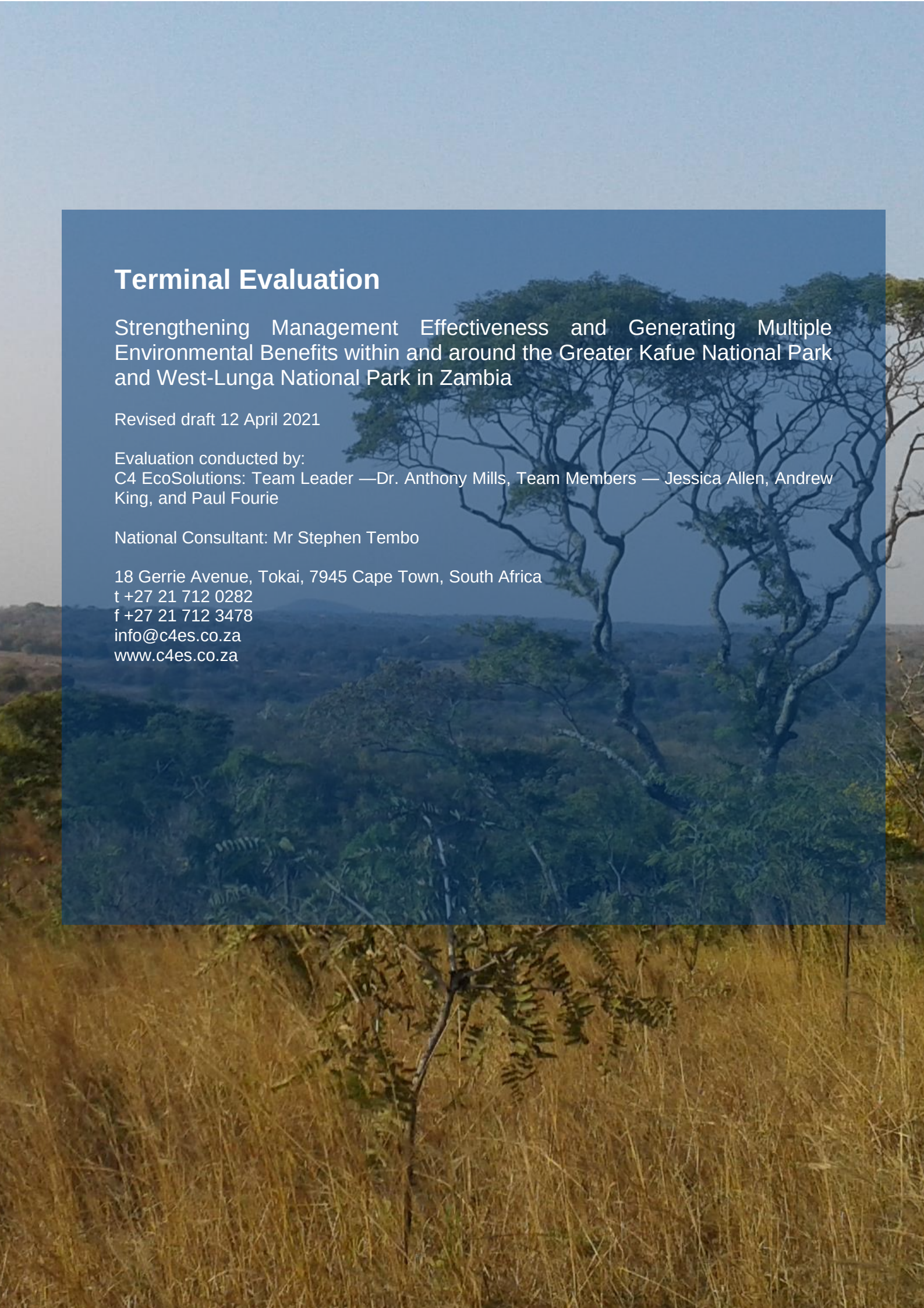

Terminal Evaluation

Strengthening Management Effectiveness and Generating Multiple Environmental Benefits within and around the Greater Kafue National Park and West-Lunga National Park in Zambia

Revised draft 12 April 2021

Evaluation conducted by:
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PROJECT TERMINAL EVALUATION

"Strengthening Management Effectiveness and Generating Multiple Environmental Benefits within and around the Greater Kafue National Park and West-Lunga National Park in Zambia."

UNDP PIMS : 4625
GEF ID: 4639

GEF FOCAL AREA: MULTI-FOCAL AREAS
BIODIVERSITY, LAND DEGRADATION, CLIMATE CHANGE - MITIGATION

STRATEGIC PROGRAM OF GEF 5:
BD1 IMPROVE THE SUSTAINABILITY OF PROTECTED AREA SYSTEMS
CCM5 PROMOTE CONSERVATION AND ENHANCEMENT OF CARBON STOCKS THROUGH SUSTAINABLE MANAGEMENT OF AND USE, LAND-USE CHANGE, AND FORESTRY
LD3 REDUCE PRESSURES ON NATURAL RESOURCES FROM COMPETING LAND USES IN THE WIDER LANDSCAPE; AND
SFM/REDD1 TO CONSERVE AND SUSTAINABLY USE FOREST BIODIVERSITY

IMPLEMENTING AGENCY: Zambia Wildlife Authority (ZAWA)

REGION: AFRICA
COUNTRY: ZAMBIA

Evaluation conducted by:
C4 EcoSolutions: Team Leader —Dr. Anthony Mills, Team Members — Jessica Allen, Andrew King, and Paul Fourie
National Consultant: Mr Stephen Tembo

April 2021
Report submitted ……..

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Abbreviations list

AP	African Parks
CBD	Convention on Biological Diversity
CBNRM	Community-based Natural Resource Management
CF	Conservation Farming
CFM	Community Forest Management
CFMG	Community Forest Management Group
CJOC	Central Joint Operations Committee
CLA	Community Liaison Assistant
CO	Country Office
COMACO	Community Markets for Conservation
CRB	Community Resource Board
CPAP	Country Programme Action Plan
CPD	Country Programme Document
DNPW	Department of National Parks and Wildlife
ESS	Environmental and Social Safeguards
FR	Forest Reserves
GEF	Global Environmental Facility
GRZ	The Government of the Republic of Zambia
GMA	Game Management Area
GRI	Game Rangers International
GKNP	Greater Kafue National Park
H	High
HS	Highly Satisfactory
HU	Highly Unsatisfactory
ILUA	Integrated Land Use Assessment
ILUP	Integrated Land Use Plans
IP	Implementing Partner
JASZ	Joint Assistance Strategy for Zambia
JFM	Joint Forest Management
KBU	Kafue Central Business Unit
KNP	Kafue National Park
KP	Kyoto Protocol
L	Low
LE	Law Enforcement
TE	Terminal Evaluation
M	Medium
M&E	Monitoring and Evaluation

MAL	Ministry of Agricultural and Livestock
METTPAZ	Management Effectiveness Tracking Tool for Protected Areas of Zambia
MLNREP	Ministry of Natural Resources and Environmental Planning
MOTA	Ministry of Traditional Affairs
MOV	Means of Verification
MS	Marginally Satisfactory
MTR	Mid-Term Review
MU	Marginally Unsatisfactory
NAPA	National Adaptation Programme of Action Against Climate Change
NDP	National Decentralisation Policy
NGO	Non-Governmental Organisation
NBSAP	National Biodiversity Strategy and Action Plan
NPE	National Policy on the Environment
NP	National Park
NFP	National Focal Point
OFP	Operational Focal Point
PA	Protected Area
PES	Payment for Ecosystem Services
PIR	Project Implementation Report
PIU	Project Implementing Unit
PMU	Programme Management Unit
PPCP	Public Private Community Partnership
PPP	Public Private Partnerships
PSC	Programme Service Center
RP	Responsible Party
RTA	Regional Technical Advisor
S	Satisfactory
SFM	Sustainable Forest Management
SGP	Small Grants Programme
SLFM	Sustainable Land and Forest Management
SLM	Sustainable Land Management
SDPF	Sustainable Development Partnership Framework
SNDP	Sixth National Development Plan
TNC	The Nature Conservancy
ToR	Theory of Change
U	Unsatisfactory
UNDP	United Nations Development Programme
UNEG	United Nations Evaluation Group
UNCCD	United Nations Convention to Combat Desertification
UNDAF	United Nations Development Assistance Frameworks
UNFCCC	United Nations Convention of Climate Change
UNSDCF	United Nations Sustainable Development Cooperation Framework
UNZA	University of Zambia
VAG	Village Action Group
VCS	Value Chain Specialist
WLNP	West Lunga National Park
WWF	World Wide Fund for Nature
ZAWA	Zambia Wildlife Authority
ZESCO	Zambia Electricity Supply Company
7NDP	Seventh National Development Plan

1. Executive summary

Table 1. Project Information table

Project details		**Project Milestones**	
Project Title	Strengthening management effectiveness and generating multiple environmental benefits within and around the Greater Kafue National Park and West-Lunga National Park in Zambia	PIF Approval Date:	22 September 2011
UNDP Project ID (PIMS #):	4625	CEO Endorsement Date (FSP) / Approval date (MSP):	30 October 2013
GEF Project ID:	4639	ProDoc Signature date:	16 May 2014
UNDP Atlas Business Unit, Award ID, Project ID:	00077150	Date Project Manager hired:	6 May 2015
Country/Countries:	Zambia	Inception Workshop date:	28 July 2014
Region:	Africa	Mid-Term Review Completion date:	17 July 2017
Focal Area:	Biodiversity, Climate Change, and Land Degradation	Terminal Evaluation Completion date:	31 January 2021
GEF Operational Programme or Strategic Priorities/Objectives:	• BD-1: Improve sustainability of Protected Areas systems • CCM-5: Promote conservation of carbon stocks through sustainable management of land use, land-use change and forestry • LD-3: Integrated landscapes: Reduce pressures on natural resources from competing land uses in the wider landscape • SFM REDD+1: Reduce pressures on forest resources and generate sustainable flows of forest ecosystem services	Planned Operational Closure date:	October 2018
Trust Fund:	GEF		
Implementing Partner (GEF Executing Entity):	Department of National Parks and Wildlife and Forestry Department		
GEF Implementing Agency:	UNDP		
NGOs/CBOs involvement:	Community Markets for Conservation (COMACO) The Nature Conservancy African Parks WWF-Zambia Game Rangers International Panthera Wild Cat Conservation Zambia Ltd. Conservation Farming Unit		
Private sector involvement:	Trident Foundation Ltd.		
Geospatial coordinates of project sites:	While specific coordinates for project intervention sites were not made available, the location of relevant Protected Areas (PAs) and Game Management Areas (GMAs) are presented in Figure 4.		

Financial Information		
PDF/PPG	at approval (US$M)	at PDF/PPG completion (US$M)
GEF PDF/PPG grants for project preparation	332,004	
Co-financing for project preparation	at CEO Endorsement (US$M)	at TE (US$M)
Project		
[1] UNDP contribution:	3,040,000	3,040,000
[2] Government:	37,396,777	37,396,777
[3] Other multi-/bi-laterals:	5,000,000	5,000,000
[4] Private Sector:		
[5] NGOs:	1,500,000	1,500,000
[6] Total co-financing [1 + 2 + 3 + 4 + 5]:	46,936,777	46,936,777
[7] Total GEF funding:	14,463,750	16,188,864
[8] Total Project Funding [6 + 7]	61,400,527	63,125,641

1.1. Brief description of the project

Protected Areas (PAs) and Game Management Areas (GMAs) in Zambia are threatened by poaching, deforestation and forest degradation, unsustainable land-use practices and uncontrolled fires. These threats result in the loss of ecosystems that provide multiple benefits, including biodiversity, water resources and forest products. The project sought to address these threats across an area of 78,188 km^2 (7,818,800 ha) in Zambia, comprising Kafue National Park (22,480 km^2, 2,248,000 ha), West-Lunga National Park (1,684 km^2, 1,684,000 ha) and 13 GMAs (54,021 km^2, 54,021,000 ha). This would be achieved by supporting Zambia's national policy of decentralised management of PAs and GMAs. Within the two national parks and Protected Forest Areas, the project would strengthen management effectiveness and ensure long-term financial sustainability. The project's aim in the GMAs would be to use a Community Based Natural Resources Management (CBNRM) approach to both ensure conservation of critical natural resources and support sustainable livelihoods. Within the GMAs, the project would work with village-based management units — in particular Village Action Groups (VAGs). The overall project objective was to protect biodiversity and carbon sinks in Kafue and West-Lunga National Parks and ensure that these landscapes were effectively managed by national and local institutions, communities and economic actors using sustainable forest and land management practices.

Table 2. Evaluation Ratings Table

1. Monitoring & Evaluation (M&E)	**Rating (out of 5, where 1 is lowest and 5 is highest)**
M&E design at entry	4
M&E plan implementation	3
Overall quality of M&E	**4**
2. Implementing Agency (IA) Implementation & Executing Agency (EA) Execution	**Rating**
Quality of UNDP implementation/oversight	4
Quality of Implementing Partner execution	4
Overall quality of implementation/execution	**4**
3. Assessment of Outcomes Rating Relevance	**Rating**
Relevance	5
Effectiveness	4
Efficiency	3
Overall project outcome rating	**4**
4. Sustainability Rating Financial sustainability	**Rating**
Socio-political sustainability	4
Institutional framework and governance sustainability	3
Environmental sustainability	3
Financial resources	3
Overall likelihood of sustainability	**3**

1.2. Summary of findings and conclusions

This Terminal Evaluation (TE) examined all the components of the GEF-5 project which ran between 2014 and 2020, including *inter alia*: i) design; ii) monitoring and evaluation; iii) financial management; and iv) implementation. The main evaluation criteria for project outcomes included: i) relevance of the project; ii) the effectiveness of project interventions iii) project efficiency; and iv) long-term sustainability of interventions (Table 2). In addition, the evaluation examined the project's contributions to gender and women's empowerment, as well as cross-cutting matters of climate change mitigation and adaptation, capacity development, and the poverty-environment nexus.

Monitoring and Evaluation (M&E)
The implementation of M&E during the project appeared to differ from the project document M&E plan in several respects, including gaps in reporting documentation, no project terminal report and delayed information to inform the TE. It was also noted that the M&E systems did not include the collection of gender-disaggregated data, which hampered the evaluation of any potential gains in gender equality. There was also limited reporting on potential social and environmental impacts caused by the project.

Implementation
Numerous challenges arose during project implementation, which was substantially delayed and required an 18-month extension. Implementation delays were largely as a result of: i) delays in recruiting project staff; ii) disagreement about the appointment of suitably qualified staff; iii) a high staff turnover; and iv) obstacles to the disbursement of project funds. As well as these internal challenges, external conditions, including Zambia's national election and the onset of the global Covid-19 pandemic, further delayed implementation.

Relevance
The project was designed to respond to a clearly articulated need for more effective, decentralised and inclusive management of PAs. In addition, the project design had a clear aim of responding to the threats and barriers identified in the Project Document. The project was furthermore well aligned with GEF-5 Focal Area Strategies, national development priorities, policies and plans. While the Community Based Natural Resource Management (CBNRM) approach, Conservation Farming (CF) methods and alternative livelihood interventions were relevant to local needs, some stakeholders reported a misalignment with community priorities.

Effectiveness
The project was effective in realising: i) the extension and improved management of PAs; ii) the engagement of Village Action Groups (VAGs); iii) community-level awareness raising; and iv) the introduction of CF to improve crop yields and safeguard rural livelihoods. However, the project was largely unable to complete activities related to REDD+, the establishment of Public-Private-Partnerships (PPPs) and Payment for Ecosystem Services (PES) schemes. Of the 16 targets set in the Project Document, five were met, eight were partially achieved and two were considered unlikely to be achieved by the end of the project. There was insufficient information available to assess one of the targets.

Efficiency
The project could not be rated as 'efficient' as a result of the considerable delays in implementation, delays in fund disbursement and ineffective adaptive management. The scope of the project exceeded the time allowed and the proposed budget was insufficient to support the completion of the project under the 18-month no-cost extension. Several activities were only partially implemented, and stakeholders reported that work was abruptly halted in 2020 with no exit strategy or communication to stakeholders on the ground. Although the annual audits provided for 2015–2018 were classified as 'unqualified', the extension of the project into 2019 and then 2020 presented a challenge for the financial management of the project. However, the introduction of CF at the community level and engagements with the VAGs were effective and efficient activities with clear benefits to beneficiaries were implemented. The CF introduction was complementary to ongoing efforts by other projects and programmes to safeguard rural livelihoods and improve CBNRM. The project was efficient in producing gains in gender equality, with women taking on a more substantive role in decision-making through the VAGs.

Sustainability
Financial sustainability
The project was effective in improving management of the Kafue and West-Lunga National Parks and boosting their revenues. While the global Covid-19 pandemic has severely reduced income from ecotourism in Zambia, it is expected that the national parks — as well as the GMAs — will continue to benefit financially in the long-term. The Government of the Republic of Zambia (GRZ) is committed to the development of PPPs beyond the project's lifespan, increasing the likelihood that private sector partners will continue to be sought to generate additional revenue for PAs. In addition, the GRZ is dedicated to the development of a financial sustainability plan for the national PA system, which will take place after the project end.

Interviews conducted with members of 10 VAGs highlighted concerns over the long-term sustainability of the alternative income generating activities — goat rearing, chicken rearing and beekeeping — introduced under the project. In particular, the stakeholder interviews suggested that

a dependency on perceived hand-outs from the GRZ and projects has been created, rather than a self-sustaining system for alternative livelihoods in communities.

Socio-political sustainability
Beneficiary communities are likely to continue applying CF beyond the project, with the continued support of project partners. Stakeholders are concerned that this support for CF will not remain available however, and that farmers may subsequently revert to unsustainable practices if seeds and other inputs are no longer available. This may be partially mitigated by the CBNRM training provided to VAGs and the lead farmers, if these lead farmers and those they have recruited coordinate among themselves to access the necessary tools and inputs. There is also a risk that the abrupt discontinuation of project activities has resulted in a loss of confidence among beneficiary communities.

Institutional framework and governance sustainability
The implementation of Zambia's Forest Legislation in 2018 (Community Forest Management Regulations No. 11 of 2018) assisted the formalisation of a number of VAGs and CBNRM plans, which will remain in place following the closing of the project.

Environmental sustainability
Despite the progress made under the project regarding deforestation, risks to environmental sustainability continue as a result of poaching, unsustainable logging and charcoal burning. Both foreign and national investors continue to expand logging operations in the project area. With the VAGs in place to enforce CBNRM and sustainable land use, it is expected that these threats will be reduced to some extent in the PAs and GMAs.

Environmental stress reduction
Approximately ~24,164 km^2 (2,416,400 ha) has been sustained under effective management in the two national parks, as well as ~41,297 km^2 (4,129,700 ha) in GMAs and ~1,387 km^2 (1,387,000 ha) in protected forests. In total, ~66,788 km^2 (6,678,800 ha) is under SLM and SFM as a result of project activities and ~768 km^2 (76,779 ha) of forest area was conserved under CFM in five VAGs surrounding Kafue National Park. Approximately 3,343 km^2 (334,300 ha) was set aside for forest conservation, which is expected to yield a 20-year reduction in carbon emissions of 63,287 tCO_2. While the total burned area was reduced by 8.3% in Kafue National Park, further reductions are likely as a result of fire management strategies developed under the project.

Environmental status change
Little quantitative data were available to evaluate the expected increase in populations of large mammal species. Populations of large mammals are likely to increase should the GMAs and national parks continue to be effectively managed. However, poaching remains a considerable threat in the region. Even in communities which have benefitted from the project interventions, community members not involved in alternative livelihoods and/or CF are still reportedly resorting to poaching.

Changes in policy and/or legal regulatory frameworks
The project supported the development of a multi-sectoral National Community Based Natural Resource Management (NCBNRM) Policy which will positively affect the establishment and operations of community conservancies in the future. At a local level, the project assisted the development of by-laws for management agreements to support the implementation and/or enforcement of Integrated Land Use Plans (ILUPs) by VAGs.

Contributions to changes in socio-economic status
Household incomes were improved through the provision of alternative livelihoods, but little quantitative data is available to describe the extent of this impact. The distribution of beehives by COMACO was anticipated to generate US$250 in household incomes per annum. CF practices were expanded over ~124 km^2 (12,446 ha) with ~46,911 farmers benefitting. The high yields gained

under CF resulted in an increase in household incomes of US$840/ha/yr in male-headed households and US$420/ha/yr in female-headed households.

Barriers and risks to further progress
The uncertain financial sustainability of the national parks remains a risk for effective management and conservation of these PAs. As mentioned above, there is an ongoing risk of poaching and encroachment from individuals who were not direct beneficiaries of the project. In addition, the Covid-19 pandemic could continue to have adverse impacts on the sustainability of the project outcomes as a result of limited tourism and hunting revenues being realised in the national parks and GMAs.

1.3. Key lessons learned

Baseline assessment
- A thorough baseline understanding of all the threats to the project landscape is necessary to ensure that interventions address all threats to the project area.

Institutional coordination
- Situating the Project Coordinator within the Implementing Partner (IP) offices rather than within UNDP, would have allowed more effective interactions with GRZ stakeholders.
- All relevant institutions should be represented in entities such as Steering Committees and Technical Committees to avoid the loss of institutional memory.

Project design
- The project risk assessment should be updated to include mitigation strategies for the impacts of unforeseen events such as the Covid-19 pandemic.
- Engagement with communities and traditional leaders is necessary to ensure alignment with community leads and chiefdom development plans.
- Resources should not be spread too thinly over a wide area.
- Priority areas for interventions should be identified carefully as individual areas may have very different requirements.
- CBNRM is an effective approach that should be more widely used.

Implementation
- Open local bank accounts to ease disbursement of project funds.
- A single Responsible Party (RP) may be more effective than multiple RPs in terms of project accounting and reporting.
- The equipment required for project implementation (such as vehicles) should be procured early on to avoid coordinating institutions being restricted in their activities.
- When changes to the implementation plan are required, these should be clearly communicated to stakeholders at all levels of the project.
- Activities providing short-term benefits should be considered in project design to encourage ongoing support from local communities.
- Novel concepts, such as activities related to REDD+, would benefit from the early procurement of international consultants.

Gender
- All project reports should include gender-disaggregated data as well as gender analyses.
- Targeted training on gender responsiveness, in the context of the social dynamics of the target communities, should be undertaken with all project staff.
- Performance appraisals of project staff should include indicators that assess whether staff have addressed gender issues in the course of their duties.
- A gender profile should be maintained and updated throughout project implementation as part of ongoing monitoring to ensure that gender gaps are being effectively addressed.

Stakeholder engagement

- The recruitment of lead farmers to drive upscaling of CF practices is an effective means to improve communication with communities and ensure sustainability.
- Intensive stakeholder engagement should be undertaken with each community earmarked to benefit under a planned project to ensure that activities address their priorities.

REDD+
- An integrated approach is required to create an enabling environment for REDD+ activities and should be focussed on a relatively small area.
- REDD+ activities should address the reduction of emissions from all relevant sources in the project area, rather than focussing on a single threat.
- REDD+ activities should be undertaken in combination with activities that promote alternative livelihoods.
- REDD+ activities have a long implementation period which should be accounted for in both project design and implementation planning.

Knowledge sharing
- Knowledge products generated by the project should be shared with national, regional and local stakeholders involved in project implementation.
- An accessible database is necessary to ensure that all knowledge products generated by the project are collated and stored at a single point.

2. Introduction

2.1. Evaluation purpose

In accordance with the United Nations Development Program (UNDP) and Global Environment Facility (GEF) monitoring and evaluation (M&E) policies and procedures, all full and medium-sized UNDP-supported, GEF co-financed projects are required to undergo a Terminal Evaluation (TE) upon completion of implementation. This TE was conducted according to the guidance, rules and procedures established by UNDP and GEF — as reflected in the UNDP project guidance documentation. A revised policy on M&E was approved by the GEF in November 2010. The policy is aimed at promoting accountability for achievement of GEF objectives through the assessment and evaluation of results, effectiveness, processes and performance of the partners involved in GEF projects. It states that “GEF results will be monitored and evaluated for their contribution to global environmental benefits”. The policy enunciates that the GEF partners, in addition to conducting various other evaluations, also evaluate projects at the end of the intervention through a TE.

The objective of this TE is to assess the performance of the project with regards to the achievement of project results and to draw lessons that will both improve the sustainability of benefits from the project, as well as aid in the overall enhancement of UNDP programming. This TE will evaluate and assess: i) project performance; ii) financial aspects of the project; iii) mainstreaming of the project with other UNDP priorities; and iv) the extent to which the project has progressed towards achieving expected impacts. In addition, the TE will include a set of conclusions, recommendations and lessons that will be formulated using documents, findings and evidence obtained through the project. The evaluation will also be used to provide GEF, UNDP, the The Government of the Republic of Zambia (GRZ) and the partner agency with an independent assessment of the main achievements and impacts of the project compared with the five-year project document.

2.2. Scope of the evaluation

Rationale for approaches
The evaluation assessed the progress of activities against the project’s logical framework matrix. In addition, it analyzed adaptation to changing conditions (adaptive management), partnerships in implementation arrangements, changes in project design, overall project management main findings and key lessons including examples of best practices for future projects in the country, region and GEF. In addition, the evaluation has included assessment of cross-cutting challenges, including: i) gender equality and women’s empowerment; ii) social and environmental safeguards/rights-based

approach; iii) climate change mitigation and adaptation; and iv) poverty-environmental nexus and capacity development.

An overall approach and method for conducting Terminal Evaluations (TE) of UNDP-supported GEF-financed projects has been developed over time and involved the following methods: i) documentation reviews; ii) field visits; iii) stakeholder interviews; and iv) focus groups and other participatory techniques for information gathering. As mentioned, the purpose of the TE is to provide evidence-based information that is both reliable and useful. To achieve this objective, the evaluation was undertaken through a participatory and consultative approach, ensuring close engagement with government counterparts. Specifically, this includes the project teams, UNDP Country Office, the GEF operational focal point, UNDP-GEF Technical Adviser based in the region and relevant stakeholders at national and local level. The TE was conducted from over a period of 57 days between October and December 2020 and included three stages, namely: i) TE inception report (IR) preparation; ii) TE mission; and iii) TE report preparation.

Time period
The total duration of the TE was ~37 days spread over a period of 57 days between October and December 2020. An additional 10 days was granted in January 2021.

Target beneficiaries
The target beneficiaries of the project in question were local community members within several districts in and around the Greater Kafue National Park and West-Lunga National Park — namely Itezhi-Tezhi, Mumbwa, Kasempa, Mwinilunga, Manyinga, Mufumbwe and Nkeyema. The strategy of the project was to empower producer communities to plan, manage and protect their resources, with support agencies providing the requisite law enforcement, extension services, research and coordination.

Geographic area
The 78,188 km² project area — comprising Kafue National Park (22,480 km^2, 2,248,000 ha), West-Lunga National Park (1,684 km^2, 1,684,000 ha) and 13 GMAs (54,021 km^2, 54,021,000 ha) — lies within the Western, North-Western, Central and Southern provinces of Zambia (Figure 4).

2.3. Methodology

The overall approach and method for conducting this project TE follows official guidance for UNDP-supported GEF-financed projects. In particular, the evaluation effort was framed using the criteria of: i) relevance; ii) effectiveness; iii) efficiency; iv) sustainability; v) gender equality and women's empowerment; and vi) results and impact. These are presented in more detail below.

- Relevance: the extent to which the activity is suited to local and national development priorities and organisational policies, including changes over time.
- Effectiveness: the extent to which an objective has been achieved or how likely it is to be achieved.
- Efficiency: the extent to which results have been delivered with the least costly resources possible.
- Sustainability: the likely ability of an intervention to continue to deliver benefits for an extended period of time after completion. Projects need to be environmentally as well as financially and socially sustainable.
- Gender equality and women's empowerment: the extent to which the project contributed towards gender equality and women's empowerment.
- Results and Impact: the positive and negative, and foreseen and unforeseen, changes to and effects produced by a development intervention. In GEF terms, results include direct project outputs, short-to medium term outcomes, and longer-term impact including global environmental benefits, replication effects and other, local effects.

Accordingly, an evaluation question matrix was prepared that applied a set of questions covering each of these criteria to the project in question. The questions were developed in line with the UNDP Theory of Change (ToR) and are annexed to this TE report (Annex I. Evaluation criteria matrix).

Evaluation criteria and ratings

An assessment of project performance was undertaken based on expectations set out in the Project Results Framework. The evaluation covered the specified criteria of relevance, effectiveness, efficiency, sustainability and impact. The following ratings were applied to the specified performance criteria in Table 2, presented in section 1 Executive Summary:

6: Highly Satisfactory (HS): no shortcomings
5: Satisfactory (S): minor shortcomings
4: Moderately Satisfactory (MS): moderate shortcomings
3. Moderately Unsatisfactory (MU): significant shortcomings
2. Unsatisfactory (U): major problems
1. Highly Unsatisfactory (HU): severe problems

2.4. Data collection and analysis

During the course of the TE, three sources of primary data and information were examined. Firstly, a wide variety of documents covering project design, implementation progress, monitoring and review studies. This covered and elaborated on the documents listed in the UNDP ToR. Secondly, remote and socially distanced consultations were conducted with a wide range of stakeholders in line with prevailing Covid-19 related guidance on social distancing. Semi-structured interviews were undertaken by a national consultant using a set of key questions, or through completion of a questionnaire tailored for each stakeholder group (

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 a the local, regional and national level?			
How well does the project align with evolving GEF focal area priorities?	Extent to which UNFCCC and related GEF priorities and areas of work were incorporated into the design and implementation of the project	Project documents	Desktop review of documents
How well does the project support the National Climate Change Strategy?	Degree to which the project supports national environmental objectives	National policy and strategy documents	Interviews
Are there linkages with other strategic documents, such as National Development Strategy, INDCs?		Interviews/information/reports from project partners	
Is the project aligned with other donor and Government programmes and projects?	Degree of coherence between the project and national priorities, policies and strategies	Interviews/information/reports from beneficiaries	
Is the project country driven?			MTR
Does the project incorporate national institutional and policy frameworks in both design and implementation?	Extent to which national institutional and policy frameworks are incorporated into the project		
Was the project responsive to threats, challenges and opportunities that arose during the course of the project?	Extent to which adaptive management was used to address, threats, challenges and opportunities		
Were the needs of beneficiaries and other stakeholders addressed through the implementation of the project?	Degree to which the project addressed local needs		
Was the project inclusive?	Degree to which stakeholder expectations were met		
Were beneficiaries and other stakeholders effectively engaged in implementation of the project?			
Has the project provided relevant lessons learned for future projects with similar objectives?	Extent to which the lessons learned from the project were documented		
Do the project objectives align with the priorities of local government?	Level of coherence between stated project objective(s) and priorities of local stakeholders	Interviews/information/reports from beneficiaries	
Do the project objectives align with the priorities of local communities?		Local development strategies and environmental policies	

Was the project concept informed by the needs of local or national stakeholders?	Level of involvement of local and national stakeholders in project origination and development (e.g., number of meetings held and project development processes incorporating stakeholder input)	Interviews/information/reports from stakeholders, beneficiaries and project staff	
Were relevant stakeholders closely involved in project development?		Project documents	
Effectiveness: To what extent have the expected outcomes and objectives of the project been achieved?			
Has the project met its indicators and targets?	Extent to which the targets outlined in the logframe and monitoring plan were achieved	Minutes of all meetings related to the project	Desktop review of documents
To what extent can the results of the project be attributed to the project itself, rather than an enabling environment?	Extent to which the enabling environment has changed	Interviews/reports/information from beneficiaries	Interviews
Have there been any notable changes in the enabling environment for this project?		Records of risk management for the project	
Has the project not been effective in any aspect(s) of its implementation?	Record of adaptive management response or early application of lessons learned during project implementation		
To what extent has the project built the capacity of stakeholders?	Extent of support from local stakeholders		
Has there been positive feedback from stakeholders regarding project activities and/or implementation?	Extent of stakeholder involvement in the implementation of the project		
Were any project activities not implemented?	Extent of engagement of beneficiaries in the implementation and/or monitoring of the project		
How were risks, assumptions and impact drivers managed?	Extent to which implementation of the project has responded to identified and/or emerging risks		
Were effective risk mitigation strategies developed?	Updating of the risk log		
Have risk mitigation strategies been developed for risks to the long-term sustainability of the project?			
Efficiency: Was the project implemented efficiently, in line with international and national norms and standards?			
Financial efficiency	Financial efficiency	Financial records	Desktop review of documents
Were the accounting and financial systems put in place adequate for effective project management?	Extent to which funds were converted into outcomes	Audit reports	Interviews
Did these produce timely and accurate financial information?	Level of transparency in use of funds	Work plans and reports	
Were funds available and transferred efficiently?	Extent to which partners and beneficiaries were satisfied with the use of funds	Interviews/reports/information from project staff	
Were any over- or under-expenditures noted?	Timely delivery of fund		
Could financial resources have been used more effectively?	Coordination of project funding and co-financing		
Were any queries raised in audit reports?	Level of cash and in-kind co-financing received in comparison to expected level		
If so, how were these addressed?			
Was project implementation as cost-effective as expected?			
Was co-financing effectively leveraged?			
What was the contribution of cash and in-kind co-financing to project implementation?			
Implementation efficiency	Implementation efficiency	Project work plans and reports	
Was implementation carried out as planned?	Extent to which project activities were undertaken to schedule	Interviews/reports/information from country partners	
Were there any delays in implementation?	Extent to which project milestones were met according to schedule	Interviews/reports/information from project staff	
Was the cost-effectiveness of the project affected by delays in implementation (if any)?	Extent to which planned results were affected by delays		
Was monitoring data collected as planned?	Required adaptive management measures in response to delays		
Was monitoring data analysed and used to inform adaptive management of the project?	Extent to which project delivery matched the expectations of partners		

Has project implementation been responsive to challenges?	Level of satisfaction from partners in the adaptive management of the project		
Were progress reports produced in a timely manner?	Level of satisfaction from PCU and EE regarding UNDP back-stopping		
Were these accurate?			
Did the progress reports respond to changing reporting requirements, including changes made through adaptive management to project implementation?			
Were any capacity gaps noted during project implementation?			
Have international and external communications been effective and efficient?			
How efficient was the provision of resources from donors, including quality assurance by UNDP?			
Efficiency of partnerships	Efficiency of partnerships	Project work plans and reports	
To what extent were partnerships/linkages between institutions, organisations and/or the private sector supported?	Extent to which project partners committed time and resources to the project	Interviews/reports/information from local partners	
Which partnerships were facilitated?	Extent of commitment of partners to take on project activities in the long term, without the continued support of the project		
Which of these can be considered as sustainable in the long term?			
Sustainability: To what extent are there financial, institutional, socio-political, and/or environmental risks to sustaining long-term project results?			
Is the social, legal and political environment conducive to sustainability?	Extent of supportive policies	Minutes from project meetings	Desktop review of documents
Is there any early indication of project activities being taken up by project partners?	Extent to which partners are supporting post-project activities	Interviews/reports/information from local partners and beneficiaries	Interviews
Are there plans in place to sustain these activities?			
Have project partners and stakeholders effectively built their capacity?	Extent to which project partners and stakeholders are applying novel ideas/approaches outside of the project context		
Will additional resources be required for project partners and stakeholders to make use of this capacity?			
Does the project have a clear exit strategy?	Intent to follow up on project activities on the part of government and stakeholders		
	Extent to which the exit strategy has been implemented		
Gender equality and women's empowerment: How did the project contribute to gender equality and women's empowerment?			
What impact has the project had on gender equity in terms of decision-making?	Evidence of gender equity in decision-making processes related to the project	Project reports	Desktop review of documents
	Degree to which women feel satisfied with their inclusion in project activities	Project meeting minutes	Interviews
What impact has the project had in terms of economic empowerment for women and other marginalised groups?	Extent of participation by women in project activities	Interviews/reports/information from local partners and beneficiaries	
Cross-cutting and UNDP mainstreaming issues			
How were the potential impacts of project activities on local populations considered in both project design and implementation	Evidence of assessment of potential impacts and unintended negative consequences	Project reports	Desktop review of documents
	Mitigation plan for potential impacts	Interviews/reports/information from local partners and beneficiaries	Interviews
	Evidence of adaptation management measures put in place to address observed impacts and unintended negative consequences	Interviews/reports/information from project staff	
Impact: Are there indications that the project has contributed to, or enabled progress toward reduced environmental stress and/or improved ecological status?			
What impact has the project had on policy, legal and institutional frameworks related to:	Extent to which new protected areas were established	Project reports	Desktop review of documents

management of projected areas;	Extent to which coverage of unprotected areas has changed as a result of the project	Project meeting minutes	Interviews
protection of forest resources; and	Extent to which forest areas are under sustainable management	Interviews/reports/information from local partners and beneficiaries	
investment in renewable energy technology?	Extent to which carbon stock monitoring systems were successfully implemented		
	Extent of uptake of renewable energy technologies		
What lessons have been learned from the project regarding efficiency?	Degree of satisfaction on the part of project implementation partners		
Could implementation efficiency have been improved? If so, how?	Suggestions put forward by partners for possible improvements in implementation		

Annex II. Stakeholder). The questions were structured to provide answers to the points listed in the evaluation matrix (
Annex I. Evaluation criteria matrix). An initial list of generic questions was provided in the TE Inception Report. To allow freedom of expression, interviews were confidential, and the information in this report is used without accreditation. Accordingly, details of interview discussions are not provided in this report. Triangulation of results — comparing information from different sources such as documentation and interviews — has been done to corroborate the reliability of evidence as far as possible.

Gender equality and women's empowerment were assessed through the collection of gender-disaggregated results arising from project activities, inclusion of women participants and relevant women's groups in the TE interviews and specific questions regarding the extent to which they were included in project implementation and/or benefited from the project. Specific attention has been given to analysing examples, best practices and lessons learned regarding women's empowerment arising through the project's scope of activities.

Throughout the course of the evaluation, the consultant has taken account of international best practices in PA management, biodiversity conservation and SLM in its assessment of project performance, especially in relation to the related Convention on Biological Diversity (CBD) guidance. In addition, Covid-19 related impacts on project implementation and results have been specifically considered during the evaluation process and included in interview questions. Stakeholders interviewed included:

- UNDP Country Office (CO);
- UNDP Regional Technical Advisor (RTA);
- the Project Implementation Unit (PIU);
- the Project Board/Steering Committee/Inter-Ministerial Committee members;
- the Global Environment Facility (GEF) Operational Focal Point (OFP) of Zambia;
- the Department of Natural Resources and Environmental Protection, under the Ministry of Lands Natural Resources (MLNR);
- the Forestry Department, under MLNR;
- Department of National Parks and Wildlife/Zambia Wildlife Authority, Under the Ministry of Tourism and Arts;
- Ministry of Agriculture and Livestock (MAL);
- the CBD National focal point (NFP);
- relevant District/local government officials;
- Kafue National Park (KNP) and West-Lunga National Park (WLNP) staff;
- representatives of 10 VAGs located in the target GMAs;
- representatives of civil society organizations/Non-Governmental Organisations (NGOs);
- representatives of the academia – University of Zambia (UNZA);
- representatives of the private sector;
- international NGOs and agencies implementing similar projects in Zambia, and/or related initiatives in the Project area; and
- any other key stakeholders to be indicated by the UNDP CO, Project team or the main Government counterparts.

2.5. Ethics

An international consultant, supported by a local consultant, were contracted as Evaluators for this TE. The evaluators were held to the highest ethical standards and were required to sign a code of conduct upon acceptance of the assignment. The evaluators have, accordingly, signed the United Nations Evaluation Group (UNEG) Code of Conduct (

Questionnaire for national-level stakeholders

Theme	Question
1. Satisfaction (8 points)	1.1 What, in your view, are the key achievements of the project; i.e. what would not have happened, or happened as quickly without the project?

	1.2 To what extent was the project's work aligned with the key priorities of your organisation? 1.3 What are areas in which the project could have done better in terms of quality of interactions, processes that the project uses, technical work or knowledge sharing? Please give examples. 1.4 Please comment on how well the project has addressed or incorporated into its work emerging priorities, such as the renewed emphasis on gender equality, sustainability or country ownership?
2. Collaboration and partnering (7 points)	2.1 Has the project done enough to partner with other relevant organisations during the projects, including local organisations? In what ways did they work well? Were any important connections not made, and if this is the case, how could they have been improved?
3. Knowledge management and capacity building (5 points)	3.1 How were the project's products shared among partners and relevant organisations? Were lessons learned captured, compiled and shared? Were project results shared and used to facilitate replication of best practices? How could this process have been improved? 3.2 In your view, did the project address capacity-building needs of the beneficiary community organisations (e.g. community-based organisations (CBOs) and cooperatives, relevant line ministries, PES legal experts) and local governmental institutions? Please elaborate.
4. Future direction	4.1 Given your experience with the project and other centrally funded projects, what were the strengths and weaknesses of this project and what would you like to see change in future project designs? 4.2 What were the technical gaps or emerging priorities that needed to be addressed in future projects?

Questionnaire for sub-national stakeholders

Theme	Question
1. Satisfaction (8 points)	1.1 What, in your view, are the key achievements of the project; i.e. what would not have happened, or happened as quickly without the project?
	1.2 To what extent was the project's work aligned with the key priorities of your organisation?
	1.3 What are areas in which the project could have done better in terms of quality of interactions, processes that the project uses, technical work or knowledge sharing? Please give examples.
	1.4 Please comment on how well the project has addressed or incorporated into its work emerging priorities, such as the renewed emphasis on gender equality, sustainability or country ownership?
2. Collaboration and partnering (7 points)	2.1 Has the project done enough to partner with other relevant organisations during the projects, including local organisations? In what ways did they work well? Were any important connections not made, and if this is the case, how could they have been improved?
3. Knowledge management and capacity building (5 points)	3.1 How were the project's products shared among partners and relevant organisations? Were lessons learned captured, compiled and shared? Were project results shared and used to facilitate replication of best practices? How could this process have been improved?
	3.2 In your view, did the project address capacity-building needs of the beneficiary community organisations (e.g. community-based organisations (CBOs) and cooperatives, relevant line ministries, PES legal experts) and local governmental institutions? Please elaborate.
4. Future direction	4.1 Given your experience with the project and other centrally funded projects, what were the strengths and weaknesses of this project and what would you like to see change in future project designs?
	4.2 What were the technical gaps or emerging priorities that needed to be addressed in future projects?

Questionnaire for VAG members

Question
1. Was the community managed GMA in existence before the project or was its formation facilitated by the project? If yes, how did the project help to strengthen this community structure? To what extent are women involved in its activities? How is the community managed GMA organized and what are its major functions?
2. What have been the major successes of the community managed GMA? What factors have contributed to such successes? What have been the major challenges? What factors have contributed to those challenges? If you were given an opportunity to re-establish the community managed GMA, what would you do differently and why?
3. Do they have VAGs? If yes, what is their legal status? What proportion of the VAG membership are women?
4. What community conservancies exist? What exactly do they do? What have been the major challenges faced? What have been the major successes?
5. If they were given an opportunity to improve community conservancies, what changes would they bring about and why?
6. What conservation farming practices have they been practicing? For how long? Who taught them these? What benefits have they found in practicing these? What have been the major challenges?
7. Which conservation farming practices have been most successful and why? Which of them have had the greatest challenges and why? If they were given an opportunity to improve conservation farming practices, what changes would they bring about and why?
8. What community forest management practices are they involved in? What benefits have accrued from such? To what extent have the community forest management practices they have been involved in helped to reduce deforestation?

Questionnaires used for chiefs/chieftainesses

Criteria	Question
Project performance	What is the progress towards the project's stated outputs and outcomes, as defined in the results framework?
	What was the effectiveness of partner and stakeholder collaboration and coordination?
	What is the operating effectiveness and efficiency of the project?
	What roles and responsibilities of the various individuals, agencies and institutions worked well, and which did

	not?
Project finance	
Mainstreaming	To what extent have project interventions contributed to enhanced conservation in PAs and GMAs in Zambia so far, and is the project on track to achieve its main objective?
	What main lessons have emerged applicable to Zambia in terms of: i) stakeholder participation; ii) institutional structure and capacity building; iii) adaptive management strategies; iv) knowledge transfer; and v) country ownership?
	Which representatives were actively involved in project design, implementation, monitoring and evaluation?
Conclusions, recommendations and lessons learned	What are the major challenges that the project faced thus far, and how were they/can they be addressed?
	What lessons and experience can be incorporated into the design of similar initiatives in the future (with distinction between lessons applicable only to this project and those of value more broadly)?

Theme	Question
1. Satisfaction (8 points)	1.1 What, in your view, are the key achievements of the project; i.e. what would not have happened, or happened as quickly without the project?
	1.2 To what extent was the project's work aligned with the key priorities of your organisation?
	1.3 What are areas in which the project could have done better in terms of quality of interactions, processes that the project uses, technical work or knowledge sharing? Please give examples.
	1.4 Please comment on how well the project has addressed or incorporated into its work emerging priorities, such as the renewed emphasis on gender equality, sustainability or country ownership?
2. Collaboration and partnering (7 points)	2.1 Has the project done enough to partner with other relevant organisations during the projects, including local organisations? In what ways did they work well? Were any important connections not made, and if this is the case, how could they have been improved?
3. Knowledge management and capacity building (5 points)	3.1 How were the project's products shared among partners and relevant organisations? Were lessons learned captured, compiled and shared? Were project results shared and used to facilitate replication of best practices? How could this process have been improved?
	3.2 In your view, did the project address capacity-building needs of the beneficiary community organisations (e.g. community-based organisations (CBOs) and cooperatives, relevant line ministries, PES legal experts) and local governmental institutions? Please elaborate.
4. Future direction	4.1 Given your experience with the project and other centrally funded projects, what were the strengths and weaknesses of this project and what would you like to see change in future project designs?
	4.2 What were the technical gaps or emerging priorities that needed to be addressed in future projects?

Annex III. UNEG Code of Conduct and Evaluation Consultant Agreement Form) of this report, indicating that the consultant agreed to the ethical expectations set out by UNDP and GEF. The evaluation was conducted in accordance with the principles outlined in the UNEG 'Ethical Guidelines for Evaluations' and the UNEG 'Code of Conduct for Evaluation'.

UNDP and the GEF are strongly committed to having competent, fair and independent evaluators carry out TEs. Assessments were independent, impartial and rigorous, and the evaluators hired to undertake these assessments ensured personal and professional integrity and were guided by propriety in the conduct of the evaluation process. Evaluation ethics also concern the way in which evaluations are carried out, including the steps the evaluators took to protect the rights and confidentiality of persons interviewed. The evaluators — particularly the national consultant conducting the consultations — clarified to all stakeholders interviewed that their feedback and input was confidential and anonymous. The final TE report does not indicate the specific source of quotations or qualitative data in order to uphold this confidentiality.

2.6. Limitations

The methodology used to conduct the TE is predominantly qualitative and is based on a review of documents provided, as well as interviews with stakeholders. As a result of the ongoing Covid-19 pandemic, the international evaluators were unable to conduct an in-country mission. The national consultant undertook interviews with relevant stakeholders independently and relayed the results back to the international consultants. Several delays were encountered in undertaking the stakeholder interviews, as a result of the challenging pandemic conditions in Zambia.

3. Project description

3.1. Project description

In brief, the project was designed to: i) improve management effectiveness and financial sustainability of core protected areas; ii) reduce conflicting land uses in Game Management Areas (GMAs, considered buffer zones); and iii) increase the use of energy efficient technologies to reduce deforestation and carbon emissions in GMAs. The project milestones are shown in Table 3 below. The project was designed to respond to the vision of GEF 5, using an integrated approach to assist Zambia in meeting its sustainable development goals and achieving multiple environmental benefits. Project interventions addressed four GEF focal areas in delivering large-scale benefits for the protection of globally significant biodiversity, prevention of land degradation, sustainable forest management and management of forest carbon stocks.

Under **Biodiversity Focal Area 1**, the project aimed to improve management effectiveness and financial sustainability of 64,000 km^2 (6,400,000 ha) of core protected area (Component 1) and 166,000 km^2 (166,000,000 ha) of GMAs (Component 2). Component 2 of the project addressed **Land Degradation Focal Area 3**, **Sustainable Forest Management Focal Area 1** and **Climate Change Mitigation Focal Area 5** through integrated land use planning to reduce land and forest degradation within GMAs (see Figure 2). The project was designed in line with GEF Investment Guidelines for Sustainable Forest Management (SFM) and the REDD+ Programme, supporting policies and regulations to implement SFM interventions that complement ongoing UN-REDD+ activities.

Table 3. Project milestones

Milestone	Planned	Actual
Project start	May 2013	16 May 2014
PAC meeting date	25 February 2014	25 February 2014
Inception workshop	28 July 2014	28 July 2014
Project Steering Committee/Board meetings	20 February 2014 24 November 2015 15 March 2016	20 February 2014 24 November 2015 15 March 2016
MTR workshop	27 May 2017	27 May 2017
Project close date	October 2018	15 November 2020

3.2. Development context

Approximately 40% of the land area of Zambia is demarcated as protected areas (National Parks, Forest Reserves and Game Management Areas). These protected areas (Figure 4) — together with large tracts of land with low human population densities — support globally significant biodiversity that has been extirpated elsewhere in the region. Approximately 50 million hectares of forests remain in Zambia, yet the country is among the largest global emitters of greenhouse gasses from deforestation. This is largely as a result of open access policies which result in unsustainable land-use practices, particularly shifting slash-and-burn agriculture. Deforestation rates of 276,021 hectares annually have been reported, one of the highest globally. Open-access policy regimes are resulting in unsustainable land use in intact lands, as well as Forest Reserves and other protected areas. Expansion of shifting slash-and-burn agriculture, as well as charcoal production for domestic energy needs, illegal logging and the unsustainable land management in the production of cash crops (e.g., maize and tobacco) are resulting in land degradation. Rural households are largely reliant on biomass, particularly firewood, as domestic cooking fuel.

The project focussed on Kafue National Park and West-Lunga National Park, as well as 13 Game Management Areas (GMAs) surrounding these protected areas (Figure 4). Baseline estimates indicated that this area (also referred to as the Greater Kafue National Park (GNKP)[1] area) annually generates US$600,000 in park fees, US$6.8 million in direct tourism revenue and US$2.4 million in hunting revenues. This equates to a turnover yield of ~US$9.2 million or US$1.35/hectare. Potential for growth in ecotourism revenue from largely underdeveloped resources in the GNKP was estimated to be a factor of 5–10 fold.

The project was designed in line with existing national policy frameworks. After the development of the project document, several revisions to these policies were published. This TE report refers to the revised policies, rather than the original policies under which the project document was developed. These policies include the: i) revised Zambia Wildlife Policy and the National Forestry Policy; ii) revised Forest Act and Wildlife Act; iii) Seventh National Development Plan (as well as the Sixth National Development Plan); iv) National Policy on the Environment — NPE (2005); v) National Biodiversity Strategy and Action Plan (NBSAP); vi) National Climate Change Response Strategy (NCCRS); vii) National Adaptation Programme of Action Against Climate Change (NAPA); viii) National Decentralisation Policy (NDP, 2010); and ix) National Climate Change policy and REDD strategy. It is also aligned with Zambia's commitments under the Convention on Biological Diversity (CBD), United Nations Convention to Combat Desertification (UNCCD) and the United Nations Convention on Climate Change (UNFCCC) and its Kyoto Protocol (KP).

In addition, the project was aligned with the The Government of the Republic of Zambia (GRZ) priorities regarding poverty reduction and decentralisation (National Decentralization Policy of 2010 and Public-Private Partnership Act of 2009). The design of the project was informed by work undertaken by Norwegian funders, the World Bank and other funders to support decentralised management of protected areas in Zambia. A partnership was also planned with the existing Kafue Business Centre to allow the project to focus on decentralised natural resource management of the Kafue and West-Lunga National Parks and their associated GMAs through a devolved community-based natural resource management (CBNRM) approach.

3.3. Problems that the project sought to address

The 78,188 km^2 (7,818,800 ha) project area (Figure 4) — comprising Kafue National Park (22,480 km^2, 2,248,000 ha), West-Lunga National Park (1,684 km^2, 1,684,000 ha) and 13 GMAs (54,021 km^2, 54,021,000 ha) — is threatened by wildlife poaching, deforestation and forest degradation, unsustainable land uses and extensive fires. The loss of large areas of intact ecosystems is

[1] "Greater" refers to the wider ecological context of the Kafue and West-Lunga National Parks and includes the surrounding game management areas (GMAs) as well as the "Open Area" corridor between the Kafue and West-Lunga National Parks, including the Chizera GMA.

resulting in the loss of multiple benefits, including forest protection, water, and globally significant biodiversity.

The project was designed to respond directly to the primary causes of deforestation and forest degradation as identified in the Second National Communication to the UNFCCC. These causes include: i) shifting agriculture (~54%); ii) semi-permanent agriculture (~24%); iii) timber (~17%); and iv) charcoal (~4.5%); v) firewood (~1.4%). In addition, the project responded to the main threats to GMAs, namely poaching, human encroachment, wildfires, subsistence agriculture, illegal fishing, commercial agriculture, charcoal production, mining, water pollution, invasive species and wildlife diseases.

In addressing these threats, both directly and indirectly, the project also aimed to improve rural livelihoods through sustainable environmental management and institutional strengthening — institutions would be capacitated to control access to their resources. Field officers of government agencies and communities will be empowered to achieve progress within VAGs and PAs within a set of agreed performance management criteria.

3.4. Immediate and development objectives of the project

The overarching objective of the project is summarised in the following statement in the Project Document:

"Biodiversity and carbon sinks of Greater Kafue/West-Lunga Protected Areas in Zambia are better protected from threats and effectively managed by local institutions, communities, and economic actors using sustainable forestry and land management practices".

3.5. Theory of Change

A Theory of Change (ToC) was not provided for the project, so a ToC was developed for the purposes of this report and is presented in Figure 2 below. The project comprises six outcomes under two components which address the problems described in section 3.3. An impact pathways diagram has been included (Figure 1) to indicate how the project outcomes will address specific threats.

Component 1. Increased management effectiveness and financial sustainability of Greater Kafue and West-Lunga PA system

Under Component 1, the decentralised Kafue National Park cost centre will be strengthened, applying lessons learned from previous projects in the region. The component will address Biodiversity Focal Area 1 by focussing on management effectiveness and financial sustainability across the project area (Figure 4).

Outcome 1.1 Develop a strategy for improved management effectiveness and increased revenues for KNP and WLNP
ZAWA (now defunct, see section 3.9) established the Kafue Business Centre in Mumbwa to manage Kafue National Park as an independent cost centre. There is considerable potential for financial growth within Kafue National Park, but this is currently limited by insufficient investment and limited progress in seeking flagship investors, as well as roads and other infrastructure that are vulnerable to climate-related impacts. The project will provide technical assistance to: i) support adaptive management and performance-based management; and ii) develop a sustainable financing plan for the project area. In addition, a participatory process will be undertaken in the first year of the project to design a logical framework and sustainable financing plan.

Outcome 1.2 Increase PA Revenue
An economic case will be built for Kafue National Park and capacity of PA staff to undertake financial and economic assessments will be built. A financial and economic plan will be produced, highlighting the case for long-term investment into the GKNP. Technical assistance will be provided to develop at least three new tourism contracts annually to ensure that revenues increase by 10%

per annum. In addition, training will be undertaken with protected-area managers in effective economic, financial and contract management of protected areas.

Outcome 1.3 Strengthening management operations (patrolling, wildlife monitoring, fire control, support to CBNRM) and performance effectiveness
Technical and financial assistance will be provided to strengthen existing evidence-based performance pay law enforcement (LE) systems. A regional best-practice model will be produced, as well as training materials which can be applied nationally. Training will be undertaken to improve LE management at both field and supervision levels, as well as to provide career-development for LE managers. Financial support will be provided for 38 village scouts to undertake 15 days of patrolling each month in the GMAs surrounding West-Lunga National Park. In addition, patrol bonuses (US$5 per patrol day) will be provided for village scouts elsewhere in the GKNP area. Training will be provided to protected area staff, including accredited professional short courses and certified training.

Outcome 1.4 Management and monitoring of fire, biodiversity and water
Financial support will be provided for the development of a fire policy and a stakeholder education initiative that builds awareness of fire management. Additional financial support will be provided for the development and maintenance of fire breaks that facilitate an early burning regime. Annual monitoring will be undertaken to assess the effectiveness of the fire management strategy. In addition, the capacity of 10 protected area staff members will be built to allow them to deliver annual training on the five key performance areas for protected area management.

Component 2. Sustainable land and forest management by "Community Conservancies" in GMA buffer areas through selected CBNRM practices

Building on the institutional strengthening undertaken under Component 1, this component involves a transformative approach to the management of community conservancies in GMAs through CBNRM (Figure 2). Under Component 2, interventions will be piloted to address the three main drivers of deforestation and degradation in the target GMAs (Figure 4), namely: i) unsustainable agricultural expansion; ii) unsustainable firewood collection; and iii) late season fires and ineffective fire management.

Outcome 2.1 VAGs acquire stronger rights and governance, management and monitoring systems improved
Under Outcome 2.1, Village Action Groups (VAGs) will acquire stronger rights and governance, while their management and monitoring systems will be improved. VAGs will be supported in developing and implementing integrated land-use assessment plans linked to the national REDD readiness programme, delineating appropriate REDD compliance and MRV mechanism in VAG areas. A participatory and remote sensing monitoring system will be established for all VAG conservation areas, including updated biomass inventories. Revenues into selected VAGs will be improved through REDD pilots (via sale of offsets) and/or PES schemes. As part of this, potential buyers for the REDD+ carbon credits from the VAG pilots will be identified. All the activities under this outcome will be underpinned by the establishment of integrated support systems for CBNRM through forums, training, capacity-building and evidence-based monitoring in all target GMAs.

Outcome 2.2 Land and forest resources managed more sustainably
Land use and forest-conservation plans will be developed and adopted by all relevant VAGs, supported and monitored by Kafue Central Business Unit (KBU). Performance monitoring and training will be provided to increase the capacity of communities and partners (e.g., Forestry Department). At the community level increased forest and wildlife patrolling and protection by Village Scouts will be supported and fire control action plans developed. Conservation farming practices will be introduced and tested in 40 VAGs. In addition, wood fuel collection zones will be established in all VAGs and coppicing best practices adopted.

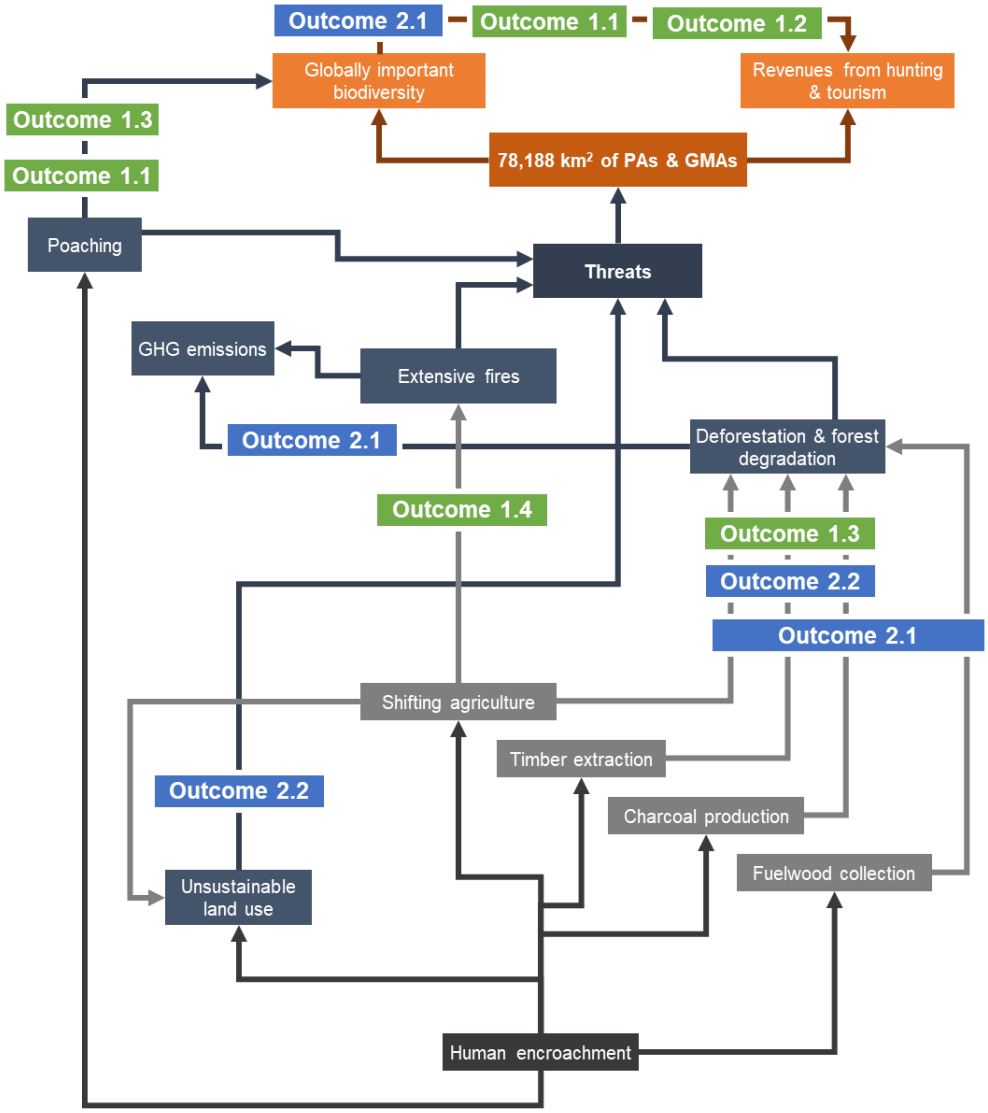


Figure 1. Impact pathway of threats to PAs and GMAs

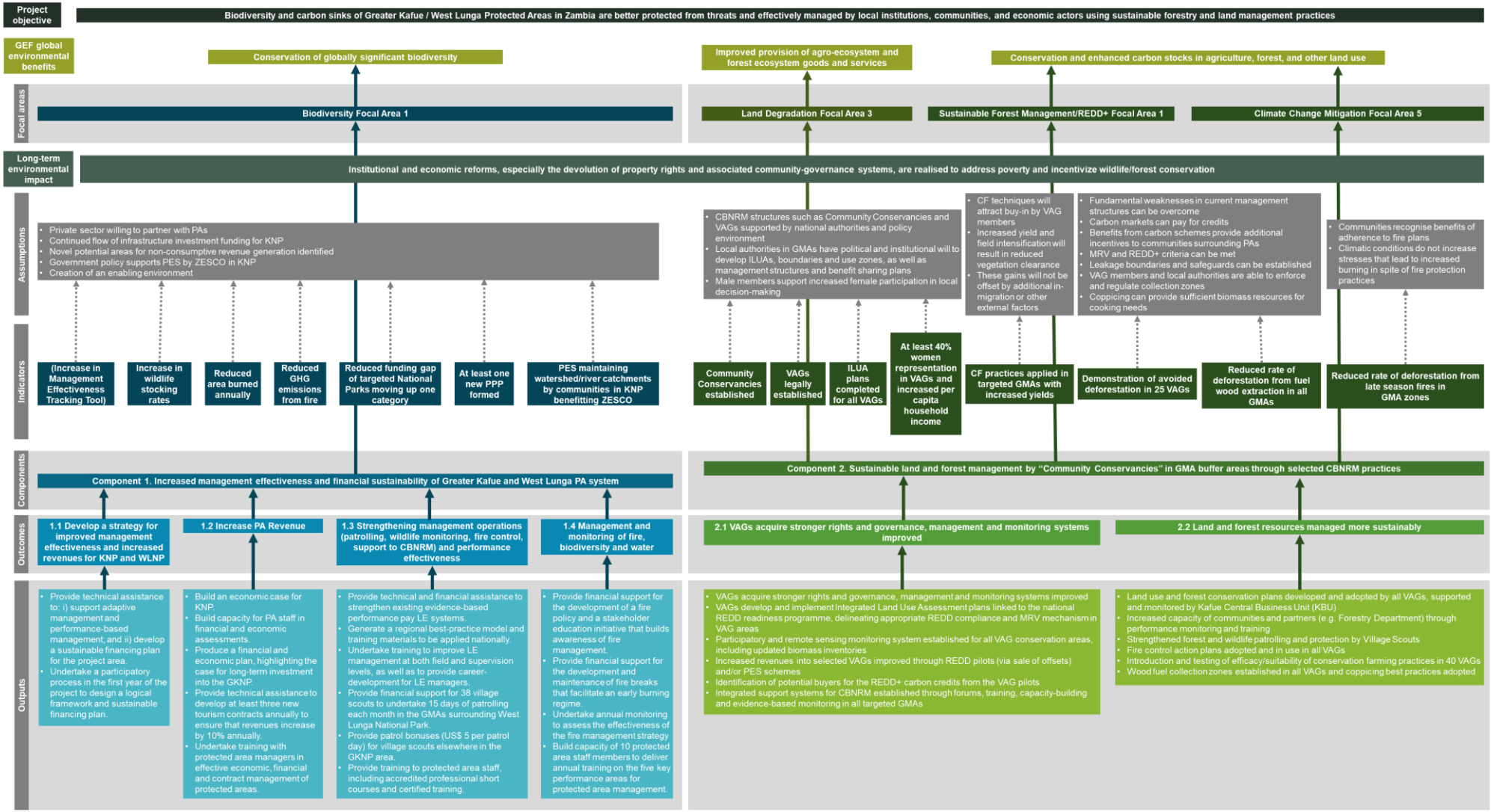


Figure 2. Theory of Change for the project

3.6. Barriers

The barriers recognised by the project are summarised in Table 4 below.

Table 4. Barriers to effective protected area management

Barriers to effective biodiversity conservation through protected areas	
Capacity	Administrative, financial and enforcement capacity at Head Office level needs to be strengthened in DPNW (formerly ZAWA now defunct, see section 3.9)
	Within Kafue and West-Lunga National Parks there is limited capacity and a need for training, strengthened enforcement and business planning.
Knowledge	Limited knowledge and information available regarding: • carbon finance opportunities (REDD+, Land Use Land Cover Change and Forestry and voluntary carbon markets) and procedures; and • uncertainties about the application of REDD+ financing mechanisms.
Financial	A sustainable financial plan is needed, including: • novel revenue-generating activities; • marketing and communication strategies; • systems to collect park user fees and manage tourism concessions; and • a government-funded protected area reinvestment and recovery plan.
	Within Kafue and West-Lunga National Parks there is a need to build partnerships with tourism operators and other private sector actors.
Institutional	Weaknesses in the framework of the protected areas systems
Protection	Five vulnerable vegetation classes underrepresented in protected areas; new protected areas are needed to protect intact vegetation.
Barriers to sustainable land and forest management	
Institutional	There is a lack of effective land-tenure arrangements, planning and governance for GMAs
	Incomplete and overlapping regulations and roles
Capacity	Limited capacity amongst GMA stakeholders such as ZAWA (now defunct, see section 3.9), the Forestry Department and traditional authorities for sustainable land and forest management.
Financial	Limited funding does not attract qualified staff
Adoption	Lack of convincing demonstration of sustainable land and forest management
Knowledge	Limited understanding and capacity amongst rural communities for implementation of sustainable land use and forest management practices.
	Communities do not consider protected areas to be effective at generating real benefits, limited support from communities.
Barriers to effective climate change mitigation and adaptation	
Capacity	Absence of local tenure institutions and appropriate technology.
Financial	Difficulty in accessing finance to scale up adoption of new technologies.
Institutional	Agreed national tools to measure emissions are lacking, as well as robust MRV systems and an integrated national data collection system.
Knowledge	Large gaps in knowledge impede planning and adaptive management, including: i. livelihoods; ii. economics; iii. status and trends of forests, land degradation and wildlife; iv. governance; v. poverty; and vi. gender.

3.7. Expected results

The expected results of the project are shown in Table 5 below.

Table 5. Expected results of the project

Project Strategy	Objectively Verifiable Indicators	Baseline	Target[2]
Objective: Biodiversity and carbon sinks of Greater Kafue National Park (KNP) and West-Lunga National	Sustainable Land and Forest Management established in Miombo Woodland and Dry Evergreen Forest ecosystems in PA Core areas.	• 24,164 km^2 (24,164,000 ha) • Core protected areas	• 24,164 km^2 PA + 41,297 km^2 GMAs = 65,461 km^2 • (24,164,000 ha PA + 41,297,000 ha GMAs = 65,461,000 ha) • Target GMAs consisting of Mumbwa, Numwala, Mufunta, Kasonso-Busanga, and Lunga-Luswishi in Greater Kafue NP,

[2] The target timeframe for all indicators is by project end, unless otherwise stated.

Project Strategy	Objectively Verifiable Indicators	Baseline	Target[2]
Park (WLNP) in Zambia are better protected from threats and effectively managed by local institutions, communities, and economic actors using sustainable forestry and land management practices.	Community managed GMAs and conservancies enabling forest corridor connectivity between WLNP and KNP in the long-term.		and Lukwawa, Musele- Matembo and Chibwika-Ntambu in West-Lunga Management Area
Component 1. Increased management effectiveness and financial sustainability of Greater Kafue and **West-Lunga** PA system	1. Increase in Management Effectiveness Tracking Tool	• 57% KNP (METTPAZ 2010) • 39% KNP GMAs (2010) • 28% WLNP (2010) • 20% WLNP GMAs (2010)	• 65% KNP • 45% KNP GMAs • 40% WLNP • 30% WLNP GMAs
	2a. Wildlife stocking rates	• KNP = 8.6% of carrying capacity (as per aerial survey 2008)	• 12% of carrying capacity in both KNP and productive GMAs
	2b. Reduced area burned annually	• KNP = 56% (~1.3 million ha)	• KNP = reduced by 50% (~625,800 ha)
	2c. Reduced GHG emissions from fire	• KNP = 1,650,000 CO_2 annually from late fires	• KNP = 825,000t CO2 reduced emissions annually[3]
	3. Reduction in funding gap of the targeted National Parks moving up one category (based on REMNPAS financial viability assessment) with at least one new PPP formed (WLNP)	• 0 PPP in Greater KNP and WLNP • Revenues: ~US$600,000 in KNP	• At least 1 PPP in each of core PAs of Greater WLNP and KNP • At least US$850,000 revenues in KNP • (increase by 10% per annum)
	4. PES maintaining watershed/river catchments by communities in KNP benefitting ZESCO	• 0	• 1 PES in KNP with ZESCO
Component 2. Sustainable land and forest management by "Community Conservancies" in GMA buffer areas through selected CBNRM practices	1a. "Community Conservancies" established	• 0 ha	• ~5,579 km^2 (557,900 ha) of intact forest ecosystems established as community conservancies in targeted GMAs
	1b. VAGs legally established	• 0	• At least 25 Village Action Groups (VAGs) in target areas formally recognized and constituted by Y2 with clear resource rights, delineation of legally recognized VAG boundaries and use zones, management structures and benefit sharing plans (in line with national REDD+ criteria)
	1c. ILUA plans completed for all VAGs	• No ILUAs in place for VAGs (0)	• Integrated Land Use Assessment plans developed for all VAGs
	1d. Women members in VAGs and improved livelihoods	• Negligible women representation in governance structure in VAG areas	• At least 40% female representation in all elected VAGs in project area; increased per capita/household income compared to 2012 baseline
	2. Conservation farming practices applied in targeted GMAs Increased yields	• 0 ha using conservation farming techniques	• At least ~37 km^2 (3,760 ha) of conservation farming practiced by at least 1,600 households (in 40 VAGs) by end of project. • Introduction of conservation farming

[3] Figures used to estimate fire emissions: annual CO_2 emitted per hectare due to fires in late season (as opposed to early season) = 1.32 tonnes CO_2/ha. Assuming 625,800 ha, project scenario reduces CO_2 emissions by 825,000 per annum.

Project Strategy	Objectively Verifiable Indicators	Baseline	Target[2]
			practices leads to improved soil organic matter and field intensification across 3,760 hectares leading to: i) 40% reduction in cumulative CO_2 emissions from vegetation clearance for agriculture in targeted areas resulting in ~75 km^2 (7,520 ha) of avoided deforestation in targeted areas; and ii) a decrease in direct lifetime avoided CO_2 emissions from clearance of vegetation for agriculture (20 years) in that same landscape (~988,128 tCO_2e compared to BAU scenario).
	3. Demonstration of avoided deforestation (no net loss) in at least 25 VAGs establishing REDD pilots linking to national and/or voluntary carbon financing	• 0 ha/no REDD+ pilots in VAGs	• ~250 km^2 (25,000 ha) leveraging additional 750 km^2 (75,000 ha, intact forest) by protecting VAG designated forest zones • VCS and CCB standard acceptable to international brokers certifying REDD pilots and marketing for carbon financing • Potential buyers identified to purchase the REDD+ carbon credits from the VAG pilots
	4. Reduced rate of deforestation from fuelwood extraction in all targeted GMAs	• Unsustainable firewood collection and SFM governance • Wood fuel collection in designated areas is ad-hoc and unsustainable • No sustainable woodlots exist in targeted areas • Knowledge of coppicing practices for fuelwood extraction among communities in targeted areas is very low	• Under the project designated zones for fuelwood collection will be established optimizing SFM (and testing different 'treatments') • Working with the Copperbelt University, the 25 VAGs will be trained in harvesting and coppice management and will each establish an auditable fuelwood use and CFM plan. • Linked to land-use planning, experimental fuelwood management and collection zones will be established in 25 VAGs; systems boundaries for VAGs will be defined; and alternative operational modalities for fuelwood harvesting and use will be applied (including coppicing). • Leading to the following GEBs: direct lifetime avoided emissions savings of ~63,281 tCO_2e (20 years) compared to fuelwood usage in a BAU scenario
	5. Reduced rate of deforestation from late season fires in targeted GMA zones	• Late season fires and poor fire management monitoring and practices in all targeted GMA zones • ~1,747 km^2 (174,671 ha) of forests burned in late-season fires annually in GMA areas in KNP • ~6,271 km^2 (627,088 ha) of forests burned in late-season fires annually in PA zones of KNP • ~Annual estimated CO_2 emissions from fire in GMA zones of KNP = 230,566 tCO_2e per annum • ~Annual estimated CO_2 emissions from fire in PA parts of KNP = 827,756 tCO_2e per annum	• Land-use and forest conservation plans will be developed and adopted by all VAGs, supported and monitored by Kafue Central Business Unit (CBU) • Forest and wildlife patrolling and protection will be done by Village Scouts in all targeted GMAs • Fire control action plans will be adopted and put in use in all VAGs • As a result, fire losses will be reduced by at least 30% in GMA zones annually through fire protection practices (boundary and firebreak management, early burning, etc), land use planning, patrolling and education • The resulting direct lifetime avoided tCO_2 emissions (over 20 years) from these activities compared to a BAU scenario (in GMA zones) = 1,383,394 tCO_2e

3.8. Total resources identified for the project

The total resources identified for the project, including approved grant financing from GEF and co-financing are shown in Table 6 below.

Table 6. Project resources

Project Financing	At CEO endorsement (US$)	At MTR (US$)	At TE (US$)
[1] GEF financing	13,148,864	13,148,864	16,188,864
[2] UNDP contribution	3,040,000	3,040,000	3,040,000
[3] Government (in-kind)	37,396,777	37,396,777	37,396,777
[4] Other partners	6,500,000	6,500,000	6,500,000
[5] Total co-financing (2+3+4)	46,936,777	46,936,777	46,936,777
Project total costs (1+5)	60,085,641	60,085,641	63,125,641

3.9. Main stakeholders

In 2014, the Project Document was signed with the Ministry of Lands, Natural Resources and Environmental Protection (MLNREP) as the Implementing Partner (IP), with the Forestry Department and Zambia Wildlife Authority (ZAWA) as Responsible Parties (RPs). However, there were several subsequent changes in the organisational structure of the national government in 2016 (Figure 3). Firstly, MLNREP was divided into the Ministry of Lands and Natural Resources (MLNR) and the Ministry of Tourism and Arts (MoTA). Secondly, ZAWA was restructured as the Department of National Parks and Wildlife (DNPW) under MoTA.). The Forestry Department now falls under MLNR, while DNPW falls under MoTA. Thirdly, Environmental Protection, which previously fell under the Natural Resources Management Department, was split into: i) the Climate Change and Natural Resources Management Department (CCNRMD) under the MLNR; and ii) the Environment Management Department (EMD) under the newly formed Ministry of Sanitation, Water Development and Environmental Protection. This latter point is pertinent as the National GEF Focal Point is placed with the Environment Management Department.

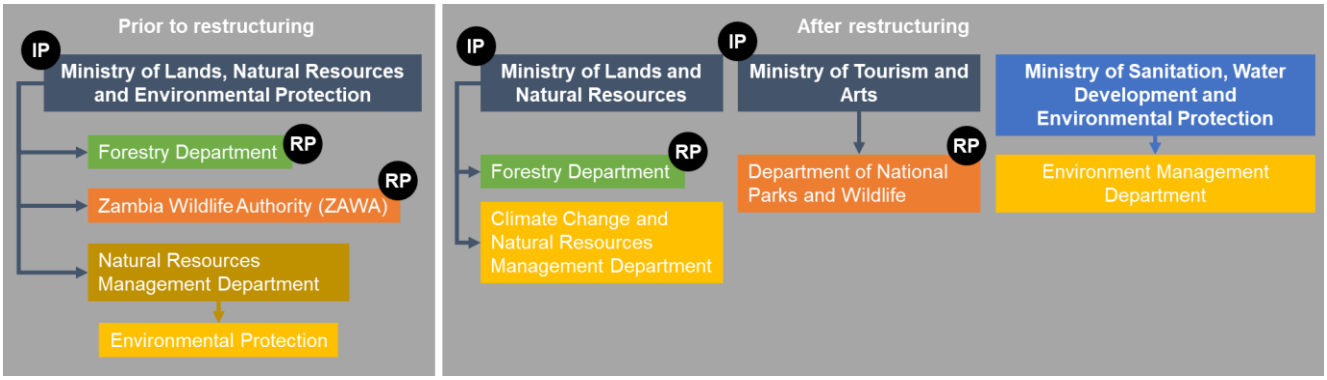


Figure 3. Institutional arrangements prior to, and following, government restructuring in 2016.

During 2016, these institutional changes were brought to the PSC for discussion. It was decided that both departments would remain as the RPs for the project, with plans in place for effective collaboration and alignment. Authority at the level of IP remained divided between the two newly formed ministries as result of inter-ministerial conflicts over the project.

From the outset of the project several stakeholders (at all levels) have referred to there being two IPs, namely the Forestry Department and the Department of National Parks and Wildlife. This misapplication of the terminology was exacerbated as a result of the institutional changes in 2016. The consistent misapplication of UNDP terminology is noted here and will be flagged elsewhere in the document as appropriate.

A summary of the main stakeholders involved in implementation of the project and their roles is shown in Table 7 below.

Table 7. Project stakeholders and partners and their roles

Stakeholder	Role
Ministry of Lands and Natural Resources	Execution/implementation
Ministry of Tourism and Arts	Execution/implementation
Department of National Parks and Wildlife (DNPW, replaced ZAWA)	Responsible Party (in reports referred to as Key Implementing Partner)
Forest Department	Responsible Party (in reports referred to as Key Implementing Partner)
Village Action Groups (VAGs)	Key units of benefits, action and accountability
Community Resources Boards	Key beneficiaries and action institutional structure
Chiefs/traditional authorities/Patrons in "Project" GMAs	Key collaborating and supportive partners on implementation
Ministry of Water Development, Sanitation and Environment Protection Ministry of Fisheries Ministry of Agriculture and Livestock	National implementing/cooperating partners
District Councils in relevant districts	Cooperation on implementation
Zambia UN-REDD Programme	Key collaborating partner on implementation of REDD pilots
Copperbelt University/Zambia Forestry College	Key monitoring and capacity building partner
Zambia Environmental Management Agency	Sharing information
Embassy of Finland	Sharing information
Embassy of Norway	Sharing information, co-funding
NGOs (CFU, TNC, GRI, WWF, Zambia National CBNRM Forum)	Collaborating partners on implementation and capacity building
The GEF Operational Focal Point of Zambia	Policy guidance
Representatives of the private sector	Cooperation on implementation
UNDP CO UNDP RTA Executing Agency	Technical Assistance
The Project Team	Implementation
The Project Board/Steering Committee/Inter-Ministerial Committee members	Policy forming and guidance of implementation

4. Previous evaluations

A Mid-Term Review (MTR) of the project was conducted in 2017. The objectives of the MTR were to: i) assess the progress towards achievement of project objectives and outcomes; ii) assess early indicators of project success or failure and make recommendations for remediation; and iii) review the project strategy and any risks therein to sustainability. This process was led by an international consultant with the support of a national consultant. Meetings were held with project staff, NGOs, traditional leaders, community representatives, UNDP and government officials (IPs), as well as local authorities in the project area. Following these engagements, a Theory of Change workshop was held during which stakeholders made recommendations to improve project implementation and management.

At the time of the MTR, governance structures had been established, awareness-raising activities had been undertaken and land-use planning had been piloted. Overall, the MTR concluded that, while some progress had been made in terms of the project objectives, minimal tangible impact had been achieved on the ground. At the time of the MTR, governance structures had been established, awareness-raising activities had been undertaken and land-use planning had been piloted. Implementation of the project had been significantly delayed, but the reviewers were positive that progress had been made. Several recommendations were made in the MTR, including: i) urgent acceleration of the project's implementation progress; ii) recruitment of a project accountant; iii) opening of a project bank account; iv) shifting of the project's operation onto Advance Funds rather than RDP/RDS, as appropriate; v) establishment of a project technical committee; and vi) recruitment of a SFM/REDD+ coordinator. Further details on the response to recommendations from the MTR are provided in Section 5.3 below.

Although no geographical coordinates are provided for the project interventions, the GMAs in which the project was conducted are illustrated in Figure 4 below. These GMAs surround the Kafue and West-Lunga National Parks.

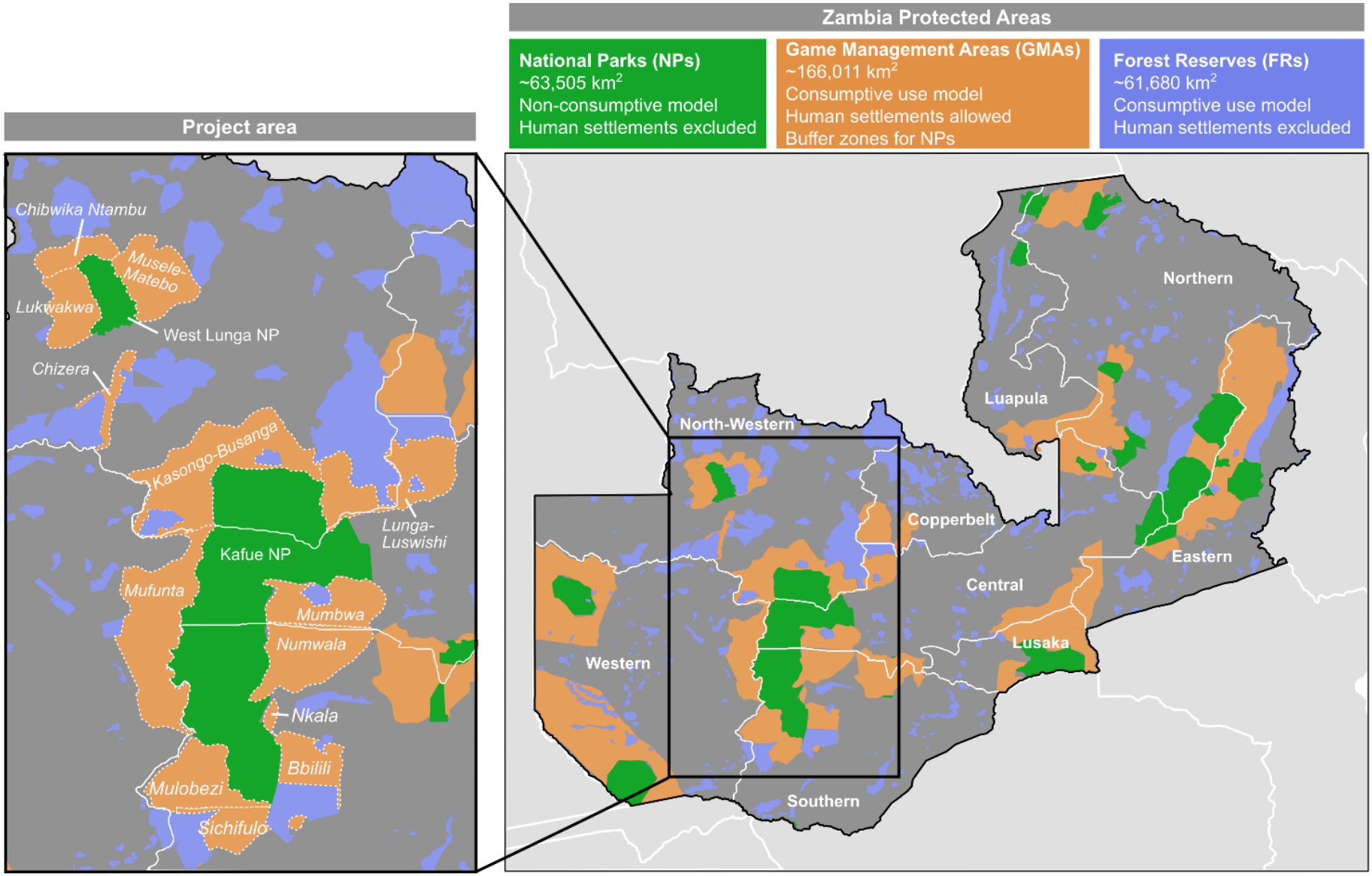


Figure 4. Geographic context of the project.

5. Findings

5.1. Project design/formulation

Assumptions

The design of the project was based on a number of assumptions (Figure 2). Component 1 assumed that the private sector would be willing to partner with protected areas and provide pilot investments. This would have formed part of the continued flow of infrastructure investment funding provided for Kafue National Park as a result of the project. This component also assumed that new potential areas for non-consumptive revenue generation exist and could be identified through the project. Furthermore, it was assumed that government policy would support payment for ecosystem services by ZESCO in Kafue National Park. Finally, it was assumed that the implementation of Component 1 would result in the creation of an enabling environment that would support the implementation of Component 2, as well as the long-term sustainable management of protected areas.

Under Component 2, it was assumed that CBNRM structures such as Community Conservancies and VAGs would be supported by national authorities and policies as well as the institutional structures established under Component 1. It was also assumed that local authorities in the target GMAs had both the political and institutional will to develop ILUAs, boundaries and use zones, as well as management structures and benefit sharing plans in partnership with local communities. The existing inadequacies in management structures were expected to be overcome through the implementation of project activities. VAG members and local authorities were assumed to be capable of enforcing and regulating collection zones through training provided by the project. Additionally, a critical assumption was that male VAG members will support increased female participation in local decision-making.

Conservation farming (CF) techniques were assumed to be attractive to VAG members while being likely to garner buy-in from communities. The proposed CF techniques were expected to result in increased yields, reducing the need for vegetation clearing and agricultural fields expansion. It was assumed that these gains will not be offset by in-migration or additional external factors. In addition, it was assumed that coppicing could provide sufficient biomass for cooking needs while reducing the rate of deforestation in community-managed lands. Furthermore, it was assumed that climatic conditions would not exacerbate the conditions that lead to wildfires and that communities would recognise the benefits afforded by adhering to fire management plans.

In terms of mitigation, it was assumed that carbon markets would be able to pay for credits earned through the project in the long-term and that benefits from carbon schemes would provide additional incentives to communities surrounding PAs. This was predicated on the assumption that both MRV and REDD+ criteria could be met and that leakage boundaries and effective safeguards could be established.

Risks

There was a strong focus on capacity building and institutional strengthening in the project which risked taking precedence over completing on-the-ground interventions, particularly in the first few years of the project. Several risks were identified, of which the majority were classified as 'medium' risk. Under the MTR, a secondary risk was identified which was caused by a significant delay in implementation. Further details are provided in
Table 19.

The project was designed following extensive consultation with local stakeholders. A stakeholder involvement plan was included as part of the Project Document to support evidence-based adaptive management of the project. The plan includes: i) the production, collation and visualisation of data on all aspects of land management — including governance, economics, livelihoods, gender, status of wildlife and forests; and ii) incorporation of this data into decision-making processes at all levels. A stakeholder forum was proposed to ensure dissemination of information across the project area.

The MTR reported that stakeholders interviewed during the MTR process were of the opinion that the project had been well designed in terms of matching local priorities. Of these priorities, the MTR highlighted the importance of strengthened governance structures, improving communication between authorities and communities, enabling policy adoption at a local level and building stakeholders' capacity for natural resource management. Furthermore, the design of the project should promote national and local ownership in its implementation. This was to be realised through capacity support at the national and regional level (Component 1), as well as through the strengthening of community governance structures and capacity for CBRNM (Component 2).

The project design is well aligned with national priorities and plans, including the:
i. Seventh National Development Plan (7NDP, 2017–2021);
ii. Sixth National Development Plan (SNDP, 2011–2015);
iii. National Policy on the Environment (NPE, 2005);
iv. National Biodiversity Strategy and Action Plan (NBSAP, 1999);
v. National Climate Change Response Strategy (NCCRS);
vi. National Adaptation Programme of Action Against Climate Change (NAPA);
vii. National Decentralisation Policy (NDP, 2010); and
viii. National Parks and Wildlife Policy of 2018 and the National Forestry Policy of 2014.

The project is also in line with the National Parks and Wildlife Policy of 2018 and the National Forestry Policy of 2014, as well as the updated Zambia Wildlife Act and Forest Act No. 14 of 2015 — although these had not been issued at the time of project development. As a whole, the project design supports the application of the national wildlife, forestry and decentralization policies, and its implementation is well coordinated with relevant national and district authorities. The project is also aligned with other relevant initiatives in the region.

Alignment of the project to other ongoing initiatives can also be demonstrated. Originally, the project was conceived as one of the initiatives of the Joint Assistance Strategy for Zambia (JASZ) II project (2011–2015). It was designed to be complementary to several initiatives funded by Finland and the Decentralised Forest and other Natural Resources Management Programme. Currently, the project also complements the new Sustainable Development Partnership Framework (SDPF, 2016–2021). The outcomes of the project were also designed to align with the United Nations Development Assistance Framework (UNDAF) 2011–2015. In addition, the project is complementary with the work undertaken by: i) the Conservation Farming Unit (CFU); ii) The Nature Conservancy (TNC); iii) Game Rangers International (GRI); and iv) CBNRM Forum initiatives. The project was also expected to provide a pilot case for future REDD+ grants and cooperate with Copperbelt University.

The project is aligned with GEF Policies on Environmental and Social Safeguards and Gender Mainstreaming. Improving the livelihoods of rural communities through sustainable environmental management, institutional empowerment and strengthened capacity is the cornerstone of the project; Gender is built into the logical framework of the project with the expectation that gender issues will be prioritised throughout implementation, particularly in activities related to CBNRM.

Overall, the project was well designed, but ambitious in terms of its scope and budget, particularly in attempting to undertake REDD+ pilots in the short timeframe. It would have been better to focus on a smaller area with more tangible on-the-ground benefits for communities.

5.2. Project implementation

As described in the annual reports, gains were made in each year of the project's implementation. However, several challenges were also experienced during the implementation process. These respective gains and challenges for each year are summarised below.

2014

Gains

In the first year of the project, the initiation phase commenced. Additionally, an inception workshop was held during which stakeholders recommended amendments to the Project Document. These

included recommendations to strengthen implementation arrangements, land tenure, procurement procedures and budget allocations. Lastly, the project area's coverage was expanded to include 28 forest reserves.

Challenges
- The stakeholder consultation process under Outcome 1 delayed the implementation of activities, which were rescheduled for 2015.
- The delay in recruiting project staff, consequently the CBNRM unit was not established.
- The inception workshop was delayed as a result of the lengthy stakeholder engagement process, which was held in third quarter of 2014.
- The workplan and budget had to be revised in fourth quarter of 2014.

2015

Gains

The Project Implementation Unit was established during the second year of the project, with certain project staff being recruited including the project manager, the CBNRM coordinator and project officers. Three meetings were held by the national Project Steering Committee through which the 2015 Annual Workplan was approved. An audit was conducted for financial operations in 2014, which yielded an Unqualified Report. Additional gains in this year are listed below.

- On-the-ground activities commenced, with awareness raising being undertaken in the areas surrounding Kafue and West-Lunga National Park.
- Further engagements were undertaken to sensitise communities to the project's activities
- Six Community Resource Boards (CRBs) and Village Action Groups (VAGs) being established
- A forestry baseline survey was undertaken.
- A process was initiated to identify baseline consultancies.
- Capacity building was undertaken, which included: i) training course in negotiation for sustainable development; and ii) training in environmental impact assessments for senior staff in the Zambia Wildlife Authority (ZAWA) and Forest Department.

Challenges
- Recruitment of consultant to develop strategic plan stalled.
- Recruitment of consultant to undertake law enforcement evaluation stalled.
- Delay in payment for results of aerial survey.
- Delay in recruitment of project staff (project manager, CBNRM coordinator and two project officers).
- Delay in procurement of office space at Mumbwa and Mufumbwe.
- Delay in procurement of office supplies and internet connection.
- VAGs and CRBs not yet formed in five Chiefdoms (Shimbizhi, Chilayabufu, Kaingu, Kasempa and Matebo), funds secured for formation in 2016.
- Delay in contracting consultancy to establish database.
- CRBs and VAGs delayed in delineating boundaries for land use planning, postponed to 2016.

2016

Gains
- Ongoing sensitisation and awareness-raising activities resulted in the establishment of five additional CRBs and VAGs.
- Community Liaison Assistants (CLAs) were appointed for each of the 14 chiefdoms in the project area.
- The Nature Conservancy (TNC) and the Conservation Farming Unit (CFU) signed MoUs with UNDP clarifying modalities of implementing their assigned activities.
- Using funds requested by CFU, six pilot areas to implement conservation farming were identified and 60 lead farmers were recruited and trained in climate-smart agriculture.
- Before the end of 2016, each lead farmer had initiated the process of recruiting 30 practicing farmers, with which they will initiate conservation farming.

- Land use planning was undertaken and an integrated land use training manual was produced.
- A multi-stakeholder team comprising 32 members was trained in the preparation of land use plans at VAG level.
- Resource assessments were conducted in several VAGs to aid in the preparation of land use plans.
- Recommendations were made for the improvement of law enforcement systems in the forestry and wildlife subsectors.
- Some progress was made in the development of the information database. Office space, supplies and an internet connection were also secured for at Mumbwa.

An audit of the 2015 operations highlighted the urgent need for: i) the opening of a project bank account: ii) recruitment of a project accountant to facilitate effective financial management; and iii) recruitment of remaining staff. Nonetheless, the audit was classified as an Unqualified Report.

Challenges

The National Steering Committee approved the project budget two weeks before the end of the first quarter of 2016. A cap was put on activities between May and September 2016 as a result of security concerns in the wake of the tripartite elections which took place in August. Implementation was further delayed by the lack of a project bank account, as well as the absence of an accountant and other critical staff. Further challenges are listed below.

- The draft of the strategy for improved management effectiveness for protected areas was rejected by the IPs, therefore the contract extended to 2017 to allow for revisions.
- Formulation of the fire management strategy was delayed to the first quarter of 2017.
- The training in reporting fire frequency and fire awareness also delayed to 2017.
- The wildlife surveys were delayed.
- The establishment of CBNRM Support Unit was delayed, awarding of advertised positions to be completed first quarter 2017.
- There was a minor delay in providing management training for VAGs.
- Establishment of Community Forest Management (CFM) was delayed until first quarter 2017.
- The appointment of a REDD+ coordinator was delayed until the first quarter 2017.
- Several assessments delayed because of the delayed appointment of the REDD+ coordinator.
- No monitoring visits undertaken by project management, which were delayed until 2017.

2017

Gains

- Significant progress was made in law enforcement in 2017.
- The Financing Strategy for Kafue National Park was completed.
- The database was developed and the Implementing Partner (IP) staff was trained in Geographic Information System (GIS) as well as remote sensing techniques for data collection.
- An adapted Management Effectiveness Tracking Tool for Protected Areas of Zambia (METTPAZ) was introduced.
- Phase 2 of the preparation of the remaining 41 VAG ILUPs was initiated.
- The CFU worked with the 60 lead farmers, who successfully recruited 1,800 farmers in 36 VAGs.
- Further capacity building was undertaken at the community level. This included the orientation of community representatives from VAGs on their roles and responsibilities, as well as other thematic issues relevant to the project.

In the latter half of the year, consultancies were contracted to: i) conduct a capacity/training needs assessment in partner institutions; ii) evaluate the Tourism Concession Agreement operating in the Kafue National Park; iii) undertake a gender gap analysis and make recommendations for mainstreaming gender in the project area; and iv) undertake an assessment of potential for community forest management.

The Mid-Term Review (MTR) was conducted and included a Theory of Change workshop. The MTR noted the slow pace of implementation — which was mainly because of the delayed start as well as other administrative, financial and staffing issues — and recommended the acceleration of implementation, among other recommendations.

Challenges

- The annual stakeholder meeting was delayed to 2018.
- The development of the financial and economic plan was delayed to 2018.
- Training for staff in law enforcement and protected area management was delayed to 2018.
- The launch of the fire management strategy delayed to 2018. In response TNC developed own strategy to implement fire management and education.
- Dissemination of results of capacity needs assessment to stakeholders delayed to 2018.
- No response was received for the post of consultant to conduct studies and surveys on PES, Ips, therefore project staff to undertake task in-house while continuing efforts to appoint a consultant.
- REDD+ coordinator position not filled and only to be advertised in 2018, delay in appointment
- The Implementation of VAG land use plans was delayed until a consultancy could be engaged to develop participatory technologies for monitoring and performance (expected first half of 2018).
- There was a delay in delivery of patrol kits for village scouts.
- Stakeholder engagement regarding establishment of PPP in Kasongo Busanga GMA was delayed until 2018.
- Late response to advertised position resulting in decision being made to abort the project activity under which 25 VAG baseline surveys would have been conducted
- The forestry resource assessment and the development of forest management plans were deferred until 2018.
- Site monitoring visits by the Inter-Ministerial Committee and UNDP was deferred to 2018.

2018

Gains

The activities implemented in 2018 contributed to the achievement of several project outputs including: i) strengthened management operations of PAs; ii) strengthened land-use governance and planning in GMAs; and iii) sustainable land management. Gains in this year are listed below.

- A field visit by the Directors of National Parks and Wildlife and Forestry was undertaken as part of monitoring activities in the project area.
- The audit on the 2017 Financial Operations was conducted and produced an Unqualified Report.
- The Management Effectiveness Tracking Tool for Protected Areas in Zambia (METTPAZ) assessment was completed by stakeholders and showed significant improvements in management effectiveness in protected areas.
- The TNC estimated that a marginal reduction in occurrence of late fires and emission of GHGs in the project area had been achieved.
- A learning visit to Mozambique on community REDD+ was conducted with two women and five men from local communities in the project area, together with the IPs.
- An additional learning visit for 11 other community members and IPs to Namibia was conducted to gain insight on the implementation of CBNRM and community conservancies.

Gains were also made in land use planning at the local level through: i) development and validation of 38 Integrated Land Use Plans (ILUPS) and associated by-laws; ii) selection of eight registered community groups and NGOs for grant support using the GEF Small Grants Programme model; iii) engagement of a REDD+ consultant who conducted community consultative meetings on the REDD+ pilot selection criteria in Kafue and West-Lunga; iv) training of 51 VAGs in Kafue and 26 VAGs in West-Lunga in fire management, leading to the establishment of Fire Management Committees, which subsequently developed Fire Management Action Plans; v) capacity building support to IPs in fire management and measuring of emissions from late fires in GMAs; vi) one member of staff in the Forestry Department pursued a Master's Degree Course in Climate Change

Development and Policy focusing on CBNRM/REDD issues at Sussex University; vii) validation of two consultancy reports (i.e., for the gender mainstreaming study and assessment of potential for community forest management); and viii) upscaling of conservation farming activities. Approximately 14,678 households were trained in conservation farming. It is reported that more than 2,075 households adopted conservation farming involving across the 41 VAGs.

Challenges

Several challenges resulted in delays, limitations and non-implementation of some activities. These challenges were largely administrative and included: i) delays in opening a project bank account; ii) delays in finalizing vendor agreements for repairs and mechanical service provision of motor bikes used by CLAs; and iii) limited proposal applications received for the GEF SGP. In addition, the project supported only limited quantities of food rations for law enforcement activities as a result of inadequate budget provisions. Delayed remittances of funds also affected monitoring of law enforcement activities, particularly the provision of limited quantities of fuel which affected planning and execution of patrols. Further challenges in 2018 are listed below.

- The completion of the concept notes was delayed.
- There was insufficient enforcement of financial guidelines following the audit undertaken by the UNDP Country Office.
- New financial regulations in the banking sector negatively affected disbursement of funds for field activities.
- No operational funds were available for 7 months (September 2017–March 2018), mainly as a result in the delay of approval of the Annual Spending Limit.
- There was a delay in the approval of an annual spending limit.
- Some activities scheduled for the first quarter of 2018 were not implemented.
- A project bank account was still being processed.

2019

Project implementation was extended into 2019, pertinent points on gains and challenges noted in the PIR and quarterly reports are listed below.

Gains

The third quarter report for 2019 states that 40% of activities under Outcome 1 were on-track, with 60% being classified as off-track. Several gains are noted, including: i) awareness raising of fishers on fire management; ii) review of a draft agreement by legal teams from KTF; iii) a HACT assessment to determine Panthera's capacity to manage and receive funding support for implementation; iv) continued strategic and logistical support for law enforcement in protected areas; v) continued support of satellite-based fire monitoring and reporting; vi) continued support of one IP staff undertaking a Master's course in REDD; and vii) facilitation of satellite-based fire monitoring and reporting by TNC; Viii) one member of staff in the DNPW pursued a Master's Degree Course in PES issues at REEDS University. The 2019 PIR notes gains made in the increased management effectiveness of the Kafue and West-Lunga National Parks, as well as the surrounding GMAs.

For Outcome 2, the third quarter report notes the following gains: i) development of specifications for communication equipment; ii) editing of project documents for print; iii) an inception meeting for the consultancy on Community Forest Management; iv) continued support and monitoring of small grant projects for alternative income generating activities; v) continued support of COMACO and CFU activities in conservation agriculture; and vi) securing of 1,924 ha as PA, translating into ~4,000 ha of avoided deforestation. The development of a manual for gender mainstreaming commenced and a consultant was engaged to review and edit documents produced under the project. In addition, a firm was engaged to develop a video documentary to capture the gains of the project in agriculture and alternative livelihoods. The 2019 PIR notes gains made in the reduction of the area burned annually in the GMAs surrounding Kafue National Park

Challenges

- There was no response to the call for proposals for a fisheries strategy consultancy.
- There was a delay in activity implementation as a result of staff turnover at The Nature Conservancy (TNC).
- The implementation of COMACO's activities was delayed as a result of procurement process setbacks.
- There were delays in reviewing the draft agreement by KTF.
- There were procurement delays in engaging a partner for the development of a CFM training manual.

2020

An 18-month extension for the project was granted in May 2019 to allow for the addressing of challenges which were constraining implementation. These challenges included: i) limited time allocated for implementation in light of the project's scope, complexity, intended outcomes and scale; ii) limited capacity of the IPs; iii) organisational reshuffling in government ministries and departments, including the IPs, which resulted in a loss of direction in strategic management and delayed high-level decision-making between 2017 and 2018; and iv) changes in PIU staff, as well as disruptions in community-level implementation as a result of the national elections in 2016. The revised closure date for the project is 15 November 2020.

Gains

In the second quarter of 2020, field-based activities were implemented following a suspension of these activities in the first quarter in the wake of the global Covid-19 pandemic. In the first quarter, only a few activities that did not require travel and physical contact — such as meetings — were implemented. Several gains were made under Component 1, including: i) development of a strategy to curb illegal fishing in PAs; ii) completion of a legal review of the Public-Private-Community-Partnership (PPCP) for the West-Lunga PA system; iii) initiation of the procurement of radio equipment for strengthening law enforcement operations in the project area; iv) continued support of one IP staff member undertaking a Master's Degree; v) completion of a data collection tool for estimating reductions in GHG emissions from conservation farming to be undertaken by a consultant employed by TNC; vi) finalisation of the Fire management Strategy for Kafue National Park; and vii) completion of the Wildlife Aerial Survey report.

The gains under Component 2 included the: i) completion of the first draft of the Community Forest Management (CFM) plan; ii) initiation of community engagement by COMACO to update boundaries of forest area earmarked for protection in the VAGs in Mumbwa and Itezhi-Tezhi; iii) provision of capacity building and mentoring support to 21 grantees of small grants; iv) continued engagement with VAGs to upgrade areas earmarked for REDD+ by COMACO; vii) commissioning of a study (undertaken by the CFU) to determine adoption rates of conservation farming in the project areas; and viii) continued strengthening of market linkages by COMACO for smallholder farmers in the project area engaged in natural resources conservation.

Challenges

- The Covid-19 global pandemic constrained implementation in the first quarter of 2020.
- Poor internet network coverage and electricity supply to CLAs hindered efficient communication, which was already constrained under pandemic conditions.
- Working remotely as part of the Covid-19 prevention measures by UNDP, PIU and IP staff contributed to further slowing of project implementation.
- Delays in initiating the TE process and engaging a consultant.
- Operational delays as a result of the Covid-19 pandemic.

5.3. Adaptive Management

Several recommendations were made under the MTR to improve implementation of the project. The recommendations, management responses and evidence of changes made are summarised in Table 8 below. An 18-month, no-cost extension was granted in May 2019, following the MTR. The TE was re-scheduled for May 2020, and operational closure date of November 2020. Following this, the TE was delayed again to November 2020 as a result of slow procurement processes. No further

extensions could be provided, as the project had already reached the maximum allowable extension.

Table 8. Management response to MTR recommendations

Challenge/Problem	MTR recommendations	Management response	Evidence of action taken

Delayed implementation	Urgent acceleration of implementation	• To commence February 2018
		  ○ Finalisation of the acceleration strategy
		  ○ Implementation of the acceleration strategy
			• Annual report for 2018 notes the need for implementation of the acceleration strategy, but no evidence is provided that this was done

Delayed implementation	No-cost extension of the project by at least 12 months (preferably 18)	• Guidelines on project extensions permit extensions only under extreme circumstances • To commence February 2018 ○ Alternative approach is the acceleration strategy	• Annual report for 2018 lists activities and indicative budget for 2019

Current organisational structure does not provide for an entity that facilitates joint decision-making by UNDP and the two IPs	Revision of the project organisation structure	• Three structures in place for oversight: i) monitoring visits; ii) quarterly and annual reviews; and iii) steering committee
		• UNDP, IPs and other stakeholders represented in the above organisational structures
		• Technical committee to be established
		• ToRs for the technical committee will include reviewing and /validating technical reports and strategies for project implementation
		• To commence December 2017
		  ○ Steering committee composition will be reviewed to add non-state actors
		• To commence first quarter of 2018
		  ○ ToRs for the steering committee will be revised to provide a distinction between the technical committee and national committee
			• Annual report for 2018 states that two Technical Committee Meetings were held during the first quarter of 2018 to review the progress of the Mid-Term Review Management Responses and provide technical input in the Annual Workplan prior to the Steering Committee meeting
			• Annual report for 2018 notes the urgent need for the implementation of the acceleration strategy, also noted during quarterly meetings of the Steering Committee

Current financial system has promoted transparency, but at a high cost of efficiency and effectiveness	Revision of the project financial management system and devolution of fiduciary responsibilities to the project organisation arrangements	• Project operates on a Direct Request Payment system • PIU generates payment requests that are cleared by directorate officers of the two IPs • Payment then made by UNDP • Delays in payments as a result of physical distance between IP directorates and UNDP • Fiduciary responsibilities clearly outlined in Project Document and POPP • These are being followed in implementation • Opening of bank accounts to be completed by 31 March 2018 • Bank accounts need to be opened at a local level as project implementation takes place in remote areas	• The Annual report for 2018 states that a project bank account had not yet been opened

Wildlife crime is a significant threat to biodiversity in protected areas	Include essential upstreaming of strategic activities to support the IPs in reducing threats, in particular wildlife crime, through an integrated multi-sectorial approach	• Government has established Central Joint Operations Committee (CJOC) • Defence force is providing law enforcement in national forests, including Kafue and West-Lunga National Parks • CJOC is developing a strategic plan for curbing wildlife crime • No further support needed from the project	n/a
There is a need to establish community engagement in sustainable natural resources management and conservation. During the remaining project time, there should be a special focus on sustainability-inducing activities, both upstreaming and at the local level.	Prioritise implementation of impact-generating/trust-building pilots with communities and extend exposure of CRBs and VAGs to a wide variety of income-generation options.	• Land use plans completed in 36 VAGs • To start in the second quarter of 2018 ○ Validate and develop income generating activities, including the implementation of REDD+ • Tour to Mozambique to be undertaken in February 2018 to collect information on the implementation of REDD+	• The Annual report for 2018 states that tours were undertaken to both Mozambique and Namibia in 2018

Project has limited visibility in the project area, as well at a national level	Elaborate and implement a communication and visibility strategy	• To be completed by 31 March 2018
		  ○ Recruit a United Nations Volunteer to develop a communication strategy
		• To begin in the second week of April 2018
		  ○ Implement the communication strategy
			• The Annual report for 2018 states that a Communications Officer was recruited

There are coordination challenges among stakeholders as result of the two IPs being two different ministries	Enhance cooperation between the two EAs as well as between the two EAs and other relevant stakeholders and sectors at all levels	• The Seventh National Development Plan (7NDP) has shifted from a sectoral approach to an outcomes-based approach • Forest and wildlife departments will be contributing to the same programmes in the 7NDP • Structures for implementing the 7NDP in a coordinated manner established at the national level • At the project level, the technical and steering committees will amplify arrangements for a coordinated approach	n/a
There is a necessity t to enhance coordination and cooperation and resolve conflicts between key actors, as well as between actors and competing sectors	Provide training to key stakeholders on participatory approach and conflict resolution	• Continue capacity building activities for CRBs/VAGs, including conflict management and resolution skills • By second quarter 2018 ○ Conflict management to be done during validation of VAG land use plans • Conflicts at sectoral level addressed by the national and project technical committees	• Annual report for 2018 states that 38 Integrated Land Use Plans (ILUPS) and associated by-laws were validated • VAGs trained on fire management and developed Fire Management Action Plans • VAGs participated in learning visit to Namibia on CBNRM

Recommended that the project indicators be revised to integrate suggested amendments	Revision of the indicators	• To be done by first quarter 2018
		  ○ Technical committee to meet to review and advise steering committee on the status of indicators
		• To be done by first quarter 2018
		  ○ Steering committee will request UNDP to engage
			• Annual report for 2018 does not mention the revision of indicators
			• Annual report for 2018 does not mention the engagement of the GEF regional service centre

		GEF regional service centre	
	Implementation of Project activities for establishing REDD pilots linking to national and/or voluntary carbon financing	No management response provided	• Annual report for 2018 states that activities related to carbon financing were to be delayed until a pilot had been established
Enabling better and well-coordinated government performance in achieving national objectives and priorities	Strengthen significant cooperation between the wildlife and forest sectors and coordination of both sectors with further relevant sectors, and with local stakeholders	• The Seventh National Development Plan (7NDP) has shifted from a sectoral approach to an outcomes-based approach • Forest and wildlife departments will be contributing to the same programmes in the 7NDP • Structures for implementing the 7NDP in a coordinated manner established at the national level • At the project level, the technical and steering committees will amplify arrangements for a coordinated approach	n/a
Capacity for management and enforcement in the forest sector is needed beyond the project	Strengthen significantly the forest sector and its management and enforcement capacity	• The 7NDP is based on an integrated approach • Capacity of the forest department will be strengthened	n/a
Related to recommendation 5	Develop and implement a National strategy for a holistic wildlife crime action, based on a multi-sectorial multi-agency approach	• Government has established Central Joint Operations Committee (CJOC) • Defence force is providing law enforcement in national forests, including Kafue and West-Lunga National Parks • CJOC is developing a strategic plan for curbing wildlife crime • No further support needed from the project	n/a
National and local stakeholders interviewed for the MTR noted the tenuous legal backing of protected areas, particularly forest as a result of legislation that prioritises other land uses that are classified as 'economic assets to the country'	Give Protected Areas, wetlands, forest, and wildlife appropriate status of 'economic asset to the country'	• The 7NDP has identified nature-based tourism as an economic growth sector • Government is conducting Wealth Accounting and Valuation of Ecosystem Services and Biodiversity Financing to put value to forests, wildlife, fisheries and ecosystem services	n/a
	Review revenue sharing policies from PAs with the Wildlife and Forest sectors and with communities	• To be done by 31 September 2018 o Revenue sharing policies will be reviewed using information generated by the REDD+ and CFM consultancies	• Annual report for 2018 does not mention revenue sharing policies
DNPW and the Forest Department to establish a joint career path with promotion horizon and training milestones at realistic intervals for staff of both entities	Establish a graded career path with promotion horizon and training milestones for Wildlife and Forest staff (including Village Scouts)	• To be done by 31 March 2018 o Capacity needs assessment will be conducted o Training strategy to be developed	• Annual report for 2018 states that one member of staff in the Forestry Department pursued a Master's Degree Course in CBNRM/REDD issues at Sussex University
Stakeholders have noted gaps in environmental education – particularly courses aimed at raising awareness of conservation, biodiversity, and the threats	Mainstream education for biodiversity conservation and natural resources sustainable management into the national and local formal and informal	• Primary and secondary school curricula already contain subjects on natural resource management • Specific tertiary institutions provide programmes on	n/a

to these	education and communication systems	biodiversity management • At community level, natural resource management is being promoted by non-state actors (e.g., WWF, TNC, CBNRM Forum) • In the project area, the project is strengthening CBNRM in all VAGs	
	Seek actively sustainable and innovative livelihoods and revenue generating activities, as well as ways to spread them to household level throughout the area	• Land use plans will be developed for all VAGs • Validation and development of income generating activities that will also include implementation of REDD+ by third quarter 2018	• Annual report for 2018 states that 38 Integrated Land Use Plans (ILUPS) and associated by-laws were validated • Income generating activities promoted through Small Grants Programme

5.4. Actual stakeholder participation and partnership arrangements

Participation and country-driven processes

The project had a stakeholder involvement plan that clearly outlined the roles of key country stakeholders, including: i) Village Action Groups (VAGs); ii) Community Resource Boards; iii) Chiefs and traditional leaders; iv) government departments; v) District Councils; vi) NGOs; vii) CBNRM Associations; ix) the private sector; x) academic institutions; and xi) GMA Stakeholder Committees. As described in the Project Document, this plan was centred around evidence-based-management operationalised at three levels, the:

i. micro-level (VAGs and CRBs);
ii. meso-level (Stakeholder Forum and informal interactions; and
iii. macro-level (PSC and dissemination of results by Copperbelt University and Information Unit).

Project involvement at the micro-level was envisioned to take place through VAG meetings and operations, while the bi-annual stakeholder forums would form the basis of decision-making and coordination between agencies and NGOs at the meso-level. Stakeholders agreed that meetings, training events and forums were the most effective means by which information was distributed and buy-in for the project realised.

Project management

The project collaborated with several local and international partners to deliver its interventions, including NGOs and the private sector. In addition, the project engaged with the GEF Small Grants Programme to facilitate support for small grants to promote alternative livelihoods. These grants were provided to NGOs such as Solidaridad, NUTRI Aid Trust and Skills Share Governance to promote alternative livelihoods (such as gardening, goat and poultry production) among the project's target communities. Additional details on the project partnerships are included below.

Community Markets for Conservation (COMACO)[4]

COMACO is a non-profit social enterprise led by the Wildlife Conservation Society. One of the organisation's goals is to work with communities to build sustainable local economies while safeguarding wildlife in Zambia. COMACO promotes eco-agricultural farming techniques — considered conservation farming techniques — and other sustainable livelihoods as an alternative to poaching. The project established a partnership with COMACO to support the expansion of CF and alternative livelihoods (such as beekeeping) in the GMAs surrounding Kafue National Park. This support is intended to continue beyond the end of the project.

The Nature Conservancy (TNC)

[4] see https://itswild.org/about-us/

Under the project, TNC provided support to the Mulobezi GMA to undertake CBRNM activities. In addition, TNC assisted with capacity building for fire management, as well as the development of a fire management strategy for Kafue National Park. TNC was also involved in the PPP negotiations along with African Parks, GRZ and communities in the GMAs around Kafue National Park.

African Parks (AP)
As of the 2020 PIR, discussions had been initiated with AP to form a 20-year PPP along with TNC to ensure the long-term effective management and financial sustainability of Kafue National Park, as well as the surrounding GMAs.

World Wildlife Fund for Nature (WWF) — Zambia
WWF worked with the IPs to reduce deforestation and restore degraded forest landscapes in the project area. The 2020 PIR reports that efforts were made to establish financial sustainability mechanisms to secure strategic partnerships and safeguard PAs.

Game Rangers International (GRI)
GRI has supported anti-poaching activities in Kafue National Park since 2008. The organisation has also played a role in building capacity for effective fire management in this landscape.

Panthera Wild Cat Conservation Zambia Ltd.
A partnership was proposed with Panthera to provide support for capacity building in the application of SMART for biodiversity monitoring and law enforcement. As of the 2020 PIR, this partnership was yet to be formalised.

Trident Foundation Ltd.
Trident Foundation Ltd. is the sustainable development arm of First Quantum Minerals, a private Zambian-based company that operates two copper mines in the West-Lunga Area. Building on its established relationship with the GRZ, the Kalumbila branch of Trident Foundation Ltd. was identified as a private partner in the establishment of a PPP to support management and alternative livelihoods in the West-Lunga National Park and surrounding GMAs. The 2020 PIR reported that the foundation was supporting communities living in the GMAs around the West-Lunga National Park in promoting CF, as well as sharing information, consultations and offering collaborative support for enhancing law enforcement in the park.

South-South Cooperation
The 2020 PIR reported that the project facilitated cooperation among countries located in the Global South. In 2020, a learning visit was undertaken to Zambia's Eastern Province with community representatives, CLAs and district authorities from Mumbwa and Itezhi-Tezhi. The purpose of the visit was to learn about the community REDD+ model COMACO was implementing in Eastern Province to assess if a similar model could be established for Kafue National Park. Prior to 2020 the project also facilitated learning and exchange visits with representatives from Village Action Groups (VAGs) and Community Resource Boards (CRBs) to Mozambique and Namibia.

Participation and public awareness
As reported in the MTR, stakeholders have showcased a high level of commitment to the project. Despite frustrations over implementation delays and a lack of delivery, a keen sense of the importance of the project appears to have been present at all levels. The project used 14 Community Liaison Assistants (CLAs) — UN Volunteers — to raise awareness among communities in the project area of the importance of protecting forests and woodlands, as well as more effective fire management. These CLAs were well received, but provincial project staff felt that the collaboration between the CLAs and RPs was ineffective, with reporting lines unclear (see Annex IV. Key findings from stakeholder interviews) Nonetheless, some gains were made in reducing late season fires and improving fire management, with the 2020 PIR crediting the awareness campaigns run under the project as well as the ongoing work being undertaken by TNC.

Extent of stakeholder interaction

The stakeholder engagement facilitated under the project broadly followed the stakeholder involvement plan, with some setbacks as a result of institutional re-arrangements within the GRZ in the second year of implementation (see section 3.9). As reflected in the MTR, the delays in implementation and the non-delivery of expected inputs resulted in a perception of failure and loss of confidence among some stakeholders. This is reflected in the findings from the stakeholder interviews conducted in the preparation of the TE.

Feedback from stakeholders at the community, sub-national and national level, indicated that participation and communication was not managed effectively throughout the project. Of the 12 national level stakeholders interviewed for the TE, four (33%) reported that information-sharing structures were ineffective and that improvements could have been made in the coordination between UNDP and stakeholders. This was echoed by the 10 sub-national stakeholders interviewed, of which seven felt that information dissemination was ineffective and two reported collaboration with key institutions as being ineffective. Further details are available in Annex IV. Key findings from stakeholder interviews.

Gender
Although gender considerations were built into the project design, gender was not well represented in monitoring or reports generated by the project. Project reports did not include detailed information on gender gaps and data collected were not disaggregated by sex. Gendered issues around natural resources and decision-making in particular, were not adequately represented. The 2018 report on mainstreaming of gender equality also noted that gender was not well considered in the partnerships formed with NGOs. Most of the activities surrounding CF, for example, were targeted towards male beneficiaries (most of the lead farmers were male), while women were considered as indirect beneficiaries. The small grants made available for alternative livelihoods, however, included a stronger gender focus, with 40% of the grants reserved for women. In addition, targeted training on gender equality was undertaken with VAGs and other relevant stakeholders.

5.5. Project Finance and Co-finance

Planned and actual expenditures
Available information from annual reports was compiled for 2014–2018 to reflect planned budget, realised expenditure and delivery (%) of project activities (Table 11). Comparable information for 2019 and 2020 was not made available at the time of the TE. However, a Combined Delivery Report for the year 2020 was made available and used to compare overall expenditures. There were several variances between planned and actual expenditures each year. These can largely be attributed to delays in implementation, delays in recruitment and delays in disbursement of funds.

Financial management
Overall, the financial management of the project can be considered adequate, based on the audit reports and the rigorous structures within UNDP. However, there were severe delays in the disbursement of project funds. The MTR recommended, *inter alia*: i) a revision of the project financial management system; and ii) devolution of financial management. In addition, it was recommended that bank accounts be opened at a local level to ensure rapid access to funds required for implementation (Table 8). This was never achieved.

The problems with fund disbursement were noted by national-level stakeholders interviewed during the TE. Of the 12 national level stakeholders interviewed, 6 (50%) stated that the processes and structures in place for the disbursement of funds were ineffective and required improvement. Two of these stakeholders noted that the delays in disbursement considerably limited implementation of the project. Sub-national stakeholders also noted the issues surrounding disbursement. Of the 12 sub-national stakeholders interviewed, 4 noted the problem of delays in disbursement. Two sub-national stakeholders stated that too much funding had been allocated to meetings which may have been better spent realising on-the-ground impacts. Further details are available in Annex IV. Key findings from stakeholder interviews.

Audits

The project demonstrated due diligence in the management of funds, including annual audits. All available audit action plans (2015–2018) were marked as unqualified, indicating that all financial statements represented a true and fair view without any limitations. The 2017 audit report states that US$2,515,356.82 in expenses was incurred in that year, all of which was in conformity with the project budget, compliant with UNDP regulations and supported by required vouchers and other documents.

Disbursement

The 2020 PIR reported a cumulative disbursement of US$11,351,508.00 as per 30 June 2020 (Figure 5), with revisions expected as of August 2020. At the time of reporting this disbursement represented 86.3% of delivery against the total approved amount as reflected in the project document.

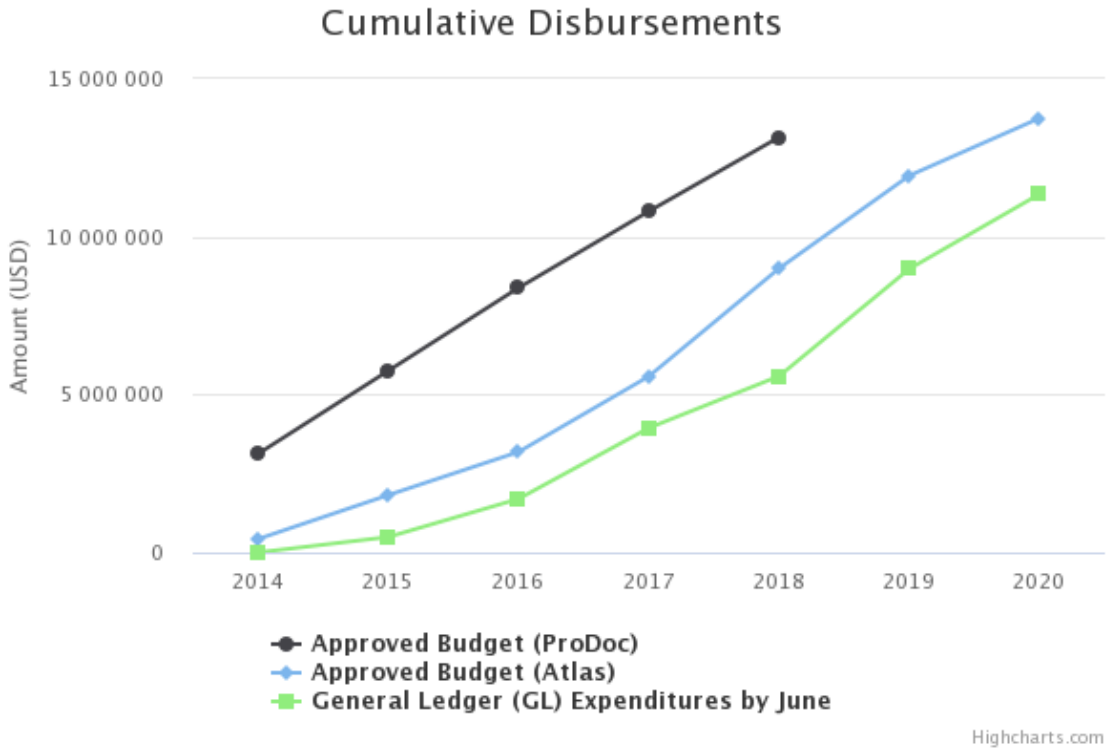


Figure 5. Cumulative disbursements as reported in the 2020 PIR

Co-financing

A total of US$46,936,777 in co-financing was realised for the project, at a ratio of GEF funds (US$16,188,864) to co-finance of ~1:3. As shown in Table 9, this co-finance consisted of US$852,204 in grants, US$40,684,573 of in-kind support and US$5,400,000 classified as 'other'. The amount of co-finance reported at the TE stage (

Table 10) was the same as what was planned at the CEO Endorsement phase. Only the type of co-finance appears to have changed (Table 9). Little additional financial information regarding the co-financing for this project was made available for the TE.

Table 9. Co-financing table

Co-financing (type/source)	UNDP financing (US$m)		Government (US$m)		Partner Agency (US$m)		Total (US$m)	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
Grants	3,040,000	852,204			6,500,000		46,936,777	852,204
Loans /concessions								
In-kind support		2,187,796	37,396,777	37,396,777		1,100,000		40,684,573
Other						5,400,000		5,400,000
Totals	**3,040,000**	**3,040,000**	**37,396,777**	**37,396,777**	**6,500,000**	**6,500,000**	**46,936,777**	**46,936,777**

Table 10. Confirmed Sources of Co-Financing at TE Stage

Sources of Co-Financing	Name of Co-financier	Type of Co-financing	Investment Mobilised	Amount (US$)
Donor agency	UNDP	Grant	Investment mobilised	852,204
Donor agency	UNDP	In-kind	Recurrent expenditures	2,187,796
Donor agency	Norwegian Higher Education for Development	Other		5,000,000
Donor agency	TNC	In-kind	Recurrent expenditures	1,100,000
Donor agency	WWF	Other	Recurrent expenditures	400,000
Recipient Country Government	GRZ	In-kind	Recurrent expenditures	37,396,777
Totals				**46,936,777**

Table 11. Planned budget, realised expenditure and delivery (%) of project activities as reported in annual reports

Outcome	Output		2014	2015	2016	2017	2018	2019	2020
Outcome 1	Output 1.1	Budget (US$)		217,000.00	510,296.00	692,600.00	1,285,996.00	*Not available*	*Not available*
		Expenditure (US$)		94,196.61	121,827.82	50,126.27	1,070,090.00	*Not available*	*Not available*
		Balance (US$)		122,803.39	388,468.18	642,473.73	215,906.00	*Not available*	*Not available*
		Delivery (%)		43.4	23.9	7.2	83.2	*Not available*	*Not available*
	Output 1.2	Budget (US$)				809,624.00		*Not available*	*Not available*
		Expenditure (US$)				0.00		*Not available*	*Not available*
		Balance (US$)				809,624.00		*Not available*	*Not available*
		Delivery (%)				0.0		*Not available*	*Not available*
	Output 1.3	Budget (US$)	70,158.00					*Not available*	*Not available*
		Expenditure (US$)	61,933.00					*Not available*	*Not available*
		Balance (US$)	8,225.00					*Not available*	*Not available*
		Delivery (%)	88.3					*Not available*	*Not available*
Outcome 2	Output 2.1	Budget (US$)	301,262.00	841,762.00	869,682.90		935,751.00	*Not available*	*Not available*
		Expenditure (US$)	15,663.00	728,881.78	1,017,047.29		837,574.00	*Not available*	*Not available*
		Balance (US$)	145,597.00	112,880.22	-147,364.39		98,177.00	*Not available*	*Not available*
		Delivery (%)	43.4	86.6	117.0		89.5	*Not available*	*Not available*
	Output 2.2	Budget (US$)		200,472.00	190,800.00	815,876.00	40,000.00	*Not available*	*Not available*
		Expenditure (US$)		252,642.87	82,719.47	55,959.00	44,775.00	*Not available*	*Not available*
		Balance (US$)		-52,170.87	108,080.53	759,917.00	-4,775.00	*Not available*	*Not available*
		Delivery (%)		426.0	43.4	6.9	111.9	*Not available*	*Not available*
	Output 2.3	Budget (US$)					238,774.00	*Not available*	*Not available*
		Expenditure (US$)					118,320.00	*Not available*	*Not available*
		Balance (US$)					120,454.00	*Not available*	*Not available*
		Delivery (%)					49.6	*Not available*	*Not available*
	Output 2.4	Budget (US$)						*Not available*	*Not available*
		Expenditure (US$)						*Not available*	*Not available*
		Balance (US$)						*Not available*	*Not available*
		Delivery (%)						*Not available*	*Not available*
	Output 2.5	Budget (US$)					60,468.00	*Not available*	*Not available*
		Expenditure (US$)					46,794.00	*Not available*	*Not available*
		Balance (US$)					13,674.00	*Not available*	*Not available*
		Delivery (%)					77.4	*Not available*	*Not available*
	Output 2.6	Budget (US$)					180,476.00	*Not available*	*Not available*
		Expenditure (US$)					61,900.00	*Not available*	*Not available*
		Balance (US$)					118,576.00	*Not available*	*Not available*
		Delivery (%)					34.3	*Not available*	*Not available*
	Output 2.7	Budget (US$)					304,632.00	*Not available*	*Not available*
		Expenditure (US$)					294,086.00	*Not available*	*Not available*
		Balance (US$)					10,546.00	*Not available*	*Not available*
		Delivery (%)					96.5	*Not available*	*Not available*
	Output 2.8	Budget (US$)					157,200.00	*Not available*	*Not available*

		Expenditure (US$)					151,068.00	*Not available*	*Not available*
		Balance (US$)					6,132.00	*Not available*	*Not available*
		Delivery (%)					96.1	*Not available*	*Not available*
	Output 2.9	Budget (US$)					49,000.00	*Not available*	*Not available*
		Expenditure (US$)					48,969.00	*Not available*	*Not available*
		Balance (US$)					31.00	*Not available*	*Not available*
		Delivery (%)					99.9	*Not available*	*Not available*
	Output 2.10	Budget (US$)					25,000.00	*Not available*	*Not available*
		Expenditure (US$)					19,549.00	*Not available*	*Not available*
		Balance (US$)					5,451.00	*Not available*	*Not available*
		Delivery (%)					78.2	*Not available*	*Not available*
	Output 2.11	Budget (US$)					33,250.00	*Not available*	*Not available*
		Expenditure (US$)					27,226.00	*Not available*	*Not available*
		Balance (US$)					6,024.00	*Not available*	*Not available*
		Delivery (%)					81.9	*Not available*	*Not available*
Outcome 3	Output 3.1	Budget (US$)	105,980.00	225,906.00	75,000.00	106,014.00	86,720.00	*Not available*	*Not available*
		Expenditure (US$)	60,047.00	196,936.06	54.876.10	2,310.68	82,131.00	*Not available*	*Not available*
		Balance (US$)	45,933.00	28,869.94	20,123.90	103,703.32	4,589.00	*Not available*	*Not available*
		Delivery (%)	56	87.2	73.2	2.2	94.7	*Not available*	*Not available*
Total		**Budget (US$)**	**477,400.00**	**1,485,140.00**	**1,646,178.90**	**4,848,228.00**	**3,418,525.00**	***Not available***	***Not available***
		Expenditure (US$)	**277,643.00**	**1,272,657.32**	**1,332,525.10**	**108,395.95**	**2,930,147.00**	***Not available***	**1,605,336.99**
		Balance (US$)	**199,777.00**	**212,482.68**	**313,653.80**	**2,315,718.05**	**488,378.00**	***Not available***	***Not available***
		Delivery (%)	**58.1**	**85.7**	**80.9**	**22.4**	**85.7**	***Not available***	***Not available***

5.6. Monitoring & Evaluation: design at entry, implementation, overall assessment of M&E

M&E design at entry

The planned M&E activities, as presented in the CEO Endorsement (Table 12) were reasonable and appropriate for a project of this scale. Comprising ~5% of the project budget, the M&E plan consisted of standard components, including an inception workshop, implementation reports, quarterly progress reports, audits, site visits and the MTR and TE. No budget was listed for the implementation reports, quarterly progress reports, or TE.

Table 12. Planned M&E activities as per CEO Endorsement

M&E activity	Budget (US$)	Timeframe
Inception workshop and report	10,000	Within first two months of project start
Measurement of Means of Verification of project results	To be finalised at inception	Start, mid and end of project, annually if required
Measurement of Means of Verification of project progress on output and implementation	To be determined as part of annual work plan preparation	Annually, prior to PIR and definition of annual workplans
Project Implementation Report (PIR)	None	Annually
Progress reports	None	Quarterly
Mid-Term Evaluation Report (MTR)	40,000	At mid-point of implementation
Terminal Evaluation (TE)	40,000	Three months before the end of project implementation
Audit	3,000 per year	Annually
Site visits	Paid from IA fees and operational budget	Annually
Total indicative cost	93,000 (5% of total budget)	

M&E implementation

Data on project indicators was gathered in a systematic manner through the various reports issued under the project M&E system (Table 13). Compliance with progress and financial reporting requirements was satisfactory, although completion of reports was delayed in a few instances. The various monitoring reports were used in the development of annual work plans, as well as in the MTR. Communication of M&E findings was not managed effectively at the local level. The MTR noted the need for M&E to be downscaled at a local level to ensure effective uptake, penetration and adherence.

Table 13. Evidence provided of M&E implementation

M&E activity	Expected deliverable(s)	Accomplished	Timeframe
Inception workshop and report	Inception workshop	Yes, delayed	23–24 July 2014
	Workshop report	Yes, delayed	August 2014
Measurement of MoV of project results	Report on progress towards results included in annual reports, PIRs and MTR	Yes	Various
Measurement of MoV of project progress on output and implementation			
Project Implementation Report (PIR)	2015 PIR	*Not available*	*Not required for year 1*
	2016 PIR	Yes	8 July 2020
	2017 PIR	Yes	*Not stated*
	2018 PIR	Yes	2018
	2019 PIR	Yes	2019
	2020 PIR	Yes	2020
Progress reports (Annual)	2014 Progress Report	Yes	*Not stated*
	2015 Progress Report	Yes	*Not stated*
	2016 Progress Report	Yes	January 2017
	2017 Progress Report	*Yes, draft copy*	February 2018
	2018 Progress Report	*Yes, draft copy*	January 2019
	2019 Progress Report	*Not available*	*Undetermined*
	2020 Progress Report	*Not available*	*Undetermined*
Progress reports (Quarterly)	2014 1st quarter	*Not available*	*Undetermined*
	2014 2nd quarter	*Not available*	*Undetermined*
	2014 3rd quarter	Yes	*Not stated*
	2015 1st quarter	Yes	*Not stated*

	2015 2nd quarter	Yes	*Not stated*
	2015 3rd quarter	Yes	*Not stated*
	2016 1st quarter	Yes	May 2016
	2016 2nd quarter	Yes	May 2016
	2016 3rd quarter	Yes	October 2016
	2017 1st quarter	Yes	April 2017
	2017 2nd quarter	Yes	July 2017
	2017 3rd quarter	Yes	July 2017
	2018 1st quarter	*Not available*	*Undetermined*
	2018 2nd quarter	*Not available*	*Undetermined*
	2018 3rd quarter	*Not available*	*Undetermined*
	2019 1st quarter	*Not available*	*Undetermined*
	2019 2nd quarter	*Not available*	*Undetermined*
	2019 3rd quarter	Yes	April 2019
	2020 1st quarter	Yes	April 2020
	2020 2nd quarter	Yes	April 2020
	2020 3rd quarter	*Not available*	*Undetermined*
Mid-Term Evaluation (MTR)	MTR report	Yes	10 October 2017
	Management response	Yes	*Not stated*
Terminal Evaluation (TE)	TE Inception Report	Yes	December 2020
	TE Report	Yes	December 2020
Audit	2015 Audit Action Plan	Yes	19 April 2016
	2016 Audit Action Plan	Yes	15 December 2017
	2017 Audit Action Plan	Yes	11 April 2018
	2018 Audit Action Plan	Yes	20 February 2019
	2019 Audit Action Plan	*Not available*	*Undetermined*
	2020 Audit Action Plan	*Not available*	*Undetermined*
Site visits	Back to office reports	Yes	Various

The Project Board played a role in M&E by providing quality assurance on processes and products, as well as the use of evaluations for improved implementation. Findings from the PIRs, as well as the MTR were used to inform implementation plans in an effort to improve delivery of the project.

Table 14. Rating of M&E

Monitoring & Evaluation (M&E)	Rating (out of 5, 1=lowest, 5=highest)
M&E design at entry	4
M&E plan implementation	3
Overall quality of M&E	**4**

Table 15. Monitoring & Evaluation Ratings Scale

Rating	Description
6 = Highly Satisfactory (HS)	There were no short comings; quality of M&E design/implementation exceeded expectations
5 = Satisfactory (S)	There were minor shortcomings; quality of M&E design/implementation met expectations
4 = Moderately Satisfactory (MS)	There were moderate shortcomings; quality of M&E design/implementation more or less met expectations
3 = Moderately Unsatisfactory (MU)	There were significant shortcomings; quality of M&E design/implementation was somewhat lower than expected
2 = Unsatisfactory (U)	There were major shortcomings; quality of M&E design/implementation was substantially lower than expected
1 = Highly Unsatisfactory (HU)	There were severe shortcomings in M&E design/implementation
Unable to Assess (UA)	The available information does not allow an assessment of the quality of M&E design/implementation

5.7. UNDP implementation/oversight, Implementing Partner execution and overall assessment of implementation/oversight and execution

Extent to which UNDP delivered effectively on activities related to project identification, concept preparation, appraisal, preparation of detailed proposal, approval and start-up, oversight, supervision, completion and evaluation.

The project implementation was substantially delayed, which resulted in an 18-month extension and culminated in an abrupt cessation of project activities. Problems that hindered project implementation included: i) delays in recruiting project staff; ii) disagreement about the appointment of suitably qualified staff; iii) a high staff turnover; and iv) obstacles to the disbursement of project funds (see sections 5.2 and 5.5 for additional details). In addition, some stakeholders reported a misalignment of priorities and systems between the GRZ and UNDP. This resulted in lengthy engagements and stakeholders losing confidence in the project, which negatively affected the timeous implementation of the project. These challenges were exacerbated by external conditions, including Zambia's national elections and the onset of the global Covid-19 pandemic. While these challenges — particularly the external conditions — were not entirely within the control of UNDP, an effective and timeous management response would have mitigated the negative impacts.

Several M&E documents were provided for the purpose of the TE, but gender-disaggregated data was not collected under the M&E system and there is limited reporting on potential social and environmental impacts caused by the project. Overall, the oversight of the project is considered to be sub-optimal.

Extent to which the Implementing Partner (IP) effectively managed and administered the project's day-to-day activities under the overall oversight and supervision of UNDP.
The PIRs for 2016–2020 consistently allocated a 'moderately satisfactory' rating to the IP. Nonetheless, as discussed above, there were significant delays and challenges in the implementation of the project which were not timeously addressed by UNDP and the IP. There was confusion among stakeholders regarding the arrangement of IPs and RPs (a detailed explanation can be found in Section 3.9). The use of two RPs (referred to as IPs by stakeholders at all levels) presents both benefits and risks, with the latter being mentioned by several stakeholders. Stakeholders interviewed for the TE highlighted that coordination between the two RPs was ineffective and their communication with both upstream and downstream stakeholders was inadequate. The IP and UNDP were unable to secure bank accounts to improve fund disbursement. The resulting delays and reductions in funds were not effectively communicated to stakeholders on the ground, resulting in a loss of confidence in the project on the part of communities and sub-national stakeholders.

Table 16. Rating of UNDP and IP implementation and oversight

UNDP Implementation/Oversight & Implementing Partner Execution	Rating (see Table 19)
Quality of UNDP Implementation/Oversight	4
Quality of Implementing Partner Execution	4
Overall quality of Implementation/Oversight and Execution	**4**

Table 17. Implementation/Oversight and Execution Ratings Scale

Rating	Description
6 = Highly Satisfactory (HS)	There were no short comings; quality of Implementation/Oversight and Execution exceeded expectations
5 = Satisfactory (S)	There were minor shortcomings; quality of Implementation/Oversight and Execution met expectations
4 = Moderately Satisfactory (MS)	There were moderate shortcomings; quality of Implementation/Oversight and Execution more or less met expectations
3 = Moderately Unsatisfactory (MU)	There were significant shortcomings; quality of Implementation/Oversight and Execution was somewhat lower than expected
2 = Unsatisfactory (U)	There were major shortcomings; quality of Implementation/Oversight and Execution was substantially lower than expected
1 = Highly Unsatisfactory (HU)	There were severe shortcomings in Implementation/Oversight and Execution
Unable to Assess (UA)	The available information does not allow an assessment of the quality of Implementation/Oversight and Execution

5.8. Risk Management

Seven risks, together with proposed subsequent mitigation measures, were identified in the Project Document (

Table 19). A further secondary risk was highlighted during the MTR, namely, loss of enthusiasm for the project as a result of implementation delays (

Table 19). The MTR also reported that bottlenecks which delayed the implementation of the project had not been timeously identified and effectively managed. These were partly addressed in the revisions made following the MTR (see Table 8).

The UNDP CO maintained a risk log in the ATLAS system for this project. Additional risks were identified, including regulatory, organisational, operational, political and environmental risks. A total of 48 risks were identified and listed in the project risk register. These risks were ranked and marked as 'Acclaim', 'Concern' and 'Watch', which reflects the status of the risk and actions required to mitigate the risk — namely: i) reflecting good performance/on track (Acclaim); ii) reflecting the need for improvement (Concern); and iii) requires prioritised corrective action/off track (Watch). Of the 48 risks, 42 were identified as reflecting good performance or on track, while the remaining six indicated requiring corrective action or being off-track.

The 2016 PIR reported a low overall risk rating for the project and no new risks were noted (Table 18). The restructuring of the Zambia Wildlife Authority to the Department of National Parks and Wildlife was anticipated to delay project implementation. To mitigate this impact the Forestry Department was assigned a larger role in steering the project in collaboration with Project Implementation Unit staff during the transformation period.

Similarly, the 2017 PIR reported a low overall risk rating for the project and no new risks were noted (Table 18). However, this PIR stated that while the project was assessed not to face any critical risks at the time, risk mitigation should form a strong part of the management response to the MTR.

The 2018 PIR also reported a low overall risk rating for the project and no new risks were noted (Table 18). A similar finding was reported in the 2019 PIR (Table 18). At the time, the project was considered to be on track in terms of the management of financial and cumulative risks. A persistent risk of encroachment was noted as people continue to move into conservation areas, but this was expected to be managed by increased awareness-raising and support for law enforcement activities in the project area.

The 2020 PIR noted a substantial overall risk rating for the project as a result of the Covid-19 global pandemic (Table 18). In response to the pandemic, GRZ restricted travel as well as large gatherings of people. These restrictions resulted in inevitable delays in implementation of project activities, including field-based operations and workshops. Consequently, alternative means of communication were used as far as possible to support the ongoing project activities.

Social and Environmental Standards (SES)

With the exception of the 2018 and 2020 PIR reports, little was reported about Social and Environmental Standards (SES) risks or the required mitigation measures (Table 18). The 2018 PIR reported very low risks related to the SES. In terms of biodiversity and natural resources, the report noted that while no certification system had been established, overharvesting of natural resources was expected to be curbed following the provision of CBNRM training to communities. The project was reported as working effectively with communities, particularly women, to improve gender equality and the sustainability of livelihoods. A gender analysis was conducted, and the gaps identified were addressed by the provision of small grants for alternative livelihoods. The project also continued to promote the use of CF and community conservancies. In addition, the project promoted VAGs that obtained the support of Community Forest Management regulations, affording them status as legal entities.

The 2020 PIR report noted two newly identified risks, namely: i) drought and severe climatic events; and ii) health, safety and working conditions under the Covid-19 pandemic (Table 18). The introduction of small grants to support alternative livelihoods under the project was expected to mitigate the impacts of drought and flash floods on communities across the project area. Alternative livelihoods were expected to encourage sustainable management of forest resources, as well as provide increased household incomes and reduce harvesting pressure on natural resources.

The onset of the Covid-19 global pandemic in 2020 resulted in severe restrictions on travel and gatherings of people throughout the country, hampering the implementation of several project activities that were subsequently not completed in that year. To avoid further delays in implementation, alternative forms of available communication (e.g., Skype, Zoom or WhatsApp) were used for project engagement and staff worked remotely wherever possible. Project staff and partners also adhered to all required safety protocols to limit the spread of Covid-19.

Table 18. SES risks and mitigation measures as reported in PIRs

SES	2016	2017	2018	2019	2020
New risks identified during implementation	*Not reported*	*Not reported*	None	None	i. Drought and severe climatic events ii. Health, safety and working conditions — Covid-19
Mitigation response to newly identified risks	*Not reported*	*Not reported*	n/a	n/a	i. CBO small grants for alternative livelihoods ii. Alternative communication and remote working solutions
Existing risks escalated during implementation	*Not reported*	*Not reported*	None	None	n/a
Mitigation response to escalated risks	*Not reported*	*Not reported*	n/a	n/a	n/a
Preparation of required ESS or management plans	*Not reported*	*Not reported*	*Not reported*	• Stakeholder involvement plan	None
Complaints received related to social or environmental impacts	*Not reported*	*Not reported*	*Not reported*	None	None
Details of grievance	*Not reported*	*Not reported*	*Not reported*	n/a	n/a

Table 19. Identified risks and mitigation measures

Identified risk	Rating	Mitigation measure	Comments at MTR
This is a multi-faceted and complex project. Leadership from ZAWA **(now defunct, see section 3.9)** and the Forestry Department is uncertain in a climate of ministerial reorganisation and turnover.	M	• Decentralised approach with performance targets, monitoring and capacity building	• Risk wider reaching than anticipated • Significant delays in project implementation • Mitigation measures insufficient to mitigate this risk and impact
Failure to maximise value of wildlife, and to return benefit to the producer land unit (i.e. PAs, or CBNRM community) because of weak concessioning, hunting bans and absence of fiscal	M	• Financial sustainability in KNP achieved through expansion of tourism and PPP, as well as co-financing from GRZ • Release hunting revenues from ZAWA (now defunct, see	• Mitigation measures well embedded in project design

devolution.		section 3.9) and apply them to CBNRM communities • Provide Technical Assistance and capacity building	
Landscape planning and subsequent implementation of plan will be affected by institutional inflexibility, reducing collaborative efforts between PAs, District Councils and Villages.	L/M	• Strong governmental will to improve management of natural resources • Investment in grassroots institutions and bottom-up coordination of land-use planning • Training provided to stakeholders • Improved understanding of economic value of ecosystem services that will increase prospects for institutions to find common ground	• Not a prominent risk, landscape planning well supported by national and district authorities • Collaborative efforts between PAs, District Councils and VAGs should help mitigate this risk • Mitigation measures embedded in project design
Climate change could lead to changed distributions of Biodiesity components, and changes in community and private sector demands on wildlife and forest resources.	L	• Project is landscape focussed with sufficient buffer for climate change impacts • Protection of forest contributes to climate change adaptation • VAG focus will build climate resilience at a local level	• Project lifespan too short to estimate climate change impacts • Mitigation measures embedded in project design should reduce risk in the long term
Significant increases in externally driven pressures on forest and protected area resources, such as logging pressures, mining and poaching.	M	• Steering committee to foster common goal and prevent conflicts of interest across sectors • Protocol developed to manage development projects that may pose a threat to the project area • Local governance focus and land-use planning	• Mitigation measures embedded in project design • Good response at local level, but too little upstream impact • The risk should be further broken down to be effectively addressed at an appropriate level for each threat
Mining expansion and road construction pose a serious threat to the achievement of project outcomes. Licenses for mineral exploration have been granted for areas near West-Lunga.	H	• Improved governance, monitoring and law enforcement	• Proposed mitigation measure unlikely to be sufficient • Mitigation requires upstream activities
Another project risk is the possible collapse of the carbon markets or a drop in the carbon prices. This will reduce the benefits accrued to the communities but will not affect the GEBs to be accrued from the project.	M	• Voluntary markets as an alternative • VAGs do not rely on carbon finance	• Threat had not yet manifested • Mitigation measures appeared adequate • Unlikely to be a major obstacle to implementation
Unidentified risk (identified at MTR)	**Rating**	**Comments at MTR**	
Loss of enthusiasm for the project as a result of implementation delays	H	• Delays in project implementation as a result of: i) political changes; and ii) governance challenges. • Perception of failure and loss of trust between main actors • Not anticipated in the Project Document, no mitigation measures in place • Formalisation of the delayed start and extension of the project duration recommended to prevent further loss of confidence	

6. Project Results and Impacts

6.1. Progress Towards Objective and Expected Outcomes

The assessment of project progress towards objectives, as listed in the Project Document is based on the 2020 Project Implementation Report. Of the 16 targets set in the Project Document, five were met, eight were partially achieved and two were considered as unlikely to be achieved by the end of the project. There was insufficient information available to assess one of the targets. Details on progress towards project targets are presented in Table 20 and summarised in Table 21.

Table 20. Progress towards project objective and outcome targets

Objectively Verifiable Indicators	Target as per Project Document[5]	Achievement as of 2020 PIR

[5] The target timeframe for all indicators is by project end, unless otherwise stated.

Objectively Verifiable Indicators	Target as per Project Document[5]	Achievement as of 2020 PIR
Sustainable Land and Forest Management established in Miombo Woodland and Dry Evergreen Forest ecosystems in PA Core areas. Community managed GMAs and conservancies enabling forest corridor connectivity between WLNP and KNP in the long-term.	• 24,164 km^2 PA + 41,297 km^2 GMAs = 65,461 km^2 • (24,164,000 ha PA + 41,297,000 ha GMAs = 65,461,000 ha) • Target GMAs consisting of Mumbwa, Numwala, Mufunta, Kasonso-Busanga, and Lunga-Luswishi in Greater Kafue NP, and Lukwawa, Musele- Matembo and Chibwika-Ntambu in West-Lunga Management Area	• Targets achieved (and slightly exceeded) • ~24,164 km^2 (24,164,000 ha) brought under effective management in PAs • ~41,297 km^2 (41,297,000 ha) in GMAs • ~1,387 km^2 (1,387,000 ha) in Protected Forest Areas (PFAs) • Total area of ~66,788 km^2 (66,788,000 ha) under SLM and SFM
Component 1		
1. Increase in Management Effectiveness Tracking Tool	• 65% KNP • 45% KNP GMAs • 40% WLNP • 30% WLNP GMAs	• Targets for Kafue National Park GMAs and West-Lunga National Park protected areas exceeded Management Effectiveness Tracking Tool for Protected Areas of Zambia (METTPAZ) scores Kafue National Park Target: 65% Score at project start: 57% Score in 2017: 59% Score in 2019: 72% (exceeds end-of-project target and represents an improvement over previous PIR) West-Lunga National Park Target: 40% Score at project start: 28% Score in 2017: 57% Score in 2019: 65% Score in 2020: (Target exceeded) Kafue National Park GMAs Target: 45% Score at project start: 39% Score in 2017: 57.8% Score in 2019: 68.6% (Target exceeded) West-Lunga National Park GMAs Target: 30% Score at start: 20% Score in 2017: 46% Score in 2019: 48.3% (Target exceeded)
2a. Wildlife stocking rates	• 12% of carrying capacity in both KNP and productive GMAs	• Unable to assess with available information • Limited data available at time of assessment • Proxy measures suggest increase in numbers of some indicator species based on field reports
2b. Reduced area burned annually	• KNP = reduced by 50% (~625,800 ha)	• Partially achieved • Area burned annually reduced by 8.3% (~184, 925 ha) as of 2019 in Kafue National Park since project start • Area burned annually at project start: 1,604,670 ha (71.9%) • 2019 area burned: 1,419,745 ha (63.6%) • Unlikely to be achieved by project end
2c. Reduced GHG emissions from	• KNP = 825,000t CO_2 reduced	• Partially achieved

Objectively Verifiable Indicators	Target as per Project Document[5]	Achievement as of 2020 PIR
fire	emissions annually[6]	• Slight reduction in GHG emissions, corresponding to the decrease in the extent of land being burned • Reduction 3.9% (equivalent to 63,980 tCO_2 or 1.316 tCO_2/ha/year between early burning and late burning reported in 2018
3. Reduction in funding gap of the targeted National Parks moving up one category (based on REMNPAS financial viability assessment) with at least one new PPP formed (WLNP) 3a Establishment of PPPs	At least 1 PPP in each of core PAs of Greater WLNP and KNP	• Some progress in reduction of PA funding gap • Establishment of PPP for Kafue National Park in advanced stages Establishment of PPP for West-Lunga National Park not realised
3b. Annual revenue collection (Kafue National Park)	• At least US$850,000 revenues in KNP	• Annual revenue collection (Kafue National Park) has been variable • Baseline: US$600,000 pa • Target: US$850,000 pa • Revenue collection in Kafue National Park has been variable year-on-year • 2015: US$1.1million • 2016: US$ 438, 500 • 2017: US$749,100 • 2018: US $927,800 • 2019 (January to June only): US$590,000 • Increase in revenue generated from hunting from K75,303,574.84 (USD 4,137,559.06) in the second half of the year 2018 to K103,953,519.97 (USD 5,711,731.87) during the same period in 2019.
3c. Annual percentage increase in tourism revenues	• Increase by 10% per annum	• Annual tourism revenue target exceeded in West-Lunga National Park • 106% increase in revenues in 2019 compared to 2015
4. PES maintaining watershed/river catchments by communities in KNP benefitting ZESCO	• 1 PES in KNP with ZESCO	• Target unlikely to be met • ZESCO unwilling to enter into additional PES arrangement (double charging) • No additional PES developed as of 2020
Component 2		
1a. "Community Conservancies" established	• ~5,579 km^2 (557,900 ha) of intact forest ecosystems established as community conservancies in targeted GMAs	• Target partially achieved • Training manual established to assist extension staff and communities establish CFMGs over ~768 km^2 (76,779 ha) of forest area in five VAGs (Maunga, Mulilabanyama, Mbuma and Babibizhi and Kapepe) around Kafue National Park • No similar achievement for West-Lunga National Park communities was reported at the time of the TE
1b. VAGs legally established	• At least 25 Village Action Groups (VAGs) in target areas formally recognized and constituted by Y2 with clear resource rights, delineation of legally recognized	• Target partially met with 38 VAGs earmarked for legal establishment, with ILUAs developed • 25 of these prepared for REDD+

[6] Figures used to estimate fire emissions: annual CO_2 emitted per hectare due to fires IN LATE SEASON (as opposed to early season) = 1.32 tonnes CO_2/ha. Assuming 625,800 ha, project scenario reduces CO_2 emissions by 825,000 per annum.

Objectively Verifiable Indicators	Target as per Project Document[5]	Achievement as of 2020 PIR
	VAG boundaries and use zones, management structures and benefit sharing plans (in line with national REDD+ criteria)	
1c. ILUA plans completed for all VAGs	• Integrated Land Use Assessment plans developed for all VAGs	• ILUAs developed for 38 VAGs
1d. Women members in VAGs and improved livelihoods	• At least 40% female representation in all elected VAGs in project area; increased per capita/household income compared to 2012 baseline	• 50% representation on VAG committees (target exceeded) • 40% of project financing earmarked for a small grants programme to support livelihood activities for women 2019 PIR: Preliminary results from CFU indicate agricultural production has tripled since CF in female-headed households • 2014 (baseline/project start): >1 tonne/ha • 2018: 3 tonnes/ha (of which 1 tonne is needed for food security and 2 tonnes are sold for income — equivalent to U$420/ha/year
2. Conservation farming practices applied in targeted GMAs 2a. ha under conservation farming and number of households practicing	At least ~37 km^2 (3,760 ha) of conservation farming practiced by at least 1,600 households (in 40 VAGs) by end of project	• End-of-project target exceeded: 37 km^2 (3,760 ha), involving 1,600 households • As of 2020: ~124 km^2 (12,446 ha) under CF, 46,911 farmers practicing CF (combined figure for COMACO and CFU) Adoption rate of 84.5% across project area (above national average of ~30%)
2b. Increased yields		• Further data needed to establish yields from 2019/2020 season 2019 PIR: • Yields have tripled, despite dry conditions in 2018/2019 farming season • Farmers practicing CF under the project achieved minimum maize yield of 3 tonnes/ha, an improvement from 1 tonne/ha at project initiation • Corresponding increase in income of US$840/ha/year
2c. CO_2 emissions resulting from vegetation clearance for agriculture in targeted areas	• Introduction of conservation farming practices leads to improved soil organic matter and field intensification across ~37 km^2 (3,760 ha) leading to: i) 40% reduction in cumulative CO_2 emissions from vegetation clearance for agriculture in targeted areas resulting in ~75 km^2 (7,520 ha) of avoided deforestation in targeted areas; and ii) a resulting decrease in direct lifetime avoided CO_2 emissions from clearance of vegetation for agriculture (20 years) in that same landscape (~988,128 tCO_2e compared to BAU scenario)	• ~52 km^2 (5,220 ha) reduction in land clearing in 2019/2020 season • Study commissioned to estimate lifetime avoided emissions by this standing stock. Results not available at time of TE. 2019 PIR: • Extent of land cleared reduced by ~199 km^2 (19,988 ha), exceeding the end-of-project target • Estimate for 2018 reduction in emissions is equivalent to 6,400 tCO_2e
3. Demonstration of avoided deforestation (no net loss) in at least 25 VAGs establishing REDD pilots	~250 km^2 (25,000 ha) leveraging additional 750 km^2 (75,000 ha, intact forest) by protecting VAG	• Some progress made • Targets unlikely to be met by November 2020

Objectively Verifiable Indicators	Target as per Project Document[5]	Achievement as of 2020 PIR
linking to national and/or voluntary carbon financing 3a. Hectares or number of VAGs implementing REDD+ pilots	designated forest zones	2019 PIR: • Identification of 3,343 km^2 (334,300 ha) of forest areas for REDD+ piloting in 25 VAGs (exceeds project target of 250 km^2 (25,000 ha)) • Expected to leverage additional 750 km2 (75,000 ha) of VAG designated forest zones
3b. Standards	• VCS and CCB standard acceptable to international brokers certifying REDD pilots and marketing for carbon financing	• Standards for performance of REDD+ (VCS and CCB) are unlikely to be achieved during the project period
3c. Identification of buyers	• Potential buyers identified to purchase the REDD+ carbon credits from the VAG pilots	• Identification of potential buyers to purchase the REDD+ carbon credits is unlikely to be achieved
4. Reduced rate of deforestation from fuelwood extraction in all targeted GMAs 4a. Zones for fuelwood collection	• Under the project, designated zones for fuelwood collection will be established optimizing SFM (and testing different 'treatments') • Working with the Copperbelt University, the 25 VAGs will be trained in harvesting and coppice management and will each establish an auditable fuelwood use and CFM plan	• Designated fuelwood collection zones established in 38 VAGs through the ILUP process
4b. Training and awareness	• Linked to land use planning, experimental fuelwood management and collection zones will be established in 25 VAGs; systems boundaries for VAGs will be defined; and alternative operational modalities for fuelwood harvesting and use will be applied (including coppicing).	• VAGs trained in forest management • Promotion of energy efficient stoves in over 1,860 households
4c. Lifetime avoided emissions	• Leading to the following GEBs: direct lifetime avoided emissions savings of ~63,281 tCO_2e (20 years) compared to fuelwood usage in a BAU scenario	• Target of 63,281 tCO_2e direct avoided emissions savings over 20 years is likely to be achieved by project end • 3,334 km^2 (334,300 ha) set aside for forest conservation, of which ~836 km^2 (83,575 ha) set aside as fuelwood collection zones
5. Reduced rate of deforestation from late season fires in targeted GMA zones 5a. Late season fires and fire management practices	• Land use and forest conservation plans (developed as part of the ILUPS) will be developed and adopted by all VAGs, supported and monitored by Kafue Central Business Unit (CBU) • Forest and wildlife patrolling and protection will be done by Village Scouts in all targeted GMAs • Fire control action plans will be adopted and put in use in all VAGs As a result, fire losses will be reduced by at least 30% in GMA zones annually through fire protection practices such as boundary and firebreak management, early burning etc, land use planning, patrolling and education	• Decrease in total area burned in GMAs, reduction from ~10,678 km^2 (1,067,871 ha) in 2014 to ~9,769 km^2 (976,948 ha) in 2017 • Target for reducing emissions from late season fires unlikely to be met • Preliminary estimates indicate a downward trend in the total area burned in the GMAs Slight gains attributable to improved capacity for land use and conservation planning in 38 VAGs and improvements in fire management infrastructure, equipment and monitoring
5b. Reduced emissions	• The resulting direct lifetime avoided tCO_2 emissions (over 20 years) from these activities compared to a BAU scenario (in GMA zones) = 1,383,394 tCO_2e	• Unlikely to be achieved • Threat posed by late season fires remains a challenge 2019 PIR: • Late fires in 2014 took place over

Objectively Verifiable Indicators	Target as per Project Document[5]	Achievement as of 2020 PIR
		8,210 km^2 (821,014 ha) and in 2017 this increased to ~8,977 km^2 (897,752 ha)

6.2. Relevance

6.2.1 Alignment with national priorities

As discussed in Section 5.1, the project objectives were well aligned with national priorities, including several new and revised policies which were issued after the project had been designed. Project implementation was delayed by changes in institutional structures at the national level, as well as the national election in 2016, and the onset of the global Covid-19 pandemic in early 2020. In terms of gender equality, the project design is aligned with GEF Policies on Environmental and Social Safeguards and Gender Mainstreaming. Gender is built into the logical framework of the project with the expectation that gender issues will be prioritised throughout implementation, particularly in activities related to CBNRM and livelihoods.

6.2.2. Alignment with UNDP and GEF strategic priorities

The project design is well aligned with the UNDP Strategic Plan, CPD, UNDAF, United Nations Sustainable Development Cooperation Framework (UNSDCF) and SDGs. As stated in the Project Document, the project was designed to contribute to achieving the following Country Programme Outcomes as defined in the UNDAF, CPAP and UNDP Strategic Plan for Zambia:

- UNDAF Outcome 4: Contribute to the reduction of people's vulnerability from the risks of climate change, disasters and environmental degradation;
- CPAP Outcome 1: Government promotes adaptation and provides mitigation measures to protect livelihoods from climate change; and
- CPAP Outcome 2: Government implements policies and legal frameworks for sustainable community based natural resources management.

The project is also aligned with two Country Programme Outcome indicators, namely: i) percentage increase in the area brought under effective management of PA system; and ii) percentage reduction in annual average deforestation rate.

6.2.3. Stakeholder engagement

As described in Section 5.1 above, the project was designed following extensive consultation with local stakeholders. A stakeholder involvement plan was also included as part of the Project Document to support evidence-based adaptive management of the project. According to the 2019 Project Implementation Report, stakeholder engagement under the project was assisted by Community Liaison Assistants (UN Volunteers) and Community Scouts (community members), which provided an on-the-ground interface with community organizations (VAGs, Community Resource Boards and CBNRM associations). In addition, the project established partnerships with civil society institutions and private sector entities, including: i) Panthera Wild Cat Conservation Zambia Ltd.; ii) Community Markets for Conservation; iii) African Parks; iv) The Nature Conservancy; and v) the Trident Foundation Ltd.

6.2.4. Relevance to and complementarity with other initiatives

As described in Section 5.1 above, the project was designed to support the ongoing activities of the Conservation Farming Unit (CFU), and The Nature Conservancy (TNC). In addition, the project was to support complementary activities of the Game Rangers International (GRI) in Kafue National Park. A similar cooperation with the Trident Foundation in West-Lunga National Park was considered but was ultimately unsuccessful. The project was also considered to be complementary to the CBNRM Forum initiatives, although the MTR noted that further coordination was required to achieve this. Cooperation and capacity building with Copperbelt University was built into the project design and implementation.

Under Outcome 1 the project collaborated with partners, including TNC to build capacity for fire management through the provision of training workshops, equipment and protective clothing (details given in Table 20). The 2019 PIR also reported that the project was providing training in use of GIS and remote sensing to map incidence of fire and associated emissions in collaboration with the TNC. In addition, the project, in collaboration with TNC, also facilitated the development of community-based fire control action plans which were reportedly being executed in all VAGs.

Under Outcome 2, CF practices were promoted in collaboration with the CFU. The 2019 PIR reported preliminary results showing that production had tripled since the introduction of CF (details given in Table 20).

Outcome rating (based on Table 23): 5 (Satisfactory)

6.3. Effectiveness

Effectiveness is the extent to which the project's objectives were achieved or are expected to be achieved. Effectiveness is also used as an aggregate measure of (or judgment about) the merit or worth of an activity, i.e., the extent to which an intervention has attained, or is expected to attain, its major relevant objectives efficiently in a sustainable fashion and with a positive institutional development impact. With this in mind, the following issues were assessed as contributing to overall effectiveness.

6.3.1 Extent to which the project contributed to the country programme outcomes and outputs, the SDGs, the UNDP Strategic Plan, GEF strategic priorities, and national development priorities

The project was designed to contribute to three Country Programme Outcomes, as defined in the UNDAF, CPAP and UNDP Strategic Plan for Zambia. As of 2019, the project had provided small grants to support sustainable livelihoods intended to reduce community dependence on natural resources which may be affected by climate change. In addition, the project promoted CF, which balances the need for environmental protection with the need for increased agricultural production. This climate-responsive approach typically increases income and food security while safeguarding environmental resources. Preliminary results in 2019 from CFU indicated that production on farms had increased three-fold following the introduction of CF, including in female-headed households. These gains contributed to both *UNDAF Outcome 4 (Contribute to the reduction of people's vulnerability from the risks of climate change, disasters and environmental degradation)* and *CPAP Outcome 1 (Government promotes adaptation and provides mitigation measures to protect livelihoods from climate change)*. The project has also reportedly supported the development of by-laws which supply clear resource rights, boundaries and land use zones, management structures and benefit sharing plans in line with National REDD+ criteria. This contributes to *CPAP Outcome 2 (Government implements policies and legal frameworks for sustainable community based natural resources management).*

The project is also aligned with two Country Programme Outcome indicators. Project contributions under these indicators are discussed below.

Increase in the area brought under effective management of PA system (%)
As of 2019, the project had strengthened the effectiveness of management across ~24,164 km^2 (2,416,400 ha) of Protected Areas, as well as ~41,297 km^2 (4,129,700 ha) of GMAs and ~1,387 km^2 (138,700 ha) of Protected Forest Areas (PFAs). In total, ~66,788 km^2 (6,678,800 ha) will be protected under sustainable land and forest management models. While encroachment, uncontrolled fires, illegal hunting and timber extraction remain a threat in some areas, the project has taken steps to address these. Such measures include:

- ongoing contribution to Sustainable Land Management through promotion of conservation agriculture;
- continued strengthening of law enforcement in the project area; and
- ongoing capacity building for improved fire management.

Reduction in annual average deforestation rate (%)
The project has reportedly supported the development of by-laws which supply clear resource rights, boundaries and land use zones, management structures and benefit sharing plans in line with National REDD+ criteria. In addition, 25 VAGs were prepared for the implementation of REDD+ projects by: i) facilitating zoning of areas for REDD+; ii) undertaking resource mapping; and iii) provision of small grants to support sustainable livelihoods that reduce dependence on the forest resource base.

6.3.2. Extent to which the project's actual outcomes/outputs were commensurate with what was planned
A detailed assessment of the progress of the project against targets is given in Table 20 (Section 6.1). Of the 16 targets set in the Project Document, five were met, eight were partially achieved and two were considered unlikely to be achieved by the end of the project. There was insufficient information available to assess one of the targets (2a. Wildlife stocking rates). A summary of these achievements is shown Table 21 below.

Table 21. Summary of extent to which project targets were achieved

Target	Target achieved		Target partially achieved		Target not achieved		Indeterminate/ cancelled		Total
	No.	%	No.	%	No.	%	No.	%	No.
Objective	1	100							**1**
Component 1			5	83%	1	17%			**6**
Component 2	4	44%	3	33%	1	11%	1	11%	**9**
Total	**5**		**8**		**2**		**1**		**16**

6.3.3. Areas in which the project had the greatest and fewest achievements, and the contributing factors
The greatest achievements across the project were in the extension and improved management of PAs, the engagement of VAGs, community-level awareness raising, and the introduction of CF to improve crop yields and safeguard rural livelihoods. The areas of least achievement were predominantly in activities related to REDD+, PPPs and PES. Data on these and other elements of project progress is presented in Table 22 above. Additional details on the achievement of specific indicators are provided below.

Sustainable Land and Forest Management (SLFM) established in Miombo Woodland and Dry Evergreen Forest ecosystems in PA core areas, as well as community managed GMAs and conservancies enabling forest corridor connectivity between WLNP and KNP in the long term.

The target (65,461 km^2, 6,546,100 ha) for this objective was slightly exceeded with 66,788 km^2 (6,678,800 ha) under SLM and SFM (Table 20). To ensure the long-term sustainability of this achievement it is necessary that the quality of the SLM and SFM is maintained. There are still pockets of encroachment in PAs, uncontrolled fires, illegal hunting and timber extraction which is compromising the forest corridor connectivity between West-Lunga National Park (WLNP) and Kafue National Park (KNP). To ensure the sustainability of the project, the implementation of several important interventions has continued according to the 2020 PIR, including:
i. the promotion of conservation farming in collaboration with the Conservation Farming Unit (CFU);
ii. the strengthening of law enforcement in project areas; and
iii. ongoing capacity building to improve effective management, including fire management.

Outcome 1 indicators

Indicator 1. Increase in Management Effectiveness Tracking Tool
The targets for this indicator were exceeded in 2019 and had not changed significantly by 2020 (Table 20). The improvement in management effectiveness was realised through investments in capacity building of Implementing Partner (IP) staff and community members in law enforcement,

fire management, anti-encroachment efforts, as well as the development of platforms for stakeholder engagement and communication. As of 2019, the Management Effectiveness Tracking Tool for Protected Areas of Zambia (METTPAZ) assessment indicated improvements in management effectiveness as follows:

- Kafue National Park — improved by 15%
- West-Lunga National Park — improved by 25%
- GMAs around KNP — improved by 30%
- GMAs around West-Lunga NP — improved by 28%

Sub-indicator 2a. Wildlife stocking rates

Updated figures on wildlife stocking rates are not available, as a result of the impacts of the global Covid-19 pandemic. The GRZ imposed restrictions on travel and gatherings in 2020, limiting access to field sites and delaying several activities. However, a Wildlife Aerial Survey was undertaken by the Nature Conservancy (TNC) in collaboration with Zambia's Department of National Parks and Wildlife in 2019. The TNC survey results indicate increased populations of major mammal species ranging from 3% for elephant to more than 90% for red lechwes compared to the population figures in 2011. In contrast, the survey found the puku population to have significantly declined by over 35%. The reasons for this decline are yet to be established once the Management Report is compiled.

Sub-indicator 2b. Area burned annually

Data for the area burned between 2019 and 2020 were not available as of the 2020 PIR (Table 20). The area burned in 2020 is not expected to be substantially different from the 1,419,745 ha (63.6%) recorded in 2019, as no large-scale fire interventions were undertaken during that period. The end-of-project target is unlikely to be achieved for two reasons: i) planned fire management interventions in the first half of 2020 were not implemented as a result of the Covid-19 outbreak and subsequent restrictions; and ii) there has been continued pressure from encroachment, timber extraction, charcoal production and use of fire by illegal hunters or poachers.

Sub-indicator 2c. GHG emissions

As of the 2020 PIR this indicator was partially achieved, however no data on emissions from late season fires were available (Table 20). A study had been commissioned and was being facilitated by TNC, but the information was unavailable at the time of this assessment. Nonetheless, the IPs were supported in the development of a Fire Management Strategy for Kafue National Park which is expected to contribute to reducing the burned area and GHG emissions in the long term.

Indicator 3. Reduction in funding gap of the targeted National Parks moving up one category (based on the REMNPAS Financial viability assessment) with at least one new PPP formed (WLNP).

Sub-indicator 3a. Establishment of PPPs

The target of reducing the funding gap for the Kafue PA system is likely to be met by the end of the project (Table 20), and some advances on this have been made as of the 2020 PIR. These advances include the process currently underway to establish a PPP in the Kafue PA system by African Parks[7] (a partner that is being actively considered for a PPP arrangement in the Kafue PA system) and the The Government of the Republic of Zambia (GRZ). However, establishment of a PPP in West-Lunga was unable to be realised with no private sector identified. As a result, the target for financial sustainability of the West-Lunga PA system is unlikely to be achieved by the end of the project.

Sub-indicator 3b. Annual revenue collection (Kafue National Park)

The 2020 PIR indicated that revenues continued to be generated from the national parks through hunting and tourism (Table 20). An increase in revenue generated from hunting was noted from K75,303,574.84 (US$4,137,559.06) in the second half of 2018 to K103,953,519.97 (US$

[7] A non-profit conservation organization that partners with governments and local communities to undertake rehabilitation and long-term management of protected areas. See https://www.africanparks.org/

5,711,731.87) during the same period in 2019. This increase is partly attributed to training and equipment provided by the project that has contributed to strengthened law enforcement capacity, which in turn has led to increased animal populations and revenue.

Sub-indicator 3c. Annual percentage increase in tourism revenues
The annual tourism revenue target (10%) was exceeded in West-Lunga National Park according to the 2020 PIR (Table 20). This achievement was attributed to enhanced law enforcement as a result of project activities, as well as donor support which doubled between 2015 and 2019. The establishment of PPPs in the future is expected to further increase tourism revenues in the national parks.

Indicator 4. PES maintaining watershed/river catchments by communities in KNP benefitting ZESCO.

As of the 2020 PIR this indicator was not expected to be met (Table 20). The Zambia Electricity Supply Company (ZESCO) — that is currently paying for ecosystem services to the Zambezi River Authority — has been unwilling to enter another PES arrangement, as this is viewed as double charging. To date, efforts to identify alternative stakeholders to undertake the PES around Kafue National Park have been unsuccessful.

Outcome 2 indicators

Sub-indicator 1a. Community conservancies established
This target was not achieved by November 2020, largely as a result of the sustained absence of enabling legislation. According to the 2020 PIR, the project continued to pursue an alternative approach of Community Forest Management (CFM). This involved securing land for community involvement in sustainable forest management, with the intention of communities deriving economic and environmental benefits from managing forest areas in their localities. In 2020 a consultant was engaged to develop a structured training manual for use by extension staff and communities to secure land for CFM, following guidelines established by a Statutory Instrument for the formation of CFM Groups. The establishment of CFMGs (covering 76,779 ha of forest area) began in five VAGs around Kafue National Park, namely Maunga, Mulilabanyama, Mbuma, Babibizhi and Kapepe. According to the 2020 PIR, communities around West-Lunga National Park had not received similar support. Following the development of the first draft of the TE it was reported that field work had been undertaken to support the development of CFMGs in communities around West-Lunga National Park, although no documentation was provided to support this.

Support was also provided for the development of a multi-sectoral National Community-Based Natural Resource Management Policy. While the policy development process is still ongoing, the aim is to have this policy process guide future legislation that will address the current gap in the establishment and operations of community conservancies.

Sub-indicator 1b. Establishment of VAGs and sub-indicator 1c. ILUPs (in line with REDD+ criteria)
The target for these sub-indicators was to have 25 VAGs legally established by the end of the project, with established Integrated Land Use Plans (ILUPs). As of the 2019 PIR, this target had been partially met with 38 VAGs earmarked for legal establishment, and their ILUPs prepared. It should be noted that of the 18 interviews conducted with members of 10 VAGs for the TE, six indicated that the VAG had been legally established, while six indicated that the VAG had not yet been legally established. The status of the remaining six VAGs was not clear from the interview notes received.

The 2020 PIR reports that a set of by-laws for the management agreements to support implementation (or enforcement) of ILUPs in these 38 VAGs was also developed. In addition, COMACO was reported to be supporting the simplification of ILUPs to make them user-friendly for the communities.

COMACO also rendered support for the CFM and REDD+ consultancy work under the project which formed the basis for the identification of 25 VAGs that are suitable for delineation and support to establish CFMGs, as well as pilot REDD+. In addition, the 2020 PIR reports that a learning visit was undertaken to ensure buy-in and learn about the Community REDD+ Model that COMACO is working on in Zambia's Eastern Province. Reportedly, COMACO have also facilitated training to improve the institutionalisation of the REDD+ process in partnership with GIS staff from DNPW and FD.

Sub-indicator 1d. Women's participation in VAGs and household incomes

The 2020 PIR report states that 50% female participation in the VAG committee structure was achieved, exceeding the 40% target for this sub-indicator. This is supported by the 18 interviews undertaken with members of 10 VAGs for the purposes of this TE. Of these, 50% of the interviews indicated that female participation had increased, with 44% of interviews stating that women comprised at least 75% of the VAG.

Household incomes have also been reported in the 2020 PIR to have improved through support for alternative livelihoods and strengthened market linkages. This improvement was achieved through the Small Grants Programme (SGP) that supported more than 34 community groups/NGOs to engage in beekeeping, poultry farming, goat rearing and vegetable gardening. Around Kafue National Park, the project partnered with COMACO to procure and distribute ~5,000 beehives, with COMACO providing an available market for honey. Reportedly, the market provided by COMACO for numerous commodities was furthermore helping to enhance compliance levels of communities to conserve natural resources.

Of the 18 interviews undertaken with members of 10 VAGs, five (28%) indicated dissatisfaction with the goats provided under the SGP, while two (11%) indicated that the goats had improved food security. The dissatisfaction with the goats largely stemmed from the small number provided, the lack of vaccinations (resulting in the early death of many goats) and the perceived limited feed and other inputs necessary for successful goat rearing. Similarly, two interviews (11%) indicated that the community was dissatisfied with receiving chickens, having preferred goats or pigs, and that insufficient support was provided to make chicken rearing successful. In only one of the interviews did VAG members express satisfaction with the chickens, reporting that they had contributed to improved incomes. Four (22%) of the 18 interviews conducted with the VAGs reported that beehives had not been delivered (or only part of the expected delivery had arrived) and/or that the beehives provided were of inadequate quality. One interviewee reported that the community had resorted to building their own beehives with equipment provided by the project, which were thought to be of better quality. Two (11%) interviews recorded dissatisfaction with the lack of transparency and inconsistent reporting of the distribution process. It is concerning that four of the 18 interviews (22%) recorded VAG members stating that beehives, animal feed, seeds and other inputs necessary to support alternative livelihoods should be provided for free by the GRZ and/or project/partners. This suggests that a dependency has been created, rather than a self-sustaining system for alternative livelihoods in these communities.

Indicator 2. Conservation farming (CF) practices applied in targeted GMAs

Sub-indicator 2a. Hectares under CF and number of households practicing CF

The target for this sub-indicator (3,760 ha under CF involving 1,600 households) was exceeded according to the 2020 PIR. As of the 2019/2020 farming season, 46,911 farmers were reported to be practicing CF (combined figure for farmers supported by COMACO and CFU). These farmers cover a total area of 12,446 ha. CFU reported that the adoption rate for CF is 84.5%, exceeding the national average (less than 30%).

Of the 18 interviews conducted with members of 10 VAGs for the purposes of the TE, eight (44%) reported that CF had been widely adopted in the community, while five (28%) reported that CF had not been widely adopted.

Sub-indicator 2b. Increased yields

At the time of the TE, estimates of yield levels by farmers that adopted CF in the 2019/2020 season were unavailable. However, yields for farmers practicing CF were expected to be higher than farmers using conventional farming methods. The 2019 PIR reported that farmers practicing CF achieved a minimum maize yield of 3 tonnes/ha (compared to less than a tonne/ha by farmers practicing conventional farming). Of the 18 interviews conducted with VAGs, seven (39%) corroborated that CF practices had resulted in increased yields, improved food security and/or increased household incomes.

The high productivity reported in the 2019 PIR led to a corresponding increase in income of US$840/ha/yr. Similar gains were reported by female-headed households involved in CF (US$420/ha/yr). As a result, the 2019 PIR reported that there was a growing demand by smallholder farmers for more training in CF. This is corroborated by the 18 interviews undertaken with VAGs in preparation of the TE, with more than half (56%) of the interviews recording a request for additional training on CF.

Sub-indicator 2c. CO_2 emissions resulting from vegetation clearance for agriculture in targeted areas

The target for this sub-indicator was a 40% reduction in cumulative emissions, with a subsequent 7,520 ha reduction in area cleared by the end of the project. As of the 2019/2020 farming season, it was estimated that the additional 10,441 farmers practicing CF resulted in a corresponding 5,220 ha reduction in the area cleared for agriculture (based on an assumed 0.5 ha average land under CF per farmer). The 2020 PIR reported that a study had been commissioned to estimate the contribution of this level of CF adoption to decreasing direct lifetime avoided CO_2 emissions, but no results were available at the time of the TE. Nonetheless, the 2020 PIR estimated a reduction in emissions equivalent to 6,400 tCO_2e (5,220 ha x 0.32) in 2019, based on the global mitigation potential factor of 0.32 tC/ha/yr of agricultural land.

Indicator 3. Demonstration of avoided deforestation (no net loss) in at least 25 VAGs establishing REDD+ pilots linking to national and/or voluntary carbon financing

The 2020 PIR reports that while some progress had been made on the implementation of the REDD+ intervention (Outcome 2, sub-indicator 1d), the overall target for demonstrated avoided deforestation in at least 25 VAGs was unlikely to be achieved by project end. The project was also intended to establish REDD+ sites, as well as securing a long-term partnership with COMACO. This partnership was intended to work beyond the project to support communities in engaging in REDD+ activities. Support to communities aimed to include: i) securing ~25,000 ha of land identified through the ILUPs for REDD+; ii) developing and translating REDD+ guidelines; iii) and supporting communities to establish CFMGs. A partnership with COMACO appears to be in place, but the establishment of REDD+ sites was not completed.

Sub-indicator 3a. Hectares or number of VAGs implementing REDD+ pilots

The target for this sub-indicator was 25,000 ha (leveraging 75,000 ha) in at least 25 VAGs. As of the 2020 PIR it was reported that this target was achieved, but that the extent of avoided deforestation from REDD+ interventions was unable to be estimated. Nonetheless, it was expected that the development of a CFM manual, along with REDD+ guidelines and stakeholder consensus built under the project would form a foundation for the implementation of the REDD+ programme by COMACO beyond the project lifetime.

Sub-indicator 3b. Standards

As of the 2020 PIR the standards for performance of REDD+ (VCS and CCB) were not met within the project period. COMACO will reportedly use an existing model for REDD+ site management which will be implemented in the areas surrounding Kafue National Park. Prior to its closing, the project was to continue supporting COMACO in updating, testing and translating the REDD+ standards into local languages. It is unclear to what extent this was completed at the time of the TE.

Sub-indicator 3c. Identification of buyers

Similar to sub-indicator 3b above, the target was not met by project close. The 2020 PIR reported that COMACO has active relationships with carbon credit buyers, which they will leverage to support communities around Kafue National Park.

Indicator 4. Reduced rate of deforestation from fuelwood extraction in all targeted GMAs
The 2020 PIR reports that targets for Sustainable Land and Forest Management (SLFM) by community conservancies in GMA buffer areas through sustainable firewood collection and SFM governance were likely to be achieved before project close.

Sub-indicator 4a. Zones for fuelwood collection
As of the 2020 PIR zones for fuel collection had been designated in 38 VAGs where ILUPs were developed. Reportedly, the ILUPs remain to be completed and distributed to communities through COMACO. The use of energy-efficient cookstoves would also continue to be promoted. More than 6,000 energy-efficient stoves were reported to have been constructed in the project area using locally available materials.

Of the 18 interviews conducted with members of 10 VAGs for the purposes of the TE, one interviewee responded positively to the introduction of energy-efficient stoves. This response indicated that the demand for fuel had been significantly reduced. Another response indicated that while several community members had been trained to build the stoves, other community members were unwilling to pay ZMW50 (US$3.24) per stove. Accordingly, a training-of-trainers approach was suggested to be more effective, allowing community members to build their own stoves from locally available materials, rather than buying them.

Sub-indicator 4b. Training and awareness
The 2019 PIR reported that awareness of and capacity for more sustainable fuelwood use had been built among VAGs through: i) the promotion of energy-efficient cookstoves in over 1,860 households; and ii) training VAGs in practical forest management. The 2020 PIR states that the use of the CFM training manual by extension personnel would be further promoted.

Sub-indicator 4c. Lifetime avoided emissions
The target for this indicator — according to the 2020 PIR — will be met through the 334,300 ha set aside for forest conservation, forming part of the total forest area to be set aside for CFM, of which 83,575 ha will be earmarked as fuelwood collection zones as outlined in the ILUPs. Taking into account the numerous SFM efforts outlined in the 2020 PIR indicators, it is considered likely that the 20-year target of 63,287 tCO_2 in reduced emissions will be met.

Indicator 5. Reduced rate of deforestation from late season fires in targeted GMA zones
The 2020 PIR reports that progress had been made towards reducing late season fires in targeted GMAs. The target for SLFM by community conservancies in GMAs through community-based fire management was reported as likely to be achieved by the end of the project.

Sub-indicator 5a. Late season fires and fire management practices
Preliminary estimates — according to the 2019 PIR — indicated a reduction in the total burned area from 1,067,871 ha in 2014 to 976,948 ha in 2017. An unspecified small gain in reducing the burned area in GMAs was reported in the 2020 PIR and attributed to the project's partnership with TNC. Support for capacity building under the project has also led to improved management effectiveness.

According to the 2020 PIR, the project continued to support the updating of fire management action plans through VAG committees in 2019 and 2020, along with early burning exercises conducted during the third quarter of 2019. Using this multi-sectoral approach, the project consolidated the fire action plans within the GMAs. However, the ongoing arrival of new settlers in areas adjacent to GMAs remains a challenge, reducing the effectiveness of awareness campaigns. In response, a high-level dialogue meeting was held with traditional leaders and senior GRZ authorities — in collaboration with COMACO — from the areas around Kafue National Park to find sustainable solutions. In addition, the project supported the FD and DNPW to review opportunities under

existing legislation to strengthen capacity for law enforcement. Following this support, the FD and DNPW were to issue a Gazette Notice that will recognise community scouts engaged by CFMGs as well as wildlife law enforcement personnel as Honorary Forestry Officers.

Sub-indicator 5b. Reduced emissions

According to the 2020 PIR, it was unlikely that the target of reducing emissions from late season fires would be met during the project lifespan. The failure to meet this target was largely attributed to the increasing pressure of encroachment and growing demand for charcoal that resulted in high fire incidences in GMAs. Nonetheless, the existing partnership with TNC was expected to continue to advance efforts to mainstream fire management principles in communities, traditional leaders and authorities through awareness creation and implementation of the fire strategy.

6.3.4. Constraining factors and how they were overcome

There were several institutional changes at the national level which affected project implementation, including changes in the banking sector, changes in departmental arrangements and a national election. These challenges were overcome, in part, as a result of the adaptive management approach, particularly in the wake of the MTR in 2017.

The procurement of office space, an internet connection, office supplies and other commodities was severely delayed, which limited the effectiveness of project staff in achieving their targets. This was due, in part, to of the limited availability of service providers, as well as disbursement systems being ineffective in the project setting. An alternative strategy would have been to establish mobile offices (container or caravan-based for example) or provide additional support for project staff to work from decentralised home offices.

There were significant delays and interruption in disbursement of funds for project activities for several reasons. Following the 2017 MTR, a project accountant was acquired to oversee financial management of the project. However, it is not clear whether a project bank account was successfully opened before the end of the project term in 2020. An alternative strategy would have been to acquire a financial manager or accountant for the project in the first year of implementation, as well as to establish effective strategies for disbursement in a rural setting.

Unfortunately, the onset of the Covid-19 global pandemic constrained activities, particularly in the first quarter of 2020 and also restricted international travel for the purposes of conducting the TE. As this was an unprecedented situation, there are few alternative strategies which could be recommended. With limited internet access in rural areas, communications could have been maintained with VAGs via WhatsApp, or other mobile platforms, to ensure that CF activities were ongoing.

Overall, the project's adaptive management response was considered to have been slow and ineffective in identifying and addressing problems during implementation. This resulted in a loss of confidence amongst stakeholders and hindered the achievement of several targets. Further details on the challenges faced by the project are listed in Section 5.2 above.

6.3.5. Gender

The project was effective in contributing to several gender targets including: i) minimising gender gaps and improving access to and control over resources; ii) improving the participation of women in decision-making around natural resource management; and iii) contributing to improved livelihoods for women and female-headed households.

At the community level the project provided gender-sensitive training for VAGs that included elements of addressing gender, as well as environmental and social safeguards. A sub-committee within the VAGs was also proposed in line with the lessons learned from Mozambique regarding grievance redress. The training provided has increased female confidence and participation in decision-making and challenged existing gender roles and norms. The 2019 Project Implementation Report notes that attitudes and social norms have changed in the communities in which the project

operated. Female representation in decision-making bodies such as the VAGs has increased to 50% in most cases.

In terms of improved livelihoods, the project dedicated small grants to support women in pursuing alternative livelihoods. These small grants were reported to have benefited ten women's groups as of 2019. It should be noted that some women reported dissatisfaction with the alternative livelihoods presented to them. For example, several felt that goat rearing would have been more appropriate than chicken rearing. In addition, only one goat was supplied per household and vaccinations were not made available for these animals. A large number of goats and chickens were lost as a result of disease, with communities lacking access to vaccinations and veterinary services.

Nonetheless, across the project area women engaged in CF and alternative livelihoods have been able to improve household food security, as well as increase household income by selling excess produce. This has narrowed the income gap between men and women at a household level. In addition, the introduction of energy-efficient stoves has reduced the demand on women and girls for firewood collection and is likely to have health benefits in the long-term, by reducing smoke inhalation. Overall, improved agricultural yields and reduced reliance on natural resources has increased the resilience of women and female-headed households to climate change impacts.

Outcome rating (based on Table 23): 4 (Moderately satisfactory)

6.4. Efficiency

6.4.1. Resource allocation and cost effectiveness

Overall, the project cannot be rated as 'efficient' as a result of the considerable delays in implementation, delays in fund disbursement and ineffective adaptive management (for further details please see Sections 5.2, 5.3 and 6.1 above). The scope of the project exceeded the time allowed, as well as the proposed budget. Several activities were only partially implemented, and work was abruptly halted in 2020 with no exit strategy or communication to stakeholders on the ground. Although the annual audits provided for 2015–2018 were classified as 'unqualified', the extension of the project into 2019 and then 2020 posed a challenge for the financial management of the project.

The introduction of CF at the community level and engagements with the VAGs were effective and efficient activities with clear benefits to beneficiaries. CF is complementary with ongoing efforts by other projects and programmes to safeguard rural livelihoods and improve CBNRM. The project was efficient in producing gains in gender equity, with women taking a greater role in decision-making through the VAGs.

6.4.2. Project management and timeliness

The project management structure as envisaged in the Project Document was revised during the Theory of Change Workshop at the time of the MTR. The structure had not been wholly successful in implementing the project at that time (2018). There were substantial delays in procuring project staff, setting up workspaces and delivering the equipment and services required for timely implementation of the project. Of particular concern to stakeholders were the substantial delays and interruptions in the disbursement of project funds, as well as the unreliable delivery of fuel and other commodities. A project accountant was acquired following the recommendations of the MTR, but challenges remained in achieving effective and timeous disbursement. An 18-month extension was granted to overcome the delays in implementation, particularly in the delivery of activities related to REDD+ and PES. The revised project end date was November 2020.

Outcome rating (based on Table 23): 3 (Moderately unsatisfactory)

7. Overall Project Outcome

The calculation of the overall project outcome rating is based on the ratings for relevance, effectiveness and efficiency, of which relevance and effectiveness are critical. Overall project outcome is assessed using a six-point scale, described in Table 23.

Several constraints on this rating are noted below.

- The rating on relevance will determine whether the overall outcome rating will be in the unsatisfactory range (MU to HU = unsatisfactory range). If the relevance rating is in the unsatisfactory range then the overall outcome will be in the unsatisfactory range as well. However, where the relevance rating is in the satisfactory range (HS to MS), the overall outcome rating could, depending on its effectiveness and efficiency rating, be either in the satisfactory range or in the unsatisfactory range.
- The overall outcome achievement rating cannot be higher than the effectiveness rating.
- The overall outcome rating cannot be higher than the average score of effectiveness and efficiency criteria.

In cases where a project's result framework has been modified and approved, and if the modifications in the project impact, outcomes and outputs have not scaled down their overall scope, the consultant understands that outcome achievements should be assessed based on the revised results framework. In instances where the scope of the project objectives and outcomes has been scaled down, the magnitude of and necessity for downscaling should be taken into account and despite achievement of results as per the revised results framework, where appropriate, a lower outcome effectiveness rating may be given.

Table 22. Assessment of overall project outcome

Assessment of Outcomes	Rating
Relevance	5
Effectiveness	4
Efficiency	3
Overall Project Outcome Rating	**4**

Table 23. Outcome Ratings Scale — Relevance, Effectiveness, Efficiency

Rating	Description
6 = Highly Satisfactory (HS)	There were no short comings; quality of project design/implementation exceeded expectations
5 = Satisfactory (S)	There were minor shortcomings; quality of project design/implementation met expectations
4 = Moderately Satisfactory (MS)	There were moderate shortcomings; quality of project design/implementation more or less met expectations
3 = Moderately Unsatisfactory (MU)	There were significant shortcomings; quality of project design/implementation was somewhat lower than expected
2 = Unsatisfactory (U)	There were major shortcomings; quality of project design/implementation was substantially lower than expected
1 = Highly Unsatisfactory (HU)	There were severe shortcomings in project design/implementation
Unable to Assess (UA)	The available information does not allow an assessment of the quality of project design/implementation

8. Sustainability: financial, socio-political, institutional framework and governance, environmental, overall likelihood of sustainability

Financial sustainability

The Government of the Republic of Zambia is committed to the ongoing development of community Public-Private-Partnerships (PPPs). Therefore, is it likely that private sector partners will continue to be sought to generate additional revenue for protected areas, although PPPs were not successfully established before the closing of the project. In addition, the government is committed to the development of a financial sustainability plan for the national protected area system. Under this plan, the need for protected area financing will be mainstreamed into national development planning budgets. The project has also been effective in improving management of the national parks and boosting their revenues. While the global Covid-19 pandemic has severely reduced income from ecotourism in Zambia, it is expected that the Kafue and West-Lunga National Parks — as well as the GMAs — will continue to benefit financially in the long-term.

Interviews undertaken with members of 10 VAGs highlight some concerns over the long-term sustainability of the alternative livelihoods (goat rearing, chicken rearing and beekeeping) introduced under the project. In five (28%) of the 18 interviews undertaken with VAG members, dissatisfaction was expressed with the goats provided for alternative livelihoods, while two (11%) indicated that the goats had improved food security. This dissatisfaction was largely with the number of goats provided, which was deemed inadequate. However, several VAG members reported that the goats were provided lacking necessary vaccinations, with many dying as a result (Annex II Key findings from stakeholder interviews). This point was reiterated by a CFU officer interviewed for the TE. Similarly, VAG members (2 interviews of the 18 undertaken) indicated that the community was dissatisfied in having received chickens (would have preferred goats or pigs) and stated that insufficient support was given to make chicken rearing successful.

In 4 of the 18 interviews, it was reported that beehives had either not been delivered, or the only part of the expected number were delivered. In addition, these beehives were considered to be of poor quality. One interview reported that a community had resorted to building their own beehives with equipment provided. This demonstrates that there is potential for communities to take develop self-sustaining alternative livelihoods, which is of considerable concern in this case. Four of the 18 interviews (22%) undertaken recorded VAG members stating that beehives, animal feed, seeds and other inputs necessary to support alternative livelihoods should be provided for free by the GRZ and/or project/partners. This suggests that a dependency on hand-outs has been created, rather than a self-sustaining system for alternative livelihoods in these communities (see

Annex IV. Key findings from stakeholder interviews).

In several interviews with VAGs and sub-national stakeholders it was reported that the project activities were not aligned with community wants and needs, particularly in the context of the alternative livelihoods activities (see Annex IV. Key findings from stakeholder interviews). One of the three chiefs and chieftainesses interviewed suggested that project activities should be aligned with strategic plans of individual chiefdoms and be more informed by the lessons learned from previous projects.

Outcome rating (based on Table 25): 3 (Moderately likely)

Socio-political sustainability
The government has/is committed to a decentralised approach to local governance and poverty reduction, which supports the upscaling of CBNRM. At a local level, it is likely that communities will continue to apply CF as the benefits of its practice have been demonstrated through increased yields. Nonetheless, stakeholders remain concerned that support for CF will not be available and that farmers may revert to unsustainable practices if seeds and other inputs are no longer available. The training provided to VAGs and the lead farmers may partially mitigate this if these stakeholders coordinate between themselves to access the necessary tools and inputs.

The abrupt discontinuation of project activities has resulted in a loss of confidence among communities. However, a positive aspect has been the bolstering of the VAGs which has resulted in an increase in women's participation in land use planning and decision-making. If stakeholders remain committed to this trend, then it is likely gender equity will be further improved.

Outcome rating (based on Table 25): 3 (Moderately likely)

Institutional framework and governance sustainability
The enactment of the Forest Legislation in 2018 (SI No. 11 on CFM guidelines) assisted the formalisation of a number of VAGs and CBNRM plans, which will remain in place following the closing of the project.

Outcome rating (based on Table 25): 3 (Moderately likely)

Environmental sustainability
Risks to environmental sustainability continue as a result of unsustainable logging and charcoal burning, rather than deforestation which is the project's focus. Foreign investors continue to expand logging operations in the project area. With the VAGs in place to enforce CBNRM and land use, it is expected that these threats will be avoided to some extent in the protected areas and GMAs. Additionally, other projects operating in the project area are likely to contribute to the protecting of forests and intact ecosystems.

Outcome rating (based on Table 25): 3 (Moderately likely)

Table 24. Outcome rating for sustainability

Sustainability	Rating (see Table 27)
Financial resources	3
Socio-political	4
Institutional framework and governance	3
Environmental	3
Overall likelihood of sustainability	**3**

Table 25. Outcome Ratings Scale — Sustainability

Rating	Description
4 = Likely (L)	There are little or no risks to sustainability
3 = Moderately Likely (ML)	There are moderate risks to sustainability
2 = Moderately Unlikely (MU)	There are significant risks to sustainability

1 = Unlikely (U)	There are severe risks to sustainability
Unable to Assess (UA)	Unable to assess the expected incidence and magnitude of risks to sustainability

9. Country ownership

As discussed in Section 5.1, the project was designed to align with Zambia's national and sectoral priorities, policies and plans. In addition, stakeholders across all levels were closely involved in the initial design of the project. Moreover, the MTR reported that the project design supports country ownership through capacity support at the national level, as well as local ownership through financial and capacity-building support to VAGs and other local governance structures. Relevant GRZ representatives were involved during project implementation (as indicated in Table 7), and the GRZ has maintained its financial commitment to the project throughout its lifespan (
Table 10).

Provincial-level staff interviewed for the TE acknowledged that implementation delays may have negatively impacted the sense of ownership at a local level (see Annex IV. Key findings from stakeholder interviews) and that communities still have a limited sense of project ownership and have become dependent on projects. District-level stakeholders asserted that the project's lifespan was too short to build a sufficient sense of ownership among communities. This impression was likely built as a result of the late onset of implementation, followed by the abrupt cessation of project activities.

10. Gender equality and women's empowerment

The project's gender equality and women's empowerment focus can be rated as 'gender targeted' (Table 26**Error! Reference source not found.**) with a strong focus on increasing the representation of women in decision-making. The project is one of several initiatives in the target area that aim to improve gender equity. Additional discussions of gender considerations within the project are provided in Sections 5.4 and 6.3 above.

Table 26. Gender results effectiveness scale

Rating	Description
Gender negative	Result had a negative outcome that aggravated or reinforced existing gender inequalities and norms
Gender blind	Result had no attention to gender, failed to acknowledge the different needs of men, women, girls and boys or marginalised populations
Gender targeted	Result focussed on the number of equity (50/50) of women, men or marginalised populations that were targeted
Gender responsive	Results addressed differential needs of men or women and addressed equitable distribution of benefits, resources, status, rights but did not address root causes of inequality
Gender transformative	Result contributes to changes in norms, cultural values, power structures and the roots of gender inequality and discrimination

Project contribution to gender equality and women's empowerment

The 2019 PIR noted that attitudes and social norms have changed within the project's target communities. In most cases, female representation in decision-making bodies such as the VAGs has increased to 50%. Moreover, the income gap between men and women has been reduced in households implementing CF practices and alternative livelihoods.

The 2020 PIR also reported that recommendations from the Gender Analysis and Action Plan (GAP) continued to be implemented during 2020, including provision of training on gender mainstreaming in the context of VAG/CRB constitutions. The gender training was made available to VAG/CRB members and the IPs. Following this training, a blueprint VAG/CRB constitution, demonstrating gender mainstreaming, was developed. As reported in the 2019 PIR, the representation of women in VAG structures has reached 50%.

As discussed in Section 6.3 (in addition to Sub-indicator 1d. Women's participation in VAGs and household incomes in Table 20), the stakeholder interviews conducted during the preparation for the TE reflect an increase in gender representation in VAGs. Of the 18 interviews conducted with members of 10 VAGs across the project area, nine (50%) reported that participation of women in

VAGs had increased as a result of project activities. As of late 2020, eight (44%) of the VAG interviews indicated that their VAG now comprised up to 75% women. Only one interviewee reported a VAG as comprising less than 30% women. Some respondents reported that there had been relatively slow progress in increasing the participation of women in VAG executive committees — as well as CF — because these were still largely viewed as the domain and roles of men. Additional details are available in.

The 10 VAGs mentioned above were also recipients of small grants made available under the project to kickstart alternative livelihoods. Of these grants, 40% were reserved specifically for women. These small grants were used to start several income-generating activities including goat-rearing, poultry farming and beekeeping. As discussed in Section 6.3, the stakeholder interviews conducted during the preparation for the TE reflect a mixed response to the provision of these alternative livelihoods. While in some cases these resulted in improved household food security and incomes, criticism arose about the types of livelihoods offered as well as the quality and quantity of inputs provided.

Contribution of gender results to environment, climate and/or resilience outcomes
The work undertaken with VAGs on CBNRM will continue to have environmental benefits, along with the ongoing efforts to upscale CF across the project area. However, while adoption of CF has reportedly improved yields and household food security, uptake among women has been slower than among men. This is largely as a result of ingrained gender norms in these communities. As discussed in Section 6.3, VAG members reported widespread adoption of CF in eight (44%) of the 18 interviews, with requests for additional training being common (10 of 18 interviews, 56%). Additional details are available in Annex IV. Key findings from stakeholder interviews.

Besides alternative livelihoods and CF, the project introduced energy-efficient cookstoves that have several benefits, including reducing: i) over-harvesting of fuel; ii) labour required to gather fuelwood; iii) cooking times; and iv) smoke exposure. By reducing the amount of time spent gathering fuelwood and cooking, the project intended to allow women more time to engage in alternative livelihoods, training, community meetings and other development-orientated activities.

Achievement of short-term or long-term gender results under the project
The introduction of CF farming is likely to have long-term benefits for household food security and incomes in the communities, in both male- and female-headed households. There is also an indication that the alternative livelihoods (supported by small grants of which 40% were allocated to women) contributed to narrowing the income gap between men and women in target communities. However, the long-term contribution of alternative livelihoods, such as goat rearing, is less certain. Communities reported that the number of goats were inadequate, and that many were lost to disease as a result of not being vaccinated (more details are available in Annex IV. Key findings from stakeholder interviews). Despite these reports, the increased representation of women within VAGs is likely to continue in the long-term.

Contribution to gender results areas
The project was effective in contributing to several gender targets including: i) closing gender gaps and improving access to and control over resources; ii) improving the participation of women in decision-making on natural resource management; and iii) contributing to improved livelihoods for women and female-headed households.

11. Cross-cutting Issues

The Project Document states that the project was designed to be consistent with GEF policies on Environmental and Social Safeguards. An Environmental and Social Screening Checklist was completed, which rated the project as Category 3[8]. No risks to human rights or gender equality are

[8] Category 3a: Impacts and risks are limited in scale, can be identified with a reasonable degree of certainty and can be handled through application of standard best practices. Will require some minimal or targeted further review and assessment to identify and evaluate whether there is a need for full environmental and social assessment.

recorded in the project documents. In addition, the project was designed to align with identified national priorities (further details are available in sections 5.1 and 9).

Overall, the project had positive effects on communities around Kafue and West-Lunga National Parks and within the surrounding GMAs, particularly in terms of livelihoods, CBNRM and household incomes. These impacts included, but were not limited to:

i. the establishment of a business centre in Mumbwa;
ii. establishing budgeting and performance management systems;
iii. rendering technical assistance, project and financial management;
iv. improving biodiversity management and protection;
v. increasing tourism investments, management and expansion;
vi. streamlining managerial effectiveness;
vii. increasing revenues in PAs;
viii. strengthening management operations at a local level (VAGs);
ix. providing financial support for the development of alternative livelihoods;
x. improving management of fires; and
xi. empowering communities to take on sustainable land and forest management.

The introduction of alternative livelihoods and replication of CF across the project areas will increase communities' resilience to climate change impacts in the long term and safeguard important ecosystem services. Both men and women will benefit from increased food security and household incomes in target communities. In addition, the participation of women in decision-making and CBNRM has been substantially improved through gender mainstreaming and training.

12. GEF Additionality

GEF additionality is defined as the additional outcomes — environmental or otherwise — that are directly associated with the GEF-supported project in question. Aspects of GEF additionality include: i) quantifiable benefits brought on by the project; ii) outcomes achieved in creating a more supportive environment throughout the project; iii) the extent to which outcomes achieved can be attributed to the GEF contribution as originally anticipated; iv) monitoring and evaluation (M&E) related to the assessing of project benefits as originally anticipated; v) the sustainability of the project initiatives and activities; and vi) the broader impact of the project at the completion stage. The aspects have been analysed and are discussed in more detail below.

Are the outcomes related to the incremental reasoning?

The original outcomes of the project are consistent with the original approved design. The intended global environmental benefits of the GEF Alternative incremental reasoning described in the Project Document are supported by verifiable data in a number of cases. These benefits are discussed in more detail in Table 27 below.

Table 27. Data demonstrating project global environment benefits

No.	Global Environment Benefit (GEB)	Data demonstrating GEBs
1	Management effectiveness in target PAs, West-Lunga and Kafue National Parks (covering 24,084 km^2 (2,408,400 ha) of Miombo Woodland and Dry Evergreen Forest ecosystems) increase to 73% and 44% (measured by Management Effectiveness Tracking Tool).	*METTPAZ scores* • Kafue National Park: 72% (target 65%) • West-Lunga National Park: 65% (target 40%) • Kafue National Park GMAs: 68.6% (target 45%) • West-Lunga National Park GMAs: 48.3% (target 30%)
2	Core PAs expanded by at least 5,579 km^2 (5,57,900 ha) of forest ecosystems by formalizing new Partnership Parks and/or Community Conservancies to reduces gaps in representation.	• ~24,164 km^2 (2,416,400 ha) brought under effective management in PAs • ~41,297 km^2 (4,129,700 ha) in GMAs • ~1,387 km^2 (138,700 ha) in Protected Forest Areas (PFAs) • Total area of ~66,788 km^2 (6,678,800 ha) under SLM and SFM
3	Wildlife poaching will be controlled (monitoring of patrol coverage, poaching catch-effort ratios, and increase in sightings of wildlife) and populations stabilized or increased	*Insufficient data to assess*
4	Improved financial sustainability of target core PAs	PPPs not established

	measured by increase in financial scorecard score (see table) and increase in KNP financial sustainability to 45% (funding gap reduced from $1.5–2.0m to $1m by Y5 through budget controls and new tourism concessions) with WLNP outsourced through a PPP by Y3.	• Annual revenue collection in Kafue National Park remains variable 2015: US$1.1million 2016: US$ 438, 500 2017: US$749,100 2018: US $927,800 2019 (January to June only): US$590,000
5	Strengthening of rights (of exclusion), land use planning, REDD+ pilots and resource protection in 50 Village Action Groups results in planned use of resources and control of illegal/unplanned uses.	• 38 VAGs earmarked for legal establishment, with ILUAs developed
6	At least 3,760 ha of conservation farming practiced by at least 1,600 households (in 40 VAGs) by end of project.	• As of 2019 ~100 km^2 (9,994 ha) under CF, 6,400 households trained in CF and 4,215 households actively practicing CF
7	Introduction of conservation farming practices leads to improved soil organic matter and field intensification across ~38 km^2 (3,760 ha) leading to: • 40% reduction in cumulative CO_2 emissions from vegetation clearance for agriculture • 7,520 ha of avoided deforestation in targeted areas • Resulting decrease in direct lifetime avoided t CO_2 emissions from clearance of vegetation for agriculture (20 years) in that same landscape = 988,128 tCO_2e compared to BAU scenario	• Adoption rate of 41% across project area (above national average of ~30%) • Extent of land cleared reduced by ~200 km^2 (19,988 ha), exceeding the end-of-project target • Estimate for 2018 reduction in emissions is equivalent to 6,400 tCO_2e
8	Under the project designated zones for fuel wood collection will be established optimizing SFM (and testing different 'treatments')	• Designated fuelwood collection zones established in 38 VAGs through the ILUP process
9	Working with the Copperbelt University, the 25 VAGs will be trained in harvesting and coppice management and will each establish an auditable fuel wood use and CFM plan.	*Unable to assess*
10	Linked to land use planning, experimental fuel wood management and collection zones will be established in 25 VAGs; systems boundaries for VAGs will be defined; and alternative operational modalities for fuel wood harvesting and use will be applied (including coppicing). The direct avoided emission savings from the activities mentioned above are based on the following conservative assumptions: • Equivalent area of Miombo woodland deforested to generate fuel (ha) in target VAG zones in BAU scenario = 482 ha • Average CO_2 emission from conversion of woodland for fuel use (t CO2/ha) = 131.4 Leading to the following GEBs: • Direct lifetime avoided emissions savings of 63,281 tCO_2e (20 years) compared to fuel wood usage in a BAU scenario	• Designated fuelwood collection zones established in 38 VAGs through the ILUP process

Table 28. Six Areas of GEF's Additionality

GEF's Additionality	Description
Specific Environmental Additionality	The GEF provides a wide range of value-added interventions/services to achieve the Global Environmental Benefits (e.g., CO_2 reduction, Reduction/avoidance of emission of POPs).
Legal/Regulatory Additionality	The GEF helps stakeholders transformational change to environment sustainable legal /regulatory forms.
Institutional Additionality/Governance additionality	The GEF provides support to the existing institution to transform into efficient/sustainable environment manner.
Financial Additionality	The GEF provides an incremental cost which is associated with transforming a project with national/local benefits into one with global environmental benefits.
Socio-Economic Additionality	The GEF helps society improve their livelihood and social benefits thorough GEF activities.
Innovation Additionality	The GEF provides efficient/sustainable technology and knowledge to overcome the existing social norm/barrier/practice for making a bankable project.

13. Catalytic/Replication Effect

This section examines the extent to which the project has achieved: i) scaling up; ii) replication; iii) demonstration; and/or iv) production of public goods. The definitions of these terms are included in Table 29 below. The main impacts of the project can be classified as scaling up, replication and demonstration.

Table 29. Assessment of Catalytic Role

Scaling up	Approaches developed through the project are taken up on a regional/national scale, becoming widely accepted, and perhaps legally required
Replication	Activities, demonstrations, and/or techniques are repeated within or outside the project, nationally or internationally
Demonstration	Steps have been taken to catalyse the public good, for example through the development of demonstration sites, successful information dissemination and training
Production of public good	The lowest level of catalytic result, including for example development of new technologies and approaches. No significant actions were taken to build on this achievement, and the catalytic effect has been left to 'market forces'

Scaling up

Under the project Gender-mainstreamed VAG/CRB Constitutions were drafted that could be used to establish or strengthen VAGs across the rest of the country. In addition, the development of a multi-sectoral National Community Based Natural Resource Management Policy was initiated during project implementation, and was supported by the project. The intention is for the policy to guide the development of future legislation that will address gaps in the establishment and operations of community conservancies.

Replication

The project has partnered with several national and international organisations (more detail in Section 5.4) to replicate models for alternative livelihoods and CF that have proven to be effective elsewhere in Zambia. For example, the partnership with COMACO supported the expansion of CF and alternative livelihoods (such as beekeeping) in the GMAs surrounding Kafue National Park. Similarly, the project replicated the work already being undertaken by the Conservation Farming Unit (CFU)[9] and increased the number of farmers employing CF methods. The lead farmer approach (Section 5.2) used by CFU has proved to be successful in facilitating replication, with 60 lead farmers having reportedly recruited 1,800 farmers to undertake CF in 36 VAGs as of 2017. It is likely that the introduction of this approach will ensure further replication with the continued support of the CFU. Both COMACO and the CFU will continue to operate within the project area beyond the end of the project.

Demonstration

The project provided and/or supported training on, *inter alia*: i) fire management; ii) GIS; iii) gender equality and gender mainstreaming; iv) mapping and establishing REDD+ sites; v) CF methods; and vi) law enforcement (village scouts). As stated above, several manuals and reports were produced based on these trainings.

Knowledge sharing

The 2020 PIR listed several knowledge products produced under the project. These include, but are not limited to, a CFM manual (finalisation delayed as a result of Covid-19 restrictions), ILUPs, gender-mainstreaming training manuals and results of aerial wildlife surveys. According to the Project Document, Copperbelt University and the Information Unit of the Kafue Business Centre are the main entities through which the results and information generated by the project would be disseminated. In addition to the formal processes of information dissemination, the 2020 PIR listed a number of popular articles and social media pages relevant to the project. These are listed below.

[9] see https://conservationagriculture.org/

- UNDP (2019) Partnering to fight wildlife crime in Zambia. https://undpinzambia.exposure.co/partnering-to-fight-wildlife-crime-in-zambia
- UNDP (2019) Small actions, big impact https://undpinzambia.exposure.co/small-actions-big-impact
- UNDP (2019) Wood-saving cookstoves are helping Zambia cut forest loss https://undpinzambia.exposure.co/58f1d6045cafe5b947f8f204cc9989b1
- Moses M. Zangar, Jr. (2020) Women farmers breaking the cycle of poverty in Zambia's Kalumbila District https://www.youtube.com/watch?v=Zecu1eXLEPo
- GEF 5 Project – Zambia Facebook page https://www.facebook.com/GEF-5-Project-Zambia-1889086368019304/?ref=bookmarks
- GEF 5 Project Zambia flickr account https://www.flickr.com/photos/158105630@N04/page1
- GEF 5 Project Zambia Twitter account https://twitter.com/gefvproj_zambia

Exit strategy

The Project Document lacks a dedicated section to its exit strategy, but the long-term sustainability of project interventions is discussed throughout the document. Both Kafue National Park and West-Lunga National Park were intended to become financially self-sustaining as a result of strengthened management effectiveness and PPPs established under the project. Accordingly, the 2019 and 2020 PIR reports indicate that management effectiveness in the parks and GMAs improved as a result of the project (see Table 20). However, the PPPs were not realised by project end. This raises some concern for the long-term sustainability of the parks, particularly West-Lunga National Park. The long-term sustainability of GMAs was to be realised through the revenues generated by hunting, tourism and REDD+, which would support the effective management of these areas. Whether this was achieved under the project is unclear. The planned REDD+ activities were left largely incomplete and there has also been limited income from hunting and tourism in 2020 as a result of the Covid-19 restrictions.

14. Progress to Impact

Environmental stress reduction

As of the 2020 PIR ~24,164 km^2 (2,416,400 ha) has been sustained under effective management in the two national parks, as well as ~41,297 km^2 (4,129,700 ha) in GMAs and ~1,387 km^2 in protected forests (see additional details in Table 20). In total, ~66,788 km^2 (6,678,800 ha) is under SLM and SFM as a result of project activities. In addition, ~76,779 ha (768 km^2) of forest area was conserved under CFM in five VAGs surrounding Kafue National Park. Approximately 334,300 ha (3,343 km^2) was set aside for forest conservation. The total area set aside for SFM is expected to yield a reduction in carbon emissions of 63,287 tCO_2 over 20 years.

The 2019 PIR reported a total burned area of 1,419,745 ha (14,197 km^2) and an 8.3% reduction in Kafue National Park since project start. While no data was made available for 2020, it was expected that no further significant reductions would have taken place in that year. These reductions in burned area are significantly below the project target of 50% reduction in burned area. Nonetheless the reductions in burned area will translate to a reduction in GHG emissions, further complemented by the introduction of energy-efficient cookstoves in target communities. The fire management strategy developed for Kafue National Park is expected to contribute to long-term reductions in burned area and GHG emissions.

Environmental status change

While little quantitative data is available to evaluate the expected increase in populations of large mammal species, an aerial survey was conducted in 2019 and reported in the 2020 PIR. The 2019 survey indicates that populations of elephant and red lechwe have increased compared to the 2011 baseline measure. However, populations of puku were found to have declined, with no explanation available as to why this is the case. Should the GMAs and national parks continue to be effectively managed it is likely that populations will continue to increase. However, poaching remains a significant threat outside of individuals directly benefitting from the project.

Contributions to changes in policy/legal/regulatory frameworks, including observed changes in capacities

The 2020 PIR reports that the project supported the development of a multi-sectoral National Community Based Natural Resource Management Policy. In the long-term this policy will advise the development of legislation that will govern the establishment and operations of community conservancies. At a local level the project supported the development of by-laws for management agreements to support the implementation and/or enforcement of ILUPs by VAGs.

Contributions to changes in socio-economic status

As reported in the 2020 PIR (see Table 20), household incomes have been improved in through the provision of alternative livelihoods in 34 communities under the small grants programme. Little quantitative data is available to describe the extent of this impact. The distribution of beehives by COMACO was anticipated to generate US$250 in household incomes per annum. It remains to be seen whether this will be realised in the long term. As discussed in Section 6.3, the stakeholder interviews conducted during the preparation for the TE reflect a mixed response to the provision of these alternative livelihoods, but several interviews reported that household food security and incomes had been improved.

The replication of CF under the project has resulted in 12,446 ha (~124 km^2) being farmed under these methods, by ~46,911 farmers (Table 20). The high yields gained under CF has resulted in an increase in household income of US$840/ha/year and US$420/ha/year in female-headed households according to the 2019 PIR. COMACO and CFU continue to upscale CF across Zambia, thus it is likely that these benefits will be maintained in the future.

15. Main Findings, Conclusions, Recommendations, Lessons Learned

Main Findings

This TE examined all aspects of the GEF-5 project, including, *inter alia*: i) strategy and design (Section 5.1); ii) implementation (Sections 5.2 and 5.7); iii) financial management (Section 5.5); and iv) progress towards project objects from 2014 to 2020 (Section 6.1). Ratings are provided for M&E, project implementation/oversight provided by UNDP, project execution by the IP and overall implementation/execution (Table 2). The main evaluation criteria for project outcomes included: i) the relevance of the project (Section 6.2); ii) the efficiency of the project's organisation, supervision, financing, administration and activities (Section 6.4); iii) effectiveness of project design, management and implementation (Section 6.3); iv) the results and/or impacts achieved (Sections 6.1, 7 and 14); and v) long-term sustainability of the achievements and impacts (Section 8). In addition, the TE examined contributions to gender and women's empowerment (Section 10), and GEF cross-cutting issues (see section 11). The ratings for each of the evaluation criteria are indicated in Table 2 and Table 30 below.

Table 30. Detailed evaluation ratings

1. Monitoring & Evaluation (M&E)	Rating	Comments
M&E design at entry	4	• Planned M&E activities reasonable and appropriate for project scale • M&E plan comprised ~5% of the project budget • Standard components included inception workshop, implementation reports, quarterly progress reports, audits, site visits, MTR and TE
M&E plan implementation	3	• Data on project indicators gathered in a systematic manner through the reports issued under the project M&E system • Satisfactory compliance with progress and financial reporting requirements • Communication of M&E findings was not managed effectively at the sub-national and local levels • Project Board provided quality assurance on processes and products, as well as the use of evaluations for improved implementation • Findings from PIRs and the MTR were used to inform implementation plans in an effort to improve delivery of the project
Overall quality of M&E	4	• While there were moderate shortcomings, the overall quality of

		M&E design/implementation more or less met expectations
2. Implementing Agency (IA) Implementation & Executing Agency (EA) Execution	**Rating**	**Comments**
Quality of UNDP implementation/oversight	4	• Implementation substantially delayed • Required an 18-month extension • Abrupt project exit • Misalignment of priorities and systems between the GRZ and UNDP • Exacerbated by external conditions • Gender-disaggregated data were not collected under the M&E system • Limited reporting on potential social and environmental impacts caused by the project.
Quality of Implementing Partner execution	4	• Significant delays and challenges in the implementation of the project • Delays were not timeously addressed • Use of two RPs presents both benefits and risks, with the latter being mentioned by several stakeholders • Coordination between the two RPs was ineffective • Communication with both upstream and downstream stakeholders was inadequate • Unable to secure bank accounts to improve fund disbursement • Loss of confidence in the project on the part of communities and sub-national stakeholders
Overall quality of implementation/execution	4	• Overall, oversight of the project was sub-optimal
3. Assessment of Outcomes Rating Relevance	**Rating**	**Comments**
Relevance	5	• Project objectives well aligned with national priorities • Project design aligned with GEF Policies on Environmental and Social Safeguards and Gender Mainstreaming. • Gender built into the logical framework of the project • Project well aligned with the UNDP Strategic Plan, CPD, UNDAF, United Nations Sustainable Development Cooperation Framework (UNSDCF) and SDGs • Project designed to contribute to achieving several Country Programme Outcomes as defined in the UNDAF, CPAP and UNDP Strategic Plan • Also aligned with two Country Programme Outcome indicators • Project was designed following extensive consultation • A stakeholder involvement plan was also developed • Stakeholder engagement assisted by Community Liaison Assistants (UN Volunteers) and Community Scouts (community members) • Partnerships established with civil society institutions and private sector entities • Project was designed to support activities of Conservation Farming Unit (CFU), The Nature Conservancy (TNC), and to be complementary to activities of Game Rangers International (GRI) in Kafue National Park • Complementary to the CBNRM Forum initiatives
Effectiveness	4	• Project provided small grants to support sustainable livelihoods intended to reduce community dependence on natural resources which may be affected by climate change • Project promoted CF, resulted in increased yields • Project supported development of by-laws that supply clear resource rights, boundaries and land-use zones, management structures and benefit sharing plans in line with the national REDD+ criteria • Strengthened effectiveness of management across ~24,164 km^2 (2,416,400 ha) of PAs, ~41,297 km^2 (4,129,700 ha) of GMAs and ~1,387 km^2 (138,700 ha) of PFAs • Ongoing contribution to sustainable land management through promotion of CF • Continued strengthening of law enforcement • Ongoing capacity building for improved fire management • Reduced deforestation

		• Of the 16 targets set in the Project Document, five were met, eight were partially achieved and two were considered unlikely to be achieved by the end of the project. There was insufficient information available to assess one of the targets • Project was effective in contributing to several gender targets • Project dedicated small grants to support women in pursuing alternative livelihoods • Stakeholders reported dissatisfaction with the alternative livelihoods • Risk of dependency on projects and GRZ being built rather than self-sustaining systems
Efficiency	3	• Project was inefficient • Delays in implementation • Delays in fund disbursement • Project accountant was acquired following recommendations of the MTR • Problems with disbursement were not overcome • Replication of CF efficient • Ineffective adaptive management • Several activities only partially implemented • Abrupt project exit with little communication to local stakeholders • Annual audits classified project as 'unqualified' • Extension of the project into 2019 followed by challenges to the financial management in 2020 • Replication of CF efficient as a result of partnerships with COMACO and CFU • Engagements with the VAGs were effective • Gains made in gender equity, with women taking a greater role in decision-making through VAGs
Overall project outcome rating	4	• Project highly relevant • Project mostly effective • Project inefficient
4. Sustainability Rating Financial sustainability	**Rating**	**Comments**
Socio-political sustainability	4	• GRZ committed to a decentralised approach to local governance and poverty reduction, which supports the upscaling of CBNRM • Communities likely to continue to apply CF • Concern that support for CF will not be available and that farmers may revert to unsustainable practices • Abrupt project exit resulted in loss of confidence among stakeholders • Improved coordination within VAGs • Increase in women's participation in land-use planning and decision-making
Institutional framework and governance sustainability	3	• Formalisation VAGs and CBNRM plans will remain in place following project closure
Environmental sustainability	3	• Risks to environmental sustainability continue • Strengthened VAGs in place to enforce CBNRM and land use
Financial resources	3	• Likely that private sector partners will continue to be sought to generate additional revenue for protected areas • Management of national parks and revenues improved • Concerns over the long-term sustainability of alternative livelihoods • Insufficient support and inputs provided to stakeholders • Delivery of inputs incomplete or not realised • Risk that dependency on hand-outs has been created, rather than a self-sustaining system for alternative livelihoods • Project activities were not aligned with community wants and needs and/or strategic plans of chiefdoms
Overall likelihood of sustainability	3	• Socio-political stability likely to continue • Institutional framework should be sustainable as aligned with GRZ priorities • Environmental sustainability at risk • Financial sustainability uncertain
Gender and women's empowerment	**Rating**	**Comments**
Gender results effectiveness scale	4	• Project was gender targeted

Project contribution to gender equality and women's empowerment		• Positive changes in attitudes and social norms within target communities • Women's representation in VAGs increased to 50% • Reduced income gap between men and women in households implementing CF practices and alternative livelihoods • Blueprint VAG/CRB constitution developed, demonstrating gender mainstreaming • Training provided on gender mainstreaming in context of VAG/CRB constitutions • 40% of small grants to support alternative livelihoods were reserved for women
Contribution of gender results to environment, climate and/or resilience outcomes		• Work undertaken with VAGs on CBNRM will continue to have environmental benefits • Adoption of CF improved yields, household food security and incomes • Uptake among women slower than among men • Energy-efficient cookstoves introduced
Achievement of short-term or long-term gender results under the project		• CF likely to have long-term benefits for household food security and incomes • Long-term contribution of alternative livelihoods less certain • Increased representation of women within VAGs likely to continue in the long-term
Contribution to gender results areas		• Project was effective in contributing to several gender targets
Cross-cutting issues	**Rating**	**Comments**
Climate change mitigation and adaptation	n/a	• Project consistent with GEF policies on Environmental and Social Safeguards • Environmental and Social Screening Checklist rated the project as Category 3 • No risks to human rights or gender equality recorded • Overall positive effects on communities • Improved management effectiveness of PAs • Increased revenues in PAs • VAGs strengthened • Improved fire management
Capacity development	n/a	• Participation of women in decision-making and CBNRM improved through gender mainstreaming and training
Poverty-environment nexus	n/a	• Financial support provided to kickstart alternative livelihoods • Introduction of CF • Increased food security and household incomes

Conclusions

Project design

The project was well designed, but ambitious in terms of its scope and budget, particularly in attempting to undertake REDD+ pilots within the short timeframe. It would have been more beneficial to focus on a smaller area with more tangible on-the-ground benefits for communities.

Project implementation

There were significant delays in implementation as a result of both internal and external factors which had to be overcome, resulting in an 18-month extension. Overall, implementation was rated as sub-optimal, although it is noted that some improvements were made following the MTR. The lack of effective communication between stakeholders at several levels, as well as the abrupt cessation of project activities has resulted in confusion and loss of confidence among sub-national and local-level stakeholders.

M&E

While M&E was not optimal, it met the basic expectations for a project of this scale. Reporting did not include gender-disaggregated data, but data were gathered in a systematic manner. Findings from the PIRs and MTR were used to inform implementation plans to improve delivery. However, communication of M&E findings at the sub-national and local levels was not effective.

Risk management

Seven risks were identified in the Project Document and one additional risk was highlighted during the MTR. Mitigation plans were enacted to reduce the impact of these risks and were somewhat successful. Between 2014 and 2019, the PIRs consistently rated the project as low risk. However, a substantial risk was noted in 2020 following the onset of the Covid-19 pandemic. The GRZ enacted restrictions on travel and gatherings in response to the pandemic, inevitably delaying implementation at that time. All risks were consistently logged in the ATLAS system maintained by UNDP and the results were made available for the TE.

Financing and co-financing
The monitoring and reporting of the project financing was as expected for a project of this nature. Co-financing information was supplied upon request and matched the expected amount at CEO Endorsement.

Environmental stress reduction
The project was effective in improving protection and management of ~66,788 km^2 (6,678,800 ha) of national parks and GMAs. An additional ~768 km^2 (76,779 ha) of forest area was conserved under CFM and ~3,343 km^2 (334,300 ha) set aside for forest conservation. The total area set aside for SFM is expected to yield a 20-year reduction in carbon emissions of 63,287 tCO_2. This will be further supported by the reduction in annual burned areas as a result of improved fire management.

Environmental status change
Limited quantitative data were available to evaluate the expected increase in populations of large mammal species. It is expected that mammal populations will increase further as GMAs and national parks continue to be effectively managed. However, poaching and unsustainable land-use practices remain a significant threat outside of areas that are directly benefitting from the project.

Contributions to changes in policy/legal/regulatory frameworks, including observed changes in capacities
A multi-sectoral National Community Based Natural Resource Management Policy was developed which will support the establishment and operations of community conservancies at a national level. At a local level, the project supported the development of by-laws for management agreements to assist the implementation and/or enforcement of ILUPs by VAGs.

Contributions to changes in socio-economic status
Household incomes were improved through the provision of alternative livelihoods in 34 communities under the small grants programme. Limited quantitative data are available to describe the extent of this impact. Stakeholders had a mixed response to the provision of alternative livelihoods, but several interviews reported that household food security and incomes had been improved.

The replication of CF under the project has resulted in ~124 km^2 (12,446 ha) being farmed under these methods, by ~46,911 farmers. High yields under CF were reported, resulting in an increase in household income of US$840/ha/yr in male-headed households and US$420/ha/yr in female-headed households. COMACO and CFU continue to upscale CF across Zambia, increasing the likelihood that these benefits will be maintained in the future.

Barriers and risks
Several barriers and risks remain to the sustainability of project interventions in the long term. In terms of financial sustainability, PPPs need to be secured for both Kafue National Park and West-Lunga National Park. Alternative livelihoods provided for communities may become self-sustaining in time but require additional capacity building and provision of markets by partners such as COMACO. Nonetheless, communities continue to expect additional inputs from GRZ and projects. An additional barrier is that community members, particularly farmers, expect to be given financial incentives to take up CF methods. Finally, the incomplete delivery of the project, poor communication and abrupt cessation of project activities has eroded confidence in the project at the sub-national and local levels.

Recommendations

Few recommendations can be made, as the project has already been completed notwithstanding delays caused by Covid-19 and delays in procurement. Accordingly, the current recommendations are for follow-up actions that may assist in bolstering the sustainability of the project's outcomes.

Table 31. Recommendations Summary Table

Rec #	TE Recommendation	Entity Responsible	Time Frame
A	**Category 1: Completing critical outstanding deliverables**		
A.1	Formalise PPPs for Kafue National Park and West-Lunga National Park	IP	August 2021
A.2	Establish PES for Kafue National Park	IP	August 2021
A.3	Complete and validate ILUPs	IP	May 2021
C	**Category 3: Facilitating outcome sustainability**		
C.1	Ensure roll out of training manual for extension staff to establish CFMGs in VAGs	UNDP IP	March 2021
D	**Category 4: Follow up strategy**		
D.1	Gather all outstanding data, surveys, information and reports and ensure that they are collated in a central, accessible location	UNDP IP	March 2021
D.2	Undertake final meetings or issue announcements to all stakeholders to communicate the end of the project and realised outcomes. Sub-national and local-level stakeholders need to be informed of: i) the reason for the abrupt end of the project; ii) what was achieved under the project; and iii) what plans were put into place through partner organisations to ensure the long-term sustainability of alternative livelihoods and CF	UNDP IP	April 2021

Lessons Learned

A summary of lessons learned is presented below. These were derived from the project documents provided for the TE, as well as the in-country stakeholder consultations.

Baseline assessment

- The main threat to deforestation addressed by the project was the expansion of shifting slash-and-burn agriculture. Other threats, such as logging and charcoal burning, were not directly addressed. A thorough baseline understanding of the threats to the project landscape will ensure that interventions address all threats to the project area.

Institutional coordination

- Situating the Project Coordinator within the offices of the implementing partner(s), rather than within UNDP would allow government stakeholders to interact more effectively with the coordinator, in addition to allowing more scope for promoting the interests of the government.
- Ensuring that relevant institutions are represented in entities such as Steering Committees and Technical Committees will help avoid the loss of institutional memory.

Project design

- The project risk assessment should be updated to include mitigation strategies for the impacts of events such as the Covid-19 pandemic.
- Comprehensive stakeholder engagement at the design phase is necessary to ensure that project objectives are aligned with stakeholder needs and priorities.

- The scope of the project should be carefully considered to ensure that resources are not spread too thinly over a wide area. More interventions across a limited area may be more impactful in the long-term.
- Priority areas for interventions should be identified carefully as individual areas may have very different requirements (e.g., different ecosystems facing distinct threats across regions).
- CBNRM is an effective approach and should be more widely used.

Implementation
- Implementing partners (IPs) should have individual bank accounts to ease disbursement of project funds.
- Procurement processes should be adjusted to ensure timeous disbursement of funds.
- A single IP may be more effective than multiple IPs in terms of project accounting and reporting.
- Where multiple IPs are used, measures should be established to ensure that the direction of the project does not get swayed.
- Equipment (such as vehicles) required for project implementation should be procured early on to avoid the restriction of coordinating institutions in their activities.
- When changes to the implementation plan are required, these should be clearly communicated to stakeholders at all levels of the project. This is necessary to ensure that stakeholders do not lose confidence as a result of non-delivery of funds or activities and that funds are not disbursed prematurely, necessitating a refund request.
- Activities providing short-term benefits should be considered in project design to encourage ongoing support from local communities. If possible, activities directly benefitting communities should be implemented early on.
- Novel concepts, such as activities related to REDD+, would benefit from the early procurement of international consultants.

Gender
- A gender analysis should be conducting during the project preparation phase to ensure that the project is designed to address gender gaps.
- All project reports should include gender-disaggregated data as well as gender analyses.
- Targeted training on gender responsiveness, in the context of the target communities' social dynamics, should be undertaken with all project staff.
- Performance appraisals of project staff should include indicators that assess whether staff have addressed gender issues in the course of their duties. This approach will have an additional benefit of potentially addressing knowledge gaps through follow-up training.
- A gender profile should be maintained and updated throughout project implementation as part of ongoing monitoring to ensure that gender gaps are being effectively addressed.

Stakeholder engagement
- The recruiting of lead farmers to drive upscaling of CF practices is an effective means to improve communication with communities and ensure sustainability.
- Intensive stakeholder engagement should be undertaken within each community earmarked to benefit under a planned project, to ensure their priorities are addressed by project activities. For example, in implementing alternative livelihoods some women in the project area indicated that they would have preferred to take on goat rearing rather than chicken farming.

Private sector partnerships
- Partnerships with the private sector have the potential to accelerate the realisation of project objectives. Scope for private sector partnerships should therefore be incorporated during project design.

REDD+
- An integrated approach is necessary to create an enabling environment for REDD+ activities and should be focussed on a relatively small area.

- REDD+ activities should address the reduction of emissions from all relevant sources in the project area, rather than focussing on a single threat.
- REDD+ activities should be undertaken in combination with activities that promote alternative livelihoods.
- REDD+ activities have a long implementation period which should be accounted for in both project design and implementation planning.

Knowledge sharing

- Knowledge products generated by the project — including annual reports and other project documents — should be shared with national, regional and local stakeholders involved in project implementation.
- An accessible database is required to ensure that all knowledge products generated by the project are collated and stored at a single point. Projects involving multiple institutions risk the loss of information if knowledge transfer is not managed at the close of the project.

Annex I. Evaluation criteria matrix

Table 32. Evaluation criteria matrix

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 a the local, regional and national level?			
How well does the project align with evolving GEF focal area priorities?	Extent to which UNFCCC and related GEF priorities and areas of work were incorporated into the design and implementation of the project	Project documents	Desktop review of documents
How well does the project support the National Climate Change Strategy?	Degree to which the project supports national environmental objectives	National policy and strategy documents	Interviews
Are there linkages with other strategic documents, such as National Development Strategy, INDCs?		Interviews/information/reports from project partners	
Is the project aligned with other donor and Government programmes and projects?	Degree of coherence between the project and national priorities, policies and strategies	Interviews/information/reports from beneficiaries	
Is the project country driven?			MTR
Does the project incorporate national institutional and policy frameworks in both design and implementation?	Extent to which national institutional and policy frameworks are incorporated into the project		
Was the project responsive to threats, challenges and opportunities that arose during the course of the project?	Extent to which adaptive management was used to address, threats, challenges and opportunities		
Were the needs of beneficiaries and other stakeholders addressed through the implementation of the project?	Degree to which the project addressed local needs		
Was the project inclusive?	Degree to which stakeholder expectations were met		
Were beneficiaries and other stakeholders effectively engaged in implementation of the project?			
Has the project provided relevant lessons learned for future projects with similar objectives?	Extent to which the lessons learned from the project were documented		
Do the project objectives align with the priorities of local government?	Level of coherence between stated project objective(s) and priorities of local stakeholders	Interviews/information/reports from beneficiaries	
Do the project objectives align with the priorities of local communities?		Local development strategies and environmental policies	
Was the project concept informed by the needs of local or national stakeholders?	Level of involvement of local and national stakeholders in project origination and development (e.g., number of meetings held and project development processes incorporating stakeholder input)	Interviews/information/reports from stakeholders, beneficiaries and project staff	
Were relevant stakeholders closely involved in project development?		Project documents	
Effectiveness: To what extent have the expected outcomes and objectives of the project been achieved?			
Has the project met its indicators and targets?	Extent to which the targets outlined in the logframe and monitoring plan were achieved	Minutes of all meetings related to the project	Desktop review of documents
To what extent can the results of the project be attributed to the project itself, rather than an enabling environment?	Extent to which the enabling environment has changed	Interviews/reports/information from beneficiaries	Interviews
Have there been any notable changes in the enabling environment for this project?		Records of risk management for the project	
Has the project not been effective in any aspect(s) of its implementation?	Record of adaptive management response or early application of lessons learned during project implementation		
To what extent has the project built the capacity of stakeholders?	Extent of support from local stakeholders		
Has there been positive feedback from stakeholders regarding project activities and/or implementation?	Extent of stakeholder involvement in the implementation of the project		
Were any project activities not implemented?	Extent of engagement of beneficiaries in the implementation and/or monitoring of the project		
How were risks, assumptions and impact drivers managed?	Extent to which implementation of the project has responded to identified and/or emerging risks		

Were effective risk mitigation strategies developed?	Updating of the risk log		
Have risk mitigation strategies been developed for risks to the long-term sustainability of the project?			
Efficiency: Was the project implemented efficiently, in line with international and national norms and standards?			
Financial efficiency	Financial efficiency	Financial records	Desktop review of documents
Were the accounting and financial systems put in place adequate for effective project management?	Extent to which funds were converted into outcomes	Audit reports	Interviews
Did these produce timely and accurate financial information?	Level of transparency in use of funds	Work plans and reports	
Were funds available and transferred efficiently?	Extent to which partners and beneficiaries were satisfied with the use of funds	Interviews/reports/information from project staff	
Were any over- or under-expenditures noted?	Timely delivery of fund		
Could financial resources have been used more effectively?	Coordination of project funding and co-financing		
Were any queries raised in audit reports?	Level of cash and in-kind co-financing received in comparison to expected level		
If so, how were these addressed?			
Was project implementation as cost-effective as expected?			
Was co-financing effectively leveraged?			
What was the contribution of cash and in-kind co-financing to project implementation?			
Implementation efficiency	Implementation efficiency	Project work plans and reports	
Was implementation carried out as planned?	Extent to which project activities were undertaken to schedule	Interviews/reports/information from country partners	
Were there any delays in implementation?	Extent to which project milestones were met according to schedule	Interviews/reports/information from project staff	
Was the cost-effectiveness of the project affected by delays in implementation (if any)?	Extent to which planned results were affected by delays		
Was monitoring data collected as planned?	Required adaptive management measures in response to delays		
Was monitoring data analysed and used to inform adaptive management of the project?	Extent to which project delivery matched the expectations of partners		
Has project implementation been responsive to challenges?	Level of satisfaction from partners in the adaptive management of the project		
Were progress reports produced in a timely manner?	Level of satisfaction from PCU and EE regarding UNDP back-stopping		
Were these accurate?			
Did the progress reports respond to changing reporting requirements, including changes made through adaptive management to project implementation?			
Were any capacity gaps noted during project implementation?			
Have international and external communications been effective and efficient?			
How efficient was the provision of resources from donors, including quality assurance by UNDP?			
Efficiency of partnerships	Efficiency of partnerships	Project work plans and reports	
To what extent were partnerships/linkages between institutions, organisations and/or the private sector supported?	Extent to which project partners committed time and resources to the project	Interviews/reports/information from local partners	
Which partnerships were facilitated?	Extent of commitment of partners to take on project activities in the long term, without the continued support of the project		
Which of these can be considered as sustainable in the long term?			
Sustainability: To what extent are there financial, institutional, socio-political, and/or environmental risks to sustaining long-term project results?			

Is the social, legal and political environment conducive to sustainability?	Extent of supportive policies	Minutes from project meetings	Desktop review of documents
Is there any early indication of project activities being taken up by project partners?	Extent to which partners are supporting post-project activities	Interviews/reports/information from local partners and beneficiaries	Interviews
Are there plans in place to sustain these activities?			
Have project partners and stakeholders effectively built their capacity?	Extent to which project partners and stakeholders are applying novel ideas/approaches outside of the project context		
Will additional resources be required for project partners and stakeholders to make use of this capacity?			
Does the project have a clear exit strategy?	Intent to follow up on project activities on the part of government and stakeholders		
	Extent to which the exit strategy has been implemented		
Gender equality and women's empowerment: How did the project contribute to gender equality and women's empowerment?			
What impact has the project had on gender equity in terms of decision-making?	Evidence of gender equity in decision-making processes related to the project	Project reports	Desktop review of documents
	Degree to which women feel satisfied with their inclusion in project activities	Project meeting minutes	Interviews
What impact has the project had in terms of economic empowerment for women and other marginalised groups?	Extent of participation by women in project activities	Interviews/reports/information from local partners and beneficiaries	
Cross-cutting and UNDP mainstreaming issues			
How were the potential impacts of project activities on local populations considered in both project design and implementation	Evidence of assessment of potential impacts and unintended negative consequences	Project reports	Desktop review of documents
	Mitigation plan for potential impacts	Interviews/reports/information from local partners and beneficiaries	Interviews
	Evidence of adaptation management measures put in place to address observed impacts and unintended negative consequences	Interviews/reports/information from project staff	
Impact: Are there indications that the project has contributed to, or enabled progress toward reduced environmental stress and/or improved ecological status?			
What impact has the project had on policy, legal and institutional frameworks related to:	Extent to which new protected areas were established	Project reports	Desktop review of documents
management of projected areas;	Extent to which coverage of unprotected areas has changed as a result of the project	Project meeting minutes	Interviews
protection of forest resources; and	Extent to which forest areas are under sustainable management	Interviews/reports/information from local partners and beneficiaries	
investment in renewable energy technology?	Extent to which carbon stock monitoring systems were successfully implemented		
	Extent of uptake of renewable energy technologies		
What lessons have been learned from the project regarding efficiency?	Degree of satisfaction on the part of project implementation partners		
Could implementation efficiency have been improved? If so, how?	Suggestions put forward by partners for possible improvements in implementation		

Annex II. Stakeholder questionnaires

Questionnaire for national-level stakeholders

Theme	Question
1. Satisfaction (8 points)	1.1 What, in your view, are the key achievements of the project; i.e. what would not have happened, or happened as quickly without the project? 1.2 To what extent was the project's work aligned with the key priorities of your organisation? 1.3 What are areas in which the project could have done better in terms of quality of interactions, processes that the project uses, technical work or knowledge sharing? Please give examples. 1.4 Please comment on how well the project has addressed or incorporated into its work emerging priorities, such as the renewed emphasis on gender equality, sustainability or country ownership?
2. Collaboration and partnering (7 points)	2.1 Has the project done enough to partner with other relevant organisations during the projects, including local organisations? In what ways did they work well? Were any important connections not made, and if this is the case, how could they have been improved?
3. Knowledge management and capacity building (5 points)	3.1 How were the project's products shared among partners and relevant organisations? Were lessons learned captured, compiled and shared? Were project results shared and used to facilitate replication of best practices? How could this process have been improved? 3.2 In your view, did the project address capacity-building needs of the beneficiary community organisations (e.g. community-based organisations (CBOs) and cooperatives, relevant line ministries, PES legal experts) and local governmental institutions? Please elaborate.
4. Future direction	4.1 Given your experience with the project and other centrally funded projects, what were the strengths and weaknesses of this project and what would you like to see change in future project designs? 4.2 What were the technical gaps or emerging priorities that needed to be addressed in future projects?

Questionnaire for sub-national stakeholders

Theme	Question
1. Satisfaction (8 points)	1.1 What, in your view, are the key achievements of the project; i.e. what would not have happened, or happened as quickly without the project?
	1.2 To what extent was the project's work aligned with the key priorities of your organisation?
	1.3 What are areas in which the project could have done better in terms of quality of interactions, processes that the project uses, technical work or knowledge sharing? Please give examples.
	1.4 Please comment on how well the project has addressed or incorporated into its work emerging priorities, such as the renewed emphasis on gender equality, sustainability or country ownership?
2. Collaboration and partnering (7 points)	2.1 Has the project done enough to partner with other relevant organisations during the projects, including local organisations? In what ways did they work well? Were any important connections not made, and if this is the case, how could they have been improved?
3. Knowledge management and capacity building (5 points)	3.1 How were the project's products shared among partners and relevant organisations? Were lessons learned captured, compiled and shared? Were project results shared and used to facilitate replication of best practices? How could this process have been improved?
	3.2 In your view, did the project address capacity-building needs of the beneficiary community organisations (e.g. community-based organisations (CBOs) and cooperatives, relevant line ministries, PES legal experts) and local governmental institutions? Please elaborate.
4. Future direction	4.1 Given your experience with the project and other centrally funded projects, what were the strengths and weaknesses of this project and what would you like to see change in future project designs?
	4.2 What were the technical gaps or emerging priorities that needed to be addressed in future projects?

Questionnaire for VAG members

Question
1. Was the community managed GMA in existence before the project or was its formation facilitated by the project? If yes, how did the project help to strengthen this community structure? To what extent are women involved in its activities? How is the community managed GMA organized and what are its major functions?
2. What have been the major successes of the community managed GMA? What factors have contributed to such successes? What have been the major challenges? What factors have contributed to those challenges? If you were given an opportunity to re-establish the community managed GMA, what would you do differently and why?
3. Do they have VAGs? If yes, what is their legal status? What proportion of the VAG membership are women?
4. What community conservancies exist? What exactly do they do? What have been the major challenges faced? What have been the major successes?
5. If they were given an opportunity to improve community conservancies, what changes would they bring about and why?
6. What conservation farming practices have they been practicing? For how long? Who taught them these? What benefits have they found in practicing these? What have been the major challenges?
7. Which conservation farming practices have been most successful and why? Which of them have had the greatest challenges and why? If they were given an opportunity to improve conservation farming practices, what changes would they bring about and why?

8. What community forest management practices are they involved in? What benefits have accrued from such? To what extent have the community forest management practices they have been involved in helped to reduce deforestation?

Questionnaires used for chiefs/chieftainesses

Criteria	Question
Project performance	What is the progress towards the project's stated outputs and outcomes, as defined in the results framework?
	What was the effectiveness of partner and stakeholder collaboration and coordination?
	What is the operating effectiveness and efficiency of the project?
	What roles and responsibilities of the various individuals, agencies and institutions worked well, and which did not?
Project finance	
Mainstreaming	To what extent have project interventions contributed to enhanced conservation in PAs and GMAs in Zambia so far, and is the project on track to achieve its main objective?
	What main lessons have emerged applicable to Zambia in terms of: i) stakeholder participation; ii) institutional structure and capacity building; iii) adaptive management strategies; iv) knowledge transfer; and v) country ownership?
	Which representatives were actively involved in project design, implementation, monitoring and evaluation?
Conclusions, recommendations and lessons learned	What are the major challenges that the project faced thus far, and how were they/can they be addressed?
	What lessons and experience can be incorporated into the design of similar initiatives in the future (with distinction between lessons applicable only to this project and those of value more broadly)?

Theme	Question
1. Satisfaction (8 points)	1.1 What, in your view, are the key achievements of the project; i.e. what would not have happened, or happened as quickly without the project?
	1.2 To what extent was the project's work aligned with the key priorities of your organisation?
	1.3 What are areas in which the project could have done better in terms of quality of interactions, processes that the project uses, technical work or knowledge sharing? Please give examples.
	1.4 Please comment on how well the project has addressed or incorporated into its work emerging priorities, such as the renewed emphasis on gender equality, sustainability or country ownership?
2. Collaboration and partnering (7 points)	2.1 Has the project done enough to partner with other relevant organisations during the projects, including local organisations? In what ways did they work well? Were any important connections not made, and if this is the case, how could they have been improved?
3. Knowledge management and capacity building (5 points)	3.1 How were the project's products shared among partners and relevant organisations? Were lessons learned captured, compiled and shared? Were project results shared and used to facilitate replication of best practices? How could this process have been improved?
	3.2 In your view, did the project address capacity-building needs of the beneficiary community organisations (e.g. community-based organisations (CBOs) and cooperatives, relevant line ministries, PES legal experts) and local governmental institutions? Please elaborate.
4. Future direction	4.1 Given your experience with the project and other centrally funded projects, what were the strengths and weaknesses of this project and what would you like to see change in future project designs?
	4.2 What were the technical gaps or emerging priorities that needed to be addressed in future projects?

Annex III. UNEG Code of Conduct and Evaluation Consultant Agreement Form

Independence entails the ability to evaluate without undue influence or pressure by any party (including the hiring unit) and providing evaluators with free access to information on the evaluation subject. Independence provides legitimacy to and ensures an objective perspective on evaluations. An independent evaluation reduces the potential for conflicts of interest which might arise with self-reported ratings by those involved in the management of the project being evaluated. Independence is one of ten general principles for evaluations (together with internationally agreed principles, goals and targets: utility, credibility, impartiality, ethics, transparency, human rights and gender equality, national evaluation capacities, and professionalism).

Evaluators/Consultants:

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.
6. 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.
8. Must ensure that independence of judgement is maintained, and that evaluation findings and recommendations are independently presented.
9. Must confirm that they have not been involved in designing, executing or advising on the project being evaluated and did not carry out the project's Mid-Term Review.

Evaluation Consultant Agreement Form

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

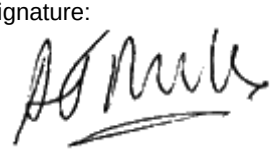
Name of Evaluator: Anthony Mills

Name of Consultancy Organization (where relevant): C4 EcoSolutions

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

Signed at Tokai, Cape Town, South Africa on 29 January 2021

Signature:



Annex IV. Key findings from stakeholder interviews

Table 33. Summary of consultations undertaken in preparation of the TE

Level		Number of consultations/ interviews undertaken	Number of respondents			
			Male	%	Female	%
National		12	12	86%	2	14%
Sub-national		12	15	94%	1	6%
Community	10 x Village Action Group (VAGs)	18	46	53%	41	47%
	Chief/Chieftainess	3	2	67%	1	33%
Total		**45**	**75**		**45**	
Percentage			**63%**		**38%**	

Table 34. Key findings from stakeholder interviews

Level	Number of individuals/ groups interviewed	Overall impression	Number of individuals/ groups interviewed reporting this	
Satisfaction				
National-level staff	12	There were ongoing projects with similar mandates/priorities that should have been built on	2	17%
		Data collection by consultants was not always accurate	2	17%
		Capacity of local stakeholders and role-players has been strengthened through the project	5	42%
		Project design was good but implementation requires/required much improvement	3	25%
		Project design required stakeholder engagement from the outset	5	42%
		UNDP mismanagement through micromanaging various project aspects	3	25%
		The management of funds requires/required greater precision, efficiency and effectiveness	5	42%
		Delays in receiving funding, clearance and approval of work plans was a limitation	2	17%
		The project assisted greatly with various procurements aspects, capacity building, etc.	3	25%
		Lack of interaction between project implementers	3	25%
		Implementation arrangements were ineffective/non-existent and require much improvement	5	42%
		Processes and structures for the disbursement of funds require much improvement	6	50%
		Greater analysis of required stakeholder engagement is required	4	33%
		UNDP changing of concept note and other project aspects was a challenge	3	25%
		GEF impact on the ground-level difficult to quantify	2	17%
Provincial-level staff	2	Project started late	1	50%
		Improved natural resource management	1	50%
		Inconsistent provision of funding and logistical support	1	50%
		Too much funding used for meetings, not enough for on-the-ground impacts	1	50%
		Landuse planning incomplete	1	50%
		Financial managemenf of the project inefficient	1	50%
		Lack of ownership as a result of implementation delays	1	50%
		Capacity building insufficient	1	50%
		Resources and inputs were not delivered reliably	1	50%
District-level staff	6	Tangible impacts made on the ground less than expected/not realised	2	33%
		Delays in receiving funding	1	17%
		Alernative livelihoods (goats, chickens, beekeeping) insufficient/not delivered	1	17%
		Positive response to alternative livelihoods and/or cookstoves	2	33%
		Goats not vaccinated, not enough feed/support provided	1	17%
		ILUPs not completed	1	17%

		Project was well aligned with organisation priorities	4	67%
		Grants not managed transparently	1	17%
		Project coverage insufficient to curb poaching, charcoal burning	1	17%
		Strong stakeholder engagement	1	17%
		Communities effectively sensitised to natural resource conservation	1	17%
		Project contributed to food security	1	17%
Management staff	3	Project made a positive impact in terms of livelihoods and/or natural resource management	2	67%
		Project was well aligned with organisation priorities	2	67%
		Delays in receiving funding	1	33%
		Enagement with VAGs/communities was inconsistent	2	67%
		Project coverage insufficient to curb poaching, charcoal burning	1	33%
		Communities lack ownership, are dependent on projects	1	33%
		Fire management was improved	1	33%
		Fire management was not maintained	1	33%
		Project coverage insufficient to curb poaching, charcoal burning	1	33%
		Project was well aligned with organisation priorities	1	33%
		No transport made available	1	33%
		Positive response to capacity building	1	33%
		Conflict between recommended and preferred burning schedules	1	33%
Community-level staff	1	Positive response to alternative livelihoods and/or cookstoves	1	100 %
		Late disbursment of funds	1	100 %
		Delayed implemention, incomplete activities	1	100 %
		Capacity of local stakeholders has been stregthened through the project	1	100 %
Village Action Group (VAG)	18	Not satisfied with goats, goats wrong breed, goats not vaccinated, not enough goats, not enough feed/support provided	5	28%
		Goats have helped reduce poverty, improve food security	2	11%
		Not satisfied with chickens, wanted pigs/goats, not enough feed/support provided for rearing	2	11%
		Chickens have helped reduce poverty	1	6%
		Beehives not delivered, only partial delivery, poor quality beehives	4	22%
		Wanted livestock, not beehives	1	6%
		Community resorts to making their own beehives with equipment provided	1	6%
		Dissatisfaction with process by which goats/beehives/chickens were allocated/distributed, lack of transparency, little/no reporting	2	11%
		Beehives, animal feed, seeds and other equipment should be provided for free by the government/project/partners	4	22%
		Project not aligned with community needs/wants	6	33%
		Conservation Farming (CF) has increased yields/food security and/or income	7	39%
		CF has been widely adopted	8	44%
		CF has not been widely adopted	5	28%
		More support/equipment/training needed for CF	10	56%
		Deforestation has been reduced	8	44%
		Deforestation and poaching continues	1	6%
		Reduction in wildfires/bushfires/late season burning	5	28%
		Poor connectivity/lack of transport	2	11%
Chief/Chieftainess	3	Disconnect between what community wanted/needed and project activities	2	67%
		Communication with community leaders regarding project activities inadequate	2	67%
		Several activities left incomplete or abandoned	3	100 %
Collaboration/ coordination				
National-level staff	12	The responsibility/influence of particular role-players was limited	2	17%
		The project effectively engaged/partnered with relevant stakeholders	4	33%

		Communication/collaboration between UNDP and stakeholders could have been improved	4	33%
		The quarterly meetings were an effective way of communicating and sharing lessons/ideas/etc.	2	17%
		Information sharing structures require/required improvement	4	33%
Provincial-level staff	2	Project provided funding and logistical support that was lacking from national government	1	50%
		Improved collaboration at community level	1	50%
		Collaboration between IPs and CLAs not effective	1	50%
		Project management made inefficient by internal conflicts	1	50%
		Project neglected to engage with key institutions	1	50%
		Good collaboration with non-government entities	1	50%
		Documents and reports were developed, but not validated, as a result of funding delays	1	50%
District-level staff	6	Project filled gaps in community structures	1	17%
		Linkages between organisations weak	1	17%
		Project neglected to engage with key institutions	2	33%
		Dissemination of information/reported was ineffective	4	67%
		No clear exit strategy	2	33%
		Project neglected to engage with key institutions	3	50%
		Collaboration with key institutions effective	2	33%
		Collaboration with key institutions ineffective	2	33%
		Stakeholder capacity building was insufficient	3	50%
		Limited interaction with CFOs as a result of limited transport	1	17%
		Dissemination of information/reports was ineffective	1	17%
		Collaboration with key institutions ineffective	1	17%
Management staff	3	Dissatisfaction with process by which goats/beehives/chickens were allocated/distributed, lack of transparency, little/no reporting	1	33%
		Project engaged with key institutions	1	33%
		Project neglected to engage with key institutions	1	33%
		Dissemination of information/reported was ineffective	2	67%
		Stakeholder capacity building was sufficient	1	33%
		Stakeholder capacity building was insufficient	1	33%
		Remote management of project activities limits coordination/communication	1	33%
		Collaboration was as good as could be expected given the project structure	1	33%
		Dissemination of information/reports was ineffective	1	33%
Community-level staff	1	Communication flow from IPs to community level was poor	1	
		Collaboration was as good as could be expected given the project structure	1	
		Information sharing structures require/required improvement at local level	1	
Village Action Group (VAG)	18	Collaboration improved	4	22%
		Collaboration not improved	1	6%
		VAG registered/being registered	6	33%
		VAG not registered	6	33%
		Registration status of VAG unclear	6	33%
Chief/Chieftainess	3	Mixed response, organisational partnerships overall seen to be effective	3	100 %
		Having extension officers and other support staff based nearby, rather than Lusaka, was effective	1	33%
		No explanation given for sudden withdrawal of project support	2	67%
Future directions/ lessons learned				
National-level staff	12	Prior groundwork and greater resources led to more success in the KNP	1	8%
		Recommend a project implementation unit/independent project body to manage various aspects	3	25%
Provincial-level staff	2	Establish game ranches to provide pay for scouts, reduce deforestation and poaching	1	50%
		Establish community forests	1	50%
		Open project accounts and have funds released directly	1	50%
District-level staff	6	This project was too short to build a sense of ownership within communities	1	17%
		Stakeholders expect to be paid to take up alternative livelihoods or CF practices	1	17%

		Focus on a core group of interested farmers, then use them to upscale	1	17%
		Loans are needed to ensure farmers can afford inputs	1	17%
		Use a matching grants model	1	17%
		Project staff should be stationed in the area in which they are to work and be properly equipped	1	17%
		Enforce clear information and reporting lines	1	17%
		Focus on all agricultural camps to achieve desired impact	1	17%
Management staff	3	More effective to identify specific user groups, rather than large communities, for delivery of inputs	1	33%
		Consider the pledge system used by COMACO for future projects	1	33%
		Sustainability needs to be addressed more strongly in project design	1	33%
		Consider specific interventions for poachers	1	33%
		No feedback	1	33%
Community-level staff	1	Project document difficult to understand	1	100 %
		Project design rigid and impractical in some cases	1	100 %
		More focus on CBNRM, more community-driven activities	1	100 %
		Phasing should be carefully planned and implemented	1	100 %
		Strengthen legal structures to allow decentralised decision making	1	100 %
Village Action Group (VAG)	18	Deliver funding and equipment timeously and in full	2	11%
		Ensure animals are vaccinated	1	6%
		Follow Namibia model where all funds from community conservancies go to communities, not the case in Zambia	2	11%
		More training and equipment for fire management	1	6%
		More training on CF, livestock rearing, boreholes	2	11%
		Include focus on water resources	2	11%
		Address connectivity/transportation gaps	2	11%
		Provide financial incentives for following recommendations	1	6%
		Provide more options for alternative livelihoods	1	6%
Chief/Chieftainess	3	Consult with individual communities on needs/wants	3	100 %
		Align activities with strategic plans of chiefdoms	1	33%
		Have a clearly communicated exit strategy	1	33%
		Don't leave activities incomplete	3	100 %
		Spend less on allowances and meetings and more on on-the-ground impacts	1	33%
Gender equality				
National-level staff		*No feedback*	0	0%
Provincial-level staff	2	Gender incorporated to some degree	1	50%
District-level staff		*No feedback*	0	0%
Management staff	3	Involvement of women and youth was prioritised and has improved	3	100 %
		Gender equity not effectively addressed	1	33%
		No feedback	1	33%
Community-level staff	1	Gender equity was addressed in last year of project	1	100 %
Village Action Group (VAG)	18	Increased participation of women reported	9	50%
		Gender equity not effectively addressed	1	6%
		VAG comprised of less than 30% women	1	6%
		VAG comprised of up to 30% women	2	11%
		VAG comprised of up to 50% women	3	17%
		VAG comprised of up to 75% women	8	44%
Chief/Chieftainess	3	Approved of gender equality training offered	1	33%