Report Number: ICRR0022209

1. Project Data

Project ID	Project Name
P124625	ZW:HSBC Project
Country	**Practice Area(Lead)**
Zimbabwe	Environment, Natural Resources & the Blue Economy

L/C/TF Number(s)	Closing Date (Original)	Total Project Cost (USD)
TF-17713	30-Jun-2019	5,645,000.00
Bank Approval Date	**Closing Date (Actual)**	
16-May-2014	31-Dec-2019	

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	5,645,000.00	5,645,000.00
Revised Commitment	5,645,000.00	5,645,000.00
Actual	5,645,000.00	5,645,000.00

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2. Project Objectives and Components

a. Objectives

The objective of the project, Hwange-Sanyati Biological Corridor Project (P124625), was “to develop land use and resource management capacity of managers and communities in the Hwange-Sanyati Biological Corridor (HSBC)” (PAD, para 32; GEF Grant Agreement, Schedule 1, page 7).

For the purposes of this ICR Review, the following sub-objectives will be assessed:

Sub-objective 1: To develop land-use capacity of managers and communities in the HSBC

Sub-objective 2: To develop resource management capacity of managers and communities in the HSBC

The "managers" in the objective referred to resource managers in the national agencies responsible for management of natural resources and community areas for indigenous resources (ICR, page 54). The "communities" in the objective referred to the communities in the HSBC (PAD, para 33-34).

b. Were the project objectives/key associated outcome targets revised during implementation?

No

c. Will a split evaluation be undertaken?

No

d. Components

Component 1: Protected area management and community livelihoods (Estimated: US$1.80 million; Actual: US$1.26 million, 70 percent of the original estimate) aimed to improve management of the Hwange National Park (HNP) and livelihoods of buffer zone communities in the Tsholotsho district and in the Sidinda wildlife conservancy. Management of the HNP was intended to be improved by: a) investments for improving management and operations of the park, and b) studies and management measures for improving game water supply and fire management. Livelihoods of buffer zone communities were intended to be improved by: c) implementing human and wildlife conflict (HWC) measures in Tsholotsho together with rural district councils (RDCs) and communities, and d) restocking wildlife in the Sidinda wildlife conservancy and developing management measures with a new business plan to achieve its long-term sustainability.

Component 2: Improved forest and land management (Estimated: US$3.24 million; Actual: US$2.01 million, 62 percent of the original estimate) aimed to improve forest management in the Sikumi and Ngamo Forest Reserves and to design and implement sodic soil gully rehabilitation in Chireya district. Forest management was intended to be improved by: a) revising forest management plans, including measures to improve communication infrastructure, fire protection efforts in collaboration with neighboring community fire brigades and operationalizing resource-sharing efforts with communities, and b) assessing the readiness of the two forest reserves to implement Reduced Emissions from Deforestation and Forest Degradation (REDD+). Sodic soil gully was intended to be rehabilitated by: c) implementing participatory sodic soil gully rehabilitation pilots with communities, RDCs, and Environmental sub-committees (ESCs), and d) producing a sodic soil "Land Restoration Tool Kit" to serve as future guidelines.

Component 3: Corridor Sustainability (Estimated: US$0.33 million; Actual: US$1.66 million, 503 percent of the original estimate) aimed to improve coordination between the different actors in the HSBC and facilitate corridor-level sharing of tools and skills by: a) mapping of land use patterns within the biological corridor and technical support to the units within the ministries to develop a strategy for landscape-based approaches for good management of forests and wider landscape in the HSBC, b) developing a communication strategy on the project's tools and interventions to be shared across the HSBC and with the broader Kavango-Zambezi Transfrontier Conservation Area (KAZA TFCA), and c) supporting transboundary meetings and sharing of practical experiences among stakeholders.

Component 4: Project Coordination (Estimated: US$0.27 million; Actual: US$0.71 million, 262 percent of the original estimate) provided oversight of the project, including financial management and audits, procurement, and monitoring and evaluation (M&E). The cost of component 4 increased during project implementation due to the increased needs for technical supervision, M&E support, and knowledge sharing (ICR, para 54).

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Project Cost: At appraisal, the total project cost was estimated to be US$28.810 million (PAD, para 48). At project closing, the total actual cost was US$22.732 million (ICR, page 2), due to the decrease in actual costs compared to estimates for Component 1 and 2.

Financing: At appraisal, the project was expected to be financed with the grant of US$5.645 million from the GEF trust fund, in combination with the grant and in-kind contributions of US$23.165 million in total from the Borrower, the World Wildlife Fund (WWF), unidentified foreign multilateral institutions and foreign private commercial sources, and non-governmental organization (NGO) of borrowing country (PAD, para 48). At project closing, the project was financed with the grant of US$5.645 million from the GEF trust fund and the grant and in-kind contributions of US$17.087 million from parallel financing (ICR, page 2).

Of the parallel financing, the Borrower increased its co-financing by 9.3 percent from the estimate of US$13.215 million to the actual disbursement of US$14.18 million (ICR, para 69). The Borrower's contribution was mostly in-kind, given in the form of staff hours, office, equipment, and vehicles. In addition, the Borrower also financed a food-for-work program in support of project efforts during gabion construction in Chireya. The envisaged co-financing from the private sector did not fully materialize, only 5.8 percent of the anticipated, as only one private sector partner became engaged in Sidinda (Ibid).

Dates: The project was approved on May 16, 2014, and became effective on January 22, 2015. The Mid-Term Review (MTR) was completed on January 22, 2018. The project was closed on December 31, 2019, six months after the original closing date of June 30, 2019.

Restructuring: There was one Level 2 restructuring on May 9, 2019, in which the project duration was extended for six months to implement project activities.

3. Relevance of Objectives

Rationale

Country Context. The economic and political situation in Zimbabwe at the time of project appraisal was relatively stable. More than 72 percent of the total population and 84 percent of the rural population were poor (ICR, para 1). Zimbabwe's environmental challenges included land degradation, soil erosion, deforestation and forest degradation, loss of biodiversity, and land, air, and water pollution. Unsustainable land and forest use practices in communal areas accelerated forest and land degradation, which resulted in the forest cover loss of about 20 percent between 1990 and 2010 and the annual cost of 6 percent of gross domestic product (GDP) due to land degradation (Ibid). Climate change was exacerbating land

degradation, reducing agricultural productivity, threatening already severe food insecurity, and furthering biodiversity loss.

Sector Context. The Hwange-Sanyati Biological Corridor (HSBC), with its area of 5.7 million hectares, covered most of the northwest Zimbabwe, including Hwange National Park (HNP), five forest reserves, and communal land. The lives of native fauna and rural populations were dependent on the HSBC. The environmental and natural resource management issues were prominent in the HSBC, in specific, it was challenged by frequent wildfires, groundwater shortages for wildlife, heightened poaching and hunting by communities, and increasing Human Wildlife conflicts (HWC) such as destruction of crops. Due to the infertile sodic soils and relatively low vegetation density, coupled with improper land use practices, soils in the HSBC were under severe erosions. The forest and land management tools for the main agencies at national, local, and community levels needed improvements, as the insufficient funding and the lack of coordination among responsible agencies and stakeholders posed challenges (ICR, para 3).

Relevance to Bank Assistance Strategies. At appraisal, the project objective contributed to the World Bank's Interim Strategy Note (ISN) for Zimbabwe (2013-2015), especially the third objective of reducing vulnerabilities, improving resilience, and strengthening human development. Among the wide range of social development aspects covered by the ISN's third objective, the portion that the project objective contributed was not the most central one. At project closing, the project objective was relevant to the Bank's Zimbabwe Reconstruction Fund (ZIMREF) (2014-2021), which was a key instrument for implementing the ISN. The project was particularly relevant to ZIMREF's programmatic window for analytical and advisory work under which capacity of the government to integrate climate change into investment planning in forestry, agriculture, and the water/energy nexus.

Relevance to Government Strategies. At appraisal, the project objective was designed to contribute to the five-year development plan, Zimbabwe Agenda for Sustainable Socio-Economic Transformation (Zim Asset, 2013-18), particularly the objective of improving environmental management of natural resources and protection and conservation of biodiversity though the document did not explicitly mention the HSBC. The project was aligned with the Government's regional integration agenda as articulated in the Southern African Development Community (SADC) Treaty and the Kavango-Zambezi Transfrontier Conservation Area (KAZA TFCA) Treaty. At the global level, the project was in line with the Government's obligations under the United Nations' conventions such as Framework Convention on Climate Change, the Convention to Combat Desertification's Land Degradation Neutrality Target Setting program, and the Convention on Biodiversity Aichi targets (3, 5, 7, 8, 9, 10, 12, and 13). At project closing, the project objective was in line with Zimbabwe's Vision 2030, which started in 2018 as the successor to Zim Asset and prioritized developments in the HSBC for tourism, aiming to contribute to inclusive growth. Attaining these objectives would help the country to achieve the Bank's twin goals of poverty reduction and shared prosperity by contributing to the sustainable and inclusive growth.

Previous Sector Experience. The Zimbabwe Agricultural Investment Plan, which had been supported by the World Bank in 2013 stated that a sustainable increase in agriculture production and productivity hinged upon improved management and sustainable use of the natural resources base, through targeted investments in irrigation, forestry and sustainable land management practices. The Bank was also engaged in Zimbabwe through the multi-donor trust fund for Cooperation in International Waters in Africa and funding from the TerrAfrica Trust Fund to support forestry and land management.

Rating
Substantial

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective
To develop land use capacity of managers and communities in the Hwange-Sanyati Biological Corridor (HSBC)

Rationale
Theory of Change: The project's first objective, to develop land use capacity, focused on the Chireya district. This district was an area with one of the HSBC's most degraded sodic soils. The land use capacity referred to an ability to demonstrate knowledge of project-developed tools to address sodic soil degradation and gullying (PAD, para 38; ICR, para 6). Conducting a participatory integrated assessment of biophysical and socio-economic causes of land degradation, implementing soil rehabilitation pilots with livelihood improvement activities in a participatory manner, and developing a Restoration Tool Kit for the Environmental Management Agency, would provide managers and communities with tools to address sodic soil degradation and gullying. Key assumption here were that: 1) the lack of tools and skills of managers and communities were drivers of unsustainable land use and resource management (ICR, page 7), and 2) the managers and the communities had sufficient financial and human resources to use the tools and the skills once obtained. The development of land use capacity of managers and communities would enhance sustainable use of natural resources and increase incomes in communities, leading to behavior change in the public and contributing to improvements in community livelihoods and climate change resilience in the long-term. Key assumption here was that the improved management of natural resources would increase revenues for the parks, forest reserves and communities by enhancing tourism, sale of forest and animal products, and carbon payments, which were the activities for Objective 2 below.

Outputs:

- Integrated assessment of biophysical and socio-economic drivers of land degradation was conducted (ICR, para 22). Through the assessments, such as the study to determine the scope of Ume sub-catchment wide measures to reduce land degradation and the participatory socio-economic study to determine underlying drivers of land degradation, the project identified micro-catchment wide strategies. The interventions to be implemented was selected through a risk analysis together with agencies and communities considering criteria for sustainability, affordability and livelihood alternatives.
- Six participatory soil rehabilitation pilots in areas threatened by erosion and gullying were developed and implemented (Response from the TTL/ICR team). The soil rehabilitation pilots and technologies implemented across the micro catchment had a visible and measurable effect on improving land degradation threats. For example, constructing 31 kilometers of dead level contours to increase water infiltration and soil moisture to the arable lands; installing a network of 64 water harvesting tanks in two schools and the Chireya hospital to reverse runoff volume, flow velocity, and erosivity, while also

providing a source of water; and fencing 4 hectares of the gully micro-catchment to protect it from deforestation, overgrazing, trampling, and soil compaction by animals and people (ICR, para 23).

- The rehabilitation pilots were complemented by alternative livelihood activities, including: establishing three fenced, solar-powered borehole to irrigate community gardens for enhancing cash incomes for 120 households; establishing a beekeeping program to engage 300 households in the honey value chain instead of destructive practices; building a cement brickmaking facility engaging 60 youth to produce bricks with less fuel wood for the rehabilitation pilots; developing a community driven nursery for vetiver grass and trees (ICR, para 24).
- A Restoration Tool Kit for sodic soils was developed to be used by the Environmental Management Agency (EMA) and stakeholders in areas with similar challenges. The tool kit was developed in consultation with local stakeholders and disseminated the methodologies and the lessons from the pilots in Chireya. Finalizing and disseminating the tool kit were delayed and completed during the extension period of the project (ICR, para 14). The tool kit later began to guide the EMA to rehabilitate degraded ecosystems and reclaim gullies, while being adopted in other areas in the HSBC and Zimbabwe (ICR, para28).
- Sustainable land management practices were implemented in 464 hectares of sodic soil area through the land rehabilitation activities undertaken in the Ume sub catchment which included the Chireya ward (93 percent of the target of 500 hectares) (ICR, page 53, 55).
- Direct project beneficiaries of 1,740 people in Chireya benefited from restoration pilots, community gardens, brick making machine projects, and beekeeping equipment (ICR, para 45).

Outcomes:

Referring to the theory of change above, the outputs listed above would provide managers and communities with tools to address sodic soil degradation and gullying. However, the key assumption on the drivers of the unsustainable land use and resource management as the lack of tools and skills (ICR, page 7) would not be in alignment with the lesson that the main constraint to utilize the expertise within government institutions on addressing gully erosion was the lack of resources (ICR, page 59). The constraint was not fully addressed by the project.

- Sustainable land management practices were adopted to the area of 491.4 hectares as a result of project, slightly missing the target of 500 hectares (98 percent of the target; ICR, page 36). The sustainably managed land areas consisted of: 275 hectares protected by dead level contours and minimum tillage in arable lands, 46.4 hectares protected along the stream bank as a result of the consolidated community gardens, 20 hectares protected from brick molding, and 150 hectares protected by gully catchments (Ibid; No breakdown of the targets was provided).
- Gully reclamation activities in the soil rehabilitation pilots were replicated in three separate sites by communities, which utilized skills and materials gained from the original pilots (ICR, para 27).

In sum, the land use capacity of communities was strengthened by the soil rehabilitation pilots, resulting in the adoption of sustainable land management practices in degraded areas and the replications of gully reclamation activities by communities themselves. On the other hand, the activities to strengthen the land use capacity of agencies was completed late in the project, unable to present the result of dissemination. Overall, the achievement of Objective 1 is rated substantial.

Rating
Substantial

OBJECTIVE 2
Objective
To develop resource management capacity of managers and communities in the HSBC

Rationale
Theory of Change: The second objective aimed to develop capacities of managers and communities to manage natural resources in the corridor in the Hwange National Park, the two forest reserves in Sikumi and Ngamo, and the Sidinda wildlife conservancy. In theory, completing the following activities would lead to the develop the capacity of wildlife management: upgrading the assets and operational structure for anti-poaching, implementing a groundwater study, conducting a fire ecological assessment to update the Fire Management Plan, and supporting research and implementation of Human Wildlife Conflict mitigation measures in the Tsholotsho district together with the local Rural District Council and communities. For the Sidinda wildlife conservancy, conducting an ecological study and wildlife restocking based on the study findings would develop capacity for wildlife management. For the forest reserves in Sikumi and Ngamo, providing equipment and training for anti-poaching, upgrading communication infrastructure for rangers, conducting a study on causes of deforestation and forest degradation, operationalizing community resource-sharing committees, installing equipment for beekeeping and wood processing for sustainable income generating activities, providing remote-sensing equipment and training, and procuring forest inventory equipment, would develop capacity for forest management and Reduced Emissions from Deforestation and Forest Degradation (REDD+) development. Supporting corridor-wide coordination and communication and dissemination of package tools for up-scaling in corridor would lead to improved coordination on addressing corridor-wide challenges. The development of resource management capacity of managers and communities would contribute to improvements in biodiversity resources, community livelihoods, and climate change resilience in the long-term.

Key assumptions, in addition to those described for Objective 1 above, included: 1) management skills developed in each selected site would support both capacity strengthening and environmental outcomes at the corridor-level, and 2) economic benefits by tourism or other environmentally sustainable business activities would make communities to refrain from engaging in poaching or unsustainable natural resource consumption in the future.

Outputs:

The Hwange National Park (HNP)

- Anti-poaching: The project upgraded the assets and operational structure for park management, including purchasing patrol equipment, improving the digital communication infrastructure, and setting up a very high frequency radio system that covered around 60 percent of the park. An anti-poaching plan was developed and implemented, which led to implementing over 150 operations in the HNP and its buffer areas in collaboration with law enforcement agencies. Rangers were trained to use the Spatial Monitoring and Reporting Tool (SMART), which was a new ranger-based wildlife monitoring system. This allowed the HNP to map problematic areas and have rangers respond to poaching incidents in a timely manner. Number of poaching incidents was reduced from the baseline of 710 per year to the achievement of 450 per year, not meeting the target of 400 per year (88 percent of the

target) (ICR, page 37). The end of project wildlife aerial survey in HNP to assess population information was not conducted due to failure of Zimbabwe Parks and Wildlife Management Authority (ZIMPARKS) to raise requisite matching funds (ICR, para 14).

- Ground water: A ground water study was conducted with co-financing from the TerrAfrica grant and led by the Geology Department of University of Zimbabwe and ZIMPARKS. Based on the result, eight solar powered boreholes were newly drilled in drought-prone areas, while seven diesel powered boreholes were converted to solar power to reduce operating costs and noises.
- Fire Management: Based on the fire ecological assessment conducted under the project in coordination among the HNP, the Environmental Management Agency, and the Forestry Commission, the HNP's Fire Management Plan was revised and implemented by involving communities. For example, fire guards with a length of 1150 kilometers were graded, and equipment and protective gear were provided to the local community fire brigades. The HNP started to conduct regulated burning in the pre-fire season jointly with buffer communities, under the project support to develop joint fire management capacity. The total area burnt in the HNP declined by 90.04 percent (Target not provided, ICR, para 33).
- Human Wildlife Conflict (HWC): HWCs caused by elephants in the HNP was a major concern of neighboring communities. The project supported research and implementation of HWC mitigation
- measures in the Tsholotsho district together with the local Rural District Council (RDC) and communities. Construction of gum pole barriers with creosote and use of chili guns benefitted 16,086 community members who reduced loss in crops and time for field guarding against wildlife (ICR, para 34). In the pilot site in Tsholotsho Ward 7, the HWC incidents was reduced from the baseline of 100 per year to the achievement of 9 per year, exceeding the target of 30 per year (130 percent of the target) (ICR, page 38). Moreover, the RDC covering Tsholotsho Ward 7 proactively extended its efforts beyond the original project design to invite two other wards to learn from the success in the pilot site, which implied an enhancement of community capacity on wildlife management.

The Sidinda wildlife conservancy

- Wildlife Restocking: The ecological study led by Community Areas Management Programme for Indigenous Resources (CAMPFIRE) identified 20,000 hectares in the Sidinda Ward as a potential area for communities to produce wildlife for income generation, and researched its species composition and carrying capacity. A community-based scout patrol unit was trained and provided with upgraded communication equipment to protect the conservancy. Based on the ecological study, 100 Buffaloes, 20 Kudus, 19 Waterbucks, and 18 Zebras were relocated to a fenced area of roughly 7,700 hectares (ICR, para 37). After the translocation, a severe drought hit the area and reduced forage, which resulted in a loss of approximately 50 buffaloes by project closing (Ibid). The translocation spot was selected by the ecological study based on a future plan to expand the area in line with the wildlife's adaption. However, insufficient considerations on drought risks cost unplanned project spending on forage and raised a concern on domesticated animals' loss of competitiveness in the wild. The significant rains in the following season recovered the vegetation and increased the buffalo population to 85 (Ibid).
- Business Plan for the Wildlife Conservancy: To ensure proper functioning and sustainability of the conservancy, a public-private community partnership was established among the RDC, a private safari operator, and the community. For the same purpose, a business plan for the conservancy was developed, but only finalized in the final year of the project, due to the long procedures including negotiations of institutional relationships, community mobilization and training, and the ecological assessment that would inform the actual identification and demarcation for the conservancy. The

delay in finalization of the business plan resulted in an insufficient exploration of income-generating opportunities for the community in the Sidinda conservancy (ICR, para 99).

- 48 new members of the Sidinda Environment Sub-committee were trained by the project for capacity building to improve its management and operation (Response from the TTL/ICR team).

The Forest Reserves in Sikumi and Ngamo

- Forest Management: The equipment and training for anti-poaching and a new radio communication system were provided to the forest reserves. An inventory study of the invasive and alien species (IAS) in the forests was conducted for the first time to incorporate IAS management strategies in the Management Plan. The community resource-sharing committees were operationalized to control forest harvests jointly between the reserves and communities. The community fire brigades were upgraded by providing material and training on fire management to 197 community members. The beekeeping kits and training were provided to beekeepers and the Forestry Commission officers, which led to the establishment of beekeeping farmer field schools with 100 households registered. A timber kiln was installed in Lupane, adjacent to Ngamo, to add values to the forest products, create jobs at the sawmill, and increase incentives to support forest conservation. The annual production of cured timber was estimated at 600 cubic meters (ICR, para 48). The kiln was installed close to the end of the project due to delays in finalizing the Environmental and Social Management Plan (ESMP), which limited the opportunity to fully assess its social and economic outcomes.
- Building capacity for REDD+ development: An initial study to identify the direct and indirect drivers of deforestation and forest degradation in the two forest reserves was conducted. The equipment and training on forestry measurement and remote sensing were provided to the Forest Commission GIS laboratory in Bulawayo. The forest inventory equipment was procured for individual forest offices. The project supported the first government-led REDD+ initiative in Zimbabwe. The assessments of the readiness of the two forest reserves to implement REDD+ covered issues such as land tenure arrangements, arrangements for benefit sharing with communities, institutional capacity to establish baselines and status of the presence of emission reduction accounting capability. This enabled the FC to develop a Project Design Document for future REDD+ pilots in Ngamo and Sikumi. A policy brief to inform the planned development of the national REDD+ Strategy was also developed. The avoided carbon losses offer significant carbon sequestration value and financial gains to the community for ongoing forest management, if the carbon trade is completed, reinforcing the benefits associated with elevated forest management. The annual net avoided emissions is estimated to be 238,550 tCO2e (ICR, para 48).

Corridor-level scaling up of natural resource management tools

- The Northwestern Zimbabwe Symposium was organized in 2017, which invited key stakeholders to share experiences on current initiatives and identify gaps to achieve the corridor's sustainability (ICR, para 44), as well as to construct building blocks for sustained collaboration (Response from the TTL/ICR team). Lessons generated in the project were subsequently scaled up within the corridor; for example, ZIMPARKS introduced the HNP's SMART to the Chizarira National Park in the KAZA TFCA. Transboundary collaboration in the KAZA TFCA was also strengthened through participations in KAZA meetings by the government and WWF representatives.
- A compendium on IAS was developed based on the inventory of the IAS, covering 39 species found in the gazetted forests and the corridor, in order to inform an IAS impact monitoring and develop IAS

management strategies in other parts of the corridor beyond the project (Response from the TTL/ICR team).

Direct Beneficiaries

- Number of direct project beneficiaries was 20,134, exceeding the target of 20,000 (102 percent of the target), of which the percentage of female beneficiaries was 52 percent, meeting the target of 52 percent (100 percent of the target) (ICR, page 34). There were 1,689 community members in the Sidinda Ward that benefitted from wildlife restocking, 400 community members in Ngamo and Sikumi
- that benefited from beekeeping equipment and training, 22 forest rangers and 197 community members in community fire brigades and 16,086 people in Tsholotsho benefiting from HWC mitigation measures. The direct project beneficiaries from livelihood improvement activities were expected to benefit from the increased food security and income earning opportunities.

Outcomes:

- Management of the Hwange National Park measured by the Management Effectiveness Tracking Tool (METT) was improved from the baseline of 51 to the achievement of 69.6, meeting the target of 69.6 (100 percent of the target; ICR, page 35). The indicator considered interventions for anti-poaching, sustainable game water management, fire management, and enhanced community participation. It was one of GEF's requirements to use METT for projects related to Protected Areas.
- Carbon sequestration in project forest reserves measured by the normalized difference vegetation index (NDVI) remained stable throughout the project duration, as the baseline of 0 percent in 2015 stayed the same in 2019 (ICR, page 35). To measure the carbon sequestration, NDVI values were calculated per year per forest for a total of fifty randomly selected points in two forest reserves. NDVI values increased from 0.43 in 2015 to 0.54 in 2019 for the Ngamo reserve, and 0.40 in 2015 to 0.53 in 2019 for the Sikumi reserve which indicated an improvement in the condition and health of the two forest reserves (ICR, para 41, Figure 1).
- Additional resources of US$150,000 were secured from the KAZA TFCA Secretariat for fencing the Sidinda wildlife conservancy and for institutional support pertaining to the registration of the Sidinda Community Trust, while US$270,000 was being invested by the private-sector partner, enabling completion of the fencing of the conservancy to reach the initially planned target of the project (Response from the TTL/ICR team). The project outputs on wildlife conservation contributed to leveraging these additional resources.

Community Engagement: The Borrower's project completion report (ICR, Annex 5, page 58) indicated two issues in community engagement in Sidinda. First, community consultations were not always conducted to ensure active participation of the community. A section of the community mentioned that facilitators at times told the community what they intended to do without fully capturing the community's view. Second, the community public private partnership lacked a platform where the three partners equally interact with each other. For the management of community scouts in Sidinda and the introduction of the private safari operator to the community, the public (the RDC) acted as an intermediary and no meeting was held between the safari operator and the community. Though such communication arrangement was due to the delay in capturing and translocating game animals, it created a mistrust and a suspect for under-representation of some ideas from the community.

In sum, the resource management capacity of managers and communities were developed, which led to the improvement in management effectiveness of the HNP, the stabilization of carbon sequestration in the two forest reserves, and resource mobilization for wildlife management in the conservancy. The natural resource management tools were scaled up to the corridor-level and beyond, though the environmental and economic outcomes were to be observed in the future. Overall, the achievement of Objective 2 is rated substantial.

Rating
Substantial

OVERALL EFFICACY
Rationale
The achievement of Objective 1 was substantial, due to the improved land use in areas with sodic soil degradation. The achievement of Objective 2 was substantial, due to the improved natural resource managements in the national park and forest reserves and the leveraged resources for the wildlife conservancy. Overall, the efficacy is rated substantial.

Overall Efficacy Rating

Substantial

5. Efficiency

Economic Analysis: At appraisal, the PAD indicated that calculating an economic rate of return (ERR) in the context of a cost-benefit analysis would not adequately capture the project's value; because, it was difficult to assess outcomes and outputs of the project due to lacks of quantifiable productive functions (PAD, Annex 6, page 70). At project closing, the internal rate of return (IRR) was calculated as 37 percent, by using a discount rate of 12 percent, a 100 percent coverage of the total project costs, and the World Bank's shadow prices (i.e. US$40 for carbon and US$550 per cubic meters for timber) (ICR, Annex 4, page 49-51). Qualitative assessments of economic and environmental benefits provided by the ICR (para 48), such as the greater efficiency in administration and wildlife management efficacy in HNP, were the achievement of improved efficiency of the sector being supported and not the efficiency of the project. on this basis, the economic benefits were incorporated in Section 4 above.

Aspects of design and implementation that affected efficiency: There were procurement delays of wildlife fencing in Sidinda and GIS and office equipment for forest inventory for Forestry Commission in Bulawayo in 2015/16, which led to certain delays in project implementation (ICR, para 71, 90). According to the June 2016 Procurement Progress Review, the procured equipment was not able to perform the intended function due to deficient specifications submitted by WWF partners (ICR, para 90). Hiring of a procurement consultant at WWF

subsequently addressed the procurement delays to complete the project within six-month no-cost extension of the project duration.

In sum, the IRR at project closing was on the higher side while the temporary procurement delays in the first half of the project were addressed to complete the project with an extension. Overall, the efficiency is rated substantial.

Efficiency Rating

Substantial

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal		0	0 ☐ Not Applicable
ICR Estimate	✓	37.00	100.00 ☐ Not Applicable

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

The relevance of objective was substantial, as the objective almost fully aligned with the strategies of the government and the Bank's country assistance. The efficacy was substantial, due to the achievements of targeted outcomes. The efficiency was substantial, due to the considerably high IRR at project closing. Thus, overall, outcome is rated satisfactory.

a. Outcome Rating

Satisfactory

7. Risk to Development Outcome

1. Risk to reduced public support for the environment sector: The country's worsening macroeconomic situation, which was represented by high inflation, currency shortages, and budget and current account deficits, posed the risk that public support for environment agencies could be reduced. To sustain and advance the activities initiated by the project, continued budgetary and policy supports would be essential for the coordinating government agencies and the local and community structures in the environmental sector.

2. Risk to viability and sustainability of community-led activities: At project closing, it was uncertain whether the activities that were implemented late in the project would continue to work (e.g. the business plan of the

Sidinda community conservancy and the community gardens in Chireya). Unreliable perception patterns and prolonged droughts resulted from climate change, as well as an overall reduction in tourism, also posed a risk to the sustainability to the Sidinda wildlife conservancy.

3. Risk to utilization of the capacity for REDD+ implementation: Without a commercial agreement for initiating the piloting of REDD+, the capacity on REDD+ built under the project would not be fully capitalized. Discussions between the government and an interested organization was underway at project closing, requiring sustained and detailed follow-up. Given the World Bank's vast experience in such schemes regionally and globally, it could play an important role in continuing to facilitate these discussions.

8. Assessment of Bank Performance

a. Quality-at-Entry

Strategic relevance and the approach were thoroughly considered to align with the Government's priorities and the Bank's assistance strategies. Considering the Government's relative inexperience with implementing a project to address natural resource degradations, the project design incorporated lessons learned from other Bank projects in the region, such as the importance of incorporating the inputs of local communities in the actual protected area management (PAD, para 51). The Bank also provided the Bank-Executed Technical Assistance (BE TA) with the TerrAfrica Fund and conducted technical analysis with a focus on the groundwater in the Hwange National Park (HNP). Financial management was adequately arranged. Technical issues related to natural resource management were well considered as the Bank's task team had the appropriate mix of expertise at entry.

On the other hand, climate change effects on the project could have been anticipated given the project matter. The growing risks associated with climate change were recognized at the design stage but not adequately incorporated into the project design, resulting in the additional costs and the uncertainty in durability of outputs (ICR, para 75). On social aspects, the issues related to sharing community benefits from wildlife management could have been better analyzed and addressed during project preparation, as such issues in Sidinda had been previously identified by the Community Areas Management Programme for Indigenous Resources (CAMPFIRE).

Procurement capacity of WWF Zimbabwe could have been more thoroughly analyzed by the procurement capacity assessment under the Bank's Procurement Risk Management System and strengthened where necessary to prevent potential delays. Overall, the quality at entry is rated moderately satisfactory.

Quality-at-Entry Rating

Moderately Satisfactory

b. Quality of supervision

Focus on development impact was well maintained during implementation. Supervision inputs and processes were adequate with bi-annual support missions, including the mid-term review (MTR) mission in January 2018. Candor and quality of performance reporting were sufficient. Fiduciary aspects were regularly supervised and guided by the specialist on financial management and procurement. The disbursement challenges during implementation were addressed in a timely manner. According to the Borrower Completion Report, the agencies which implemented project activities were satisfied with the Bank's performance. The Bank team ensured transition arrangements for regular operation of supported activities after project closing by facilitating cooperation and experience-sharing among relevant agencies in the country and the region. The continuity of supervision after the change in the TTL was ensured by sufficient communication between the predecessor and the successor.

As a stand-alone GEF operation, with a restricted supervision budget (*Zimbabwe is not eligible for IDA financing*), IEG recognizes that, there was a sustained improvement in the quality of supervision, informed by periodical reviews and implementation support missions. In addition, the World Bank team was dealing with a client not familiar with Bank systems and procedures, which resulted in initial shortcomings related to M&E and proactive engagement by the Bank team enabled accessing Bank Executed Trust Funds to complement and improve project activities.

However, there were modest shortcomings on proactive identification and resolution of issues related to safeguards and M&E, especially in a sector that had high risk of safeguards. The expertise on safeguards and M&E was not sufficiently available within the team, which caused delays in monitoring the implementation of safeguard frameworks and finalizing missing baselines and the M&E manual until 2016 (ICR, para 73).

In sum, the quality of supervision was satisfactory.

Quality of Supervision Rating
Satisfactory

Overall Bank Performance Rating
Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design
The objective was clearly specified with two overall project outcomes, which were to develop land use capacity and resource management capacity. The retroactive theory of change presented in the ICR (Figure 1, page 7) provided an overview of the causal relationships among the activities and the expected outcomes. The indicators were specific, measurable, relevant, and time-bound, encompassing all outcomes of the project development objective statement. The Results Framework, however, lacked some of the key baseline data in the early years of implementation, including the Normalized Difference Vegetation Index (NDVI) of forests and the Management Effectiveness Tracking Tool (METT) scores for the forest reserves. The activities to establish the baseline were formalized in 2016, two years after appraisal. The design of the M&E methodology lacked adequate cross-verification processes. No clear

indicator linked to Component 3 was designed, which prevented the project to measure progress of corridor-wide sharing of tools and capacity (ICR, para 77).

b. M&E Implementation

WWF was responsible for M&E of the project. In the first year of implementation, the M&E reports were not substantial in terms of data, due to the lack of dedicated staff and manual for M&E of the project in WWF, as well as the unstandardized quality of data provided by other agencies. The Bank's M&E support to WWF and other agencies was constrained by the lack of M&E Specialist in the task team. At the Mid-term Review (MTR), the M&E methodology on cross-verification of data was strengthened by WWF with support from the Bank. The progress against the GEF Biodiversity goal was reported by using the tracking tools in the middle and end of project.

c. M&E Utilization

The M&E data was not sufficiently used to inform shifts in the implementation direction in the first year of implementation. After the MTR, with the Bank's support, WWF improved M&E management and reporting on key aspects of project performance. This helped improve prioritization of activities and overall management of the project. At project closing, the M&E data on PDO outcome indicators provided evidence of achievements of project outcomes.

In sum, some shortcomings on M&E design, such as the lack of baseline, cross-verification methodologies, and indicators to measure Component 3, affected the M&E implementation and utilization until these issues were addressed after the MTR. The key outcomes attributable to the project were measured by the M&E data only at project closing. Overall, the M&E quality is rated modest.

M&E Quality Rating

Modest

10. Other Issues

a. Safeguards

The project was classified into a social and environmental category of B and triggered six safeguard policies, namely, Environmental Assessment (OP 4.01), Natural Habitats (OP 4.04), Forests (OP 4.36), Physical Cultural Resources (OP 4.11), Indigenous Peoples (OP 4.10), and Involuntary Resettlement (OP 4.12). The project prepared the required Environmental and Social Management Framework (ESMF), Process Framework (PF), and Indigenous Peoples Planning Framework (IPPF).

There were delays in monitoring the implementation of safeguard frameworks and only secured after the MTR in early 2018 (ICR, para 82). After two dedicated safeguards specialists on environment and social joined the Bank's task team at the MTR, the capacity of WWF to implement and report on the safeguard frameworks was strengthened by training and instruments on safeguard policies. For Environmental Assessment (OP 4.01), Natural Habitats (OP 4.04), and Forests (OP 4.36), the project

mitigated potential environmental or social impacts to be generated by the subprojects by screening subproject activities for safeguard implications. The project involved only one physical structure, the wood drying kiln, for which an adequate Environmental and Social Management Plan (ESMP) was developed. Project activities were supported by the results of impact assessments such as the Aquifer Study in 2016 and the Ecological Study Report for Wildlife Restocking in Sidinda Ward in 2015. For Indigenous Peoples (OP 4.10), the review of the inclusion of Tshwa community members in the Human Wildlife Conflict mitigation activities in Tsholotsho was conducted in 2018 as part of the IPPF (ICR, para 85). For Physical Cultural Resources (OP 4.11), the project tried to comply with the safeguard by establishing chance-find procedures which would have been followed if any issue were found unexpectedly. For Involuntary Resettlement (OP 4.12), the PF provided guiding principles for community engagement and benefit sharing, which led to the scheduling of community activities in the forest area with the park rangers and the Forest Commission staff. No project activities were directly involved in the incident of the deceased poacher by park rangers in the Hwange National Park (HNP) in 2019, which was registered under the Environmental and Social Incident Reporting Tool. The project complied with all applicable safeguard policies at project closing.

b. Fiduciary Compliance

Financial Management (FM): The project complied with FM procedures during its duration. FM arrangements were adequate in terms of being capable of recording correctly all transactions and balances, supporting the preparation of regular and reliable financial statements, safeguarding the entity's assets and its auditing arrangements maintained acceptable to the Bank. Mid-way through the project cash management for the project started becoming a challenge, due to country-wide liquidity issues. The issue was successfully addressed by reducing the payments thresholds from US$ 50,000 to $3,000 to allow the project to make direct payments to foreign suppliers. The project complied with all the FM covenants by submitting reports in a timely manner.

Procurement: Procurement was conducted in line with the World Bank's guidelines by using the Systematic Tracking of Exchanges in Procurement (STEP) system. At appraisal, procurement risk was assessed as low by a procurement capacity assessment of WWF Zimbabwe conducted under the Bank's Procurement Risk Management System. However, challenges in accessing STEP led to procurement delays until 2016, leading to certain delays in protected area management and forest conservation. More specifically, the Procurement Progress Review (PPR) in June 2016 pointed out challenges in procurement as: (i) deficient specifications submitted by WWF partners; (ii) incomplete asset registers; (iii) lack of a system to record goods issued out to beneficiaries; (iv) inappropriate use of vehicles outside the project; (vi) insufficient record management system for procurement. These issues were addressed by hiring a local procurement consultant at WWF in 2016 and providing training from the Bank and the Ghana Institute of Management and Public Administration (GIMPA).

c. Unintended impacts (Positive or Negative)

No unintended impact was mentioned in the ICR.

d. Other

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11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Satisfactory	
Bank Performance	Satisfactory	Moderately Satisfactory	The quality at entry was moderately satisfactory due to insufficient arrangements on safeguards, M&E, procurement and the lack of climate change elements in the design.
Quality of M&E	Substantial	Modest	Some shortcomings on M&E design, such as the lack of baseline, cross-verification methodologies, and indicators to measure Component 3, affected the M&E implementation and utilization until these issues were addressed at the MTR. The key outcomes attributable to the project were measured by the M&E data only at project closing. Overall, the M&E quality is rated modest.
Quality of ICR	---	Substantial	

12. Lessons

The following lessons in the ICR stood out as important and relevant to other projects in the natural resource management sector and are presented here with some editing.

1. **Piloting a land rehabilitation project in a participatory manner, where a common social asset is under threat, can ensure community engagement and lead to sustainable land restoration efforts.** For example, the gully prevention measures and soil rehabilitation around social assets, such as the hospital and schools in Chireya, supported the communities to strengthen their capacities on land use and resource management. It also generated cohesion among community members for committing to land restoration efforts for the long-term. This participatory approach could be applicable to other natural resource management projects of the Bank to effectively engage communities in restoration, especially if benefits will only be visible in the long-term for limited beneficiaries.

2. **Developing businesses for community conservancies requires supervisions from project initiations and considerations on promoting livelihood opportunities beyond wildlife tourism.** The project was not able to fully explore income-generating opportunities for the community in the Sidinda conservancy due to the delay in building community capacity for finalizing the business plan for the Sidinda conservancy and its limited focus on wildlife management for tourism. As it required time to build community capacity, projects need to implement such activities early in the project with a clear methodology. The Sidinda conservancy and similar community conservancies in the country and the region need livelihood opportunities beyond wildlife tourism, to cope with the downward trend of tourism and the external shocks such as the COVID-19 pandemic. Promoting community-private partnerships is a way to leverage financial and technical resources for promoting income-generating activities which do not fully relied on tourism. Facilitating market linkages could support the sustainability of expected income streams from the alternative livelihood options.

3. **Preserving transboundary ecosystems requires a long-term commitment to the region, which can be ensured by a Transfrontier Conservation Area (TFCA) program.** The project confirmed the need for supporting and funding the region in the long-term in order to achieve sustainability of the project interventions in the corridor-level. The Bank has relevant prior experience to manage pooling resources for a TFCA program from various sources including bilateral donors. Such a program would align with the Bank's current national and regional priorities.

4. **Assessing and managing climate change risks needs to be continuous throughout project implementation.** While the risks of climate change were considered during preparation, the changes in precipitation patterns induced the drought during the project and posed unprecedented technical and financial challenges, such as the insufficient grazing for wildlife in HNP and the difficulties in wildlife restocking in Sidinda**.** Incorporating climate risk monitoring as a core part of project supervision, as well as strengthening capacities to mainstream climate change in the sector at national and community levels, would reduce unexpected implementation delays caused by environmental conditions.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR provided a detailed overview of the project. The narrative supported the ratings and available evidence in general. It was candid and generally aligned to the project development objective. At times it was quite lengthy and provided a bit too much background information. At other times, it relied on anecdotal information to make the case. There were some data gaps on the achievement of outcomes and outputs, which were later provided by the TTL/ICR team. The quality of evidence and analysis was aligned to the messages outlined in the ICR. The project's theory of change presented in the ICR provided an overview of the causal relationships among activities, outputs, and outcomes. The ICR's lessons were clear and based on evidence outlined in the ICR. Overall, the quality of ICR is rated substantial.

a. Quality of ICR Rating
Substantial