GLOBAL WILDLIFE PROGRAM
PHASE 2
SUMMARIZED VERSION CHILD PROJECTS

GWP Phase 2 Child Projects:

1. **Angola**
2. **Belize**
3. **Bhutan**
4. **Cambodia**
5. **Chad**
6. **Democratic Republic of Congo**
7. **Ecuador**
8. **Global Project**
9. **India**
10. **Indonesia**
11. **Madagascar**
12. **Namibia**
13. **Panama**
14. **South Africa**

Child Project Title:	Strengthening Climate Resilience and Biodiversity Management in Angola's Conservation Areas
Country:	Angola
GEF Agency(ies):	WB
Total Project Cost (GEF Grant)	$ 14,834,862
Estimated Co-financing	$25,800,000

PROJECT DESCRIPTION

Country Context

Angola has a diversity of ecosystems and hosts some of the richest biodiversity in the continent, including several endangered species. The extent of protected areas has been increasing and now covers 13 percent of the country (equivalent to 156,909 km^2). Wildlife and protected areas play an important role in Angola, although their contribution to the economy is not well documented. However, climate change poses a serious threat to Angola's economy, its population and its ecosystems. Angola has warmed significantly in recent decades, mean annual rainfall has decreased, and long-term projections over the 21st century reveal these trends will continue, with a stronger impact in the southern part of the country. Climatic shocks such as droughts and floods have also become more frequent and are projected to intensify. Desertification is advancing, particularly in the Namib and Kalahari deserts in southern Angola. These effects pose serious threats to ecosystems and biodiversity – which are impacted by shifts in the habitat ranges of plants and animals, leading to species displacement and loss – as well as vulnerable communities and indigenous people, who depend on natural resources and agriculture for their livelihoods and food security.

Poverty and a rapid growing population exacerbate the threats of climate change to the protection of wildlife and biodiversity in Angola. The country has one of the highest deforestation rates in the country. Further, the levels of poaching are high in comparison to other countries in southern Africa and illegal hunting occurs in most or all the protected areas. There is significant commercial poaching of elephants, which has led to a steady decrease of their population. Other endangered animal species include the cheetah, brown hyenas, African wild dog, mountain and plain zebras, giraffe and oryx, while Black rhinoceros may be already extinct. With the increased expansion of communities in protected areas, human-wildlife conflicts are common, mainly in areas where there is agriculture development and near water catchments. Climate change is also posing alterations to the geographical environment with species displacement and loss, also resulting in an increase in human-wildlife conflict where wildlife tends to move closer to human settlements due to the absence of food and water.

Angola's intended National Determined Contribution (iNDC) prioritizes ecosystems and biodiversity, and agriculture, among other sectors, as important for building resilience to climate change and improving livelihoods. Angola's National Adaptation Programme of Action (NAPA) highlights the vulnerability and impacts of climate change on biodiversity, forests, ecosystems and agriculture and foresees the inclusion

of 10 to 15% of species in the IUCN categories of species threatened with extinction by 2050, with an increase to 25 to 40% of species by 2080 (assuming there is no species migration). The National Strategy for Climate Change, on the other hand, highlights the risks to species displacement and loss and defines priority actions to address these, including improving and strengthening the capacity of forest and biodiversity monitoring at national and regional scale, and improving the management of protected areas.

The institutions with a mandate over protected areas have limited capacity to address the degradation of the protected areas and wildlife loss. Law enforcement is weak as is the implementation of national conservation policies and priorities. Funding for protected area management and local development in surrounding areas is also limited. As multiple resource use areas, Angola's Transfrontier Conservation Areas (TFCAs) are inhabited by local communities and indigenous people who are among the poorest and most vulnerable in Angola and are highly exposed to climate change impacts, mostly to agriculture. Locally, there is little coordination between park management authorities and municipalities on local development and land use issues, often resulting in land use conflicts and further degradation of the environment and wildlife.

The project is expected to generate global environmental benefits such as strengthened climate resilience of globally-significant important ecosystems, improved biodiversity conservation and strengthened resilience of local communities to climate change.

Project Overview and Approach

Provide a brief description of the geographical target(s), including details of systemic challenges, and the specific environmental threats and associated drivers that must be addressed

The proposed project is expected to support the Angolan component of two TFCAs, namely: the Luengue-Luiana National Park (part of the Kavango-Zambezi TFCA (KAZA), in the south-east) and Iona National Park (part of the Iona-Skeleton Coast TFCA, in the south-west). Luengue-Luiana covers an area of 4,581,800 ha while Iona covers 1,515,000 ha.

The targeted TFCAs have exceptional biodiversity, but face significant threats, including from climate change vulnerability and exposure, environmental degradation, land encroachment, and poaching. Moreover, local communities and indigenous people living in the TFCAs are poor and highly vulnerable to climate change impacts and have few opportunities to derive significant benefits from wildlife yet can suffer from human-wildlife conflict and other direct costs.

The Iona-Skeleton Coast TFCA hosts the most ancient and biodiverse desert in the world and has a wide range of desert and semi-desert ecosystems, including mobile dunes along the coast, calcrete plains, desert grasslands, open woodland, arid shrub land and savannah. It also hosts a rich endemic flora and fauna. The TFCA is also home to indigenous peoples, such as the Mucubal and Himba, as well as many Kimbundu groups. Most practice subsistence farming or are herders. About 3,300 people live inside the Iona National Park, who own 70,000 cattle. In Iona National Park, drought and irregular rainfall are affecting the agricultural productivity in the area, threatening food security. Calamities are frequent due to the desert, and often, the government supports the population by providing food. Due to an increase in the population living in the national, expansion of settlements and illegal camping there has been an increase in deforestation and overgrazing which is causing loss of wildlife and exacerbating land degradation and human-wildlife conflicts.

KAZA is estimated to be the ecosystem that sustains the world's largest elephant population (of around 250,000). Angola occupies the largest portion of the park (approximately 17% of the total area). The Cuando Cubango province has the largest block of protected area and includes the Luengue-Luiana National Park and the Mavinga National Park. In Luengue-Luiana National Park, irregular rainfall and deforestation are threatening the 'Water Towers' of the Kavango watershed.

Human wildlife conflicts and wildlife poaching is prevalent in both targeted TFCAs, where wildlife tends to move closer to human settlements due to absence of food and water. There is also inadequate law enforcement in the protected areas. In the KAZA TFCA particularly, there is persistent bushmeat hunting by local communities and intense elephant poaching, which has led to a steady decrease of their population.

Government institutions responsible for conservation and climate change lack capacity and financing to address these issues, leading to a weak management of protected areas and lack of response to climate risks. These TFCAs are challenged by degraded infrastructure and weak management, which leads to an expansion of human settlements, and further environmental degradation and wildlife poaching. This is compounded by the fact these areas are significantly large, remote, and under significant threats in addition to being surrounded by significant poverty. Locally, lack of integration of climate-resilience, biodiversity conservation and local development considerations into planning and management leads to further degradation and conflicts in land use. Even though there is potential to develop nature-based tourism to generate revenues for the government and diversify the livelihoods of vulnerable communities, the target TFCAs lack basic infrastructure and services to develop an attractive offer.

Describe the existing or planned baseline investments, including current institutional framework and processes for stakeholder engagement and gender integration;

Angolan wildlife and protected areas are receiving increasing attention by the government of Angola to support people's livelihoods and the diversification of economy through nature-based tourism. In recent years, the GoA has developed the policy and legal framework to rehabilitate the national system of protected areas and engaged in international agreements to foster regional collaboration on these issues. The Strategic Plan for the Protected Areas System (Plano Estratégico para o Sistema de Áreas Protegidas, PESAP, 2018) is the most recent policy document for protected areas. It strives to ensure their socioeconomic and financial sustainability and to mobilize investments to stimulate the local economy through activities that are compatible with the protection of natural resources, while improving the quality of life for communities. In addition, the National Forest, Wildlife, and Conservation Areas Policy (2010), the Forest and Wildlife Act (2017), the Plan for the Expansion of the Network of Protected Areas (PLENARCA) and the 2018–2022 National Development Plan (PND) provide a solid policy and legal framework for the development of wildlife conservation and protected area management efforts.

A list of associated projects regarding strenghteninng of the protected areas and wildlife conservation include from the Government of Angola and funded through MINAMB the Program for Biodiversity Conservation and Protected Areas (2017-2020, US$ 5.5 million); the Project to Support Parks and Reserves (US$ 3.6 million); the National Project for the Zoning and Regulation of Parks (US$ 1.1 million, complementing INBAC's institutional budget of US$ 0.73 million over this time period). Regarding threatened species due to illegal wildlife trade include the Preservation of the Giant Sable (US$ 181,000) in Cangandala and Luando National Parks; the Program of the Transfrontier Conservation Initiative for the Maiombe Forest (US$ 812,000), and the Project Maiombe Ecology 2 (US$ 30,000). The Angolan Ministry of Interior also budgeted over USD 3 million for border control for the time period 2017-20 of which USD

300,000 are counted as cofunding for the current project.The German Government via the Kreditanstalt fuer Wiederaufbau (KfW) invested Euros 3.3 million or US$ 3.5 million and co-financed with UNDP (US$ 300,000 over 6 years).The project aims to strengthen the infrastructure and management in Mavinga and Luengue-Luiana Protected Areas in Cuando-Cubango Province. UNDP through GEF has invested in the Combating Illegal Wildlife Trade and Human Wildlife Conflict in Angola project (4,1 million USD with 16.5 million of co-financing) which aims at combating illegal wildlife trade (IWT) and reducing human-wildlife conflict (HWC) in Angola's Protected Area.The European Union and UNDP have invested in the National biodiversity project: Conservation of Iona National Park (2013-2018, EUR 6.2 million or US$ 6.9 million) with the goal to establish and effectively manage a network of protected areas to conserve representative samples of Angola's globally unique biodiversity.

When it comes to stakeholder engagement, NGOs and CSOs experience barriers to participate in dialogues about natural resources management, and even when organizations manage to participate, their input is not binding to the decisions. The project will ensure stakeholder engagement in line with World Bank environment and social standards. On gender, the project will take steps to integrate gender into project design. It will undertake a gender gap assessment during project preparation to inform project activities. Activities will also actively promote the participation of women, and gender outcomes will be monitored in project results.

Describe how the integrated approach proposed for the child project responds to and reflects the Program's Theory of Change, and as such is an appropriate and suitable option for tackling the systemic challenges, and to achieve the desired transformation with multiple global environmental benefits

The project will provide support to the targeted TFCAs (Iona-Skeleton Coast and KAZA) and surrounding communities, to strengthen resilience to climate change, support economic local development and conserve biodiversity**.** The project aims to: (i) strengthen the resilience of local communities to climate change and improve land-use planning in local municipalities; (ii) improve the management of the targeted TFCAs; and (iii) strengthen the capacity of national climate change and conservation institutions to integrate and implement climate change adaptation and biodiversity management measures.

Locally, the project will promote activities that improve the adaptive capacity of communities and offer a diversification of livelihoods, reducing their vulnerability and increasing their resilience to climate change impacts. Climate-smart technologies that increase food security and restore the landscape will be conservation-compatible, such that adaptation practices also produce conservation outcomes. Aware and engaged communities will be better equipped to effectively maximize their benefits from natural resource use and to respond to future climate shocks. To this end, the project will have significant capacity building components on environmental education, technical assistance on technology transfer and other trainings. Key to strengthening the resilience of communities is also diversifying income sources; increasing the value of natural and wildlife resources for local communities will strengthen the case for conservation at the local level. Proposed project activities will actively promote the participation of women, and gender outcomes will be monitored in project results.

Integrating climate-resilience, biodiversity conservation and local development considerations into planning and management in the targeted TFCAs will be key to further promote these objectives. Within the targeted TFCAs, the project will work with municipalities to integrate these considerations into local development and land use plans. It will also work to enhance biodiversity management and monitoring in the protected areas through infrastructure and better information-based decision-support systems.

Communities, ecosystems and biodiversity – particularly wildlife[1] – will benefit from more integrated planning and improved management, and the targeted TFCAs will be better protected, restored and resilient to climate change. Improved cross-border collaboration between Angola and its neighbors will also improve management of the TFCAs. An integrated approach to TFCA management is particularly important as the TFCAs transcend national borders, and connectivity and integration across borders – of biodiversity, people and economic opportunities – are critical to ensure the sustainability of the TFCAs.

At the national level, the project will strengthen the technical and operational capacity of the national climate change and conservation institutions. It will strengthen the country's capacity to integrate climate resilience into conservation area and natural resources management. Institutional and human capacities will be strengthened to better monitor the performance of conservation areas and identify, integrate and implement adaptation measures. The project will also seek to increase and diversify financing options for climate change adaptation and biodiversity conservation, both domestic and international. In addition, the project will support to improve the conditions for investments in nature-based tourism.

The project is aligned with the 2018-2022 LDCF Programming Strategy, as well as the GEF Biodiversity Focal Area. GEF's biodiversity objectives to maintain globally-significant biodiversity in landscapes is supported through inclusive conservation and addressing direct drivers of habitats loss, through improved financial sustainability, effective management, and ecosystem coverage of the protected area estate. In particular, this project aligns with Objective 1 (*Mainstream biodiversity across sectors as well as landscapes)* and Objective 2 (*Address direct drivers to protect habitats and species*), through the Global Wildlife Program (wildlife for sustainable development). It also contributes to the Aichi Biodiversity 2020 Targets through safeguarding key natural wildlife habitats in the targeted TFCAs. Specifically, the project will directly contribute to: (i) Aichi target 11 (improving the management effectiveness of the targeted TFCAs); (ii) Aichi target 12 (improving and sustaining the conservation status of known threatened species); and (iii) Aichi target 15 (enhancing the ecosystem resilience and contribution of biodiversity to carbon stocks). In turn, the LDCF objectives aim to strengthen resilience and reduce vulnerability to the adverse impacts of climate change in developing countries and support their efforts to enhance adaptive capacity. The project responds to these combined priorities, focusing on reducing vulnerability and increasing resilience of local communities and ecosystems through climate-resilient production activities and diversification of livelihoods. In specific it aligns with Objective 1 (*Reduce vulnerability and increase resilience through innovation and technology transfer for climate change adaptation)* and Objective 2 *(Mainstream climate change adaptation and resilience for systemic impact).*

Describe the project's incremental reasoning for GEF financing under the program, including the results framework and components.

The Government of Angola has clearly identified in its National Development Plan, and several other national strategies, objectives for the development of wildlife conservation and protected area management efforts, towards increasing global wildlife-based goods and services both for biodiversity and the local population. The baseline scenario shows that there is significant potential for improvements and advances that can be made towards meeting these objectives, which are also well-aligned with the GWP Phase II priorities.

[1] African lion, antelopes (kudus), cheetahs, elephants, giraffes, hippopotamus, impalas, leopards, gazelles (oryx and springbok), ostriches, spotted hyena, zebras, among various other mammals, birds and reptiles.

There is a strong justification for GEF resources, which will contribute in the long term to improved climate-resilience and biodiversity conservation through well-managed protected areas. The project aims at strengthening the climate-resilience of local communities and ecosystems in the target TFCAs and at improving biodiversity conservation through well-managed protected areas. This will be done by supporting the achievement of three intertwined goals: (i) strengthened climate-resilience and sustainably improved livelihoods of local communities, achieved through climate-resilient and conservation-compatible activities; (ii) healthy biodiversity and climate-resilient ecosystems achieved through improved and integrated management of the targeted TFCAs; and (iii) national institutions with improved capacity for climate change and conservation area management integrating climate-resilience, further improving the performance of protected areas.

Under the business as usual scenario, given that Angola's protected areas are significantly underfunded, the targeted TFCAs would continue to be challenged by degraded infrastructure, weak management and vulnerability to climate change, leading to further environmental degradation and exposure of wildlife to poaching. In addition, local development initiatives would not integrate climate-resilience nor be linked to biodiversity conservation, further exposing local communities to climate change impacts and potential conflicts in land use.

The project is expected to be part of the Global Wildlife Program (GWP) Phase II. Among others, GWP projects seek to ensure that local communities living inside or outside of conservation areas benefit from economic development, including from wildlife-based tourism. The project aims to enhance the ability of the targeted TFCAs Iona-Skeleton Coast and KAZA and surrounding communities to strengthen resilience to climate change, support economic local development and conserve biodiversity.

The project aims to: (i) strengthen the resilience of local communities to climate change and improve land-use planning in local municipalities; (ii) improve the management of the targeted TFCAs; and (iii) strengthen the capacity of national climate change and conservation institutions to integrate and implement climate change adaptation and biodiversity management measures.

Component 1 - Strengthening the resilience of local communities to climate change in targeted TFCAs

The project will finance the implementation of climate-resilient and biodiversity-compatible production practices (such as sustainable land and water management (SLWM) practices in agricultural and sylvo-pastoral areas, agroforestry, sustainable fuelwood use). The project will also support skills training and the provision of inputs to promote natural-resource based rural entrepreneurship activities (such as honey production, inland fisheries and traditional handicrafts). Targeted support will also be provided to train and include local communities in the tourism industry of the TFCAs, such as through hospitality and as local guides. These activities will also seek to empower women by ensuring their active participation in project consultation and decision mechanisms and access to livelihood and training opportunities. A gender gap assessment will be undertaken during project preparation to inform these actions. In addition, as a cross-cutting priority to build the knowledge and capacity of local communities on climate change adaptation measures and biodiversity conservation, the project will promote outreach and environmental education to communities and municipalities around the targeted TFCAs and facilitate knowledge exchange for communities across TFCAs, particularly between Angola and Namibia.

The project will also work with municipalities to integrate climate-resilience and biodiversity conservation into local development plans. This will include updating and/or developing zoning and land use maps for

spatial planning and any other local development plans to integrate actions that respond to climate risk information and are aligned with the conservation objectives of the TFCAs.

The component will finance works, equipment and technical assistance.

Component 2 - Improving the management of the targeted TFCAs aims to enhance the management of the targeted TFCAs, while building the resilience of its ecosystems. A management approach integrating climate-resilience, biodiversity management, and cross-border collaboration between Angola and its neighbors will be sought, including on anti-poaching efforts and combatting illegal wildlife trafficking. The level of support to the protected areas will vary based on their current level of development, with the Luengue-Luiana National Park showing greater needs.

To promote the integrated management of the targeted TFCAs, the project will support the update or development of protected area management plans and other strategic and tactical management plans to integrate actions that respond to climate risk information and that strengthen biodiversity management. Such plans would guide activities such as corridor development and maintenance, restoration, infrastructure (including border posts to facilitate tourist movements) and allocation of areas for mixed use that will also be supported by the project.

To strengthen biodiversity management, the project will finance physical assets (such as electrical fences, vehicle control and observation posts) as well as operational and communications assets, including location-appropriate technology application. Specific interventions and techniques will be used to guide anti-poaching efforts and combat illegal wildlife trafficking, and population census counts for priority wildlife species will be conducted to track progress. Research and monitoring will also be key to strengthening biodiversity management, including the use of collars, periodic wildlife surveys and digital satellite systems. In addition, the project will consider the use of SMART tools to enhance protected area management (specifically ranger patrol and utilization), explore the use of the Domain Awareness System (DAS) for monitoring, and also consider the Management Effectiveness Tracking Tool (METT) and other tools/technologies to assess protected area effectiveness. Finally, the project will support the training of staff in the use of these tools. The project will also support the translocation of wildlife, the rehabilitation of degraded areas, fire control, managing human-wildlife conflicts and promoting co-existence, and addressing settlement and agriculture expansion within protected areas. The project will also cover the operational costs of managing the protected areas (fuel, food, utilities, among others).

Component 3 - Enhancing the institutional capacity of national climate change and conservation institutions aims to strengthen the enabling conditions for climate change adaptation and biodiversity conservation through building the capacity of MINAMB's Directorate of Climate Change, INBAC, and the Environment Fund to improve the management of Angola's conservation areas while strengthening their resilience to climate change.

The project will support the development of INBAC's technical and organizational capacity. The project will recruit external technical assistance and implement a comprehensive and multi-disciplinary training program to support the protected areas system. The project will improve the management, planning and monitoring of the performance of conservation areas and integrate climate-resilient planning by supporting systems that generate and integrate climate risk information into conservation policies, biodiversity monitoring and decision-making both at the site-level and at the national level. In addition, the project will support INBAC improve the conditions for investments in nature-based tourism in protected areas by fostering an enabling environment for private sector engagement, addressing barriers

and helping to broker private sector partnerships to increase investments in tourism operations, including through concessions. South-South Cooperation with other countries on conservation area management and nature-based tourism will also be promoted.

The project will support the development of the Directorate of Climate Change's technical and organizational capacity to strengthen adaptation planning, including through the preparation of key analysis and the integration of adaptation measures into sectoral policies and programs. Finally, the project will support the restructuring of the Environment Fund to serve as a long-term source of finance for environment and protected area management. This would include developing a results-based management system (with clear and transparent rules for the allocation and use of funds) and a practical operational manual to govern the management of the fund (specifying its governance, management, allocation, transparency, accountability, audit, and reporting requirements). The Fund's technical capacity would then be strengthened to diversify its funding sources and access additional financial revenues, including from climate finance and biodiversity offsets.

Engagement with the Global / Regional Framework

Regional knowledge exchanges are essential to the project, particularly because of the cross-border nature of the project and positive models of conservation area management and nature-based tourism in the region. Project preparation will include visits to other countries in the region, and project activities will further collaboration, such as with Namibia, an example for community engagement in tourism. Angola's participation in the KAZA TFCA, which has an established Secretariat and ongoing collaboration between its neighbors, provides opportunities to learn from the partner countries on natural resources management, law enforcement, and draw lessons from community participation in tourism activities. The project will benefit from the GWP led knowledge management and exchanges which aim to promote regional and global synergies.

The project pilots an approach for cross-border collaboration for TFCA management, including wildlife connectivity and cross-border governance arrangements like multi-stakeholder management committees. If successful, this approach can be replicated in other TFCA landscapes.

The project will have a programmatic and multi-partner approach, maximizing finance for development and allowing for scale-up. The project will serve as an umbrella framework for coordinating across several partners (NGOs, private sector, multi- and bilateral agencies) in support of the Government of Angola. Co-management of the protected areas will be delegated to NGOs, who will in turn invest in these protected areas, and further investments would be leveraged from private actors, including on technology for biodiversity management and tourism activities and infrastructure. The project is designed as the first phase of a long-term program in support of Angola's PESAP, for which the project would generate important lessons. There is therefore potential for scaling up, either to deepen support in the target TFCAs or expand its innovative approach to other protected areas in the country, potentially mobilizing financing for future phases.

Child Project Title:	Enhancing jaguar corridors and strongholds through improved management and threat reduction
Country:	Belize
GEF Agency(ies):	UNDP
Total Project Cost (GEF grant)	$ 1,234,404
Estimated cofinancing	$ 10,394,000

PROJECT DESCRIPTION

Country Context

Belize has long been recognised for the beauty of its natural resources. As part of the Mesoamerican biodiversity "hotspot", the land bridge between the North and South American continents, Belize has species representation from both continents, supporting 4,784 species of flora and fauna including over 118 globally threatened species, 10 critically endangered, 30 endangered and 77 Vulnerable, and an additional 62 species Near Threatened or of least concern (IUCN, 2016). [2]

The country's 22,965 km² of landmass is comprised of 14 broad ecosystem types where 61.6% remains natural and intact forest cover. The country's primary conservation intervention, under the CBD, is through the establishment and management of protected areas. Belize developed the National Protected Areas System (NPAS), under its NPAS Act[3]. Forty per cent (40%) of the country's forested stands are found within the country's 103 protected area units.

Unlike many of its larger Central American neighbours, the natural landscapes of Belize still support viable populations of large mammalian species, such as jaguars, tapirs, and white-lipped peccaries. The country still retains three large, forested blocks that are important in maintaining national and regional biodiversity. These key biodiversity blocks lie within the Maya Mountains Massif node, one of the largest remaining forested areas in Central America, the Selva Maya Forest in the west, linked to the Guatemala Selva Maya, and the Shipstern / Fireburn block in the northeast. As a country, however, Belize is reaching a tipping point as development, driven land use change, is rapidly removing/depleting unprotected forest areas; reducing the natural environmental buffers , compromising ecosystem functions and connectivity.

Despite the high forest cover and relatively intact nature of the Belize natural environment, the primary issue for Belize is the development of fragmentation and loss of species through that deterioration. Through this proposed activity, the emphasis on jaguar connectivity and the umbrella impacts on other

[2] Belize 5th National Report to CBD

[3] National Protected Areas System Act, 2015

species will mitigate – if not eliminate – this anticipated deterioration, through rigorous monitoring of key species, including the jaguar, and directly confronting the conservation challenges for the jaguar, including anti-predation techniques for cattle landscapes and road impact mitigation.

Project Overview and Approach

Description of the geographical target(s), including details of systemic challenges, and the specific environmental threats and associated drivers that must be addressed

Belize has an impressive system of terrestrial protected areas, with roughly 8,000 km^2 of its total 23,000 km^2 landmass protected (~35%) as pure wilderness areas without human populations living within their boundaries. Outside of these protected areas, Belize still has ~60% forest cover, assuring an impressive amount of natural habitat for jaguars. This landscape has two major forest block, the Belizean portion of the Selva Maya in the North, consisting of the Rio Bravo Management Area, Spanish Creek and Labouring Creek Jaguar Corridor Wildlife Sanctuaries. The other block consists of the Maya Mountain Massive. Here several national parks, nature reserves and Wildlife Sanctuaries, including Cockscomb Basin, are surrounded by forest reserves, which allow logging concessions without any human habitation. Camera trap monitoring efforts have shown that some of these forests can be considered as the most optimal jaguar habitat, within the species range, with the highest recorded densities, certainly within Central America but also ranking high compared with the South American habitats. This means that the small country of Belize can be considered as a critical part of the Northern jaguar population and an important node for connectivity for populations in Mexico, Guatemala and Honduras. These two large forest blocks approach each other in close proximity through the Central Belize JCU, Manatee Forest Reserve and some smaller reserves. Although of impressive size, the Maya Mountain Massive and the still connected Central Belize JCU are likely not large enough for long-term survival of jaguars in isolation. As such connectivity to the northern Selva Maya is vital. Here a section of unprotected privately owned forest, currently called the Central Belize Corridor, concerns a vital component in terms of forest connectivity.

A large section of unique drier forest with salt water lagoon systems in the northern part of the country, the Northern Biological Corridor, is equally threatened with isolation. Here a tenues patchwork of privately-owned forest can still provide connection with the Selva Maya in the north. Equally in the South some undesignated forest patches still connect the most southern national park of Sarstoon Temash with the Maya Mountains

The main threats to these corridors and adjacent unprotected forests concerns the exponential growth of the agricultural frontier, both crops (sugarcane, corn, sorghum, and soy) and livestock (mainly cattle). The investment levels potential gain in foreign currency cannot be matched in the short-term and private landowners frequently get offered attracted offers. Currently large parts of the southern section of the Belizean Selva Maya are privately owned by a logging company, ready to sell to the highest bidder. This would cause a dramatic reduction in the size of the Belizean portion of the Selva Maya.

The high amount of nationwide attention on jaguars has equally created the first government led jaguar conflict response team. As with the database, this requires further expansion and resources to assure success. The livestock industry is growing and almost all farms are at the edge of wilderness areas, creating high possibility of jaguar-livestock conflict. The high amount of edge equally creates the high possibility of game hunting with the country having a long tradition of game meat consumption. Using appropriate permitting, zoning and regulatory systems, uncontrolled hunting with rampant depletion of prey

populations – exacerbating the potential for jaguars switching to domestic animals when prey is heavily depleted – can be prevented.

The high amounts of intact wilderness and potential for high-value natural wildlife products, creates the real potential for a flourishing illegal wildlife trade. Anecdotal evidence suggests that some trade is happening but it is in its infancy. The Belize government needs to stay on top of this to assure they are ahead of the curve and can stop high level organization before it emerges.

Existing or planned baseline investments, including current institutional framework and processes for stakeholder engagement and gender integration

As the only English-speaking country in the region, Belize attracts considerable attention in terms of tropical education studies from English speaking universities. This has been integrated income generation for many protected areas, providing the basis for an extensive network of camera trap monitoring effort, some consistent and some more haphazard. These efforts provide an important baseline for building a national monitoring system, through government regulation and delegation. Belize's relatively small size creates the possibility of truly knowing, with enough precision and accuracy, the distribution and abundance of jaguars throughout the country, allowing detailed management of its population. This requires building capacity within the government to manage and bring together these data within a national system and communicate and liaise with all relevant stakeholders providing data. Some of the protected area units have high management capacity, with limited capacity for some of the forest reserve, meaning limited knowledge of wildlife distribution or management. Holes within the monitoring and management system need to be filled through an integrated system of a data warehouse management system under the currently developed Forest Information System of the Belize Forest Department. With the widespread implementation of SMART systems in the country, the combination of wildlife monitoring system and increased enforcement efforts can lead to an efficient system of wildlife management within the National Protected Area System (NPAS). Wildlife moving outside of this for wildlife management system can be regulated by the conflict resolution team per district. The Belize Forest Department has started such a system by having one forest ranger dedicated per district but the system is in its infancy. The current program will strengthen this with further NGO involvement and financial and expert assistance within the current network.

How the integrated approach proposed for the child project responds to and reflects the Program's Theory of Change

The project closely reflects the Global Wildlife Program (GWP) Theory of Change (TOC). The project structure is aligned with three of the four GWP pillars, namely Conserve Wildlife and Habitats, Promote Wildlife-Based Economy, and Combat Wildlife Crime, as well as with several of the activities/outputs outlined in the TOC. In turn, these activities will contribute to the short-term outcomes established for the GWP, such as landscapes with improved biodiversity management practices, increased incentives to protect wildlife and capacity to co-exist with wildlife, and strengthened institutional capacity to combat IWR, among others. Over the medium term, the project will contribute to the GWP outcomes of wildlife conservation and crime prevention, and in the long-term to the outcomes of global biodiversity conserved, livelihoods for local communities improved, and resilience enhanced. The project, together with other possible projects emerging following the Jaguar 2030 High-level Statement and Roadmap, plans to make full use of GWP coordination processes and structures for stimulating action across the jaguar range. The present project is expected to be a cornerstone in these efforts.

Incremental reasoning for GEF financing under the program

This project proposes an integrated approach of monitoring and research, embedded within a marketing and education eco-tourism strategy; together NGO and third party academic institutes, government will supervise and integrate these efforts into a national database system. The enhanced knowledge of jaguar distribution will feed into land management and provide narrative for economic gain through research-based tourism. Detailed understanding of jaguar distribution will equally feed into resolution human-jaguar conflict, as it will indicate the stress points where wilderness and agricultural expansion will likely collide in most problematic manner. Here different teams throughout the country can respond, equipped with sufficient knowledge, and resources; embedded within a larger government network. Targeted law enforcement can further improve the wilderness status of the Belizean forest.

Engagement with the Global / Regional Framework

The project will pay close attention to knowledge management, which will take place at multiple geographic and thematic levels:

- ***Within the Global Wildlife Program: As a child project under the Global Wildlife Program (GWP), the present project will maintain especially close ties with other child projects under the GWP. It will support the diffusion of knowledge, know how and ingenuity: (i) across the Jaguar Corridor, which extends across 16 countries and 6,000 km^2, and (ii) with other projects and regions that may be addressing the conservation of big cats or other umbrella species.***

- ***Within Belize: Throughout its implementation, the project will develop knowledge sharing products such as: report of lessons learned and good practices, south-south cooperation, triangular cooperation, as well as tools and methodologies that can be applicable to the jaguar as well as other species, at different levels, both locally and nationally. Additionally, the obtained results will be shared with countries in the region (LAC), in a way that contributes to the strengthening of the Jaguar Roadmap 2020-2030 as well as the implementation of the Agenda 2030, mainly associated with SDG 15.***

- ***Within GEF: The project will liaise and exchange knowledge with relevant GEF-7 Impact Programs, particularly the Food Systems, Land Use and Restoration Impact Program (FOLUR), which will support transformational shifts in large landscapes by taking into account competing demands for production of staple foods and major agricultural commodities, while harnessing opportunities to protect natural environments and restore degraded landscapes. Given the importance of expanding production of agricultural commodities as a threat to jaguars and a driver of habitat loss within the Jaguar Corridor, the FOLUR programme—both its methodological approaches and the on-the-ground support afforded—will be a target for knowledge sharing by the project.***

Project Title:	Mainstreaming biodiversity conservation into the tourism sector in Bhutan
Country(ies):	Bhutan
GEF Agency(ies):	UNDP
Total Project Cost (GEF grant)	$ 4,670,642
Estimated cofinancing	$ 7,509,000

PROJECT DESCRIPTION

Country context

Bhutan's rugged mountain terrain spread across alpine, temperate and subtropical agroecological zones houses unique biodiversity. Despite its small geographic extent, Bhutan contains almost 6,000 species of vascular and non-vascular plants and 200 species of mammals, 27 of which are globally-threatened including Bengal tiger (IUCN Red-List: EN), snow leopard (VU), clouded leopard (VU), red panda (EN), Asian elephant (EN), Himalayan black bear (VU), takin (VU), golden langur (EN), capped langur (VU), Himalayan musk deer (EN) and the critically-endangered pygmy hog (CR). Over half of Bhutan is set aside in the conservation estate, which comprises protected areas (PAs) connected by biological corridors. Landscapes outside of PAs are also critically important for biodiversity conservation. Bhutan is unique in that with 70% forest cover and an additional 10% under shrub cover, the country can be considered as a tiger landscape almost in its entirety (as confirmed by the national tiger survey 2015).

Rural livelihoods and conservation in Bhutan are inextricably linked. With such a high level of forest connectivity and a population that is almost 70% rural and heavily dependent on natural resource use, human-wildlife conflict (HWC) is a substantial challenge and a threat to wildlife and livelihoods. Around 15% of the population lives within 10km of a PA and there are some communities within PAs and biological corridors. Bhutan's NBSAP recognizes that livestock loss and crop damage are major problems caused by wildlife. Over half of crop damage in Bhutan is attributed to wildlife (e.g. elephant, wild pigs, monkeys, ungulates) and livestock predation (e.g. by tiger, leopard, black bear, wild dogs) exceeds 200 head per year. Households are estimated to spend an average of 110 nights a year guarding crops and engaging in retaliatory killing of wildlife. Human lives have been lost to black bear, wild boar, elephant and leopard. Since HWC causes substantial economic and social costs to rural communities, it also results in retaliatory killings, resentment against policies, and lack of support towards conservation initiatives.

Poaching and trafficking of wildlife is an increasing threat, in part due to Bhutan's geographic proximity to major Asian markets for illegal wildlife products. Key species poached include tiger, leopard, musk deer and Himalayan black bear. Other threats to biodiversity include land use conversion (e.g. road construction, transmission lines and hydropower) and development pressures, forest fire, over-extraction of timber, unsustainable agricultural practices, overgrazing, forest offences, climate change and increasing rural-urban migration (particularly among youth) that leaves fewer stewards of the land.

Tourism is a potential increasing threat if development is not managed sustainably. Since opening its borders to foreign tourists in 1974, Bhutan has exhibited a cautious policy for tourism development and together with the Gross National Happiness philosophy created a unique approach of 'high value, low

volume' tourism. Challenges are emerging despite this cautious strategy, including the growing influx and poor management of regional tourism, poor repeat visitation, low average bed nights, and high geographic restriction and seasonality that condenses tourism within western Bhutan and a few months of the year resulting in congestion at key attractions. Tourist arrivals rose from 116,000 in 2013 to almost 255,000 in 2017, representing more than a doubling of tourists over the five year period. These shifting factors increase the level of threat to sensitive ecosystems and impede the extent to which tourism can provide a viable alternative livelihood for local communities across Bhutan.

Biodiversity conservation in Bhutan will only be effective in the long-term if benefits to the rural population are enhanced. This proposed project will develop and promote Bhutan as a model ecotourism destination as part of a long-term strategy to mitigate HWC and offset its financial impact on farmers, reduce threats to biodiversity, and generate sustainable financing for biodiversity conservation (including PAs) and sustainable livelihoods diversification. Doing so will help the government to address the current challenges by showcasing ecotourism as a strategy to strengthen biodiversity conservation and climate change mitigation across the landscape through inclusive community engagement, ecotourism enterprise development and employment generation.

Current barriers to establishing sustainable ecotourism in Bhutan are:
1) *Inadequate enabling national policy environment and weak institutional coordination and governance*. While ecotourism pilots and demonstrations have been underway in key PAs for some years now, these are not yet captured under a cohesive national policy framework or vision for ecotourism, leading to weak coordination and clarity in policy, planning and mandates between key government departments with a role in tourism development, and fragmentation in approaches between governments at different levels, and between government and the private sector. Limitations of current policies include insufficient framework and mechanisms for private sector investment, a lack of consideration of domestic and regional tourism within the 'high value, low impact' model, poor integration of biodiversity considerations within tourism development bringing an emerging risk of tourism impacts in ecologically sensitive landscapes and a lack of mechanisms to capture tourism revenue and use it to strengthen biodiversity conservation including PA management. There is an absence of common standards and guidelines for managing ecotourism development, and limited monitoring and enforcement of the rules and standards that do exist.
2) *Lack of sustainable financing, innovation and diversification of tourism products and limited integration of tourism value chains into local community engagement and development*. Currently, there is an absence of systematic investment facilitation processes, no adopted tourism concessioning strategy or demonstration of concessions across the landscape (within and outside of PAs), and overall limited consideration of sustainable financing structures. Viable development sites within and outside of PAs have not been systematically identified and are not being actively promoted to potential investors. There is limited involvement of rural communities in tourism value chains and weak value chain linkages across regulators, tour operators and local communities (and across local cultures, environment and economy). There are few identified opportunities for high-value private investment and public-private partnerships, no incentives for local tour operators to diversify itineraries to include a broader range of wildlife- and nature-based products, and a limited availability of quality nature-based experiences to attract and retain visitors. There is limited focus on pulling together existing site-based products (currently focussed in western Bhutan) into broader landscape-wide tourism programmes that share the economic benefits of tourism across more communities and regions. Economic benefits to communities – the stewards of land and wildlife – are not equitably dispersed.
3) *Insufficient ecotourism knowledge, capacity and awareness at national and local levels*. There is limited knowledge among the local tourism sector on ecotourism best practices, leading to limited application of

sustainable tourism practices within the private sector, along with weak understanding of business opportunities at local level and limited skills to transform these into functioning ecotourism businesses. Sustainable tourism practices are not included in training and hospitality courses and there is an absence of targeted training programmes. Coordination and learning is impeded by a lack of networks to consolidate and share experiences from ecotourism pilots, boost marketing and business opportunities, and facilitate the establishment of Bhutan as a preferred ecotourism destination. Community attitudes can be antagonistic towards wildlife and conservation due to substantial HWC impacts on livelihoods.

Project overview and approach

Geographical targets

Within Bhutan, the project will focus on eastern and southern tourism-deficient areas that have good potential for ecotourism. This will help provide more balanced geographical spread of visitation, tourism investment, employment and revenue entering local economies in less-developed regions of Bhutan. The region covers an area of 1,527,710 ha, of which 1,174,481 ha is forested. It includes eight of Bhutan's 20 districts (Dzongktags). It also houses a wide range of globally significant biodiversity and important PAs. Eastern Bhutan is home to the Phrumsengla National Park, a prime tiger habitat; Sakteng Wildlife Sanctuary, home to red pandas and semi-nomadic tribes with cultural affinity towards the mythical Yeti; Bumdeling Wildlife Sanctuary, home to black-necked cranes and the Bhutan Ludlow butterfly; and numerous heritage sites of cultural importance. Southern Bhutan is endowed with rich sub-tropical forests including those in Royal Manas National Park, a hotspot for wild felids; and the Jomotshabkha National Park. Combined these PAs comprise almost 28% of the national PA estate, covering 455,799 ha.

The core landscape which will be used for demonstrating private sector concessions and activities is the Eastern Bhutan Tourism Circuit which is least explored in terms of tourism development. This landscape will focus on Sakteng Wildlife Sanctuary and surrounding communities and agricultural/forested landscape, connecting up to Bumdeling Wildlife Sanctuary in the north and Jomotshabkha National Park in the south. The core PA proposed for demonstration of concessions is Sakteng Wildlife Sanctuary, which protects the easternmost temperate ecosystems of Bhutan, harboring species such as red panda and a diverse Himalayan terrestrial ecosystem of mixed coniferous forest, alpine scrub and screes. The Sanctuary has been on the UNESCO World Heritage List as a tentative site since 2012. It was the first PA in Bhutan to establish a visitation fee and therefore provides a feasible demonstration site for broadening PA revenue generation mechanisms that can be replicated across the PA system. A motorable road has only recently reached the Sanctuary, which increases the potential for ecotourism but also heightens potential biodiversity threats. The exact landscape (including Sakteng Wildlife Sanctuary but extending beyond it into a broader ecotourism landcape) and sub-districts/communities for targeted interventions will be determined during the PPG phase based on detailed assessments and local consultations.

These landscapes of Bhutan (as is much of the country) are heavily forested and subject to high amounts of HWC, with substantial impacts on rural livelihoods and posing risk to endangered species. Poaching, including through retaliatory killing, is also a threat, particularly for areas with easy access to national borders and markets for illegal wildlife products. Drivers of HWC include habitat fragmentation, encroachment, clearing, selective logging, and new infrastructure and human settlements that bring people and wildlife closer together in the landscape, increasing the chance for conflict. In parallel, socio-economic drivers include rural poverty and recurrent farmer financial loss due to livestock depredation and frequent crop damage, along with a lack of sustainable livelihood opportunities to offset these losses. In turn, ongoing high levels of HWC drives negative community attitudes towards wildlife and

conservation agendas that can lead to increased local engagement in poaching and trafficking. Because of the nature of the landscape in Bhutan and the high degree of connectivity of PAs, biological corridors and government reserved forest, these threats apply across the landscape. This means that a holistic focus at landscape level is required in response, as proposed by this project.

The baseline scenario and any associated baseline projects

Baseline

This project has been designed to build upon and pull together the different threads of the baseline scenario in a comprehensive national approach to sustainable ecotourism development that:

Uses the Royal Government of Bhutan's 'high value, low volume' tourism philosophy and commitment to avoid negative environmental and social impacts of tourism as its foundation;

- Aligns with the government's directions to achieve sustainable tourism growth as a development priority;
- Supports ongoing initiatives to strengthen long-term financing for biodiversity conservation including PA management and works in partnership with these initiatives to ensure a coordinated, cohesive national approach to ecotourism and sustainable conservation financing mechanisms across landscapes of Bhutan.

Bhutan's national development philosophy of Gross National Happiness considers good governance, equitable socio-economic development, cultural preservation and environmental sustainability pillars. Accordingly, national development policies and programs accord a high priority to environmental conservation that has facilitated: the Constitution with a full-fledged Article on Environmental Conservation and National Forest Policy (2012) recognizing the maintenance of 60% forest cover for all times; the establishment of five national parks, four wildlife sanctuaries, one strict nature reserve, one recreational park and nine biological corridors, protecting 51.42% of the country; a range of policies and Acts that provide a good foundation for the conservation and management of biodiversity; and the focus of the 11th Five-Year Plan (2013- 2018) on the concept of 'green' plan creating a 'green' mindset and attitude to prioritize environment management, reduction of greenhouse gas emissions and pollution. The 11th Five-Year Development Plan allocates US$16.83 million for biodiversity-related activity. In addition, the Bhutan Trust Fund for Environmental Conservation (BTFEC) provides $1.5 million and WWF around $1.6 million annually. A key part of the project baseline is the government's Bhutan for Life (BFL) initiative supported by WWF using the 'project finance for permanence' model. As at 2018, Bhutan had mobilized $43 million (including from the Green Climate Fund) in the BFL transition fund to strengthen long-term PA management effectiveness and PA financing capabilities.

Sustainable tourism development is a national priority. Tourism is a key part of the economy and a central pillar to Bhutan's sustainable development. The Economic Development Policy (2016), which sets the agenda for national economic development, identifies tourism as one of 'Five Jewels' or priority sectors that has the potential for export, revenue generation and employment creation. Sustainable tourism development is planned as a national flagship program in the 12th Five Year Plan under the coordination of the Tourism Council of Bhutan. Several sectors include tourism in their respective plans. For example, the Sustainable Natural Resources Management and Utilization Programme of the Ministry of Agriculture and Forests plans to develop ecotourism products in PAs. The Ministry of Labour and Human Resources aims to increase tourism sector employment from 24,650 to 48,037. The Ministry of Economic Affairs aims to increase Direct Revenue Contribution from tourism (which comprises of the Sustainable Development Fee of $65 per person per night and Visa fee of $40 for all international arrivals) from $22.41 million to $33.94 million during the term of the 12th Five Year Plan.

The development of ecotourism as a strategy to strengthen biodiversity conservation and its financing, reduce HWC, preserve culture and boost local livelihoods is widely recognized. Out of the 20 national targets, strategies and actions in Bhutan's NBSAP, seven directly relate to the interface between tourism as a source of revenue and as a tool for biodiversity conservation. The government and UNDP-led BIOFIN assessment identifies ecotourism as a key biodiversity financing solution with potential to generate US$108 million annually in revenues and create 1,400 new jobs through community-owned businesses and public-private partnerships. Ecotourism in the PA system is recognized as part of the BFL long-term PA financing strategy, along with green taxes and payment for ecosystem services. For example, BFL has set the ambitious goal of 80% of communities within PAs having improved access to nature-based employment by 2025. To support this, BFL will invest in nature-based tourism business models for PAs and provide capacity development for PA communities to manage these enterprises. Shorter-term actions to address HWC (e.g. fencing) and enhanced patrolling of PAs are also captured within BFL. Ecotourism development in some biological corridors will be supported under the GEF and LDCF-financed, UNDP-supported project 'Enhancing Sustainability and Climate Resilience of Forest and Agricultural Landscapes and Community Livelihoods'. With regards to the interface between HWC and ecotourism, the 2008 Bhutan National HWC Management Strategy recognizes ecotourism as an integrated strategic approach to address HWC. Similarly, the WWF-supported 2016 HWC SAFE Strategy for nine Gewogs (counties) recognizes the development of community-based ecotourism as a key first step in creating a positive link between wildlife and communities to reduce and prevent HWC impacts on wildlife, habitats and people.

Since around 2010, community-based ecotourism pilots (e.g. homestay programmes, community-governed trekking trails) have been underway at individual PA sites by government with support of partners including WWF, the Association of Bhutanese Tour Operators and the Royal Society for the Protection of Nature. These pilots confirm that the potential livelihood and biodiversity financing benefits from ecotourism are substantial. They also indicate the need for careful governance to ensure that benefits are shared equitably, for overarching government policy to guide sustainable ecotourism growth with engagement of key sectors, and for investment in site maintenance and new product development so that ecological impacts on sensitive ecosystems and at high-visitation sites are minimized.

Combined, this baseline provides a strong foundation for the project and the opportunity to develop a cohesive national approach to ecotourism that ties together existing efforts and helps transform them into meaningful landscape-wide investments that provide long-term financing for biodiversity and equitable community benefits.

Stakeholder *engagement*

The project has been designed to be part of broader partnerships on sustainable ecotourism development in Bhutan, and build off existing stakeholder engagement and coordination mechanisms. For example, the Tourism Council of Bhutan is an existing mechanism for stakeholder discussion on tourism development in Bhutan, with mandate to facilitate development of tourism infrastructure, implement tourism policy and roles, and facilitate product development. The Third Tourism Council of Bhutan held its first meeting on 25 February 2019, chaired by the Minister of the Ministry of Foreign Affairs and attended by government, Dzongkhags and the tourism sector (e.g. Association of Bhutanese Tour Operators, Hotel Association of Bhutan, Guide Association of Bhutan. The project will build off this existing mechanism to strengthen engagement and coordination on ecotourism development (see next section). The project has been developed to align with key government directions on tourism development and hence the joint execution of the project by Gross National Happiness Council, Tourism Council of Bhutan, and the Department of Forests and Park Services. The project will take a strong approach to strengthening

partnerships on ecotourism at all levels, including between different levels of government, between government and the private sector, interfaces between this project and aligned initiatives such as BFL and the Tourism Flagship Program, and with civil society and local communities. Further stakeholder consultations will continue during the PPG phase to confirm interest and support for the project and potential roles that different stakeholders could play in implementation (to be documented in the project's stakeholder engagement plan).

Gender integration

There are existing national mechanisms and processes that support gender mainstreaming in Bhutan. For example, the National Commission for Women and Children was established in 2004 to take the lead in promoting and protecting the rights of women and children and upgraded to a fully autonomous agency in 2008. The Commission oversees a range of policies and legislation supporting the rights of women, including a draft national gender equity policy. A key government mechanism for gender mainstreaming is the inclusion of gender as one of the criteria in the Gross National Happiness Council policy screening tool that is applied to all government policy. The project will aim to build upon these existing mechanisms to ensure gender mainstreaming and identification of economic opportunities for women in ecotourism development. The project will explore these opportunities during the PPG phase, including the definition of specific activities targeting women and aiming to increase livelihood and employment opportunities for women and women's participation in decision-making. During the PPG phase, a comprehensive gender analysis will be completed to identify the different roles of men and women in nature-based tourism and biodiversity conservation. At the site level, the project will examine local conditions pertaining to local livelihoods, resource use and land tenure, and factors affecting the livelihoods of women and men in relevant communities. Consultation sessions will be held to obtain views and inputs of a wide range of local stakeholders, including women, to inform the development of project activities and a robust stakeholder involvement plan with full gender considerations. A corresponding gender mainstreaming plan will be completed and submitted at the time of CEO Endorsement. Gender mainstreaming will be integrated across project activities as relevant and has also been explicity recognized in a project output (see next section). Gender-disaggregated targets and indicators will be included within the project results framework.

The proposed alternative scenario with a brief description of expected outcomes and components of the project

The proposed project seeks to mainstream biodiversity conservation into tourism development in Bhutan as a long-term strategy for mitigation of threats to biodiversity and to generate sustainable conservation financing. The alternative scenario is that well-managed, landscape-wide ecotourism investment and operations provide sustainable alternative livelihoods for local communities, bring about a positive shift in attititudes towards wildlife and PAs, reduce threats to biodiversity across the landscape (including threats from unsustainable tourism development), and provide much-needed sustainable financing to strengthen PA management and biodiversity conservation. This will be achieved through three project components that work in parallel to: i) strengthen national policy and governance for sustainable tourism development based on ecotourism; ii) develop a diversified and innovative range of high-quality tourism products and experiences that reflect the natural beauty and ecological diversity of Bhutan; and iii) put in place the partnerships, knowledge exchange and capacity needed to establish Bhutan as a model ecotourism destination.

First, Component 1 will establish a conducive and coordinated policy and institutional framework for ecotourism development. The project will support the establishment of a National Sustainable Tourism

Policy setting the vision and overall strategy for tourism and a National Ecotourism Master Plan defining a road map to get there (Output 1.1). The master plan will be informed by a nationwide assessment of tourism resources, assets and gaps, hotspots of biodiversity threats including HWC, and investment opportunities. Coordination and alignment of mandates across institutions with a role in ecotourism development will be strengthened through the establishment of a multi-sectoral Ecotourism Technical Advisory Team under the Tourism Council (Output 1.2), which will oversee the implementation of the national strategy and master plan, and strengthen public-private partnerships for tourism investment. Facilitating private sector investment, an investment framework for ecotourism will be developed (Output 1.3). This will include a tourism concessions strategy and operational guidelines for investment in landscapes and in PAs, that will be demonstrated in a landscape-wide ecotourism program under Component 2. The project will also develop a comprehensive range of ecotourism safeguards, standards and guidelines to maximize biodiversity benefits and prevent adverse impacts (e.g. national standards for accommodation classification; guidelines for *inter alia* biking trails, rafting, trekking, spiritual site development, visitor information facilities; SEA guidelines for tourism development) and establish a voluntary certification system encompassing biodiversity conservation and awareness, low-carbon technologies, improved waste management and cultural values (Output 1.4). Compliance monitoring will be mainstreamed in development planning and monitoring.

Component 2 will create opportunities for the identification, development and promotion of unique, high-quality, community-led and environmentally-sound ecotourism products and experiences. These will be demonstrated across the landscapes of eastern and southern Bhutan – an area which currently receives limited tourism. The concessions framework established under Component 1 will be demonstrated in one landscape in eastern Bhutan with globally significant biodiversity threatened by poaching and HWC (Output 2.1). The demonstration will take place at landscape level, outside of PAs and within (e.g. Sakteng Wildlife Sanctuary – investment in PAs will be in coordination with BFL) with the aim of enhancing biodiversity conservation and threat reduction across the landscape. The exact landscape will be delineated and defined during the PPG phase. The project will identify and develop high-quality ecotourism products across eastern and southern Bhutan (Output 2.2). This will be based on: (i) feasibility assessments in all Dzongkhags (districts), based on consultations with local communities and using a tourism value chain approach; (ii) Support for development of identified high-quality, unique ecotourism products and experiences; and (iii) Promotion, branding and marketing of ecotourism products and their integration into tour itineraries, packages and landscape-scale ecotourism programmes that utilize the skills and services of host local communities and promote nature-based economic enterprises. Potential products to be supported by the project include a 108-day Heritage ecotrail connecting sacred places of Bhutan, intrastructure development for new trails and heritage sites, and community-based product packages in the eastern and southern tourism districts. The capacity of local communities, tour operators, local guides and community associations to identify and develop ecotourism products and experiences and integrate them within locally-owned itineraries will be built (Output 2.3), with a specific focus on providing support for the generation of employment opportunities for local women and youth. Finally, outreach and awareness programs with local communities will help raise awareness of the importance of nature and its role in underpinning ecotourism development and reinforce positive attitudes towards wildlife and conservation (Output 2.4). Outreach will also aim to create social pressures and mindsets for conservation that help curb involvement in poaching, forest offences and illegal activities within PAs.

Finally, Component 3 will enhance ecotourism marketing, capacity, knowledge management and partnerships. A tourism marketing and promotional strategy will be developed (Output 3.1) and implemented including through promotional, branding and marketing collateral to establish key attractions and experiences including within PAs. In parallel with this global market outreach, community-

based ecotourism events and trade fairs will be supported at national and Dzongkhag level to build networks, market linkages and support the uptake and replication of innovative ecotourism products and experiences (Output 3.2). A comprehensive awareness and capacity development program will be developed and rolled out to key actors including the Tourism Council of Bhutan, Department of Forest and Park Services, Dzongkhag administrations, sector associations, private sector operators and local communities (Output 3.3). It will include skills-based training, training in entrepreneurship and business development, visitor management training including for PA staff, and training in the application of ecotourism safeguards and standards. Training will be supported by exposure trips within Bhutan and internationally, and by a tourism education and awareness program including the development and integration of ecotourism modules within the programs of national training institutions. The project will develop an online knowledge-sharing and marketing platform (Output 3.3) to showcase local products and support production replication/upscaling, and build ecotourism networks and partnerships at national, regional and international level including with the Global Wildife Program (Output 3.4). Finally, an effective project M&E system (Output 3.5) incorporating gender mainstreaming will be implemented to maximize project impact through effective adaptive management.

Alignment with GEF focal area and/or Impact Program strategies

Through its efforts to mainstream biodiversity into the tourism sector in Bhutan and promote ecotourism as a long-term strategy to achieve human-wildlife coexistence and generate sustainable biodiversity financing and livelihoods, the proposed project is aligned to GEF-7 focal area objectives *BD-1-1 Mainstream biodiversity across sectors* as *well as landscapes and seascapes through biodiversity mainstreaming in priority sectors*, *BD-1-2a Mainstream biodiversity across sectors as well as landscapes and seascapes through global wildlife program to prevent extinction of known threatened species,* and *BD-2-7 Address direct drivers to protect habitats and species and improve financial sustainability, effective management, and ecosystem coverage of the global protected area estate.* As these issues are thematically integrated within the Global Wildlife Program, and to facilitate highly-beneficial knowledge exchange and learning on nature-based tourism as a tool for long-term mitigation of HWC management, the project is proposed as a GWP child project.

The project makes the following links to the GWP Theory of Change: i) increased and diversified financing for biodiversity conservation (including for PA management and HWC mitigation) arising from ecotourism investment across landscapes of Bhutan will result in improved management of PAs and improved biodiversity management across landscapes, supporting stable wildlife populations; ii) community-based ecotourism development in Bhutan will be an effective strategy to improve local livelihoods and mitigate HWC; iii) improved policies that provide increased individual and community benefits (e.g. economic, employment, skills) from nature-based tourism will promote human-wildlife coexistence and strengthen public-private-community partnerships and support for PAs and landscape conservation agendas; iv) reduced/offset farmer economic losses caused by wildlife along with targeted outreach will shift community attitudes towards wildlife conservation and reduce local participation in retaliatory killing and poaching of wildlife, helping to disrupt local and regional markets for illegal wildlife products.

The project will make the following contributions to the GEF-7 GWP framework:

GWP Component	**Contributions of this project (and alignment to GWP Sub-Components)**
1. Conserve wildlife and its habitats	-Enhanced management and financing for biodiversity conservation at landscape level including PAs and biological corridors arising from sustainable ecotourism development and private sector investment (Sub-Component 1.1, 1.3)

	-Diversified and increased PA and landscape financing and revenue generation through ecotourism development including implementation of adopted concessions framework across unique landscapes of Eastern Bhutan, including PAs (Sub-Component 1.3) -National policy development and institutional framework for sustainable ecotourism development, providing overarching guidance and controls for ecotourism development across Bhutan and supporting ecotourism development of other initiatives such as BFL (Sub-Component 1.1, 1.3)
2. Promote wildlife-based economy	-Enhanced community support and capacity for ecotourism provides genuine alternative livelihoods for communities, boosts local economies and employment, and puts in place a long-term strategy for the prevention and management of HWC across landscapes including PAs, buffer zones and biological corridors (Sub-Component 2.4) -Local outreach helps build more positive community attitudes towards wildlife, facilitating human-wildlife coexistence and building social pressures and norms that help prevent HWC and deter participation in poaching, IWT and forest offences (Sub-Component 2.4)
3. Combat wildlife crime	N/A (encompassed within BFL; although see local outreach under Component 2)
4. Reduce demand and disrupt markets	N/A
5. Coordinate and enhance learning	-Enhanced regional partnerships and knowledge exchange on building, promoting and marketing ecotourism products and experiences (Sub-Component 5.2) -Capacity-building of national and district agencies, communities and local tour operators to support ecotourism development and create a positive link between wildlife and communities (Sub-Component 5.2) -Knowledge management to identify, document and share project best practices and lessons learned between communities, across Bhutan and with other countries establishing ecotourism and nature-based tourism in Asia and within the Global Wildlife Program (Sub-Component 5.2)

Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

Baseline	**Alternative to be put in place**	**Project impact including GEBs**
Tourism development		
Heavily dependent on culture-based tourism assets (monasteries, Dzongs and festivals) and trekking routes. Tourism limited to culture and treks mostly in western Bhutan and in April and October months due limited diversification and investments. Tour operators as major players, inadequate value chain linkages and limited community participation.	Mutually supportive and symbiotic relationship between tourism and conservation established in forms of national sustainable tourism policy, coordinated implementation of sustainable tourism master plan, conducive investment framework and institutionalized concession system.	Improved management of 200,000 ha of landscape in Eastern and Southern Bhutan, comprising forested areas (including PAs and biological corridors) that provide important habitats for globally significant biodiversity. Reduction of threats from tourism development to biodiversity from

Limited social and environmental safeguards. Limited capacity for product development, marketing and branding. Tourism will remain detached from conservation of the biodiversity resources which are the major tourism asset, leading to degradation of tourism resources and loss of international biodiversity wealth.	Diversified tourism products linking communities as well as biodiversity conservation with tourism. Tourist arrivals spread more evenly across seasons and geographical area. Growing tourism will continue to finance protected area management and conservation actions by the state, communities and the private sector.	implementation of social and environmental safeguards and waste management in sustainable tourism. Environmental social impacts accorded equal priority to experience and satisfaction of tourists.
Community and stakeholder engagement in conservation		
Community and stakeholder engagement in conservation driven by project based on incentives and subsidies provided by the state, which is not sustainable. While communities residing in the PAs and BCs have access to natural resources, there are also restrictions imposed by the conservation management regimes with limited project based on incentives and subsidies. Widespread human-wildlife conflict including substantial crop depredation and livestock predation, particularly in communities near PAs and in biological corridors. Significant livelihood impacts on affected communities. Retaliatory killing of wildlife in response to predation.	Community and stakeholder engagement in conservation driven by sustainable business based on incentives, employment and ownership provided and motivated by the inclusive sustainable tourism business model which integrates biodiversity conservation, safeguards and livelihood improvement with tourism business. Promotion of positive link between wildlife and communities and of potential economic values, building human-wildlife coexistence across landscapes.	Livelihood opportunities of communities enhanced through employment, income covering an estimated 10,000 community members including those residing within PAs and biological corridors. Reduced HWC incidences and damage; improved cross-landscape management and reduction of threats impacting globally significant species, including reduced poaching and retaliatory killing of tiger, leopard, Himalayan black bear.
Protected area management		
PA system will continue to be under-funded and continue to depend on donor financing with resultant suboptimal management effectiveness. This will have both short and long-term negative implications for biodiversity conservation as well as the tourism sector, as the tourism resources within the PAs will be degraded. BFL sets ambitious strategy to achieve self-financing of PA system within 14 years, with ecotourism a core strategy. Lack of overarching national strategy and	Local communities and tourism stakeholders engaged in biodiversity conservation, which is recognized as natural resources for sustainable tourism. PA system and natural landscapes supported by revenues generated from ecotourism and rollout of new tourism concessions framework (in partnership with and supported by BFL investment	Improved financial sustainability of protected area system and increased management effectiveness in the target PAs over at least 75,000 ha of globally significant sites (further PA benefits to be identified during PPG, in detailed discussion with co-financers). Strengthened conservation of globally significant IUCN Red-listed species such as tiger,

investment approach for ecotourism impedes replication and development of sustainable ecotourism within PAs.	and capacity development across Bhutan's PAs). PAs will continue to effectively underpin sustainable and inclusive tourism growth.	leopard, snow leopard, Himalayan black bear, musk deer.

Global *environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)*

The proposed project will generate global environmental benefits over 200,000 ha of largely forested landscape in Eastern and Southern Bhutan. The overall global biodiversity significance of this region is shown through its range of identified KBAs including Bumdeling Wildlife Sanctuary, Thimsing La and Khaling/Neoli Wildlife Sanctuary (Jomotshabkha National Park) in Eastern Bhutan. The region's high level of forest and PA coverage means that much of the landscape, including areas outside of PAs and biological corridors, provides important habitat for globally-threatened species.

Targeted attention will be placed on the easternmost part of Bhutan through a ecotourism landscape including PAs as anchors of ecotourism, but also paying attention to areas buffering and connecting PAs to promote ecotourism across the landscape to spread impacts and share economic benefits more equitably. PAs within this landscape are Sakteng Wildlife Sanctuary, Bumdeling Wildlife Sanctuary and Jomotshabkha National Park. These PAs and surrounding landscapes are currently impacted by HWC and poaching and illegal hunting of wildlife. The generation of enhanced PA revenue through establishment and demonstration of a concessions framework for PAs and landscapes will provide much-needed financing to strengthen the management of these PAs and conservation of threatened wildlife and their habitats – and importantly provide a national framework that can be adopted in support of other PA financing initiatives such as BFL. The promotion of biodiversity-friendly ecotourism will support the improved management of landscapes for biodiversity and wildlife, and also facilitate land degradation benefits (e.g. through installation of fodder stations along trekking trails to reduce overgrazing impacts on sensitive alpine habitas from portering animals). The project activities (through replication supported by aligned activities) will have an indirect impact across the full PA system of 1,640,000 ha of national parks and wildlife sanctuaries, and 33,000 ha of biological corridors, and also surrounding buffer zones and connected areas across forested landscapes.

The project also offers strong potential for climate change mitigation co-benefits through policy and advocacy that encourage ecotourism operators to incorporate low-carbon measures across their operations and activities, and these co-benefits will be integrated into project activities as far as possible to ensure achievement of multiple global environmental benefits.

The project will demonstrate livelihood benefits and sustainable alternative livelihoods for an estimated 10,000 people living near and within PAs and biological corridors in the project landscape and currently suffering substantial damage from wildlife-related crop depredation and loss of livestock, with a greater indirect reach as economic benefits and job creation through ecotourism grow and spread across Bhutan. This will help offset current farmer losses from HWC and create a positive link between wildlife and communities and help reduce poaching and retaliatory killing of wildlife including tiger, leopard and Himalayan black bear.

Engagement with the Global / Regional Framework

Innovation: The innovative approach of the project is to establish an institutionalized link between the tourism sector and biodiversity conservation in Bhutan including to ensure long-term financial sustainability for biodiversity conservation. This will help ensure that ecotourism development provides meaningful, long-term financing for PAs and landscapes. Such an institutionalized link has not been part of tourism development or biodiversity conservation in Bhutan. The project will introduce innovative solutions for developing sustainable conservation financing such as concessionary-based biodiversity-friendly ecotourism operations across the landscape including in PAs and state-reserved forests which is a significant shift in the approach to current management. Importantly these mechanisms will be applied across the landscape given the connectivity of habitats – and of landscape-wide threats to biodiversity such was HWC. The project will help support a transition from ecotourism pilots based around local homestays to integrated landscape-scale programmes of ecotourism that cluster products and experiences and help transform socioeconomic landscapes for human-wildlife coexistence and reduced threats to biodiversity.

Sustainability: The project has been developed to align to and support national policy directions and the Royal Government of Bhutan's strategic direction for tourism development. This close alignment supports project sustainability, as will the development of a comprehensive national sustainable tourism policy that provides an appropriate context for ecotourism within the overall national tourism development approach and a sustainable tourism master plan that defines priority actions for an integrated way forward for ecotourism and biodoversity conservation. Capacity development and awareness raising of all key actors in ecotourism development including government (different sectors and different levels), local communities and tourism sector will further support sustainability. The project will create different models for conservation that are centred in community involvement and the provision of sustainable economic benefits to local communities, which will help ensure long-term sustainability of project approaches and impact. Such approaches include establishment of community-based tourism ventures that support conservation and livelihoods and tourism concessions within PAs based on a conducive concession investment and operations policy framework. The project has been designed to work synergistically with two key related initiatives – BFL and the Tourism Flagship program – which is a key factor in its sustainability. Close alignment between activities for this project and co-financed activities under these initiatives improves the feasibility of this project and its potential for widespread impact, along with the likelihood that this impact will be sustained after project close. Detailed review and mapping of activities of the different initiatives has already commenced to inform initial project design. The project will help drive private sector investment in ecotourism development in Bhutan that will support the sustainability and impact of other initiatives such as BFL – and which in turn will support the scaling up of this project through replication potential across Bhutan's PA network and biological corridors (see below).

Scaling up: The approaches implemented in the selected site-specific initiatives have the potential for scaling up across Bhutan, including PAs and biological corridors, state reserved forests and natural landscapes. This will be supported by the project's partnership and co-financing with initiatives such as BFL which is investing in ecotourism development in PAs across Bhutan. This replication, along with the project's focus on national overarching policy and regulation for ecotourism development, will indirectly benefit PAs, landscapes and communities across Bhutan.

Knowledge management: The project will actively engage in the global knowledge platfrom of the Global Wildlife Program, particularly to share lessons learned and global best practices on HWC mitigation and

the development of nature-based tourism to reduce these threats. The project will also emphasize knowledge management and sharing at a national level and will put in place platforms for information dissemination and identification and sharing of best practices and lessons learned between communities and ecotourism providers in the demonstration landscape, across ecotourism areas and PAs across Bhutan and across the different sectors with a role to play in ecotourism development in Bhutan. This is captured under Output 3.3 of the project, which also covers documentation of project best practices, and their sharing with the broader Global Wildlife Program community as well as national stakeholders. Participation in the Global Wildlife Program will provide a platform for the dissemination of experiences on ecotourism development and on holistic approaches to managing HWC that might offer valuable lessons for other countries.

Child Project Title:	Enhancing management of protected areas and promoting conservation -compatible enterprises in targeted landscapes
Country:	Kingdom of Cambodia
GEF Agency(ies):	WB
Total Project Cost (GEF grant)	$ 4,422,019
Estimated cofinancing	$ 25,777,000

PROJECT DESCRIPTION

Country Context

Cambodia has experienced remarkable economic growth and poverty reduction over the past two decades. The growth has been driven to a large extent by the country's rich and diverse natural capital. Natural capital such as cropland and forest resources, account for more than 40 percent of Cambodia's wealth and contributes significantly to its economy (World Bank, 2014).

According to the National Biodiversity Strategy and Action Plan (2016), Cambodia's vision for biodiversity is that by 2050, Cambodia's biodiversity and its ecosystem services are valued, conserved, restored where necessary, wisely used and managed so as to ensure equitable economic prosperity and improved quality of life for all in the country.

At present, the Ministry of Environment (MoE) governs 49 protected areas and a number of biodiversity corridors covering over 7.4 million ha (41% of Cambodia). Its protected landscapes represent one of the highest percentages of national territory within protected areas in the world. The protected landscapes including wildlife in Cambodia is however under heavy pressure.

To ensure the sustainability of the protected area systems, in 2017, the Royal Government of Cambodia (RGC) developed the National Protected Area Strategic Management Plan (NPASMP) for 2017-2031. The NPASMP provides strategic direction and targets for improving the management of protected areas with a focus on: zoning and PA management plan development; conservation and restoration activities; law enforcement; financing PAs; and expanding livelihood opportunities for local communities.

Protected Areas (PA) hold untapped potential for development of ecotourism that can directly generate revenues for sustainably financing PAs and contribute more broadly to local and national economies. According to the Ministry of Tourism report, Cambodia received 5 million foreign tourists in 2016 and expects to get 7 million in 2020 and 11 million in 2025. By developing and enhancing Cambodia's nature-based attractions to the regional ecotourism offerings, there is a strong potential for increasing tourism revenues which could support protected area financing.

In 2018, the Ministry of Tourism and the MoE developed a policy for ecotourism to unlock its potential. This policy outlines RGC's plans to develop both large and small-scale ecotourism operations, priority ecotourism areas which include the Cardamom Mountains, and for private sector participation in ecotourism.

An enabling environment will help promote strong governance and improve the management of PA systems in Cambodia resulting in global environmental benefits including biodiversity conservation and ecosystem service benefits such as water provision and slop protection services, freshwater and nutrients

to support fisheries. An estimated 6.2 billion cubic meters of high-quality freshwater is provided by the Central Cardamoms Protected Forests (Conservation International). The project will help achieving the Sustainable Development Goals (SDGs) specifically SDG Goal 15 – Life on Land as well as the Aichi Biodiversity 2020 Targets through safeguarding key natural wildlife habitats. Specifically, the project will directly contribute to Aichi target 11 (improving the management effectiveness of the targeted PAs) and Aichi target 12 (improving and sustaining the conservation status of known threatened species).

Project Overview and Approach

A brief description of the geographical target(s), including details of systemic challenges, and the specific environmental threats and associated drivers that must be addressed

The Project's geographical target areas are the Cardamom Mountain Landscape (CML), located in the southwest and western Cambodia. The landscape forms a Global 200 Ecoregion, a secondary Endemic Bird Area, and was listed as a Level I Tiger Conservation Unit. The CRL comprises seven protected areas (2.03 million hectares which is equivalent to about 98% of PA coverage in CRL) (i) Tonle Sap Biosphere Multiple Use Area; (ii) Phnom Sankos Wildlife Sanctuary; (ii) Central Cardamom Mountains National Park; (iv) Phnom Aural Wildlife Sanctuary; (v) Southern Cardamom Mountains National Park; (vi) Tatai Wildlife Sanctuary; and (vii) Cardamom Biodiversity Corridor.

The landscape provides vital ecosystems services, including clean water supply, and carbon. It also hosts critical populations of more than 50 IUCN red-listed threatened wildlife including Asian elephant *Elephas maximus*, Asiatic black bear *Ursus thibetanus*, sun bear *Helarctos malayanus*, pileated gibbon *Hylobates pileatus*, Bengal slow loris *Nycticebus bengalensis*, dhole *Cuon alpinus*, mainland clouded leopard *Neofelis nebulosa*, fishing cat *Prionailurus viverrinus*, marbled cat *Pardofelis marmorata*, and four critically endangered species: Sunda pangolin *Manis javonica*, Siamese crocodile *Crocodylus siamensis*, southern river terrapin *Batagur affinis,* and giant ibis *Thaumatibis gigantean.*

The biodiversity and ecosystems in the CML have been under increasing threats with more than 37% of forest loss in the past 35 years. Mounting pressure for land and resources, unclear tenure, and weak governance are some of the drivers of the change.

Systemic challenges such as inadequate knowledge on wildlife and critical ecosystems, limited financial and human resources to protect PAs, lack of clear zonation within protected areas, and limited incentives for local communities to engage in sustainable management of PAs and wildlife conservation.

Specific threats include illegal and unsustainable harvesting of forest products, poaching and illicit wildlife trafficking and trade, land use changes such as forest encroachment, conversion of forests for large scale agriculture, development and infrastructure projects leading to habitat loss, degradation and fragmentation.

All of these threaten the long-term sustainability of the CML with major negative impacts on natural habitat, threatened species, cultural values, rural livelihoods and the ecotourism potential in the areas.

Describe the existing or planned baseline investments, including current institutional framework and processes for stakeholder engagement and gender integration;

The proposed GWP project will build on and supplement activities of the existing pipeline baseline investment of an IDA loan of $53.16 million, "Cambodia Sustainable Landscape and Ecotourism Project (P165344)".

The project will work with MoE (for PA management and ecotourism), National Council for Sustainable Development (for biodiversity conservation), Ministry of Rural Development (MRD) (for rural development), the Ministry of Agriculture, Forestry and Fisheries (MAFF) (for land degradation), Ministry of Economy and Finance (MEF) and Ministry of Tourism (MoT) (for ecotourism) as well as relevant development partners and other public and private sector stakeholders.

The project will build on the existing mechanism of stakeholder engagement to strengthen coordination on conservation-compatible enterprises development such as ecotourism. The project will engage UNDP, Conservation International (CI), Wildlife Alliance, and Fauna and Flora International (FFI) as partners for the implementation of activities, within the scope of the IDA/GEF funded project. In particular, the project will (i) build on UNDP's support for the government in operationalizing information and decision support systems for landscape planning; and (ii) scale up the successful interventions by CI, Wildlife Alliance, and FFI working in the targeted landscape on law enforcement, community protected areas, conservation compliant economic activities, NTFPs and ecotourism. This will ensure effective reduction of illegal wildlife trade and promote sustainable economic development.

The project will ensure gender integration, empowerment and equality, through promotion of female led entrepreneurship and business ownership. This will be facilitated through targeted coaching for women on business development and development of networks of female entrepreneurs. The project will also increase women's voice and participation in community and women's organizations by mainstreaming gender concerns into decision making, business development, and benefit sharing mechanisms.

The integrated approach proposed for the child project responds to and reflects the Program's Theory of Change, and as such is an appropriate and suitable option for tackling the systemic challenges, and to achieve the desired transformation with multiple global environmental benefits;

The project contributes to the parent's project's overall theory of change that well-managed protected areas, landscape-wide ecotourism operations provide income and alternative livelihoods for local communities, bring about a positive shift in attitudes towards wildlife and PAs, reduce threats (such as illegal wildlife trade) to biodiversity across the landscape, and provide sustainable financing to strengthen PA management and biodiversity conservation. This will be achieved through three interlinked project components that complement to the World Bank's Sustainable Landscapes and Ecotourism Project.

The project is aligned with the global efforts for climate change mitigation through effective conservation of forest resources for carbon sequestration and the GEF Biodiversity Focal Area - In particular, with Objective 1 (Mainstream biodiversity across sectors as well as landscapes through Global Wildlife Program to prevent extinction of known threatened species) and Objective 2 (Address direct drivers to protect habitats and species and Improve financial sustainability). The project aims to tackle systemic challenges

to achieve the desired transformation with multiple global environmental benefits, while reflecting on the GWP's Theory of Change, as follows:

GWP Component	Contributions of this project (and alignment to GWP Sub-Components)
1. Conserve wildlife and its habitats (Sub-Component 1.1 and 1.3)	- Enhanced knowledge of key habitats of wildlife and designations of areas for targeted conservation - Biodiversity conservation mainstreamed into landscape and development planning, through cross-sector multi-stakeholder forums and effective PA management - Adopt PA management plans for the targeted landscape - Establish diversified and increased financing mechanisms to generate revenue from ecotourism, PES and other conservation-compatible enterprises - Site-specific investments to improve PA management and promote ecotourism corridor development
2. Promote wildlife-based economy (Sub-Component 2.1, 2.2 and 2.3)	- Enhanced policies and strategies to facilitate private sector investment in PAs - Restoration and conservation compatible economic activities - Build public-private partnerships for ecotourism and value chain development - Skills Development for Local communities on business development for ecotourism, wildlife friendly agricultural products and NTFP value chain enterprises - Increased access to technical assistance for conservation compatible enterprises and accessing markets
3. Combat wildlife crime (Sub-Component 3.3)	- Improved ability of rangers and prosecutors on law enforcement and anti-poaching patrols at the site level - Deploy SMART monitoring tool
4. Reduce demand and disrupt markets	N/A
5. Coordinate and enhance learning (Sub-Component 5.2)	Enhanced capacity of national and local institutions to combat illicit wildlife trafficking and enhanced capacity and knowledge sharing between private sector companies and communities to identify, develop and manage conservation-compatible enterprises

Describe the project's incremental reasoning for GEF financing under the program, including the results framework and components.

Leveraging on lessons learned from the Global Wildlife Program (GWP) to reduce illegal wildlife trade and promote sustainable development, the project aims to mainstream biodiversity and wildlife conservation across sectors and prevent the extinction of known threatened species by addressing drivers of habitat loss and increasing financing for PAs. Results framework and components are described below.

Component 1: Strengthen Protected Area Management

This component addresses the challenges related to inadequate knowledge on biodiversity, wildlife habitats, unclear tenure, and limited financial and human resources for PA management and law enforcement to combat wildlife and forest crimes.

The project will support (i) consolidation and regular update of data on biodiversity, wildlife, key ecosystems and genetic resources to identify priority areas for core/conservation zones and targeted wildlife conservation, (ii) establishment and strengthening of CPAs to promote active engagement of communities in sustainable PA management and wildlife conservation, including support for alternative livelihood activities, (iii) development of management plans for PAs, including zoning plans and strategies for effective law enforcement, (iv) operationalization of sustainable financing options for the landscape conservation such as CCMNP Trust Fund for forest protection, REDD+, and (v) defining and operationalization of benefit sharing mechanisms under PES, and Access and Benefit Sharing (ABS).

These activities will also supplement the parent project components that aim to operationalize decision support systems for integrated landscape planning, and to strengthen law enforcement in targeted landscapes, and boundary demarcation of PAs.

Component 2: Improve Enabling Environment for Ecotourism and Conservation Compatible Enterprises

This component builds on the parent project by strengthening the government policy on private sector partnerships and community participation for ecotourism, and sustainable NTFP development.

The project will develop national guidelines and best practices, as well as to strengthen the enabling environment for Small and Medium Enterprise (SME) growth for ecotourism, and NTFPs. The project will assist MoE to develop policy guidelines for ecotourism development in PAs (including on management, monitoring, benefit sharing mechanisms etc.) and subsequent implementation in the various ecotourism sites within PAs.

The project will also develop Business Development Services (BDS) which offer training and outreach to communities, with a focus on building women-owned enterprises. The facilities will provide technical guidance on business development for ecotourism, NTFPs and conservation compatible enterprises including wildlife certified agricultural products and strengthen entrepreneurial skills of the private sector and communities in the areas of market identification and marketing, product development and management, and business plans.

The project will support different types of restoration through (i) provision of inputs for agroforestry, sustainable production of forest products, and required training/ skills development; and (ii) training on sustainable land management practices under agriculture production in the central Cardamom Mountains. This will improve the land area restored outside conservation areas.

The project will also ensure regular and close monitoring of activities and impacts of the loan project activity to improve roads for eco-tourism to ensure compliance with the plan and the World Bank's safeguards to avoid and minimize the adverse impacts of roads on protected areas and wildlife.

Component 3: Combat Illicit Wildlife Trafficking

Inadequate human resources for PA law enforcement and forest monitoring on the ground is a challenge for effective PA management, further compounded by lack of proper infrastructure, equipment, and adequate budgets for PA management.

To combat illicit wildlife trafficking, and other forest crimes and trade, and to ensure effective patrolling and monitoring of illegal wildlife crimes at the site level, the project will employ crime prevention methods, ensure that rangers are able to deploy Spatial Monitoring and Reporting Tool (SMART)[4] and enhance the capacity of prosecutors to sanction violations. Additionally, the parent project will provide the infrastructure and equipment necessary for the rangers to use these monitoring and decision-making tools.

Component 4: Institutional Capacity Building and Knowledge Management

Through knowledge sharing opportunities that take into consideration gender perspectives, the GWP project will help enhance collaboration between different stakeholders and build capacity of a network of individuals that contribute to development of ecotourism, and NTFPs and PA management. The project will share lessons learned and best practices guidelines with the broader GWP community.

Engagement with the Global / Regional Framework

Recognizing the potential to design tourism hub and models across Thailand, Vietnam and Laos, the project will contribute to the knowledge platform of accelerated learning through knowledge exchange seminars and bilateral meetings organized by the project team and the GWP Coordination team and also with CITES/TRAFFIC. The project will have a programmatic and multi-partner approach, maximizing finance for development (MFD) and allowing for scale-up. This Project follows MFD framework and aims to improve the enabling environment for private sector and entrepreneurs in ecotourism through policy actions as well as critical public investments. Importantly, the Project activities are expected to:

- ***Build government capacity to manage private sector and entrepreneurs in this sector;***
- ***Encourage ecotourism that involve various forms of public-private partnerships, including linkages to communities in and around protected areas***
- ***Enhance value chains relating to ecotourism and NTFPs***
- ***Improve business development services for ecotourism enterprises***
- ***Improve the perspectives of local communities towards PAs***
- ***Collaborate regionally on exchanging knowledge and best practices on law enforcement, combating wildlife crime and PA management***

[4] SMART is a suite of best practices, including software applications and hardware aimed at helping PA and wildlife managers better monitor, evaluate, and adaptively manage patrolling activities. CI and other NGOs have been implementing have been implementing SMART patrolling with rangers in Cambodia.

Child Project Title:	**Strengthen sustainable wildlife and natural resources management in the Republic of Chad's conservation areas**
Country:	Republic of Chad
GEF Agency(ies):	World Bank
Total Project Cost (GEF grant)	$ 4,450,170
Estimated cofinancing	$ 16,570,845

PROJECT DESCRIPTION

Country Context

The Republic of Chad, Africa's fifth-largest nation, is a landlocked country, bordered by Libya to the north, Sudan to the east, the Central African Republic to the south, Cameroon and Nigeria to the southwest and Niger to the west, it covers and area of 1.2million km2 with a population of 11.8 million5 with an average population growth rate of 2.6 per annum (2.5% for rural population) for 2010 – 20156. Chad is one of the poorest countries in the world; with 87% of the rural population living below the poverty line7, as subsistence herders and farmers. Since 2003, crude oil has become the country's primary source of export earnings, superseding the traditional cotton industry of the south. Chad is a low-income food-deficit country, ranked 184 out of 187 countries on the 2012 UNDP Human Development Index8. The Chadian government has defined its main objectives as poverty reduction, primarily through agriculture, rural development and development of human capacity, to ensure the social and economic integration of the most vulnerable population groups9.

Chad is divided into multiple biomes, in the north, a desert zone (Saharan zone), a shrub steppe, semi-arid belt in the centre and a more fertile extensive woodland savannah Sudanian zone in the south. Tropical deciduous forests (Guinean zone) exist in the extreme southern tip of the country. Lake Chad after which the country is named, is the largest wetland in Chad and the second-largest in Africa. These biomes are largely caused by differences in annual rainfall, which also govern land use by humans and the wildlife abundance. The variety of habitats existing in this spectrum of climatic conditions originally supported a richness and diversity of birds, large mammals, and other vertebrates that was comparable to the fauna of eastern and southern Africa.

However, these unique ecosystems are at risk of serious and irreversible degradation, stemming from poor management of water resources, the progressive depletion and declining fertility of agricultural soils, the intensification of agricultural production, and the encroachment of human settlements on natural forests, resulting in desertification, soil degradation, deforestation and decline in the quantity and quality of water resources. The degradation of the ecosystem is resulting in socioeconomic effects are becoming increasingly evident, as productivity and resource availability decreases.

Until the late 1970s, the scimitar-horned oryx and other desert animals such as the dama gazelle, ostrich and addax antelope, thrived in Chad's Ouadi Rimé-Ouadi Achim Game Reserve, one of the world's largest protected areas. However, in the early 1980s there was a period of extended civil unrest, leading to a devastating decline of many species, particularly the oryx and the addax from overhunting. By the late 1990s, the species was believed to have gone extinct in the wild after the last remaining individuals in

[5] UN 2012
[6] UN Data 2014
[7] WFP 2014
[8] WFP 2014
[9] MPDC – PRSP SC, National Poverty Reduction Strategy Paper 2003).

Chad and neighbouring Niger died out. Since then, the species has only existed in captivity, with over 220 zoological institutions contributing to a global captive breeding program, and other collections being held in UAE and other Gulf states.

Between 2009 and 2013, ZSL worked closely with the SCF and government partners on the Pan Sahara Wildlife Survey to collect updated information on the status of wildlife and land use in several regions where oryx were once found. The Ouadi Rimé-Ouadi Achim Game Reserve in central Chad emerged as the place with the highest potential for a successful reintroduction after surveys revealed that the Reserve, which supports large numbers of nomadic pastoralists and their livestock, still holds the world's largest remaining Dorcas gazelle population as well as healthy populations of bustards and most notably, a small population of the critically endangered dama gazelle

Concurrently, Chads wildlife populations, and specifically its elephant population, are declining. The elephant population has decreased from an estimated 300,000 in the 1930s10 was around 3885 individuals in 200611. Chads remaining elephants are around Zakouma National Park ecosystem, and in the south, along the Central African Republic and Cameroon boundary. Elephant poaching to supply the illegal trade in ivory is the forefront of this decline in numbers and distribution. The poachers are organized and equipped and will kill most of the herd in one event. The ivory from Chad is thought to be trafficked via Sudan, Cameroon or Nigeria to its end destination. The population decline in elephants and other species is worsened by habitat destruction and fragmentation for agriculture, development, and the southwards extension of the desert due to desertification. This creates barriers and disrupts elephant's seasonal movements in search for water and food, which increases human –elephant conflicts. Wildlife population decline has been further exacerbated by the long-term instability and civil wars.

The Government of Chad is committed to stop the poaching crisis and the wildlife trafficking and protect its natural resources. Chad was one of the founding governments for the Elephant Protection Initiative, and has developed a robust draft of a National Elephant Conservation and Management Strategy (NECMS), which details the multi-faceted actions needed to secure these remaining elephant populations – including improving law enforcement and judiciary; strengthening land use planning and management to secure ecosystem connectivity and functionality, and reduce habitat degradation and restore vegetation coverage; and improve community engagement for wildlife management which needs to be coupled to poverty evaluation and improved livelihoods. These actions will ultimately contribute to sustainable productivity in landscapes, and climate change mitigation measures.

To this end, the proposed project would strengthen capacity to combat illegal wildlife trade and improve wildlife and natural resources management for increased community benefits in selected areas in the Republic of Chad's.

Project Overview and Approach

Provide a brief description of the geographical target(s), including details of systemic challenges, and the specific environmental threats and associated drivers that must be addressed;

[10] Antonínová M., Malachie D.N., Banymary D., 2014: National Elephant Conservation and Management Strategy for Chad (NECMSC) 2015 – 2019. DPNRFC & African Parks, Chad.

[11] Blanc, J.J., Barnes, R.F.W., Craig, G. C., Dublin, H.T., Thouless, C.R., Douglas-Hamilton, I. and Hart, J.A. (2007). African elephant status report 2007, an update from the African elephant Database IUCN/SSC African Elephant Specialise Group. IUCN.

The targeted site is likely be Ouadi Rimé and Ouadi Achim wildlife reserve. Illegal activities take place around these sites and the project aims to work with local inhabitants in all project activities to combat poverty and create awareness about the causes of ecosystem destruction and biodiversity loss.

The project aims to reduce poaching of gazelles and other protected species circulating in the Central-East zone (Ouadi Rimé wildlife reserve and Ouadi Hachim) through the design and implementation of a plan for the integrated co-management and sustainable use of natural resources (faunas and floras) while developing socio-economic and sectoral activities for the benefit of the populations bordering the wildlife parks and reserves.

Describe the existing or planned baseline investments, including current institutional framework and processes for stakeholder engagement and gender integration;

The Republic of Chad has institutions such as the Ministry of Environment, Water and Fisheries, and the Economic, Social and Cultural Council, that have made the environment one of their priorities. The Ministry of the Environment, Water and Fisheries is the institution responsible for the quality of the environment and for the design and implementation of strategies, policies and programs that ensure the sustainable use of natural resources and the protection of the environment. It includes technical directorates and specialized agencies to combat desertification, conserve biodiversity, enforcing environmental regulations, preventing pollution and nuisances, the fight against wildlife poaching.

The ministry works with specialized agencies such as l' Agency of the great green wall (ANGV), the Agency for domestic energy and the environment (AEDE), the special Environment Fund (ESF), the national the national technical Committee for monitoring and control of environmental aspects (CTNSC). The following actions have been taken that are relevant to this project.

- The National Action Plan to combat desertification, which aims to safe guard Chad's important and threatened ecosystems - (i) to protect, restore and develop Chad's productive potential to achieve sustainable agriculture and livestock production, protected and enhanced fisheries, and to promote human habitat planning in a manner respectful of the environment; (ii) to protect and safeguard important and threatened ecosystems, in particular, Lake Chad, Lake Fitri, the Ouadis, the oasis and the koro lands ; (iii) to build human capacities and adapt legal and institutional frameworks to combat desertification, particularly among rural populations, NGOs, and public agencies ; (iv) to manage risks and uncertainties exacerbating the fragility of ecosystems and human-induced drivers of land degradation.

The National Biodiversity Protection Strategy and Action Plan (BSAP). Which aims to ensure for the sustainable exploitation of biodiversity in Chad, considering the development aspirations of the population and reconciling the objectives of local economic development with those of biodiversity conservation. It has five core objectives are to: (i) improve knowledge and monitoring of biological diversity; (ii) inventory ecosystems and threatened species and reduce criminal acts (in particular bush fires) in and around protected areas; (iii) increase use of substitution resources, including consumption of wood energy; (iv) adopt techniques for a more sustainable exploitation of agriculture, fisheries, and forests in order to conserve biodiversity; and (v) promote a more equitable sharing of the benefits of biodiversity exploitation and promotion of collective responsibility and community-based actions to promote biodiversity conservation.

National Environmental Action Plan, which defines the Government of Chad's broad strategic principles and establishes its long-term priorities for environmental protection. It seeks to establish a collaborative

framework for the implementation of activities by the Government, international partners, and NGOs, while raising awareness and increasing the participation of all stakeholders in sustainable natural resource utilization.

Poverty Reduction Strategy, which promoting good governance and the restoration and conservation of fragile ecosystems. The project will advance participation of rural communities in local development and the establishment of linkages between decentralization and ecosystem management.

National adaptation program of action (NAPA) which identifies priority activities that respond to their immediate needs to adapt to climate change, ultimately leading to the implementation of projects aimed at reducing the economic and social costs of climate change.

The protection of biodiversity, restoration of ecosystems degradation and sustainable use of existing natural resources in the project's intervention areas will be carried out through key stakeholders that include among others:

- Communities, through local organizations, ensure effective and equitable representation of all users without distinction or discrimination (farmers, breeders, women, caste and other operators) in decision-making;
- Users/clients, through their social structures, have the responsibility to adopt principles and behaviors, i.e. a code of conduct for rational and sustainable exploitation of natural resources by adapting and enacting consensual rules for all users;
- The State has a role of mentoring, information, awareness and training of grassroots communities and elected officials. In addition, it controls the regularity of natural resource management acts and provides the requisite technicality in terms of resource development;
- Decentralized communities, through elected officials/representatives, establish partnership relationships with other actors by improving communication and resource mobilization;
- The private sector, NGOs, and others) play a role of interface between the structures of the State (General Administration, technical services), the elected representatives, the communal Council and the users. As such, they have as their role the Advisory support, facilitation, training and coordination of activities between decision-makers (State, common) and users.

Describe how the integrated approach proposed for the child project responds to and reflects the Program's Theory of Change, and as such is an appropriate and suitable option for tackling the systemic challenges, and to achieve the desired transformation with multiple global environmental benefits.

The project is expected to be part of the Global Wildlife Program (GWP) Phase II. Launched during the GEF 6 replenishment cycle and expected to be expanded in a second phase with GEF 7 financing, the Global Wildlife Program serves as umbrella to coordinate and share lessons across projects aiming to reduce illegal wildlife trade (IWT). The Program's theory of change addresses key distortions and weaknesses across the illegal wildlife value chain and lack of wildlife-based land uses. It prioritizes investments in interventions that ensure that the real value of wildlife is reflected in land use planning and incentives for local communities and in interventions to combat wildlife crime. The Republic of Chad interventions sees both strengthening of the state-led enforcement efforts and community engagement in wildlife-based development as essential in tackling the IWT crisis. Component 1 of the project will provide focused support to the implementation of activities to strengthen the protection of key wildlife and combat illegal wildlife trade. This falls within Component 1 of the GWP Phase 2 framework. Component 2 and 3 of the project will support efforts to empower communities in and around PAs to be stewards and beneficiaries

of wildlife and develop agrosylvopastoralism activities which will protect the ecosystems and restore habitats and improve community livelihoods and engage them in supporting wildlife conservation. This falls within Component 1 (Conserve Wildlife and Habitats), Component 2 (Promote Wildlife-based Economy) and Component 3(Combat Wildlife Crime) of the GWP phase 2 framework.

Describe the project's incremental reasoning for GEF financing under the program, including the results framework and components.

Under the business as usual scenario, the government will continue to improve Chad's ability to prevent, combat and investigate wildlife trafficking in silos i.e. when government departments do not share information, goals, tools, priorities and processes with other departments. This project will build on the collective efforts of the different government institutions and counterpart civil society organizations and supplement the considerable level of baseline domestic resources and philanthropic and business investments already committed, to combat illegal wildlife crime. The project will specifically assist the Government of the Republic of Chad in addressing key resource and capacity constraints to the effective implementation of three secondary objectives: The protection of biodiversity, restoration of ecosystems degradation and sustainable use of existing natural resources. It will do so through four interrelated components:

Component 1: Protect wildlife and habitat: This component will support the following activities:

Infrastructure and Equipment: a) Periodically assess equipment requirements; b) Perform regular checks on the operating status of the equipment; c) Develop and distribute the appropriate communication documents at the level of each type of stakeholder; d) build infrastructures including a living base, fixed and mobile posts.

Strategy and Training: a) Prepare and execute resource restructuring plan for better protection of wildlife and natural resources; b) Evaluate safety and efficiency of the local unit and the needs of law enforcement personnel; c) Provide equipment and training for surveillance of illegal activities in the project areas; d) Create a network of information connected to the Central Office; e) Train key personnel and anti-poaching units on the collection of data, use GPS, Radios and other communication equipment; f) Proactively deploy patrols across the entire area; g) Collect consistently information on the movement of patrols, illegal activities, observations of endangered species and then analyze and update the operational maps; h) Using satellite track of the most vulnerable populations of fauna and flora for security reasons (combating poaching and food insecurity). The project will also support the rehabilitation of the MEEP training center.

Component 2: Sustainable Management of Natural Resources to Support Community Livelihoods: This component will support the following activities: a) Support the enabling conditions for sustainable management of natural resources by local communities through the provision of technical advisory services and equipment to conduct community land zoning, natural resource mappings, carrying out of training and capacity building of local community members and leaders and community-based organizations on decision-making, accountability, transparency, local governance, business planning and management, use and management of funds, partnerships with the private sector and use of information technology; b) Support the development of revenue generating activities around parks, including agroforestry and restoration of vegetation soils resilient to climate change (supply of wood energy bonuses), apiculture for HWC resolution and income diversification; fish farming to diversify income and Ecotourism; also the project will fund technical assistance, equipment and materials (seeds) to establish community nurseries for arid and semi-arid endangered species for reforestation c) Support for the

implementation of "local development plans" for the villages around the parks; d) Review HEC efforts, actions and effectiveness in Chad, and investigate more sustainable approaches such as environmental risk insurance schemes, locally based community reserves compensation schemes

Component 3: Combat Wildlife Crime: This component will support the following activities: a) Revise the existing laws and recommend implementing legislation to obtain substantial minimum sentences against illegal hunting and the possession or trade of elephant products and from other species; b) Strengthen and operationalize the Directorate of business litigation of the Ministry in charge of the environment for better coordination with courts; c) provide to all members of the national judicial system information to raise awareness about the protection of the fauna and flora; d) Promote regular dialogue with Country neighboring organizations that combat illicit trafficking and trade issues to harmonize their position in relation to the debates on the shops and sales of products of wild faunas as well as the policies and legislation around wildlife trade and crime; e) Work with the international CITES community, on a continued moratorium of ivory trade; f) collaborate with NGO initiatives such as EAGLE to combat illegal ivory trade; g) Conduct an outreach program on crimes and laws in key provinces; h) Conduct an environmental education program in schools for the protection and conservation of wildlife and flora in general.

Component 4: Capacity Building and Coordination
This component will support capacity building workshops for key stakeholders to enhance coordination and cooperation and it will support monitoring, procurement, management of all other components as well as prepare reports to the donor.

Engagement with the Global / Regional Framework

Knowledge management and learning exchanges are core elements of the Chad project's design and implementation and is including capacity building activities, training, south-south exchanges, visiting fellowships in all components. The project will develop cross-sectoral platforms to foster collaboration and knowledge exchange and communication and promote linkages to successful platforms in Chad and in the region. The project will also promote the sharing of experience and best practices between project stakeholders at the local, sub-national and national levels and with peers from other GWP projects. Being part of the GWP, the project will benefit from the Global Coordination project that will promote knowledge exchange between the participating countries, ensuring that emerging knowledge is captured and capacity building activities are well tailored to the needs of the countries' and their stakeholder groups at all levels (local, regional and federal governments from environment and other sectors, indigenous and communities, farmers and producer associations, private sector, other decision makers, etc.). Criteria and mechanisms will be set to ensure participation in knowledge events is prioritized and the participants will be those with the possibility of implementing the lessons and//or share with peers.

The Global Wildlife Program Coordination project will collaborate and co-finance knowledge and best practice exchanges between stakeholders of the project and the national, regional and global community. This can include conference, analytical papers, technical workshops and study tours to support capacity building of the project's stakeholders. In addition, the knowledge and data platform that the project will design, and use will be inter-linked to other platforms that the GWP global program will implement. This will allow the rapid uptake of information and support data-driven decision making.

Project Title:	Kabobo-Luama Protected Area Landscape Management
Country(ies):	Democratic Republic of Congo
GEF Agency(ies):	UNDP
Total Project Cost (GEF grant)	$ 3,730,734
Estimated cofinancing	$ 7,700,000

PROJECT DESCRIPTION

County Context

The Democratic Republic of Congo (DRC) harbours extensive natural resources including substantial areas of primary forest that provide refuge for globally significant endangered species. The country has a long history of protected area management, and was the first country in Africa to create a national park in 1925 (Virunga NP). Presently 11% of DRC is protected in reserves, and the government continues to expand efforts to protect its forests. The country has put in place several policy frameworks and strategies that are relevant to environmental sustainability and biodiversity conservation at the level of the targeted project area, including:

Growth and Poverty Reduction Strategy Paper (2011-2015 GPRSP), which places the environment, climate change and gender among key factors contributing to sustainable, inclusive economic and social development.
National Biodiversity Strategic Action Plan (2016-2020), which aims to integrate biodiversity conservation considerations into longer-term sustainable development approaches.
National Strategy for Nature Conservation (2005) that focuses on institutional rehabilitation and site-level management of PAs; and the National Forest and Nature Conservation Program (2007), which aims to strengthen capacity of the ICCN and increase coverage of PA systems from 11% to 17% of the national territory.
REDD+ Framework Strategy (2012); REDD+ Investment Plan 2015-2020 (started implementation in 2016).
National Action Plan for the implementation of the Strategic Action Programme for the Lake Tanganyika Basin (2012), which aims to achieve sustainable integrated management of the lake catchment and its natural resources, including through environmental protection.
Stratégie Sectorielle de l'Environnement for the Tanganyika Province (2018-2022), which aims to achieve climate change mitigation and adaptation through forest protection, biodiversity conservation, avoidance of land degradation and capacity enhancement.

While progress has been made in protecting DRC's environmental assets, there are substantial challenges related to the needs of a growing and increasingly destitute population. Deforestation and forest degradation continues to be a threat resulting from expanding slash-and-burn agriculture, logging, fuel wood and charcoal production, as well as mining activities. Corruption, incursions by armed rebels, poaching, illegal trade in wildlife and wildlife products, weak law enforcement, and insufficient funds provide additional challenges for forest management and biodiversity protection. The project will be designed to address several of these key drivers, focusing on an area that has been identified as Africa's most biodiverse ecoregion.

Project Overview and Approach

Provide a brief description of the geographical target(s), including details of systemic challenges, and the specific environmental threats and associated drivers that must be addressed;

The Kabobo-Luama Landscape (667,305 ha) is situated in the Albertine Rift region, which forms part of the Eastern Afromontane Biodiversity Hotspot and is one of Africa's most biodiverse eco-regions, containing more endemic and threatened vertebrates than anywhere else on the continent[12]. The landscape is located in eastern DRC along Lake Tanganyika and comprises three protected areas: Kabobo Wildlife Reserve (147,710 ha), Luama Hunting Reserve (230,351 ha), and Ngandja Natural Reserve (289,244 ha). The Landscape covers a diversity of terrestrial habitats including forest types ranging from 750-2700 metres (one of the few places in the Albertine Rift where this altitude range is protected), as well as Miombo woodland and grasslands. The landscape also includes marshes, streams, and rivers that flow into Lake Tanganyika, which itself is recognized as a global freshwater biodiversity hotspot. Both Ngandja and Kabobo Reserves include a diversity of littoral habitats that provide important fish breeding sites for local fishermen. The area harbours an important population of chimpanzees (*Pan troglodytes*), as well as other threatened mammals including elephants (*Loxodonta africana*), lion (*Panthera leo*), and hippopotamus (*Hippopotamus amphibious*), in addition to bongo (*Tragelaphus euryceros*), red river hog (*Potamochoerus porcus*) and giant forest hog (*Hylochoerus meinertzhageni*). The landscape furthermore provides a range of ecosystem services, including provision of freshwater, which benefits not only local communities but also the population of the capital of the Tanganyika Province, Kalemie (including through the hydropower dam at Bendera, which generates power for the city). A feasibility assessment for ER-PIN for REDD+ financing estimated that adequate protection of the landscape could conserve 7 million tonnes of CO_2 over a 30 year period.

Despite its rich biodiversity, socio-economic and cultural significance, the landscape is faced with several direct and indirect threats:

Poaching, unregulated hunting and fishing: Unregulated hunting of large and medium mammals and birds for bushmeat in the area is widespread, resulting in a significant declines. Armed commercial poaching is another concern and is mainly conducted by rebels and some members of the army, particularly in areas close to South Kivu where bushmeat is sold in Uvira town. Elephants are threatened by poaching, and fewer than 10 individuals are estimated to remain. Hippopotamus, bongo and buffalo population numbers are low. Numbers of primates such as chimpanzees and Prigogine's colobus are also low. Expanding fishing fishing activities and illegal use of small mesh sizes and beach seining methods are increasing concerns.

Unsustainable timber exploitation**:** Increasing timber and charcoal production to respond to needs from neighbouring towns, Fizi and Kalemi city.

Deforestation and encroachment for agriculture and pasture: The traditional practices of setting fires to hunt large animals and shifting cultivation, continue to result in loss of forest and woodland. The area hosts increasing numbers of migrants from other provinces and neighbouring countries, who are establishing themselves within or around protected area boundaries. Many have settled illegally in the Luama-Katanga Reserve resulting in increased deforestation for expansion of agricultural lands.

[12] The Albertine Rift Mountains are also recognised as Endemic Bird Area: http://datazone.birdlife.org/eba/factsheet/97

Mining impacts: Mining for gold, coltan, and cassiterite is fairly widespread and is mostly conducted by local people and migrants with support from local chiefs to whom a regular tribute is paid. Clearing of the vegetation on banks of rivers and streams is affecting riparian and aquatic habitats. Larger mining concessions for exploration also exist across much of the area, and could present a future threat.

Climate change impacts: Modelling of climate change in the Albertine Rift predicts that this region is likely to become drier overall, and rain will fall more heavily in wet seasons with longer dry seasons. As a result, erosion is likely to increase during wet seasons leading to siltation of biodiversity-rich shallow littoral habitats in Lake Tanganyika, with negative impacts on fisheries. Longer dry seasons are expected to increase the 'hungry period' between harvests.

Describe the existing or planned baseline investments, including current institutional framework and processes for stakeholder engagement and gender integration;

Baseline: In order to address the threats, a range of efforts are being made. At the national level, the Land Management Programme (Programme d'appui à la réforme de l'Aménagement du Territoire) started in 2017 in the framework of FONAREDD (Nation REDD+ Fund in DRC). The $4 million UNDP-supported programme funded by the Central African Forest Initiative (CAFI) addresses issues of zoning for mining, timber extraction and other extractive activities. The $10 million, 4-year National Forest Monitoring System Project (Système National de Surveillance Forestière - SNSF), which is implemented with support from FAO also started in 2017 in the framework of FONAREDD, aiming to strengthen national capacity for forest monitoring. The USAID-funded Central Africa Regional Program for the Environment (CARPE Phase III) Regional Development Cooperation Strategy (RDCS) 2011-2020 builds on previous successes in forest cover monitoring and management. The German Government (BMZ and GIZ) also has provided longterm support to sustainable natural resource management and forest protection in DRC, including in the Maniema and South Kivu Provinces (€ 24 million for 2016-2019). Furthermore, the EU committed €20 million to protect forests, support biodiversity conservation in the Congo Basin, which includes an initiative on strengthening capacity of civil society to combat wildlife crime (2018-2022).

The Provincial Government of Tanganyika developed a 5-year plan covering the period 2016-2021 based on ecological best practices, with an emphasis on sustainable fisheries and forestry. For implementation of the plan, the provincial government established a task force to combat illegal fishing in the Tanganyika region. ICCN have oversight and management mandate over all three protected areas (Luama, Kabobo and Ngandja). Luama-Katanga (created in 1954) has had no permanent staff presence since 1996. In the newly created reserves of Ngandja and Kabobo, local 'monitors' have been recruited but do not yet have full ICCN-mandated authority. WCS has been working in the region for 12 years, following initial reconnaissance by air in 2006 that led to biological surveys in 2007 and socioeconomic surveys in 2008, which identified that the Kabobo Massif was one of the most biodiversity-rich parts of the Albertine Rift. In 2015, a Conservation Action Plan for the Kabobo-Luama landscape was developed through extensive stakeholder consultations. The CAP completes the detailed landscape-scale planning proposed in the Strategic Framework Plan for the Albertine Rift that was developed in 2004.

Describe how the integrated approach proposed for the child project responds to and reflects the Program's Theory of Change, and as such is an appropriate and suitable option for tackling the systemic challenges, and to achieve the desired transformation with multiple global environmental benefits;

Long-term vision and barriers to achieving it: The baseline activities, although significant, fall short of the proposed long-term solution of effective management of the Kabobo-Luama Landscape and individual

PA units that harbour globally significant biodiversity. An improved protected area landscape would effectively safeguard biodiversity from existing threats, backed by sufficient institutional capacity and community support. There are, however, a number of barriers to achieving this solution:

Barriers: There are three key barriers to protecting the rich biodiversity of the Kabobo-Luama Landscape to ensure sustainable management of natural resources where local communities could benefit from revenue generated by innovative and sustainable activities.

Barrier 1: Insufficient institutional capacity at all levels for protected area landscape management
Until recently, this region was part of the Katanga Province. ICCN was poorly resourced, and as a result there has been no management presence in Luama Hunting Reserve since 1996. In 2014, the Province of Tanganyika was established and a new Provincial Ministry for the Environment established, which is staffed but poorly resourced and with insufficient capacity to manage and implement programs. There is a need to strengthen the operations of this institution to better manage the landscape. The landscape plan specifies that a management committee oversees the plan's implementation, and that this committee is comprised of members of government, traditional leaders from the local community, ICCN and WCS. While the committee has been established, members have insufficient knowledge of biodiversity conservation, wildlife management or protected area management. The Province of Tanganyika was only established in 2015, and there is a real necessity for enhancing capacity at all levels. Effectively, most people are new to working in conservation in this region, and need enhanced skills and knowledge on how to effectively manage protected areas and address threats to biodiversity including the illicit wildlife trade while engaging local communities. This is seen as an opportunity because there are no entrenched positions or approaches and people are willing to learn.

Barrier 2: Management of protected areas and law enforcement is insufficient to ensure biodiversity conservation with limited to no involvement of local community members
The recent creation of Ngandja and Kabobo Reserves has created a situation of urgent need for resources to fully establish these reserves, and to enhance wildlife populations so that the options of tourism and other income generation becomes possible. The lack of permanent staff in the Luama Hunting Reserve since 1996 has affected its ability to adequately protect the park, with substantial encroachment and poaching as a result. Since 2011, WCS has engaged 28 members of the community to provide monitoring information across the landscape. There is a need for more active management of the sites, and local ownership by engaging additional people from the community (including Batwa) as rangers who can contribute to active onsite law enforcement and biodiversity conservation. Park staff are restricted in their ability to monitor the landscape, and there is a need to invest in vehicles and boats to enable regular patrols. Staff remain to be fully equipped, as do the ICCN offices within the landscape and in the Ministry of Environment in Kalemie. Communities need to be fully engaged to agree on the boundaries and internal zoning of Ngandja Natural Reserve, and complete zoning of the Kabobo Wildlife Reserve. Capacity is needed to enable appropriate zoning and mapping to take place, and to obtain legal agreements for zones and limits at the national level. Particular attention needs to be given to the indigenous Batwa groups who are marginalized as rights-holders. Through the implementation of an improved joint management protected area governance model that empowers local community rights in a fair and transparent manner, there is potential to reduce conflict at the same time as promoting DRC's commitment to safeguarding natural habitats.

Barrier 3: Low levels of socio-economic development, subsistence, and limited opportunities for income generation leading to unsustainable use and over-exploitation of natural resources

There is strong local community support for the protected area of the Kabobo-Luama landscape. However, A socioeconomic survey of communities living around the Mt Kabobo massif undertaken in 2008 demonstrated that people were very poor, even in comparison with most communities in eastern DRC. The humanitarian situation in the DRC is of great concern. Armed conflict and general insecurity have created one of the world's most complex and protracted humanitarian crisis. About half a million people have been displaced since the last escalation of fighting in Katanga province in September 2013. DRC has monumental humanitarian needs for these highly vulnerable populations, especially in terms of food, health, shelter and protection. Human development is low (with an HDI of 0.433, DRC ranks 176th out of 188 countries), and poverty is widespread with more than 61% Congolese living below the poverty line. The project area is remote and generally lacks basic services – access the forest is important for local communities who rely on numerous forest products, particularly building poles, fuel wood, ropes/lianas, medicinal plants, and who value certain cultural sites of religious significance.

Barrier 4: Weak knowledge management and gender mainstreaming
Limited collection and sharing of reliable data information and knowledge remains a substantial hurdle to ensuring effective support for biodiversity conservation and ecosystem management in DRC. Similarly, monitoring of gender-related aspects and mainstreaming of gender disaggregated data into policies and programmes is not routinely practiced. Additionally, the minimal amount of information available creates challenges regarding sharing and scaling-up of successes and lessons learned in efforts being supported by international, national and local actors. Promoting robust M&E processes and sharing of informationis essential for adaptive management, replication/upscaling of good practices, and overall improved management of environmental governance.

Describe the project's incremental reasoning for GEF financing under the program, including the results framework and components.

The project Strategy**:**
In the proposed alternative scenario, the project will seek to ensure the ecological integrity of the Kabobo-Luama Landscape, through conserving its unique and rich biodiversity and working with the local communities to facilitate sustainable management of natural resources across the three protected areas that make up the Kabobo-Luama Landscape complex. The proposed project will also work to ensure that local communities benefit from revenue generated by innovative and sustainable activities and continued provision of ecosystem services. Four components have been designed to respond to the identified barriers described above and to tangibly contribute to the long-term solutions proposed above.

Component 1: Institutional capacity for PA landscape management and conservation of endangered species
The Management of the Kabobo-Luama Landscape is piloting a new approach in DRC by engaging communities in joint-management together with ICCN and the Ministry of Environment. To oversee the implementation of the landscape plan, a Management Committee comprising government officials, traditional leaders from representative communities, including indigenous communities, and members of the conservation community. There are also additional committees for managing microcredit schemes, regional management of the reserves and for conflict resolution, which all include members of villages in the region. This project will build on these existing initiatives through developing and implementing a conservation training program that aims to enhance capacity of stakeholders who benefit from/are involved in managing the landscape. In particular, the capacity of Tanganyika Ministries will be strengthened to engage in the effective management of the Kabobo-Luama Landscape and work to ensure that policies support wildlife conservation. Targeted training of Ministry staff will be supported to manage

environmental issues at Provincial level. Tools and systems developed by the International Consortium on Combating Wildlife Crime (ICCWC) will be used to enhance capacity to address poaching and trade in endangered species. The project will also provide essential equipment to the Ministry of Environment in Tanganyika Province to enable effective oversight of management of Kabobo, Luama and Ngandja Reserves. Additionally, local institutional capacity will be strengthened for implementation of the landscape management plan, through formation of well-trained local community-led governance structures. Training of communities and local government institutions will also be supported.

The project component is expected to result in improved management of the Kabobo-Luama Protected Area Landscape covering 667,305 ha, indicated by: (i) improved institutional capacity for the landscape management as per UNDP institutional capacity development scorecard; (ii) stable or increased population of key species such as chimpanzee, hippopotamus, and elephant monitored using encounter rates from SMART; (iii) enhanced functional connectivity between the protected areas.

Component 2: Enhanced Protected Area Management

The project will enhance the management effectiveness of the Kabobo Wildlife Reserve, Luama Hunting Reserve, and Ngandja Natural Reserve through a phased implementation process in that order. While extensive consultations were made to establish boundaries and agricultural zones for the Kabobo Reserve as well as the forest part of Ngandja Reserve, there have been much fewer consultations for the savannas and wetland areas of Ngandja Reserve due to an unforeseen opportunity to establish the reserve separately from Kabobo (given it is in South Kivu Province). Consultation wil take place with villages in and around the Ngandja Reserve to agree on boundaries using a Free Prior and Informed Consent process (FPIC) prior to any management implementation. Additionally, the project will provide support to gazetting of the Kabobo and Ngandja Reserves as National Reserves (they are currently Provincial Reserves). Preparation of gazettement documents including zoning maps and FPIC consultations with communities in Ngandja Reserve will be supported to define acceptable limits of the reserve.

Esential infrastructure and facilities will be established and support provided to staffing for the effective management of the landscape and protection of wildlife. One structure will be put in place with a decentralised system of management at each reserve. Additional patrol posts will be established (at least 5) across the landscape at strategic locations and additional buildings constructed at the existing headquarters. Office and field equipment to enable park management and conservation work will be purchased including transport equipment, camping equipment, uniforms, boots, etc. In each reserve, communities will be actively engaged to agree on management zones that include: core protected zones where no human use will take place; sustainably managed areas for hunting, timber and other forest products; artisanal mining areas that will be managed with no bushmeat hunting; and agriculture zones and development zones for the existing villages. Demarcating the limits of the protected areas and the agreed zones is considered a priority for the landscape and will also use an FPIC approach. The process has already been piloted in Kabobo Reserve to identify development and agricultural zones by WCS. Additional staff will be recruited from among the local communities and given training in conservation management to become rangers, as well as additional on the job mentoring for staff at more senior levels. Institutionalisation of the PA management will be supported. Training in the use of data collection for SMART software will be a focus for rangers, and the data captured will be used to improve management of the region as well as identify zones for the protected areas. Biodiversity surveys will be made of the savannas and wetland areas of Ngandja to identify possible areas of importance for the conservation of rare and threatened species as well as potentially identify new species. These surveys will help identify critical sites for core protection zoning.

The degradation of forest in Luama Reserve through the in-migration of people will be addressed with the Provincial Government using a multipronged approach. Where this is achievable, the habitat destroyed will be rehabilitated following resettlement. Rehabilitation of any degraded habitat will be done through community tree planting schemes. Tree planting for fuel wood and timber needs will also be supported around Kalemie and some of the large villages in the landscape to reduce the pressures on the natural forest in future.

Lake Tanganyika is one of the most biodiverse freshwater lakes in the world and many of the species are unique, with 89% of fish endemic to the lake. Part of Ngandja Reserve includes the lake shore and some parts of Kabobo Reserve include the lake. However there are no agreed fishing zones and protection areas for spawning grounds. This project will identify spawning areas and sites where no-fishing zones will be established with communities to ensure the fishing of the region can be sustainable over the long term.

The project will also assess options for sustainable financing of the landscape through supporting development of the PA complex business plan. While in the long term tourism has a great possibility in the landscape with good beaches on the lake north of Kalemie and open grasslands for game viewing as well as unique species in the forests for specialist tourists, there is a need to re-build wildlife numbers to be able to attract tourists to the region. Security needs to be re-stablished in the immediate region, although the improvements in governance of forest resources through this project would aim to reinforce security-conservation partnerships and reduce conflict in the area, to this end. WCS has already evaluated the carbon sequestration services of the landscape but the water provision, particularly with likely climate change will also be important to evaluate. REDD+ financing will be an important component of the financial plan.

The key outcome of this component is increased management effectiveness of three reserves as indicated by: (i) upgraded status of the Kabobo and Ngandja Reserves; (ii) increase in the score of the Management Effectiveness Tracking Tool; (iii) reduced threats such as illegal hunting, encroachment by mining and timber extraction etc; and (iv) improved habitat conditions.

Component 3: Improved livelihoods within the buffer and corridors

There are approximately 100,000 inhabitants in the Kabobo-Luama landscape, and they are largely poor and subsistence farmers as well as fishermen. While support for conservation of the landscape is good and people are engaging well with the structures that have been established to manage the landscape plan, there is a need to evaluate options for providing tangible benefits to the community to ensure this support continues. These benefits need to be appropriate both for the conservation of the landscape and help target threats to the landscape. Bushmeat harvesting is one of the major threats to re-establishing healthy populations of targeted wildlife (e.g. antilopes) and therefore the project will support assessments and implement options for protein substitution (e.g. farming guinea pigs and chickens) as well as working with fishermen to access fish markets more easily. A detailed feasibility assessment will be carried out during the PPG phase to identify the most suitable (socially and environmentally) options for improving livelihoods. Fuelwood and timber is also a growing issue in and around large urban centres such as Kalemie and some of the larger villages in the landscape (Baraka, Misisi, Lubondja, and Ngalula Bachanga) and the project will address this by developing privately owned plantations with community individuals who are willing to invest time in managing plantations for the longer term. The focus of the plantation work will be around Kalemie and will also be monitored for its contribution to carbon sequestration and rainfall over time.

Development of micro-entrepreneurship programmes in the communities in and around the landscape is seen as an essential mechanism to broaden livelihood options and reduce dependence on the natural resources of the landscape. Expertise in Micro-entrepreneurship will be engaged to assess options for business and develop a program of micro-credit to start businesses that are viable in the landscape over the short and medium term.

Component 4: Gender Mainstreaming, M&E and Learning

This component will focus on ensuring gender mainstreaming, monitoring and evaluation and lesson collation and dissemination with a view to guiding adaptive management and promotion of uptake of successful approaches and best practices. Based on the gender analysis and action plans to be developed during the PPG, the project will ensure that decisions made, and interventions proposed for implementation, take into account potential impacts and outcomes for different groups within society, and in particular focus of roles played by men, women and youth. Capacity building programs will be developed accordingly for each of the groups in the governance structure, indigenous groups, that integrate specific socio-cultural needs.

The local Management Committee for the landscape has been developing internal organisational documents to establish their internal management system and to define roles and responsibilities of the various members. Concurrently they are designing the charter that describes key principles and values that describe the Management Committee vision, including strong rights for the Batwa indigenous groups. Under this project, these documents will then be endorsed by provincial authorities and shared with partners after advice of a national legal expert.

The project will promote a participatory approach to monitoring, evaluation and learning. It will therefore support the development of monitoring and evaluation protocols that involve all relevant local stakeholders, including local institutions and communities and indigenous Batwa. It will establish a platform for sharing experience, knowledge and skills among project beneficiaries as well as within the institutions tasked with management of resources in the landscape.

Standardized monitoring tools for natural resource governance and household wellbeing have already been deployed by WCS in several areas across DRC and would be applicable here. Additionally the SMART software tool used by rangers (community and ICCN) for monitoring threats to wildlife and protection efforts is already deployed by ICCN in the Kabobo landscape, providing standardized indicators and reports for adaptive management.

In addition, the project will ensure a systematic and thorough documentation and collation of lessons learnt from project implementation, and share this learning/knowledge with other stakeholders beyond the project, including at the national level, with policy-makers, and at the regional and global levels. The project will develop knowledge products and conduct analysis of specific project results and share these at local, regional and global workshops and conferences, and through other fora and platforms.

Engagement with the Global and Regional Framework

The project is in alignment with the GEF-7 Focal Area objective to address direct drivers to protect habitats and species and improve financial sustainability, effective management, and ecosystem coverage of the global protected area estate (BD-2-7) we well as with the Global Wildlife Program through its objective to mainstream biodiversity across sectors as well as landscapes in order to prevent extinction of known

threatened species (BD-1-2a). The project will contribute to achieving the GWP objective to promote wildlife conservation and crime prevention for sustainable development through:

GWP Component	Contributions of this project (and alignment to GWP Sub-Components)
6. Conserve wildlife and its habitats	• Enhanced management of protected areas (GWP Sub-Component 1.1) • Diversified and increased financing sources and mechanisms for conservation (1.3)
7. Promote wildlife-based economy	• Stimulate wildlife-based economic development through community participation (2.3)
8. Combat wildlife crime	• Strengthened frameworks and increased (local) political recognition of wildlife crime as an issue that can hamper sustainable development (3.1) • Enhanced capacity to generate, analyze, and share actionable information and data on illicit wildlife trade (3.2)
9. Reduce demand, disrupt markets	• n.a.
10. Coordinate and enhance learning	• Improved coordination cooperation among key stakeholders including regional level coordination targeting specific species (5.1) • Promote knowledge management and capacity building (5.2) • Program-level monitoring (5.3)

Summary of incrementality and global environmental benefits:

Baseline situation	*Alternative practices to be facilitated by project*	*Global benefits*
Habitat fragmentation and degradation trends caused by the range of identified threats in the Kabobo-Luama Landscape will continue and likely accelerate. Unsustainable timber exploitation and poaching will continue, degrading habitats and driving some species to become locally extinct. There will be little if any investment in protected area management resulting loss of unique biodiversity. Unsustainable agricultural practices continue, based on clearing of old growth forests and poorly controlled use of fire, degrading the Kabobo-Luama landscapes.	Protected area landscape management system will be established with institutional capacity under an approved management plan, governance and management structure, resulting in reduced habitat fragmentation and degradation. Increased capacities of individuals and institutions that are responsible for managing the protected areas in the target landscape. Increased investment in protected area and species management. Production activities such as mining, fisheries and agriculture are better regulated and monitored reducing threats to the protected areas. Livelihoods of protected area resident and neighbouring communities diversified with increased income and opportunities for environmentally sustainable livelihood options. Community management approaches is piloted that will inform similar approaches across the Congo Basin.	Improved management of the Kabobo-Luama Protected Area Landscape covering 667,305 ha of globally significant ecosystems and endemic species. ▪ Increased management effectiveness of the Kabobo, Luama and Ngandja Reserves, including upgrading of the reserve status. ▪ Enhanced protection of globally significant biodiversity, including chimpanzee, hippopotamus, lion,

		elephant, and endemic species unique to landscape.

Innovation, sustainability and potential for scaling up

The project pilots a new approach to protected area management in DRC, including the establishment of structures that incorporate traditional local community leaders in decision-making processes and active management of the landscape. At present, while community-based natural resource management is increasingly seen as important in DRC, there is no other concrete example where the management of a protected area is actively and jointly overseen by community leaders together with government and ICCN. Through the present management arrangements that are being piloted with support from WCS, there is increasing evidence that having local leadership and support will significantly reduce threats to the protected areas, reduce conflict through strengthened governance, capitalize upon the new provisions for resource tenure under the DRC Forestry law, and thus make the landscape more sustainable in the long term. In order to ensure sustainability, the project will enhance institutional capacity for effective protected area and landscape management. The project will furthermore explore sustainable financing to enable effective longer-term management of the landscape, which is likely to include a significant regular income through the Forest Carbon Partnership Facility. These approaches are unique in DRC and have high potential for replication and scale-up across the country.

Child Project Title:	Integrating landscape considerations in wildlife conservation, with emphasis on jaguars
Country:	Ecuador
GEF Agency(ies):	UNDP (lead for child project)
Total Project Cost (GEF grant)	$ 1,788,991
Estimated cofinancing	$ 8,944,955

PROJECT DESCRIPTION

Country Context

Ecuador's environmental challenges related to wildlife management, and the strategic approach being put forward by the government and its partners, closely reflect the overall goal and approach of the GEF-7 Global Wildlife Program.

As a megadiverse country that recognizes the value of its biological riches, Ecuador has created a public policy framework that emphasizes conservation of wildlife and wild places. In 2008, Ecuador was one of the first countries in the world to recognize the Rights of Nature in its Constitution, as stated in Article 71, which mentions that "Nature, or Pacha Mama, where life is reproduced and occurs, has the right to integral respect for its existence and for the maintenance and regeneration of its life cycles, structure, functions and evolutionary processes."

Ecuador´s development and conservation projects need to be framed within the priorities of the National Development Plan, 2017 – 2021 , which includes Objective 3 of Aim 1 to "Guarantee the rights of nature for current and future generations." This involves better and more integrated conservation approaches that result in more effective and cost-effective results.

The Ministry of Environment developed the National Strategy for Biodiversity, 2015-2030 and an accompanying action plan, which materialize Ecuador´s commitments to the UN Convention on Biological Diversity (CBD) and reinforce the need for wildlife conservation in the country. With the support of the Wildlife Conservation Society, the Ministry of Environment developed the National Jaguar Conservation Plan in 2015. Its main goal is to maintain and restore, in coexistence with people, viable populations of jaguars as an integral part of ecosystems and landscapes across Ecuador. The objectives of the plan are: i. Create a network of interested parties including local communities, local governments, national government, researchers, and citizens; ii. Develop and implement new models and methods to ensure the coexistence of jaguars with people; iii. Disseminate valuable experience and knowledge from different countries in Latin America; and iv. Encourage public discussion on the future of jaguars in Ecuador, especially with regards to rural livelihoods that maintain the economic and social well-being of local people as well as conserve viable populations of jaguars. The main issues that the plan addresses include: i. Conservation of jaguar populations and their habitats on both sides of the Andes; ii. Integration of jaguar conservation into local government development plans; iii. Support for jaguar conservation through appropriate legislation, policies and economic instruments; and iv. Information and public awareness with the aim of obtaining the acceptance of large carnivores by all sectors of society.

Though insufficient, investments have been made through fiscal and project resources to build capacity for wildlife management, reduce wildlife trafficking, promote sustainable production and reduce wildlife conflict in areas adjacent to jaguar populations.

Project Overview and Approach

Description of the geographical target(s), including details of systemic challenges, and the specific environmental threats and associated drivers that must be addressed

In Ecuador, jaguars occur in two distinctive and geographically isolated regions: the Pacific Coast and the Amazon Regions. The forests within jaguars´ historic range along the coast of Western Ecuador are among the most severely threatened on the planet in terms of biodiversity loss and species extinction as a result of habitat destruction and other human activities, and the jaguar range has been reduced by c. 90%. Critically endangered yet potentially viable jaguar populations remain in only three isolated areas. The present range of the jaguar (*P. onca onca*) in the Ecuadorian Amazon has not been precisely defined but is estimated to have been reduced by c. 30%. These populations have been categorized as Endangered (EN) in the National Red List Assessment.

The priority areas within the landscapes in which the project will work will be defined during the PPG phase.

Throughout Ecuador, globally important wildlife is subject to a range of threats. Although protected areas (some of them along the jaguar corridor) provide protection to habitats at macro level, their locations and current management regimes are not adequate to ensure effective protection of many species and populations of native wildlife fauna, with the result that these face increasing pressures. Additionally, species like jaguars have substantial range sizes, dispersion distances and require habitat connectivity (at least 50km^2 of habitat per individual). These factors serve to increase the likelihood of them coming into contact, and potentially conflict, with humans and makes them highly dependent on the ways that the landscapes surrounding and adjoining protected areas are managed. Among the specific threats faced by jaguars are: unsustainable subsistence hunting, commercial hunting and species trafficking, human/wildlife conflicts, loss and fragmentation of habitat.

Even although actions have begun to ensure connectivity among landscapes, the jaguar's corridor in Ecuador has limited connectivity between many areas where individuals/populations have been identified, isolating endangered populations on 'islands'. Meanwhile, deforestation and land degradation (mainly related to the agriculture and livestock expansion) continue to degrade and convert significant areas of remaining habitat.

Describe the existing or planned baseline investments, including current institutional framework and processes for stakeholder engagement and gender integration;

Ecuador has invested in capacity building and analysis of its challenges related to wildlife management and conservation. Unfortunately, the national budget deficit situation has limited the allocation of resources for management of wildlife at all levels. Currently, the country has a Wildlife Unit within the Ministry of Environment to respond to all issues related to wildlife management in Ecuador. Although provincial directorates provide help in terms of attending complaints and confiscation processes, the support is limited.

Ecuador has received financial support from international cooperation agencies for specific initiatives related to wildlife management. It has also established a dedicated wildlife account within the Sustainable Environmental Investment Fund (FIAS), which remains to be capitalized.

In order to involve stakeholders in wildlife management, the Ministry of Environment, together with FIAS, is creating a technical group on wildlife management to engage various sectors and actors. Issues to be addressed would include gender considerations in wildlife management processes, considering that Ecuador´s new Environmental Law (COA) calls for the progressive incorporation of gender issues in all areas of environmental management. Ecuador is implementing the 2030 Agenda, whose objective 5 specifically refers to the promotion of gender equality empowerment as well as the "National Agenda for Women and LGBTI People 2018-2021", which considers actions to promote gender equality in environmental conservation initiatives.'.

In institutional terms, UNDP Ecuador has established a Gender Equality Seal program, which aims to improve the quality of programmatic results with a gender focus. This, in turn, is related to the GEF Gender Implementation Strategy 2018. Both UNDP and GEF consider the gender-sensitive approach as a programming, monitoring and evaluation mechanism.

Describe how the integrated approach proposed for the child project responds to and reflects the Program's Theory of Change, and as such is an appropriate and suitable option for tackling the systemic challenges, and to achieve the desired transformation with multiple global environmental benefits;

The project closely reflects the Global Wildlife Program (GWP) Theory of Change (TOC). The project structure is aligned with three of the four GWP pillars, namely Conserve Wildlife and Habitats, Promote Wildlife-Based Economy, and Combat Wildlife Crime, as well as with several of the activities/outputs outlined in the TOC. In turn, these activities will contribute to the short-term outcomes established for the GWP, such as landscapes with improved biodiversity management practices, increased incentives to protect wildlife and capacity to co-exist with wildlife, and strengthened institutional capacity to combat IWR, among others. Over the medium term, the project will contribute to the GWP outcomes of wildlife conservation and crime prevention, and in the long-term to the outcomes of global biodiversity conserved, livelihoods for local communities improved, and resilience enhanced. The project, together with other possible projects emerging following the Jaguar 2030 High-level Statement and Roadmap, plans to make full use of GWP coordination processes and structures for stimulating action across the jaguar range. The present project is expected to be a cornerstone in these efforts.

Describe the project's incremental reasoning for GEF financing under the program, including the results framework and components.

The existing baseline situation described previously demonstrates the country´s commitment to strengthening wildlife management, however, existing baseline investments are insufficient to adequately ensure wildlife conservation, reduce trafficking and support sustainable and wildlife-friendly production models. As such, GEF additional funding is necessary to achieve global environmental benefits. Component 1, Conserve Wildlife and Habitat, focuses on defining Jaguar Conservation Units and priority areas for enhanced connectivity and providing support for the establishment of sub-national protected areas therein, as well as strengthening wildlife management capacity. This will be complemented with the gathering of information, such as through biological monitoring of current populations and mapping of anthropogenic pressures on jaguars. In order to ensure that financial resources are available for wildlife conservation, the project will facilitate the implementation of corporate socio-environmental

responsibility mechanisms so that these resources are channeled to the Sustainable Environmental Investment Fund.

Component 2, Wildlife-Based Economy, will promote the development of policies and resulting sectoral guidelines to reduce the impact of development projects that take place in Jaguar Conservation Units. It will also develop and implement community wildlife management plans to reduce consumption of wild meat. Finally, it will implement cooperative and participatory approaches to reducing human-jaguar conflicts, such as for example, putting in place fencing for cattle and increasing the capacity to address this problem.

Component 3, Combat Wildlife Crime, will support evaluations of current wildlife trafficking, capacity building and development of technical and legal tools for prosecution purposes. It will also provide funding for the campaign against wildlife trafficking and other actions to control illegal wildlife trafficking, in coordination with other related projects in the region.

Component 4, Knowledge Management, Monitoring and Evaluation, will ensure that the project experience is captured in the form of lessons learned and that these lessons are used to raise awareness regarding best practices in key areas of project intervention. This will include sharing products such as a report of lessons learned and good practices, and tools and methodologies that can be applicable to jaguars as well as other species, as well as engaging in South-South cooperation and triangular cooperation. The information generated by the project will be made available to national-level stakeholders including the Decentralized Autonomous Governments, Ministry of Environment, local communities and civil society, among others. The results will also be shared with countries in the region (LAC), where possible, in order to contribute to the strengthening of the Jaguar Roadmap 2020-2030 as well as the implementation of the Agenda 2030, mainly associated with SDG 15. Project monitoring and evaluation will further support this aim, while ensuring that adaptive management takes place in light of any changing circumstances.

Engagement with the Global / Regional Framework

As a child project under the Global Wildlife Program (GWP), the present project will maintain especially close ties with other child projects under the GWP. It will support the diffusion of knowledge, know-how and ingenuity, particularly across the Jaguar Corridor, which extends across 16 countries, and with other projects and regions that may be addressing the conservation of big cats or other umbrella species.

The project will also seek opportunities to liaise and exchange knowledge with projects in the region under relevant GEF-7 Impact Programs, particularly the Food Systems, Land Use and Restoration Impact Program (FOLUR). which will support transformational shifts in large landscapes by taking into account competing demands for production of staple foods and major agricultural commodities, while harnessing opportunities to protect natural environments and restore degraded landscapes. Given the importance of expanding production of agricultural commodities as a threat to jaguars and a driver of habitat loss within the Jaguar Corridor, the FOLUR programme—both its methodological approaches and the on-the-ground support afforded—will be a target for knowledge sharing by the project.

Project Title:	Coordinate action and learning to combat wildlife crime and promote conservation for sustainable development
Country(ies):	Global
GEF Agency(ies):	WB
Total Project Cost (GEF Grant)	$ 9,174,313
Estimated Cofinancing	$ 20,000,000

PROJECT DESCRIPTION

Country/ Global context

As highlighted in the GWP's Program Framework Document (PFD), humans have wiped out 60% of animal populations since 1970 (Living Planet Report 2018) and specifically, mammal species have collectively lost over 50% of their continental populations (Ceballos et al, 2018). The main direct threats to wildlife are: habitat change (loss, degradation, and fragmentation), illegal wildlife trade (IWT) and climate change (The GEF 7 Biodiversity Strategy). IWT is estimated to be US $8-10 billion annually (excluding fish and timber). This illicit trade has many similarities to other transnational crimes, including drugs and human trafficking, that are estimated at US $344 billion and US $157 billion, respectively.[13] IWT undermines economic development by eroding renewable natural capital. IWT has significant financial opportunity costs for governments , exacerbates poverty and hinders equitable distribution of benefits from wildlife resources. At its core, IWT is a systemic governance issue that requires political commitment and coordination across many scales (local, national, regional and global level) and sectors (finance, transport, infrastructure, agriculture, etc). Corruption risks, including related to licensing and permitting, are facilitators of illegal wildlife trade and are exploited across the supply chain, including national border crossings (Strengthening Governance and Reducing Corruption Risks to Tackle Illegal Wildlife Trade OECD 2018).

In recent years, a higher level of political support to conserve wildlife and habitats was demonstrated by global government leaders (See *Declaration: London Conference on the Illegal Wildlife Trade 2018*). Recent high-level commitments were made by member countries at the UN General Assembly, Convention on Biological Diversity (CBD), and Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Still, the global regulatory frameworks and national policies that enforce laws to combat IWT largely remain inadequate to address the magnitude of threats facing wildlife today.

One of the recent and largest concerted efforts to address IWT is the GEF-funded Global Wildlife Program (GWP) approved by the GEF Council with US $131 million investments in 19 countries[14] (using funds from GEF's sixth replenishment cycle (GEF-6), which leveraged $704 million of donor co-financing. The GWP contributes to the GEF-6 Biodiversity Strategy under Program 3: *Preventing the Extinction of Known Threatened Species*. Since 2010, multilaterals, bilaterals, international organizations, and foundations increased their financial

[13] A UNEP-INTERPOL Rapid Response Assessment - The Rise of Environmental Crime 2016.

[14] In June 2015, the GEF Council approved the GEF-6 GWP that included an initial investment of US $ 90 million for 11 projects in Africa and Asia and one global project executed by World Bank Group (WBG) and United Nations Development Programme (UNDP). In the June 2016, the GEF Council approved the addition of nine projects to the GWP (five in Africa and four in Asia).

commitments to tackle IWT (See GWP's 2016 *Analysis of International Funding to Tackle Illegal Wildlife Trade)* . Despite significant investments made to reduce threats to wildlife populations, losses continue at an alarming rate. Also, even though there is increase in investments to address IWT, funds allocated to combat IWT remain negligible.
compared to funding allocated to fight other transnational crimes such as drugs and human trafficking[15].

Due to lack of resources, coordination and technical capacity, countries often struggle to implement and enforce the CITES convention. Yet they must link illegal wildlife crime with the national and international institutions in charge of serious crimes. The legislation to leverage anti-money laundering (AML) and other powerful tools available to combat other serious crimes are often not used to combat wildlife trafficking networks. Wildlife crimes are often not a predicate offence for AML legislation. For example, a recent survey by UK FCO/Global Atlas in the Asia Pacific reported that only 1% of wildlife crimes in the region triggered money-laundering investigations, charges or prosecutions. Therefore, AML and other upstream financial integrity and governance tools need to be integrated into regional and national efforts to combat illegal wildlife trade.

The lessons learned from the GEF-6 GWP implementation and the donor analysis indicate that the approaches to address the challenges facing wildlife and its habitats require a paradigm shift. Although recent funding increases to combat IWT is an encouraging development, there is a need to significantly increase global financial support to adequately address this serious issue. National governments from wildlife source countries also need to expand and strengthen their partnership with the private sector and local communities, through public-private partnerships, to optimize enforcement efforts. In addition, national government-led holistic and longer-term financial strategies are needed to diversify revenue sources to protect wildlife and their habitats. A basic building block for this to occur is to adequately valuate wildlife and protected area resources to account for the benefits (social, economic, and ecological) provided to rural communities, national governments and globally. This shift towards anchoring rural economies in natural assets supports sustainable development and is a new feature for GWP under GEF-7. The GEF-7 replenishment programming directions specifically defines the two priorities for GWP under GEF-7: (i) *Wildlife for Sustainable Development* and (ii) *Preventing the Extinction of Known Threatened Species* (continuation from GEF-6).

The GEF-7 GWP *Wildlife for Sustainable Development* priority promotes a wildlife-based economy (WBE) for countries to adequately value wildlife in their national accounts and policies. The GWP will help participating countries achieve a shift to a dynamic WBE by removing barriers to unlock the potential of this sector. Key barriers the GWP will address include insufficient: (i) analysis, studies, and policies that demonstrate the economic value of protected areas and wildlife for national and local economies; (ii) empowerment of local communities and their inclusion in decision-making over natural resources to benefit directly and indirectly from wildlife; and (iii) incentives and concession policies to promote WBE development and attract long term investments. In addition, GWP will support efforts to deploy tools and incentives for policy makers to better understand the value wildlife and its habitats provide as economic assets. These assets can help countries transition from wildlife depleting practices to implement policies that foster wildlife conservation and sustainable development.

The GEF-7 GWP *Preventing the Extinction of Known Threatened Species* priority supports national projects combat IWT and works at the global level through coalitions focused on reducing poaching, trafficking and demand for illegal wildlife and wildlife products. GEF-7 GWP includes new priority landscapes in Latin America

[15] US expenses to combat drugs varies from $41.3 billion / year to $51 billion per year Drug Policy Alliance. US Government aid to fund projects to combat IWT is less than US $200 million per year.

and increases efforts to support transboundary cooperation between national projects and adoption of innovative technologies to effectively combat IWT. The GWP IWT pillar addresses the following barriers: (i) weak governance at the local level which prevents communities from participating in decision making; (ii) weak legal systems that allow poaching and trafficking to thrive; (iii) high corruption levels across the supply chain, including national border crossings that allow transportation of illegal wildlife products undetected; (iii) lack of awareness among consumers of illegal wildlife products, and unsustainable demand, and (iv) limited access to knowledge, technology and innovation.

Project Overview and Approach

Geographical targets

The GEF-7 GWP Global Project will continue to focus its support to national projects in Africa and Asia. In addition, three national projects in Latin America and the Caribbean (LAC) allows the GWP to expand into this important region also impacted by IWT. Although accurate data about IWT in LAC is scarce, Brazil's Institute of Environment and Natural Resources estimates that at least 12 million wild animals are poached in the region each year (Smithsonian 2009).

GWP GEF-7 includes 13 national projects: (i) Angola; (ii) Bhutan; (iii) Belize; (iv) Cambodia; (v) Chad; (vi) Democratic Republic of Congo; (vii) Ecuador; (viii) India; (ix) Indonesia; (x) Madagascar; (xi) Namibia; (xii) Panama; (xiii) South Africa. India, Indonesia and South Africa were already part of GWP through GEF-6 investments. The other 10 countries are new to the program. All GWP GEF-7 countries contain conservation areas inhabited by priority species such as elephants, rhinos, big cats (i.e. jaguars, tigers, lions), and pangolins. These conservation areas are also home to some of the poorest communities who struggle to survive without deriving benefits from wildlife. By bringing these countries together under one programmatic framework, the GWP expands its reach from 19 countries to 29 countries. Coordinated action across boundaries, supported by a dynamic and robust global coordination and investment promotion platform, helps countries scale up wildlife efforts by catalyzing WBEs and combating IWT. The GWP's Global Project expedites partnership development and investment mobilization by promoting regional collaboration of national projects (i.e. including countries that share borders) to collaborate on transboundary goals and facilitating connections between the conservation sector and investors.

The baseline scenario and any associated baseline projects

The broad baseline for GEF 7 GWP are the numerous projects supported by international donors to conserve wildlife. A preliminary analysis of donor IWT data from 2010 to 2018 shows that international donors committed over US $2.3 billion to 1,612 projects to help combat IWT and conserve wildlife. New committed funds since 2010 fluctuated, peaking at US $464 million in 2017. Donor projects included over $1.5 billion in investments in 69 countries, and $0.8 billion in various regional and global projects. Several new investments were announced at the 2018 IWT London Conference, including Germany's €90 million for 2019, USA's $90 million (for 2019), and UK's £36 million. USAID's major new programs since 2015 include Wildlife Asia, Saving Species (Vietnam), PROTECT (Philippines), and Southern African CWT landscapes (4 transboundary landscapes) and the ROUTES partnership. EC's larger programs include MIKES, Sustainable Wildlife Management, SOS, ICCWC support and funding for various NGOs. Germany's larger programs include Polifund (and follow-up partnership project), TFCA funding to Southern Africa and regional support to Central and Eastern Africa, and tiger habitat programmatic support. The World Bank Group's (WBG) larger conservation related programs are in Mozambique, Tanzania, Madagascar, Sri Lanka, Bangladesh, and Lao PDR. An increasing number of foundations have also contributed to combat IWT and are now a major source of funding

to national and regional projects. Beyond national and regional conservation projects, there are also knowledge platforms that form the baseline scenario for the GEF-7 GWP Global Project. Examples include "People not Poaching: the Communities and IWT Learning Platform", IUCN Biopama, TRAFFIC's Social and Behavioral Change Communications (SBCC) Community of Practice".

The specific baseline for the GEF-7 GWP Global Project includes the 20 GEF-6 GWP projects (in 19 countries), and the US $5 million GWP GEF-6 Global project led by the WBG. It also includes non-GWP GEF and WBG projects focused on topics relevant to the GWP theory of change. Sample projects include: (i) GEF-6 UNDP project in Angola; (ii) GEF-6 UN Environment IWT project in South Sudan; (iii) WBG community forest management projects in Benin and Cote d'Ivoire; and (iv) WBG nature-based tourism (NBT) projects in Tanzania, Mozambique, Lao PDR, India, Nepal, and Cambodia. Collectively, the WBG NBT projects represent over US $300 million in investments also benefiting from GWP knowledge and coordination activities. For example, experiences from the LENS2 Lao PDR and Tanzania REGROW projects were shared with GWP stakeholders during the GWP Annual Conference in Zambia in 2018. GWP collections of NBT lessons learned and best practices were shared with the Nepal WB tourism project (including during a January 2019 conference held in Kathmandu, Nepal) and will inform future GWP knowledge exchanges. The Mozambique project (MozBio) was also featured in a donor case study collaboration completed in 2018 and benefited from GWP knowledge resources. For example, in June 2018, the GEF-6 GWP Global Project partnered with the Government of Mozambique to organize an international conference on NBT that featured over 600 participants, including the President of Mozambique, former President of Botswana, ministers, and a diverse cohort of experts and public/private sector representatives. This conference helped launch public-private sector agreements signed by the Government of Mozambique and various partners totaling over US $600 million in investment.

In 2016, the GEF-6 GWP Global Project established a knowledge and coordination platform for the "Global Partnership on Wildlife Conservation and Crime Prevention for Sustainable Development". Over the last three years, it has successfully built a coordination, knowledge management and monitoring platform to support national projects and other stakeholders engaged in combating IWT. It set up two communities of practice (CoP): an external CoP on Human Wildlife Conflict (HWC) in partnership with IUCN and an internal WBG CoP on NBT. Project Coordination activities implemented to date include: (i) creation and operationalization of the GWP Program Steering Committee (PSC) and engagement with STAP through a total of 12 meetings held since September 2015 (two in-person) and 10 virtual meetings, respectively), (ii) over 10 coordination calls with national projects to discuss project updates and collaboration opportunities; (iii) establishment of a donor roundtable that held 11 virtual meetings and 6 in person meetings with over 24 bilateral, multi-lateral, foundations and NGO sector representatives to share portfolio updates and experiences. In addition, a donor working group consisting of 11 donors was created in 2018 and met 15 times to share IWT project experiences and collectively developed 20 case studies covering all six different interventions to combat illegal wildlife trade across 29 countries.

Knowledge Management activities conducted from December 2015 to March 2019 include: (i) 43 virtual knowledge exchange events with the participation of a total of over 1,116 attendees; (ii) eight in-person thematic conferences, one study tour, and two annual conferences (iii) four analytical publications ; (iv) 18 blogs and feature stories; (v) 11 videos produced to highlight the GWP and national projects (Gabon, Malawi, Mozambique, Vietnam); and (vi) use of innovative geospatial and digital platforms to enhance GWP data visualization and outreach (i.e. Atlas of Sustainable Development Goals 2018, spatial agent, e-book, and story maps). Monitoring and Evaluation (M&E) efforts included development of a simplified framework for IWT child projects that featured a tailored tracking tool, a qualitative review, and program-level monitoring analysis. A

list of GWP Global Project activities executed (as of December 2018) can be found in The Global Wildlife Program: Knowledge Platform 2016-2018.

The GEF Independent Evaluation Office (IEO) highlighted the good performance of the GWP global grant implemented under GEF-6 in their December 2018 Biodiversity Focal Area Study (which includes the GWP formative review). In summary, it documented that "the global coordination grant is accomplishing more than expected with the available funding. The global grant is an innovative design element of the program. It seeks to coordinate actions and build capacity, learning, and knowledge management to address the issue of illegal wildlife trade across the entire supply chain with implementing partners, donors, and international organizations—some of which are not GEF Agencies. To accomplish these multiple objectives, the global grant receives only 5 percent of total GWP funding. Nonetheless, the activities undertaken by the global grant to facilitate cooperation and knowledge exchange, foster interagency cooperation, and disseminate good practices and lessons have been uniformly praised by informants familiar with the work, based on its efficiency, relevance, accessibility, and helpfulness."

In addition, the GEF IEO recommendations included: (i) scaling-up of GEF's work in combating IWT; (ii) better integration of bottom-up, country-driven approaches, with top-down, strategic approaches; (iii) expanding the scope of the GEF's IWT funding to other species, countries, and regions; (iv) emphasizing the need for a stronger regional and global programming; (v) addressing political will and corruption explicitly and directly in all IWT projects; (vi) using the simplified measures for tracking overall GWP performance while reflecting the uniqueness of child projects; and (vii) creating links between other international activities regarding illegal wildlife demand and GEF-supported efforts.

In GEF-7, the Global Wildlife Program has incorporated the important GEFIEO recommendations by expanding the geographic and species coverage of the projects, designing the program around a structured Results Framework which was shared with national projects for them to consider in their project design. In addition, the GEF-6 experiences highlighted the importance of engaging policy makers to endorse activities to combat IWT and tackle corruption. This will be pursued through capacity building on enforcement (including judiciary) and building partnerships including and beyond the wildlife sector such as the financial and transport sectors. The GEF-7 program design also looks to continue to simplify the reporting requirements while conserving key indicators on combating IWT. The GWP Global Project will also help link GEF-funded GWP activities with other GEF-funded activities (i.e. Impact Programs such as Amazon Sustainable Landscapes (ASL) and Congo Basin Sustainable Landscapes Program) as well as activities organized by partner organizations that address demand reduction and behavioral change.

Key lessons learned from implementation of the GEF-6 GWP Global Project include: (i) frontloading activities can help expedite national project preparation efforts and create a sense of belonging to the program[16]; (ii) establishing relationships with multiple stakeholders in each national project builds program support and can facilitate political buy-in for project activities; (iii) diversification of product and services maximizes audience uptake as there is a broad spectrum of stakeholder interest and needs (administrative, technical, and technological); (iv) conducting stakeholder analysis and knowledge need assessments helps identify gaps and

[16] During GEF-6, GWP conducted trainings, knowledge exchange events, and engagement with GEF Implementing Agencies early on. This was done through delivery of three in-person knowledge events in 2017, creation of sub-committees within the Steering Committee Group to develop streamlined monitoring and evaluations tools, and individual calls with national project stakeholders to share information on the GWP including terms of reference, subject matter experts, etc. and obtain input to design Global Project activities ensuring buy-in from national projects.

prioritize program activities efficiently; and (v) co-financing annual meetings or thematic conferences helps secure national commitment to successfully deliver events. A gap in GEF-6 GWP was the limited allocation of national projects in demand reduction/behavior change to reduce the consumption of wildlife and wildlife products as few countries utilized national STAR investments for such interventions. As the GWP Global Project delivers activities that are prioritized by the national project counterparts and other stakeholders, it implemented less knowledge and coordination activities focused on this topic. This will continue to be a gap in GEF-7 GWP as total investments focused on demand reduction/behavior change total less than 1% of the total GEF Program financing. Table 1 summarizes how the lessons learned and GEFIEO recommendations were incorporated into the design of the GEF-7 GWP Global Grant.

Table 1 – GEFIEO Recommendations and GEF-7 GWP Design Elements

GEF IEO GWP Recommendations	GEF-7 GWP Design Elements	GEF-7 GWP Global Project Support
1. The ongoing IWT crisis warrants scaling-up of GEF's work in combating IWT	GEF-7 programming directions funding includes an increased GWP allocation to combat IWT (US$184 million notional funding for national projects compared to GEF-6 Program of US$131 million). In addition, a global set-aside of US$10 million is proposed to expand coordination and knowledge activities (initiated under GEF-6 with US$5 million Global Project). Despite no GEF financial incentive provided for GWP in GEF-7, there was a strong country-demand to join the program	GWP Global Project will leverage partnerships to tap into funding mechanisms to help maximize the GEF-7 impact (potentially including various World Bank multi-donor trust funds, partnerships with key donor programs, and innovative financing that links the private sector)
2. The GEF's IWT strategy needs better integration of bottom-up, country-driven approaches, with top-down, strategic approaches	In the design of the GEF-7 GWP, targeted efforts were made to design (in collaboration with the Program Steering Committee) the program framework which was communicated to governments and implementing agencies to align their national project interventions. National project input was also used to modify the framework and integrate national priorities. As part of the child project selection process, consideration was made to the level of direct link of project components to the programmatic framework	This non-STAR funded Global Project will support targeted multi-county/regional and multi-sector activities to complement the nationally-focused STAR investments
3. The scope of the GEF's IWT funding should be strategically expanded to other species, countries, and regions	GEF-7 GWP expanded the strategic framework to include additional species and geographies (including Latin America and the Caribbean and Europe/Central Asia)	GWP Global Project activities will include regional elements (including support to Latin America and the Caribbean) and efforts for other species that are also illegally traded
4. In addition to national projects, stronger regional and	GEF-7 GWP includes a Global Project that will support international collaboration. GEF-7 GWP framework includes elements to	Through partnerships, including ICCWC, and knowledge exchanges the Global Project will support

GEF IEO GWP Recommendations	GEF-7 GWP Design Elements	GEF-7 GWP Global Project Support
global programming is warranted	increase connectivity of landscapes and establish transnational conservation areas	targeted cross-border and regional activities
5. Political will and corruption should be explicitly and directly addressed in all IWT projects	GEF-7 GWP framework includes elements to strengthen long-term governance (including for protected areas) and political will to prevent, detect, and penalize wildlife crime	Through partnerships, including ICCWC (as indicated by GEFIEO), and knowledge exchanges, the Global Project will support national projects consider activities that address corruption
6. Continue to use the simplified measures for tracking overall GWP performance while reflecting the uniqueness of child projects	GEF-7 GWP framework will continue to use simplified M&E measures to track performance (including tailored tracking tool, qualitative review, and program-wide analysis) while maintaining consistency with the implementing agencies' M&E requirements, and responding to the GEF updated policy	GWP Global Project M&E efforts will further streamline reporting and enhance capabilities to leverage data for program and project performance management
7. Create links between other international activities regarding illegal wildlife demand and GEF-supported efforts.	GEF-7 GWP framework includes elements to for coordination with donor countries and major transit/demand markets.	GWP Global Project will build on existing collaboration with US, EU, Germany, and other international leaders to create links with their international activities. In addition, ICCWC partners will be engaged to support collaboration, and as required, deliver joint program activities and operations. Additionally, efforts will be made to coordinate with ASL and Congo Basin IPs that also include components on combating IWT

Stakeholder engagement and gender integration

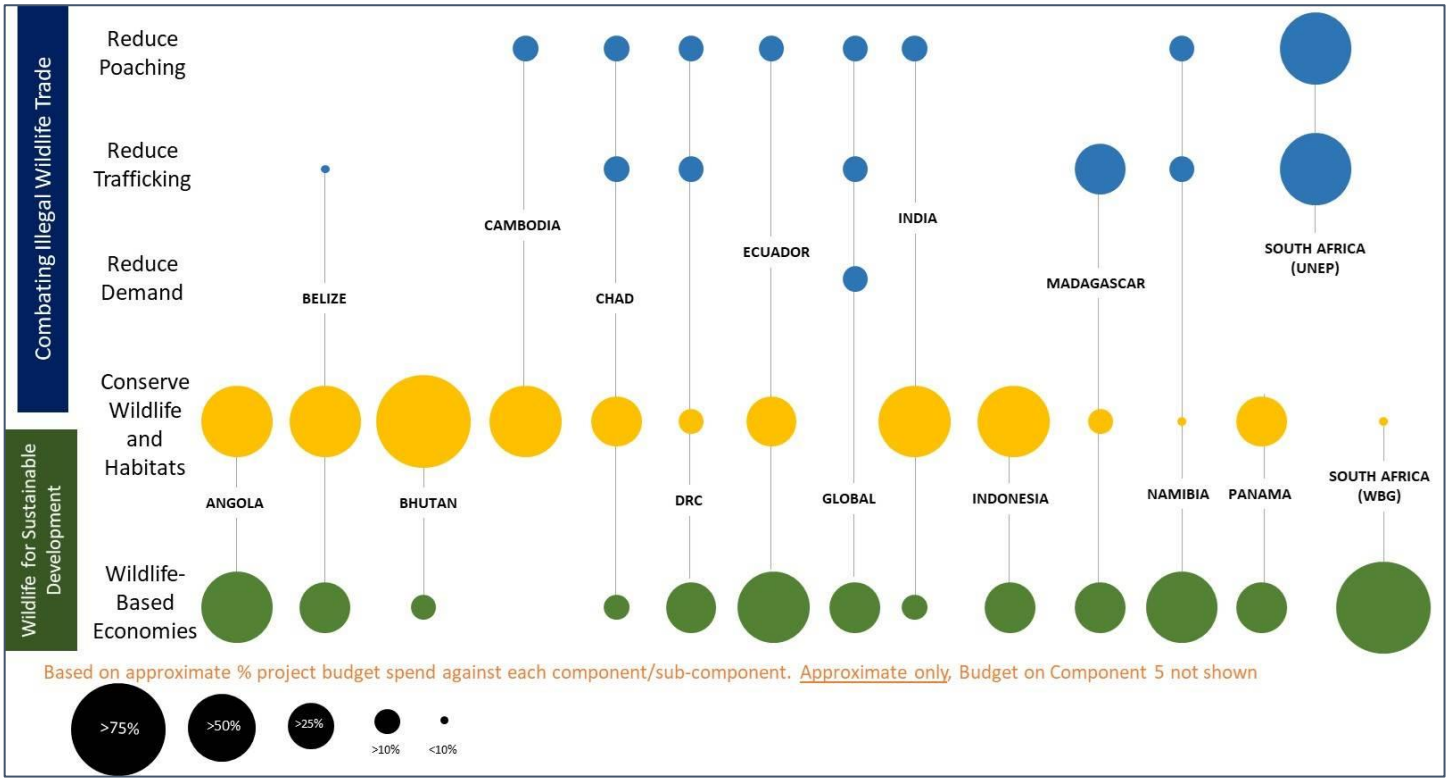
The GWP Global Project has consistently made efforts to integrate gender considerations. For example, for each knowledge management event, GWP Global Project actively strives to have women leaders represented either as the event chair, presenter, and/or discussant. The GWP Global Project has also supported specific activities that promoted participation of women in conservation. For example, in January 2017 the GWP Global Project organized a Women's Network to Drive Social Change event. In January 2019, GWP participated in the Women in Nature Network (WiNN) India event that is part of the all-women's network to support and empower women in nature conservation. The GWP has also supported specific national-level gender integration activities. In partnership with the Gorongosa Project (which is an executing partner of the Mozambique GWP national project), ANAC, and National Geographic, the GWP global grant is co-financing the Summit on Women and National Parks (October 2019). This summit provides participants with a unique opportunity to learn from leading female conservationists from around the world about the important role of women in protected-area management and ways to increase their active contributions. It will feature

workshops, field visits, and inspirational personal stories aimed at sharing best practices and fostering collaboration.

The proposed alternative scenario with a brief description of expected outcomes and components of the project

The design of the proposed GEF-7 GWP Global Project considers the GEF IEO review and lessons learned from the implementation of the GEF-6 global grant. The GWP Global Project is an essential element to the success of the GEF-7 GWP as it will help provide a common platform for collaboration and sharing of experiences between government counterparts and other stakeholders to create networks, link experts and develop partnerships. There are 13 countries participating in the GEF-7 GWP. Figure 1 shows the approximate project funds allocated for each component/ sub-component of the GWP Framework. The GEF-7 GWP Global Project will support national project teams with knowledge resources and skills to accomplish component activities.

Figure 1: GEF-7 GWP National Project Budget Allocation by Component

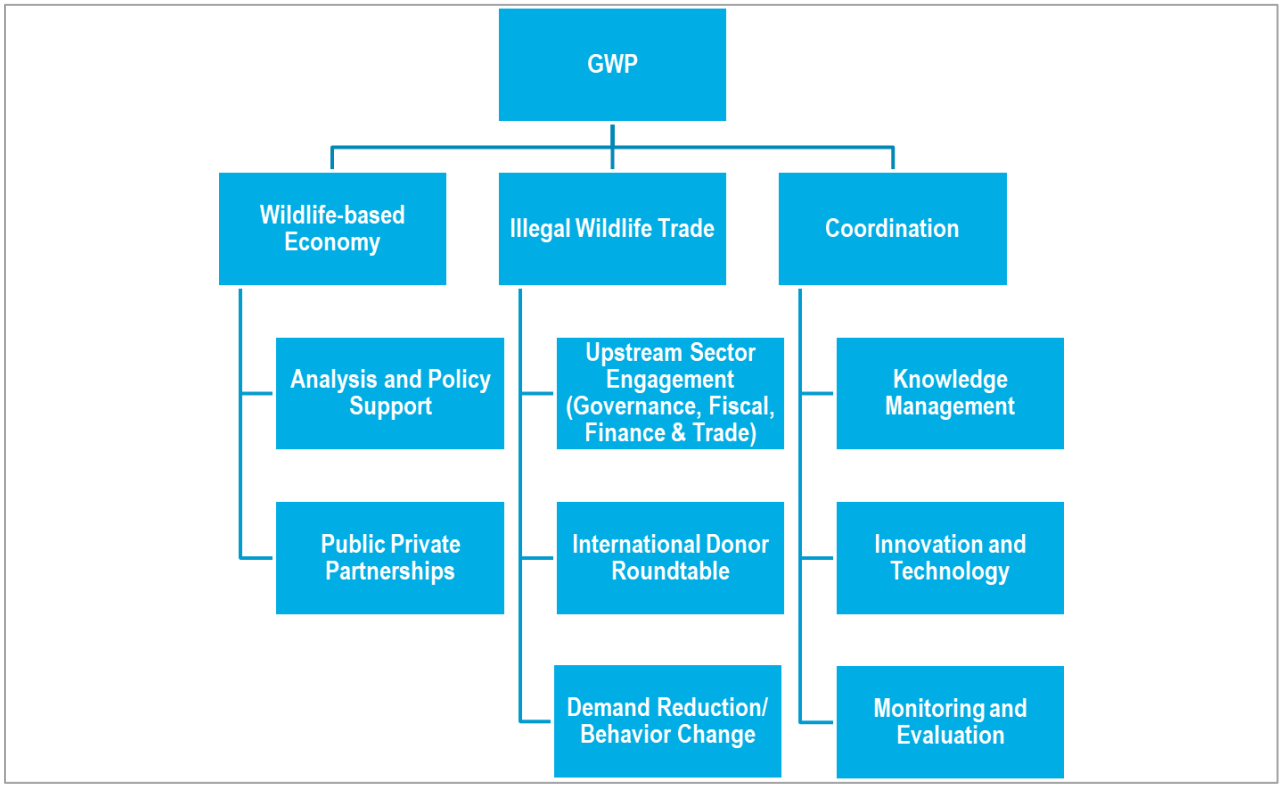


The objective of the GEF-7 GWP Global Project is to **strengthen the GWP's coordination and knowledge management platform to promote wildlife based economies and combat illegal wildlife trade**. The WBG will continue to lead the global GWP platform; working closely with GEF Implementing Agencies (UNDP, UN Environment, WWF) and other PSC members. The GWP consists of a diversified group of stakeholders it will support, including staff from government agencies, GEF Agencies and other specialized organizations.

By integrating efforts to promote WBE and to combat IWT, the 30 GWP countries collectively can increase populations of critically endangered wildlife, improve benefits to communities, and safeguard landscapes that contribute to global environmental benefits. In addition to the new targeted activities the GEF-7 GWP Global Project to promote WBE and combat IWT, it will continue to deliver effective knowledge exchanges and capacity building to project teams. The GEF-7 GWP Global Project will scale up its innovative knowledge and

learning platform to facilitate peer-to-peer exchange and engage new partners to bring industry-leading technological know-how, additional funding, and political support for national projects and global wildlife conservation. As previously discussed, The GWP Global Project pillars are shown in Figure 2.

Figure 2 – GEF-7 GWP Global Project Pillars



Component 1: Wildlife-based Economy

The GEF-7 GWP Global Project will create a platform to promote wildlife-based and resilient economies (such as nature-based tourism, legal wildlife trade under CITES, and protected area revenue-sharing with local communities). The outcomes of this component are: (i) increased global WBE policy dialogue and engagement; (ii) enhanced understanding of wildlife as an economic asset and competitive land use and; (iii) increased public-private partnerships (PPP) to stimulate WBE. Activities will be delivered through the following sub-components:

Sub-component 1.1 –Analysis and Policy Support

(i) Policy & Strategy Development

The loss of wildlife and wild habitats threatens important economic sector and hinders future development opportunities. As governments plan for the future and make development decisions it is critical that wildlife and habitats are considered in the planning. Integration of wildlife considerations into long-term planning and investment decisions can ensure that these natural assets continue to deliver ecological, social and financial returns for generations to come. The GWP Global Project will help elevate global policy dialogue through targeted engagement in global fora and through bilateral efforts to support stakeholders deepen the dialogue

at the CBD, CITES, and other sector activities to mainstream biodiversity in regional and global initiatives. The GWP Global Project will work across three levels: (i) global; (ii) regional; and (iii) national/local.

Global - Through policy dialogue and raising the profile of wildlife economies at forums such as those organized by the World Economic Forum, UN World Tourism Organization, World Travel & Tourism Council, Global Sustainable Tourism Conferences, and International Agrobiodiversity Conferences, the Global Project will help mainstream biodiversity into other economic sectors.

Regional - Throughout Africa, there is immense potential to invest in wildlife as a way to achieve several sustainable development outcomes. There are key landscapes that require better coordination and improved WBE policy as the wildlife between these landscapes move across country boundaries. GWP includes countries from the SADC landscape (Angola, Botswana, Malawi, Mozambique, Namibia, South Africa, Zambia and Zimbabwe) and the East African landscape (Ethiopia, Kenya, and Tanzania). These countries will benefit from targeted GWP Global Project technical assistance to assess enhancement options in their legislations, policies, and strategies. Potential activities include capacity building to enhance visitor experiences, shared natural resource management (water, wildlife, fisheries, and forests), and entrepreneurship development programs that expedite economic integration of people living near shared borders. Examples of successful transboundary collaboration in the Kavango-Zambezi Transfrontier Conservation Area (KAZA-TFCA) show that regional coordination brings conservation and economic benefits to countries investing in cross-border partnerships. The GWP received requests from the KAZA Secretariat and the KAZA countries to assist them with strategies to create an enabling environment for collaborative management of shared ecosystems and to mobilize additional financing. The five KAZA countries have the opportunity to invest in the connectivity of key wildlife habitats, promote community development (approximately two million people reside within KAZA), and enhance management of shared tourism destinations. The GEF-7 GWP Global Project will build on successful engagements with national governments to organize country-focused events (i.e. Mozambique NBT conference in June 2018) to promote regional investor forums to scale up exchanges with policy makers, investors, international organizations, and other market participants to bring in the resources needed to propel WBE forward. Regional investor forums can promote investment across various GWP countries, rather than providing support to single country events on this topic. The GWP Global Project will also support targeted regional initiatives that promote cross-border partnerships and complement nationally-focused investments.

National/Local - At the national level, the GWP Global Project will continue to support national governments to organize knowledge exchanges to promote wildlife-based economies. The national/local level engagement will build off of the global and regional efforts to facilitate adoption of good practices and experiences across the region to tailor solutions that are best for the specific conditions in each country. National/local level dialogue will be led by the national projects, and the GWP Global Project will support these efforts through knowledge exchanges, resource mobilization, and technical assistance to support national governments tailor and adopt tools and resources that are relevant and applicable to their political and operating environment. The GWP Global Project will also support efforts to enhance state government capacity to work with communities on benefit sharing mechanisms.

(ii) Targeted Economic Studies & Analysis

The GWP Global Project will support regional or global studies to estimate the costs of illegal wildlife trade and benefits from nature-based tourism and other WBE activities that contribute to mainstreaming biodiversity in other sectors. The GWP Global Project will support GWP countries and global partners on related efforts that contribute to the implementation of the Aichi Biodiversity Targets (CBD); and the Land Degradation Neutrality targets (UNCCD), and the Nationally Determined Contributions and National Adaptation Plans (UNFCCC)

related to protected areas and biodiversity conservation. To support policy analysis and strategic planning, robust economic advisory work and advanced "big data" analysis may be used to identify levers to promote legal wildlife trade and biodiversity conservation. These resources can support targeted integrated planning at landscape level and promote investments in priority areas. There is a need to improve valuation of natural capital tied to biodiversity conservation and highlight the importance of upstream investments. A study will be conducted on the importance for public investments in protected areas to improve both biodiversity outcomes and support economic development by leveraging investment from the private sector. The range of benefits that protected areas generate in the form of tourism revenues, ecosystem services, community welfare and other economic benefits need to be better documented and shared with policy makers. As the WBG's Wealth Accounting and Valuation of Ecosystem Services (WAVES) and the Changing Wealth of Nations (CWON) activities offer resources that can be complemented with additional national level economic studies to improve the existing knowledge base on natural capital and its ability to generate local economic development. These targeted studies will help galvanize interest of ministers of finance and the financial community around wildlife issues and strengthen linkages between critical conservation policy challenges and national development priorities. The GWP will also increase its role in various international forums, including CBD and CITES Conference of Parties (CoPs), G7/G20 meetings, and other strategic forums to raise the profile of the importance of wildlife and biodiversity in promoting sustainable development and climate resilience.

Sub-component 1.2 –Public Private Partnerships (PPP)

This component aims to strengthen awareness and action beyond the wildlife sector, through targeted engagement in other relevant segments such as security, economic development, resilience building, sustainability and connectivity. Expanded partnership investments will promote effective advocacy and policy for GWP issues in cross-sector forums and increased uptake of partnership tools and resources used by GWP stakeholders. This will be done in addition to the catalyst role the GWP will play in CBD and CITES CoPs, as well as mainstreaming biodiversity in the National Determined Contributions (NDCs). It will leverage ongoing World Bank efforts to elevate biodiversity conservation into technical and financial development assistance, including activities under PROBLUE, PROFOR, Global Program on Sustainability/WAVES and other global partnership efforts. The GWP Global Project will also explore opportunities to partner with leading organizations and collaborators in the tourism sector (i.e. UNWTO, UNESCO Heritage Sites, Airbnb, and TripAdvisor), in technology (i.e. Google, Intel, Microsoft), through public private partnerships/financing (i.e. commercial banks, protected area management entities), and media network (i.e. National GeographicN) to expand nature-based tourism opportunities. Partnerships will be pursued to create an ecosystem that can help GWP mobilize technical, financial, and political resources in development areas that can help enhance the scale and sustainability of wildlife conservation efforts. For GEF-7, the GWP Global Project will emphasize partnerships that help unlock opportunities related to innovative financing (i.e. green bonds, blended financing, natural capital), governance, technology (i.e. artificial intelligence, big-data, mobility, blockchain), and supply chain management and customs/trade risk mitigation related issues.

An area to explore under this component is also exchanging knowledge on successful PPP that developed countries have engaged in to conserve habitats. For example, the United States National Park Service (US NPS) utilizes US $3 billion in appropriate funds to support national parks and tourism development to generate over US $36 billion in total economic output to the national economy[17]. To realize this level of investment, the US

17 Natural Resource Report NPS/NRSS/EQD/NRR—2018/1616 available at https://www.nps.gov/nature/customcf/NPS_Data_Visualization/docs/NPS_2017_Visitor_Spending_Effects.pdf

has created a comprehensive conservation and tourism promotion policy and investment environment that stimulates commercial services and concessions. Similarly, Canadian National Parks Service have managed to create tremendous visitor experiences in their national park to generate more revenue that can go back into conservation. Understanding the elements of designing such policy, realizing the importance of engaging communities in the process and delivering a tourism concession model that works for the people and the parks will be an important bridge that the GWP will build through this component by organizing knowledge exchanges and promoting capacity building efforts in GWP countries. The targeted economic analysis previously referenced will support WBE PPP efforts. Additional assessments will be conducted to help national governments expedite the number of WBE activities/projects that are "investor-ready" to leverage private investment.

Component 2: Combating Illegal Wildlife Trade

This component will provide technical capacity to national project stakeholders with improved knowledge to combat IWT. The outcomes of this component include: (i) strengthened upstream sector engagement on governance, fiscal, finance, and trade that are cross-sectoral and can help integrate conservation priorities into other sectors (i.e. work with port authorities, eliminating subsidies that are harmful to biodiversity, etc.); (ii) enhanced donor coordination to combat IWT; (iii) adoption of anti-corruption tools, anti-money laundering training, and use of ICCWC toolkits, guides, and other resources; (iv) targeted consumer behavior change campaigns to reduce demand for illegal wildlife products; and (v) improved coordination at local, national and transboundary levels through better access to innovation and technology. These outcomes will be achieved through implementation of activities described below.

Sub-component 2.1 Upstream Sector Engagement (Governance, Fiscal, Finance & Trade)

The GWP will strive to establish and strengthen partnerships with leading entities and consortiums to improve linkages between illegal wildlife trade and other sectors which are intertwined in the supply chain. The GWP Global Project will help strengthen upstream sector engagement on governance, fiscal, finance, and trade that are cross-sectoral and can help integrate conservation priorities into other sectors (i.e. work with port authorities, eliminating subsidies that are harmful to biodiversity, etc.). Cross-sector partnerships will be facilitated through engagement of World Bank Global Practices on governance, fiscal, finance, and trade. In addition, the GWP will leverage the International Consortium to Combat Wildlife Crime (ICCWC) to partner with relevant entities on enforcement, policy, regulatory, and institutional issues related to illicit financing, anti-corruption, customs, legal, and governance. The GWP Global Project will strengthen partnerships with ICCWC members and facilitate access of national project teams to ICCWC services and resources. An important focus will be to scale up the anti-money laundering (AML) training that was piloted under GWP GEF-6 in Kenya and Tanzania to additional countries and regions. The GWP in partnership with other WBG and outside partners will develop a clear road map of the different approaches, tools and strategies needed and the deployment of technical assistance to address weak governance.

This sub-component will also help improve GWP stakeholder capacity to reduce poaching and trafficking in source and transit countries. There are innovative systems created over the last few years to improve patrolling of large conservation areas. The GWP Global Project will support departments of national park and wildlife authorities and other stakeholders to showcase the use of technology at site level. Opportunities to collaborate with the private sector and engaging communities will also be an important consideration. This support can help monitor wildlife and improve chances of apprehending poachers and strengthening patrols. It will also educate and sensitize key agencies and communities in appropriate law enforcement methods. Complementary to that, when wildlife products are trafficked, there is a need to improve the ability of

government stakeholders to be able trace, detect, and confiscate contraband so that when the criminals are caught, the chain of custody is not hampered nor is the evidence compromised. The GWP will work with partners who have expertise in legal, justice, forensics, intelligence collection, information exchange and other relevant themes to improve knowledge in this field and train stakeholders in deployment of these approaches. Relevant to these knowledge exchanges and trainings is also transborder law enforcement mechanisms that can help countries improve cross-border patrolling and enforcement. For example, the governments of Cambodia and Vietnam have expressed interest enhancing cooperation between local agencies to combat transborder wildlife trafficking.

Sub-component 2.2 International Donor Coordination

This donor coordination sub-component is a continuation of efforts tied to Decisions 16.5 to 16.7 of the CITES CoP16 in Bangkok, March 2013 that called for organization of a Wildlife Donor Roundtable to share information, understand long-term financial needs and explore the potential for scaled-up financial resources to combat IWT. Under GEF-6, the GWP Global Project successfully: (i) established a donor group that meets quarterly to discuss their portfolios and share experiences; (ii) analyzed over 1,100 IWT projects representing US $1.3 billion across 24 donors and documented key trends in the *Analysis of International Funding to Tackle Illegal Wildlife Trade*; (iii) captured lessons learned in the form of 20 case studies in collaboration with 11 donors to better understand how projects are implemented and identify key challenges and opportunities. The GEF-7 GWP Global Project will continue to strengthen the donor community through regular meetings, updates to the donor portfolio and dissemination of tools and resources to promote coordination across donors. A recent study in Africa stated that more than US $1 billion would be needed annually to secure Africa's protected areas (Lindsey et al, 2018). Thus, the GWP Global Project will explore the potential to link global level efforts to national and regional level coordination to facilitate dialogue between donors and governments of countries to explore ways to channel greater investments more effectively and to priority areas that require donor support.

Under GEF-6, the GWP Global Project collaborated well with the various headquarters and field mission teams working on combating illegal wildlife trade, including among others government staff from Germany, United States, and United Kingdom. For example, the GWP partnered with Germany (BMU) to capture lessons learned from donor-funded IWT projects in the form of 20 case studies and 10 story maps. The GWP participated in the Friends of the Chair group chaired by the UK Government to provide guidance in the preparation of the 2018 IWT London Conference. Support also included participation in preparatory meetings such as the Wilton Park event on Tackling illegal wildlife trade (IWT): strengthening transnational cooperation. The GWP Global Project will continue to explore partnerships with thematic and regional programs funded by these and other donors. The GWP Global Project will leverage memorandum of understanding (MoU) and agreements already in place at the WBG through other Global Practices and the IFC. For example, the WBG has a MoU with Airbnb, Trip Advisor, and engagements with several specialized UN agencies and leading tourism sector entities that can help promote wildlife-based tourism opportunities for national projects and the overall program. Partnerships will help identify and implement larger scale activities. Examples of potential geographically focused collaboration may include partnering with organizations active in Southern African Development Community (SADC), Kavango Zambezi (KAZA), South Asia (SAWEN), Latin America and the Caribbean (LAC), and Association of Southeast Asian Nations (ASEAN).

Sub-component 2.3: Demand Reduction

Under GEF 6, GWP worked with governments in Asia to address the barrier related to the lack of awareness among consumers and increasing, unsustainable demand for wildlife products. In GEF-7, the GWP Global

Project will partner with national and international partners (particularly in Asian countries where the demand is high) to raise awareness about the threats that high demand is posing to endangered species. Activities under this component may include collaboration with institutions such as TRAFFIC to connect national project teams with their community of practice on behavioral change and with UN Environment on their Wild for Life Campaign. Additionally, other institutions like WildAid, WWF and IFAW work in China on behavior change initiatives with successful outcomes like the ban on ivory sales in China last year. Partnership with these institutions will help raise awareness about the costs and realities of wildlife crime to deter the demand, especially of secondary products that may appear far removed from the realities of poaching of wildlife species (e.g. finished carvings, or art or ingredients in tonics and medicines). It will increase public understanding and visibility of the scale and impacts of illegal wildlife trade on biodiversity, livelihoods, human health, and links to organized crime. Activities may also include education of domestic and international tourists that purchase souveniers some of which may be illegally sourced. Additionally, it would also be useful to conduct surveys that can provide a deeper understanding of the motivations and perceptions of citizens to see how best to target the campaigns to specific consumer groups. Where appropriate, use of key opinion leaders and champions will be considered to promote large scale messages and change. These activities will be precisely targeted, evidence-based and be preceded by a sound analysis of what drives behavioral change in a cultural setting, of consumer and market research, and of global lessons from work attempting to reduce demand for other illegal products. The GWP Global Grant will prepare different terms of reference after consultations with the countries to seek partnerships with some of these partners to support this important aspect of the IWT value chain. The Global Project will also organize regional events to address the issue of demand for other species such pangolins, primates, parrots, tortoises, that are being illegally traded in large volumes but that may not necessarily be the target species in any of the participating countries.

Component 3: Program Coordination and Management

The World Bank Group will continue to work closely with PSC members to seek guidance on program activities and maximize impact of GWP efforts. PSC engagement will continue with the Asian Development Bank (ADB), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the International Union for Conservation of Nature (IUCN), TRAFFIC, UNDP, UN Environment, WildAid, the Wildlife Conservation Society (WCS), and the World Wildlife Fund (WWF). PSC membership will be assessed following the launch of GEF-7 Global Project to ensure it aligns with priorities of national projects. In addition, the GWP will continue to coordinate with STAP to leverage their scientific and technical expertise for the benefit of national projects. GWP will continue to hold quarterly virtual meetings with PSC and STAP and meet in-person annually. In addition, coordination efforts will also include engagement with countries such as Lao PDR, Nepal, Sri Lanka, Uganda and Tanzania that recognized IWT as a serious challenge and are investing in nature-based tourism with support from World Bank Group grants and loans. For program coordination, three key themes will be supported: (i) knowledge management; (ii) innovation and technology; and (iii) monitoring and evaluation.

Sub-component 3.1 Knowledge Management

(i) Knowledge events

The GWP Global Project will continue to implement virtual and in-person events that helped national projects increase awareness and knowledge of good practices and tools as implemented during GEF-6. In addition, it will conduct study tours to foster south-south exchanges. It will also explore with innovation competitions, hackathons, and other knowledge exchange formats to engage new stakeholders in activities to promote WBE. These events are an effective forum to exchange knowledge generated and curated for the GWP targeted audience that include national project teams, PSC members, donors, and development practitioners. In-person

events and study tours were highly useful for building technical capacity of GWP national teams during GEF-6 and they will continue to play an important role in helping countries learn from each other and implement applicable lessons in their projects. The GWP will leverage technology to capture content from these events and share them in various platforms so that the content can be shared with a broader audience and archived. For GEF-7, the GWP Global Project will also promote regional knowledge events that are scheduled during business hours for Latin America, Asia, and Africa to increase the number of stakeholders who can participate and learn from these events. Additionally, the grant will encourage national project teams to present on their projects' activities and deliver "how-to" talks that can help other projects facing similar issues learn strategies to expedite their own project implementation.

(ii) Network of subject matter experts

The GWP Global Project will continue to identify and make available technical and regional experts to share knowledge with national project stakeholders. The Global Project will build upon a database of over 181 experts from fields including conservation, tourism, communities, wildlife and natural resources that has been developed under the Global Project for GEF-6. For GEF-7, the Global Project will deploy tools to facilitate national project team's identification and connection with these experts and set up collaborative methods to link teams to experts.

(iii) Thematic Communities of Practice (CoPs)[18]

The GWP itself is a community of practice that brings practitioners together to share knowledge and collaborate on issues related to IWT. To complement year-round knowledge events, interactive knowledge-sharing groups or CoPs will complement large thematic conferences by generating new ideas and continuing the networking after these events. At the request of national project teams, two priority technical themes were identified under GEF-6: (i) Human-Wildlife Conflict (HWC); and (ii) Nature-Based Tourism (NBT). The CoP on HWC was established under GEF-6 in partnership with the IUCN Species Survival Commission (SSC) Human-Wildlife Conflict Task Force. This CoP is piloting the Bank's Collaboration for Development platform (C4D) as another tool to engage an active community of practitioners interested in learning and sharing resources online about human wildlife conflict solutions and interacting with other practitioners. The aim of the CoP is to expand services available to national projects on developing national policies on HWC, provide trainings on HWC and exchanging lessons learned with other teams. An established community of practice (CoP) on nature-based tourism currently exists within the World Bank and is led by the GWP. The aim of this CoP is to promote best practices, improve policy and support client countries to determine various forms of engagement with partners on promoting sustainable tourism. In this phase, the GWP will expand this CoP to include countries joining the program and helping promote a platform where various stakeholders and work together to increase the scale of tourism in their respective countries and improve the processes through which communities can engage and

[18] Existing GWP CoPs include one on Human-Wildlife Conflict (HWC) and another on Nature-Based Tourism (NBT). The HWC CoP brings together experts and practitioners striving to improve HWC management and mitigation practices globally, reduce conflict, and promote coexistence. This is a one-stop-shop for knowledge exchange on HWC, expert connections, tools and resources, and capacity building. The NBT CoP was launched in December 2017 as an internal World Bank Group (WBG) community whose focus is to help develop the NBT agenda within ENR Global Practice. In one year, the NBT has been able to coordinate three in person events on NBT and 5 BBLs, published two reports on NBT solutions and policies, and analyzed World Bank projects that have a component of NBT to find gaps that can be addressed to help build the case of NBT. Currently, the NBT CoP is developing an assessment of tools and resources within this topic that can help members of the CoP to access the right knowledge resources for challenges in their projects. This CoP will be opened to external GWP partners during GEF-7 to share knowledge with national project teams.

benefit from tourism. Industry partners, NGOs and private sector groups will also be invited to join this community so that partnerships can be facilitated.

The GWP Global Project supported the creation of targeted CoPs for both technical themes. For GEF-7, the GWP Global Project will continue supporting these two CoP and seek input from national projects and other stakeholders to prioritize and support future CoPs under the GWP knowledge sharing platform. These CoPs empower practitioners to learn from technical experts and more importantly contribute to joint learning with other colleagues by sharing knowledge and experiences amongst the CoP members. Potential themes of additional CoPs include community engagement, technology and innovation, public-private partnerships, and governance. The CoPs will leverage various knowledge resources and communications tools to facilitate exchange and collaboration. The use of resources will be tailored to CoP members and a CoP manager will facilitate discussions to respond to preferences and needs of community members.

(iv) Knowledge Products

Knowledge products will strive to identify challenges and opportunities of current policy priorities of wildlife related sectors (including wildlife-based economy) through economic analysis and alternative strategy assessments. Under GEF-6, the GWP Global Project delivered analytical studies that included Lessons Learned from International Donor Investments to Combat Illegal Wildlife Trade (Forthcoming 2019), Supporting Sustainable Livelihoods through Wildlife Tourism (2018), Tools and Resources to Combat Illegal Wildlife Trade (2018), and Analysis of International Funding to Tackle Illegal Wildlife Trade (2016). The tourism publication done jointly with the Finance, Competitiveness & Innovation (FCI) Global Practice was one of the most downloaded FCI publications in FY18-19 (2,500+ downloads). The GWP Global Project will employ stakeholder knowledge surveys to identify needs and priorities of national teams on relevant themes and topics for enhancing their projects. Further, it will explore the use of innovative applications for making available existing research and tools in a variety of formats. Where there is a knowledge gap that can be addressed by specific analytical products, it will commission experts to deliver new knowledge products and services. This will increase the availability of tools, guidelines, and good practices for national projects and other stakeholders as well as build capacity. The project will share resources collected during GEF-6 and new resources to be collected during GEF-7 to provide the latest knowledge on these issues and will make this content available through various knowledge platforms. As needed, the Global Project will consider developing case studies, analytical reports, and other knowledge products to deliver required content to national projects and incrementally improve project related operations. Potential thematic areas requested by government clients during GEF-6 include benefit sharing, nature-based tourism studies, human-wildlife conflict case studies, community-based natural resource management and resource guides for effective park management. The GWP Global Project will continue to engage the PSC and national project stakeholders in determining priority knowledge areas for analytical services.

(v) Communications

The GWP Global Project will create a knowledge management and communication strategy that raise awareness on the program and its projects. The GWP will deploy this communications strategy to increase awareness of the GWP and reach a broad audience to raise awareness about wildlife extinction, promote project activities and solutions, disseminate knowledge products, and showcase partnerships with stakeholders. The GWP will establish an interactive website where all the products and services will be available to stakeholders for their reference. Through a GWP website and the World Bank, GEF and other implementing agency social media platforms, the GWP will also promote communication assets to strengthen the GWP brand. Communication assets will include newsletters, reports, blogs, feature stories, videos, infographics, and social

media packages. These communication products will feature stories from national projects and facilitate alignment of national level communication strategy with the broader program level strategy.

Sub-component 3.2 –Innovation and Technology

The GWP Global Project will also promote the use of innovative technology that can help countries leap through gaps in technology and address challenges where human capacity is limited. Through partnerships, the aim of the GWP Global Program will be to showcase various kinds of technology and innovation that child projects could use for delivering their project objectives. Artificial intelligence cameras, SMART technology to monitor species, online tools to deter demand for wildlife products, and other technologies will be promoted through knowledge events to facilitate adoption and usage of these new tools. The Program will also venture and pilot new tools that strengthen financial instruments and market technological innovations. It will also explore innovation competitions, hackathons, and other knowledge exchange formats to engage new stakeholders in activities to promote the goals of the program. Innovation and Technology may also be demonstrated through study tours where national project teams can see the technology in use and decide whether it may be appropriate to invest in it. By linking tools, experts and platforms, the GWP will ensure that national projects are given the best resources to implement their activities.

Sub-component 3.3 – Monitoring and Evaluation

This cross-cutting sub-component aims to implement a program management and monitoring and evaluation (M&E) system to deliver the GWP Global Project and strengthen monitoring of GWP national and program level performance. The GWP will leverage various program management and monitoring tools currently in use under GEF-6 to continue to track progress and increase management effectiveness of program. Examples of tools used in GEF-6 GWP include Microsoft Project, tailored budget and tracking tools developed in Microsoft Excel, and various World Bank project and risk management tools. The system will also keep consistency with the implementing agencies' M&E requirements and respond to the GEF updated policy.

At project level: Each national project allocates funds to conduct project level M&E according to the tools required at project and program level. Guidance, quality assurance and training, as needed, will be delivered by the GWP Global Project to national teams to foster understanding and adopting of these M&E tools. GEF-6 GWP lessons learned will be leveraged for GEF-7 and a working group consisting of the M&E specialists from each project will be established to share experiences, methodologies, good practices and to promote consistency in data collection and reporting. Data standardization will facilitate program level aggregation. Use of various M&E tools will help collect data to monitor and evaluate projects and program performance. Tools that will be used include:

i. GEF Portal - As established in the "GEF Updating Results Architecture", Core indicator data relevant to GWP outcomes will be collected at baseline, mid-term and project completion and submitted by the implementing agencies through the GEF portal
ii. GWP Tracking tools - A GEF-7 GWP tracking tool (TT) will be designed to capture results for indicators to measure GWP outcomes. This simplified TT will measure relevant indicators and will include clear definitions to avoid different interpretations in the values for the indicators. This TT will consider lessons learned from implementation of GEF-6 GWP for program level data collection and aggregation and ensure compatibility between GEF-6 and GEF-7 M &E tools.
iii. Annual progress reports - The coordination project will review the reports submitted by the implementing agencies to the GEF and extract quantitative and qualitative information to deliver annual progress reports aligned to GWP goals. This will include tracking indicators included in the projects' results framework, and those included in the tracking tools along with GEF-7 core

indicators. This will help report on the performance of the projects' development objectives. Annual reports by child project will also include risk ratings that could influence program's overall performance.

iv. Annual qualitative review by child projects – National projects will report on lessons, success stories, challenges and knowledge need as they arise from the activities implemented by each project. This information will be captured in the annual report. The analysis of qualitative reviews from the GEF-6 GWP projects will inform adjustments to GWP reporting templates in this phase.

At GWP Program level: Periodic reports such as the one developed under GEF-6, will be developed by the GWP Global Project to present key program level quantitative and qualitative information, updates on indicators and success stories from the countries and regional activities. This component will also consider the design of a program level geospatial data dashboards. The application of geospatial technology to the M&E framework will contribute to the effectiveness and communications of results to the national project partners, donors, and other project stakeholders. Advice and support will be provided to national project teams on geospatial data collection, sharing and visualization. For GEF-7, the GWP Global Project will also work with national project teams to explore the possibility of project learning missions and field visits to facilitate the capture of M&E information, data, and project stories. Learning missions contribute to fostering a strong relationship between national project teams and the GWP Global Project team.

Alignment with GEF focal area and/or Impact Program strategies

Under the GEF 7 Programmatic Directions, the Global Project aligns very well with the Biodiversity Focal Area. The GWP Global Project under priority 1 (Wildlife for Sustainable Development) activities, the will work with national project partners and donors to organize joint events that may include regional investor forums and other knowledge exchange/investment promotion activities that promote sustainable and inclusive economic development anchored in and around protected areas. The Global Project will support national projects with implementation of activities under priority 2 (Preventing the Extinction of Known Threatened Species) with regional coordination efforts to bring relevant stakeholders together.. Coordination through the PSC will also facilitate engagement with other GEF-funded Programs, where investments on wildlife conservation and to combat IWT may take place including the Amazon Sustainable Landscapes (ASL IP) and the Congo Basin Landscape (CBL IP). Coordination with these GEF-funded programs will facilitate sharing of technical resources and minimize risk of duplicating. The importance of designing and implementing strategies that engage local communities that are living inside and outside of conservation areas and that they benefit from economic development will be an important focus of GWP activities. In addition, GWP collaboration with national project teams will support countries work towards meeting other national commitments such National Elephant Action Plan (NEAP), National Ivory Action Plan (NIAP), National Biodiversity Strategy and Action Plan (NBSAP), CITES, etc. and global commitments to the Convention on Biological Diversity. The GWP Global Project activities are aligned to the GWP PFD component 5 – coordinate and enhance learning.

Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

1. The success of the GWP Phase I is a strong foundation on which to build this coordination grant. GEF-7 GWP Global Project will scale-up activities currently under implementation and diversify the range of services provided to national project teams. The GWP Global Project will expand IWT knowledge generation and sharing, communications and donor coordination. The Global Project will also help enhance efforts that promote: (i) cross-boundary collaboration; (ii) increase political will and combatting corruption; (iii) support knowledge exchanges in Latin America and the Caribbean as well as other regional forums and with other GEF-

funded programs (i.e. ASL, Congo Basin, FOLUR, etc.); and (iv) sustain knowledge management activities that would cease to sustain without this additional support. Additional financial support will enable the GWP Global Project to deliver additional products, enhance coordination, and increase awareness of the magnitude of illegal wildlife trade and need to promote sustainable development. Governments will provide substantive and significant co-financing in cash, grants, and in kind for the projects related to the proposed interventions. Additionally, grants from other donors and loans from multi-lateral agencies will be expected contributions.

Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

This Project focuses on leveraging economies of scale and delivering results more effectively through coordination, collaboration within Communities of Practice and knowledge management. Doing this will have longer term socio-economic benefits for participating agencies, organizations and countries with limited capacity to implement new ideas and solutions. By protecting natural capital, i.e. wildlife and habitats, and promoting a biodiversity economy, the underlying governance models will be strengthened. This will directly benefit local people who often bear heavy costs of living with wildlife. Combating wildlife crime also reveals corrupted networks which can then be destabilized. Additionally, protected areas will be under improved and effective management, which will reduce of poaching, trafficking and demand. This will increase wildlife populations, and landscapes will be more resilient, thus, creating the conditions for communities to continue to use nature as a safety net, particularly as climate change uncertainty exacerbates already tenuous lives. The range of conservation activities will also make significant contributions to reducing greenhouse gases.

Engagement with the Global/Regional Framework

Innovation: While there have been some projects and initiatives to protect single species (i.e. Tigers, rhinos, and elephants) or habitats, this Global Project builds on the GWP Phase I, which was the first time that a suite of investments were coordinated to respond to a key driver of biodiversity decline, namely illegal wildlife trade. Interventions will not simply focus on a single species or sites, but rather on the mechanisms and underlying factors that provide the opportunities for criminal activity. New approaches and frameworks will be tested to tackle IWT as a serious crime (i.e. through anti-money laundering engagements with public and private entities). In addition, the GWP Global Project will assess the potential for innovative financing to support wildlife conservation such as scaling up the Rhino Impact Investment Fund and even exploring blockchain technology which could speed up protection efforts exponentially. The GWP will also look to engage major players in the shared economy to deliver products and services tailored to support the needs and capabilities of conservation areas and the communities that depend on them for their livelihoods. Through hackathons and innovation focused competitions, the Global Project will strive to engage entrepreneurs in exploring new solutions to combat wildlife crime and promote new services for a wildlife-based economy. Additionally, the Global Project aims to facilitate adoption of the latest wildlife technology by national project teams.

Sustainability: The aim of the collaborative networks is to ensure that the program level coordination can sustain itself way beyond the project duration. An active network of committed individuals will self-sustain the knowledge sharing components and help other colleagues in addressing challenges. Communities of Practice across themes will also provide the impetus for these networks to work together in finding solutions that can be applied across the globe. All the coordination activities together will help improve governance, natural resource management, promote wildlife conservation and sustainable development. Local and national treasuries benefit in two ways: first, increased revenues from legal trade in natural resources are assured as the risk of contraband entering trade chains is reduced, and legal businesses that benefit from reduced corruption and a better and safer business environment, can provide improved tax revenues. Governments

can also legally use natural resources in a sustainable way rather than simply stand by as the asset becomes irreparably damaged. The project will seek to build capacity of Wildlife Departments to create stable situations on the ground where there is enforcement of law in partnership with local communities who are engaged in wildlife activities (i.e. tourism, trophy hunting, etc.). This generates local benefits while contributing to global environmental benefits. Increased capacity and financial stability will support long-term environmental sustainability. Further, demonstration of economic and social value of PAs will help government leaders and other stakeholders consider wildlife-smart investments and have proof-cases available to showcase. In terms of Financial Sustainability, the aim of the program will be to find successful ways of making conservation and protected areas self-sustaining. One of the ways to do this is through leveraging public finance to encourage private finance for PA management. Through making wildlife an economic asset and tourism concessions the delivery mechanism, governments can increase the return on investment of protecting wildlife. It is expected that lessons from the GWP implementation will contribute to the development of the post-2020 framework and to help countries achieve them.

The Potential for Scaling up: The GWP has already built a sizable network of people interested in combating IWT and promoting a wildlife-based economy. The potential to scale up is therefore very high. With strengthened partnerships and donor coordination, the GWP hopes to share valuable resources not just within the community but also to others who may be interested in implementing solutions and in turn will help maximize the potential impact of this coordination. Additionally, through transborder work, there is scope to expand into countries that are experiencing IWT but have not been included in this phase of the GWP as well as those that have the potential to start wildlife-based economies.

Project Title:	Strengthening conservation and resilience of globally-significant wild cat landscapes through a focus on small cat and leopard conservation
Country(ies):	India
GEF Agency(ies):	UNDP, WWF-US
Total Project Cost (GEF Grant)	$ 4,500,000
Estimated cofinancing	$ 28,222,000

PROJECT DESCRIPTION

Country context

Of the 41 wild cat species, 15 are native to India. Hotspots for cat diversity are the scrub and open forest of the semi-arid and arid regions in western India, and the vast elevational gradient and associated forest types of the north-east, each having 9 wild cat species. Among these are iconic large cats such as tiger (IUCN Red-list: EN) and leopard (VU), with lion (VU) in Gujarat's Gir landscape. Lesser-known are the small cats of these landscapes: the drier open forest of western India holds jungle cat, caracal, Asiatic wild cat, rusty-spotted cat, and fishing cat (VU), whereas the sub-tropical and temperate forests in north-eastern India house leopard cat, marbled cat, golden cat and clouded leopard (VU), with Pallas's cat in the Himalayan foothills that connect these two eco-regions. While most of India's wild cats do not yet feature as a conservation priority attracting the resourcing of flagship species such as tiger, almost all small cats plus leopards have decreasing populations and many are approaching vulnerable status globally. A higher level of threat is considered to apply to many at national level (e.g. caracal is thought to be endangered within India).

Small cats are keystone species, providing crucial economic and ecosystem services such as pest control and disease control, and their conservation is essential to underpin the integrity of big cat conservation efforts and maintain large natural ecosystems across India. While India's network of tiger reserves provides a safe refuge to many cat species, a substantial part of the geographical distribution of small cats occurs outside the Protected Area (PA) network, making protection, restoration and connectivity of habitats at a landscape scale essential for their long-term conservation. These areas are subject to varying degrees of habitat degradation and fragmentation, and cats are threatened by poaching and human-wildlife conflict (HWC) – threats that are increasing in extent and frequency as ongoing development and land use changes extend the human-wild cat interface and increase the potential for local-level conflicts. For example, four leopards are illegally killed in India each week.

This project will secure the conservation of globally-significant wild cat landscapes in western, northern and north-eastern India (States of Assam, Gujarat, Meghalaya, Rajasthan and Uttar Pradesh) through an integrated landscape approach that broadens and brings together the conservation programs of individual species, connects stakeholders and empowers communities, and operates across PAs, identified tiger corridors and in buffer zones surrounding and connecting these areas.

Current barriers to achieving wild cat conservation at a landscape level include: 1) *Gaps in the policy, planning and procedural framework*, including incomplete understanding of conservation status, distribution, habitat needs and threats, lack of understanding of conservation priorities (and translation of priorities into key actions) at a landscape level, weak integration of efforts among existing species and site conservation and management plans, insufficient consideration of habitat protection and connectivity

in land use and development planning and in work programmes of other sectors, and lack of standardized protocols for monitoring and managing small cats; 2) *Limited capacity* (e.g. personnel, equipment, SOPs) at State, landscape and site level, including to monitor wild cat populations and habitats, apply appropriate management techniques for habitat restoration and connectivity, and manage HWC in an appropriate and timely fashion; 3) *Lack of incentives to support community engagement and* participation in wild cat conservation, restricting community capacity and willingness to apply eco-friendly land use and habitat management techniques that will support wild cat conservation and help prevent and manage HWC; 4) *Insufficient partnerships, regional coordination and outreach* to engage the private sector and identify sustainable financing options, strengthen transboundary collaboration, reduce participation in poaching and trafficking of wild cats, and support knowledge exchange and transfer.

Project overview and approach

Geographical targets

The project will focus activities in wild cat hotspots in western, northern and northeastern India that contain multiple species of small cats and leopards, along with presence of charismatic big cats such as tiger or lion. These are critical sites for maintenance of wild cat diversity in India. Four demonstration landscapes are proposed. Each is built around a key PA for wild cat conservation and also extends into surrounding buffer zones that contain important habitats for small cat conservation. Activities will be conducted within PAs, buffer zones (demarcated as up to 10km around each PA) and identified tiger corridors within these landscapes. The project landscapes are: Ranthambore landscape in Rajasthan, Gir landscape in Gujarat, Bhramaputra landscape in Assam and Meghalaya, and Dudhwa landscape in Uttar Pradesh. Each landscape contains 5-8 species of wild cats and an identified Key Biodiversity Area, recognizing its global biodiversity significance. These landscapes face habitat loss, degradation and fragmentation, and the wild cats they house are threatened by HWC and by poaching for illegal markets and retaliatory killing. Ongoing development impacts reduce and fragment habitat, increasing the interface between humans and wild cats. Increasing human populations and economic development that does not consider environmental needs are drivers of the threats to wild cats.

The baseline scenario and any associated baseline projects, stakeholder engagement and gender mainstreaming

Forest and Wildlife are in the concurrent list of the constitution, supported by strong national legislation for conserving forest and wildlife. Wildlife conservation is mandated to be a government responsibility and programmes for conservation and management of wildlife are in place. The Ministry of Environment, Forest and Climate Change has the mandate to lead on these matters. These include the maintenance of the PA network that has been expanded by 26% over the past two decades, and a central scheme dedicated to the conservation of areas outside PAs. At the same time, policy initiatives of inclusive governance of PAs are anchored in the Amended Wildlife (Protection) Act of India, 1972 and include Conservation Reserves and Community Reserves. The non-statutory, bottom-up initiative of Community Conservation Areas is widespread across regions of India, however these largely do not overlap with the main geographic range of small cat species. Forest restoration efforts of the Government of India are anchored in the Bonn Challenge of Forest Landscape Restoration, with India's pledge for restoring 13,000,000 ha of forest landscapes by 2020 and further 8,000,000 ha by 2030. Ambitious investments are directed towards increasing the country's forest cover through dedicated programmes such as the Green India Mission. Eighty-six percent of the forests in India are under public ownership and 63% are under public management.

The national legislation for wildlife in India, the Wildlife (Protection) Act of India, 1972, lists 15 species of cats (which includes four species of big cats in Schedule I which is accorded the top-most protection). All small cats, except for the Jungle Cat figure in Schedule I of the Wildlife (Protection) Act, with the Jungle Cat placed in Schedule II which also prohibits hunting. Concerted national efforts to support the conservation of iconic big cats such as Tiger, Snow Leopard and Lion include dedicated Protected Areas, the Tiger Landscapes, and human-big cat interaction strategies. For the Leopard and all small cat species similar dedicated conservation programmes and management strategies have not yet been developed and there is an absence of species-specific understanding of conservation needs and priorities.

Baseline interventions that specifically focus on small cats and their habitat include engagement by the Wildlife Trust of India with communities in West Bengal focusing on conserving populations and habitat of the fishing cat by addressing HWC and marshland conservation. Conservation activities that focus on small cats are typically localized interventions that focus on a species or habitat and do not follow a holistic, strategic approach to leverage transformational change towards securing the species' long-term survival in intact habitats. At an international level there is also increasing recognition of the importance of small cat conservation, with the first International Small Wild Cat Conservation Summit held in September 2017, with the support of the Mohamed bin Zayed Species Conservation Fund and the Aspinall Foundation. Case studies from India were among those shared at this inaugural event.

Stakeholder engagement

The project will build upon existing mechanisms for stakeholder coordination and engagement related to wild cat conservation. The project will be implemented by the Ministry of Environment, Forest and Climate Change and engage with other relevant central Ministries that have a mandate relevant to the project objective including agriculture, tribal affairs, rural development, power, railways, tourism and defence; along with relevant State departments. There are existing mechanisms for community engagement in natural resources management and biodiversity conservation in place at village level, for example Forest Management Committees. These will be strengthened through project activities such as targeted capacity building. A regional mechanism for coordination on tiger conservation is in place via the Global Tiger Forum. The GTF will be a partner in project implementation and provide a platform that can support field implementation and transboundary engagement with neighbouring tiger range States. There is not yet an operational mechanism for engagement of the private sector in wild cat conservation. The establishment of a mechanism to strengthen this private sector engagement and investment will be supported by the project (see next section). During project PPG phase and during implementation, a broad approach to stakeholder engagement will be continued, as strong partnerships across government and with the private sector and local communities are needed to achieve effective conservation of wild cats. Specific activities will be integrated into the project design to strengthen partnerships and stakeholder engagement. Individual stakeholder interests will be mapped as part of the project PPG phase, and potential roles in project implementation agreed as part of detailed stakeholder consultations (which will include FPIC with local communities in accordance with policies and standards of the GEF Agencies).

Gender integration

All programmes and schemes of the Government of India seek to ensure equal representation of women across all levels for design, implementation and monitoring of actions. For example, local-level institutions like Biodiversity Management Committees and Panchayati Raj Institutions have 50% representation of women across all levels. The gender budgeting scheme of the Ministry of Women and Child Development aims to mainstream gender across various government departments and agencies. This proposed project will seek to build off this baseline to further support gender mainstreaming, particularly at project sites.

There are gender disparities and differences in the way that men and women interact with and use natural resources in the project landscapes. The project will strive to create opportunities to increase women's participation and decision-making and generate socio-economic benefits for women in these landscapes. These opportunities will be explored at site-level during the PPG phase and specific activities targeting women defined. A comprehensive gender analysis will be completed to identify the different roles of men and women pertaining to local livelihoods, resource use and land tenure, and their differing participation in conservation and habitat management activities and decision-making. Consultation sessions will be held to obtain views and inputs of a wide range of local stakeholders, including women, to inform the development of project activities and a robust stakeholder involvement plan with full gender considerations. A gender mainstreaming plan will be completed and submitted at the time of CEO Endorsement. Gender mainstreaming will be integrated across project activities as relevant and has also been explicity recognized in a project output (see next section).

The proposed alternative scenario with a brief description of expected outcomes and components of the project

To address the above-mentioned barriers, the proposed project will support India to put in place an integrated model for wild cat conservation at landscape scale that can be upscaled and replicated nationally and in wild cat landscapes of other range States. The proposed project will be achieved through four complementary components that aim to build the required enabling policy framework and institutional capacity (Component 1); strengthen government management of wild cats and habitat (Component 2) and build community stewardship (Component 3) at landscape level; and enhance private sector partnerships, regional collaboration, and knowledge transfer and learning (Component 4).

Component 1 will put in place a landscape-level approach to wild cat conservation that will guide the revision and implementation of existing policies, plans and programs of government departments at national and sub-national level. GEF support will be used to establish landscape-level conservation strategies (Output 1.1) through a participatory process involving government agencies, communities and other local stakeholders. These will be informed by i) landscape-scale assessments of land use, small cat distribution and threats, along with review of existing assessments and baseline studies; ii) a review of existing species and PA management plans, sector plans and work programs to identify gaps, landscape-level conflicts and key actions and measures of success for achieving landscape-level conservation; iii) collaborative planning with stakeholders to identify . The implementation of landscape conservation strategies will be supported by outputs under Components 2 (integration of landscape strategies into existing site-based conservation and PA management plans), 3 (community mobilization and inventives for collective action towards small cat conservation) and 4 (creation of business partnerships to support private-sector supported conservation and livelihood pilots in project landscapes). Landscape conservation priorities for wild cats will be mainstreamed into the strategies and work plans of other sectors through the revision of State and district-level land use planning processes (Output 1.2) and through capacity building of State departments (e.g. Forest, Revenue, Animal Husbandry, Land Use Planning and Agriculture & Fisheries), District Administrations and research institutions for landscape-level conservation, along with sensitization of elected representatives to build political will for wild cat conservation (Output 1.3). Finally, standardized procedures to support the operationalization of landscape conservation strategies will be developed, including the development of Standard Operating Procedures (SOPs) for HWC management, standardized monitoring protocols for small cats, and national guidelines for strengthening human-rights approaches to law enforcement (Output 1.4).

Components 2 and 3 will be implemented in four project landscapes, putting in place the required local capacity, collaborations and community stewardship for landscape-scale conservation in globally-significant landscapes for wild cats, focussed on clustered hotspots where small cat distribution overlaps with big cat habitats. Component 2 will bring together key government departments with a role to play in wild cat conservation to support the implementation of landscape-scale strategies. Site-specific guidelines on small cat conservation will be developed in accordance with landscape-level strategies developed under Component 1 and integrated into revised big cat conservation strategies, conservation plans of tiger reserves and management plans of other PA types (Output 2.1). This will help build a complementary and coordinated action portfolio for wild cat conservation bringing together big cat and small cat conservation. Supporting the implementation of landscape conservation strategies, targeted interventions will be demonstrated to improve wild cat habitat and prey management (Output 2.2), including measures such as native species plantings in PAs, buffer zones and riparian zones; and regulation and enforcement of fishing activities in PAs and buffer zones to improve the wild cat prey base. Finally, frontline staff will be capacitated and equipped to support wild cat conservation, monitoring and enforcement (Output 2.3). This will include completion of security assessments and provision of equipment for monitoring and surveillance (e.g. GPS, night-vision binoculars), trail-guard applications/artificial intelligence-based cameras to monitor poaching-related activiti, and training in state-of-the art monitoring protocols (e.g. M-STrIPES 'Monitoring System for Tigers - Intensive Protection and Ecological Status' protocols and software system), and implementation of SOPs for wild cat conservation developed under Component 1 including training in indigenous peoples, community engagement and delivery of a human rights-based approach to site-based wildlife law enforcement.

Working in parallel with Component 2, in the same wild cat landscapes, Component 3 will build community stewardship and engagement in the co-management of wild cat habitats. Target locations for community collaboration on wild cat conservation will be identified during the PPG phase, and local consultations conducted to confirm support for project activities. The project will strengthen the governance and capacity of existing community and village-level institutions (e.g. Forest Management Committees) to take a greater role in wild cat conservation in support of landscape-level strategies (Output 3.1). GEF funds will support the delivery of training on wild cat habitat management, participatory monitory and business skills. Community engagement and participation will be enhanced through the delivery of local community workshops (Output 3.2) that aim to raise awareness of wild cat conservation and document traditional knowledge and practices that support wild cat conservation. A new model for participatory community monitoring of wild cat populations and HWC damage and risks will be operationalized (Output 3.3) with the support of village-level institutions, raising understanding of local wild cat population status, the quality and use of habitats within PAs and across the surrounding mosaic of forest and agricultural land use, and on the extent of threats such as HWC and poaching. Incentives will be provided to support community participation in wild cat conservation and reduce pressure on wild cat habitats through diversification of local livelihoods (Output 3.4). Uptake of more sustainable land and habitat management practices will be supported by value addition to agriculture and livestock products, and establishment/enhancement of tourist facilities and homestay tourism programmes. Finally, HWC hotspots will be identified and innovative mechanisms for preventing and managing HWC in areas adjacent to PAs and corridors demonstrated (Output 3.5). This will involve the completion of SAFE workshops with communities and local stakeholders applying the WWF SAFE Framework, followed by investment in community-based HWC solutions (e.g. corral reinforcement) that respond to the identified issues.

Finally, Component 4 will build the necessary partnerships and platforms for integrated and collaborative wild cat conservation. A Wildlife Business Council will be established (Output 4.1) to engage the private

sector in wild cat conservation and facilitate the identification of sustainable financing options to maintain community stewardship outside of core tiger habitats protected in PAs. This is expected to include partnerships with agricultural businesses operating within the project landscapes, supporting pilot conservation and livelihood initiatives under Component 3. Targeted communications and outreach adopting social and behavioural change communications principles (Output 4.2) will be deployed to target audiences including local communities to help shift attititudes and behaviours and reduce participation in poaching and illegal trade in small cats and their body parts. Transboundary and regional collaboration on wild cat conservation, including with tiger range states, will be enhanced through new/strengthened bilateral agreements, sharing of information and knowledge on wild cat conservation, and identification of areas of common concern and agreed joint actions for monitoring, species conservation and combating illegal trafficking (Output 4.3). Web-based knowledge platforms and e-networks will be established (Output 4.4) to facilitate knowledge sharing and information dissemination between landscapes, States and with the Global Wildlife Program, while an effective M&E system (Output 4.5) will help ensure project impact and adaptive management and adequate consideration of gender mainstreaming and social and environmental safeguards.

Alignment with GEF focal area and/or Impact Program strategies

Through its effort to combat threats to known threatened wild cat species, including from poaching and illegal trade, and mainstream wild cat conservation at State and landscape level, the proposed project is aligned to GEF-7 focal area objective *BD-1-2a Mainstream biodiversity across sectors as well as landscapes and seascapes through global wildlife program to prevent extinction of known threatened species*.

The project aligns to the GWP Theory of Change in the following ways: i) implementation of landscape-level conservation management plans integrated across existing species and site plans and programmes will support improved management of PAs, improve biodiversity management across landscapes and support healthy wildlife populations; ii) increased frontline capacity for patrolling and surveillance activities will improve PA management and support stabilization of wildlife populations with reduced poaching; iii) effective HWC management strategies and the provision of financial incentives to communities will support community participation in wild cat conservation and bring about more positive attitudes towards wildlife and human-wildlife coexistence; iv) targeted awareness, advocacy and social mobilization can achieve a shift in attitudes and behaviours that deter and reduce participation in poaching and illegal trafficking of wild cats, helping disrupt supply to illegal wildlife markets.

The project will make the following contributions to the GEF-7 Global Wildlife Program framework:

GWP Component	**Contributions of this project (and alignment to GWP Sub-Components)**
11. Conserve wildlife and its habitats	-Enhanced management of wild cat landscapes including tiger reserves, PAs, tiger corridors (Sub-Component 1.1) -Strengthened policy, procedures, institutions and partnerships for managing protection of habitats at landscape level within and outside of PAs (Sub-Component 1.2) -Sensitization of other sectors and elected representatives to support mainstreaming of wild cat conservation and build political will for more attention on managing and connecting significant wild cat habitats (Sub-Component 1.2) -New private sector sustainable financing solutions to support community stewardship of wild cat habitats (Sub-Component 1.3)

12. Promote wildlife-based economy	-Innovative solutions for preventing and managing HWC deployed at identified hotspots within wild cat landscapes, and increased adoption of land use and habitat management techniques to minimize potential for conflicts (Sub-Component 2.4) -Communication initiatives and outreach to minimize local community engagement in poaching, retaliatory killing and illegal trade in wild cats and their body parts, helping build human-wildlife coexistence (Sub-Component 2.4)
13. Combat wildlife crime	-Frontline training and equipment for monitoring and surveillance of wild cats and poaching-related activities, strengthening site-based anti-poaching and enforcement capacity (Sub-Component 3.3)
14. Reduce demand and disrupt markets	N/A (but also see communications and outreach under Component 2)
15. Coordinate and enhance learning	-Enhanced regional cooperation between India and neighbouring tiger range States and agreed coordinated action portfolio (Sub-Component 5.1) -Capacity-building of State, district and community-level institutions to support conservation of wild cats and their habitats (Sub-Component 5.2) -Knowledge management to identify, document and share project best practices and lessons learned between project landscapes, across India and other wild cat range countries and across the Global Wildlife Program (Sub-Component 5.2)

Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

Baseline	**Alternative to be put in place by project**	**Global environmental benefits**
Policy and planning framework		
Limited understanding of conservation needs, threats and status of small cats and leopards across India. Observations of ecosystem services that are supported by these species, but no standardized assessments of the extent to which these are provided or the overall benefits of small cats to ecosystem health. No standardized protocols for small cat management and monitoring further challenging understanding of their distribution and conservation status. Conservation planning focussed on flagship species such as tiger and the protection of critical sites.	Updated and data-driven National Red List for wild cats, informing global Red List updates. Species-specific conservation action plans developed for globally-threatened wild cats. Multi-sector and participatory landscape conservation action plans, supported by land use and development planning processes that are more sympathetic to wild cat conservation and adopt a climate-smart planning approach; and the mainstreaming of small cat (plus leopard) conservation into strategies and work plans of other sectors. Standardized protocols for management and monitoring of small cats support increased understanding of their	Integrated and coordinated management of globally-significant wild cat landscapes covering over 720,000 ha in western, northern and north-eastern India. Improved management of 520,949 ha of PAs in five States of India, including improved management of four identified KBAs. Improved management of an estimated 200,000 ha of agricultural and forest mosaic that buffers and connects PAs and provides important habitats for small cats.

Land use planning and development decisions do not consider wild cat conservation, resulting in habitat fragmentation and degradation.	conservation status and improved effectiveness of conservation actions.	Stable and improved populations of globally-significant wild cats including tiger (EN), lion (VU), common leopard (VU), fishing cat (VU) and clouded leopard (VU). Arrested declines of small cat populations for species currently listed as globally near-threatened but reaching vulnerable status globally and at higher risk within India.
Wild cat conservation and community involvement		
Declining populations of small cats species and increasing threats to their habitats. Conservation programmes typically restricted to iconic big cats such as tiger and lion with no dedicated programmes for small cats or leopards. Site-level management is predominant, with little consideration of management at a landscape scale. Limited financial incentives for conducting land and habitat management in a way that benefits small cat conservation Human-wildlife conflict is common in areas buffering and connecting PAs. Limited involvement of private sector in wild cat conservation. Reliance on government and donor funds for maintenance of community engagement.	Dedicated conservation programmes for small cats and leopards and their integration with management plans of tiger reserves and other PAs, providing an integrated set of actions for wild cat conservation. Implementation of technically-sound interventions to support wild cat conservation at a landscape-scale. Communities act as stewards for wild cat landscapes, adopting eco-friendly land management that provides livelihood benefits, improves quality, extent and condition of wild cat habitats and promotes human-wildlife coexistence. Effective private sector engagement provides sustainable co-financing solutions to maintain community involvement and provide long-term livelihoods benefits. Strengthened transboundary cooperation across tiger range States.	

Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

The proposed project will result in the improved management of almost 600,000 ha of landscapes in western, north-eastern and northern India that provide critical habitats for wild cats. Each landscape includes a globally-significant site for biodiversity conservation. The project will strengthen the management of an estimated 391,400 ha across four pivotal PAs for the conservation of wild cats (including a number of tiger reserves) along with improve the management of an estimated 200,000 ha of agricultural and forest land buffering and connecting these reserves through the adoption of eco-friendly land and habitat management practices. The improved management and connectivity of habitats within these landscapes and delivery of coordinated wild cat action portfolios will support the long-term conservation of globally-significant species such as tiger (EN), lion (VU), common leopard (VU), fishing cat (VU) and clouded leopard (VU) and help arrest declining populations of many other small cat species that are considered to be nearing vulnerable status globally and are perhaps already endangered within India. Improved PA management effectiveness and the improvement of habitat quality, extent and connectivity

across forest and agricultural mosaics will in turn support the conservation of a wide range of biodiversity *found* in these eco-regions of India. The focus of the project on building conservation and resilience at landscape level will support the adaptive capacity of species and ecosystems to respond and shift as climatic envelopes change.

Engagement with the Global / Regional Framework

Innovation: Project strategies are based on a novel approach of multi-stakeholder engagement and stewardship that have not been adequately applied before in India for integrated conservation of wild cats at landscape scale. The project will engage communities in wild cat conservation by empowering community-level institutions in co-management and by creating economic incentives for the adoption of wild cat-friendly land and habitat management techniques in the forest and agricultural mosaic surrounding key PAs and corridors; apply a holistic landscape approach that considers the interconnectedness of landscape elements and actors and integrates conservation actions for individual species into a coordinated action portfolio; and engage stakeholders from different administrative units (e.g. States, districts, individual PAs), institutional mandates (e.g. Departments of Forest, *Agriculture*, Land Resources) and functions (e.g. government, non-government, civil society, community) in wild cat conservation.

Sustainability: long-term ownership over project outputs will be achieved by institutionalizing project approaches within State, district and local-level institutions, mainstreaming wild cat conservation into policies and plans of *other* sectors including land use planning; integrating project outputs within existing government programs (e.g. conservation plans for tiger reserves and management plans for other PAs) and by creating the economic incentives and public-private partnerships needed to sustain community participation beyond project close.

Scaling up: Project approaches have high potential for up-scaling to other wild cat landscapes in India and to neighbouring countries and wild cat range States. The projects effort's to ensure effective knowledge management and transfer will identify and disseminate best practices and lessons learned across India, neighbouring countries and the Global Wildlife Program to facilitate this scaling up, as well outputs to strengthen bilateral partnerships and coordinated action with neighbouring countries.

Knowledge management: The project will support knowledge management at a range of levels. First, the project will establish web-based knowledge platforms and e-networks to facilitate information dissemination and knowledge transfer between project landscapes. This will also be facilitated through knowledge transfer visits between landscapes during project implementation. A national steering committee will also help facilitate this transfer between landscapes. Partnership mechanisms such as local institutional partnerships to support the implementation of landscape-level strategies will help facilitate knowledge transfer between sectors, as will the proposed Wildlife Business Council that will share knowledge with interested businesses, including those engaged in livelihood activities at project sites. The project will actively participate in the GWP knowledge exchange platform and seek to share lessons learned from this global engagement through national fora and project landscapes. Importantly, the project will also seek to enhance knowledge transfer with neighbouring countries in wild cat – and particularly tiger – conservation. This will build off existing platforms such as the Global Tiger Forum and existing bilateral agreements. Knowledge management is captured under Output 4.4 (and also Output 4.3) in the results framework giving emphasis to the project's attention on knowledge sharing, learning and sharing of experiences. The project will dentify, document and disseminate project best practices, including on gender mainstreamining and documentation and use of traditional knowledge.

Project Title:	**C**atalyzing **O**ptimum Management of **N**atural Heritage for **S**ustainability of **E**cosystem, **R**esources and **V**iability of **E**ndangered Wildlife Species (CONSERVE)
Country(ies):	Indonesia
GEF Agency(ies):	UNDP
Total Project Cost (GEF Grant)	$ 6,272,018
Estimated Co-financing	$ 49,400,000

PROJECT DESCRIPTION

Country context

Indonesia is one of the most biodiverse regions in the world, and supports many mammal and bird species including endemic and endangered species. The country is located in the biodiversity distribution path of the Asian continent (Java, Sumatra and Kalimantan islands) and Australia (Papua), and is in the transitional zone of the Wallace line (Sulawesi, Maluku and Nusa Tenggara islands), and therefore harbours the biological richness of Asia, Australia and the transitional zone of the two continents.

Sumatra is the sixth largest island in the world, characterized by the Bukit Barisan mountain range and globally significant tropical montane, sub-montane, lowland, freshwater and peat swamp forests as well as mangroves and rivers. Sumatra forms part of the Sundaland region, a recognized 'biodiversity hotspot'. The flora of Sumatra is one of the most species-rich on earth with over 10,000 vascular plant species, of which 12% are endemic. The island's fauna includes 201 mammal and 580 bird species, with endemic and Critically Endangered species such as orangutan, rhinoceros, and elephant. It is also the home for two other Critically Endangered species: Sumatran tiger and Helmeted hornbills.

This range covers multiple conservation areas - 13 Important Bird Areas, two Ramsar sites (Berbak and Sembilang National Parks) and the UNESCO Tropical Rainforest Heritage of Sumatra World Heritage Sites (the National Parks of Gunung Leuser, Kerinci Seblat and Bukit Barisan Selatan). The key threat facing this biodiversity hot spot include first, from forest habitat loss and fragmentation that over the past two decades has occurred at 2%/year. Second significant threat facing the key species of sumatran tigers, elephant, helmeted hornbill is from direct poaching to supply Asian markets, which over the past five years has spiked in response to soaring international demand. For tiger, an increase in black market prices (>300%) and organised wildlife trafficking syndicates sponsoring poaching. A lesser poaching threat is from the hunting of the tiger's ungulate prey base, which is mainly for local meat consumption. While large (>10,000 km^2) contiguous forest landscapes still remain in Sumatra, weak protected area management capacity means that overall threats in national parks remain high, especially as anti-poaching patrols are mostly confined to the core areas within the larger landscapes. Outside of national parks, threats to tigers are even greater because of proposals to clear remaining forest areas for plantations and infrastructure development, and retaliatory killings due to conflicts with people.

Sumatran elephants in the Leuser Ecosystem and associated nearby forest areas in Northern Sumatra are severely threatened by the conversion of forests into farmland and palm oil plantations. Other serious threats to their homes include timber concessions, illegal logging and burning, mining, quarrying, and expansion of roads and settlements. All of these actions have devastating impacts such as forest loss,

severe fragmentation and direct threats on animals – either by poaching or killing as a result of human-wildlife conflict. Clearing elephant habitat is leading to increased human-elephant interactions and exacerbating conflicts demonstrated by the increased rate of poisoning of elephants in recent years. Worryingly, there are now plans for the development of a road through Leuser that would open the park up to more threats and illegal activities throughout the now relatively well protected interior regions.

In term of population of key species, elephant population in Sumatra has dropped from 2,400-4,800 individuals in 1985 to 1,700-2,000 individuals in 2016 and where 85-90% of their home ranges are outside the existing conservation area. Thus, the importance of landscape conservation approach.
Effective mitigation is needed, and depends on the team on the ground applying tested strategies that take into consideration the needs of local communities and wildlife. At the same time, habitat restoration and protection, and the planning of forest corridors require sound scientific data on the habitat needs and home range sizes of elephants. Currently there is limited or data to make decision for effective conservation strategies.

Over the past few years, the Sumatran elephant population has faced a drastic decrease. In 2012, they obtained their status as "Critically Endangered". The table below compares the population size over a span of about 20 years. About 70% of the elephant's habitat has been wiped out due to illegal logging, establishment of oil plantations and poaching. These animals have been seriously restricted in their abilities to find food and a place to live. According to scientists, more than half of the Sumatran elephant population has been lost in only one generation (from 1985 to 2007). The table indicates both elephant populations and forest cover are in decline.

In 2007, estimates suggest that 2,400 to 2,800 elephants are in the wild. This resulted from human activities which reduced the species from its pre-existing total of about 4,800 elephants. Approximately 2,200 elephants were lost in a span of 22 years; the average population loss being 100 elephants per year. In 2008, the elephant had become "locally extinct" in 50% of the ranges identified in Sumatra in 1985 (over one generation). Now, Sumatran elephants reside in only seven provinces many of which are under increased pressure of habitat loss and imminent conflicts with human.

According to IUCN, 85% of the animal's remaining habitat is unprotected and likely to be converted to agriculture or other purposes. If harmful and destructive activities continue at this rate, then the mortality rates of elephants will increase and pose high risks of extinction.

Table 1. Estimated Sumatran Elephant Population

Year	Number of Elephants
1985 - 1990	4,800
1991 - 1996	4,300
1997 - 2002	4,800
2003 - 2008	3,300
1009 - 2013	2,800
2014 - 2019	2,500 or less

Source: sumatranelephantsatrisk.weebly.com

Pig-nosed turtle (*Carettochelys insculpta*) the most hunted species in the lowland of the southern Papua. Its specific nesting habitat and the nesting period making the species vulnerable because of the easy detect crawl. Drastic population decline due to the nest collection. Market demand and lack of protection is the drivers for local community to collect as much as possible nest.

Historically, protected area management has been hindered by a lack of funding, varying local stakeholder commitment, poor inter-agency coordination for wildlife and forest conservation outside of the protected areas, limited capacity of frontline staff and slow uptake of new conservation tools (e.g. SMART). In addition, protected areas are managed in isolation from the surrounding areas hence, biodiversity conservation targets are not considered equally important for the administration units bordering the protected area. Conservation authority will have to embrace a landscape approach as ensuring its effectiveness and existence will depend on the threats from the surrounding areas and how stakeholders around the protected areas perceive the value of protected areas. Removing these barriers would greatly improve the ability to detect, respond to and monitor changing threat levels and, significantly strengthen effective management of protected areas which forms cornerstone of key species conservation.

Project overview and approach

Geographical targets

The project aims to strengthen protected area and landscape management for enhancing wildlife conservation, sustainable land-use practices and generating sustainable livelihood through Nature-based tourism, promoting local wisdom and addressing illegal take of wildlife. The project's target areas include some of the most important forest for biodiversity and also a stronghold for four Critically Endangered species in Sumatera, Wallace and Papua Regions. The project will also include a sample of forest concession surrounding these national parks, primarily consisting of production forest. In combination, the project area covers 8.26 million ha and includes the UNESCO Tropical Forest Heritage of Sumatra World Heritage Site cluster (Gunung Leuser, Kerinci Seblat and Bukit Barisan Selatan). Together, these forests represent some of the last remaining contiguous areas of forest remaining in Indonesia and represent dominant portion of Indonesia's 'Tiger Conservation Landscapes'.

The Sumatran elephant, a subspecies of the Asian elephant, is critically endangered and is found only in Sumatra, Indonesia. However, the lack of information about Sumatran elephant distribution, habitat use and home ranges makes it difficult to plan effective conservation strategies, and further research is needed to prevent their extinction. Besides, the landscapes in the region also provides vital ecosystem services for the local community (e.g. through water supply regulation; genetic resources with potential commercial application, such as agriculture and bio-products; and, macro-biodiversity with high tourism amenity value), as well as for the international community (e.g. through climate regulation). Thus, the project areas have been identified for the following reasons: i) they offer the best long-term survival for elephant; ii) high risk of poaching areas; iii) increased human-wildlife conflict; and iv) lack of game hunting park management and therefore, need to act as protected area flagships for Indonesia; the smaller areas (e.g. Bukit Barisan Selatan and Berbak-Sembilang national parks) offer the potential for recovering tigers, if the right management systems are put into place; and offer a model for achieving effective wildlife management in production landscapes (i.e. landscape approach); ii)These are the priority areas of Ministry of Environment & Forestry (as stipulated in the national policy); and, iii) each project area already has an NGO-Ministry of Environment & Forestry partnership that will enable the proposed project to swiftly move to an implementation phase.

The baseline scenario and any associated baseline projects

Indonesia has a strong policy framework for managing, conserving and protecting its biodiversity and forest resources. The government is a signatory to the CBD, CITES, the Convention Concerning the Protection of World Cultural and National Heritage and the Ramsar Convention. International commitment has been made for elephant, through Monitoring the Illegal Killing of Elephants (MIKE) in which Indonesia as one of two Asian Elephant range state.

There have been numerous conservation and community development initiatives in the target landscapes a range of successful site-specific strategies (e.g. HWC, SMART -based patrol, wildlife population monitoring) that have been developed and enhanced by the MoEF and its NGO partners.

Some of the baseline projects that are relevant to the proposed project include:

- The Kerinci Seblat-Integrated Conservation and Development Project (ICDP) exemplifies the problems associated with project implementation for a large-sized donor-funded project if poor inter-agency coordination exists. It also exemplifies how rural development activities that are designed to provide indirect payment schemes with tenuous links to biodiversity conservation will fail to achieve the intended conservation-development outcomes.

- The community ranger project in Ulu Masen demonstrated that while some rangers earned less than they did previously through illegal activities, they wished to remain as community rangers because: i) previously they had no choice but to be engaged in illegal activities due to a lack of alternative income opportunities; ii) their income is now stable; and, iii) they are proud to be community rangers. So, the community ranger project design may mean a lower income over the short term, but it will increase their livelihood security in the future and is, therefore, expected to greatly reduce the likelihood that the rangers would revert to destructive livelihoods after the program ends.

- Bukit Barisan Selatan coffee production initiative: The project focused on smallholder farmer intensification for improved coffee production in two areas surrounding the national park and engagement with only one coffee company proved insufficient to effectively address the wider supply chain problem that coffee from inside was being sourced by national and international companies. Thus, a supply chain wide focus (across all or the majority of companies engaged in the area) is needed to improve transparency of supply, coupled with better monitoring, to ensure that sourced raw product is not grown in illegal areas.

Current projects in the landscapes include:

- GEF-5 Tiger/UNDP: Transforming Effectiveness of Biodiversity Conservation Landscape is a five years project (2015-2020), funded by GEF to support Government of Indonesia in conserving biodiversity in Sumatra. The project's goal is to contribute to conservation and sustainable use of globally significant biodiversity in Indonesia. Whereas the objective of project is to enhance biodiversity conservation in priority landscapes in Sumatra through adoption of best management practices in protected areas and adjacent production landscapes. Tiger recovery is used as key indicator of success of the project. The target landscapes: Gunung Leuser National Park, Berbak-Sembilang National Park, Kerinci Seblat National Park and Bukit Barisan Selatan National Park.

Results achieved under the project include:

- strengthened partnership amongst multiple partners - Ministry of Environment and Forestry, local government in the target sites, and NGO partners - Wildlife Conservation Society, Fauna Flora International, Zoological Society of London, and Sumatran Tiger Conservation Forum.

- estimated tiger density in the core areas through camera trap survey in the four landscapes (Leuser, Kerinci Seblat, and Bukit Barisan Selatan Ecosystem) in 2017 and, the average tiger density recorded for the 4 target landscapes was 1.46 tiger/100km^2 indicating increased in tiger density from the baseline data of 1.06 tiger/100 km2

- project facilitated institutional strengthening by collaborating with the Center of Education and Training of Ministry of Environment and Forestry (MoEF). This resulted in the development of curriculum on - Management of Human and Tiger Conflict; and Monitoring Sumatran Tiger Population.

- facilitated coordination among law enforcement agencies and in particular, established partnerships between national park agencies and Provincial Police Authority (POLDA). Number of joint initiatives have been undertaken namely - exchange of information, capacity building, joint patrolling, out-reach and awareness activities, etc. The joint effort has resulted in increased number of wildlife crime cases submitted for prosecution.

- responded to Human-tiger conflict (HTC), by facilitating forming human-tiger mitigation teams in the 5 NPs and, other mitigation measures included: (1) Conflict monitoring at high risk villages; (2) developed syllabus on HTC mitigation; (3) provided trainings to national park/local government staff, veterinarian, and local community to respond and manage the conflict effectively; (4) constructed tiger proof enclosures (TPE).

- ITHCP (Integrated Tiger Habitat Conservation Program)-IUCN implements in Ulu-Masen Protected forest, Gunung Leuser National Park, Kerinci-Seblat National Park, Bukit Barisan Selatan National Park, Berbak-Sembilang National Park (2017-2018, but currently running under the no-cost extension until 2019 due to delay in starting the project). The objective is to stabilize the population of Sumatran tiger by the end of project, through implementation of the NTRP in the tiger core areas in four priority TCLs accounting for >70% of the remaining population. This will be achieved through supporting: 1) Intensive protection of the core PAs holding the main tiger source populations; 2) Sustainable landscape management across >69,000 km2 of prime tiger habitat; and 3) Community livelihood buffer zone initiatives at PA borders.

- GEF-6 GWP Phase I/Combatting illegal and unsustainable trade in endangered species in Indonesia: this project is part of the GEF Programme on Global Partnership on Wildlife Conservation and Crime Prevention for sustainable development (GWP phase I) and is a six-year project which started implementation in 2018. The project's objective is to reduce the volume of unsustainable wildlife trade and the rate of loss of globally significant biodiversity in Indonesia and East and South-East Asia. The project focuses on: (i) strengthening national policy, legal and institutional framework for regulating legal commercial wildlife trade and combating illegal wildlife trade; (ii) institutional capacity for regulatory coordination, implementation and enforcement at the national and international levels; (iii) improve enforcement strategy demonstrated and scaled up at key trade ports and connected subnational regions

with key ecosystems - northern Sumatra centered on the Leuser ecosystem and northern Sulawesi centered on the Bogani Nani Wartabone ecosystem and their respective seaport and airport.

Stakeholder engagement processes and gender integration

At each region, series of consultations will be conducted where all the relevant stakeholders will be consulted not only to gain understanding on their perspective on wildlife and habitat conservation but also on how to best streamline the wildlife/habitat conservation into their management plant and daily operational activities. This will include multi-stakeholder at national and sub-national level, donor agency as well as development partners. Gender analysis will be undertaken during PPG and gender mainstreaming and action plan will be developed to ensure the project strategy is gender responsive.

The proposed alternative scenario with a brief description of expected outcomes and components of the project

The project aims to strengthened management and protection of forest landscapes for the conservation of key threatened species (Component 1), enhanced site-based enforcement and monitoring of sustainable use of wildlife resources, governance and financial issues underpinning the problems and create a model biodiversity landscape management system operating across the project areas that can be scaled up across Sumatra and, potentially, beyond and build community stewardship (Component 2); enhance private sector partnership (Component 3); and knowledge transfer and learning (Component 4).The project will approach this through four components:

Component 1 will improve on-the-ground investment management and protection of key forest landscapes and wildlife species through sthrengtening key species strategy and Action Plans developed for selected PA units (section area or resort level) and implemented with adequate investment in tools/equipment to enhance law enforcement, species & habitat monitoring (Output 1.1). And sthrengtening the collaborative conservation with the local government policies to support wildlife and forest management objectives (Output 1.2) will greatly incorporated with the initiative mutipartnership Human-wildlife conflict management and anti-poaching measures including incentive mechanism for forest-edge communities (Extended Desa Mandiri Konflik) developed, implemented and up-scaled including improved habitat management. GWP HWC community of practice / IUCN SSC HWC Task Force will be consulted during PPG to ensure use and replication of best practices (Output 1.3). The government has issued regulation in relation to the HWC (including method of tackling and preventing HWC which comes from years of experience implemented by communities and related Civil Society Organization) but with limited success partly, because those that experience HWC (that is the community) are seen as an object and not a subject in the HWC scheme. The focus now has to shift towards building the local/community capacities to mitigate HWC and ensure that this will be sustainable (in terms of budget allocation for the HWC activities). This output is linked to output 1.2, where local government can facilitate through their policies to utilize village funds to mitigate HWC. Besides, GWP community of practice will be consulted during PPG to ensure use and replication of best practices.

Component 2 will improve site-based enforcement and monitoring of illegal activities including poaching, encroachment, and illegal logging at key landscapes through upgrading, utilizing, testing and operationalizing the state-of-the-art SMART patrol operational system (Output 2.1). Developed high risk poaching area mapping in selected sites (Output 2.2) will greatly complement in monitoring and understanding the current threats within each landscape. Site-based key threatened species monitoring will be enhanced and conducted in systematic and regular fashion as indication of successful protection

and, will be combined with enhanced wildlife genetics techniques for counter wildlife trafficking (Output 2.3). The wildlife genetics work will involve non-invasive approach (e.g. scat collections, urine sampling) and analyze to develop DNA maps/profiles of key species. This information can also be used in the case of Illegal Wildlife Trade (i.e. checking the DNA from the skin or bones confiscated and cross-reference with the DNA profiles. Protecting the key species also acknowledging the role of community and will be upgrade through the New model of Masyarakat Mitra Polisi Hutan/MMP (Forest Ranger Community Partner) developed to safeguard PA including community-based incentive mechanism such as through (but not limited) Dana Amanah Konservasi (Conservation Trust Fund) (Output 2.4). In line with the two ways benefit between the wildlife conservation and community through supporting the Eco-tourism and cultural based model for sustainable use of wildlife resources in game hunting park involving both men and women piloted and up-scaled. (Output 2.5)

Component 3 will operate at the landscape level together with Component 1 and focus on the buffer zone forest through close engagement with private sector partners. The first step is to engage with the private sector partners and support PA buffer zone management to reduce threats to wildlife including poaching across the landscape for improved species and forest management (Output 3.1). There are many private sectors operating around the conservation areas, hence introducing the key species conservation objectives into their management plan and daily operation will enhance biodiversity conservation at a landscape scale. Series of awareness raising, and coordination meeting will become the main process in here where a positive acceptance by the private sector will then lead to incorporating biodiversity conservation into their business operation. Incentive/reward mechanism will be developed for private sector who has demonstrated biodiversity conservation into business operation for reducing forest degradation and wildlife conservation within their concession (Output 3.2). This will be followed by establishing public-private financing schemes piloted in buffer zones to support PA management objectives and diversify funding for biodiversity conservation across landscapes (Output 3.3).

Component 4 will focus on consolidating and disseminating results from the other components as part of the knowledge management coordinated through the Global Wildlife Program contributing to post 2020 of the Indonesia Biodiversity Management Strategy (Output 4.1) and supported by national-level knowledge *management* platforms that facilitate knowledge exchange and sharing of lessons between project landscapes and across Indonesia. Communication strategy and implementation plan developed and coordinated to improve knowledge and awareness of stakeholders to support wildlife protection, human-wildlife conflict management, and reduce poaching as measured by KAP (Knowledge, Attitudes and Practices) score (Output 4.2). The effective M&E system (Output 4.3) will help to ensure project impact and adaptive management and adequate consideration of gender mainstreaming and social and environmental safeguards.

Alignment with GEF focal area and/or Impact Program strategies

The proposed project is aligned to GEF-7 Biodiversity focal area: (i) objective 1 and program 2a (BD-1-2a): *Mainstream biodiversity across sectors as well as landscapes and seascapes through global wildlife program to prevent extinction of known threatened species;* and (ii) Objective 2, Program 7 (*BD-2-7) - Address direct drivers to protect habitats and species by Improving financial sustainability, effective management, and ecosystem coverage of the global protected area estate.* The project is proposed as a child project under the Global Wildlife Program (GWP).

This project will make the following contributions to the GEF-7 GWP framework:

GWP Component	Contributions of this project (and alignment to GWP Sub-Components)
1. Conserve wildlife and its habitats	-Enhanced management of the target landscapes including PAs and the surrounding forest under different administration units (Sub-Component 1.1) -Strengthened policy, procedures, institutions and partnerships for managing protection of habitats at landscape level within and outside of PAs (Sub-Component 1.3) -Sensitization of local, provincial and national government to support mainstreaming of key threatened species conservation and build political will for more attention on managing and connecting significant key threatened species habitats (Sub-Component 1.2) -New private sector sustainable financing solutions to support community stewardship of key threatened species habitats (Sub-Component 1.3)
2. Promote wildlife-based economy	- Innovative solutions for preventing and managing HWC deployed at identified hotspots within project landscapes, and increased adoption of land use and habitat management techniques to minimize potential for conflicts (Sub-Component 2.4)
3. Combat wildlife crime	- Anti-poaching patrolling utilizing improved SMART patrol system (Sub-Component 3.3) - Innovative solutions by engaging local community to minimize poaching, retaliatory killing and illegal trade in key threatened species (Sub-component 3.1)
4. Reduce demand and disrupt markets	- Communication strategy and outreach
5. Coordinate and enhance learning	- Facilitate coordination and cooperation among key stakeholders including regional level coordination targeting specific species (Sub-Component 5.1) - Capacity-building of state, district and community-level institutions to support conservation of key threatened species and their habitats (Sub-Component 5.2) - Knowledge management to identify, document and share project best practices and lessons learned between project landscapes, and across the Global Wildlife Program (Sub-Component 5.1)

Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

Baseline	**Alternative to be put in place**	**Project impact including GEBs**
Policy and planning framework		Integrated management of globally-significant key species conservation
Limited understanding of conservation needs, threats and status for conservation of key species at landscape level.	Key stakeholders and departments engaged in collaborative landscapes partnerships where the key Species	

Baseline	Alternative to be put in place	Project impact including GEBs
Management plans of forest area adjacent to the protected areas do not yet incorporate key species conservation resulting in the habitat fragmentation and degradation thus isolation of PAs from the surrounding areas.	Strategy and Action Plans are integrated into their management plans Standardized protocols for management and monitoring of key species support increased understanding of their conservation status and improved effectiveness of conservation actions.	covering 8.7 million ha in Sumatra, Indonesia Improved management of over 3.066 million ha of four PAs, and 0.430 million ha of non-national park conservation areas. Stable and improved populations of key threatened species (all Critically Endangered: tiger, elephant, helmeted hornbill) Enhanced PA management effectiveness and improved habitat condition including the areas buffering PAs provides flow-on benefits for a wide range of biodiversity including other globally-significant species.
Key Species conservation and community involvement		
Declining populations of key species and increasing threats to their habitats. Site-level management is predominant, with little consideration of management at a landscape scale. Limited financial incentives for conducting land and habitat management in a way that benefits key threatened species conservation Human-wildlife conflict is common in areas buffering and connecting PAs. Limited engagement of private sector in the landscape conservation programme.	Focused conservation programmes for the key threatened species and the integration of conservation programmes into the management plans in other land-use types bordering the PAs, thus, providing an integrated set of actions for key threatened species conservation. Innovative and technically-sound interventions to support key threatened species conservation at a landscape-scale. Communities act as stewards for key threatened species landscapes, adopting eco-friendly land management that provides livelihood benefits, improves quality, extent and condition of key threatened species habitats and promotes human-wildlife coexistence. Effective private sector engagement provides sustainable co-financing solutions to maintain community involvement and provide long-term livelihoods benefits. Strengthened trans-boundary cooperation across tiger, elephant, helmeted hornbill range States.	

Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

The proposed project will result in the improved management of over 8 million ha of landscapes in Sumatra, Wallace, Papua Regions which por rovide critical habitat Critically Endangered Species. The project will strengthen the management of an estimated 3 million ha of PAs (national park and game hunting park) and 200,000 ha of non-forest conservation areas. The improved management and connectivity of habitat within these landscapes will support the long-term conservation of globally significant species and help prevent the decline of many other species that are considered endangered,

vulnerable or near-threatened. Improved PA management effectiveness and the habitat quality, extent and connectivity across non-PA areas will in turn support the conservation of a wide range of biodiversity and the adaptive capacity of species and ecosystems.

Engagement with the Global / Regional Framework

Innovation: The project strategies are based on innovative ecosystem approach where the conservation area must meet three complementary functions:

1. Conservation function (preserve landscapes, ecosystems, species, and genetic variation)
2. Development function (foster sustainable economic and human development), and
3. Logistic function (support demonstration projects, environmental education and training, and research and monitoring related to local, national, and global issues of conservation and sustainable development).

Such an approach has not been implemented yet where in general, the conservation areas are managed in isolation hence, creating an island of forest within the landscape. This approach will enable the integrated conservation of key threatened species at landscape scale. The project will engage communities in target landscapes by empowering community-level institution for the adoption of community-based livelihood initiatives and mitigate HWC in the surrounding key PAs; engage stakeholders from different administrative units and functions, and at multiple scales: local, provincial and national levels.

In an effort to combat poaching of wildlife, SMART has been adopted by several protected area in Indonesia so-called SMART-RBM. In addition, a new powerful extension to the widely adopted Spatial Monitoring and Reporting Tool (SMART) from the SMART Partnership has been launched. This new technology called SMART Connect will allow rangers and conservation area managers to exchange critical information and transmit data in real time. Utilizing this new extension will deliver a revolutionary suite of services improving access to data for park staff and managers on pressing issues such as poaching and human wildlife conflict. The technology will be combined with innovative field-based remote sensors deployed such as camera traps and drones, hence the detection of perpetrators will be enhanced by many folds. Moreover, enhanced wildlife genetics techniques for counter wildlife trafficking and improved site-based species monitoring developed and applied – including significant advances in tiger, its prey and other priority threatened species, such as those in trade will also be implemented in this project.

Sustainability: the development of cost-effective and sustainable solutions will be achieved by institutionalizing project approaches within policies and plans of institutions at the national, provincial and local level; integrating project outputs within existing government programs (e.g. conservation plans for tiger reserves and management plans for other PAs) and by creating the economic incentives and public-private partnerships needed to sustain community participation beyond project period.

Scaling up: Project builds on the good results achieved under the GEF-5 Sumatra tiger project including partnership between the government and INGOs/local NGOs, and will draw lessons from lessons from the GWP-I/IWT project in terms of national policy, regulatory framework and national capacity in combatting poaching and illegal wildlife trade. The innovative approach of developing a model biodiversity landscape management by addressing range of institutional, governance and financing mechanism presents potential for up-scaling to other biodiversity conservation landscapes in Sumatra and beyond.

Knowledge management: The projects effort's to ensure effective knowledge management and transfer will identify and disseminate best practices and lessons learned across Indonesia, neighbouring countries and the Global Wildlife Program to facilitate this scaling up, as well outputs to strengthen bilateral partnerships and coordinated action with neighbouring countries. The project will develop communication strategy and action plan. A range of communication materials will be developed for sharing in various forums and online.

Project Title:	**Sustainable Management of Conservation Areas and Improved Livelihoods to Combat Wildlife Trafficking in Madagascar**
Country(ies):	Madagascar
GEF Agency(ies):	UNDP
Total Project Cost (GEF Grant)	$ 5,763,303
Estimated Co-financing	$ 52,240,000

PROJECT DESCRIPTION

Country context

Regularly cited as a global hotspot for biodiversity, Madagascar demonstrates high rates of endemism at the species and higher taxonomic levels, but is also marked by extreme poverty, low education levels at the rural population level, a rapid population growth (the population more than doubling in 20 years and currently estimated to be 26,262,810,[19] with 30% in the 25-54 age bracket and 40% in the 0-14 years, reflecting rapid population growth) and escalating rates of environmental degradation. More than 80% of the population is rural (60% of the population is coastal) and there is high reliance on natural resources for food, fuel and income, with the result that remaining forests are threatened by shifting cultivation, charcoal production and bushmeat consumption, whilst wetlands are threatened by rice cultivation and unregulated fishing for national markets.

There are between 12,000-14,000 vascular plant species in Madagascar, 90% of which are endemic.[20] Several hundred species of Madagascar's fauna and flora are listed on the CITES Appendices, many of which are legally traded internationally. However, given the rarity and high economic values of certain species, there has been a marked increase in unsustainable harvesting and trade in selected species, leading to Madagascar being placed under scrutiny by CITES and subject to several Significant Trade Reviews (STR) under the Convention, including the first country-wide STR (2002-2003), and trade embargoes and zero quotas have been applied to key species (including precious woods, reptiles and amphibians). The country-wide STR led to the adoption by GoM of the National CITES Action Plan (2003), which remains the guiding text for implementation of the Convention, although it does need to be updated and revised. Madagascar's precious woods, particularly rosewoods, are the most highly valued woods on the international market, although their mis-management could have rendered them commercially unviable.

The objectives of the creation of Protected Areas in Madagascar are to conserve all of Madagascar's unique biodiversity (ecosystems, species, genetic variability); preserve Malagasy cultural heritage; and maintain ecological services and the sustainable use of natural resources for poverty reduction and sustainable development. The Durban Vision of 2003, where the GoM committed to a tripling of its PA landscape, has resulted in an increase in PA coverage, but efforts are required on the ground to ensure their effective management for both conservation and livelihood benefits. There has been a reported quadrupling of the PA landscape from 1.7 to 7.1 million hectares (exceeding the Durban Vision of 6 million hectares), due in part to the identification and designation of NPAs. The management systems have

[19] UN Population Data https://population.un.org/wpp/DataQuery/

[20] *Catalogue of the Vascular Plants of Madagascar.* http://www.efloras.org/madagascar

moved from primarily government-managed areas focused on conservation and research, and with strict restrictions on access and use (managed by Madagascar National Parks, formerly ANGAP), to more broad multiple-use PAs, recognising that the strict PA system places an enormous burden on a country with a predominantly rural population reliant on natural resources for survival. The majority of the New Protected Areas (NPAs) are managed by the MEDD with additional delegated management regimes (with NGOs, local community associations, the private sector, etc) that may, or may not, be further delegated to "co-management" (primarily comprising a supervisory or monitoring role) arrangements with local communities. The NPAs both conserve biodiversity and simultaneously assist with poverty alleviation and rural development through permissible sustainable uses of natural resources. Uses include: livestock grazing, charcoal production, fuelwood collection, harvest of wood and non-timber products. Given the relatively new and complex nature of the NPAs, shared governance regimes have not been fully developed and/or applied across the NPA landscape. Some NPAs (currently 13 NPAs) are without any delegated co-governance or management agreements in place and are effectively 'paper parks'. An additional 29 NPAs have been described as 'orphan' sites as, although they were selected for PA designation, have not received official protected status.

The NBSAP identifies a key action to be carried out to promote and integrate Critical Conservation Zones (ZCC) and Priority Zones for Conservation (ZPC) into the national institutional framework for natural resource management. This project is an opportunity for Madagascar to act on this priority need and ensure that ZPC and ZCCs are integrated in the NPA management and governance plans developed under the project. The Project will be carried out at the national level (Component 1) and also at the local level in three Regions in the south of the country, ie Anosy, Androy and Atsimo Atsinanana (Components 2, 3 and 4). These 3 Regions were selected for Project activities by the MEDD due to inadequate funding and the lack of partner agencies to assist with management of the NPAs that occur there (ie Angavo, Behara-Tranomaro, Sud-Ouest Ifotaky), the presence of Critical Conservation Zones with high conservation needs and the high degree of illegal trafficking of biodiversity.

Madagascar's rich and varied biodiversity is under threat from a variety of unsustainable practices, both direct and indirect. Upstream from the project sites, deforestation and accelerated urbanization have caused land degradation and siltation of most of Madagascar's rivers and waterways, leading many to describe the island as bleeding into the oceans due to the heavy loads of suspended sediment. Addressing deforestation at the drainage basin is a priority of the newly reorganized Ministry of Environment & Sustainable Development (MEDD). Deforestation has resulted in a national loss of 500,000 hectares of forest cover in 2017 alone, and a total nationwide loss of 3.27 million hectares since 2001.[21] The east (24%) and south west (21%) of the country accounted for almost half of all tree cover loss over the same period, although the eastern region (Toamasina) still accounts for 60% of Madagascar's tree cover.

Barriers to ensuring conservation of Madagascar's biodiversity within NPAs and reducing the rate of wildlife trafficking are:
1. *Incomplete policy, legal, regulatory and institutional frameworks to control illegal wildlife trade at all stages of the trafficking chain.* The mechanisms through which NPAs are identified and designated have been described, but the governance mechanisms to manage, conserve biodiversity and engage with communities remain incomplete, resulting in a suite of 'paper parks' lacking any formal structures for their effective oversight and control. Before any site-specific activities can take place, the correct policy and regulatory texts, with capacity to interpret and implement, are needed. This also applies to the enforcement of laws governing resource use, for both domestic (local and national) and international

[21] https://www.globalforestwatch.org/dashboards/country/MDG

trade purposes. The roles and responsibilities of law enforcers dealing with natural resource crime are unclear and are causing environmental and social problems as regulations are poorly translated to action on the ground. Law enforcement in the PAs and NPAs is of concern, together with the enforcement vacuum that exists in natural resource management in Madagascar. The high degree of corruption across all sectors and at all levels along the value chain, and at all levels of society from the ground to top levels of Government is also a barrier to achieving protection for key species. The incoherence between various legislative texts governing biodiversity conservation, application of CITES, mandates for arrests and prosecutions are serious barriers to a harmonised approach to addressing IWT. The poor capacity within the various institutions responsible for regulation, analysis and enforcement is impeding progress with a number of action plans and projects that are in place.

2. *Limited experience and capacity to monitor biodiversity and address poaching and trafficking.* Although the decentralisation of governance power at NPAs provides for a local form of cooperation and regulation through the *dina*, comprising locally-developed and applicable laws that regulate resource use within designated areas and which have been in operation since the early 1990s (EP1 era) to govern management transfers, Madagascar has limited resources for surveillance and enforcement, particularly given the size of the country, the wide distribution of the NPAs and the dispersal of surrounding, resource-dependent rural communities. To tackle organised criminal networks in these areas is evidently beyond the current scope of enforcement entities. In addition, NPA (and PA) promoters/co-managers do not have the authority to apply the law in their area. There has not been the necessary addition of personnel to keep pace with the rapid PA expansion, resulting in a lack of human resources to address conservation, development and law enforcement requirements. Where biodiversity surveys have been carried out, these have been undertaken by partner NGOs and scientific institutions, with little to no transfer of knowledge or capacity to manage biodiversity databases and guarantee analysis of data for sound decision-making.

The poor institutional capacity at MEDD (central and decentralised divisions) to enforce laws and regulations has impacted on the country's ability to proceed with arrests, seizures and prosecutions. Corruption within the enforcement agencies has led to a high degree of insecurity with regard to application of the laws and regulations. Intelligence on IWT and planned confiscations and arrests are regularly stymied by complicity at enforcement agencies with criminal networks. Intra-sectoral and inter-sectoral coordination between the Ministry and other pertinent sectors, ie justice, transport, migration, maritime and interior security, together with poor cooperation with nations beyond Madagascar's borders, is resulting in 'leaky borders' that facilitate the export of illegally-sourced and traded fauna and flora. The poor human, financial, institutional and logistical resources at decentralized MEDD authorities results in illegal activities taking place with impunity.

3. *Limited guidance and expertise within the MEDD to address sustainable development issues where communities are integral to the designated NPA.* The NPAs do not currently have the required manpower or resources to contribute to effective conservation or management, nor to sufficient interaction with local communities. The MEDD (previously MEEF) focused primarily on environmental concerns and has not had the capacity to address issues of sustainable development. The security in the possible pilot sites is of concern to MEDD personnel as the culture of '*dahalo'* or banditry (originally centred on cattle rustling, but has now diversified to other sectors) has resulted in a culture of fear. Added to this is the insecurity faced when confronting poachers and traffickers, given that IWT has become more criminally syndicated over the past decade. Co-management practices with communities have been found to be most effective in Madagascar when the area under management has resources of value to the community and does not attract powerful outside interest in high-value resources (such as timber and minerals). Partnership

agreements between local authorities and community associations, or COBA[22], are applied in areas where delegation of natural resource management is made to the communities. The Law 2005-019 removed the presumption of State ownership of land and allows for a combined land management system and the issuance of land certificates.

The transfer of management authority to community level has only had limited success in Madagascar. Following the Durban Vision declaration in 2003, a system of Community-Based Forest Management (CBFM) sites was developed, known as KoloAla, which aimed to address the goals of poverty alleviation, biodiversity conservation and timber production under one umbrella, but has not been the panacea envisaged, leaving State governance of the environment lacking. Poverty and lack of access to basic social services remains critical in Madagascar, where 77.6% of the population earns less than $2 per day, making it the poorest nation on the planet (World Bank report). With predicted continued disparity in income growth at the poorest levels in the country, rural communities will continue to rely on natural resources to meet their daily needs. Ensuring that this natural resource use is sustainable and legal is a real challenge for the country. Given the level of poverty and inadequate opportunities for alternative income generation, poaching, trafficking and IWT have become easy options (low risk, high gain).

4. *Poor knowledge management and sharing and processing of lessons learned* with many reports and feedback being stored as 'grey' literature that is not evaluated or applied to other sites or with partners. Information is generally retained in central repositories and the decentraised regional authorities remain unaware of new approaches, technologies or tools that could be adapted to their particularly situation and regulate, analyse and combat poaching, trafficking and IWT.

Threats:
Unsustainable timber exploitation: Timber is exploited in Madagascar for a variety of purposes, including for the artisanal industry, for local construction and furniture needs, and for the international timber trade and high-value musical instruments. The local use is considered to be sustainable. However, despite Madagascar's rosewoods (*Dalbergia, Diospyros* species) being listed in CITES Appendix II with a zero export quota, there has been a surge in illegal harvesting, transport and export of these precious woods. The Midongy du Sud National Park in Atsimo Atsinanana Region contains the second largest rainforest in Madagascar, including *Dalbergia* and *Diospyros* species, and provides critical water supplies to the lowlands from its many mountains and crevices. 48 *Dalbergia* and 85 *Diospyros* species are found in Madagascar, although there are 3 principal species that are in international trade to China*, Dalbergia louvelii, Dalbergia greveana* and *Diospyros mcphersonii*. A study of the trade dynamics of high value *timber* noted that the common names of Rosewood, Palisander and Ebony are interchanged frequently causing confusion with enforcement effectiveness and bias in trade statistics (TRAFFIC report 2017).[23] It is generally understood that Palisander is the species *Dalbergia madagascariensis* as it lacks the typical red colouration. However, the word palisander is regularly used to obfuscate trade in timber as it is considered to be a permissible tree species; tree species identification in the project areas will be necessary during PPG and into the project.

Habitat loss for agriculture, pasture and energy needs (charcoal): Habitat loss is also impacting on the survival of key species, including the Radiated Tortoise (see below on Illegal harvesting). Recent satellite imagery is showing that the rate of destruction of spiny forest in the south of Madagascar has increased significantly over the past decade. Local populations near protected areas are paying the price for the

[22] Communautés locales de Base

[23] *TRAFFIC Bulletin* Vol. 29 No. 1 (2017)

maintenance of global environmental benefits through foregone access to resources. To date, there has been insufficient effort to link conservation with agricultural *needs* with the result that incentives have been lacking for communities to support biodiversity conservation. Creation of NPAs that take into consideration the needs of communities living within and around the NPA is a means to address this.

Illegal harvesting of protected wildlife for the exotic pet trade: The Critically Endangered Radiated Tortoise (*Astrochelys radiata*) is illegally harvested from the wild and shipped overseas to collectors and breeders, in contravention of both national law (Decree 60126 of October 1960) and international regulations (CITES Appendix I). Confiscations are made regularly, both within Madagascar and overseas. The species was considered to be one of the most abundant tortoises, often seen along roadways in the south (its natural range), with a total population estimated at between 1.6-5.7 million[24] (which would explain the ability for poachers to harvest the species in such large numbers). However, population models in 2005 predicted that the species will become extinct within 20-100 years (popularly cited as within 45 years) although there are no recent population data or surveys to substantiate this. The species is listed as one of the top 25 endangered tortoises (IUCN-SSC Turtle Specialist Group, 2018). The Menarandra (Anosy/Atsimo-Atsinanana) and Manambovo (Androy) Rivers are the principal barriers to the spread of the species beyond its current range; it is restricted to the extreme southern and southwestern parts of Madagascar, where this project will be implemented. The expansion of Madagascar's Protected Area network is considered to be a necessary action to ensure adequate habitat range for remaining poplations. Given their range in low and irregular rainfall areas with xerophytic spiny vegetation, clearance of Didiereaceae and Euphorbia with shifting cultivation, will impact on the species' survival. In its distribution range, the species is protected by the Mahafaly and Antandroy through taboos against eating or touching the tortoises, but it is threatened by in-migration of Malagasy people without the same taboo restrictions, as well as by itinerant collectors. Although precise numbers are not available, there are estimates that between 22,000 and 241,000 tortoises are harvested annually, renewing concerns that the species is threatened with local extirpation. Other reptile species that are harvested illegally include Chameleons, Geckos, Snakes. The USAID SCAPES[25] project (activities were focused in the north and north-east of the country) noted that illegal trafficking impacts on community stability and reduces the prospects for sustainable development through ecotourism and development of new sustainable livelihood options; it is also likely to be the case in the project areas in the south and south-east of Madagascar.

Poaching: Hunting and poaching are part of the daily life of villagers throughout the Project pilot sites, although the intensity of this activity varies from one site to another depending on the ethnic composition of villages ie where villages are predominantly "Antandroy", the consumption of certain animals remain taboo (eg tortoises, bush pigs, lemur species, Greater Hedgehog Tenrec *Setifer setosus* (LC) and the Lesser Hedegehog Tenrec *Echinops telfairi* (LC), etc.) and access to the forests is not allowed. In other villages that are predominantly "Antanosy", hunting and poaching activities are more intense. Populations of the White-collared Lemur *Eulemur cinereiceps* (CR) in the MBG-managed Agnalazaha Forest of Atsimo Atsinanana are decreasing and it has been suggested that protection through creation of corridors connecting Parks and Reserves in its distribution zone are needed to ensure its continued existence, as well as inclusion of swamp forests in the ZCC where it occurs, and identification of alternative sources of timber and fuelwood for communities (to halt forest degradation). A study on the extinction risks of Malagasy herpetofauna (Jenkins *et al*, 2014) concluded that the south-east of Madagascar has more threatened species than expected, with nine threatened reptile species endemic to NPAs, thus highlighting the need to conserve these arid regions. Jenkins (2014) also noted that whilst relatively few

[24] IUCN RedList assessment viewed 19.02.2019 (https://www.iucnredlist.org/species/9014/12950491#conservation-actions)

[25] Sustainable Conservation Approaches in Priority Ecosystems (SCAPES)

species were threatened by international trade and human consumption, these are the primary threats to tortoises. Tortoises are also taken from villagers in the south and purchased by middlemen for as little as USD 3, and eventually shipped to Asia and Europe where they can retail for between USD 1000 to USD 10,000 per individual. Community outreach is being undertaken by the Madagascar Biodiversity Partnership from the Lavavolo area in SW Madagascar, which aims to reduce pressures on the tortoises through promotion and adoption of alternative agricultural practices as well as development of entrepreneurial opportunities.[26]

Project overview and approach

Geographical targets

The biodiversity found at the proposed project sites in the Regions Androy, Anosy and (possibly) Atsimo-Atsinanana (to be confirmed) is part of the Spiny Forest and Dry Forest Ecosystems, characterised by flora in the family Didiereaceae (6 of the 11 endemic species are found in the Nord Ifotaky New Protected Area (Nouvelle Aire Protégée, or NPA) in Anosy (an NPA lying north of the potential project sites in Anosy), as well as *Alluaudia* and *Euphorbia* species, all of which are of considerable global environmental significance. The fauna of these ecosystems include endemic mammals and reptiles, including a number of lemur species and the Radiated Tortoise (*Astrochelys radiata* - CR). Trade in tortoise species appears to be for three main purposes: as small hatchlings for the exotic pet trade; as large live specimens (or chilled meat) for human consumption; and for medicinal or cosmetic use, sold in bone, cartilage or as whole organs (eg liver). The plant diversity is mainly threatened by encroachment and habitat degradation. Sympatric with the Radiated Tortoise is the Spider Tortoise *Pyxis arachnoides* (CR), also threatened by poaching and encroachment.

The baseline scenario and any associated baseline project

The role of Category V and VI PAs (NPAs) in biodiversity conservation in Madagascar, although contributing to sustainable development, is unclear and the relating policy and legal frameworks are incomplete. Institutional capacity, experience and motivation for the development of these NPAs are relatively weak, with poorly-defined governance and coordination mechanisms in place. The definition of this category of PAs was relatively unclear to all actors working in conservation in Madagascar. The NPAs have not attracted adequate interest from donors and partners for the required initial investments in either park management or development of economic opportunities to generate revenue for improved local development. The possibilities for community livelihood options in the target Regions have been the subject of some research, including ethnobotanical studies on the value of medicinal plants in the Agnalazaha Forest (Razafindraibe *et al*, 2013). To address these needs, an MRPA (Managed Resources Protected Areas) project was jointly implemented by the (then) Ministry of the Environment, Ecology and Forests (MEEF) and UNDP, where recommendations from the final evaluation noted: (i) policy and legal frameworks relating to MRPA are incomplete; (ii) institutional expertise and motivation is poor; (iii) mechanisms for co-governance are poorly defined; (iv) subsistence need of neighbouring rural communities relies on agricultural produce as well as natural resources from within PAs. This project proposal builds upon these recommendations (section 3 on Alternative Scenario provides further details).

[26] https://madagascarpartnership.org/field-sites/lavavolo/

There is considerable collaboration between multiple stakeholders in Madagascar with regard to management of PAs and addressing drivers of IWT, most particularly for CITES-listed species.[27] PAs have had limited effectiveness in reducing deforestation in the country, which has been ascribed to the rapid establishment process, insufficient resources and "complexity of management towards multiple objectives".[28] To ensure PA funding sustainability and reduce reliance on donor support, some of the NPAs have attempted to diversify revenue possibilities, recognizing that PAs require consistent funding to be effective. Further challenges to NPA management include the costs associated with law enforcement within the PAs, surveillance costs, and the management challenge to balance resource use with conservation objectives.

With regard to combating IWT, several organisations and donors are assisting Madagascar, although the focus is primarily on addressing Madagascar's obligations under CITES to deal with the rosewood 'crisis', together with inputs on training and implementation on the ground on SMART technology at some NGO co-managed PAs in the north and west of the country. Efforts have concentrated on solving the rosewood stockpile issue, which will again be the topic of discussion at the forthcoming CITES 18th Conference of the Partiies (CoP18) in Sri Lanka. In this regard, Madagascar is also supported by the CITES Secretariat, ITTO, UNODC and ICCWC member organisations (*inter alia*) to address the broader issues surrounding IWT, such as combating corruption and ensuring enforcement of applicable laws. The project will, through its inclusion in the GWP, support efforts to increase the cooperation between the various law enforcement agencies and relevant international organisations, as well as mobilise political support for environmental law enforcement. Building on the relationship between Madagascar and ICCWC, the Project will address appropriate priority actions and recommendations identified and stipulated in various official UNODC, ICCWC and CITES documents that will result in a reduction in the rate of IWT from Madagascar. One particularly activity that the Project will address, and is a recommendation from the ICCWC Toolkit, is the creation of a National Wildlife Crime Data Bank, including all traffic information (seizures and arrests) at national and international level, in liaison with Interpol, which would function within the Intelligence Unit of the Office.

In addition, project activities align with the ICCWC recommendation to complete the development of Madagascar's Forestry Code with a view to clarifying the criminalisation and penalties related to wildlife offences, particularly as they related to the removal of indiscrepancies and inconsistencies between different legislations. Further specific and relevant activities from the ICCWC Toolkit recommendations will be considered for inclusion during the PPG Phase. Projects on IWT also include efforts to address the illegal trade chain for the critically endangered Ploughshare Tortoise (*Astrochelys yniphora*), which has worked with law enforcement authorities, particularly to build capacity to arrest and prosecute smugglers.

Stakeholder engagement processes

The project affects a wide range of stakeholders in Madagascar, ranging from Government to local communities living alongside endangered wildlife to law enforcement authorities to biologists. In addition, the project has a far-reaching impact on stakeholders along the value chain, from source to transport to consumer, who could be both national or international. During the Project Preparation Grant (PPG) phase, an intensive stakeholder consultation process will be carried out to identify the key stakeholders, assess their interest in the Project, and define their roles and responsibilities in its implementation. Numerous stakeholders will be involved in the Project Preparation phase and will

[27] For example, the EU is providing assistance with the Rosewood Action Plan, together with the World Bank and USAID (who also provided inputs to Madagascar's uplisting of rosewoods to Appendix II) as well as the GiZ, assisting with critically-needed revision of text in the Forestry Code.

[28] Gardner *et al*. 2018

provide key inputs to the development of the baseline and anticipated activities. The MEDD will host several meetings during the Project Preparation Phase to bring together many more stakeholders from national and decentralised Government agencies with responsibility for biodiversity management, law enforcement, rural development and socio-economic advancement.

Gender integration/PPG gender analysis and gender mainstreaming plan:

Gender integration: One of the activities to be carried out under the project involves the development of a Gender Strategy, which will guide the involvement and active participation of women, as well as men. During the field site visits planned during PPG it will become clearer which resources are present in the pilot sites and for which purpose they can be used legally and sustainably to enhance livelihood options. Where enterprise development favours female involvement, this will be encouraged.

PPG Gender analysis: The project will be further developed during PPG recognising that women and men in the south of Madagascar where the project sites will be located do not always receive equal opportunities or consideration. Cultural biases will be respected but equality of outcome will be acknowledged as a guiding need for the project stakeholders. The PPG Gender analysis will address this need. Women in the south will be responsible for different aspects of daily life than the men, and the Gender analysis will be cognisant and respectful of this disparity.

Gender mainstreaming: A gender mainstreaming plan will be carried out during the PPG phase, the objective being to perform a gender assessment that will review the roles of men and women with regard to: a) project development, b) project implementation, c) potential impacts of the project on each gender group, and d) provide guidance on gender mainstreaming for the project. The gender mainstreaming plan will ensure that an inclusive approach is adopted throughout the project (from concept to conclusion) such that women and men are able to participate actively and benefit equitably, have equitable access to project resources, and receive fair social and economic benefits. The output of the gender mainstreaming plan will be a gender mainstreaming strategy, which will be developed during the first year of the Project and its implementation will be monitored through the M&E Plan.

The proposed alternative scenario and expected outcomes and components of the project

The project will address the challenges and barriers described above and be implemented at national, regional and site level in 3 Regions where conservation of key species and wildlife trafficking are of concern, primarily in the south and south-east Regions of the country, ie Anosy and Androy Regions, and Atsimo-Atsinanana. The project builds on a previous project carried out in Madagascar (UNDP GEF PIMS 4172 Network of Managed Resource Protected Areas in Madagascar). The three Regions are characterized by semi-dry, spiny and deciduous forests that contain remarkable region-specific and endemic species of fauna and flora. The provisional sites under discussion are: NPA Sud-Ouest Ifotaky, NPA Angavo, and NPA Behara-Tranomaro.

The **Project Objective** is: Conservation of biodiversity in Madagascar through improved management of New Protected Areas (Category V and VI), with active engagement by communities and enforcement to reduce the rate of IWT and poaching. The project will be implemented through **four components**, namely:

Component 1: Strengthened political, institutional and regulatory framework to combat illegal wildlife trade (IWT) and poaching. The outcome of this component will be *National NPA management and IWT strategies and regulatory frameworks revised, adopted and operationalized, with capacity to implement,* achieved through four outputs that aim to (i) develop and validate a national strategy to manage NPAs and combat IWT and poaching; (ii) establish and operationalize an inter-agency cross-sectoral IWT task force to tackle IWT and poaching; (iii) develop the capacity of key agencies and actors in the Ministries of Environment (MEDD), Justice, Customs, Police, Rural Development, Transport, Ports to address IWT; and

(iv) roll out a nationwide communications strategy and public awareness program on biodiversity value and need to combat IWT.

Several NPAs in Madagascar were identified and proposed for NPA status over a decade ago. However, many remain 'paper parks' as, although they were allocated a management partnership (primarily with NGO partners), they have not received any substantial management plan or budget. Specific plans are required for the targeted NPAs under the Project. Given the change in direction of the newly designated Ministry of Environment & Sustainable Direction, and the new Organigram for the Ministry designating the various and numerous departments, the project is anticipating the need to revise and review national strategy for NPAs, especially given the community and sustainable development focus of not only Category V and VI NPAs, but also new personnel within the Ministry itself. Consultations with the MEDD noted that management tools, plans and strategies, some of which were elaborated over 10 years ago, cannot currently be used or analysed and, further, need to be brought in line with new developments in eg CITES, climate change discussions, etc.

One of the concerns regarding IWT in Madagascar (particularly through the rosewood review process under CITES and UNODC/ICCWC) has been the lack of due process following seizures and arrests. Suspected traffickers are not pursued to the full extent of the law and prosecutions have been limited, if not non-existent in some case. This project aims to assist with addressing this gap in enforcement and, through improved governance mechanisms and coherence at the national level, aims to test the improved judicial processes at the pilot project sites (at NPAs in 3 main Regions where there is high trafficking of radiated tortoises – also of concern to CITES Parties and placing MG on a 'watch' list – and of several palisander tree species [again of concern to CITES Parties and the control and management of which is problematic for Madagascar]). Data is available on the trafficking in tortoises and for other reptiles, as well as for the rosewood (2011-2016 for wood; 2011-2018 for other species).

Component 2: Expanding and strengthening capacity at selected NPAs (IUCN Categories V and VI). The final outcome of this component will be enhanced capacity within the MEDD and its partner entities to address the management of NPAs and high priority conservation areas so that biodiversity can be conserved and the rate of IWT (from source to shipping) can be reduced. The project will achieve this outcome through five outputs that will (i) develop management plans and ensure capacity to implement them at pilot sites; (ii) establish, formalize and operationalize NPAs with functional governance structures and IWT/anti-poaching plans in place; (iii) provide training to anti-poaching and intelligence-gathering structures, including use of SMART tool; (iv) initiate biodiversity surveys and research to monitor population dynamics of key species of fauna and flora; (v) introduce cutting-edge technologies to support prevention of IWT and poaching at pilot sites.

The NPAs that have been targeted for Project activities are in the south of the country in Anosy, Androy and Atsimo-Atsinanana Regions. The NPAs are therefore clustered over a manageable, albeit large, range in the same ecoregion. The scope of the Project's activities under Component 2 will be further refined during PPG once the project sites have been visited and consultations held with key stakeholders, thereby ascertaining the precise needs for capacity building and governance structures to be set up. During stakeholder consultations, the GoM considered that it is feasible to deliver results for 3 NPAs given that they have already been proposed (created as NPAs but not yet considered to be PAs) and already have management structures in place, albeit extremely limited. The project will assist with the development of effective regional management skills at the project sites. In addition, partner agencies will be sought to engage with GoM to take on a delegated management role at the NPAs, which is the national means to ensure sustainability and longevity of Park management. Discussions are beginning with the FAPBM to

encourage their involvement/collaboration at the NPA sites – and these will continue during the PPG. Maps of the targeted Regions (Map 1), showing their general location and the location of the proposed NPAs (Map 2) are shown below.

Map 2: Location of the NPAs Behara-Tranomaro, Angavo and Sud-Ouest Ifotaky in Anosy and Androy Regions. The potential NPAs in Atsimo-Atsinanana have not yet been identified. [Source: MEDD, 2019]

Map 1: Highlighted areas show the location of the 3 Regions in the south and south-east of Madagascar where project activities will take place. [Source: Ministry of Environment & Sustainable Development, 2019]

The Indicator on 'decrease in number of poaching incidents' is a targeted indicator for the chosen NPAs, particularly as the sites have been selected based on poaching incidences. By improving management capacity and governance at the NPAs, the Project aims to reduce poaching incidences at local level. Training on anti-poaching initiatives and establishment of governance/enforcement structures at the local level will impact on the degree of poaching at the local sites, particularly when considered alongside activities under Component 3 to diversify livelihood options and draw communities away from illegal activities.

Capacity already exists on the ground to apply the cutting-edge technologies, for example the SMART Tool is being implemented successfully in Madagascar by MNP and partner NGOs (ie WCS, CI, WWF, Durrell). Consultations have previously been held with DSAP regarding application of the tool at NPAs and have included discussions at DIREEF level at one of the Project's planned NPA sites in Atsimo-Atsinanana. The national roadmap for SMART utilisation recognises that, while the MEDD ensures institutional and decisional support, the NPA managers are responsible for putting in place mechanisms to operationalise the technology and ensure the information is an integral part of NPA management. It has been proposed that a SMART Leader is in place at MEDD and SMART Focal Points are in place at each NAP, each with their

respective roles and responsibilities, with additional Focal Points required at the Canton level within the NPAs, together with a system to coordinate information capture and analysis. The Project will not work in isolation on application of SMART tool, but will work with partner agencies already involved in capacity building and utilisation of the tool at other NPAs (currently in the north/northwest of the country).

The cost to set up and run the SMART tool (based on a USAID-funded project in Madagascar) is estimated to be: smartphones – US$400; GPS for patrols – US$250; Data logger – US$100. Patrol costs per site using SMART technology have been calculated at US$100 ($5 per person (x2) per site working for 10 days at each site – includes fee and travel costs). It is not clear at PIF stage how many sites will be involved at each of the proposed NPAs; this will be calculated at PPG following site visits and detailed stakeholder consultations, but it is estimated to be well within the budget for this Component.

The MEDD has a collaborative partnership with Scientific Institutions, Universities, NGOs, private researchers/scientists and will work with these entities to carry out the population surveys at the target sites. In order to ensure strengthened capacity within Malagasy institutions and NGOs, the Project will work with these partner entities to develop the necessary skills (which already exist, but can be strengthened) and ensure that the data remains within the Ministry with capacity to manage and analyse and use the data for NPA management. The MEDD retains ultimate control for NPA management, as stipulated in the Code des Aires Protegees (COAP) and will be the lead entity on the collaborative scientific agreements. In addition, any foreign researcher working in Madagascar is obliged to enter into an agreement with Malagasy Universities and work alongside Malagasy researchers also, thereby transferring capacity and knowledge and ensuring that research findings are shared with Madagascar. Biodiversity data exists for some species at the selected sites, but much is available as grey literature at various NGOs in country (eg Asity, MBG).

Component 3: Community engagement and poverty reduction for effective NPA management and biodiversity conservation. The outcome of this component is that communities engaged at the pilot sites will receive tangible benefits from the partnership arrangements that will be put in place. This will be achieved through four outputs: (i) nature-based livelihoods that provide long-term security are developed and operationalized; (ii) development of partnerships with private sector to invest in value chain development for identified products; (iii) development and testing of innovative approaches to community involvement in IWT mitigation (including application of SMART tool); (iv) creation of official multi-stakeholder platforms at local sites that will act on community development, NPA management and IWT mitigation strategies.

This is a complicated Component, but a necessary one given the nature of the NPAs targeted by the Project. Outputs will be delivered at 2 (and possibly 3) NPAs such that communities derive alternative livelihoods from new (innovative) nature-based utilisation schemes, plans or businesses and pressure is taken off any currently unsustainable (legal and illegal) use of biodiversity, including involvement in illegal offtake of valuable protected reptile and timber species.

The SMART tool has already been implemented, with success, at many sites in Madagascar. The SMART tool trainers and expertise in Madagascar will be deployed to the project sites through partnership/contract agreements. The multi-stakeholder platforms are considered a cost-effective (ie low cost requirements) means to bring the various parties together to address NPA and biodiversity management, and IWT mitigation issues. The platforms will involve MEDD regional representation (DIREF currently), the village governance structures, local chief/authority, the Police and other law enforcement entities, all to ensure that the cohesive governance mechanism to be developed under Component 1 will

also be applied at the local level. A PIF Review Workshop noted that these multi-stakeholder platforms are necessary and are not costly.

Component 4: Knowledge management, gender empowerment, monitoring and evaluation. This component will result in improved sharing of information among stakeholders and partners to build awareness and strengthen ownership of resources to mitigate IWT and poaching (Outcome 4.1). This outcome will be delivered through four outputs, namely: (i) development of a gender empowerment strategy that will guide project implementation and M&E at pilot sites; (ii) development and implementation at pilot sites of participatory M&E and learning framework; (iii) sharing of lessons learned through participatory M&E and gender empowerment at national and international platforms and fora; and (iv) production, publication and distribution of lessons learned at national, regional and international levels. Women in the Anosy & Androy Regions are considered subordinate and are not always involved in discussions regarding access to resources. Developing a gender strategy in the southern Regions is considered to be a necessity for the Project.

Alignment with GEF focal area and/or Impact Program strategies

This project is aligned under the GEF Biodiversity focal area. Specifically: BD1-2a: Global Wildlife Program—Preventing the Extinction of Known Threatened Species; and BD2-7: Improving Financial Sustainability, Effective Management, and Ecosystem Coverage of the Global Protected Area Estate. The project forms part of the GEF Programmatic Approach to Prevent the Extinction of Known Threatened Species, and is proposed as a Child project under the GEF-7 Global Wildlife Program (GWP), where it is particularly aligned to the following Components of the GWP Framework, ie 1. Conserve Wildlife and its Habitats, 2. Promote Wildlife Based Economy, 3. Combat Wildlife Crime, and 5. Coordinate and Enhance Learning. Project efforts will also target market disruption (and not demand reduction) as the project will be concentrated within Madagascar's borders for biodiversity and natural resources that are used nationally, with a focus on ensuring sustainability of use. Under this programmatic framework, and with coordination through the program steering committee, coordinated knowledge management and cross-fertilisation of the individual projects will be assured.

This project will make the following contributions to the GEF-7 GWP framework:

GWP Component	Contributions of this project (and alignment to GWP Sub-Components)
16. Conserve wildlife and its habitats	- Strengthened capacity of MEDD at national and regional levels to manage areas of critical conservaton concern (Sub-Component 1.1) - Establish cross-sectoral and inter-ministerial governance mechanisms to strengthen enforcement and political will to reduce the rate of poaching and trafficking (Sub-Component 1.2)
17. Promote wildlife-based economy	- Build public-private partnerships for nature-based livelihood options at project sites within selected NPAs (Sub-Component 2.1) - Strengthened capacity of communities, private sector, local, regional and national institutions to identify, develop and promote nature-based livelihood options (Sub-Component 2.2) - Active engagement and community participation in biodiversity conservation with reduced poaching/trafficking through community-based nature-based economic opportunities (Sub-Component 2.3)
18. Combat wildlife crime	- Establish policy, legal, institutional and regulatory frameworks to address and combat iwt in a coordinated manner (sub-component 3.1)

	- Creation of a national database, and ensure capacity to manage/analyse, on iwt intelligence (sub-component 3.2) - Strengthened capacity of key agencies and actors (ministries of environment, justice, customs, police, military, rural development, transport, ports) to address iIWTwt and strengthen justice pathway (sub-component 3.3)
5 Coordinate and enhance learning	- Improved sharing of information among stakeholders and partners to build awareness and strengthen ownership of resources to mitigate IWT and poaching (Sub-Component 5.1) - Nationwide communications strategy and public awareness program on biodiversity value and to combat IWT and poaching (Sub-Component 5.2). - Knowledge management platforms that support reporting of lessons learned up to Global Wildlife Program and disseminate lessons learned down to project sites and throughout Madagascar (Sub-Component 5.2 and 5.3).

Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

The incremental approach can be summarised as follows: the project will seek to (i) reduce substantially the threat from poaching and illegal wildlife trade in Madagascar's NPAs network, thereby allowing the stabilisation and recovery of the biodiversity of these areas; and (ii) strengthen management of Madagascar's New Protected Areas through effective engagement of communities towards biodiversity conservation.

Baseline practices	Alternatives to be put in place by the project	Global Environmental Benefits
Lack of coordination and capacity among agencies reduces the effectiveness of NPAs and conservation efforts, and allows IWT, poaching and trafficking to continue	- Revision, validation and implementation of new Strategies for Management of NPAs and Combating IWT will enhance NPA management and ensure implementation of national laws governing wildlife protection and use, as well as ensure adherence to CITES - Inter-institutional and inter-sectoral coordination, through creation of IWT Task Force, will address wildlife crime and reduce rates of poaching and trafficking at the site level - Capacity development within key Ministry mandated to manage NPAs and the KBAs/ZCCs identified and brought under the project - Improved understanding nationally and at local project sites of the value of biodiversity and improved	- 100,000 hectares of designated NPAs will be formally protected under improved management regimes - Additional 80,000 hectares under conservation management through indirect replication (to be confirmed) - Reduced anthropogenic pressures within and surrounding selected sites - Populations of endemic tortoise species at project sites will be protected from illicit harvest and trafficking - Conservation of other endemic and globally significant species, including endemic plant species - Increase in number of biodiversity-friendly livelihood ventures at project sites

	livelihoods that can arise from its conservation and sustainable use - Creation of a nationwide system to monitor wildlife trade and IWT - Training of relevant judiciary and legal practitioners on environmental crimes and how to tackle prosecutions etc	
Uncontrolled IWT/poaching and trafficking continues resulting in local declines and possible extinctions, particularly given the high rate of microendemism (ie localised and restricted distribution of endemic species)	- Enforcement and crime scene capacity is strengthened to support criminal investigations and successful prosecutions of poachers and IWT criminals. - Private sector enterprises are integrated into dialogue with communities and government to reduce illegal exploitation of threatened species. - Community-based microenterprise ventures provide alternative 'wildlife friendly' livelihoods at project sites to reduce pressures on the environment and involvement in illegal extraction of natural resources.	To be confirmed
Poor management of NPAs and low capacity to control poaching and monitor wildlife leads to biodiversity loss due to unsustainable land use practices, ineffective conservation efforts and IWT	- Biodiversity surveys are carried out to determine key conservation needs - KBAs and ZCCs are identified and managed effectively - NPA management plans are revised and strengthened for project sites with emphasis on community engagement for improved conservation and livelihoods - Capacity of MEDD personnel is strengthened for improved NPA and KBA/ZCC management	To be confirmed

By safeguarding wildlife habitats in NPAs and KBAs/ZCCs, the project will directly contribute to biodiversity conservation with local and global benefits. In addition, through addressing systemic changes to addressing trafficking and enforcement of national/international laws and regulations on wildlife trade, the Project will enhance the conservation of key endemic and threatened species, particularly at the project sites (but also potentially at a broader and even national level through improved governance mechanisms and border controls). As a result of this work, the project will contribute to:

SDG 15—*Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss* by

improving the overall management effectiveness of Madagascar's terrestrial protected areas, and Aichi Targets 11 and 12.
SDG 16— *Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels,* reflecting the fact that wildlife crime has become a serious security issue in Madagascar and that protecting biodiversity and ecosystems is not only an opportunity to limit loss of natural resources and their related conflicts, but also a way to *stop the funding flow to violent individuals - and groups - by combatting illicit wildlife trafficking.*
SDG 1 – End poverty in all its forms, everywhere.
SDG 5 – Achieve gender equality and empower all women and girls.
SDG 8 – Promote sustained, inclusive and sustainable economic growth, full productive employment and decent work for all.

Global environmental benefits (GEFTF)
The proposed project will contribute to delivery of global environmental benefits through the expansion and improved management of new PA landscapes designated by the GoM, but which have not received the necessary scientific or governance attention. Through improved land-use practices for biodiversity conservation and efforts to mitigate the rate of IWT with associated livelihood benefits, the project will contribute to preventing the extinction of endangered species (such as endemic tortoises, precious woods and various other endemic and vulnerable species). Combating IWT will lead to improved benefits regarding local security, particularly given the professional criminal syndicates that are reportedly involved in IWT. The coordinated and cross-sectoral approach to the project components will have immediate and longer-term socio-economic benefits. Madagascar's efforts to combat IWT respond to the UN General Assembly's Third Resolution adopted to tackle illicit trafficking in wildlife (Resolution A/71/326), the development of which was supported by Madagascar. This Resolution calls upon countries to address money-laundering, corruption and sustainable livelihoods to address the underlying factors leading to and resulting in IWT; this project will contribute to achieving the goals of the UN's Resolution.

Engagement with the Global/Regional Framework

Innovation*:* The project's inputs to NPA management at the chosen pilot sites is a new approach to biodiversity conservation and PA management in Madagascar. The criteria for the identification of NPAs is established based on the presence of local endemic species, the specific diversity of the environment, the abundance of lemur species, birds, micromammals, reptiles and amphibians, as well as the quality of the habitat and the level of threat to wildlife.

Scaling up: The NPAs that will be the targeted sites for this project are located in a region that is expanding its protected area status and the project has the potential to assists with a process of corridor building, connecting the NPAs to other PAs and Forest Reserves, KBAs, etc that are being managed by MNP, Asity, QMM, CI, and others. Strengthening the capacity of MEDD and the communities in the Category V and VI NPAs will provide valuable lessons learned to other park managers, as well as enable the MEDD/SAPM to identify biodiversity richness (warranting protection) and measures to mitigate IWT/poaching. Addressing the IWT of key species of fauna and flora at the local level, and the establishment of local structures that will coordinate with the decentralized MEDD and with local community platforms, aligns with the GoM's intention to create 'green beret' units on the ground for improved environmental protection. Piloting efforts at the chosen sites and working in collaboration with multiple stakeholders will enable the project, through MEDD, to share its successes at other NPAs in Madagascar.

Sustainability: In order to ensure sustainability, the project will enhance institutional capacity for effective NPA and landscape management. The project's aim to include innovative technologies and partnerships with the private sector will also include exploration of sustainable financing mechanisms to ensure effective conservation, community engagement and solutions to IWT.

Knowledge management: As a Child project under the GWP, dissemination of lessons-learned and experiences from engagement of communities at site-level to combat IWT, as well as the creation of nature-based income-generating activities, the project will not only share its successes and challenges, but will also benefit from the extensive global network provided through inclusion in the GWP. All knowledge accumulated will assist Madagascar with scaling up and sustainability, as well as identify additional innovative and adaptable techniques to a) monitor and conserve key biodiversity in Category V and VI NPAs, b) develop proactive and engaged cross-sectoral IWT task forces at national and site-level, c) identify and develop alternative livelihood options to deter IWT, poaching and trafficking, etc.

Project Title:	Integrated approach to proactive management of human-wildlife conflict and wildlife crime in hotspot landscapes in Namibia
Country(ies):	Namibia
GEF Agency(ies):	UNDP
Total Project Cost (GEF Grant)	$ 6,247,018
Estimated Co-financing	$58,761,000

PROJECT DESCRIPTION

Country Context

Namibia is home to two internationally-recognized, endemic-rich 'biodiversity hotspots' (the Succulent Karoo Biome in the Southern Namib Desert and the Western Escarpment region) and important populations of high-value, threatened species such as rhinoceros, elephants, lions, cheetahs, African wild (painted) dogs, and pangolins. This globally significant biodiversity faces critical threats to its survival, key among these being: escalating **Human-Wildlife Conflict** (HWC) – with over 8,000[29] incidents reported in 2017; **illegal trade in wildlife** (IWT) and other forms of wildlife crime (including retaliatory killing of HWC-implicated animals); and **land degradation** caused by inappropriate or poorly-located, consumptive land uses – with all of these worsened by the impacts of climate change and pervasive poverty.

To safeguard its biodiversity assets, the Government of Namibia, working with a diversity of partners, has established an impressive network of 20 state-owned **protected areas**, covering some 17% of the country's land surface (approx.140,394 km^2), and the entire 1,500 km coastline. These state-owned national parks – which include the flagship Etosha National Park and the Bwabwata and Mudumu National Parks in the Namibian domain of the Kavango-Zambezi Transfrontier Conservation Area (KAZA TFCA) – are complemented by a strong Community-Based Natural Resource Management (CBNRM) programme, which is delivered through 83 registered **community conservancies** (that allow for mixed conservation and production land uses), and a smaller number of freehold conservancies and private game reserves, tourism concessions and Community Forests. In community conservancies wildlife is mostly free-roaming and people in these areas live with the daily possibility of encounters with wild animals. Many conservancies also lie adjacent to national protected areas and form an important part of natural wildlife migratory corridors between core protected areas. This opens up important opportunities for an integrated, landscape approach to management of wildlife, but also **high potential for conflicts to arise** between people and wild animals - especially when potentially damage-causing animals break out of fenced national parks (as is the case with lions and elephants to the north and west of Etosha), or when there are no fences between core protected areas and multiple-use zones (as is the case in Bwabwata National Park).

Natural resources and wildlife occupy an integral position in the lives of Namibia's rural population, supporting cultural value systems and providing the raw materials for meeting daily subsistence and **livelihood needs**. This means that the conservation and sustainable use of Namibia's biodiversity, and the fair and equitable sharing of benefits arising from this, is inextricably linked – wildlife will only be

[29] This figure based on reporting by 71% of all registered conservancies in the Namibian State of Conservancy Report, 2017

conserved if the net benefits to communities and landowners of living with wildlife, or engaging in its conservation, outweigh the net costs[30].

Wild animals and natural landscapes are the primary drawcard for the large number of tourists who visit Namibia annually, driving a multi-million dollar **nature-based tourism sector** that already provides many jobs and stimulates economic development[31], but, holds potential to deliver benefits to an even larger number of people. Due to commendable and innovative, people-centred conservation efforts over the years, Namibia's wildlife populations have been maintained in a stable state, and have even expanded in some cases – despite the ongoing threat posed by increasingly sophisticated wildlife crime operations, particularly to high value species such as elephant, rhino and pangolins. But, with the co-occurrence of growing populations of both people and wildlife, come several challenges that compromise the effectiveness of conservation efforts in general, the future of high-value and HWC-implicated species in particular, and the potential to deliver benefits to people through building a nature- or wildlife-based economy.

Recognizing this, Namibia has adopted numerous policies and strategies for addressing HWC and wildlife crime, and enabling communities and private businesses to benefit from wildlife-based tourism and sustainable natural resource management. These include: (i) the *National Strategy on Wildlife Protection and Law Enforcement (2016); (ii)* the *National Human Wildlife Conflict Management Policy* (v2, April 2018), and its associated *Implementation Measures and Guidelines* (November 2018); (iii) the *National Policy on Community-Based Natural Resource Management* (2013), a *Parks and Neighbours Policy;* and, (iv) the *Tourism and Wildlife Concessions Policy (2013)*. The country's fifth *National Development Plan (NDP5)* and second *National Biodiversity Strategy and Action Plan* both give priority to sustainable use of biodiversity as one of the key drivers of poverty alleviation and equitable economic growth. These national-level policies are supported by a hierarchy of action plans and programmes at regional and local levels, with a diversity of instituitions in government and civil society present to facilitate their implementation.

This positions Namibia well to drive the systemic and site-based transformation required for the proposed project to deliver impactful outcomes with global environmental benefits. To do this, the country must address **four main problems**:

- The **increased occurrence and intensity of incidents of human-wildlife conflict**, especially involving elephants, feline predators, crocodiles and hippopotamus – this presents significant economic displacement risks and causes trauma to people (through damage to crops, infrastructure and, sometimes, injury and loss of life), creating a strong disincentive among affected people to conserve wild animals. In Namibia it has been established that those species at highest risk of illegal killing (through retaliation or poaching) also feature amongst those that pose the highest livelihood risks through HWC.[32]
- The **persistent threat posed by wildlife crime** to populations of high-value species, including elephants, rhinoceros, and pangolins – this includes poaching, through organized crime syndicates and incidental illegal killing, either to meet subsistence needs or as retaliation resulting from HWC.

[30] Cooney, R.; Rode, R.; Dublin, H.; Phelps, J.; Wilkie, D.; Keene, A.; Travers, H.; Skinner, D.; Challender, D.W.S.; Allan, J.R, and Biggs, D. 2016. *From Illegal Poachers to Protectors: Engaging Local Communities in Solutions to Illegal Wildlife Trade. Conservation Letters*, August 2016. Accessed at: https://www.researchgate.net/publication/306336374

[31] Joint-Venture(private-community) photographic tourism alone generated NAM $68, 343, 671 in 2017.

[32] Kahler, J.S. & Gore, M.L. 2015. *Local perceptions of risk associated with poaching of wildlife implicated in HWC in Namibia. Biological Conservation*: Special Issue on Wildlife Crime. Accessed at: www.elsevier.com/locate/biocon

- The **benefits currently flowing from wildlife conservation to communities and farmers are inadequate** to offset the costs of HWC and incentivize conservation.
- Approaches to management, prevention and mitigation of HWC and WC are currently **weakly coordinated, and are not adequately inclusive of all stakeholders.**

Current efforts to address these issues are impeded by the following barriers:

Barrier 1: ***Gaps and inefficiencies in the institutional capacity and resources available to mitigate, manage and prevent HWC at scale***: The Ministry of Environment and Tourism (MET) carries overall responsibility for managing and addressing HWC, but has insufficient equipment and lacks dedicated, trained capacity to perform these functions effectively, and at scale, across the three hotspot landscapes – currently PA game wardens, rangers and scouts have to deal with HWC as one of their many wildlife and protected-area management duties. Building on the experiences of many partners (such as IRDNC[33]), the MET has developed a customized set of technical, information-based and other measures for preventing HWC (based on the 'toolbox' advanced by the IUCN Task Force on HWC, and other HWC experts), and has species-specific HWC management plans either available (e.g. for lions) or under preparation (e.g. elephants). However, there are inadequate resources, equipment and capacity available to catalyze (or scale up) their implementation and monitor their effectiveness. A National HWC Coordination Centre has been established for collecting, managing and serving HWC data and coordinating action plans across the country, but this currently lacks the equipment (IT and communcations) and resources it needs to become fully operational.

Barrier 2: ***The capacity to protect wildlife populations and reduce incidence of wildlife crime is constrained by limited capacity, equipment, data and coordination:*** Working with partners in other line ministries, the MET has established a dedicated Anti-Poaching Unit (APU), with teams deployed to selected sites in the three targeted landscapes. Whilst the introduction of the APUs has largely stabilized the poaching situation, its capacity to scale up and sustain efforts to manage the ongoing threat posed by syndicated poaching (which is fuelled by ever-increasing external demand), is constrained by shortages of equipment and operating costs (for surveillance, detection and interception of poachers – and other criminals in the IWT chain), and weak coordination capacity for facilitating rapid and strategic response to incidents of wildlife crime. To enable better protection and more responsive management of high-risk, high-value species, the MET has initiated the development of species-specific, science-based management plans. Implementation and finalization of these plans is constrained by inadequate resources for implementation, lack of field equipment and monitoring capacity.

Barrier 3: **The wildlife economy is currently weakly diversified, and too few communities in HWC hotspots are currently empowered to benefit from it**: Namibia has a vibrant CBNRM programme and joint-venture ecotourism sector, which has amply demonstrated the potential of biodiversity-based value chains to provide jobs and stimulate economic growth, despite some challenges[34]. Building on this, and in keeping with priorities indentified in Namibia's fifth *National Development Plan*, the second *National Biodiversity Strategy and Action Plan* and the *UN Country Development Plan for Namibia*, the MET is developing a flagship Biodiversity Economy Programme. Currently, the benfits that are flowing to communities from living with wildlife are outweighing the costs (in terms of economic displacement caused by HWC), and wildlife-based value chains are weakly diversified. To incentivize conservation, there

[33] Integrated Rural Development and Nature Conservation

[34] Hübschle, A and Shearing, C. 2018. *Ending Wildlife Trafficking: Local Communities as Agents of Change*. Global Initiative against Transnational Crime.

is a need to empower more communities to enter innovative business partnerships linked to wildlife tourism and beneficiation of wildlife value chains, with cross-links to agricultural production and sustainable management of water and land resources.

Barrier 4: **The current information-sharing and knowledge management network for HWC and WC-related issues is under-developed**, resulting in weak cooperation and collaboration between programmes and stakeholders, and limited stakeholder participation in management and prevention of incidents, monitoring and knowledge-sharing. There is a well-established network of stakeholder forums through which information could be exchanged, but these need to be formalized, coordinated and empowered to contribute to local, regional and global knowledge-sharing and to build a specific community of practice on HWC-WC and the wildlife economy.

Project Overview and Approach

This project seeks to incentivize conservation by addressing the twin challenges of human wildlife conflict and wildlife crime in pro-active and integrated ways that generate benefits for rural communities from wildlife-based value chains.

Geographic targets

The project will work in three hotspot landscapes: (i) the North-East (Kavango/Zambezi) Region, which centres on the Bwabwata-Mudumu National Park complex, and includes multiple-use areas and core protected areas; (ii) the North-Central Region, centred on Etosha National Park and surrounding communaal conservancies and farmlands to the north and west (2,235, 000 ha); and, (iii) the North-West (or Kunene) Region, centred on the Palmwag, Etendeka and Hobatere Concession Areas and their associated greater community conservancies, which collectively account for an area of some 632,000 ha (of which the Palmwag Conservancy accounts for 550,000 ha).

The drivers of the systemic threats in these landscapes are complex and interlinked. They include: (a) limited cross-sectoral land-use planning and an escalation of unplanned human settlement and agricultural and industrial encroachment into former wildlife habitats or migratory pathways; this leads to increasing competition between people and wildlife for land and water resources, and increased incidence of HWC; (b) under-resourcing of the protected area system, resulting in the declining state of protected area infrastructure (such as the fencing of Etosha National Park), and limited institutional capacity to manage and monitor wildlife populations, and respond to incidents of HWC and wildlife crime in a proactive and coordinated manner; (c) a reliance on land-use options that increase the risk of HWC, and limited alternative opportunities for sustainable economic development available to rural communities living in and adjacent to conservation areas, and negative perceptions of wildlife due to the consequences of HWC.

Existing or planned baseline investments, current institutional framework and processes for stakeholder engagement and gender integration

Namibia's protected area network – which covers 45 percent of the land surface of the country, and includes state-owned national parks, private parks and concessions, community conservancies and forests – lies at the heart of its strategy for conserving its unique and significant biodiversity and ecosystems, in support of sustainable and inclusive green growth and improved governance and accountability. Over the past 20 years, a strong baseline of government- and donor-funded initiatives has supported government-led efforts to expand and strengthen the management effectiveness of this protected area network, build

the capacity of those responsible for its management, unleash its economic potential, and address risks to its sustainability – such as financing shortfalls, increasing wildlife crime and HWC, and the worsening impacts of climate change (for example, increased fire risk and protracted drought). These initiatives include past GEF-financed, UNDP-supported projects such as SPAN (Strengthening the Protected Area System of Namibia), PASS (Strengthening the Capacity of the Protected Area System to address new management challenges); and NAMPLACE (Protected Landscapes Conservation Areas Initiative), and the World Bank-supported project, ICEMA (Integrated Community-Based Ecosystem Management).

In 2006, the MET established the Namibia National Parks Programme (NAMPARKS), with support from the German government through the German Development Bank (KfW). This has played an important role in complementing allocations from the national fiscus to meet the human resource and operational costs of managing the country's protected area system. Over four phases (which ended in 2018), the NAMPARKS programme has contributed to the development and strengthening of the Namibian component of the Kavango-Zambezi Transfrontier Conservation Area (KAZA TFCA), upgrades to PA infrastructure, empowerment of local communities and conservancies that lie adjacent to protected areas.

These longer term investment programmes are complemented by numerous past and current programmes of action implemented through partnerships with bilateral agencies and NGOs, such as GIZ, KfW, WWF-Namibia (the Rhino Programme), the Namibia Nature Foundation (NNF), The Save-the-Rhino Trust, Integrated Rural Development and Nature Conservation (IRDNC – which has played an importarnt role in piloting HWC-prevention measures in Kunene region), Africat Foundation, Desert Lion Trust and the Cheetah Conservation Fund of Namibia. Support is being provided to developing the potential of community conservancies through numerous government-supported programmes (including through the Game Products Trust Fund), in partnership with NGOs (such as NACSO – the Namibian Association of CBNRM Support Organisations), and private sector partners. A number of public awareness campaigns on the plight of illegally-traded species are also being driven by organisations such as the Namibian Chamber of Environment, the Save-the-Rhino Trust, and the Rare and Endangered Species Trust (REST).

During the lifespan of the proposed new project, NAMPARKS 5 will invest at least Euro 10 million in further upgrades to PA infrastructure, and capacity development for PA management. In addition, KfW will provide support (outside of the NAMPRKS programme) for the establishment of a Community Conservation Trust Fund (an essential element for building a wildlife-based economy that benefits local communities), an integrated wildlife protection system (which will rely on well-capacitated and equipped anti-poaching units, among other things), and the implementation of payment for ecosystem services schemes (for which a feasibility study has been undertaken). A HWC Self-Reliance Scheme will be rolled out using capital budgets and support of various donors, including KfW. The government is currently negotiating a partnership with GIZ to support aspects of the developing BioEconomy Programme (which is expected to be initiated by the close of 2019), and contributions from a variety of private partners (some of these secured through previous UNDP-supported, GEF-financed interventions) will represent aligned investment.

Despite the enormous gains that have been made thorugh these efforts, measures to address HWC and wildlife crime need to be consolidated, adequately-resourced, scaled up, and integrated with measures to incentivize conservation through building the wildlife-based economy, with greater interagency cooperation and stakeholder participation and benefits.

Stakeholder engagement: The project will bring together stakeholders from government, civil society and the private sector to ensure participatory planning, decision-making, monitoring and knowledge-sharing.

Engagement processes will build on existing institutional frameworks and processes tha have legitimacy and credibility and that take local customary norms into due consideration. It will be important to engage Namibia's Sustainable Development Advisory Council (which promotes high-level cooperation on environmental issues between government, CBOs, NGOs and donors in respect of environmental issues), and the Evironmental Commissioner, and the hierarchy of ministerial and departmental representatives, and regional and local councils (municipalities, towns and village councils), which carry a mandate or perform delegated funcitons in respect of wildlife management, social and economic development. At ground level, there is a well-established network of conservation and development NGOs and CBOs (including Parks and Neighbours Forums, Conservancy Associations and Committees and other social groups) whose participation will be essential to ensure full ownership and sustainability of project outcomes. A comprehensive stakeholder analysis will be undertaken during the PPG phase to develop a stakeholder engagement plan that ensures inclusivity during project implementation, and participation of the full spectrum of rolepelayers in the developing HWC-WC-Wildlife Economy community-of-practice, and the Global Wildlife Programme more broadly (in which Namibia has not participated previously).

Gender mainstreaming: Namibia's National Gender Policy (2010 – 2020) provides the broad enabling framework for all sectors to mainstream gender in line with priorities set in the country's National Development Plan. Nearly 44% of households in rural areas are female-headed, and their empowerment is viewed as critical to addressing poverty and rural development goals. Given their customary, engendered roles in agricultural production, food provision and collection of water and firewood, women are critical roleplayers in the arena of natural resource management and mitigation and avoidance of conflict and natural disasters. These roles also place them at high risk of coming into conflict with wild animals who raid crops or compete for water resources, and women often bear the brunt of the economic hardships caused by crop losses or damage to infrastructure. Although women may sometimes be motivators for illegal killing of wildlife – either to avoid further conlicts, or when food is scarce – experience in Namibia has shown that women are powerful, positive agents of change in efforts to mitigate and manage HWC and address poaching[35]. To ensure that the project design and activities fully incorporate and reflect the views of women, and provide opportunities for women and girls to benefit from their involvement, a gender analysis will be undertaken by a gender specialist during the PPG phase. A comprehensive Gender Action Plan will be submitted at the time of CEO endorsement, and gender-disaggregated targets and indicators will be included within the project results framework, with dedicated budget allocated to ensure that they are monitored.

Alignment with GEF focal area and Global Wildlife Programme strategies:

This project is aligned with GEF 7 Strategic Objectives 1-2a&b of the Biodiversity Focal Area, which seek to **mainstream biodiversity across sectors as well as landscapes and seascapes, through the Global Wildlife Programme (GWP)**. The project has outcomes aligned to both GWP *Component 1: Preventing the extinction of known threatened species* (through improved management and science-based monitoring of wildlife in protected areas and neighbouring communal areas, conservancies and farming areas; strengthening capacity for law enforcement; and improving communication systems to coordinate response to incidents of wildlife crime); and *Component 2: Wildlife for Sustainable Development* (through strengthening capacity for mitigating, preventing and managing human wildlife conflict; stimulating wildlife-based economic development to incentivize conservation and increase the flow of benefits to rural communities and conservancies).

[35] IRDNC, 2011. *Lessons from the Field: Community Based Natural Resource Management – IRDNC's Experience in Namibia*. IRDNC, Windhoek

Within the **GWP Programme Framework**, the project contributes to the GWP II Theory of Change through delivery of the following core outcomes:
Component 1, (Conserve Wildlife and its habitats), under sub-component 1.1 (Enhance management of terrestrial protected areas, community, private and state reserves and wildlife corridors).
Component 2, (Promote the Wildlife-based Economy), under sub-components 2.2 (promote partnerships between local communities, private sector and/or government); 2.3 (stimulate wildlife-based economic development though community participation); and, 2.4 (manage human-wildlife conflicts and promote co-existence.
Component 3, (Combat Wildlife Crime), under sub-components 3.2 (generate, analyze and share actionable information, data and intelligence on criminal networks); and 3.3 (increase capacity to combat wildlife crime).
Component 5, (Coordinate and Enhance Learning), through sub-components 5.1 (Facilitate coordination and cooperation among key stakeholders), and 5.2 (promote knowledge management and capacity building).

Alignment between project outputs and delivery of GWP ouctomes is summarized in the table below.

GWP components	Project contributions	Long-Term Outcomes
1. Conserve wildlife and its habitats	Training equipment and operational requirements provided for management and monitoring of high-value, high-risk species, in accordance with science-based species management plans (Output 2.3): lions, elephants, rhinos, wild dogs, hyenas	PAs managed effectively Wildlife populations stabilized or increasing Landscapes with improved biodiversity management practices
2. Build the wildlife economy	Effective HWC strategies implemented through: establishment of dedicated HWC Rapid Reaction teams (Output 1.1); enabling operations of the National HWC Coordination Centre (Output 1.2); installation and scaling up of HWC-avoidance/prevention measures (Output 1.3) Conservation of wildlife incentivized through: wildlife-based tourism and ancillary enterprises established in each hotspot landscape (Output 3.1); predator-friendly meat-production best practice and accreditaiton programme (Output 3.2)	Enhanced individual/community benefits Increased incentives to protect and coexist with wildlife
3. Combat wildlife crime	Antipoaching surveillance and communication equipment installed and/or upgraded (2.1) Training and organizaitonal support for effective patrolling and intelligence gathering (Output 2.2) Development, implementtion and monitoring of species management plans for high-risk, high value species (Output 2.3)	Strengthened institutional capacity for combatting IWT (inlcuding implementation of innovative law enforcement tools, and improved data sharing and intelligence gathering)

	Anti-poaching Coordination Centres equipped to develop and monitor (Output 2.4)	
5. Coordinate and enhance learning	Regional HWC-WC Symposium involving GWP countries and other stakeholders, with lessons learnt documented and distributed (Output 4.1) HWC-WC Knowledge Platform established and playing a role in local M&E, awareness-raising and knowledge sharing through GWP (Output 4.2) M&E system (including gender indicators) guiding implementation (Output 4.3)	Improved coordination among GWP countries Enhanced cross-border collaboration Community of practice built to share applied knowledge on global wildlife issues Enhanced GWP coordination platform

Incremental reasoning for GEF financing under the program, including the results framework and components.

This project proposes an alternative scenario in which integrated and proactive approaches are used to address the interlinked challenges of human-wildlife conflict and wildlife crime, with stimulation of the wildlife economy used as a vehicle for incentivizing conservation of wildlife. Through these approaches, critical populations of high-value species will be more strategically and effectively managed to reduce threats, and coexistence between wildlife and resilient communities will be incentivized, with increased benefits flowing to affected communities. This scenario is centred on socially-inclusive multi-stakeholder collaboration at national, regional and local scales; evidence-driven decision-making and management approaches (based on integrated social, economic and ecological research); implementation of innovative, fit-for-purpose technologies and best-practices that enhance capacity for prevention and management of wildlife crime and human-wildlife conflict; and entrepreneurship and sustainable business models that enable rural communities to gain greater benefits from wildlife conservation through diversified value chains.

This will be achieved in three 'hotspot' landscapes, centred on: Etosha National Park (and neighbouring conservancies and community areas); the BwaBwata-Mudumu National Park complex (falling within the domain of the Namibian KAZA TFCA), and the Kunene and Erongo Regions (focusing on Palmwag, Hobatere and Entendeka Concessions and surrounding conservancies).

The project is structured around **four components**, as follows:

Component 1 - Management, mitigation and prevention of human-wildlife conflict: The outcome under this component is that **incidence of HWC will be reduced, mitigated and prevented through enhanced institutional capacity and systems, and measures for implementing Namibia's Revised National HWC Management Policy.** One of the critical interventions required to deal with HWC at site level is the establishment of an expertly-trained, suitably-equipped, dedicated HWC Rapid Reaction Unit, with teams operating in each of the hotspot landscapes *(Output 1.1*). These teams, which will be staffed by an appropriate mix of dedicated MET personnel (including wildlife veterinarians wildlife managers and social facilitators) working in collaboration with other partners, will be equipped to respond to HWC incidents soon after they are reported, to take appropriate measures to manage the HWC-implicated animals (and

monitor their future movements), avert escalation of conflict, and support the community in putting mitigation and avoidance measures in place. The activities of the reaction teams will be coordinated through establishment of a fully-operational National HWC Coordination Centre (*Output 1.2*), which is able to co-ordinate the collection and management of HWC data in a national database, and feed this into web-based monitoring, planning, coordination and implementation of HWC management plans at regional and site level. The Coordination Centre will play an important role in reporting incidents to the Rapid Reaction Unit. The MET has already appointed core staff to the Centre, but it requires equipment and resoucres to become fully operational. At site level, proactive avoidance and prevention of HWC will be enabled through the installation and monitoring of technical, technological, infrastructural and information-based measures at selected sites across the 3 hotspot landscapes (*Output 1.3*), in accordance with the *Measures and Guidelines for Implementation of the Revised National Strategy on HWC*. These measures have been modelled on the known toolbox of HWC-avoidance measures advanced by HWC expert groups such as the IUCN Task Force on HWC, but have been adapted for the local context through expert inputs and trial-and-error experience. Some of them have already been piloted at certain sites and their implementation needs to be scaled up, and others need to be piloted and their effectiveness monitored, before being scaled up. The framework within which these measures will be implemented is provided by Species-specific HWC Management Plans, the implementation, further development and monitoring of which will be enabled thorugh the project (*Output 1.4*). A management plan for lions in the North-West Region has already been developed and a similar plan for elephants is partially completed. Support of the project is required to implement and monitor the plan for lions (capacity, equipment), complete and catalyse the implementation of the plan for elephants, and develop and activate similar plans for other prioritized species (e.g. other predators, hyenas and crocodiles).

Component 2 - Combating wildlife crime and protecting wildlife populations: The outcome here is that the **incidence of wildlife crime in the hotspot landscapes will be reduced through strengthened capacity for law enforcement, and science-based management and monitoring of populations** of high-risk/high-value species. In delivering this outcome, the first line of action will be to ensure that Anti-poaching Units are effectively equipped with surveillance, detection and communications equipment (*Output 2.1*). Since their establishment, the APUs have demonstrated effectiveness in detecting perpetrators of wildlife crime and bringing them to book. Capacitation of the APUs is being funded through allocations from the national fiscus and the support of partners in the development community, but this needs to be scaled up to ensure effectiveness at landscape scale. Building on the models established during the PASS project, this new project will invest in ensuring that all APUs are adequately equipped with anti-poaching surveillance, detection and monitoring equipment (including, *inter alia*, satellite phone/radio systems, GPS devices, night-vision binoculars) and through construction of surveillance towers and other facilities to be determined at PPG. Training and organizational support will be provided to patrolling and intelligence units *(Output 2.2),* making use of the Training Centre at Waterberg Plateau National Park[36], and site-based training, according to the needs determined at PPG. Capacity to manage high-value wildlife populations will be improved through the implementation and monitoring of flexible, science-based management plans *(Output 2.3*) for of high-value species such as elephants, rhinoceros and pangolins. Finally, monitoring of site-based anti-poaching startegies, coordination of the day-to-day operations of APUs deployed to different sites, and collation of data on wildlife crime will be enabled thorrgh the establishment of well-equipped Anti-Poaching Coordination Centres – the staff for these centres are in place, but equipment and operational costs are needed to render them effective *(Output 2.4).*

[36] This facility was built with support from the GEF-financed, UNDP-supported PASS project, the Namibian Game Products Trust Fund and other local and international partners.

Component 3 - Building the wildlife economy to promote coexistence: The overall outcome of this component is that **conservation of wildlife and habitats will be incentivized**, and the damaging costs of human-wildife conflict offset, **by generating economic benefits for communities** from wildlife-based value chains. The project will do this by catalyzing the establishment of wildlife-based enterprises – at least one in each hotspot landscape – leading to job creation, diversified livelihoods and imprived incomes for communities living adjacent to protected areas and in conservancies *(Output 3.1*). During the PPG, a detailed assessments and community consultations will be undertaken to identify suitable interventions that can be developed and catalyzed thorugh the project, building on known successful models but diversifying value chains to provide more entry points for a broader spread of community beneficiaries (with specific attention given to women). Innovative partnerships and business models (PPPs, Joint Ventures and community-based enterprises) will be used to catalyze nature-based or wildlife-compatible enterprises and products that may include (but not be restricted to): tour and field-guiding, transportation, , catering, lodge-management, other aspects of value addition in the hospitality sector, as well as landscape restoration and community resource monitor programmes (e.g. building on the Rhino Custodians model). A second strategy for promoting coexistence between people and wildlife in the targeted landscapes will be to pilot the development of a best-practice, predator-friendly farming programme (*Output 3.2).* Partnerships with eco-touirism operators to promote preferential sourcing of certified predator-friendly products and to create other incentives for conservation rather than persecution of predators.

Component 4 – Knowledge management, stakeholder coordination and M&E: The outcome of this component is that **enhanced coordination, cooperation and knowledge-sharing enables integrated and proactive management of HWC and wildlife crime, and builds the HWC-WC community of practice**, both locally and regionally. In the North-eastern hotspot region (i.e. the KAZA TFCA),the efficacy of efforts to address HWC and wildlife crime within Namibia is influenced strongly by how these issues are managed in neighbouring countries (including Angola, Botswana and Zambia). A critical intervention under this component will be convene a Regional Symposium on HWC and Wildlife Crime *(Output 4.1*), bringing together local stakeholders with their counterparts in neighbouring countries and other GWP partners, to share lessons, strengthen transboundary cooperation and develop harmonized approaches. The proceedings will be documented and distributed through GWP knowledge-sharing platforms and other conduits (such as IUCN Panorama Solutions). A national HWC-WC knowledge-sharing platform (*Output 4.2)* will be built, brining together existing multi-stakeholder forums, and providing a collective platform through which stakeholders can be actively involved in local-scale M&E, awareness-raising and advocacy and participate in regional and global GWP knowledge-sharing events – particular emphasis will be placed on enabling community voices to be heard, with balanced representation of women and other marginalized groups. The TORs, governance and membership of the platform will be determined at PPG. Finally, to maximize project impact through effective adaptive management, the project will develop and implement a robust M&E system, incorporating gender mainstreaming and other safeguards (based on the UNDP Social and Environmental Safeguards pre-screen carried out during concept development and expanded at PPG).

Engagement with the Global / Regional Framework

Innovation: The innovation in this project lies in: (i) its integrated and proactive approach to addressing HWC and Wildlife Crime as interlinked issues, using stimulation of the wildlife-based economy as a key incentive for protecting populations of threatened species and engaging people in biodiversity-compatible land-use practices; (ii) the establishment of a new, dedicated institutional mechanism (the HWC Rapid Reaction Unit) to respond to and address incidents of HWC at site-level; (iii) strengthening of

coordinated planning, prevention and monitoring of both HWC and Wildlife Crime (through the establishment of a socially-inclusive, multi-stakeholder knowledge-sharing platform; and, (iv) implementation and monitoring of technologies, infrastructure and equipment for preventing HWC, which have not been used before or have had only limited application in Namibia – these measures have been adapted from known HWC prevention tools, through application of local knowledge and research.

Sustainability: The sustainability of the project is anchored in the robust policy framework which entrenches long-term institutional ownership of the project outcomes at national and local levels. Project outputs will feed into well-established and developing programmes of action led by government (principally the MET but also other line ministries) working in partnership with a highly-committed and active NGO sector, Conservancy Associations and Committees, the donor community, and private enterprises and individuals. Sustainability will also be strengthened by developing the economic incentives and public-private partnerships needed to sustain community participation beyond project closure.

Scaling up: The project's outputs and outcomes have high potential for scaling up, both within the three target landscapes, and beyond – including in neighbouring countries, especially in the domain of the KAZA TFCA. There is a well-established network of committed institutional partners available to carry out this work – the project's emphasis on knowledge-sharing and strengthening the community of practice for dealing with HWC and wildlife crime (as a critical component of building the wildlife-economy), will identify and disseminate best practices and lessons learnt, and enable a more informed and coordinated response that will make it possible to achieve impact at scale. Project outcomes can be further scaled up through the flagship Biodiversity Economy Programme which is currently under development by the MET, working with local partners and donor institutions.

Knowledge management: Under Component 4, the project will establish a co-ordinated knowledge platform that brings existing stakeholder forums into an active HWC-WC community of practice thorugh which experiences can be shared at local as well as regional and global level, through engagement with other GWP countries and participation in GWP knowledge-exchange opportunities. The project will identify, document and disseminate best practices, including on gender mainstreaming, through GWP and other platforms, and will give partciular attention to enabling community voices to be heard.

Child Project Title:	Conservation of wildcats and prey species through public-private partnerships and human-jaguar conflict management in Panamá
Country:	Panama
GEF Agency(ies):	UNEP
Total Project Cost (GEF Grant)	$1,784,862
Estimated Co-financing	$14,000,000

PROJECT DESCRIPTION

Country Context

Panama is part of the Mesoamerican Biological Corridor, the second most important of 25 hotspots in the world for species diversity and endemism. There are >218 mammal species, 226 species of reptiles, 146 amphibian species, and 940 avian species (largest in Central America). The jaguar shares habitat with many other key species sensitive to forest cover change and anthropogenic pressures, including prey such as the tapir and the white-lipped peccary. The jaguar is listed as Endangered in national legislation, as Near Threatened by IUCN, and included in CITES Appendix I; the tapir is catalogued locally as Critically Endangered and as Endangered by IUCN; and the white-lipped peccary is listed locally as Endangered and as Vulnerable by IUCN. The loss of forest cover associated with agriculture, infrastructure development, and urbanization and the decrease of its natural prey make the jaguar vulnerable and expose it to greater direct and conflictual contact with human populations and activities. Jaguars have lost 40% of their habitat in Panama and are increasingly isolated and vulnerable.

Panama's policy framework provides a strong foundation to prioritize jaguar conservation whilst building on commitments to reverse forest cover loss. The challenge lies in implementing commitments in an integrated fashion. Panama has prioritized jaguars as key biodiversity species to be conserved as denoted in the Action Plan for Jaguar Conservation (2011). Besides, the Forest Policy and related financial incentive mechanisms and the National Biodiversity Action Plan (NBSAP/2000) provide strong foundations for wildcat conservation. The country has also designed a National REDD+ Strategy (ENREDD+), which is directly connected to its commitment to restoring 13% of its national forest cover through the public-private pact 'Alliance for 1 Million Hectares' and its UN Framework Convention on Climate Change (UNFCCC) Nationally Determined Contribution (NDC).

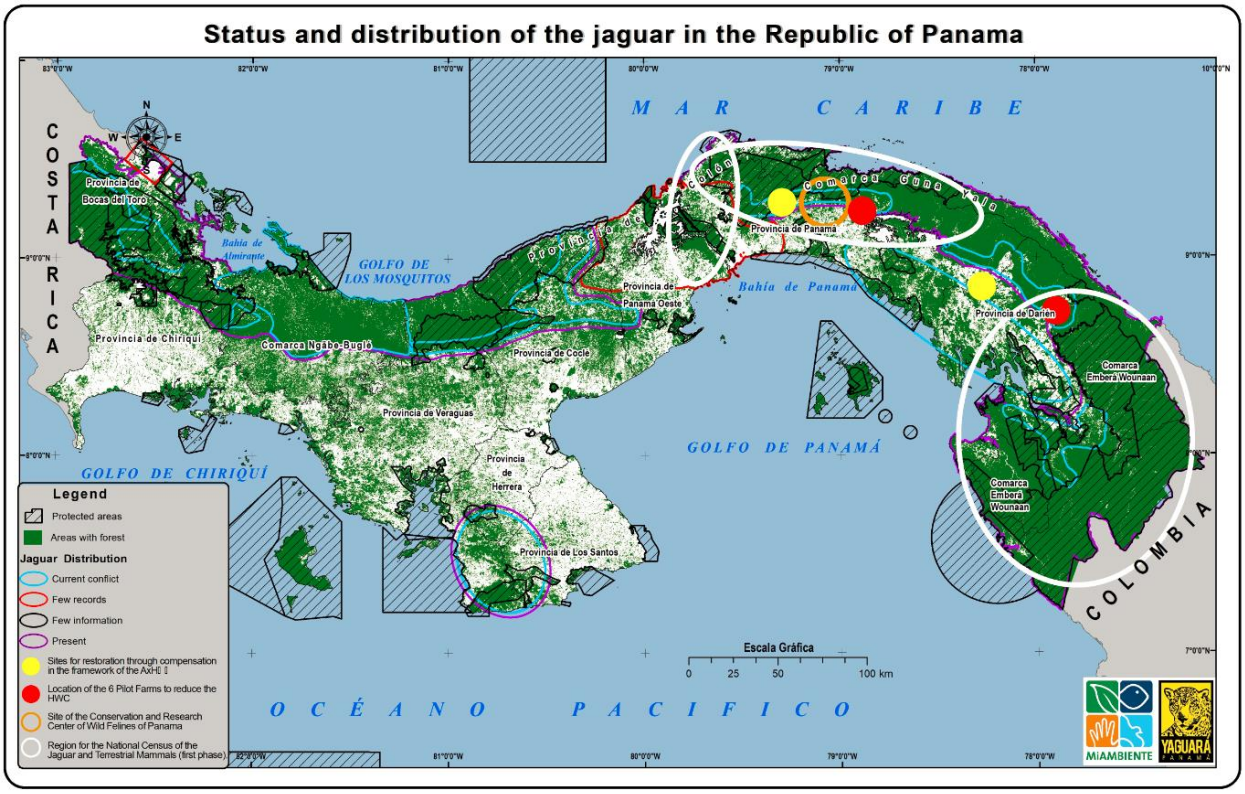
The long-term solution and systems transformation proposed under this GEF Project involves promoting wildlife corridors; mainstreaming biodiversity conservation in environmental offsetting efforts; mainstreaming anti-predation measures in livestock management to reduce human wildlife conflict (HWC); and robust jaguar-centric monitoring and data systems that contribute to region-wide conservation targets.

This project will generate global environmental benefits by restoring critical habitat and increasing connectivity along the isthmus from Chagres National Park to Darien National Park, ultimately contributing to the conservation of endangered species such as the jaguars. The project will also support implementation of the aforementioned policy framework. It will secure the future of many threatened and endangered species in one of the most ecologically diverse regions of the world. Improved

conservation of threatened species such as Bradypus variegatus, Hydrochoerus isthmius, Choloepus hoffmanni, Tapirus bairdii, Tayassu pecari, Leopardus wiedii, Leopardus pardalis and Panthera onca will serve to protect and improve genetic diversity for the future. Furthermore, restoration of critical habitat in the buffer zones of protected areas will help maintain their role as a carbon sink. The project will also contribute directly to improved management of approximately 600 ha37 for globally significant biodiversity and ecosystem services.

Project Overview and Approach

Provide a brief description of the geographical target(s), including details of systemic challenges, and the specific environmental threats and associated drivers that must be addressed;



The Chagres National Park–Darien National Park Complex is the broader geographical zone where GEF financed interventions will take place. This geographical target has been strategically selected to encompass the area between Panama Centro, the narrowest zone of the Central American isthmus with critical biodiversity habitats and where the jaguar is under the greatest threat, and the Darien National Park, home to the largest population of jaguars in the country. The project's wildcat conservation rationale is therefore to promote connectivity between the hotspot of vulnerability and the largest jaguar habitat; landscape level measures to reduce human-wildlife conflict caused by habitat loss and fragmentation; and better-informed protected area management that integrates robust information on the status of wildcats and their prey.

Systemic challenges contributing to the vulnerability of jaguars are primarily associated with the following threats:

[37] Based on the calculations of the areas of potential pilot areas, to be confirmed in the PPG.

Ecosystem degradation and forest fragmentation: Panama's human population of 3,705,246 is growing at an annual rate of 1.3% and is concentrated in the Center and adjacent Protected Areas (PAs). Agriculture, extensive livestock farming, human settlement and infrastructure development are major drivers of forest change. Panama has 60% forest cover and the rate of deforestation has decreased over time, currently at 15,681 ha/year. However, in the central region of Panama, population growth and agricultural expansion continue to spread in forested areas and PA buffer zones. Deforestation continues outside PAs in Panama, Colón and Darién provinces., which suggests that North and South America are no longer connected in an effective way for some wild species and ultimately endangers the biogeographical connection between the Americas for some terrestrial mammals. Fragmentation results in increased human-wildlife conflict (HWC).

Human-wildlife conflict, retaliatory killing of jaguars and poaching: The jaguar is protected by national legislation. It is illegal to damage, traffic, trade, capture, illegally possess and hunt. However, a major issue is retaliation for predation of domestic animals, mainly cattle and smaller animals; 96% of the 339 jaguar deaths reported since 1989 were due to killing by humans after livestock death. The economic benefits of poaching have increased with the illicit trade boom mainly in the Chinese market38.

Describe the existing or planned baseline investments, including current institutional framework and processes for stakeholder engagement and gender integration;

Baseline investments:

Alliance for one million reforested hectares in line with the REDD+ Strategy of Panama: this public-private pact led by the Ministry of Environment aims to recover 13% of forest cover restore 1 million ha in 2015-2030. It includes the new "Reforesta Panama Fund" with USD 15 million per year in grants from the General State Budget for forest restoration and conservation projects. In addition, the Government of Panama has allocated USD 23.5 million for reforestation projects, community agroforestry development and adaptation to climate change during 2015-2018.

Water, Protected Areas and Wildlife Trust: finances local public-private investment initiatives and is expected to provide USD 20 million per year for initiatives during 2018-2030 from the General State Budget.

Environmental Economic Incentives Program in the Panama Canal Watershed: US $10 million (2009-2028) initiative executed by the Panama Canal Authority with the Ministries of Environment and Agricultural Development that promotes water conservation, reforestation, agroforestry and silvopastoral activities in over 20,000 ha, including PAs.

Program for the conservation and management of the cultural and natural heritage of Panama: implemented by the Ministry of Environment and the National Institute of Culture with US $107 million of IDB financing (2018-2023) it promotes jaguar conservation and local job creation through community tourism. Program to finance and support conservation-oriented livestock production in the Darién: led by the Ministry of Agriculture with financing of USD 12 million (2017-2022), the program conditions credit and loans to the presentation of sustainable cattle ranch management plans inclusive of conservation measures. Furthermore, the are programs to manage jaguar-livestock conflicts (USD 500,000 million |

[38] Jaguars are beginning to be considered a replacement for tiger bone for traditional medicine purposes by the growing Asian community in Latin America.

2017-2019) under development by supporting community complaints, measures to avoid jaguar death, and rescue and relocation of wild cats.

A GEF-CAF project "Ecosystem-based biodiversity friendly cattle production framework for the Darien Region of Panama" (GEF funding USD 3 million, indicative co-financing USD 14.3 million) is under development and has some geographical and thematic overlap with the proposed project. Close collaboration and complementarity between the two projects will be ensured.

Stakeholder engagement and gender integration:
Relevant stakeholders will be systematically consulted and engaged during project preparation and execution. They are : cross-sectoral government institutions; local communities involved in efforts to minimize the impacts of HWCs (from ranch owners to neighbouring dwellers); private sector actors in the infrastructure and other sectors engaged in environmental offsetting schemes; academic institutions that hold information on the status of jaguars and could benefit from increased capacity on scientific monitoring through the National Jaguar Census and 'Wildcats Conservation and Research Centre'; and civil society working on conservation in the target geography.

Ensuring that both men and women can equally participate in and benefit from this project is key to its success and can be achieved through careful gender planning and mainstreaming. A gender mainstreaming approach will inform the design, implementation, monitoring and evaluation of project interventions. A key expected outcome from project preparation is to identify how to address gender imbalances and increase women's participation in jaguar conservation. Capacity building efforts will reinforce leadership skills and promote the empowerment of local women in their communities. The same will apply to restoration efforts and measures to mitigate HWC in cattle ranches. In the context of training and capacity building programmes, both women and men will be involved in a balanced way.

Describe how the integrated approach proposed for the child project responds to and reflects the Program's Theory of Change, and as such is an appropriate and suitable option for tackling the systemic challenges, and to achieve the desired transformation with multiple global environmental benefits

The integrated approach proposed by this project is in full alignment with the Global Wildlife Program (GWP)'s Theory of Change as it ultimately aims to achieve quantifiable wildlife and habitat conservation results, thus communicating directly with GWP's outcomes under Components 1 and 2. In particular, this approach seeks to address human wildlife conflicts related to the retaliatory killings of jaguars in response to attacks on livestock. The effective implementation of HWC management strategies that increase incentives to protect wildlife is prioritized through the implementation of sustainable management plans inclusive of on-site anti-predation measures in selected cattle ranches (GWP Component 1 output and short-term outcome). HWC is associated with habitat loss and degradation that lead to greater proximity between wildcats and human activities. It follows that this project's integrated approach equally promotes connectivity through enhancement of multispecies biological corridors and wildlife habitat. Directing environmental offset schemes[39] to promote enhanced connectivity is an innovative means of diversifying

[39] Panama's legal framework establishes that public and private investments in the infrastructure, energy and other sectors that lead to environmental degradation compensate (offset) the environmental damage caused (Executive Decree 123 of 2009, General Law of the Environment, Forestry Law and Wildlife Law). Environmental compensation can take place anywhere in the country irrespective of the location of the investment at stake. Restoration of degraded areas is an accepted modality of environmental compensation in Panama. The legal framework requires that every public or private investment

financing for jaguar conservation through public-private collaboration (GWP Component 2 output and short-term outcome). Finally, access to more robust data on jaguar conservation through more accurate knowledge on the status of jaguars in key protected areas (Census) and targeted scientific knowledge (Conservation Centre) creation and dissemination at national and regional levels is also a dimension of this project's integrated approach. It contributes to improved protected area management through the integration of more accurate data on jaguar status in PA management plans and supports efforts to quantify jaguar and other wildlife populations (GWP Component 1 output and short-term outcome and GWP Component 5).

Describe the project's incremental reasoning for GEF financing under the program, including the results framework and components

This project is incremental insofar as it will complement other ongoing initiatives under implementation in Panama to secure globally significant BD values in key BD areas. MIAMBIENTE, Yaguará Panamá Foundation, and other public and private stakeholders are executing activities that will run parallel to the project and help achieve its objectives.

In the absence of GEF funding, the Government of Panama will continue to provide resources to update PA management plans without unified data on jaguars and other key terrestrial mammals. MIAMBIENTE will continue to engage the private sector in the execution of mandatory and voluntary offsetting programs, but without any strategic planning to benefit globally-important BD. While these reforestation/restoration efforts will benefit the Alliance for One Million Hectares/REDD+ goals and Panama's emission reduction commitments under the Paris Agreement, there will be an opportunity lost from not mainstreaming specific BD standards within their planning framework.

The business-as-usual scenario will be characterized by limited capacity for monitoring jaguars and other key species, increased encroachment and fragmentation of crucial forest habitat, enhanced Human-Wildlife Conflict in human settlements adjacent to protected areas, and the consequent loss of biodiversity. Without GEF funding, many conservation objectives will not be achievable in the short term, and others will be jeopardized.

Project Component 1: Conserve jaguar and prey species through connectivity promotion and human-wildlife conflict management: Environmental offsetting programs by the infrastructure sector are legally mandated by the Forest Law (Law No.1/1994) and ensuing regulation (article 41); and the General Law on the Environment (Law No. 41/1998) and its Decree 123/2009 on Environmental Impact Assessments. The Ministry of Environment has oversight of these projects. Activities include a Plan to direct future offset investments to the Chagres NP-Darien NP "multispecies" biological corridor inclusive of criteria to prioritize restoration sites building on GIS data and forest carbon stock data as a proxy for the status of jaguar habitat, and potential to contribute to The Alliance for One Million Hectares 2015-2030 and the REDD+ Strategy. The project would also provide technical assistance to 3 environmental offsetting programs aimed at restoring 100 ha in the Panamá Centro–Chagres (Chagres NP), Panama Este-Chepo,

presents an Environmental Impact Assessment, inclusive of environmental compensation plans. The latter can encompass compensation for forest clearance authorized by the Ministry of Environment. It follows that Reforestation Plans are often part of these Environmental Impact Assessments and they include information on the location and size (hectares) of sites to be restored. It is mandatory that these restoration efforts abide to technical criteria and priorities established by the Ministry of Environment and comply with the national regulatory framework. The Ministry of Environment has therefore discretion over restoration efforts under environmental compensation schemes.

and Rancho Frío–Darien (Darién NP) complexes. Furthermore, GEF funds would implement sustainable management plans inclusive of site-specific anti-predation methods to reduce HWC. The management plans were designed under the project 'Preventive Management of Jaguar-Cattle Conflict' led by the Ministry of Environment in 6 cattle ranches covering 500 ha in the Panama Este-Chepo and Rancho Frío–Darién complexes. By demonstrating cost-effective human-wildlife conflict prevention measures the project will generate proof of concept of jaguar-livestock coexistence in productive landscapes. The project would also support the first National Census of Jaguar and Terrestrial Mammals using the method of camera traps along 33,000 ha in Chagres National Park, Darien National Park, and Nargana Wildlife Protected Area. This pioneering effort would enable the integration of jaguar data in 3 protected area management plans and support activities on HWC and connectivity management.

Component 2: Generate scientific knowledge, build national capacity and promote regional commitments on wildcat conservation
The project would co-finance and provide funds to set-up the first stage of the 'Wildcats Conservation and Research Center of Panama' as a 'go to' resource for scientific data, capacity building, and knowledge dissemination on jaguar conservation and HWC management. GEF funds would: (i) invest in basic infrastructure and equipment for research and training, (ii) promote institutional strengthening of relevant government organizations, (iii) plan for the 1st Phase of the Pilot Program for the Management, Rehabilitation and Reintroduction of Wildcat Cubs, and (iv) undertake a needs assessment for further investments in the Centre. Data sharing with regional initiatives on jaguar conservation would also be promoted (see below).

Engagement with the Global / Regional Framework

As described above, this project has a whole second component dedicated to the coordination and enhancement of learning on wildcat conservation. While the project's focus is fundamentally national, there is equally marked ambition to build on the results of its Component 2 to contribute with regional initiative on jaguar conservation, the Jaguar 2030 Initiative in particular as well as to take full advantage of participation in the broader Global Wildlife Program (GWP)'s community of practice to exchange lessons learnt at a global scale with multi-stakeholder counterparts in Africa, Asia-Pacific and the global North involved.

Jaguars are of particular relevance in the Latin American context not only because they are the largest mammals in the region acting as apex predators with a range that extends from Mexico all the way down to Argentina, but also because they are mostly under threat. It follows regional collaboration to increase the knowledge base for jaguar and wildcat conservation is particularly strategic. Regional and sub-regional information exchange on efforts to promote connectivity and wildlife corridors centred on jaguars can substantially increase the effectiveness of these measures over time. Panama very much takes this strategic priority on board as demonstrated by a dedicated output under this project to regional coordination. It intends to direct GEF funds to ensure the results under this project (on promotion of connectivity, addressing HWC, the National Jaguar and Mammals Census in 3 protected area, and knowledge management activities) are systematically captured and both hard data and lessons learnt disseminated regionally through the GWP network as well as contribute to the Jaguar 2030 Initiative.

With regards to the project's overall approach to learning and scaling-up, the proposed project is innovative because it will develop standards for planning environmental offset projects from the infrastructure sector based on scientific research resulting from the National Census of jaguars and mammals, the first in Central America and the second in Latin America. It will show that compulsory

compensation programs of private companies can be successful financing mechanisms for landscape-level conservation, both for jaguar populations and for "multispecies" biological corridors. Lessons that could also be mainstreamed across the region. This project is sustainable because it builds upon itself, strengthening the capacities of national institutions through the development of public-private partnerships and the establishment of the Conservation and Research Center of Wildcats of Panama. The intent to consider forest carbon stock in jaguar habitat and promote explicit linkages with national REDD+ activities and financing streams cannot only lead to the fulfilment of international commitments related to the UNFCCC Paris Agreement and the CBD Aichi Targets, but could also generate relevant knowledge and lessons learnt to other countries in the region. The same applies to the participatory approach promoted through community engagement in the management of habitats for large cats and the replicability of cost-effective HWC measures. This project's considerable potential for replication, given its national and intersectoral scope, will be reinforced by knowledge management and the exchange of best practices through the Center of Conservation and Research of Wildcats of Panama.

Child Project Title:	South Africa Biodiversity Economy and Illegal Wildlife Trade
Country:	Republic of South Africa
GEF Agency(ies):	UN Environment and World Bank
Total Project Cost (GEF Grant)	$ 13,427,982
Estimated co-financing	$157,972,260

PROJECT DESCRIPTION

Country Context

South Africa's is one of most biodiverse countries in the world, with important populations of white and black rhino, elephant, African lion and cheetah. It has many endemic species that are globally significant, such as bontebok, black wildebeest, 39 species of cycad and *Pachypodium* succulent plants. Biodiversity and its habitats contribute significantly to the national economy, and to local livelihoods, through nature-based tourism development and, by providing a range of goods, such as food, biomass fuel, and medicine; and services such as water and soil conservation. South Africa's ecological infrastructure (preserved ecosystems) also increases resilience to climate shocks, by reducing the impact of extreme weather events such as drought and floods.

South Africa's system of Protected Areas (PAs) covers an area of about almost 100,000 KM^2 of land area and over 185,000 KM^2 of marine area (20 percent of the national terrestrial territory, and 12 percent of the marine territory), and includes both formal PAs and other types of Conservation Areas (CAs). This vast system of PAs is managed by a range of national conservation agencies such as South African National Parks (SANParks) and the iSimangaliso Wetland Authority, provincial government, and private and communal structures. South Africa harbors world-renown protected areas, such as the Kruger National Park and the iSimangaliso Wetland Park**.**

The total contribution of Travel and Tourism to South Africa's gross domestic product (GDP) in 2016 is estimated at 9.3 percent (WTTC), a significant portion of which is directly linked to natural assets, particularly protected areas (PAs). In 2016, South Africa received record 10 million tourists – a 12.8 percent increase from 2015 (South African Tourism, 2017), and is expected to be among the world's top 20 destinations by 2020. Most of this tourism is based on nature, particularly PAs. South Africa system of PA combined host over 7 million visitors annually, 75 percent of which are domestic, with a tendency of increase.

The proliferation of trans-national organised criminal networks in South Africa since the 1990s has led to a significant escalation in the poaching and trafficking of the country's wildlife resources. Criminal syndicates are targeting iconic species, including the cycad, rhino, elephant and lion. An increase in poaching intensity, and range of species targeted. Rhinoceros horn trafficking has increased in South Africa by more nearly 200% between 2010 and 2017 (with annual poaching figures of 333 in 2010 and 1,028 in 2017). Ultimately, the biodiversity and natural resources of the country, especially in the light of the significant increase in the numbers and range of wildlife species (e.g. rhinoceros, elephant and abalone) being poached over the past few years, are increasingly under threat. It has also become apparent that the damage caused to South Africa's environment and biodiversity is having a severe impact on tourism, the economy and national security. Approximately 1,300 species found in South Africa are listed on the CITES Appendices due to risks associated with international trade.

One of South Africa's biggest challenge is its high inequality rate, the highest in the world. The current government is acutely aware of the challenges that need to be overcome for accelerating progress and building a more inclusive society. It developed a 2030 National Development Plan (NDP), outlining vision and priorities, and the strategic goals of eliminating poverty and reducing inequality by 2030. The National Development Plan 2030 demonstrates strong commitment to environmental and biodiversity protection as a vehicle to address its most crucial development challenge - accelerating growth while reducing inequality. The National Biodiversity Strategy and Action Plan (NBSAP) 2015-2025 supports the development of a Biodiversity Economy, to encompass businesses and economic activities that either directly depend on biodiversity for their core business or that contribute to conservation of biodiversity through their activities. The *Biodiversity Economy* was identified as a crucial engine for socio-environmentally sustainable growth and poverty reduction, especially in rural areas. The NBSAP specifically targets an increase of 10 percent in average annualized GDP growth by 2030 from the wildlife sector, including nature-based tourism.

South Africa has developed, and is in the process of implementing, a number of strategies to combat wildlife crime, with some focused more on rhino poaching (e.g. Integrated Strategic Approach to Management of Rhinoceros and the Rhino Conservation Lab) while others are focused on wildlife trafficking (draft National Integrated Strategy to Combat Wildlife Trafficking, NISCWT, with a focus on four priority species), strengthening the capabilities of the relevant law enforcement bodies (e.g. National Environmental Compliance and Enforcement Strategy for the Environmental Management Inspectorate) and integrating local people into natural resources (including wildlife) management (e.g. National Biodiversity Economy Strategy, NBES).

Project Overview and Approach

Provide a brief description of the geographical target(s), including details of systemic challenges, and the specific environmental threats and associated drivers that must be addressed;

South Africa wildlife, PAs, and biodiversity in general, are increasingly under threat. These threats result in adverse impacts on biodiversity and ecosystems, on the rural population dependent on them, and the broader regional and national economies. Unsustainable and illegal practices on biodiversity, which are among the main causes of loss and degradation of wildlife, are largely induced by rural poverty, lack of access to effective and sustainable livelihoods support (such as jobs, business support, direct payments from conservation), and the absence of meaningful livelihood alternatives. South Africa's law enforcement and wildlife conservation structures have increasingly recognised that the issue of wildlife trafficking has now evolved into a wider threat to its national security.

The project will address issues related to loss of habitat and biodiversity, the high inequality rate and the rampant illegal wildlife trade that is taking place in South Africa. The objective is to strengthen South Africa's capacity to combat illegal wildlife trade and improve PAs and landscape management to increase benefits to communities. The project is structured along 2 key pillars. The first pillar will reduce the level of poaching and illegal trade in wildlife, and enhance the capacity for wildlife crime enforcement, investigations and prosecutions in South Africa. It will be implemented by UN Environment as the GEF Implementing Agency. The second pillar will maximize PAs potential to serve as 'hubs' of local development and establish a model of conservation-compatible rural development for scaling up with additional funding in the future. The model will be implemented in selected PA landscapes. The World Bank will be the GEF Implementing Agency for this pillar.

Pillar 1 will contribute to improving South Africa's ability to prevent, combat and investigate wildlife trafficking. It will support the establishment and operations of an Anti-Poaching Unit (APU) - using Kruger National Park and Umfolozi as operating models – in the low-capacity government protected areas with rhino populations. Other interventions of this pillar will have a national impact. Pillar 2 will work in the landscapes around iSimangaliso Wetland Park and Kruger National Park, both of which have the potential to rapidly scale up ongoing activities and demonstrate the application of the proposed model. The choice of iSimangaliso Wetland Park, in addition, will enable to build on results and lessons learned from a recently closed GEF WB project that focused on protecting the exceptional biodiversity of the Park though conservation, sustainable resources use, rational land use planning, and local economic development. The choice of Kruger National Park, part of the Great Limpopo Transfrontier Conservation Area, will allow to leverage its ground-breaking achievements in terms of biodiversity conservation, environmental education, and sustainable tourism and local development promotion. SANParks is currently identifying a third PA landscape, following a robust selection process.

Describe the existing or planned baseline investments, including current institutional framework and processes for stakeholder engagement and gender integration;

President Ramaphosa launched in September 2018 the "Biodiversity Economy Programme", which seeks to balance biodiversity and natural resources protection with sustainable use for economic development and equitable distribution of benefits. The Department of Environmental Affairs (DEA), SANParks, iSimangaliso Wetland Authority and other PAs authorities have taken strategic decisions to prioritize the promotion of socio-economic development of communities around PAs. A key objective of local governments in South Africa is "to promote social and economic development", with Local Economic Development (LED) firmly entrenched in local government practice. LED has not yet delivered on its promise of robust and inclusive growth. Integrated Development Plans (IDPs) rarely incorporate broader environmental and natural resources concern into local economic planning, resulting in land use decisions that do not adequately consider environmental concerns, including biodiversity conservation, watershed maintenance and climate resilience. This project will build on these initiatives.

South Africa has developed, and is in the process of implementing, a number of strategies to combat wildlife crime, with some focused more on rhino poaching (e.g. Integrated Strategic Approach to Management of Rhinoceros and the Rhino Conservation Lab) while others are focused on wildlife trafficking (draft National Integrated Strategy to Combat Wildlife Trafficking, NISCWT, with a focus on four priority species), strengthening the capabilities of the relevant law enforcement bodies (e.g. National Environmental Compliance and Enforcement Strategy for the Environmental Management Inspectorate) and integrating local people into natural resources (including wildlife) management (e.g. National Biodiversity Economy Strategy, NBES).

The proposed project builds the lessons learned from the recently closed, GEF-financed "Development, Empowerment and Conservation in the Greater St Lucia Wetland Park and Surrounding Region (P086528)". It will incorporate some of the most fundamental community development innovations introduced through the Rural Enterprise Accelerator Programme (REAP), which provided community entrepreneurs with training, mentorship and seed capital for businesses, enabling businesses to leverage opportunities in iSimangaliso Wetland Park, catalyzing job creation and economic growth.

Associated baseline projects include inter alia: GEF-6 UNEP-DEA project 'Strengthening institutions, information management and monitoring to reduce the rate of illegal wildlife trade in South Africa'; management of Intensive Protection Zones (IPZs) for rhino populations; parks/reserves Patrol Optimisation Programme; NATJOINTS Operation Rhino; provincial species Threat and Risk Assessments; anti-poaching initiatives; Mission Area Joint Operations Centre (MAJOC) for security-related anti-poaching efforts; joint law enforcement operations; wildlife crime coordination between the Directorate for Priority Crime Investigations (DPCI), the South African Revenue Service (SARS) Customs and Excise and Environmental Management Inspectors (EMI's) at ports of entry and exit; Rhino Guardian programme; RhODIS database for rhino horn DNA; Integrated Smart Parks Programme; National Biodiversity Investigators Forum (NBIF); DEA, DPCI and the Department of International Relations and Cooperation (DIRCO) initiatives to raise awareness and dialogue at diplomatic levels; training, skills development and capacity building of security forces; and a diverse and extensive range of partnership arrangements to combat wildlife crime with the private sector, NGOs and local communities.

The project will have positive social and environmental benefits at local, national, regional and global levels. At the local level, direct project beneficiaries include communities and their members in targeted landscapes, and particularly: individual entrepreneurs, small, medium and micro-sized enterprises (SMMEs), community-based organizations (CBOs), such as co-operatives, communal property associations (CPAs), and community trusts. Benefits are expected to include improved access to skills training for business development, finance and markets, PES, improved local governance, and subsequently more profitable community or individually-owned businesses and increased household income. Women bear the heavy burden of ensuring the livelihood sustainability of rural households. Moreover, restrictions on their participation in public consultations and decision-making spaces, customary laws, and low level of literacy all play against women empowerment within the community. As such, the project envisages empowering women

Describe how the integrated approach proposed for the child project responds to and reflects the Program's Theory of Change, and as such is an appropriate and suitable option for tackling the systemic challenges, and to achieve the desired transformation with multiple global environmental benefits; and

The project is expected to be part of the Global Wildlife Program (GWP) Phase II. Launched during the GEF 6 replenishment cycle and expected to be expanded in a second phase with GEF 7 financing, the Global Wildlife Program serves as umbrella to coordinate and share lessons across projects aiming to reduce illegal wildlife trade (IWT). The Program's theory of change addresses key distortions and weaknesses across the illegal wildlife value chain and lack of wildlife-based land uses. It prioritizes investments in interventions that ensure that the real value of wildlife is reflected in land use planning and incentives for local communities and in interventions to combat wildlife crime. The South Africa interventions sees both strengthening of the state-led enforcement efforts and community engagement in wildlife-based development as essential in tackling the IWT crisis. Under Pillar 1, the project (with UN Environment as GEF Implementing agency) will provide focused support to the implementation of elements of the draft National Integrated Strategy to Combat Wildlife Trafficking (NISCWT). These interventions will be increasing the costs of participation in the illegal trade. This falls within Component 3 (Combat Wildlife Crime) of the GWP Phase 2 framework. Under Pillar 2, the project (with WB as GEF Implementing agency) will support efforts to empower communities in and around PAs to be stewards and beneficiaries of wildlife and develop wildlife-based economic activities and tourism related products to attract further

funding to areas around PAs where communities live. This falls within Component 1 (Conserve Wildlife and Habitats) and Component 2 (Promote Wildlife-based Economy) of the GWP phase 2 framework.

Describe the project's incremental reasoning for GEF financing under the program, including the results framework and components.

Pillar 1: Strengthening South Africa's capacity to implement the National Integrated Strategy to Combat Wildlife Trafficking (NISCWT)

Under the business as usual scenario, the government will continue to improve South Africa's ability to prevent, combat and investigate wildlife trafficking in silos. With the project, it will build on the collective efforts of the different government institutions and counterpart civil society organisations and supplement the considerable level of baseline domestic resources and philanthropic and business investments already committed, to combat illegal wildlife crime. The project will specifically assist the Government of South Africa (GoSA) in addressing key resource and capacity constraints to the effective implementation of three secondary objectives – c. Improve law enforcement capacity …; f. Enhance forensic capacity …; and i. Establish dedicated prosecution and court capacity … - of Strategic Objective 1 (Improving law enforcement … to effectively investigate, prosecute and adjudicate wildlife trafficking) of the NISCWT.

Component 1 is focused on: (i) enhancing the anti-poaching capabilities of low capacity 'Rhino reserves' (Output 1.1); and (ii) establishing a national environmental enforcement and compliance training centre (Output 1.2). Under component 1, the project will support the establishment and operations of an Anti-Poaching Unit (APU) - using Kruger National Park and Umfolozi as operating models – in the low-capacity government protected areas with rhino populations. Initiative A15 ('Establish an APU for each government protected area with rhino population …) under Workstream A (law Enforcement) of the *Rhino Conservation Lab* has preliminarily identified 26 state protected areas (PAs) with rhino populations that have no or limited anti-poaching capacity. A sub-selection of 10 of these low-capacity rhino PAs (based on a set of objective prioritisation criteria) will be targeted for project support. While work is currently underway to define and cost the minimum and optimal structure, staffing, equipment and operational requirements of an APU at different scales of PA size and management complexity, it is envisaged that project support to these low-capacity rhino PAs will seek to address critical gaps in the staffing (rangers and tracker dogs and dog handlers for large reserves), training, equipping (including safety equipment, backpacks, first aid, field equipment, weapons, transport, data collection technology, detection technology, etc.) and operating (rations, fuel, etc.) requirements for APUs in the target PAs. GEF funding will be used to supplement the substantial baseline investments (including staffing, training, equipment, running costs) already being committed to anti-poaching efforts in the state rhino protected areas by the nine provincial conservation agencies, SANParks, DEA, PPF and WWF. The project will also support the establishment of a national environmental enforcement and compliance training centre, to be administered by the Environmental Management Inspectorate of DEA, as a mechanism to deliver more efficient and effective compliance and enforcement training to national, provincial and local Environmental Management Inspectors (EMIs), other law enforcement authorities (such as South African Revenue Service/Customs, South African National Defence Force, Road Traffic Management Corporation and the South African Police Service) and private sector, community and NGO wildlife conservation partners. While the preferred operating model for the training centre will only be identified after completion of the in-depth feasibility study (that is currently underway), project support for the development and operationalisation of the training centre will include the initial planning, design,

construction and equipping of the centre[40] and the development of suitable courses and training programmes once the centre is operational. GEF funding will thus primarily be used to finance the establishment and start-up costs of the training centre while DEA co-financing will primarily be used to fund the ongoing staffing, operations, administration and running costs of the centre. The costs of course attendance will be borne by the participating government, NGO and private sector partner institutions.

Component 2 is focused on: (i) strengthening capacities to identify species from forensic cases in the investigation and prosecution of wildlife crimes (Output 2.1); and (ii) building the DNA barcode reference library of endangered species that are being illegally poached and traded (Output 2.2). Under component 2, the project will support the expansion of the DNA forensic analysis capabilities of the National Zoological Gardens (NZG) research laboratory and the South African Police Service (SAPS) Forensic Science Laboratory (FSL) for targeted South African species (including rhino, elephant, and other threatened birds, mammals, reptiles and marine species)[41]. GEF funding will be used in the: (a) development of alternative laboratory technologies and approaches for forensic investigations (e.g. crime scene investigations, specimen identifications, poisoning and pesticide analysis, forensic veterinary pathology); (b) ongoing training and skills development for laboratory technicians (e.g. sample collection using chain of custody protocols, biomaterial processing, tissue storage, forensic tests for species identifications, traceability of source populations); and (c) the procurement of additional laboratory equipment, materials and short-term specialist expertise. The NZG, which is part of the South African National Biodiversity Institute (SANBI), will finance the recurrent operating costs (staffing, materials, services, etc.) of the existing state of the art research laboratory. The project will also support the implementation of the *Barcode of Wildlife Project* (BoWP) in South Africa, and assist in the expansion of the central biobank database to include geographic origin (origin tracking). GEF funding will be used to help expand the South African "reference library" of DNA barcodes (established with Google start-up funding) for CITES and threatened species[42] at the NZG research laboratory. A number of priority species of plants and animals have already been selected for the BoWP on the basis of their CITES or Threatened and Protected Species (TOPS) status and/or illegal trade in these species in a form which would make identification based on general morphology or appearance problematic (e.g. traded as seeds, bark, bulbs, bone, meat)[43]. GEF support will further assist in developing the processes – including specialized chain of custody (CoC) sampling protocols, sampling kits and training manuals – within government agencies to effectively use the DNA reference library for wildlife crime investigations, enforcement of permit requirements, border inspection, courtroom prosecutions, and other enforcement measures. Finally, GEF funding will be used to prepare Standard Operating Procedures (SOPs) and technical guidance documents for staff involved in the collection and analysis of samples to ensure that the use of DNA barcodes in wildlife crime investigations are legally defensible. The NZG will finance for the recurrent operating costs (staffing, materials, services, etc.) of the existing research laboratory. The DEA will co-finance the development, population and ongoing maintenance of the biobank database. It is envisaged that the lessons learnt

[40] It is however unlikely that a new building will be constructed. The most cost-effective option is the repurposing of part of an existing government-owned building as the dedicated training facility.

[41] Project support to further building the wildlife forensic capabilities of the country will be fully aligned with the University of Pretoria's Veterinary Genetics Laboratory, currently a centre for rhino forensic work.

[42] As well as for species that are closely related or that closely resemble the priority species. The inclusion of "look-alike' species is essential so that identification by DNA barcode could not be challenged on the basis of it being that of a non-protected species.

[43] Included in the list are cycads, some of the succulent plants favoured by collectors, some medicinal plants, four of the "Big 5" species, pangolins, vultures, cranes, chameleons, sungazer lizards, snakes, sharks, abalone, crayfish and several fish species that are protected.G

under this component will be compiled into *Guidelines to the use of forensic and specialist techniques in the investigation of wildlife crime in South Africa*.

Component 3 is focused on: (i) Conducting a needs assessment for improving the capacity to prosecute wildlife trafficking cases (Output 3.1); (ii) strengthening the prosecution and court capacities to deal with high priority wildlife crimes in 'hotspot areas' (Output 3.2); and (iii) sustaining specialised wildlife crime-related training support to the prosecution authority, and awareness-raising campaigns to magistrates and judges (Output 3.3). Work under component 3 will initially entail a comprehensive feasibility and needs assessment for wildlife crime prosecutions and convictions. This needs assessment will be conducted jointly by the Department of Justice and Constitutional Development (DOJ&CD) and National Prosecuting Authority (NPA) and supported by the DEA. Based on the findings of the feasibility and needs assessment, the project will then assist the NPA to provide adequate prosecution capacity, and the DOJ&CD to establish appropriate court capacity, in the following known hotspots: Mpumalanga, Limpopo, North West and KwaZulu-Natal (rhinoceros horn trafficking); Western and Eastern Cape (abalone trafficking); and Gauteng (wildlife trafficking through major ports of entry and transit routes). This technical and logistical assistance to the DOJ&CD and NPA may include: (a) providing specialised and dedicated prosecution direction and support to investigations into wildlife trafficking; (b) allocation of experienced prosecutors to deal with and expedite high priority prosecutions; (c) provision of courts to deal with the expedited prosecution and adjudication of wildlife trafficking incidents; (d) establishing standards for case reporting and evidential requirements; and (e) facilitating the prosecution, conviction and, where appropriate, heavy sentences and asset forfeitures to assist in deterring these crimes. It is envisaged that the lessons learnt under Outputs 3.1 and 3.2 will be compiled into a 'Norms and standards for the investigation and prosecution of wildlife crimes in South Africa'. Finally, the project will intensify and diversify the current DEA-administered wildlife crime training and awareness-raising programme for inter alia: prosecutors, Office of the Chief Justice (OCJ), staff of the Asset Forfeiture Unit (AFU), state law advisers, judges, magistrates and authorised headman (in traditional courts).

Pillar 2: Improve PAs/landscapes management and increase benefits to local communities.

Under the business as usual scenario, support to rural enterprises and rural development more generally in South Africa would not be necessarily linked to biodiversity conservation. As such, the project interventions are critical to ensure the establishment and maintenance of such linkage through a package of different activities targeting PAs management, local stakeholders' behavioral change, and livelihoods' enhancement, all contributing to the same outcome. While on the one hand the project will focus on supporting a more sustainable management of PAs, it will also strive to make decision making, landscape planning and development more inclusive by supporting participation of otherwise excluded stakeholders, such as local communities. In parallel, the project will increase the benefits that such local communities derive from PAs and stimulate their participation in wildlife conservation.

Component 4: Promote integrated landscape management in targeted Biodiversity Economy Nodes in selected areas [US $1.8M from GEF]

Biodiversity related businesses can help meet biodiversity conservation goals and deliver considerable financial benefits to local stakeholders and provide opportunities for strategies that combine successfully conservation and human and economic development. With this in mind, South Africa's Biodiversity Economy Lab, undertaken in 2016, developed detailed plans for a suite of initiatives and recommendations aimed at building South Africa's biodiversity economy. These include (1) operationalizing Biodiversity Economy Nodes that enhance the economic potential of Protected and non Protected Areas, (2) empowering emerging entrepreneurs and farmers through focused capacity building programmes, (3) increasing support for CPAs, trusts and traditional authorities, and (4) developing,

upskilling and resourcing extension services to facilitate the growth of the wildlife economy. These Biodiversity Economy Nodes are currently being mapped and have existing protected areas as well as priority biodiversity areas at their core and provide the opportunity to develop integrated landscapes of protected areas and OECMs. This component will support the expansion of the conservation landscape within two identified Biodiversity Economy Nodes through pursuing biodiversity stewardship agreements including OECMS. It will provide extension support to communities and emerging wildlife ranchers with a view to strengthening the land management practices and identifying and developing biodiversity related businesses compatible with protected areas, promote integrated management and governance within the targeted landscapes, investigate and pilot innovative financing and resourcing mechanisms for protected areas and OECMS and their related biodiversity related businesses, facilitate knowledge and lesson sharing amongst communities as well as conservation agencies and undertake policy integration of OECMs into the existing South African protected area and conservation area policy framework.

Component 5. Promote integrated landscape management in targeted protected areas landscapes [US$ 1.07M from GEF]
The component will support the preparation of a shared "landscape vision" in project intervention areas, promote the integration of PA Management Plans into local, bioregional and regional planning instruments, develop cross-sectoral platforms to foster collaboration and knowledge exchange visits, and communication; and foster linkages to successful platforms in South Africa (such as that in the Greater Kruger) and in other countries. It will provide technical assistance for PAs expansion, such as through biodiversity stewardship arrangements and cooperative and contract agreements. The component will support the design and piloting of a payments for ecosystem services. The details of the PES scheme will be worked out during project preparation and could be part of the design of a Biodiversity Economy Fund (see Component 3 below for more details on the Fund).

Component 6. Strengthen the capacity of institutions to promote conservation-compatible rural development around targeted protected areas landscapes (US$ 2.68M from GEF)
This component will enable targeted PA agencies to support business development for local communities and promote PES in targeted landscapes. This will include updating the organizational strategy in what refers to socio-economic development, training, coaching, mentoring and South-South exchanges targeted at the agencies' staff. This component will design and capitalize a "Biodiversity Economy Fund". The Fund will provide financing and technical assistance for viable business opportunities and to finance PES in targeted PA landscapes. The component will also improve governance in the sustainable management and use of natural resources by all actors and increase capacity to manage funds. Activities under this component will target Community-Based Organizations (CBOs), including Community Trusts, Communal Property Associations (CPA), Traditional authorities and cooperatives). This will include the establishment of local credit and savings groups, which are particularly relevant for women.

Component 7. Promote inclusive value chains and businesses in the targeted protected area landscapes (US$ 2.87M from GEF).
This component will support: i) the preparation of analytical studies to identify value chains and business opportunities, including new businesses in the area; ii) development of opportunity studies for the identified value chains and business opportunities, including available and potential markets, needs and gaps assessments, and a map of potential private sector operators interested in engaging with local communities; iii) a gender study to identify economic opportunities for women and the technical skills required that allow them to conciliate domestic labor with economic activities without adding an extra time burden. The component will also promote entrepreneurship among local communities and individuals, through: i) sensitization campaigns to raise awareness of new business opportunities; ii)

trainings in business management and to stimulate entrepreneurial mindsets among communities, while building awareness on the value of biodiversity conservation and productive landscapes; iii) business development plans for identified business opportunities; iv) strengthening technical capacity of targeted beneficiaries in selected business areas; v) Facilitating access to finance and markets for selected inclusive businesses; vi) Promoting of 'productive alliances' for business creation, biodiversity conservation, and productive landscapes.

Engagement with the Global / Regional Framework

Knowledge management and learning exchanges are core elements of the South Africa project's design and implementation and is including capacity building activities, training, south-south exchanges, visiting fellowships in all components. The project will develop cross-sectoral platforms to foster collaboration and knowledge exchange and communication and promote linkages to successful platforms in South Africa and in the region. The project will also promote the sharing of experience and best practices between project stakeholders at the local, sub-national and national levels and with peers from other GWP projects. Being part of the GWP, the project will benefit from the Global Coordination project that will promote knowledge exchange between the participating countries, ensuring that emerging knowledge is captured and capacity building activities are well tailored to the needs of the countries' and their stakeholder groups at all levels (local, regional and federal governments from environment and other sectors, indigenous and communities, farmers and producer associations, private sector, other decision makers, etc.). Criteria and mechanisms will be set to ensure participation in knowledge events is prioritized and the participants will be those with the possibility of implementing the lessons and//or share with peers.

The Global Wildlife Program Coordination project will collaborate and co-finance knowledge and best practice exchanges between stakeholders of the project and the national, regional and global community. This can include conference, analytical papers, technical workshops and study tours to support capacity building of the project's stakeholders. In addition, the knowledge and data platform that the project will design, and use will be inter-linked to other platforms that the GWP global program will implement. This will allow the rapid uptake of information and support data-driven decision making.