

**GLOBAL WILDLIFE PROGRAM
PHASE 2
SUMMARIZED VERSION CHILD PROJECTS**

GWP Phase 2 Child Projects:

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1. Bhutan Concept Note Summary

Project Title:	<i>Mainstreaming biodiversity conservation into the tourism sector in Bhutan</i>
Country(ies):	Bhutan
GEF Agency(ies):	UNDP
Total Project Cost (GEF grant)	\$ 4,854,128
Estimated cofinancing	\$ 7,509,000

PROJECT DESCRIPTION

1) 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.

2) *Project overview and approach*

a) 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 (Dzongktag). 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 (see Annex 1), 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 scree. 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 landscape) 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.

b) 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 (BT FEC) 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 explicitly recognized in a project output (see next section). Gender-disaggregated targets and indicators will be included within the project results framework.

c) 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 attitudes 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 (see Annex 1). 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, infrastructure 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 Wildlife 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.

d) 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	<ul style="list-style-type: none"> -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	<ul style="list-style-type: none"> -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	N/A

and disrupt markets	
5. Coordinate and enhance learning	<p>-Enhanced regional partnerships and knowledge exchange on building, promoting and marketing ecotourism products and experiences (Sub-Component 5.2)</p> <p>-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)</p> <p>-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)</p>

e) 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
<i>Tourism development</i>		
<p>Heavily dependent on culture-based tourism assets (monasteries, Dzongs and festivals) and trekking routes.</p> <p>Tourism limited to culture and treks mostly in western Bhutan and in April and October months due limited diversification and investments.</p> <p>Tour operators as major players, inadequate value chain linkages and limited community participation.</p> <p>Limited social and environmental safeguards.</p> <p>Limited capacity for product development, marketing and branding.</p> <p>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.</p>	<p>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.</p> <p>Diversified tourism products linking communities as well as biodiversity conservation with tourism.</p> <p>Tourist arrivals spread more evenly across seasons and geographical area.</p> <p>Growing tourism will continue to finance protected area management and conservation actions by the state, communities and the private sector.</p>	<p>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.</p> <p>Reduction of threats from tourism development to biodiversity from implementation of social and environmental safeguards and waste management in sustainable tourism.</p> <p>Environmental social impacts accorded equal priority to experience and satisfaction of tourists.</p>
<i>Community and stakeholder engagement in conservation</i>		
Community and stakeholder engagement in conservation driven by project based on incentives and	Community and stakeholder engagement in conservation driven by sustainable business	Livelihood opportunities of communities enhanced through employment, income

<p>subsidies provided by the state, which is not sustainable.</p> <p>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.</p> <p>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.</p>	<p>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.</p> <p>Promotion of positive link between wildlife and communities and of potential economic values, building human-wildlife coexistence across landscapes.</p>	<p>covering an estimated 10,000 community members including those residing within PAs and biological corridors.</p> <p>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.</p>
<i>Protected area management</i>		
<p>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.</p> <p>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 investment approach for ecotourism impedes replication and development of sustainable ecotourism within PAs.</p>	<p>Local communities and tourism stakeholders engaged in biodiversity conservation, which is recognized as natural resources for sustainable tourism.</p> <p>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 and capacity development across Bhutan's PAs).</p> <p>PAs will continue to effectively underpin sustainable and inclusive tourism growth.</p>	<p>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).</p> <p>Strengthened conservation of globally significant IUCN Red-listed species such as tiger, leopard, snow leopard, Himalayan black bear, musk deer.</p>

f) 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 (Jomotsabkha 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 Jomotsangkha 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 habitats 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.

3) *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 as 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 biodiversity 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 platform 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.

2. Malaysia Concept Note Summary

Project Title:	<i>Building institutional and local capacities to reduce wildlife crime and enhance protection of iconic wildlife in Malaysia</i>
Country(ies):	Malaysia
GEF Agency(ies):	UNDP
Total Project Cost (GEF grant)	\$ 7,139,450
Estimated cofinancing	\$ 66,175,644

PART II: PROJECT DESCRIPTION

Country Context (maximum 500 words)

Malaysia is a source and transit country for internationally trafficked wildlife products. As a transit country, Malaysia plays a pivotal role in the international trafficking of ivory, testudines (turtles, tortoises and terrapins) and pangolins. As a source country, Malaysia has several iconic species that are trafficked both domestically and internationally, including the Malayan tiger and Bornean Orangutan. This dual market demand places additional pressure on these species and requires a multi-faceted law enforcement approach, including anti-poaching and anti-trafficking initiatives.

Domestically, wildlife crime is being driven by the demands of an illegal market for traditional medicine, pets and bush meat, spread throughout the three regions of Peninsular Malaysia, Sabah and Sarawak. Numerically the most seized wildlife species in Malaysia is the white-rumped shama, a small bird prized for its song. Of particular concern is the poaching of tigers, whose population in Malaysia has plummeted to less than 200 in 2019 (from an estimated 3,000 in the 1950's).

Malaysia is unique within the Association of Southeast Asian Nations (ASEAN) in that three different regions have responsibility for enforcing wildlife legislation within their own jurisdiction, and there is no overarching Federal law that supersedes this regional legislation. Wildlife crime enforcement is divided among three agencies: Department of Wildlife and National Parks Peninsular Malaysia (*DWNP*), Sarawak Forestry Corporation (SFC) and Sabah Wildlife Department (SWD). These agencies operate with different legislation, using different case management and intelligence systems, and often with a lack of access to advanced investigation methods (e.g. wildlife forensics). They have little official means of intelligence coordination and generally operate in the absence of investigative assistance from police enforcement agencies.

Arrests are however made despite these restrictions, often leading to convictions and prison terms. This is particularly the case in Peninsular Malaysia, where numerous transnational organized crime networks have been identified and disrupted.

There are several reasons for the success of the regional wildlife agencies, notably: effective domestic legislation that also incorporates the species protected under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); the increasing use of proactive intelligence-led investigations; dedicated prosecutors from the wildlife agencies; dedicated Environmental Courts; strong sentencing guidelines; a willingness to work with international counterparts; domestic wildlife agencies that see international governmental organizations (IGOs) and non-governmental organizations (NGOs) as a force multiplier rather than a hindrance; and, most importantly, very dedicated staff.

The project seeks to build on this success by further strengthening the effectiveness of the federal and regional wildlife agency's efforts in reducing the poaching of, and illegal trading in, selected iconic Malaysian wildlife species across the Malaysian Peninsula, Sabah and Sarawak.

Project Overview and Approach (maximum 1250 words)

a) 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 project will focus on improving the conservation status of three threatened iconic wildlife species: Malayan tiger (*Panthera tigris jacksoni*); Bornean Orangutan (*Pongo pygmaeus pygmaeus*); and Bornean banteng (*Bos javanicus lowi*).

The remaining population of Malayan tigers - most of which are located in the Taman-Negara National Park, Belum-Temengor Forest Complex, and Endau-Rompin Forest Complex in Malaysian Peninsula - are under severe pressure from ongoing poaching, habitat reduction through human encroachment, and a reduction in numbers of prey species (such as the Samba deer). Forested 'corridors' - meant to allow tigers (and their prey) to move between the major jungles - have also been destroyed, while the expansion of logging roads into once remote parts of the forest are now making it easier for poachers to explore once-inaccessible areas. Evidence suggests that these poachers are mostly foreigners from Thailand, Vietnam and Cambodia, who feed into an illegal trade fueled by a demand for parts of endangered animals to cure a myriad of diseases, or to improve strength and virility.

The Bornean Orangutan is endemic to the island of Borneo, where it is present in both the Malaysian states of Sabah and Sarawak. Habitat loss is by far the greatest threat to the Bornean Orangutan. Huge tracts of forest have been cleared throughout their range, and the land used for agriculture (particularly palm oil plantations). Road development, illegal timber harvesting and unsustainable logging and human encroachment also contribute to habitat loss, degradation and fragmentation. Young orangutans up to the age of seven are being sought after for the illegal pet trade, while Orangutans are hunted in some areas for food. They are also sometimes killed when they move into agricultural areas and destroy crops.

Once widespread in Borneo the endangered Bornean banteng is now confined to isolated forest reserves in Sabah and on the Sabah/Kalimantan border. The banteng is highly threatened by deforestation and conversion to agricultural land, hunting, and disease transmission from domestic cattle, driving the ongoing decline of the banteng populations in Sabah. Hybridization with domestic cattle and inbreeding (a consequence of small, isolated populations) are also likely additional threats.

On the domestic front Malaysia is faced with similar challenges to those confronting other ASEAN countries, trying with scarce economic and human resources to protect the remaining populations of these three iconic wildlife species in fragmented protected areas that are under increasing pressure from human encroachment and poaching. Many of the protected areas in Malaysia are understaffed and underfunded, and there is a high reliance on temporary staff and rangers. Protected areas are not always secure, since the boundaries of some protected areas – particularly those in Borneo - are often not clearly delineated, which makes them difficult to patrol and monitor illegal activities.

Adequate resourcing of the regional wildlife and forestry agencies is a major issue that needs to be addressed before they can become effective at deterring, investigating, and prosecuting wildlife crime. There is currently a reliance in these agencies on arrests based upon evidence collected during the 'act of committing an offence' rather than from protracted complex investigations. There is a general lack of expertise and equipment to manage and process crime scenes and to undertake basic and advanced investigations, including physical and electronic surveillance. The systems required to enable and enhance the collection, analysis and dissemination of intelligence within and between these agencies is also poorly

developed¹. There is, for example, currently no centralized database for recording seizures, arrests, or intelligence that is accessible across all three Malaysian regions.

The proposed GWP project will thus seek to strengthen the effectiveness of domestic efforts to reduce poaching and trafficking of wildlife across Malaysia. It will do this by building on, and supplementing, the existing institutional capacities of the public agencies responsible for wildlife-related crime in Malaysia (see the brief overview of these public agencies, and their existing baseline capacities, below).

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

Malaysia has several public management agencies responsible for the enforcement of wildlife laws. The table below summarises the different state agency responsibilities for wildlife-related crimes in Malaysia².

Supply chain phase ³	State agency	Region of responsibility	Main legislation
All	Department of Wildlife and National Parks (<i>Perhilitan</i>)	Peninsula Malaysia and Labuan Federal Territory	Wildlife Conservation Act 2010 National Parks Act 1980 International Trade in Endangered Species Act 2008
All	Sarawak Forestry Corporation (SFC)	Sarawak	Wildlife Protection Ordinance 1998 Forests Ordinance 2015 National Parks and Nature Reserves Ordinance, 1998 International Trade in Endangered Species Act 2008
All	Sabah Wildlife Department (SWD)	Sabah	Wildlife Conservation Enactment 1997 Forest Enactment 1968 International Trade in Endangered Species Act 2008
All	Royal Malaysian Police (RMP)	All regions	Anti-Money Laundering, Anti-Terrorism Financing and Proceeds of Unlawful Activities Act 2001
All	Attorney Generals Chambers (AGC)	Peninsula Malaysia	All
All	Malaysian Anti-Corruption Commission (MACC)	All regions	Malaysian Anti-Corruption Commission Act 2009
Import, export	Royal Malaysian Customs Department (RMCD)	All regions	Customs Act 1967
	Malaysian Quarantine and	All regions	Malaysia Quarantine and Inspection Services Act 2011

¹ Whilst this is being partially addressed in Peninsular Malaysia, in Sabah and Sarawak this remains a problem.

² Extract from the UNDODC report: *Criminal justice response to wildlife crime in Malaysia: A rapid assessment* (2017)

³ Harvesting, processing, trade, import and/or export.

	Inspection Services (MAQIS)		
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Perhilitan is responsible for managing Peninsular Malaysia's protected areas⁴ and its native wildlife. It has a staff of approximately 1,500, of which around a third are engaged in law enforcement functions. A joint initiative between the *Perhilitan* and the Royal Malaysian Police (RMP) to combat wildlife poaching through integrated enforcement operations was recently launched this year, with the establishment of a Special Protected Area Response Team (SPARTA)⁵. *Perhilitan* has offices in every state, and rangers at 14 ports of entry, including airports and land borders. They have powers of search and seizure, and utilize advanced investigative methods including electronic and physical surveillance, and undercover operations. *Perhilitan* officers recruit and manage covert human intelligence sources (CHIS) and have a central database of informants. *Perhilitan* has a dedicated investigation unit and an intelligence unit that performs proactive intelligence-led investigations. *Perhilitan* has its own forensic unit, with a staff complement of five officers (their capabilities and expertise are however limited). When it comes to prosecuting cases, *Perhilitan* utilizes two seconded prosecutors from the Attorney General's Chambers (AGC), as well as about 20 officers of its own staff. Whilst these officers are not qualified lawyers or crown prosecutors, they receive basic training at *Perhilitan*'s own training academy. *Perhilitan* has developed its own internal database and is in the process of receiving analytical software to enhance its intelligence capability. Within Peninsular Malaysia, *Perhilitan* administers an online licensing system that regulates the possession of protected species for commercial and non-commercial use. The Wildlife Conservation Act 2010 is currently being revised and penalties are set to be increased to align them more closely with the Penal Code.

The *SWD* is responsible for managing approximately 70,000 hectares of wildlife, bird and marine sanctuaries in Sabah. The Enforcement Division of the SWD is responsible for investigating violations of the Wildlife Conservation Enactment and undertakes duties such as performing patrols, roadblocks, conducting inspections and investigations into breaches of the Act. The Enforcement Unit of the SWD has about 70 staff members who undertake investigations. The primary focus of their investigations is the trafficking in sea turtles and sea turtle eggs, Asian box turtles, pangolins and sun bears. Like other conservation agencies in Malaysia, SWD enforcement officers generally have a science background and receive only basic level law enforcement training. The SWD does not have an intelligence unit, nor does it have a formal mechanism for recruiting and managing CHISs. The SWD does not use advanced investigation methods, instead relying on local police for this. The SWD does not have a central database for convicted offenders or suspects, nor does it have a facility to share this information with agencies in Sarawak or Peninsular Malaysia. The SWD does not have any forensic capacity and relies upon rangers to process crime scenes. It has no capacity to collect human fingerprints or DNA, nor does it have any ballistics capacity. The SWD is facing increasing pressure from the establishment of new roads traversing protected forest reserves and wildlife sanctuaries that are leading to an increase in poaching numbers. The SWD is currently reliant on the help of NGOs to monitor the online trade in wildlife. The SWD also works closely with international and local NGOs who provide valuable support in assisting in anti-poaching and anti-trafficking operations. The SWD has three officers who undertake prosecutions on behalf of the agency who are not qualified lawyers or crown prosecutors. The SWD manages a paper-based licensing system that allows the possession of protected species for commercial and non-commercial use.

The *SFC* has about 2,000 staff, of whom about 500 are focused on law enforcement. The SFC is responsible for managing about 6 million hectares of permanent forest estate and around 944,000 ha of totally protected areas (37 national parks, five wildlife sanctuaries and 14 nature reserves). In Sarawak, all wildlife and forestry investigations are undertaken by the SFC, occasionally with the support of the RMP and RMCD.

⁴ Totalling an area of 503,209ha.

⁵ An additional USD 5 million has recently been allocated in the 2020/2021 budget by the Government of Malaysia to supplement the existing anti-poaching staff costs of the wildlife agencies.

Rangers engaged in enforcement activities receive basic law enforcement training, but like their counterparts in *Perhilitan* and Sabah, they come from a conservation background. The SFC has an intelligence unit but does not possess any analytical software, and its analysts receive only basic training. The SFC does not use advanced undercover officers or undertake electronic surveillance. It does have basic physical surveillance capability; however, its officers have not been trained in surveillance. In Sarawak, the SFC utilizes Honorary Wildlife Rangers, who provide timely and reliable enforcement information from the field. These Honorary Rangers are generally recruited as volunteers from the local communities in certain areas, and through their employment the SFC has access to good local intelligence and CHIS. In instances where Customs seize wildlife, the cases together with the exhibit and any evidence are handed over to the SFC for further investigation and disposal or retention of the exhibit. The SFC does not have a central database for convicted offenders or suspects, nor does it have a facility to share this information with agencies in Sabah or Peninsular Malaysia. The SFC does not have any forensic capacity. It has no capacity to collect human fingerprints or DNA, nor does it have any ballistics capacity. Like *Perhilitan* and the SWD, the SFC is developing its capacity to undertake online investigations, however its officers have not received any training in conducting such investigations. When it comes to prosecuting cases, the SFC relies upon local prosecutors from the State Prosecutor's Office. These prosecutors are all qualified lawyers, but they may or may not have knowledge and expertise in prosecuting wildlife and forestry cases. In Sarawak, trading of wildlife is permitted only if the specimens concerned were sourced from a licensed breeding facility, or if they were taken from the wild with the required permit.

The RMP plays a very minor role in investigating wildlife and forestry offences in Peninsular Malaysia, and only fulfils a support role in Sabah and Sarawak. While the INTERPOL National Central Bureau (NCB) of Malaysia is an important focal point in facilitating and coordinating the investigation of transnational wildlife crimes, the RMP currently does not have a dedicated police unit to address serious transnational wildlife crime.

The AGC is responsible for the prosecution of environmental crimes within Peninsular Malaysia (although the role is currently shared between the AGC and *Perhilitan*). There are approximately 400 prosecutors from the AGC working in courts throughout Malaysia, responsible for trying cases brought by the RMP, *Perhilitan*, RMCD and the MACC. There are two dedicated prosecutors from AGC seconded to *Perhilitan* who provide legal advice and conduct prosecutions of serious wildlife crime cases. Wildlife and forest crime cases are tried in one of Malaysia's 39 Sessions Environmental Courts or its 17 Magistrates' Environmental Courts.

The MACC is tasked with the enforcement of anti-corruption law in Malaysia. It has a complement of about 2,600 staff, of whom about 600 are focussed on investigations and 400 on intelligence. It operates a dedicated intelligence unit with about 20 trained criminal intelligence analysts equipped with the modern analytical tools. The MACC has been very active and successful in investigating cases, particularly cases involving law enforcement officers engaged in corrupt practices. Most corruption cases related to environmental crimes are associated with logging, but the MACC does address corruption cases linked to wildlife crimes.

The RMCD has a high level of proficiency and expertise. It has 709 customs officers working in the Enforcement Division who undertake inspections, conduct investigations, perform searches, seizure contraband and arrest suspects across the country. The RMCD has the authority to commence prosecutions with its own prosecutors. The RMCD utilizes some advanced investigation methods and this is primarily undertaken by the Enforcement Division. They also utilize undercover operatives and physical and electronic surveillance methods. However, they do not have a dedicated unit for wildlife crime intelligence analysis. The RMCD recruits CHISs and operates a central register for informants. RMCD has a dedicated Risk Assessment Unit operating at headquarters level, which undertakes risk assessments of all goods and passengers entering and leaving Malaysia. Domestically, RMCD has good cooperation with domestic

wildlife agencies, notably *Perhilitan*, SFC and SWD, and with other agencies such as the MACC and RMP. Intelligence on environmental crime is disseminated to other agencies on a case-by-case or *ad-hoc* basis.

The function of the Financial Intelligence Unit (FIU) within the Central Bank of Malaysia (Bank Negara Malaysia) is to receive suspicious transaction reports (STRs) and cash threshold reports (CTRs), analyse these reports together with information from databases maintained by other law enforcement agencies, and disseminate financial intelligence to support the investigations of all law enforcement agencies in Malaysia. The FIU has a complement of 118 staff and has proved to be very effective at identifying money-laundering trends for high-risk crimes, although environmental crimes are not currently designated as one of the (five) priority crime types.

Various NGO/NPOs (e.g. WWF-Malaysia, WCS-Malaysia, TRAFFIC, Borneo Conservation Trust, Malaysia Nature Society, Sahabat Alam Malaysia, PACOS Trust, MyCAT, Sepilok Orangutan Appeal UK), multilateral agencies (e.g. FAO, UNDP) and corporates (e.g. Reef Guardian Sdn. Bhd., Al Bukhary Foundation) are further supporting (through funding or technical expertise) the work being undertaken by these state and federal wildlife enforcement agencies.

The proposed project will, wherever practicable, use existing mechanisms for stakeholder engagement and inter-agency collaboration, in order to reduce duplication and strengthen coordination. These include the:

- *National Blue Ocean Strategy, a joint policing strategy to handle cases and share resources⁶*
- *National Task Force on CITES, which mainly deals with management and scientific issues*
- *Malaysia Wildlife Enforcement Network (MY-WEN)*
- *Sabah State Anti-Poaching and Illegal Wildlife Trade Task Force, which provides for collaboration between customs, agriculture and fisheries departments*
- *National Tiger Task Force, which addresses poaching and trade of tigers in Peninsula Malaysia*
- *ASEAN Senior Officials Meeting on Transnational Crime (SOMTC), an ASEAN platform focused on transnational criminal threats.*

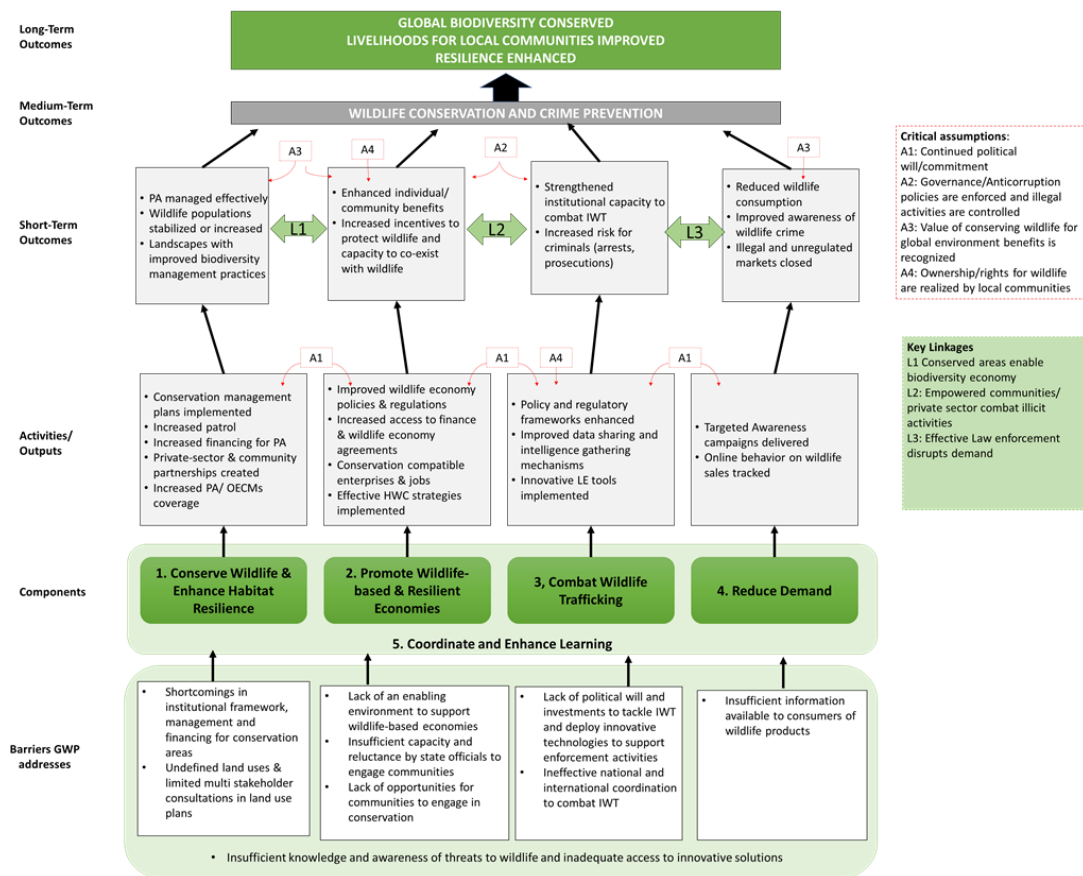
The project will further strengthen bilateral working relationships between counterpart wildlife management agencies, particularly in the areas of intelligence collection, analysis and dissemination.

A Gender Analysis and Gender Mainstreaming Plan will be prepared during the PPG phase to analyze gendered roles in production, access to resources and services, and decision-making power and will identify opportunities to promote gender equality and women economic empowerment. The project will specifically seek to increase women's voice in community organizations by mainstreaming gender concerns into decision-making, business development, and benefit sharing mechanisms.

c) 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 TOC of the Global Wildlife Program (GWP) can be summarized by a series of interdependent interventions along the value chain from source to transit to demand (see figure below).

⁶ The Blue Ocean Strategy involves RMP, RMCD, *Perhilitan* and the armed forces working together to handle cases and share resources.



This project will help to address the following barriers linked to the GWP TOC: (i) shortcomings in the management and financing of conservation areas (i.e. poor boundary demarcation, inadequate training and equipping of anti-poaching ranger staff, limited deployment of innovative technologies to support anti-poaching ranger staff, lack of sustainable financing to increase the anti-poaching ranger staff complement); (ii) insufficient opportunities for communities to engage in conservation (i.e. few honorary ranger programs, limited community-based wildlife tourism enterprise developments, scarce alternative livelihood opportunities, limited training opportunities, limited awareness-raising); (iii) lack of expertise and technologies to support enforcement activities (i.e. limited physical and electronic forensic and surveillance investigations capacity); and (iv) ineffective national coordination in IWT (i.e. no inter-agency specialized wildlife crime training programs, no centralized wildlife crime database for information-sharing, no real-time sharing of intelligence).

This project will complement the following components and outputs of the GWP TOC: Component 1 ('Conserve habitats and enhance habitat resilience'), through increased patrols, increased financing for anti-poaching staff, and the strengthening of partnerships between government, private-sector and communities; Component 2 ('Promote wildlife-based and resilient economies'), through conservation-compatible enterprises and jobs; Component 3 ('Combat wildlife trafficking'), through improved data sharing and intelligence gathering mechanisms and innovative law enforcement tools; and Component 4 ('Reduce demand'), through tracking online wildlife sales.

This project has the following objective: *'To enhance the protection of three iconic wildlife species and their habitats in Peninsular Malaysia, Sarawak and Sabah'*. The achievement of this objective will explicitly contribute to the following short-term outcomes of the GWP: 'Wildlife populations stabilised or increased' and 'Strengthened institutional capacity to combat IWT'. It is anticipated that the project will

also support the achievement, albeit at a more modest scale, of the following GWP short-term outcomes: ‘PAs managed more effectively’, ‘Enhanced individual/community benefits’ and ‘Increased risk for criminals’.

During the PPG phase, the project will develop a project-specific TOC showing the explicit linkages between the project strategy and the GWP strategy.

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

The project will support global efforts in addressing the multi-faceted threats to wildlife. It will contribute to improving Malaysia’s ability to prevent, combat and investigate wildlife crimes.

It will build on the collective efforts of the different government institutions (in partnership with counterpart civil society organizations) and supplement the considerable level of baseline domestic resources and philanthropic and business investments already committed, to combat wildlife crime.

To ensure the sustainability of support to these government institutions, the project will develop an institutional sustainability plan during the PPG phase. This sustainability plan will seek to more fully embed and align the GEF funded capacity building activities with the existing institutional structures and systems of the wildlife agencies.

Focusing on Malayan tiger, Bornean banteng and Bornean orangutan (as iconic Malaysian wildlife species), the project will play a significant role in reducing wildlife poaching numbers across the country and containing the amount of wildlife being smuggled out of and transiting through the country. In particular, the project will assist in reducing the seriously high poaching levels of the critically endangered Malayan tiger and endangered Bornean banteng.

The project will comprise four complementary components:

Component 1: Strengthen institutional capacities to combat wildlife crime and reduce poaching of iconic species at the national level

Component 2: Conserve the Malayan tiger and its habitats in the Malaysian Peninsula

Component 3: Conserve the Bornean orangutan and its habitats in the protected areas of Sarawak

Component 4: Conserve the Bornean banteng and its habitats in Sabah

Component 1 is focused on building the institutional capacities of the agencies responsible for wildlife-related crime in Malaysia, at both the federal and regional levels.

In **Output 1.1**, the project will design, scope and implement the development of a national wildlife crime intelligence system to enable real-time sharing of intelligence between federal and regional wildlife agencies. It is envisaged that this system will act as central access point for wildlife crime intelligence-related information, facilitate improved information flows and provide for better data access, sharing and analysis. GEF financing will be used to: (i) design, and scope the requirements for, a wildlife crime intelligence sharing system that will allow for the collection, collation and analysis of information to support wildlife crime management activities; (ii) standardize electronic data forms and work flows for recording wildlife crime- related information; (iii) develop an analytics capability to improve the identification and management of wildlife crime risks; (iv) operationalize the wildlife crime intelligence system (including data management center, shared database, management consoles, wireless data service, mobile device software and data entry forms, automated data aggregating and IT support) servicing both field and office-based parts of the wildlife crime management workflows.

In Output 1.2, the project will develop and implement a national wildlife crime investigation and prosecution training and skills development program for the staff of all public agencies⁷ involved in combatting wildlife crime across Malaysia. Work under this output will include: (i) developing ‘*norms and standards for the investigation and prosecution of wildlife crimes in Malaysia*’ to ensure that all wildlife crime investigations across all three regions follow best practices, and are legally defensible; (ii) developing a set of accredited basic and advanced wildlife crime investigation and prosecution training modules (that conform to these ‘norms and standards’); and (iii) delivering basic and specialized training for public agency staff involved in wildlife crime investigations and prosecutions (using the training modules as the basis for this training).

In Output 1.3, the project will strengthen the capabilities of the federal wildlife crime forensics unit in *Perhilitan* to manage and conduct online investigations and undertake forensic analysis of cell phone communications. At the regional level, the project will also strengthen the forensic crime scene (e.g. evidence collection, sampling and storage) and forensic laboratory (e.g. specimen identifications, poisoning and pesticide analysis, forensic veterinary pathology) capacities of the Sabah and Sarawak wildlife agencies. GEF funding support may include: (i) procuring equipment and materials; (ii) upgrading/renovating digital, electronic and laboratory infrastructure and services; (iii) study tours and exchange programs; (iv) contracting external specialist technical services (e.g. for DNA analysis or ballistics services); and (v) funding for professional, specialist training courses.

In Output 1.4, the project will develop and implement a diverse set of knowledge-sharing mechanisms that will facilitate the constructive participation of local, national and regional stakeholders in combatting wildlife crime and reducing the poaching of Malayan tiger, Bornean banteng and Bornean orangutan (and other iconic wildlife species, such as marine turtles, the Sumatran rhino and the Sunda pangolin). This will include: (i) hosting inter-agency wildlife crime intelligence-sharing and coordination meetings; (ii) collating, curating and sharing knowledge (including lessons learnt and good practices) on the combatting of wildlife crime in Malaysia; (iii) building a local ‘community of practice’ in wildlife crime through hosting informal dialogues and formal information-sharing sessions; (iv) facilitating local and regional (ASEAN) exchange trips for targeted wildlife agency staff; and (v) enabling the participation of key project stakeholders in regional and global GWP knowledge sharing platforms.

Component 2: is focused on enhancing tiger conservation efforts in Peninsula Malaysia, with an emphasis on strengthening the field-based operational capacities of *Perhilitan*.

In Output 2.1, the project will strengthen the ongoing professional development of the anti-poaching ranger patrol staff in the tiger range conservation areas (including national parks, state parks, wildlife sanctuaries and forest reserves) of the Malaysian Peninsula. This professional development will include: (i) developing Standard Operation Procedures (SOPs)⁸ for all anti-poaching patrol staff; (ii) implementing specialised (basic-intermediate-advanced; ethical-legal-tactical-procedural) professional field training, with annual follow-up training, for anti-poaching staff; and (iii) procuring specialised equipment for anti-poaching field staff (GPS-enabled SMART patrol technology, digital camera, satellite phones, night scopes, body armour, etc.).

In Output 2.2, the project will pilot, and test the cost-effectiveness of, technologies that could proactively detect poachers early, collect data on those who enter the perimeter, and send rangers alerts when unusual activity is spotted. GEF funding will be used to procure, deploy and evaluate the following suite of technologies (and combinations of technologies) in the remote areas (where there is very limited electronic communication available) of the Belum-Temengor forest complex, Taman Negara NP and Endau Rompin NP: perimeter-based technologies (e.g. lasers, sensors, optical fibres); ground-based technologies (e.g.

⁷ Including staff from the regional wildlife departments, RMCD, Malaysian Quarantine and Inspection Services, regional forestry departments, Attorney General’s Chambers, Financial Intelligence Unit, Royal Malaysian Police, Malaysian Armed Forces and Malaysian Anti-Corruption Commission.

⁸ SOPs will include monitoring and enforcement procedures and protocols for: a) human-wildlife conflict (HWC) management; b) SMART patrolling; c) tiger monitoring; and d) addressing human-rights.

cables, sensors, heat-mapping, black-flash cellular cameras, camera traps, CCTV, shot-detection, UWB, WSN); aerial-based technologies (e.g. drones, satellites); and animal-tagging technologies (motion/GPS sensors).

In Output 2.3, the project will support *Perhilitan*'s tiger rehabilitation and rewilding efforts. This support may include planning, technical and professional support in the: (i) capture and transport of injured animals; (ii) upgrading of tiger quarantine and rehabilitation facilities and services; (iii) provision of veterinary services; (iv) specialized rewilding training; (v) procurement and tracking of radio collars; and (vi) development and implementation of bilateral tiger exchange/ translocation agreements. It is anticipated that KATS would provide the bulk of resources to support the in-situ implementation of tiger rehabilitation and rewilding. GEF support will be focused primarily on capacity building and professional backstopping assistance.

Component 3 is focused on: (a) improving the conservation status of state protected and community-conserved areas as Orangutan habitats; and (b) piloting the implementation of a community-managed Orangutan tourism enterprise in a community conservation area Sarawak.

In Output 3.1, the project will contribute to rationalizing and securing the boundaries of Ulu Sebuyau and Sedilu National Parks as orangutan habitats. The activities under this output will include: (i) assessing the feasibility of consolidating the parks into a single, physically linked, 'park' complex'; (ii) surveying and mapping the park boundaries (or boundaries of the complex); (iii) physically demarcating the parks boundaries (beacons, signage, fencing, channels, etc.); and (iv) restoring key degraded forest (orangutan) habitats in the park complex.

In Output 3.2, the project will support the consultative establishment and management of a small community-conservation area (CCA) within the 'parks complex' (see above) and, as part of this community conservation area (CCA), and then facilitate the development of a nature-based tourism enterprise as a mechanism for generating income for this CCA. The activities under this output will include local community consultations to: (i) secure community rights over designated land for a CCA; (ii) establish socio-economic baselines of the target beneficiary community; (iii) establish and administer an honorary wildlife ranger programme for the CCA; (iv) develop and implement a community awareness-raising program in the CCA; (v) identify, and support the establishment of a nature-based tourism concession for the CCA; and (vi) set up local businesses, and train tourism guides, to support the tourism concession in the CCA.

Component 4: is focused on strengthening efforts by the wildlife department, local communities and NGOs in Sabah to conserve Bornean banteng and its habitats.

In Output 4.1, the project will undertake surveys of the Bornean banteng populations. This population survey work will include: (i) initiating a baseline population survey of the Bornean banteng in Sabah; and (ii) implementing a capture and radio-collaring program for the Bornean banteng in Sabah.

In Output 4.2, the project will support the procurement, installation, operations and maintenance of key equipment to improve the anti-poaching capacities in the Maliau Basin Conservation Area (MBCA). This key equipment will include the installation of a real-time camera trap system for field-based monitoring and enforcement.

In Output 4.3, the project will facilitate the consultative establishment and management of a CCA for Bornean banteng in the Nabawan and Sapulut districts. The activities under this output will include local community consultations to: (i) select targeted areas for the CCA and identify the beneficiary communities; (ii) establish socio-economic baselines for the targeted community/ies; (iii) formalize the establishment of the CCA; (iv) establish and administer an honorary wildlife ranger programme for the CCA; (v) develop and implement a community awareness-raising program for the CCA; (vi) identify, and support alternative livelihood opportunities (including nature-based tourism services and products) in the targeted beneficiary community/ies; and (vii) set up local enterprises, and train individuals from targeted beneficiary communities, to optimally benefit from alternative livelihoods initiatives.

Engagement with the Global / Regional Framework (maximum 500 words)

The project will – through *Perhilitan*, SFC and SWD – continually share lessons learnt, good practices, tools and templates with the national interagency cooperation platforms, including the National Blue Ocean Strategy, the National Task Force on CITES, the Malaysia Wildlife Enforcement Network (MY-WEN), the Sabah Anti-Poaching and Illegal Wildlife Trade Task Force and the National Tiger Task Force. The ‘National wildlife intelligence sharing platform’ developed by the project in Output 1.1 and the wildlife intelligence inter-agency forum being supported in Output 1.4 will further enhance information sharing opportunities between wildlife crime agencies (and NGOs).

The Malaysian wildlife agencies will ensure ongoing involvement in, and information sharing with, regional counterpart countries through existing bilateral working relationships with their counterparts in the region, and through participation in the wildlife and timber trafficking working group of the ASEAN Senior Officials Meeting on Transnational Crime (SOMTC).

As a child project under the Global Wildlife Program (GWP), the project will maintain close ties with other child projects under the GWP. Participation in the Global Wildlife Program may also provide a mechanism for the dissemination of Malaysia’s experiences on community-based conservation initiatives that might offer valuable lessons for other countries.

A comprehensive stakeholder analysis will be undertaken during the PPG phase. Based on this analysis, a stakeholder engagement plan - that ensures inclusivity during project implementation and participation of the full spectrum of role players in the developing a wildlife crime community-of-practice, and the Global Wildlife Programme more broadly - will be developed.

3. Nigeria Concept Note Summary

Project Title:	<i>Improved Management Effectiveness of Gashaka-Gumti and Yankari Protected Areas to conserve threatened wildlife species, build a wildlife economy and enhance community benefits</i>
Country(ies):	Nigeria
GEF Agency(ies):	UNDP
Total Project Cost (GEF grant)	\$ 3,519,725
Estimated cofinancing	\$ 12,875,350

PROJECT DESCRIPTION

1. *Country Context (maximum 500 words)*

Describe the country's relevant environmental challenges and strategic positioning relative to the systems transformation proposed for the program, including relevant existing policies, commitments, and investment frameworks. How are these aligned with the proposed approach to foster impactful outcomes with global environmental benefits?

Nigeria's natural landscapes and ecosystems are under pressure and increasingly degrading, as a result of several factors, including a combination of overgrazing, destruction of trees through cutting, charcoal-making and now-inappropriate farming techniques causing landscape degradation. The shortening of the fallow cycle depletes the soil and eliminates micro-wildlife. Wildlife and wildlife habitats are threatened by poaching, illegal timber extraction and unsustainable cattle herding practices. The most significant threat to the Yankari Game Reserve for example, which is the stronghold for the few remaining Nigerian populations of elephants, is the killing of elephants for their ivory and hunting of other large mammals for bushmeat for sale in specialised urban markets rather than for local subsistence. Nigeria is also a route for trafficked pangolin scales, including those transiting through Nigerian ports, from Cameroon.

Nigeria has seven national parks and a number of game reserves, making up about 3 percent of Nigeria's total land area. These landscapes have historically not been well-funded and as a result some have become ineffective and become overrun by other non-conservation uses. State Governments have recognized the limitations of a state-run protected area model and have recognized the value of a co-management approach and partnerships with non-government entities to manage these protected areas. Yankari Game Reserve and Gashaka Gumti National Park, which are the proposed focus of this project, have been put under a co-management model with NGOs and in the case of Yankari Game Reserve, this partnership also includes the Bauchi State government. The move towards co-management of these landscapes and the protected areas estates is also an important step as evidence shows that respecting the rights of and involving indigenous peoples and local communities in the management of their land and natural resources contributes to lower rates of deforestation than in government-managed areas and that biodiversity outcomes often improve. Co-management of these landscapes and PAs is important in Nigeria, particularly in light of government underfunding of the National Park Service.

Recently, the Nigerian Government has made a policy decision to promote nature-based tourism as an economic growth pathway, and to diversify away from agriculture and oil. Three national parks, including Gashaka Gumti National Park, have been identified for commercialization of tourism and the Bureau for Private Enterprise (BPE), whose official mandate includes promoting a competitive private sector driven economy, has been engaged to drive this process. This decision to view protected areas as a potential contributor to economic growth, is a key step towards strengthening protected area management

effectiveness, landscape management and restoration and indeed wildlife conservation including reduction of wildlife poaching and human-wildlife conflict.

The 2006 Nigeria Tourism Master Plan, categorises the country into tourism clusters, including two clusters related to nature: Tropical Rainforest and Scenic Nature. The Yankari Game Reserve and Gashaka Gumti National Park are included in the 'Scenic nature' cluster. The Tourism Master Plan also emphasizes the need to strengthen the management effectiveness of protected areas, as a key condition for developing and growing the nature-based tourism sub-sector. Evidence also indicates that many Nigerians would utilize the nature-based tourism product, if the product met certain minimum quality standards. Currently evidence indicates that many Nigerians visit Ghana for eco-tourism and leisure, because they view much of Nigeria's tourism product as basic and inadequate outside of urban areas. The Nigerian government recognizes the role of nature and natural landscapes in contributing to the growth of the tourism sector.

This policy direction is in line with the GEF 7 Biodiversity Strategy and aligned with the objectives of Global Wildlife Program. Indeed, there is convergence of a number of factors, two key ones in particular: a) significant wildlife populations – e.g. the elephant and lion populations in Yankari Game Reserve and the endangered Nigeria-Cameroon Chimpanzee in Gashaka Gumti National Park. The Yankari Game Reserve is promoted by Bauchi State Government as a place to visit to see large mammals and for recreation. b) large wilderness areas needed to sustain viable populations in perpetuity, and; c) private sector partners (primarily tourism operators) with the expertise and willingness to engage in wildlife-based tourism.

2. Project Overview and Approach (maximum 1250 words)

- a) *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;*

Gashaka-Gumti National Park and Yankari Game Reserve are two of the prominent protected areas in Nigeria that remain the cornerstone for wildlife and wilderness conservation.

Gashaka Gumti National Park - is 6,670km² and is the largest national park in Nigeria, situated along the Cameroon border and is a mosaic habitat of woodland, lowland and gallery forest and contains one of the largest remaining populations of the endangered Nigeria-Cameroon Chimpanzee as well as leopard, buffalo and many antelope species. The forests within the park are classified according to the WWF Global 200 ecosystem as part of the Cameroon Highlands Forest ecoregion and are especially important globally with some of the highest levels of endemic plant and animal species on the continent.

Yankari Game Reserve - is 2,244 km² and has a wide variety of savannah mammals and significant archaeological sites throughout the reserve. It represents one of the largest areas of relatively undisturbed savannah in Northern Nigeria and one of the most important reserves of fauna and flora in West Africa, preserving animals and plants threatened or extinct elsewhere in the country. Yankari contains the largest elephant population in Nigeria and one of only four remaining populations of the critically endangered West African lion. Other large animal species include hippo buffalo, leopard and a variety of antelope species.

These two protected areas, like all protected areas in Nigeria, suffer from underfunding, and are as a result not optimally managed, and therefore not contributing optimally to the social, economic and environmental benefits that could be generated from their sustainable management and conservation. For instance, the remarkable aboveground archaeology in Yankari Game Reserve remains unprotected and undeveloped as a tourist resource. There are also concerns about Nigeria's parks becoming vast ungoverned spaces that could serve as hideouts for armed banditry. For example, Boko Haram is alleged to have begun its operations out of the neglected Sambisa Game Reserve. Out of this concern arose the realization by the Nigerian government that there is a need to involve national security forces in strengthening the

management of these spaces and landscapes. Yankari and Gashaka are of particular concern to the government given their proximity to the international border with Cameroon and to Boko Haram.

Threats to the natural resources and wildlife inside these protected areas include the extensive presence of herders and illegal timber extraction, as well as poaching. Limited resources for effective monitoring and management of these threats increases the threat of poaching, which occurs both for bushmeat, but also for animal parts and ivory. Logging (especially for rosewood) and uncontrolled cattle grazing, particularly in Gashaka Gumti present a key challenge. Across Nigeria, rising levels of poaching and illegal logging are contributing to the country's role in illegal supply chains⁹. The country is currently subject to a trade suspension under Article XIII of CITES for African rosewood due to concerns about the legality of harvests and export. The impact of climate change and variability on availability of grazing throughout Nigeria's pastoral regions has increasingly led to influxes of cattle herders into Nigeria from neighbouring countries, resulting in increased clashes between farmers and herders and protected area management over access to resources. To improve the PA effectiveness in protecting wildlife and natural resources within these habitats, more capacities, financing and equipment are required to facilitate improved and participatory management of these PAs with neighbouring communities. It will be important to demonstrate their role in contributing to the livelihoods, job creation and income generation for local communities and increase their buy-in and role in advancing the government's conservation efforts and investments.

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

Yankari Game Reserve is currently operated under a co-management agreement between WCS and Bauchi State Government management, as agreed through an MOU, since 2014 and renewed in 2018 for an additional 10 years. In Gashaka Gumti, a similar arrangement exists between African Nature Investors Foundation, a conservation NGO and the Federal Government, through the National Park Service, to co-manage the park for 30 years (signed in 2017), and to improve the management effectiveness of the park.

With these co-management arrangements in place, the recent policy decisions to improve the condition and effectiveness of Nigeria's protected area estate and position it for the development of a nature-based tourism product, as well as the demonstrated readiness of the private sector to invest in commercial tourism, present an opportunity for Nigeria to catalyse significant private sector investment into wildlife and wilderness conservation for tourism. There are significant multiple benefits to be gained from this, including local job creation and nature-based enterprise development, increased local community participation in wildlife and nature conservation and sustainable management and utilization of forest and savanna landscapes where these PAs are located. The National Parks Act is currently under review and revision, to strengthen it is a tool for enhancing PA management. The Bauchi (where Yankari Game Reserve is) and Taraba and Adamawa States (where Gashaka Gumti NP is) have existing forestry and wildlife laws and regulations that underpin the institutional and policy framework for PA management and wildlife conservation. Yankari is a CITES-MIKE site, collecting information on patrolling and elephant mortality to the MIKE Programme and carrying out assessments of site law enforcement, further contributing to enhanced park management effectiveness.

Gashaka-Gumti was declared as a national park in 1991 by the Federal Government of Nigeria. A year later, the World-Wide Fund for Nature (WWF) and the Nigerian Conservation Foundation (NCF) commenced a programme to protect the park funded by DFID but insufficient thought was given to the long-term sustainability of inputs. Management plans were developed for the park but were only partially implemented. When the funding for the park ran out in 2008, both organisations withdrew from Gashaka.

⁹ Reflecting this, in 2020 UNODC with ICCWC partner organizations is supporting Nigeria with the implementation of the ICCWC Indicator Framework and ICCWC Wildlife and Forest Crime Toolkit.

Alongside this programme, the University College of London (UCL) and Chester Zoo, carried out a research programme focused on the primates of Gashaka. This lasted from 1994 – 2016 but was purely research based with only limited protection measures. In 2018, a new programme to enhance wildlife protection and develop the park led by Africa Nature Investors (ANI) Foundation in partnership with Chester Zoo began, but it is still in its formative stages. ANI Foundation has staff that support the National Park Service to manage the park, including for monitoring and resource mobilization for improvement of the park's operational and financial effectiveness.

A 10-year MOU between Bauchi State Government and WCS was signed in June 2018, following the expiry of a previous 4-year MOU. The Bauchi State Government and WCS MOU delegates all responsibility for management of the park to WCS to: ensure the effective protection and management of YGR and reduce levels of poaching and illegal livestock grazing, with a focus on the reserve's elephants, lions, other wildlife species, historical sites and natural occurrences, e.g. springs. Under this arrangement levels of protection have improved dramatically and there has been no elephant poaching since 2015. The Bauchi State Government also pays financial contributions to WCS for park operations. In addition to pledged funds from Bauchi State Government.

These existing baseline investments constitute an important foundation on which the GEF investment will build, to catalyze very specific action for these baseline investments to become more effective in protecting the key species and maintain the integrity of the habits and landscapes.

- c) *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 proposed project approach builds on the investments and baseline described above, to contribute to the investments by several governments, including the Nigerian government, and those of the GEF, to conserve wildlife and habitats, promote a wildlife-based economy, combat wildlife crime and to reduce demand and reduce markets for illegal extracted and traded wildlife species. Through the investments by WCS, ANI and the National Park Service, completed by the GEF investment, the management of these protected areas will be strengthened to further tackle wildlife crime and help stabilize their populations, and prevent the extinction of key species such as elephants, lions and chimpanzees that are inhabiting the landscapes within these PAs.

By enhancing the current efforts to position Nigeria's PAs and wildlife as a tourism product, this initiative will contribute to the strengthening of the value proposition for the development of a nature-based tourism product and demonstrate the key role of well-managed landscapes and PA estate in contributing to this. The economic (e.g. jobs, income), environmental (increased wildlife populations, restored forests) and social benefits (reduced crime, participatory decision-making, reduced insecurity) to be gained from sustainable management of these landscapes and habitats, and the wildlife within them, are a clear incentive for a strong buy in and support for wildlife conservation by the communities in and around these PAs. It will strengthen the capacities of both the conservation NGOs and local-level institutions (e.g. CBOs, Associations) but also the government institutions officially responsible for these mandates, specifically the National Park Service, the Department of Tourism as well as the law enforcement agencies at local/sites and national levels to effectively manage landscapes and wildlife populations and contribute to improvements at all levels of management. Demonstration of the PAs strengthened capacity to manage the park, protect wildlife and prevent crime will ultimately contribute to reduction of wildlife crime and to raising of awareness of all stakeholders about the negative impacts of wildlife crime on the environment, society and economies of communities and countries.

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

The GEF investments will trigger social, economic and environmental benefits that are important for the sustainability of the PA estate in Nigeria and contribute to the development of a new tourism sub-sector and improve community livelihoods and participation in protection threatened wildlife species and sustainable use of natural resources. The project will contribute to these outcomes through a set of 3 components and several supporting outcomes and outputs as follows:

Component 1 will enhance the enabling environment for effective management of these PAs (Yankari Game Reserve and Gashaka Gumti National Park), landscapes and habitats by supporting the review/revision and enactment of policies, systems and institutional capacities for conserving wildlife and enhancing habitat resilience. Through this component, agencies and institutions supporting wildlife protection and conservation, PA management, tourism development will be supported to improve coordination mechanisms (e.g. capacity building for evidence-based decision-making, legal provisions for strengthening law enforcement) that will facilitate a co-management approach to this work, including with local communities in adjacent landscapes. The PA managers will be supported to strengthen their knowledge and utilize credible data and information to inform park management and species protection and conservation and to also facilitate increased investments for effective management of the PAs.

Component 2 will support the strengthening of economic, social and financial incentives and systems for promoting wildlife-based economies, community benefits and participation in promoting human-wildlife coexistence. This will build on the current move at the national level to review laws and policies for PA management, natural resource and landscape management to enable the development of a commercial eco-tourism product based on wildlife and wildness landscapes, including in and around PAs. By aligning the initiative with the ongoing work to facilitate private sector participation in the development of a nature-based tourism sub-sector, this initiative will contribute significantly to a transformational economic development process with the potential to generate significant benefits for wildlife protection and conservation and sustainable management of landscapes and habitats. This will further contribute to local level participation and beneficiation from sustainable management and conservation of these landscapes and habitats, through support to the development of small and micro-enterprises with business linkages to the commercial tourism sector. Local communities and micro-enterprises will be supported to sustainably harvest, process, add value and market eco-products (e.g. shea butter, gum arabica) and to facilitate community-private sector partnership for increased investments in these small and micro-enterprises and in community efforts to sustainably utilise and conserve wildlife and landscapes (i.e. payment for ecosystem services). Building on these, communities will also be engaged to contribute to the development of strategies for enhanced law enforcement and to strengthen community involvement and participation in protecting the wildlife and landscapes helping to minimize human-wildlife conflict.

Component 3 will support learning, knowledge management M&E, and strengthen the social and environmental safeguards for the initiative. This will ensure that the approaches to PA management, law enforcement and economic activities for income generation are aligned with the principles of respect to human rights, environmental conservation, and fair and equitable distribution of the costs and benefits of the decisions and actions taken to protect wildlife, and sustainably manage landscapes and natural resources. This component will generate lesson and results to build a business-case for investing in wildlife protection and conservation, financing the effective management of PAs and facilitating public-private partnerships and other collaborative management approaches for managing natural resources and landscapes. It will demonstrate the value of investing in capacity building and participatory management approaches for natural resources management. Through this component, the stakeholders in the Nigeria project will be supported to participate in regional and global knowledge exchange platforms and to develop

knowledge products for sharing with other constituents within the country as well as regionally and globally.

3. Engagement with the Global / Regional Framework (maximum 500 words)

Describe how the project will align with the global / regional framework for the program to foster knowledge sharing, learning, and synthesis of experiences. How will the proposed approach scale-up from the local and national level to maximize engagement by all relevant stakeholders and/or actors?

Through direct linkages to the GWP's global framework, the Nigeria initiative will not only generate lessons from the sites and elevate this learning to the national levels, but will also access opportunities to link up with others within the continent/region for south-south learning and exchange with countries that have more experience in wildlife conservation and management, as well as wildlife and wilderness tourism, such as the participant countries from southern Africa (Botswana, Namibia, South Africa), including those that are still in the 'learning stages' within the continent (Angola, Mozambique, Ethiopia) and others with significant experience (Kenya, Tanzania). By linking to the broader GWP community, which includes Asian countries, interactions will be facilitated, and communication enhanced between Nigeria as a supply country (and an evolving transit hub) and Asian transit and destination countries, and this may contribute to more collaboration for demand reduction and the overall effectiveness of law enforcement operations.

At the local and national levels within Nigeria, this initiative will promote collaborative management of these PAs and landscapes by bringing together agencies, institutions and organisations that don't always collaborate, around a common objective. Federal (National Park Service, Department of Tourism) regional government and institutions where the PAs are located (Bauchi State Government, Taraba and Adamawa State governments), as well as NGOs (WCS, ANI Foundation) will collaborate, along with local communities within and adjacent to the PAs, and the private sector (tourism operators, investors and financing institutions, and service providers) to collectively develop a new form of partnership to promote a wildlife economy that up to now has been weak and almost non-existent. The recent government decisions to commercialise tourism within PAs (i.e. invite the private sector to establish tourism facilities) is a key platform that positions protected area management and wildlife conservation in Nigeria to make an exponential leap forward towards effectiveness and sustainability. Strengthening PA infrastructure, and systems and capacities for monitoring resource management, combatting crime and illegal extraction, building PA-community partnerships and private sector-government-civil society partnerships, can only succeed in demonstrating the value of these partnership for wildlife conservation, landscape management, tourism development and the role of a nature-based solutions in building social, economic and environmental resilience. There is a real and tangible opportunity for an eco-tourism product to emerge out of these partnerships.

Based on the work to be supported under components 1 and 2 of the project, and the lessons and experiences to be gained, packaged, synthesized and shared from the work to be conducted under component 3, this initiative will generate important lessons to inform scaling up of investments for PA management, wildlife protection and combatting of illegal extraction and trade of wild resources. It will also inform and strengthen the business case for collaborative partnerships for addressing the challenges of managing natural landscape and investing in the effectiveness of the management systems, including from a financial and operational point of view. Through these lessons, the initiative of the Bureau for Public Enterprises to establish public-private partnerships for PA management will be further strengthened. Most importantly, international best-practice and experiences for people-centered and environmentally and socially responsible approaches to PA management, wildlife protection, law enforcement and tourism development will be integrated into this experiential learning and knowledge generation, to inform scaling up. This way, communities, local authorities and other landscape managers and users from across the PA management, wildlife protection,

law enforcement and tourism development spectrum will gain key experiences and strengthen their capacity to scale up and invest in similar initiatives across Nigeria's PA estate.

4. Pakistan Concept Note Summary

Project Title:	<i>Strengthening Governance and Capacity for Combating Illegal Wildlife Trade in Pakistan</i>
Country(ies):	Pakistan
GEF Agency(ies):	IUCN
Total Project Cost (GEF grant)	\$ 2,652,294
Estimated cofinancing	\$ 6,231,444

Project Description

Project Description. Briefly describe (limit description to each of the seven description items to 5-7 lines per item): 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description); 2) the baseline scenario and any associated baseline projects, 3) the proposed alternative scenario with a brief description of expected outcomes and components of the project; 4) alignment with GEF focal area and/or Impact Program strategies; 5) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing; 6) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and 7) innovation, sustainability and potential for scaling up.

1a.1) The global environmental and/or adaptation problems, root causes and barriers

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Global Environmental and Adaptation Problems

After habitat destruction, Illegal Wildlife Trade (IWT) is one of the most important global threats to biodiversity. Well-established networks of poachers and dealers operate around the world, particularly within countries characterized by weak law enforcement and lack of effective monitoring. A recent UN report revealed the scale of the problem: since 1999, more than 164,000 seizures have taken place in some 120 countries, involving approximately 7,000 species. The market for illegal wildlife products is worth up to USD 20 billion per year. According to the UN Office on Drugs and Crime (UNODC), wildlife poaching and trading is the 3rd largest transnational crime after drugs and human trafficking, undermining state authority and socio-economic development.

IWT is responsible for the endangerment of numerous species across Asia, South America and Africa. Extensive poaching of wildlife has brought many species to the brink of extinction, such as the Western black rhino in Africa. Trafficking is not just confined to the trade of megafauna; an estimated one-third of bird species are also traded illegally.

The degradation caused by IWT is not limited to ecosystems; the effects also extend into the economy. There is increasing evidence to show that IWT leads to major economic losses as a result of the undermining of state authorities, the destabilization of national security and the fueling of conflicts. IWT is an organized crime syndicate and should be treated with the same severity as other organized crimes.

Pakistan is home to many rare and endemic species and is a target for illegal wildlife poaching and trade. Among the species most traded through Pakistan are freshwater turtles, tortoises, lizards, venomous and non-venomous snakes, invertebrates such as scorpions and spiders, raptors, resident and migratory birds

and countless species of plants. Many mammal species are also under threat such as ungulates, the Indian pangolin, Common leopard and Snow leopard, wolves, jackals, foxes, and cetaceans. Pakistan is also the eight largest exporter of shark fins, with an average of 25,000 tons of shark fins traded illegally every year (FAO, 2015).

A recent study, compiled through analysis of in-country wildlife trade, seizure and poaching data of 3,501 cases in the past five years, provides a good insight into the prevalence of wildlife poaching, hunting and trafficking of over 80 wildlife species, including protected and CITES and IUCN Red Listed species. The study indicates in-country poaching of six endangered (EN), six near threatened (NT), nine vulnerable (VU) and 25 least concern (LC) species. Of these, about 36% were found to be listed in Appendix I of CITES, 19% in Appendix II and 15% in Appendix III. The remaining 30% were non-CITES listed species (Aisha & Khan, 2018).

For example, some 23 to 53 Snow leopards are reported to be poached in Pakistan each year - the 3rd highest total in the world. The poaching and illegal trade of the endangered Indian pangolin has been historically prevalent in Pakistan, with over 100 pangolins poached between 2011 and 2012 (Mahmood et al. 2012) in the Potohar region (north-eastern Pakistan) alone. Several consignments of pangolins were seized at international airports in Pakistan, including 145 kg of pangolin scales worth USD 150 million (Customs Today, 2014), and 25kg of pangolin scales in 2014. All eight species of freshwater turtles and two land tortoises found in Pakistan are under serious threat from poaching and illegal trade. In 2016 alone, over 2,000 freshwater turtles were seized from 8 consignments, out of which some 1,800 were Black spotted turtles. Statistics on seizures and confiscations of avi-fauna reported by the wildlife departments for the past five years have indicated poaching and trade of thousands of birds, comprising of 45 species, including IUCN Red listed and CITES listed species. Further details are provided below in the “baseline scenario” section.

An increase in the number of private zoos, aviaries and exotic pets (especially big cats) is also cause for concern. There are some 105 private zoos in Punjab and a further 200+ in Karachi. There is no established monitoring and surveillance system in place for these establishments, nor are there adequate regulatory and management arrangements for carcass disposal, breeding and sale. These factors are also contributing to illegal trade in Pakistan.

IWT in Pakistan is not confined to wild animals, as several plant species are also collected from the wild and traded illegally for their high medicinal value and aromatic characteristics. An investigation of trade routes by WWF-Pakistan and TRAFFIC International indicates that the largest market for such trade is East Asia, particularly Thailand, China and Hong Kong, Province of China.

An analysis of Pakistan’s legal exports of CITES-listed animal species over the past five years (2013-2017) indicated substantial variation between the quantities of trade items reported by the exporters on the one hand and the importers in the destination countries on the other hand. According to the exporters, some 10,000 CITES listed animal specimens were exported from Pakistan between 2013-2017. In comparison, the number of CITES-listed animal specimens reported by the importer countries over the same timeframe was over 43,000 (mainly birds). The analysis also indicated that the trade in CITES-listed species spanned over 20 countries. Mammals were being exported to most of these countries, whereas the reptile trade was found to be associated primarily with US-based importers. The bird trade was predominantly associated with Middle Eastern countries, Central Asia, the USA and a few European countries (Aisha & Khan, 2018).

Drivers

With a strategic geographical location and multiple air, land and sea ports open for trade, Pakistan has turned into a major source, consumer and transit country for consignments of wildlife, fish, birds and medicinal plants, including whole specimens and derivatives. Much of the demand for wildlife parts and products sourced from Pakistan is known to arise from East Asian countries, mainly for food and use in traditional medicines. There is also a widespread local demand for wildlife products, especially amongst rural communities, for medicinal use as well as other culturally rooted practices (e.g. use of Indian pangolin scales as protective talismans for livestock).

Geographical differences in the occurrence of species also play a role in their availability; for example, oil extract derivatives of Indian spiny tailed lizards were reported from Punjab. Previous studies have also indicated the provinces of Azad Jammu Kashmir and Punjab as important sources of live lizards and their derivatives. Common forms in which these animal derivatives are sold include oils, which contain fat or bile extracts, meat (both fresh and dried) and bones. Fat extracts of the Indian spiny tailed lizard, Asiatic black bear, Asiatic lion and tiger were derivatives commonly found in traditional medicine and have been previously documented in a market study conducted during 2015 (Aisha & Khan, 2015).

The relationship between IWT and e-crime is also of growing concern in Pakistan. A recent study by WWF-Pakistan explored some 24 groups and 76 web pages offering species for sale nation-wide. These groups are administered by wildlife traders and are used by individual sellers, whereas, the webpages represent wildlife trade vendors such as specialized exotic pet shops. Another study conducted by WWF-Pakistan found over 500 groups and 300 pages on social media related to the sale of wildlife parts and derivatives, especially on Facebook (Aisha et al., 2019 - in publication).

Under component 4 (output 4.2.1) partnership will be developed with major social media networks and online business platforms for working together to identify, monitor, and intercept illegal online traders and e-wildlife crime perpetrators. The proposed collaborations at the international and regional levels, such as those with Google and Facebook, which may be used for artificial intelligence and in-built coding systems to track online illegal trade and can also be engaged for information sharing, capacity building to scale up these interventions, and to take action against online illegal trade networks.

Barriers

Barrier 1: Weak regulatory framework and inter-agency coordination to address poaching and illegal wildlife trade

The primary reasons for the persistence of widespread and under-reported poaching and illegal wildlife trade in Pakistan include inadequate wildlife crime monitoring and management, weak law enforcement, weak regulatory framework, lack of inter-agency coordination, insufficient human resources, and a lack of institutional capacity, training and technology. Furthermore, with the exception of Khyber Pakhtunkhwa, a major limitation of current provincial wildlife acts is that they do not provide coverage for exotic species. This is symptomatic of the insufficient coordination between federal and provincial authorities. It also makes it challenging to determine jurisdiction between the wildlife department and district government, especially when an exotic species such as a lion is taken to a public place, where both entities feel that it is the mandate of the other body. Thus, wildlife crime is rendered a low risk, high return trade in Pakistan, especially for impoverished rural communities lacking livelihood opportunities and environmental awareness.

Barrier 2: Lack of institutional capacities and facilities to reduce poaching and wildlife crime

The field staff of wildlife departments often lack proper training and resources to combat institutional corruption and effectively overcome field challenges. Statistics on ranger casualties and injuries incurred

during the line of duty have not been well-documented; however, unofficial figures suggest that at least five rangers lost their lives in 2017 as a result of attempting to stop IWT and forest encroachment.. Two of these rangers were killed during an operation to catch loggers in the Khyber Pakhtunkhwa Province. Two officers from the Punjab Wildlife & Parks Department lost their lives while attempting to prevent illegal poaching of migratory birds. In a recent encounter with encroachers in the Saif-ul-Muluk National Park, seven rangers were injured during anti-encroachment operations earlier this year. Similarly in the Margallah Hills National Park, one ranger was killed while he was on duty to protect the park's resources against poachers. A recent rangers survey conducted by WWF-Pakistan in 28 Protected Areas (PAs) indicated that over 70% of the surveyed rangers lacked the basic equipment and skills required to perform their duties.

The country also lacks capacities and facilities for the proper care of the rescued and confiscated wildlife species, which are often found in debilitating conditions. Law enforcement agencies, such as Pakistan Customs and Provincial Wildlife Departments, are particularly dependent on the support of rescue and rehabilitation centers to deal with confiscated wildlife.

There are several discrepancies which exist in the management and acquisition of CITES listed exotic species, especially in relation to big cats. Wildlife authorities do not have credible data of all big cats in individual ownership. Very few of the big cat holding and breeding facilities meet the minimum requirements specified in the Guidelines on Acquisition and Management of Felids (big cats) in Captivity of 2011, set-out by the Ministry of Climate Change as minimum standards for housing exotic big cats in Pakistan.. These requirements include evidence of ownership or lease, site plan, boundary wall or fence, mortality, disposal and breeding record and tagging of animals. There is no existing monitoring mechanism through which in-country trade of exotic species or their cubs could be ascertained. A total of 47 big cats were imported into Pakistan from 2007 to 2014, including tigers, lions, jaguars, pumas and leopards.

Barrier 3: Lack of Awareness, Knowledge Management, and Monitoring Mechanisms to Curb Illegal Wildlife Trade

There is a lack of awareness when it comes to ecological and economic importance of wildlife within the local communities. There is a strong need to engage local communities at key wildlife and trade hotspots, especially through incentivised community conservation initiatives in wildlife conservation, to help relevant agencies control poaching, trade and transportation of illegal wildlife resources in and from their respective areas. A lack of monitoring mechanisms, such as SMART, Zero-Poaching Framework and National Wildlife Crime and Trade Monitoring Network, also adds to the problem of illegal wildlife trade identification, due to which organized crime syndicates are not caught, leading to unchecked trade of species under threat. At the national level, wildlife crime regulation and monitoring systems need to be strengthened, revised and updated while building human and institutional capacities of wildlife and relevant law-enforcement agencies to help in detection, confiscation, rescue and rehabilitation and or safe disposal of confiscated specimens.

Barrier 4: Lack of alternative livelihoods for local communities

Members of the local communities are found to be heavily involved as middlemen in illegal wildlife trading and poaching. They usually belong to rural areas and are financially weak, which leads to them helping poachers in identifying sites where wildlife species can be found, such as pangolin burrows. This means the endangered species are snared away at will. Livelihood diversification initiatives, such as eco tourism and sustainable resource use and management training, will ensure there is less dependence on Illegal wildlife trade. Hence, there is a strong need to provide these communities with alternative livelihood options.

1a.2) Baseline Scenario

IWT is highly prevalent in Pakistan. It hosts wide variety of species, which are attractive for poachers and traders, not just domestically but also internationally. Pakistan hosts a number of ungulate species spread across the country's diverse landscape. Illegal hunting, poaching and habitat fragmentation are the major threats to the survival of ungulate species in their home range. Concurrently, ungulates are also highly prized for trophy hunting whilst the lambs are kept as pets. This, together with ineffective law enforcement, further accelerates the intensity of this problem. Over 36 incidences of poaching of different ungulates species have been registered by the provincial wildlife departments during the past few years in Pakistan (Aisha & Khan, 2018)

Similarly, bird poaching and hunting for both domestic and international illegal trade are prevalent across the country. Statistics on seizures and confiscation of avi-fauna reported by the wildlife departments for the past five years have indicated poaching and trade of thousands of birds, comprising of 45 species, including IUCN Red listed and CITES listed species. Falcons are another target of wildlife traffickers for their increased demand for hunting in the Middle East. An analysis of current trends of illegal wildlife trade shows that most of the trade occurs via land and sea ports, of which major poaching and trade hubs are Sindh (Karachi, Indus River), Punjab (Taunsa and Chashma Barrages) and Balochistan, as well as Khunjerab Pass in Gilgit-Baltistan region. Illegal trade of falcons shows a persistent trend, as illegal falcons have been seized by law enforcement agencies at different national exit points on different occasions, including 27 in Punjab in 2013, 9 at Karachi airport in 2014, 75 in Sindh during 2015, and 25 from Punjab and Sindh in 2016. As recently as January 2019, a consignment carrying two falcons was confiscated at Lahore airport from a UAE bound flight (Punjab Wildlife Department, 2019).

Pakistan is also home to two species of bears, including Asiatic black bear and Himalayan brown bear, with both species facing a host of threats such as bear-baiting, human-bear conflict, climate change, poaching and illegal trade. A total of 16 incidences of Asiatic black bear hunting and killing in the province of AJ&K were recorded by the wildlife authorities during the last three years, wherein several bears were reported to be either killed or confiscated, with many being used in bear baiting in the larger cities (Aisha & Khan, 2018).

All eight species of freshwater turtles and two land tortoises found in Pakistan are under threat from poaching and illegal trade. In 2016 alone, over 2,000 freshwater turtles were seized from 8 consignments, out of which around 1,800 were Black spotted turtles. Illegal trade of these turtles became more visible in 2014 when 1,960 specimens were confiscated by the Pakistan Customs Authorities (Chung, 2018). In 2015, a discovery of five consignments carrying 1,345 live freshwater turtles and 1.9 tons of their body parts, including dried meat and bones, bound for different East Asian countries, revealed the scale of illegal trade in freshwater turtles (WWF-Pakistan, 2016). Over 700 Kg of freshwater turtle meat and body parts were confiscated in October 2018 in the city of Karachi (Sindh, Pakistan), which was stolen from the Wildlife Department's custody, indicating strong supply chains of illegal trading (Express Tribune 2019). Additionally, a consignment carrying over 500 freshwater turtles concealed in plaster of Paris was confiscated from Sialkot airport in the province of Punjab in 2018. It has been observed that in recent years, exit points in the country which were not being used before, are now being increasingly used, especially for the smuggling of turtles in Pakistan. Recent studies by WWF-Pakistan have documented the selling of over 2,000 green sea turtle hatchlings from October to December 2018 in Karachi, Pakistan (University of Karachi and WWF-Pakistan, 2019).

WWF-Pakistan recently conducted a study on the prevalence of illegal wildlife trade in Pakistan (2015, updated 2018). It covered 288 shops and street vendors across 55 important animal markets in 23 major cities of Pakistan, revealing an alarming statistic of open sale of wildlife; both live and dead, coupled with their parts and products, in almost all the cities which were surveyed. Majority of the specimen collected from the survey points were either listed as CITES (7 listed in Appendix I, 15 in Appendix II and 6 in

Appendix III) or IUCN Red List Species (5 Endangered, 4 Near Threatened, 6 Vulnerable and 18 Least Concern), or both (WWF, 2018).

The specimen recorded from local markets also included species which are "protected" under the existing wildlife laws. The study found evidence of wildlife species and their products being sold by street vendors and herbalists in the local markets, including 12 mammals, 5 reptiles and one bird species as well as invertebrates. These animals were being used as ingredients in traditional medicines, which are believed to have aphrodisiac properties while also acting as a cure for muscular and joint pain (WWF-Pakistan, 2017).

WWF-Pakistan's previous work on determining the scale of illegal trade in Pakistan and developing profiles of commonly traded species gives an insight into the scale of demand of illegal trade. WWF-Pakistan supported the first assessment of wildlife trafficking in the province of Sindh in 1994, which revealed considerable evidence of IWT, particularly the trade of reptiles and large mammals. In 2005, WWF-Pakistan, as part of "Environmental Assessment of Taunsa Barrage Rehabilitation and Modernization in Punjab" project, unveiled a network of traffickers and poachers involved in the freshwater turtle trade. Subsequently, comprehensive assessments of the entire Indus River system as part of the organization's Pakistan Wetlands Programme uncovered the scale and volume of the illegal trade of freshwater turtles in the country.

The "Habitat and Species Conservation" project funded by UNDP in Chaghi Desert, Balochistan, also contributed in the identification of illegal reptile trade in the region. Wildlife crime hotspots in Pakistan range from the aforementioned Chaghi Desert to Dera Ismail Khan, Nowshera, Charsadda in Khyber-Pakhtunkhwa (KP); Machiara National Park and other protected areas in Azad Jammu and Kashmir (AJK); the Salt Range in Punjab; Taunsa Barrage, Rajanpur, Kashmore, Ghotki and Sukkur in the Indus River Basin; Thar Desert in Interior Sindh and the entire Indus Delta Region in Sindh. These studies provide undeniable evidence of IWT in the country and expose well-established networks of poachers and dealers operating at various levels.

WWF-Pakistan has also developed a National Plan of Action (NPoA) for IWT in collaboration with the Ministry of Climate Change (MoCC), Government of Pakistan (GoP) and the endorsement of relevant provincial and national stakeholders (Wildlife authorities, Law Enforcement Agencies, Customs, Judiciary and UNODC etc), which provides a road map to combat IWT and trafficking in Pakistan. Moreover, the organization is also involved in the capacity building of Law Enforcement Agencies (LEAs) and has trained more than 450 officials to monitor and control poaching and illegal trade, in addition to introducing them to the legal framework for required regulation. These efforts have resulted in strong linkages with all relevant Pakistani ministries, agencies and departments, particularly with Pakistan Customs that has the mandate to address trafficking. Collaborations have also been made with UNODC and other organizations to combat IWT and poaching.

WWF-Pakistan, in collaboration with MoCC and WWF International, organized the first National Zero-Poaching Workshop in 2017. This sought to develop a road map for the establishment of a National Wildlife Crime Monitoring Network, aimed at improving inter agency and inter provincial coordination to tackle poaching through adoption of the zero-poaching framework. This would ultimately aid in controlling illegal trade and trafficking of wildlife in the country. One of the outcomes of this workshop was the creation of a core working group with the support of MoCC. Officials from Federal and Provincial Wildlife Authorities, Fisheries Departments, Pakistan Customs, Judiciary, Police, Scouts/Rangers and other relevant institutions were part of this group. WWF-Pakistan also organized a national level workshop on adoption of Spatial Monitoring and Reporting Tool (SMART), which is a technology based approach to PA management that can also be used to help control illegal poaching. The participants identified 16 priority Protected Areas (PAs) in Pakistan at which the SMART pilot initiatives should be launched, based on a

suite of criteria including the presence of threatened wildlife, landscape features, the scale of anthropogenic pressures and existing capacity of wildlife authorities to tackle these challenges.

The poaching and illegal trade of the endangered Indian pangolin has been historically prevalent in Pakistan, with over 100 pangolins poached between 2011 and 2012 (Mahmood et al. 2012) in the Potohar region (north-eastern Pakistan) only. Additionally, a total of 412 pangolins were reported to be killed at 48 locations between 2011 and 2013 from the same region (Mehmood et al. 2017). Several consignments of pangolins were seized at international airports in Pakistan, including 145 kg of pangolin scales worth USD 150 million (Customs Today, 2014), and 25kg of pangolin scales in 2014 (Dawn, 2014). The most recent seizure included confiscation of over 700 Kg of pangolin scales from the city of Karachi (Sindh, Pakistan) in October 2018, which were later stolen from the provincial wildlife department's custody in January 2019 (Dawn, 2019). This indicates strong linkages of wildlife crime syndicates, as well as ineffective and improper systems of disposal and handling of confiscated specimens. Use of pangolin scales in traditional medicines has also been reported in the rural areas of Punjab and Sindh (Roberts 1997; Mahmood et al. 2012).

In addition, five pangolins were rescued from poachers from different locations in the province of Azad Jammu & Kashmir (AJ&K) during the past two years. Recent market based assessments on the scale of illegal trade of pangolins confirmed the availability of pangolins and their derivatives in the local markets of Pakistan (Aisha & Khan, 2016). Baseline studies conducted in and around Pir Lasura National Park in AJ&K recorded illegal poaching and killing of 446 pangolins in the area during 2013-2015. Communities from similar areas were found involved in the selling of 26 Kg of pangolin scales and 10 jackets made from the scales (Akram et al., 2017). A review of pangolin poaching cases, registered by wildlife departments in Punjab and AJ&K, indicated a total of 61 cases of pangolin poaching for scales during the past three years (Aisha & Khan 2018).

WWF-Pakistan also implemented a project which focused on IWT and community based protection of Indian pangolins in Pakistan. This project aimed to counter wildlife trafficking by assessing the scale and scope of pangolin poaching and trade in selected districts of Potohar, and some areas of Azad Jammu & Kashmir (AJ&K). Under the project, a Pangolin Conservation and Management Plan was also developed, for use by the relevant government departments.

Pakistan has the third highest annual incidence of Snow leopard poaching in the world. Based on the average number of cases known to experts between 221 and 450 Snow leopards were estimated to have been poached in the nine year period between 2008 and 2016. However, this is likely to be a significant underestimate, as it is believed that the average rate of poaching detection is less than 38%. Of the Snow leopards poached, 55% were killed in retaliation for livestock depredation, 21% for trade and 18% taken by non-targeted methods such as snares. Although retaliatory killing is estimated to account for roughly half of Snow leopard poaching, experts estimate that there is a 48% chance that a poaching attempt will take place after a depredation incident. On average, experts estimate that 60% of retaliatory and non-targeted poaching incidents result in an attempt to sell; a total of 108-219 Snow leopards potentially enter into illegal trade (TRAFFIC, 2017).

WWF-Pakistan, with the support of WWF International and in collaboration with Gilgit-Baltistan Wildlife and Forest Department, has initiated a SMART pilot for snow leopards in Misgar Valley of Hunza. The project is focusing on initiating the zero-poaching framework approach; it will include SMART-based patrolling and monitoring programmes, capacity building of relevant stakeholders and community engagement to control poaching and trafficking of snow leopards and other species from the project site. Pakistan is the first country in Asia to pilot this technology based zero-poaching framework (SMART) for the conservation of this species.

WWF-Pakistan has also jointly conducted a Ranger Perception Survey with WWF International and the Provincial Forest and Wildlife Departments, covering 422 field rangers/watchers from 25 national parks. The survey was conducted to assess existing field challenges in performing duties. The findings of the study will be helpful in suggesting recommendations for evidence based conservation and PA management planning in the future.

IWT in Pakistan is not confined to wild animals, as several plant species are also collected from the wild and traded illegally for their high medicinal value and aromatic characteristics. An investigation of trade routes by WWF-Pakistan and TRAFFIC International indicates that the largest market for such trade is East Asia, particularly Thailand, China and Hong Kong, Province of China.

IUCN Pakistan, in collaboration with MoCC, conducted pangolin conservation workshops in Karachi and Islamabad in July 2019. According to the available data, pangolins are the most trafficked mammal in the world. The participants identified a number of poaching hotspots (Salt Range - Potohar and Mirpur area) and emphasized the need for urgent and collective action.

1a.3) Proposed Alternative Scenario, Description of Expected Outcomes, Project Components

Project Objective: To curb poaching and illegal wildlife trade in Pakistan

Component 1: Strengthen regulatory framework and inter-agency coordination to address poaching and illegal wildlife trade

Outcome 1.1: Wildlife crime regulation and institutional framework strengthened to prevent and control poaching and illegal wildlife trade at national and provincial levels

A wide range of government and non-governmental organizations are working on the issue of IWT. Under this outcome, GEF funds will be used to support the development of mechanisms to promote multi-sector and multi-stakeholder coordination and governance. Particular emphasis will be placed on establishing and building the capacity of a National Wildlife Crime and Trade Monitoring Network (NWCTMN) at Ministry of Climate Change. The NWCTMN will be composed of representatives from the relevant law enforcement agencies including police, customs, air and boarder security forces and judiciary and other stakeholder organisations. It will essentially function as a trade monitoring network, and will be designed to enhance inter-agency and inter-provincial coordination, intelligence sharing and the streamlining of conservation action to combat the illegal wildlife trade. Without a coordination mechanism of this kind, efforts to combat IWT will continue to be disjointed and much less effective than they could be.

In addition to the creation of the NWCTMN, activities under this component will be designed to strengthen wildlife-related law and the role of the judiciary, ensure effective implementation of a national plan of action to combat poaching and IWT, and improve IWT-related information gathering and reporting. There is in general a lack of awareness amongst the judiciary, prosecutors and investigators about the severity of wildlife crime, its impact on wildlife and habitats, associated ecosystem services, and resultant direct and indirect economic losses. Being a transnational organized crime, it is difficult to validate the actual scale of the profit margins that this lucrative wildlife crime industry generates; market values of wildlife and wildlife products can be an indicator of the gravity of these crimes, but even these do not account for the broader economic costs of the loss of wildlife or habitat. Thus the awareness of judiciary, prosecutors and investigators of wildlife crime, along with increases in penalties and effective implementation of legislation, would serve as a strong deterrent.

Output 1.1.1 National Wildlife Crime and Trade Monitoring Network established at federal Ministry of Climate Change, Government of Pakistan

Activities:

1.1.1.1 Conduct national stakeholder consultations to discuss and draft Standard Operating Procedures (SOPs) and Term of Reference (ToRs) for the creation of a National Wildlife Crime and Trade Monitoring Network Bureau (NWCTMN) at Federal Ministry of Climate Change (MoCC).

1.1.1.2 Facilitate establishment of NWTCMN in collaboration with stakeholders, and coordinate with MoCC to convene meetings of NWTCMN

Output 1.1.2 Federal and provincial wildlife and trade related legislation reviewed and aligned with CITES law

Activities:

1.1.2.1 Facilitate relevant Law Enforcement Agencies (LEAs) to review and align national and provincial wildlife crime and trade related laws, rules and regulations with Pakistan Trade Control of Wild Fauna and Flora Act (PTCWFFA, 2012)

1.1.2.2 Facilitate provincial and territorial wildlife authorities to align their respective wildlife poaching and trade laws, rules and regulations with PTCWFFA and other relevant statutory laws

1.1.2.3 Initiate consultations to enhance the role of the judiciary to address poaching and illegal wildlife trade as a serious organized crime

Output 1.1.3 Collation and access to actionable illegal wildlife trade information improved through a secure database

Activities:

1.1.3.1 Establish and strengthen SMART (GIS) repository at federal level for data collation and sharing, through provincial and territorial SMART nodes (3.1.2.5) and forest, wildlife, fisheries, customs, and intelligence departments

Component 2: Build institutional capacities and establish facilities to detect, prevent and control wildlife crime

This component will help build capacity of the key stakeholders, including staff of the respective forest and wildlife departments, Pakistan Customs, Border Security and other law-enforcement agencies and other stakeholders including local communities. The project will train local community members as citizen scientists to enable them in tackling wildlife crime and poaching, identification of species in trade demand. It is important to build capacity of both federal and provincial institutions for effective in-situ wildlife conservation.

The development of standardized curriculum would ensure consistency in the implementation of capacity building frameworks. There will be tailored training modules developed that would be integrated into existing training programs of relevant institutions. After the training programs are implemented, the key stakeholders will participate in the design, implementation and participatory monitoring of landscape conservation and management plans. In terms of development of a wildlife crime deterrent system, the project will train staff in the use of modern tools and techniques for wildlife law enforcement and for detecting wildlife trafficking and illegal trade in wildlife and wildlife parts. Creation of a common platform such as the establishment of the National Wildlife Crime and Monitoring Bureau, its provincial networks and SMART hubs where multiple enforcement agencies and border forces will be interacting can be effective in curtailing IWT and poaching.. This requires a comprehensive approach and framework for collaboration and capacity building. Furthermore, the project would address the need for proper wildlife rescue and rehabilitation measures and will develop Standard Operating Procedures (SOP) for LEAs for the rescue, safe handling, rehabilitation and release of the confiscated wildlife species.

Outcome 2.1: Provincial and federal institutional capacities improved for detection and prosecution of wildlife crime

Output 2.1.1 Staff members of wildlife departments and relevant law enforcement agencies are trained on various aspects of wildlife crime control

Activities:

2.1.1.1 Conduct Training Need Assessments in collaboration with MoCC and Provincial Wildlife Departments (PWDs) on various aspects of IWT at key Government departments

2.1.1.2 Develop customized training modules, in collaboration with relevant government training directorates, and conduct training for PWDs, the judiciary, LEAs and border trade control agencies, veterinary experts, and other stakeholders, focusing on key aspects of IWT (identification, their legal aspects, use of technology etc) with the involvement of international, regional and national experts and institutions

2.1.1.3 Conduct short term, medium-term, long-term certificate courses for PWDs in wildlife veterinary care, IWT, species identification, specimen detection, safe handling, rescue and reporting.

Output 2.1.2 Wildlife crime reporting units established at key international and domestic ports of entry and exit points in Pakistan

Activities:

2.1.2.1: Consult stakeholders to identify suitable government institutions to be designated as wildlife forensic facilities

Activity 2.1.2.2: Equip one existing laboratory with tools and technology for wildlife forensics based detection and identification

2.1.2.3 Establish and strengthen wildlife check-posts at key wildlife trade routes and poaching hotspots (equipped with detectors and identification materials)

2.1.2.4 Ensure presence of PWDs at important entry/exit points together with other LEAs for monitoring, rescue, confiscation and safe disposal of wildlife consignment and legal actions

Output 2.1.3: Wildlife crime reporting units established at key international and domestic ports of entry and exit points in Pakistan

Activity 2.1.3.1: Set-up wildlife counters at important exit and entry points (05 Airports, 2 land crossings and 2 sea ports) with information, signage and awareness material on illegal trade of wildlife

Activity 2.1.3.2: Establish and strengthen wildlife check-posts at key wildlife trade routes and poaching hotspots (equipped with detectors and identification materials)

Activity 2.1.3.3: Ensure presence of PWDs at important entry/exit points together with other LEAs for monitoring, rescue, confiscation and safe disposal of wildlife consignment and legal actions

Outcome 2.2: Safe rescue, rehabilitation, and release, or disposal of confiscated wildlife and derivatives ensured

Output 2.2.2 Guidelines and Standard Operating Procedures adopted for safe rescue, rehabilitation, release, and proper disposal of parts and products, of species in trade.

Activities:

2.2.2.1 Develop SOPs for handling and disposal of confiscated wildlife specimens in-line with CITES guidelines

2.2.2.2 Coordinate with Animal Quarantine Department, animal shelters, zoos etc., to help ensure safe rescue and rehabilitation

2.2.2.3 Organize training workshops on the SOPs for relevant law-enforcement agencies including provincial wildlife departments staff

Component 3: Reduce poaching and illegal trade of key wildlife species by at least 50% in 5 high priority sites

Pakistan has turned into a major source, consumer and transit country for the illegal trade in wildlife. Under this outcome, the project will carry out comprehensive baseline studies at selected IWT hotspots to help ascertain the true scale and scope of the illegal wildlife trade. These studies will focus on developing an understanding of the entire IWT supply chain, from poaching to transportation to sale. They will seek to identify critical drivers of poaching and illegal trade, as well as hotspots from which wildlife is sourced. They will identify important entry and exit points used by the traffickers.

Site-specific Zero-Poaching Frameworks (ZPFs) will be developed and tested at the seven priority sites. The ZPF approach employs a six pillar approach which integrates: 1) assessments; 2) community engagement; 3) technology; 4) prosecution; 5) cooperation; and 6) capacity enhancement. These are combined with essential enforcement activities, incentives and livelihood activities for local communities.

The Spatial Monitoring and Reporting Tool (SMART) will also be deployed at the seven priority sites. SMART has been designed to improve anti-poaching efforts and overall law enforcement effectiveness in established conservation areas. SMART makes it possible to collect, store and evaluate data on patrol efforts (e.g. time spent on patrols, areas visited and distances covered), patrol results (e.g. snares removed, arrests made) and levels of threat. When effectively used to create and sustain information flows between ranger teams, analysts and conservation managers, the SMART approach can help to improve protection of wildlife and habitats significantly. The proposed management and livelihoods strategies will consider a more holistic and participatory approach of management of poaching and trade hotspots, both protected areas, their buffer zones. This also addresses all six pillars of zero-poaching, sustainable management of resources and community benefit sharing and livelihood improvement. Examples of actions that support alternative livelihoods include establishing vocational centers for women and their training in artisanal skills; provision of bee-keeping enterprise and training local people in honey production and marketing; mitigating against human wildlife conflicts in the form of livestock compensation and establishing insurance schemes; provision of improved breeds, establishment of community garden through provision of high value fruit trees and capacity building of local youth in value chain development of indigenous horticultural products or firewood plantation, and wildlife-related employment (e.g. as community game watchers or guides etc).

Various management plans will be developed under Zero Poaching Framework (component 3), including community-based anti-poaching mechanism and human-wildlife conflict management plans, site specific and species specific management plans on the basis of acquired SMART data to deal with poaching and IWT, will be agreed with key stakeholders, approved by relevant government agencies and implemented, the latter through collaborative efforts with a range of Civil Society Organizations (CSOs) that are already implementing community centered conservation activities within these landscapes.

Outcome 3.1: Poaching of wildlife species reduced and management effectiveness enhanced at the 5 priority sites

Output 3.1.1: Zero-Poaching Frameworks developed for 5 selected poaching and illegal trade hotspots

Activities:

- 3.1.1.1 Conduct baseline surveys at selected IWT hotspots (one site each in Khyber Pakhtunkhwa, Punjab, Sindh, Gilgit-Baltistan and Azad Jammu & Kashmir) to determine: scale, scope and nature of illegal trade; species in demand; key drivers, actors and supply chain systems
- 3.1.1.2 Organize stakeholder consultations for developing site specific Zero-Poaching Frameworks (ZPFs)
- 3.1.1.3 Develop draft ZPFs for each selected site, and obtain endorsement by governments and relevant stakeholders
- 3.1.1.4 Finalize ZPFs with relevant government departments as the basis for implementing SMART and the Safe Systems Approach (SSA) to control poaching at project sites.

Output 3.1.2: Spatial Monitoring and Reporting Tool (SMART) rolled out at 5 project sites for implementation of approved Zero-Poaching Frameworks

Activities:

- 3.1.2.1 Conduct feasibility assessments (for customization and adoption) on the application of SMART at the selected sites
- 3.1.2.2 Develop customized SMART packages (under ZPFs) for each selected site and provide standard SMART kits to relevant wildlife departments
- 3.1.2.3 Establish a cadre of trained and equipped SMART champions to lead the application of SMART technologies within selected wildlife departments.
- 3.1.2.4 Facilitate SMART champions by training at least 15 field staff members from each site in the use of SMART technology for data collection, monitoring and reporting
- 3.1.2.5 Set up SMART nodes, embedded within the relevant government wildlife departments and staffed with SMART champions and trainees, to facilitate reporting on wildlife crime and trade

Output 3.1.3: Safe Systems Approach and First Line of Defense adopted at 5 target sites for effective community-based conservation and anti-poaching interventions

Activities:

- 3.1.3.1 Conduct detailed socioeconomic, gender, and livelihood assessments (with gender disaggregated indicators), to guide monitoring and evaluation, gender mainstreaming, and identification of suitable alternate livelihoods options
- 3.1.3.2 Organize and mobilize local communities, at the 5 project sites, into formal community conservation organizations (CCOs), for wildlife conservation and anti-poaching interventions under the Safe Systems Approach (SSA) and First Line of Defense (FLoD)
- 3.1.3.3 Develop and implement site specific, integrated conservation and livelihood development plans (under ZPF) and First Line of Defense (FLoD) to help combat wildlife poaching and trade
- 3.1.3.4 Promote partnerships between local communities, private sector, and government entities for the development of business enterprises of various scales, particularly nature based tourism enterprises at project sites

Component 4: Improve awareness, knowledge management, and monitoring mechanisms to curb poaching and illegal wildlife trade

Like all other illegal trades and businesses, illegal wildlife trade is also demand drive, changing consumer and poacher behavior through persuasion to compel them for making informed choices while buying wildlife-based products. During the inception phase of the project IUCN Pakistan and WWF-Pakistan will develop a detailed communication strategy wherein awareness raising at all levels to stop poaching and illegal wildlife trade will be detailed. The Project focuses on developing targeted awareness campaigns in collaboration with national and private print and electronic media to raise awareness among masses about wildlife crime, discouraging people buying live wild animals and plants, their body parts and products made of their derivatives. Mechanisms would be developed for citizens to feel encouraged to report events of illegal wildlife trade and poaching using wildlife crime reporting helpline services and mobile phone apps

to relevant law enforcement agencies, and help curb wildlife trafficking in Pakistan. Further local NGOs/CSOs will be engaged to conduct awareness programmes in schools, mosques and community centres.

Outcome 4: Improved awareness and reduced demand for illegal wildlife and wildlife products

Outcome 4.1: Demand for illegal wildlife and wildlife products reduced

Output 4.1.1 Public awareness on illegal wildlife products and citizen-based wildlife crime and trade reporting improved

Activities:

4.1.1.1 Develop and implement a Communications and Awareness Strategy for mass awareness and education about poaching and illegal trade of wildlife

4.1.1.2 Undertake national and international communications and advocacy campaigns for different target groups about wildlife species, conservation values and legal aspects of their protection

4.1.1.3 Promote citizen based wildlife crime reporting through the 24-hour wildlife crime reporting helpline and online services established at SMART nodes

Outcome 4.2: International coordination and cooperation enhanced among key stakeholders to tackle wildlife crime at regional level

Output 4.2.1 Transboundary, regional, and international cooperation and coordination improved to tackle wildlife crime

Activities:

4.2.1.1 Develop linkages and partnerships with regional and international IWT forums for effective vigilance and compliance in the region.

4.2.1.2 Coordinate with international wildlife crime platforms, such as TRAFFIC, SAWEN, and Interpol Wildlife Crime Unit, as well social media and internet platforms that are exploited by illegal traders, such as Google and Facebook, for combating wildlife trafficking from Pakistan.

4.2.1.3 Ensure regular coordination and knowledge sharing (through NWCTMB meetings, IWT e-database, and visits) with GEF committees and platforms in the region.

Output 4.2.2 International cooperation informed by exchange of standardized data, lessons learnt, and monitoring reports

Activities:

4.2.2.1 Implement detailed Monitoring & Evaluation Plan, with regular M&E visits, and M&E reports shared with project partners, all key stakeholders and GWP peers

4.2.2.2 Improve coordination among countries, donors, and other key stakeholders engaged in the implementation of the Global Wildlife Programme (GWP)

4.2.2.3 Ensure participation of Government of Pakistan and CSO representatives in GWP coordination and program monitoring meetings

Outcome 4.3: Holistic, long-term planning in place for wildlife and habitat protection in Pakistan

Output 4.3.1 Project sustainability ensured through a comprehensive exit strategy

Activities:

- 4.3.1.1 Conduct end line surveys at project sites (against the same indicators and sample as baselines) to assess the change in scale and scope of illegal wildlife trade, in terms of species in demand, drivers, and supply chains
- 4.3.1.2 Organize stakeholders' consultation workshop to develop exit strategy for project sustainability
- 4.3.1.3 Facilitate development of PC-Is for scaling up and out scaling of high impact project interventions by federal and provincial wildlife departments
- 4.3.1.4 Build capacity of the custodian departments for sustainability of project interventions
- 4.3.1.5 Organize results and knowledge sharing and dissemination workshops at federal and provincial levels, to share project impacts with partners and stakeholders and handover management of the project sites to the relevant provincial departments under the supervision of the NWCTMN.

Sustainability and Exit Strategy:

WWF-Pakistan and IUCN work in collaboration with key stakeholders, particularly communities and governments, to make initiatives sustainable and effective. Project planning, implementation, monitoring, and post-project handovers, employ a participatory approach with need-based interventions, particularly for social development and integrated natural resource management and conservation.

Monitoring mechanisms, improved capacity, SMART interventions, multi-stakeholder coordination, community-led conservation, and databases established under this project will be mainstreamed by the Government partners to sustain and support IWT reduction initiatives for freshwater turtles, Indian pangolins, and other traded species, and associated freshwater biodiversity (e.g. Indus Dolphins). The project will also aid adoption of sustainable fishing practices, which reduce negative pressures on freshwater biodiversity.

The project's Exit Phase shall ensure relevant capacities building (with refreshers and replication of trainings) within government departments, CBOs, and other stakeholders, to sustain and scale-up IWT reduction for other sites and other species. Incentive and reward schemes will be sustained through funds set-up under the Government, with oversight by non-government stakeholders. Livelihood diversification interventions will be sustained through relevant trainings, marketing and micro-finance linkages, and women-led savings committees (Section 19). WWF's global Wildlife Practice teams (specifically the zero-poaching team), IUCN's regional and global, will support knowledge sharing and replication, especially within destination countries in the Asian region.

1a.4) Alignment with GEF Focal Area and Impact Program Strategies

The proposed project is directly aligned with the 'Biodiversity' Focal Area of GEF. It is in line with all components of the Global Wildlife Program (GWP), under Objective 1 of the Biodiversity Focal Area, i.e. "Mainstream biodiversity across sectors as well as landscapes and seascapes". Under its first component, aligned with GWP's components 3 and 5, the project will improve multi-stakeholder coordination by establishing and building the capacity of a National Wildlife Crime and Trade Monitoring Network (NWCTMN) and strengthening wildlife and trade related law, the role of the judiciary, and ensuring effective implementation of a national plan of action to combat poaching and IWT. The project's second component aligns with GWP's component 3; it will focus on building capacity of key stakeholders, including staff of the provincial governments' forest and wildlife departments, Pakistan Customs, Border Security, and other Law Enforcement Agencies. Under its component 3, aligned with various outcomes under GWP's components 1, 2 and 3, the project will conduct comprehensive baseline studies at 5 priority sites for developing site-specific Zero-Poaching Frameworks (ZPFs) that integrate assessments, community engagement, technology, prosecution, cooperation and capacity enhancement. Plans and strategies for community-based anti-poaching and conservation mechanisms, human-wildlife conflict management, alternate and sustainable livelihoods, site and species specific management based on acquired SMART data

will also be rolled out at the 5 target sites. The project's component 4, aligned with GWP's components 4 and 5, involves executing a multi-pronged awareness and communications strategy to not only enhance public awareness, but also engage them in citizen-based wildlife crime reporting, and to reduce demand for illegal wildlife products. The other main outcomes under this component include enhancing national, regional, and international coordination and cooperation, exchange of standardized data, lessons, and monitoring reports through knowledge sharing and exchange platforms in the region and with other GWP countries. It will contribute to the GWP by addressing the 'demand side in Asian Countries as well as greatly enhancing the regional coordination efforts required to bring all the relevant stakeholders to the table for the best overall impact.' Wildlife derivatives have a huge market in Asia, particularly for endangered wildlife species, for instance, the Snow leopards, which are classified as vulnerable and the pangolins, classified as endangered in the IUCN's Red List. To curb the illegal wildlife trade, the project will build the capacity of environmental law enforcement agencies and the judiciary to reduce poaching inside and outside of the protected area system and improving border enforcement (including airports and seaports) through cross-sectoral collaboration. It will also aim to increase cooperation within and between law enforcement agencies and relevant international organizations and to mobilize political support for environmental law enforcement. Efforts will also be made to reduce consumer demand for illegally traded wildlife by raising awareness of the scale and impacts of illegal wildlife trade on biodiversity and the environment, livelihoods, and human health, its links to organized crime, and the availability of sustainable alternatives. The poaching and illegal trade of these species by organized poacher networks has contributed to their dwindling numbers which has had a major effect on the ecosystem.

Other proposed interventions will also contribute indirectly to various priorities for GEF. Awareness campaigns would help in educating the local people about illegal wildlife trade and how they can play a role in identifying and reporting of any such instances, while trying to make them responsible stewards of wildlife in their respective communities. The local community will also get to know about the importance of biodiversity conservation and how a natural habitat is key for attracting more tourists, which will help strengthen the local economy. This will also ensure the 'Improvement of wildlife based economy' as one of GEF's objectives in this project. Through awareness, consumer demand for illegally traded wildlife goods and products will also eventually diminish.

The project will also tackle Objective 2 of GEF's Biodiversity Focal Area, which is: 'addressing direct drivers to protect habitats and species', and it will be achieved through effective and improved management of protected areas. Improving the management of habitats, especially when it comes to endangered species such as Snow leopards and pangolins, takes on paramount importance as it is only through providing these species with their natural habitats that we can begin to strive for their protection.

Under Objective 2, this project meets the entry point 'Improving Financial Sustainability, Effective Management, and Ecosystem Coverage of the Global Protected Area Estate.' It covers all three elements of a sustainable protected area system, which are: 1) effective protection of ecologically viable and climate-resilient representative samples of the country's ecosystems and adequate coverage of threatened species at a sufficient scale to ensure their long term persistence; 2) sufficient and predictable financial resources available, including external funding, to support protected area management costs; and 3) sustained individual and institutional capacity to manage protected areas such that they achieve their conservation objectives. This project aims to promote the participation and capacity building of indigenous peoples and local communities, especially women, in the design, implementation, and management of protected area projects through established frameworks, hence ensuring the sustainability of the protected areas.

Improving policies and decision making would build the capacity of the concerned institutions, which would lead to much faster identification and control of illegal wildlife poaching and trade. All future policies would be made keeping in mind the best interests of the surrounding biodiversity, wildlife and their habitats, hence aligning the project with GEF's target of 'improve biodiversity policy, planning and review'

under this objective. A National Wildlife Crime and Trade Monitoring Network (NWCTMN) will be established under the supervision of MoCC to keep up to speed regarding the sites, species and organized crime syndicates involved in IWT, while a Zero-Poaching Framework would be finalized and implemented after receiving endorsements by provincial governments

The proposed project is also aligning itself with GEF's 'Sustainable Cities Impact Program.' This will be done by promoting integration of biodiversity conservation priorities into urban planning, specifically to safeguard globally significant biodiversity and associated ecosystem services affected by urbanization.

The project also contributes to the following Aichi Biodiversity Targets:

Target 1: By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.

Target 3: By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions;

Target 11: The project's interventions will help to improve the management of the targeted protected areas. In total, it will improve the management of 1,302,369 ha of protected areas by the end of the project.

Target 12: By 2020, the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained;

Target 16: By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation;

Target 19: By 2020, knowledge, the science base and technologies relating to biodiversity, its values functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.

1a.5) Incremental Cost Reasoning, Expected Baseline Contribution;

Illegal wildlife trade networks have roots deeply embedded in many third world countries. In a country such as Pakistan with weak law enforcement and inadequate monitoring systems, wildlife is largely ignored when it comes to its protection and safety. The losses caused by IWT in Pakistan are not just limited to the ecosystem sphere, but also eat into the national economy and are a cause of security concerns.

Pakistan is home to an array of rare and unique wildlife species which are poached and traded illegally by a network of poachers, which threatens the rich biodiversity of Pakistan. The trading of apex predators such as sharks and Snow leopards is of particular concern as the entire ecosystem ladder gets disrupted due to which the breeding of smaller animals which these predators prey on is not controlled. The link between biodiversity, environment and the dependent human population is of significant importance. Similarly, the illegal trade of Freshwater turtles, which is on the rise, causes a great amount of degradation to the ecosystem and contributes to the growth of economically non-viable freshwater fish species. Aside from sea creatures and water mammals, terrestrial mammals are also at risk of poaching and illegal trade, particularly the Indian Pangolins, which are listed in IUCN's Red List as one of the threatened species, and whose scales are used for a myriad of purposes.

Economic losses that are incurred due to IWT are difficult to quantify but have real consequences. Tourism plays a large part in any country's economy and in Pakistan, zoos and national parks once used to be visited frequently. Lack of a variety of wildlife species has contributed to dwindling tourist numbers, which were accompanied with low staff wages and staff cuts. The Loi Bher Wildlife Park used to be one of the most attractive tourist destinations in the twin cities of Islamabad and Rawalpindi but lately, tourist numbers have decreased from 6000 500 people per month. Similar cases of inadequate management in a number of zoos and national parks can be found across Pakistan.

Increased incidents of illegal trade over the years depict weak security, law enforcement and monitoring systems, which this project aims to change. Under the project, the on-field wildlife staff will be properly trained and equipped with resources to encounter field challenges. This will not only help in significantly reducing injuries and casualties of rangers but will also create increased sense of security where locals will feel safe in reporting incidents of poaching and trafficking of wild species.

If the proposed GEF financed activities are conducted, the project will improve on the current baseline. Without further funding, the efforts which are already underway to tackle the core issue of IWT would be left stranded. The funds acquired through GEF would go towards reducing poaching and IWT by strengthening the regulatory framework and inter agency coordination, ensuring the rescue and rehabilitation of captured wildlife species, confiscation of their parts and products, building capacity of relevant institutions to tackle IWT, and mass awareness campaigns to educate people regarding wildlife poaching.

Please see “alternative scenario” section (1a.3) for further details.

1a.6) Global Environmental Benefits

Illegal wildlife trade has potential to seriously disrupt ecosystems; however, the proposed project will help in maintaining and improving the biodiversity of several ecosystems. The project will be able to halt the decline of population of various selected species, some of which are listed as “endangered” in Pakistan by Conservation Assessment and Management Plan (CAMP). This would stabilize the population and prevent the extinction of known threatened species, which are illegally poached and traded exponentially. Controlling illegal wildlife trade would also help in increasing the numbers of targeted species in the long-run and ensuring environmental sustainability.

The zero-poaching framework along with the rehabilitation and release of different species belonging to various ecosystems will allow this project to not only indirectly contribute towards the restoration of one particular ecosystem but several different ones. This will therefore improve the livelihood of those vulnerable communities that are dependent on natural resources such as forest, rangeland, and fishing as their main source of food and income.

The capacity building and training of local communities is important to address the dangers posed by poaching and illegal wildlife trade in the proposed sites. This will not only benefit biodiversity but also support local economies as the poor community members will be trained for not addressing wildlife trade but also on establishing business enterprises as alternative livelihood options.

The project will also increase the capacity of environmental law enforcement agencies by training officials on SMART based patrolling and monitoring programmes, which would help in effectively managing and reducing poaching inside protected areas. Implementing SMART will play a critical role in stabilizing the diminishing wildlife of Pakistan. SMART will also help in collecting data and support maintenance of the illegal wildlife trade database in an effective and efficient manner. Furthermore, an interactive GIS-based

database will be developed and maintained by the National Wildlife Crime and Trade Monitoring Network (NWCTMN), under MoCC, for nationwide IWT related information gathering, intelligence sharing, monitoring, reporting and control. The data and information gathered will be accessible to relevant stakeholders to help combat IWT.

1a.7) Innovation, Sustainability and Potential for Scaling Up

The major innovative aspects under the proposed GEF project are the establishment of National Wildlife Crime and Trade Monitoring Network (NWCMN) and the development of Zero Poaching Framework (ZPF). The ZPF approach employs a six pillar approach which integrates:

- 1) Assessments;
- 2) Community engagement;
- 3) Technology;
- 4) Prosecution;
- 5) Cooperation; and
- 6) Capacity enhancement.

For example, under pillar 3 (Technology, cross cutting with pillar 4, 5 and 6), the Spatial Monitoring and Reporting Tool (SMART) approach will be implemented to control poaching and wildlife trafficking. This will also help in accessing a standardized wildlife population and seizure data. The SMART approach is already one of the most successful approaches to combat illegal wildlife trafficking and curtailing poaching of wildlife species in the world, especially considered instrumental for Tigers, Elephants, Rhinos etc.

The design of the project also incorporates a number of innovative knowledge and data management features, as well as information sharing mechanisms, like establishment of an interactive GIS-based e-database, maintained by the MoCC and the provincial wildlife departments, for nationwide illegal wildlife trade related information gathering, intelligence sharing, monitoring, and reporting, from wildlife departments and relevant law enforcement agencies. The project also plans to strengthen community engagement for sustainable development by implementing approaches such as WWF's Safe System Approach, pillar 2 of the Zero Poaching Framework that focuses on community engagement, and IUCN's First Line of Defence (FLoD) for human-wildlife conflict management. The above essential enforcement and community engagement activities are combined with, incentives and alternative livelihood interventions for local communities at the priority sites.

Strengthening governance and law enforcement is necessary for an effective response to poaching and trafficking a, thus NWCTMN will be instrumental in devising the national strategies and this platform will facilitate coordination between various arms of authority needed for effective country-level responses and coordination systems: police, customs, intelligence services, judicial systems, and the military. The executing organizations, under the exit strategy output of the project have to support the government in developing PC-Is to ensure that NWCTMN sustains its functions beyond the project period. Indicative activities under Output 1.1.1 include:

Develop proposal for a National Wildlife Crime and Trade Monitoring Network, facilitate its establishment and develop national multi-agency strategy for tackling IWT, with phases as follows:

- o Preparation of proposals - meetings, drafting agreement and SOP (including development of interagency agreements for information sharing);
- o Facilitate the establishment of a NWCTMN;
- o NWCTMN develops a national (multi-agency) strategy for tackling IWT; and
- o Capacity building (including workshops on data collection, management and data sharing, procedures).

WWF-Pakistan and IUCN Pakistan will follow a participatory approach towards project planning, implementation and monitoring. Involvement of key stakeholders throughout the various phases of a project ensures efficacy and sustainability of project interventions during and beyond the project duration. In addition, most interventions and plans are developed in using community-based approaches, to ensure ownership, higher levels of community involvement and uptake of interventions. This participatory approach also helps with post-project handovers, and ensuring interventions are demand-driven, particularly for social development and integrated natural resource management and conservation.

Strong focus on capacity building and awareness raising components within projects also ensure that target beneficiaries and stakeholders develop essential skills, awareness, and exposure to independently sustain, replicate and scale up successful interventions, and create positive impact of the project. WWF-Pakistan and IUCN Pakistan work on strengthening local level institutions and government line departments (at different levels) and provide policy recommendations and review government strategies, which also guarantees effective outcomes and sustainability of interventions.

Under this project, WWF-Pakistan and IUCN Pakistan, plan to adhere to ‘best practices’ for project implementation and drawing upon lessons learnt from past experiences. The proposed interventions include innovative approaches to tackle the issue of poaching and illegal trade of wildlife and in increasing efforts for the rescue and release of wildlife back into natural habitats. Both WWF-Pakistan and IUCN Pakistan always aims to integrate vulnerable local communities into the projects; here this has been done through capacity building. This not only financially benefits the marginalized individuals and their local economies but also builds a framework that allows for the projects sustainability.

Monitoring mechanisms, improved capacity, SMART interventions, multi-stakeholder coordination, community-led conservation, and databases established under this project will be mainstreamed by the Government partners to sustain and support IWT reduction initiatives for freshwater turtles, Indian pangolins, and other traded species, and associated freshwater biodiversity (e.g. Indus Dolphins). The project will also aid adoption of sustainable fishing practices, which reduce negative pressures on freshwater biodiversity.

The project’s exit strategy shall ensure relevant capacities building (with refreshers and replication of trainings) within government departments, CBOs, and other stakeholders, to sustain and scale-up IWT reduction for other sites and other species. Incentive and reward schemes will be sustained through funds set-up under the Government, with oversight by non-government stakeholders. Livelihood diversification interventions will be sustained through relevant trainings, marketing and micro-finance linkages, and women-led savings committees. WWF’s global Wildlife Practice and other teams, and IUCN’s relevant Specialist Groups, especially in destination countries in the Asian region, will support knowledge sharing and replication.

To ensure financial sustainability almost all activities have been planned to be implemented through the relevant government departments, especially for the functionality of NWCTMN, the outcomes are planned in such a way that they are mainstreamed into the regular operations and budgets of these government agencies (MoCC, provincial Parks and Wildlife Departments) after the ceasing of GEF funding. Further these institutions and authorities will be empowered and better equipped under component 2 & 3 of the project to exercise their mandates, without requiring further external resources. The project will also test cost-recovery mechanisms from illegal trade seizures using money laundering legislation and from legal trade through fiscal regulations to ensure trade is taxed at a level commensurate with the cost of regulating it. The proposed approaches have been discussed on various occasions by the relevant agencies but have never been piloted in the region with special focus on IWT.

Further the project has been designed to ensure that the major costs involved in setting up new systems/approaches (ZPF, FLoD) and technologies (SMART, GIS based database etc) will be covered during the project period. In addition, almost all project activities including improvement of policies, laws and regulations, capacity building activities, demonstration activities at the selected sites including site management and monitoring plans, enhanced law enforcement and monitoring, biodiversity monitoring systems related activities, community participation and development programmes, and education and awareness programmes are planned to be completed within the project period.

For institutional sustainability, it is intended that capacity development through training of trainers (ToTs) and other capacity building activities under component 2 will contribute towards enhanced national training systems for agencies engaged in combating wildlife crime, in order to enhance professionalism and the uptake of progressive techniques in line with rapidly advancing global responses across national and international trading routes.

Key initiatives with elements of innovativeness, sustainability, and scale-up potential are:

- The development of innovative yet sustainable site-specific zero-poaching frameworks, with endorsement and linkages to stakeholders and provincial/territorial governments.
- Spatial Monitoring and Reporting Tool (SMART) used to conduct feasibility studies and the development of customised SMART packages for each selected sites, along with fully equipped and trained field staff for data collection, monitoring and reporting. Furthermore, in order to increase potential, not only will a functional network of national and provincial/territorial SMART nodes be set-up within the relevant government bodies but knowledge and experience sharing visits to successful SMART sites for partners and relevant stakeholder will also be organized.
- Strengthen community engagement for sustainable development through using approaches such as Safe System Approach and First Line of Defence (FLoD) by mobilizing the local communities towards conservation and anti-poaching work, through awareness, information strategies and developing sustainable livelihoods.
- GIS-based database developed and maintained (in MoCC) for nationwide IWT related information gathering, intelligence sharing, monitoring, reporting and control. Moreover, establishing wildlife crime reporting units at international and domestic ports of entry and exit in Pakistan to enhance vigilance over wildlife smugglers.
- The establishment of three state-of-the-art wildlife rescue and rehabilitation facilities at most appropriate locations nationwide.
- Conducting specialised trainings and facilitating at least 500 staffs of the federal and provincial wildlife departments and relevant law enforcement agencies to combat IWT.

5. South Africa Concept Note Summary

Project Title:	<i>Reducing Human Wildlife Conflict through an Evidence-based and Integrated Approach in Southern Africa</i>
Country(ies):	South Africa
GEF Agency(ies):	UNEP
Total Project Cost (GEF grant)	\$ 3,427,982
Estimated cofinancing	\$ 22,928,000

Project Description

Project Description. Briefly describe (limit description to each of the seven description items to 5-7 lines per item): 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description); 2) the baseline scenario and any associated baseline projects, 3) the proposed alternative scenario with a brief description of expected outcomes and components of the project; 4) alignment with GEF focal area and/or Impact Program strategies; 5) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing; 6) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and 7) innovation, sustainability and potential for scaling up.

1) The global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)

Sub-Saharan Africa is a rapidly developing region of great ecological, climatic and cultural diversity. By 2050, its population is projected to approach 2 billion people – a figure which rises to nearly 4 billion by 2100. National poverty rates have been declining in most Sub-Saharan African countries, although Sub-Saharan Africa still has the largest proportion of people living below the poverty line. The agriculture sector employs 65% of Africa's labour force and the sector's output has increased since 2000, mainly due to an expansion of agricultural area. The production of crops and livestock other than pigs in Sub-Saharan Africa is typically located in semiarid regions.

Human-wildlife conflict takes place when the boundaries of human activity and wildlife ranges overlap. As humans destroy wildlife habitats or block wildlife movement routes and corridors, wildlife and humans come face to face. In SADC human-elephant conflict is particularly pronounced. Such conflicts are now common in almost all elephant ranges causing injuries and deaths on both sides and destruction of crops and infrastructure. Further, arguably the single biggest wildlife conservation challenge faced within the KAZA TFCA is the severe imbalance in elephant numbers between key elephant habitats. The region hosts over 200,000 elephants, but they are grossly distorted distributions between countries, at present. Over half of the contiguous population of elephants is in northern Botswana, while large areas of potential habitat in Angola and Zambia are mostly empty. In the KAZA, there are at least four aspects of the HWC, namely: (1) space conflict; (2) crop raiding; (3) death of humans; and (4) predation of livestock. In addition, conflict also occurs when there is general destruction of property by wild animals. Many rural people in the region live in close proximity to wildlife, even one incident of property, crop or livestock loss can impose severe economic and livelihood hardship on individuals and families. It can also produce psychological and social costs that are unquantifiable or uncompensated. In retaliation, humans shoot, poison, capture, injure or kill the animals. HWC impacts species conservation, jeopardizes human livelihood and safety, and requires increased resources to mitigate.

The general drivers of HWC in SADC region are increased settlement in wildlife range, habitat loss, degradation and fragmentation; land use transformation; increasing wildlife populations as a result of conservation programmes and climatic factors.

The long-term solution to addressing HWC for elephants in the SADC region is to provide sufficiently connected habitat for wildlife movement and deter wildlife from having a negative impact on livelihoods of local people. Three major barriers are preventing the accomplishment of this long-term solution namely (1) insufficient coordination across SADC countries in managing elephants; (2) lack of evidence of a widespread successful approach of HWC mitigation; and (3) improved land use planning so that uses are compatible with wildlife and provide net benefits to people who coexists with wildlife.

2) The baseline scenario and any associated baseline projects

Human-wildlife conflict is a politically charged subject, and as a result it is often managed in a piecemeal fashion, with more focus on mitigating the problem than addressing its root causes. While addressing the issue is enshrined in many plans and policies, including, for instance, the African Elephant Action Plan (developed and endorsed by all African elephant range States) and the Kruger National Park Management Plan, current approaches to mitigation vary in effectiveness and do not scale well. Addressing the root causes in a holistic way requires cross-sectoral and integrated policy approaches that are adapted to local contexts.

South Africa currently has a draft policy on “National Norms and Standards for the Management of Elephants in South Africa” that will be tabled for approval during the project period. The Ministry of Environment, Forestry and Fisheries will invest US\$ 200,000 in the consultation and approval process during the project period. Further, SANParks is implementing the Elephant Management Plan for Kruger National Park (2013 – 2022) with an annual budget of \$200,000. The plan will also be reviewed and it is envisaged that a similar amount will be invested during the remaining period of the proposed project. A large percentage of funds towards the management of elephants is and will be spent on managing human-elephant conflict.

Through SADC, Southern Africa has pioneered the development of Transfrontier Conservation Areas (TFCAs), which include the KAZA TFCA (Angola, Botswana, Namibia, Zambia, Zimbabwe) – the world’s largest TFCA, which is home to the world’s largest elephant population. Other priority TFCAs hosting key elephant populations are the Mapungubwe TFCA (South Africa, Botswana, Zimbabwe) and the Great Limpopo TFCA (South Africa, Mozambique, Zimbabwe). Full operationalization of TFCAs remain a challenge due to resource and capacity limitations, lack of harmonized transboundary approaches, and insufficient land and resource use planning that adequately incorporates wildlife. For instance, the KAZA TFCA has developed an overall integrated development plan, and each of the partner States has also created its master plan for their national components, but implementation is lacking and policy and management differences are likely to continue to hinder the effective management of the TFCA. Significant ongoing and upcoming interventions in the KAZA area include German Funding (KfW) funding for the KAZA Secretariat, USAID programs to combat wildlife crime (approximately 20 million USD), and newly approved Dutch Postcode Lottery Grant of €16.9 million to African Parks Network, Peace Parks Foundation and WWF. Through UNEP, the European Union is investing in the landscape to develop integrated policies to improve outcomes for both wildlife and local communities in the Hwange Kazuma Chobe Wildlife Dispersal Area of KAZA (straddling the borders of Botswana and Zimbabwe).

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

Component 1: Strengthening the Management of Elephants in South Africa:

The project will support the Department of Environmental Affairs in further consultations and possible improvements of the draft policy “National Norms and Standards for the Management of Elephants in South Africa” for possible endorsement by Government. In addition, the content of the policy will be unpacked through the development of specific guidelines on the management of wild elephants, escaped and roaming elephants and human-elephant conflict to sensitize both management and affected parties. South Africa has a rich experience in the managing of elephant populations which can be of valuable assistance to other countries in the SADC region as they struggle with similar challenges. In order to assist in knowledge sharing, relevant lessons learnt synthesis will be compiled and shared in a technical meeting.

Component 2: Reduced Human Wildlife Conflict (HWC) in South Africa

Human wildlife conflict will be reduced through policy, technical, capacity building and learning mechanisms in priority elephant areas. This component aims to develop a systemic understanding of the human-wildlife interface and, through appropriate interventions, holistically manage and reduce the impacts emanating from negative human wildlife interactions. Emphasis will be placed on human-elephant conflict. The project will develop evidence-based, integrated models to address the root causes of the problem and develop appropriate interventions. Innovative HWC mitigation strategies will be tested and deployed through expanded extension programmes in partnership with relevant Departments, such as Department of Agriculture, Land Reform and Rural Development and Department of Cooperative Governance and Traditional Affairs, as well as local governance and community structures. These evidence-based approaches would include the development of standardized protocols for collecting and analyzing HWC data to better understand spatial and temporal patterns of HWC incidence, mechanisms for disseminating best practices and lessons learned, and capacity building. Public- private partnerships with local communities to reduce HWC will be expanded in light of elephant dispersal ranges well beyond formal protected areas.

Component 3: Harmonized and coordinated management of elephants and HWC in SADC region.

This component aims to build on the experiences of South Africa and other SADC member States to improve collaboration for enhanced elephant management in the region. Activities will promote wide adoption of scientific and adaptive management norms and standards for the management of elephants and human development in TFCAs. The project will also engage different sectors (e.g. agriculture, water, tourism, planning and development) in transboundary areas of key strategic importance, to develop and adopt integrated policies that address HWC and ensure the resilience of the landscape for both elephant and human populations. Best practices and lessons learned through these processes will be disseminated through appropriate forums, communities of practice and clearing house mechanisms.

4) Alignment with GEF focal area and/or Impact Program strategies

The project is aligned with the GEF7 Biodiversity Strategy in particular with objective one of the strategy namely “Mainstream biodiversity across sectors as well as landscapes and seascapes. The GEF defines biodiversity mainstreaming as: “the process of embedding biodiversity considerations into policies, strategies, and practices of key public and private actors that impact or rely on biodiversity, so that it is conserved and sustainably used both locally and globally.” One of the nine entry points for countries to mainstream biodiversity across sectors and within production landscapes and seascapes is the ‘Global Wildlife Program’. Component 2 ‘Wildlife for Sustainable Development’ of the Global Wildlife Program will examine ways of turning the current and future increases in wildlife numbers and wildlife-based land uses into a contributor to sustainable development. The project is aligned with this component as it deals with an important aspect of wildlife management namely mitigating the effects of human-wildlife conflict within the framework of Community Based Natural Resource Management (CBNRM).

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

The project will build on a solid baseline of conservation at a trans-frontier level in the SADC level and deal with one of an issue that is current and in future will become more prominent as human and wildlife populations grow in these areas. The project will increase the prominence of mitigating human-wildlife conflict in the management of TFCAs and ensure its integration in planning and management of these important areas. Without the project, human-wildlife conflict will continue to be an issue discussed but will not necessary lead to a wide adoption of scientific and adaptive management norms and standards for the management of elephants and human development in TFCAs.

6) Global environmental benefits (GEFTF) and/or adaptation benefits (LDCE/SCCF)

The two wildlife species causing most of the human-wildlife conflict in the SADC region are African elephants (*Loxodonta africana*) and Lions (*Panthera leo*). Both these species are listed as Vulnerable by the IUCN Red List. By mitigating the conflict between humans and these species, the continual survival of the species will be enhanced. Further, the TFCAs of the SADC region include many Key Biodiversity Areas (such as Kafue National Park, Sioma Ngwezi National Park, Chobe National Park, the Okavango Delta, Hwange National Park, Kruger National Park, etc.). It is estimated that the project will address human-wildlife conflict in areas outside of protected areas covering an estimated area of 200,000 ha and roughly 10,000 people will direct benefit from the project interventions. More precise estimate will be provided during the PPG on these figures.

7) Innovation, sustainability and potential for scaling up

Innovation: The project will specifically look at innovative solutions to the reducing human-wildlife conflict in Component 2. These HWC mitigation strategies will be tested and deployed through expanded extension programmes in partnership with relevant Departments, as well as local governance and community structures. This includes public- private partnerships with local communities. Further, the systems approach proposed under Component 3 looking at the human-wildlife conflict issue through sector 'lenses' is novel.

Sustainability: The project builds on a strong baseline with strong financial investment in the topic as well as in the geographic focus of the project. The institutions involved in the project have strong capacity to deliver. The objective of the project speaks to ensuring sustainability, as local stakeholders need to support wildlife conservation, therefore important issue to address.

Potential for scaling up: In South Africa, the project will be scaled through the endorsement of the policy on elephant management and testing of innovative HWC mitigation options. Lessons learnt from the South African experience will inform challenges experienced in other SADC countries and beyond. Similarly, best practices and lessons learned through the engagements under Component 3 in TFCAs in the SADC region will be disseminated through appropriate forums, communities of practice and clearing house mechanisms.