United Nations Development Programme

Project Document

<table>
<tr><td colspan="3">Project title: Transformational Wildlife Conservation Management in China</td></tr>
<tr><td>Country(ies):
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Foreign Environmental Cooperation Center of the Ministry of Ecology and Environment (FECO)</td><td>Execution Modality:
National implementation</td></tr>
<tr><td colspan="3">Contributing Outcome:
United Nations Sustainable Development Cooperation Framework (2021-2025) Outcome 3: People in China and the region benefit from a healthier and more resilient environment.
UNDP Country Programme Document for China (2021-2025), Pillar 2 (A healthier planet and resilient environment), Output 2.1: Adaptive policies developed at target level (subnational), financed and applied for nature-based systems to align with multilateral agreements and transboundary platforms.
Aligned with UNDP Strategic Plan (2022-2025) Development setting/direction of change #3 "Building Resilience" and Signature Solution #4 (Environment) and contributing to IRRF Output 1.4.1: Solutions scaled up for sustainable management of natural resources, including sustainable commodities and green and inclusive value chains: Output 2.4.1: Gender-responsive legal and regulatory frameworks, policies and institutions strengthened, and solutions adopted, to address conservation, sustainable use and equitable benefit sharing of natural resources, in line with international conventions and national legislation.</td></tr>
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<tr><td colspan="3">The project aims to strengthen conservation and management of degraded biodiversity and threatened wildlife species in China through improved intersectoral coordination, biodiversity mainstreaming across key production sectors, enhanced engagement of local communities, and demonstration of innovative frontier technologies. Guided by strengthened intersectoral coordination mechanisms at the central level, policy measures will be developed and applied to incentivize biodiversity conservation and management, guidelines and monitoring protocols will be prepared for establishment and operationalization of ecological corridors for enhancing connectivity of fragmented habitats, and institutional and individual capacities will be built up through applying integrated approaches and implementing evaluation indicator systems.</td></tr>
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The enabling environment strengthened under Component 1 will be put into practice through development and implementation of cross-sectoral strategies and action plans covering two important landscapes in the country, addressing through on-the-ground demonstrations some of the primary drivers of biodiversity loss, including habitat loss and overexploitation. In cooperation with the Giant Panda National Park, conservation and management of the iconic giant panda (*Ailuropoda melanoleuca*) species will be enhanced through establishment of ecological corridors linking fragmented populations and restoration of degraded habitats. In the Yunnan demonstration area, an ecological corridor will be established, and habitat restoration carried out to strengthen conservation of the endangered black-and white snub-nosed monkey (*Rhinopithecus bieti*) and the critically endangered black crested gibbon (*Nomascus concolor*).

Management effectiveness of the protected areas in the demonstration areas will also be improved through deployment of frontier technologies, including artificial intelligence (AI) based processing of photographic images, 3-D visualization decision-support systems, design of a blockchain-technology based data management system, capacity building for applying environmental DNA (eDNA) sampling and analysis, etc. Facilitation of citizen science participation will help increase awareness among local communities and provide an expanded array of biodiversity information. The project will also support development of a university student competition to further encourage innovation in the biodiversity conservation sector.

FINANCING PLAN	
GEF Trust Fund grant	USD 5,786,073
(1) Total Budget administered by UNDP	**USD 5,786,073**
(2) Total confirmed co-financing to this project not administered by UNDP	**USD 51,158,000**
(3) Grand-Total Project Financing (1)+(2)	**USD 56,944,073**

SIGNATURES

Signature: **Mr. Zhang Bo** **Deputy Director General** **Center for Evaluation of the World Bank Loan Projects** **Ministry of Finance (MOF) of the People's Republic of China**	**Agreed by Government Development Coordination Authority** 	**Date/Month/Year:** 24/2/2023
Signature: **Mr. Zhang Yujun** **Director General** **Foreign Environmental Cooperation Center** **Ministry of Ecology and Environment (MEE) of the People's Republic of China**	**Agreed by Implementing Partner** Yujun Zhang	**Date/Month/Year:** 7/2/2023
Signature: **Mr. James George** **Deputy Resident Representative** **United Nations Development Programme China Country Office**	**Agreed by UNDP** 	**Date/Month/Year:** 1/3/2023

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Abbreviations and Acronyms:

ADB	Asian Development Bank
AWP	Annual work plan
BAU	Business as usual
BPPS-NCE-VF	Bureau for Policy and Programme Support, Nature, Climate and Energy, Vertical Fund team
CAS	Chinese Academy of Sciences
CASEarth	Big Earth Data Science Engineering Program of the CAS
CC	Climate change
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CNY	Chinese yuan
C-PAR	China's Protected Area Reform Program (GEF-6)
CPD	Country programme document (UNDP China)
CSR	Corporate social responsibility
CTA	Chief Technical Advisor
DD	Due diligence
eDNA	Environmental DNA
EIA	Environmental impact assessment
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and social management framework
ESMP	Environmental and social management plan
FAO	Food and Agriculture Organization of the United Nations
FECO	Foreign Environmental Cooperation Center of the Ministry of Ecology and Environment
FPIC	Free, Prior and Informed Consent
FSP	Full Sized Project
GHG	Greenhouse gas
GEF	Global Environment Facility
GEFSEC	Global Environment Facility Secretariat
GRM	Grievance Redress Mechanism
GWP	Global Wildlife Program
ha	Hectare
HACT	Harmonized Approach to Cash Transfers
HCS	High carbon stock
HCV	High conservation value
IP	Implementing Partner
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPP	Indigenous Peoples Plan (Ethnic Minorities Plan)
IPPF	Indigenous Peoples Planning Framework (Ethnic Minorities Planning Framework)
IUCN	International Union for Conservation of Nature
KAP	Knowledge, attitudes and practices
KBA	Key biodiversity area
KfW	*Kreditanstalt für Wiederaufbau KfW Bankengruppe*
KM	Knowledge management
M&E	Monitoring and evaluation
MARA	Ministry of Agriculture and Rural Affairs
MEE	Ministry of Ecology and Environment
MNR	Ministry of Natural Resources
MTR	Mid-term review
NBSAP	National biodiversity strategy and action plan
NFGA	National Forest and Grassland Administration
NGO	Non-governmental organization
NPD	National Project Director
NTFPs	Non-timber forest products

OECMs	Other effective area-based conservation measures
PA	Protected area
PIMS	Project information management system
PIR	Project Implementation Report (GEF)
PMO	Project management office
POPP	Programme and operations policies and procedures
PPG	Project preparation grant
PRC	People's Republic of China
RTA	Regional Technical Advisor
SDG	Sustainable development goal
SECU	Social and Environmental Compliance Unit
SES	Social and environmental standards (UNDP)
SESA	Strategic Environmental and Social Assessment
SESP	Social and environmental screening procedure (UNDP)
SOP	Standard operating procedure
STAP	Scientific Technical Advisory Panel (GEF)
TBD	To be determined
tCO2e	Tons of carbon dioxide equivalent
TE	Terminal evaluation
TOR	Terms of reference
UNCBD	Convention on Biological Diversity
UNDP	United Nations Development Programme
UNDP CO	United Nations Development Programme Country Office
UNDP CPD	UNDP Country Programme Document
UNEP	United Nations Environment Programme
UNEP-WCMC	UNEP World Conservation Monitoring Centre
UNSDCF	United Nations Sustainable Development Cooperation Framework (China)
USD	United States dollar
WWF	World Wide Fund for Nature

II. DEVELOPMENT CHALLENGE

1. A recent landmark report by the United Nations Convention on Biological Diversity (UNCBD), Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) and Food and Agriculture Organization (FAO) - reflecting the most comprehensive and authoritative assessment ever completed - paints a sobering picture for the future of biodiversity and the critical life-support systems they provide. The Earth's biological resources are vital to economic and social development, but human activities are stretching nature to its limits and are increasingly taking their toll on both the abundance and diversity of species, and our well-being in the process. According to the UNCBD, an estimated 1 million animal and plant species are now threatened with extinction, many within the coming decades, more than ever before in human history. Nowhere is this accelerated decline more pronounced than in the world's 17 Megadiverse countries. These countries account for only 10% of the Earth's surface yet house at least 70% of the planet's terrestrial biological diversity, including more than two thirds of all non-fish vertebrae species and three quarters of all the higher plant species.[1] In response the global community has adopted several global initiatives to address this, including the UN Decade on Ecosystem Restoration (2021–2030), and is working towards re-affirming ambitious targets associated with the Post-2020 Global Biodiversity Framework to realize the 2050 Vision of "Living in harmony with nature".

2. With a population closing in on 1.4 billion people, China is among the fastest-growing economies in the world. China has a total land area of 960 million ha and its capacity to conserve or consume natural resources is inextricably linked to its propensity to adopt both national and global conservation measures. The huge footprint China exacts on the environment is breath-taking, with impacts to biodiversity and their functions (both within and outside its borders) felt in all corners of the globe. As one of the 17 Megadiverse countries, China has among the highest biodiversity assemblages in the world with a wide range of geographic and biological features from mountain chains to deserts, to grasslands, to forests ranging from boreal to tropical evergreen and mangroves, as well as extensive marine areas including important coral reefs. China also has more than 35,000 known higher plant species, ranking third in the world and 7,300 vertebrate animal species, accounting for 13.7% of the world's total. More than 10,000 fungi species are known in China, making up 14% of the world's total.[2]

3. From a conservation perspective, China has made remarkable strides on adopting forward-thinking measures to protect key habitats and threatened wildlife. To supplement its steadily growing protected area network, China is ambitiously adopting a strategy of ecological redlines, a valuable example of an effective approach that has potential to be applied at scale globally, for improving nature conservation worldwide, to define limits to human encroachment into ecologically sensitive and vulnerable areas and enforce strict conservation to guarantee national ecological security, as well as to protect and improve the health and safety of the people. Administered by the Ministry of Natural Resources, the redline process is critical in maintaining its ecological security, ecosystem function, and sustainable socioeconomic development and about a quarter of land is scheduled to be covered by the redline by the end of 2020. It is and will continue to be an integral tool that can be deployed for a more integrated approach to development planning and a valuable entry point and policy lever for the proposed project. The Chinese government has also taken the comprehensive management of mountains, rivers, forests, farmlands, lakes and grasslands as the starting point to strengthen the protection of biodiversity and ecological restoration outside its protected area system. Especially in June 2020 when the National Development and Reform Commission and the Ministry of Natural Resources released "The master Plan for Major National Projects for the Conservation and Restoration of Major Ecosystems (2021-2035)"[3], putting forward "three areas and four bands", including the Yangtze key biome (including Sichuan-Yunnan ecological shelter zone) as the overall layout of major national projects for the protection and restoration of major ecosystems. Progress at the species level has also been met with some notable successes. In 2016 for example, the conservation status of the giant panda (*Ailuropoda melanoleuca*), an iconic species, was upgraded

[1] IPBES (2019): Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. E. S. Brondizio, J. Settele, S.

[2] China's National Biodiversity Conservation Strategy and Action Plan (2011-2030).

[3] Although only available in Chinese, this document has been uploaded as a reference on the Project Information Management System portal.

from endangered to vulnerable and has since seen strong population increases and is reported to be expanding their distribution ranges.

4. Despite China's tremendous resource endowments and conservation achievements, there are still contradictions between economic development and biodiversity conservation. The general trend of biodiversity decline has not yet been fully and effectively arrested and wildlife conservation has produced mixed results in some cases.[4] The numbers of large carnivores - essential for controlling prey and shaping the structure of ecosystems - have markedly decreased from protected areas in the giant panda distribution range since the 1960s: leopard (*Panthera pardus*, 81% decline), snow leopard (*Panthera uncia*, 38% decline), wolf (*Canis lupus*, 77% decline) and dhole (*Cuon alpinus*, 95% decline).

5. Globally, primate populations are also facing an imminent extinction crisis and are essential in a healthy forest ecosystem and landscapes; they are prey, predator, and a synergistic species in food webs and thereby influence ecosystem structure, function, and resilience. Primates are known connectors of habitats and most likely to adapt to modified environments. Different forms of land-use change pushes biodiversity into human-modified landscapes, where native habitats are surrounded by modified land covers. Recent research suggests that the ability of species to use these emerging changed landscapes remains poorly understood and that primates are good indicators and proxies of how species adapt, and the risks posed by widespread landscape change.[5] However, 60% of primate species are classified as vulnerable, endangered, or critically endangered, and 75% of them are under threat of population decline. With the second highest primate diversity in Asia, China has 28 species of primates in 7 genera and 4 subfamilies, including lorises, macaques, langur monkeys, snub-nosed monkeys, and gibbons. Of these, 36 percent are endemic to the country, with 6 species listed as critically endangered and 2 species of gibbons ecologically extinct. Primates are an important part of an ecosystem, and their absence can be indicative of degradation and reduced service functions. Yunnan Province is a biodiversity hotspot with half of China's biologically significant species located here. Of particular concern are the black-and-white snub-nosed monkey (*Rhinopithecus bieti*), one of the most prized protected species in China and the western Yunnan subspecies of the black crested gibbon *(Nomascus concolor*) which is limited to a small part of Guangxi, Hainan and Yunnan. The former is classified as endangered on the IUCN Red List and while China has been able to increase its numbers by 75% between 1994 and 2019, its distribution has shrunk due to habitat loss and fragmentation as a result of the persistence of human activities and hunting. Other key primate species present in the selected landscape include the Indochinese Gray Langur (*Trachypithecus crepusculus*) classified as endangered, and the Stump-tailed Macaque (*Macaca arctoides*) classified as vulnerable. Dali Prefecture, where one of the proposed demonstration sites will be located, has 9 species with national level-I protection and 43 with level-II designation. Deforestation is harming these species, and they risk losing its forest home and food sources to agricultural expansion altogether. Similarly, and also in Dali Prefecture (Yunlong County), the distribution of the black crested gibbon, listed as "Critically Endangered", has shrunk exponentially and is now only found in the northernmost perimeter of its range with an estimated 20 individuals across 2 to 3 populations left in the wild.

6. The practices of China's conservation efforts to date suggest that cross-sectoral coordination, policy changes, enhanced guidelines where gaps exist and technological innovations are needed to prevent the extinction of known threatened species under the guidance of ecological civilization and community of life in mountains, rivers, forests, fields, lakes and grasses, while ensuring greater inclusivity of, and benefits flowing, to local communities. As the presidency of the 15th Conference of the Parties (COP15) to the Convention on Biological Diversity, China has released its blueprint for action through a Position Paper entitled "*Building a Shared Future for All Life on Earth: China in Action"*. COP15 and China's COP presidency are both entry points for the prioritization of the problems articulated in this project and open up engagement opportunities with the private sector and academia in these efforts. China's blueprint on ecological civilization is also the anchor for the business case since many themes for the project have been gleaned from the above-noted position paper, and will support its priorities going forward. With this in mind, the Giant Panda National Park, pilot of which is expected to be completed this year also offers a unique opportunity through a range of flagship species to coordinate strategies and policies at a landscape scale on regional level and ensuring that habitat restoration

[4] X. Sun, L. Gao, H. Ren, Y. Ye, A. Li, M. Stafford-Smith, J.D. Connor, J. Wu, B.A. Bryan "*China's progress towards sustainable land development and ecological civilization."* Landscape Ecology 33 (2018), pp. 1647-1653.

[5] Galán-Acedo, C., Arroyo-Rodríguez, V., Andresen, E. et al. The conservation value of human-modified landscapes for the world's primates. Nat Commun 10, 152 (2019). https://doi.org/10.1038/s41467-018-08139-0

and corridor establishment are enhanced by technological innovations and underpinned by robust action plans to benefit primates and other threatened wildlife.

Demonstration areas:

7. **Primate habitats in the Dali Bai Autonomous Prefecture, Yunnan Province.** Yunnan is the province with the most abundant biodiversity in China. Northwest Yunnan and Xishuangbanna are listed as priority areas for biodiversity conservation in China even in world. Dali prefecture, located in northwest Yunnan, has about 3,000 species of higher plants of 182 families and 927 genera. Dali prefecture distribution there are 52 national protected animal species, including 9 level I species including black crested gibbon (*Nomascus concolor*), Indochinese Gray Langur (*Trachypithecus crepusculus*), Stump-tailed Macaque (*Macaca arctoides*), and black-and-white snub-nosed monkey (*Rhinopithecus bieti*), 43 level II species. There are 6 primate species in Yunlong County, Dali Prefecture, including the golden monkey and the gibbon. The Yunnan golden monkey is a unique rare and endangered species in China, listed as endangered species by IUCN, only distributed in Yunnan and Tibet. Yunlong is the most southern area for its distribution having 2 population groups, with fewer than 200 individuals totally. Mutual isolation, discontinuous population distribution, and habitat fragmentation are serious issues. Therefore, it is significant to carry out habitat restoration and corridor establishment for the flagship species as demonstration of typical important animal protection. The high variability in climatic and geographic conditions within Yunnan makes its biodiversity very fragile since habitats are consequently quite small and often endangered by growing human populations, habitat fragmentation, expanding of agricultural plantations and increasing pollution.

8. **Giant panda habitats in and near the Giant Panda National Park, Sichuan Province.** The giant panda is listed by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) as an Appendix 1 species with a ban on international commercial trade. According to the results of the fourth national panda survey, by the end of 2013, there are about 1,864 giant pandas left in the wild in the world, mainly in Sichuan, Shaanxi and Gansu provinces of China. According to the "Plan for the Establishment of Giant Panda National Park" approved by the State Council, there are 1,340 wild giant pandas in the Giant Panda National Park, accounting for 72% of the total number of wild giant pandas. The national Park's panda habitat covers 15,000 km^2, accounting for 58.48% of the country's total panda habitat area. Through giant panda protection programs such as the China Giant Panda Protection Program, 67 panda nature reserves with a total area of over 34,000 km^2 have been established in Sichuan, Shaanxi and Gansu provinces, effectively protecting 53.76% of giant panda habitats and 66.80%of wild giant panda populations.

9. In addition, 17 giant panda habitat corridors have been identified. Habitat protection and management stations have been set up in 49 counties with giant panda distribution, basically forming a network of giant panda nature reserves.

10. The area of Giant Panda National Park has exceptional value for biodiversity conservation and can demonstrate how ecosystem management systems can work across provincial protected areas. Giant pandas also serve as an iconic flagship species, bringing protection to a host of flora and fauna in the southwest and northwest China. Giant Panda National Park is intended to provide stronger protection for a high number of endemic species that are distributed across the park and significantly improve the ecosystem sustainability within its proposed boundaries, including at least 3,446 seed plant and 640 vertebrate species that are distributed over many different ecosystem types (*Source: Plan for Giant Panda National Park Establishment*). Habitat fragmentation and sub-optimal management regimes have resulted in 33 isolated panda populations (protected under national level-1 designation) and have prevented the panda's habitat from being managed as one contiguous area. Giant Panda National Park involves 13 local populations with 5 populations whose population is greater than 100 individuals, mainly distributed in the central Minshan Mountains, northern central Qionglai Mountains and central Qinling Mountains. Within this area there are 2 populations of 30 to 100 individuals each and 6 populations with less than 30 individuals. An analysis of population dynamics suggests that a panda population of less than 30 is at an increased risk of extinction, and therefore, the current scenario is neither sustainable nor reassuring. The Giant Panda National Park integrates 69 protected areas with different management levels and different protection categories. Previously, various protected areas within the giant panda range were financed differently through a mixture of funding sources from local, provincial, and central governments based on their location and classification. The GPNP will receive increased funding support from

the central government for implementation of major projects such as infrastructure development, corridor building, subsidies provision, and scientific research and monitoring.

Table 1: Demonstration areas

Area (ha)	Key habitats	Global biodiversity significance	Ecological stresses & threats	Governance	IUCN Category
Giant panda National Park					
2,197,800	Forest ecosystem PA. The area of giant panda habitat is 1.50 million hectares, accounting for 58.48% of the national giant panda habitat area.	The habitat of giant pandas covers an area of 1.50 million hectares, accounting for 58.48% of the country's total giant panda habitats. According to the establishment Plan of Giant Panda National Park, there are 640 species of vertebrates and 3,446 species of seed plants belonging to 1,007 genera and 197 families in the Giant Panda National Park. The Sichuan Giant Panda Sanctuary World Natural Heritage Site is one of the global biodiversity hotspots. It is also a key area of China's important ecological security barriers, located within the Loess Plateau-Sichuan-Dunnan area of the "two screens and three belts" of the national ecological security strategic pattern.	Giant panda habitat is fragmented into 13 local populations by natural terrain such as mountains and rivers, roads, etc.	In January 2017, the system pilot of the Giant Panda National Park was officially launched, and the acceptance was planned to complete in 2020. On Oct 12, 2021, the Giant Panda National Park was officially established. The Giant Panda National Park integrates 69 protected areas with different management levels and different protection categories (forests, wetlands, geology, scenic spots, etc.), and employs more than 3790 protection staff in total.	2: National Park: managed mainly for ecosystem protection and recreation
Yunnan Yunlong Tianchi National Nature Reserve					
14,475	Forest ecosystem PA. In the north subtropical monsoon climate region, black-and-white snub-nosed monkey, forest musk deer, Torreya yunnanensis, Taxus chinensis and other rare and endangered wildlife inhabit	The black-and-white snub-nosed monkey (*Rhinopithecus bieti*), a rare and endangered species in the world and a Class I protected animal in China, is distributed here as the southernmost and most specialized population of this species.	Dark coniferous species such as Hemlock, fir, spruce are found here. A large number of Yunnan pine is distributed near or around the PA. The potential risk of forest fire is high and the pressure of fire prevention is huge. There is also impact from human activities - there are still residents in this area	The nature reserve was established in 1983, one of the earliest ones in Yunnan Province. It was promoted to a national nature reserve in 2012 and joined the China Biosphere Conservation Network (CBRN) of UNESCO Man and the Biosphere Programme in 2019. 33 staff are currently employed.	1: Strict Nature Reserve/Wilderness Area: managed mainly for science or wilderness protection
Caojian Forest Farm (pantations) of Yunlong County					
21,533	Forest ecosystem PA. In the north subtropical monsoon climate region, black crested gibbon, forest musk deer, Assamese Macaque, Torreya yunnanensis, Taxus	The northernmost and the most distinctive specialized population of black crested gibbon (*Nomascus concolor*) can be found here. It is a Class Ⅰ protected animal in China and considered a rare and endangered species in the world.	Dark coniferous species such as Hemlock, fir, spruce, and warm coniferous such as Chinese pine, and Yunnan pine can be found here. The pressure of forest fire prevention is relatively high.	Caojian Forest Farm was established in 1962 and is a public welfare forest farm. As a public institution, it now employs 35 staff. In the Chinese context the Caojian Plantation of Yunlong County does not formally belong to the PA network, however, it could be classified as IUCN	6: Managed Resource Protected Area: managed mainly for the sustainable use of natural ecosystems

Area (ha)	Key habitats	Global biodiversity significance	Ecological stresses & threats	Governance	IUCN Category
	chinensis and other rare and endangered wildlife inhabit		There are many villages close to and frequent human activities in this area.	category 6, and is particularly adapted to the application of a landscape approach.	

More information on the demonstration areas is described in the *Profiles of demonstration areas* in **Annex 15** to the Project Document.

Root causes of biodiversity decline in production landscapes and insufficient biodiversity mainstreaming:

11. China attaches great pride and importance to its rich biodiversity and has been working to expedite the mainstreaming of biodiversity across all departments and sectors. It was one of the first parties to sign the UNCBD in 1992 and has hosted and assumed the Presidency at the Fifteenth Conference of the Parties to the Convention on Biological Diversity, to be held in Kunming, Yunnan Province, in October 2021 and will continue its host role in 2022. Rapid economic growth of the country over the last decades however has resulted in ecological degradation, environmental pollution and other adverse effects.

12. The project has purposely selected Yunnan and Giant Panda National Park to demonstrate a landscape approach to conserving iconic and threatened wildlife and hone its remediation efforts through corridor connectivity enhancement and ecological restoration. Yunnan Province simply put, is the richest in China for biodiversity, with Sichuan Province a close second. Both Yunnan and the mountains of Southwest China which include Sichuan, are among the world's 36 biodiversity hotspots as defined by areas with exceptional concentrations of endemic species (containing at least 0.5% of the Earth's plant species as endemics) and are experiencing increasing, large-scale habitat loss, at least 70% of which is caused by human disturbance. In Sichuan, the Giant Panda National Park not only includes more than 71.8% of the world's wild population of giant panda and constitutes the largest and most significant remaining contiguous area of panda habitat in the world; the area is also one of the botanically richest sites of any temperate region in the world. The entire park located across Sichuan, Shaanxi and Gansu provinces, spans two national Key Biodiversity Zones, i.e. Northern section of Minshan-Hengduanshan Mountain Area and Qinling Mountain Area, according to China's NBSAP, which identifies 32 national Key Biodiversity Zones within China's territory.

13. The high variability in climatic and geographic conditions within Yunnan makes its biodiversity very fragile since habitats are consequently quite small and often endangered by growing human populations, habitat fragmentation, expanding of agricultural plantations and increasing pollution. Sichuan has exceptional value for biodiversity conservation and can demonstrate how ecosystem management systems can work across the borders of national and provincial protected areas.

14. The generalized problem tree illustrated in Figure 1 summarizes the main causal linkages contributing to the environmental problems that will be addressed by the project. The main underlying causes of biodiversity loss, especially in the context of wildlife species, are as follows:

15. **Population growth, economic growth and human activities**: China's huge population, and the explosive intensity and scale of human activity as a result of a booming economy, an expanding middle class and industrial/agricultural expansion have not fared well for the environment. Population growth has also altered demand for and causes unsustainable use of natural resources. While economic expansion has successfully lifted large numbers of people out of poverty, this development has been largely predicated on industrialization, urbanization, and intensification of agricultural production and has led to biodiversity loss, increased pollution, widespread habitat degradation and increased ecological fragmentation, especially in high conservation value and threatened landscapes. Despite huge efforts and investments by the government to conserve biodiversity, losses have not been contained to date.

16. **Climate change**: Affected by climate change, the frequent occurrence of extreme weather, such as drought, flood, heatwave and cold snaps, has destroyed the health of many ecosystems and the exertion of their regulation and supply capacity. China's vulnerability to climatic hazards is high. Annual losses to natural hazards average USD 76 billion and around one third of China's agricultural land is affected by climatic hazards such as

storms, droughts, floods, land subsidence, landslides. Climate change has had, and will continue to have, a significant impact on China's ecological environment, society and economy. Even though China is huge, rich and economically powerful, it is still vulnerable to climate damage. China's "The Third National Assessment Report on Climate Change" shows that the country faces threats from sea level rise, extreme weather events, melting glaciers and the accumulation of greenhouse gases in the atmosphere. The report said over the past century, China's average temperature has risen by 0.9-1.5°C, exceeding the global average. China is particularly vulnerable to rising sea levels, which greatly increase the risk of damage to its coastal areas from floods and storm, and is also vulnerable to droughts, heavy rains and heat waves, and climate change will increase the frequency of all three events. Climate change will change rainfall patterns. Melting glaciers will also pose other challenges for China, with the study estimating that economic losses from river flooding in the country could increase by 80% over the next 20 years if no action is taken.

17. **Over exploitation and utilization, trade and livelihood demand**: The demand of traditional Chinese medicine and the growth of the import and export trade of medicinal materials resources, led to the over exploitation of wildlife resources; the traditional way of livelihood is highly dependent on wild animal and plant resources, such as hunting and fishing habits, which also makes the local wild animal and plant resources decrease. Proactive alternative livelihoods are needed to inhibit the dependence of local communities on natural resources and to pursue synergistic progress in biodiversity conservation and poverty alleviation. The dynamic pace of development expansion in China is, simply stated, placing huge pressures on all land resources in the form of mining, construction, transport hubs, industry, plantations etc. The pressure on remaining natural areas is extreme and their current level of legal and de facto protection is weak despite the Chinese government having put great efforts in actions and funding in recent years. This pressure, which is fuelled by the push to exploit any available land and resources to push GDP, is far greater than rural poverty as a driver. Weak governance adds to this problem.

18. **Inadequate consultation with and opportunities for local communities**: Local communities living around protected areas and in adjacent areas to threatened species' habitat are not actively engaged and consulted in land-use planning. Population growth has also altered these communities' demand for natural resources and their unsustainable use of them. With the increase of population, the community's dependence on forest resources is higher, and the way of resource utilization has changed from sustainable utilization to unsustainable utilization, leading to the continuous decrease and disappearance of resources. There are currently few alternatives by way of income generating opportunities to suppress their dependence on natural resources for survival. A solution would be to help local communities identify possible opportunities for additional financial or livelihood benefits.

19. **Poor cross-sectoral coordination**: Wildlife conservation is closely related to land use and planning. Due to the lack of a dedicated coordination mechanism, wildlife protection is not mainstreamed in the planning of key areas such as transportation, culture and tourism. Each sector always values its own importance and convenience while ignoring the requirements of other sectors and the needs and particularities of wildlife conservation. A lack of explicit actions for each of these sectors also affects the protection and utilization of wildlife management. Add to that the shortcomings of the law and a serious lack of specific assessment guidelines and requirements concerning wildlife in the provisions of the law and specific standards, the examination and approval authorities to examine and approve the draft plan have little attention to the chapters or explanation on environmental impact to the wildlife. Moreover, the current Environmental Impact Assessment system does not include wildlife considerations explicitly. Despite China's legislative attempts to conserve its natural resources and in turn protect biodiversity, Chinese law in many aspects remains ineffective in pursuit of these goals due to struggles with coordination, implementation, enforcement, and insufficient public participation, as well as legislative prioritization of economic arguments over ecological ones. China can improve this legislation by increasing the public's role in conservation efforts, increasing liability and enforcement mechanisms, and improving administrative coordination.

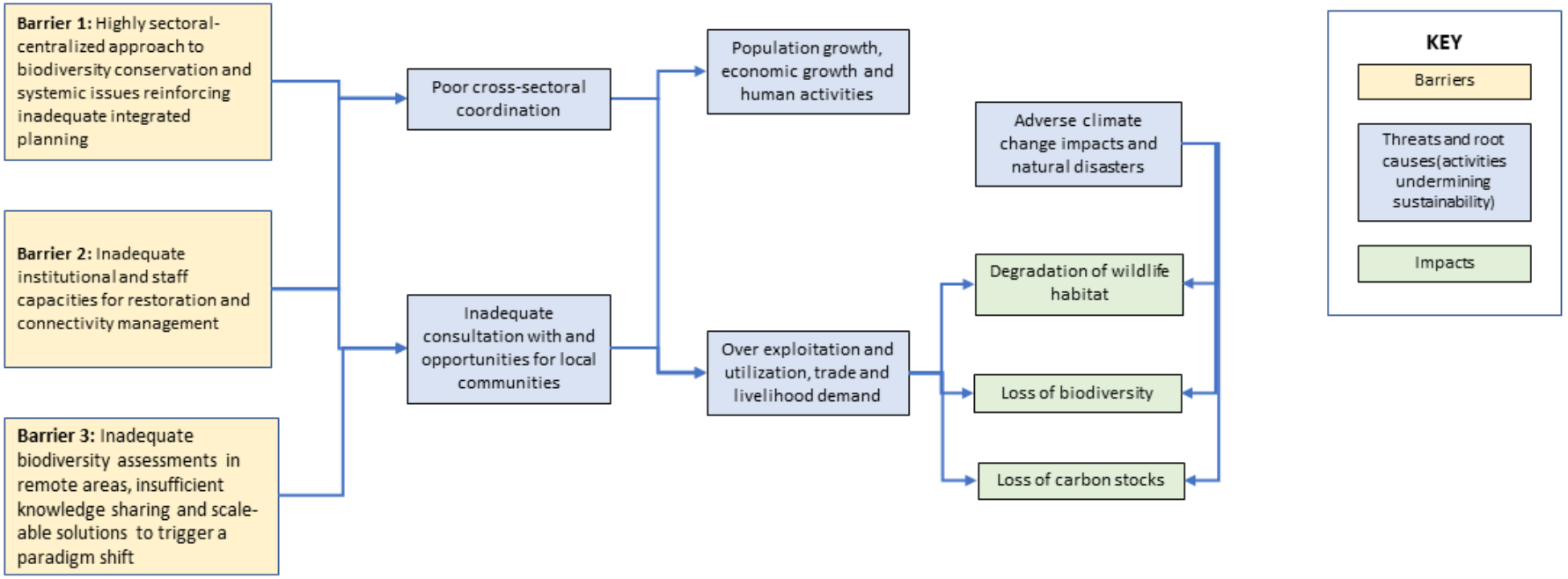


Figure 1: Problem tree analysis

Baseline Scenario:

20. **Coordination mechanisms for biodiversity in China.** There are three coordination mechanisms relevant for biodiversity in China, all of which have been approved by the State Council:

i. CBD Implementation Coordination Group established in 1993, originally comprising 10 ministries (and increased to 20 ministries in 2005) and which has now ceased all operations.

ii. Joint ministry Conference on Genetic Resources established in 2004, comprised of 17 ministries, with the scope of addressing "bio-piracy" and international negotiations on access to and benefit sharing of genetic resources under the Nagoya Protocol. This mechanism was active between 2004-2010 and has gradually weakened; and,

iii. China National Commission of Biodiversity Conservation (NCBC) established in 2010 in parallel with the United Nations Decade on Biological Diversity (2011-2020). Since 2011 it has become a fixed coordination mechanism related to all biodiversity issues and was originally comprised of 25 ministries (now 22 following recent ministry restructurings) and headed by the first vice premier (one of the top 7 leaders in China). Therefore, it is the entity with most clout and is an influential mechanism functioning as:

a) A coordination body for strategy and action planning on biodiversity conservation issues;

b) A decision-making body on policies for biodiversity conservation;

c) A vehicle for strategy formulation and for taking positions on international activities related to biodiversity issues including national implementation of the CBD and its Protocols;

d) A conduit for resolving conflicts between sectors and between central and provincial government.

21. **China's wildlife resources and habitat fragmentation.** According to the 2014-2015 Red List of Vertebrates in China, organized by the Ministry of Environmental Protection, China is the second richest country in the world in mammals, fourth richest in birds and fifth richest in amphibians. The assessment found that 169 mammal species in China were threatened with extinction, accounting for 25.76% of the total assessed species, far higher than the world average threat rate of species on the IUCN Red List. In the 2013 edition of CITES appendix, the total number of wildlife listed in China is 461 taxa. Many wildlife habitats have been destroyed, degraded and reduced. With the second highest primate diversity in Asia, China has 28 species of primates in 7 genera and 4 subfamilies, including lorises, macaques, langur monkeys, snub-nosed monkeys, and gibbons. Of these, 36 percent are endemic to the country, with 6 species listed as critically endangered and 2 species of gibbons ecologically extinct. Primates are an important part of an ecosystem, and their absence is indicative of degradation and reduced service functions. Habitat fragmentation has become the main reason for the decline of wildlife population in China, and specifically in Yunnan, and the three Provinces comprising Giant Panda National Park.

22. **The legal system of wildlife protection in China.** China has an established robust legal system with regards to the field of wildlife protection including:

1) Laws enacted by the NPC and the NPC Standing Committee: the Wildlife Protection Law enacted in 1988, and subsequently revised four times in 2004, 2008, 2016 and in 2018 respectively[6];

2) Administrative regulations promulgated by the State Council: Mainly including Aquatic Animal Protection Regulations in 2013 and Terrestrial Animal Protection Regulations in 2016;

3) Departmental rules: including more than 100 announcements and circulars issued by the National Forestry and Grassland Administration, the Ministry of Public Security, the State Administration for Industry and Commerce, the Ministry of Agriculture and Rural Affairs, the General Administration of Customs and other state departments;

4) Regulations and legal documents of local governments.

[6] With the backdrop of the global pandemic, China took steps in February 2020 to also introduce legislation banning the consumption of wild animals in order to protect public health. On February 24, 2020, the Standing Committee of the National People's Congress voted in favour of the decision to comprehensively prohibit the illegal trade of wild animals, eliminate habits of wild animal consumption, and protect the health and safety of the Chinese people, recognizing the need to amend the Law on Wild Animal Protection going forward and related regulations to accelerate progress in this direction.

23. Additional policies and legislation relevant to the scope of biodiversity conservation, protected areas, and wildlife protection are described below in **Table 2**.

Table 2: Summary of relevant policies and legislation

Policy / legislation	Date	Instrument
First PA established in China	1956	Dinghushan Nature Reserve was established on the proposal of the National Committee of the Chinese people's Political Consultative Conference in 1956
PAs recognised as important part of national planning	1979	Notice of Strengthening, Planning and Scientific Investigation in Nature Reserves
The National Committee for Man and the Biosphere was established	1980	The first three Man and Biosphere reserves were established.
PAs recognised as legal entities	1981	Law of Forest issued and implemented.
Regulations for the first PAs promulgated	1985	The State Council agreed to issue Management Approaches of Nature Reserves of Forest and Wildlife, Law of Grassland
PA role in ecological conservation needs recognised	1987	Principles on China's Ecological Conservation
Need for species protection recognised	1988	Law of Wild Animal Protection
According to the national standard of the first nature reserve type, "wild animal" is one of the nine nature reserve types	1993	The State Bureau of Quality and Technical Supervision issued the principles for classification of types and grades of nature reserves (national standard)
Implementation of wildlife protection law	1992	The State Council agreed to issue regulations on the implementation of terrestrial wildlife protection
Implementation of wildlife protection law	1993	The State Council agreed to issue regulations on the implementation of aquatic wildlife protection
Rules for Nature Reserves endorsed by State Council	1994	Regulations of Nature Reserves
Regulations for Marine reserves established	1995	Management Approaches of Marine Nature Reserves
Wide range of policy issues restated and approved	1994	China Biodiversity Action Plan
Circular of enhancing wetland conservation and management	2004	General Office of the State Council (No.50)
15 policy measures for species conservation and management	2004	Notice of the General Office of the State Council on Strengthening the Protection and Management of Biological Species Resources
Species protection and utilization policy	2007	Outline of national plan for protection and utilization of biological species resources (2006-2020)
Circular of enhancing the nature reserve management	2010	General Office of the State Council (No.63)
Biodiversity conservation policies and planning	2010	China's Biodiversity Conservation Strategy and Action Plan (2011-2030) approved by the State Council
National Park pilot project launched	2015	The National Development and Reform Commission and other 12 ministries launched trials of 10 national parks across the country
For the first time, it was proposed in the outline of national planning that "Major projects for biodiversity Conservation should be implemented".	2016	Outline of the 13th Five-Year Plan for National Economic and Social Development
Legal provisions on ecological protection red lines	2018	Amendment to the Environmental Protection Law of 1988 and 2014
Wildlife Protection Law	2018	Revision to the Wildlife Protection Law enacted in 1988
About nature conservation in system policy reform	2019	General Office of the CPC Central Committee General Office of the State Council issued the Guiding Opinions on Establishing a System of Natural Protected Areas With National Parks as the Main Bod
In order to coordinate the integrated protection and restoration of mountains, rivers, forests, fields, lakes and grasses	2020	The National Development and Reform Commission and the Ministry of Natural Resources have released "The master Plan for Major National Projects for the Conservation and Restoration of Major Ecosystems (2021-2035) "

Policy / legislation	Date	Instrument
Decision to Comprehensively Prohibit the Illegal Trade of Wild Animals, Eliminate the Bad Habits of Wild Animal Consumption, and Protect the Health and Safety of the People.	2020	Standing Committee of the National People's Congress-instruments
China Releases Position Paper of the People's Republic of China for the United Nations Summit on Biodiversity	2020	"Building a Shared Future for All Life on Earth: China in Action"
Amended national list of protected wild animals	2021	Added over 500 more animals to wildlife protection list
China 14th 5-year Plan approved and one of its aims is ecological civilization construction to achieve new progress.	2021	"National spatial development pattern of protection was optimized, the effective way of production and life of the green transformation, energy utilization efficiency of resource allocation more reasonable, greatly increased, the total discharge of major pollutants continue to reduce, continue to improve ecological environment, ecological security barrier more solid, urban and rural living environment improved significantly".

24. Supporting the operationalization of the regulatory landscape, China developed inter-agency government coordination mechanisms for biodiversity. In 2011, the China National Committee for Biodiversity Conservation (CNCBC), composed of 23 departments under the State Council and headed by a Vice Premier, was established to promote communication and improve collaboration among departments and coordinate biodiversity actions at the national level.[7]

25. Gaps in the legal system. Although China has a strong wildlife protection legislation system, it is not complete. A multitude of laws and regulations continue to be issued by departments at different levels. Separate laws cover wildlife protection, forestry, marine conservation, wetlands conservation and EIA. In terms of the legal responsibility of wildlife protection, it is also difficult for law enforcement bodies to cooperate with each other due to them being decentralized, horizontal and vertical. In particular, technical standards and a technical specification system need to be enhanced to reduce the lack of technical support in the design standards, type of ecological corridor[8] establishment, planning and technical specifications. In terms of habitat restoration, there are also a lack of technical standards and specifications for natural restoration, biological measures and engineering measures. In addition, infrastructure construction projects, such as high-speed rail, expressway, dam, reservoir, ports and other facilities, often occur in the surrounding areas and even within the protected areas. However, lack of technical guidance on how to ensure the nature-based infrastructure constructions and minimize the impact on wildlife. China's existing legislation creates challenges to conserving the country's natural resources and protecting its biodiversity. Chinese law remains unsuccessful in pursuit of these goals due to inadequate public participation, implementation and enforcement problems, and legislative prioritization of economic-as opposed to ecological-values. There is no clear lead agency in control of all areas of conservation, and no clear line of authority on environmental law matters, which creates significant an atmosphere of confusion and tension between national and provincial actors and institutions. For example, according to the Regulations on Nature Reserves, both the forestry and environmental protection administrations have authority over nature reserves management. Most importantly from a landscape perspective the "integrated management" responsibility and the responsibilities of the other departments are not clearly defined. Up to recently biodiversity legislation and policies in China have been driven-and greatly influenced-by existing international biodiversity law. Although China's outward commitment to international law is laudable, in the context of conservation, the country's domestic conservation strategy and institutional and professional capacity lack long-term viability because it has become overly dependent and reliant on international financial resources and technical support.

[7] There is a Secretariat for the CNCBC embedded within the Ministry of Ecology and Environment (MEE). It usually meets annually or bi-annually at the request of the MEE (or by another ministry), and reports to the to the State Council and the Chairman of CNCBC for approval.

[8] Consistent with IUCN definitions, the term "ecological corridor" is a geographical space that is governed and managed over the long term to maintain or restore ecological connectivity. Hilty et al. (2020). Guidelines for conserving connectivity through ecological networks and corridors. Best Practice Protected Area Guidelines Series No. 30. Gland, Switzerland: IUCN

26. Alternatives regarding the legal system. The government restructuring implemented in March 2018 unified the previously decentralized functions and responsibilities of protected land management into one department, the Ministry of Natural Resources. The newly formed Ministry of Natural Resources oversees the development and protection of China's natural resources, establishes a space planning system, establishes an ecological compensation system and manages the national system of protected land. The newly established National Forestry and Grassland Administration is responsible for the management of nature reserves and national parks throughout the country and will continue to be responsible for the protection and management of wildlife throughout the country. In order to strengthen the protection and management of wild animals and plants, the National Forestry and Grassland Administration has, in its institutional reform, established a special division of Animal and Plant Protection and a Division of Protected Areas, and has made wildlife protection one of its priority areas.

27. Like the central government, provincial government agencies have also been reformed, and local conservation areas and wildlife have been relegated to local forestry and grassland bureaus intensifying the protection of wild animals and strengthening wildlife protection legislation and law enforcement. Natural reserve management and ecological monitoring of wildlife has utilized, in parts of the nature reserve and national park, some new techniques and facilities, such as unmanned aerial vehicle (UAVs), infrared camera and a mobile terminal APP etc.

28. Conservation management and wildlife conservation are facing a new opportunity, and the implementation of this project will drive this opportunity to become a reality. Targeting the existing problems in wildlife protection, this project sets the content of the project framework as three components as follows:

1) The first component is to establish a coordination mechanism for wildlife protection and formulate relevant technical standards and guidelines for strengthening wildlife protection at the level of central and provincial governments;
2) The second component is to carry out demonstration in Yunnan and The Giant Panda National Park. Through the establishment of ecological corridors, the key protected wildlife populations are linked together to increase the survival and reproduction capacity of the wildlife populations. Meanwhile, through livelihood substitution, the demonstration is provided for the economic development of the communities around the nature reserves;
3) The third component is to strengthen the capacity building of government departments and protected land management institutions, through training, technology and information exchange; and to promote private sector participation through advocacy and education to raise awareness among stakeholders.

29. Baseline information on the PA system in China. In 2019, the General Offices of the CPC Central Committee and the State Council issued the Guidelines on establishing a system of nature reserves controlled by national parks. Nature reserves currently cover more than 18% of the land area. The overall goal of the "Guidelines", built with Chinese characteristics, is to create a national park as the main body of the natural reserve system, to promote science and all kinds of natural protected area sets, to establish the natural ecosystem protection mode of new mechanisms and systems, build a healthy and stable, efficient and natural ecological system, to safeguard national ecological security and build a foundation to realize a sustainable economic and social development foundation. The development goals of National Parks in 2020, 2025 and 2035 were included in these Guidelines.

30. In 2015, the National Development and Reform Commission, together with 13 other departments, issued the pilot program for the establishment of a national park system, which selected 10 national Protected Areas for pilot construction. The Giant Panda National Park was one of the pilot projects, covering a total of 2,713,400 hectares in 14 sub bureaus in Sichuan, Shaanxi and Gansu. In September 2020, the state has organized the acceptance for 10 pilot projects, "The Giant Panda National Park" will be officially established.

31. By 2016, China had established 2,740 nature reserves which cover 14.83% of its land area. In addition, China has 962 scenic areas (national and provincial levels) with an area of 19.56 million ha, about 2% of its land area. The total spatial coverage of protected terrestrial ecosystems in China had reached 162.44 million ha by the end of 2016 which accounts for 16.9% of its land area, practically reaching the 17% Aichi target. In reported published by the Ministry of Environmental Protection (now MEE) in 2017, there were 8,966 protected areas included in the PA system, broken down among 12 types as outlined below in **Table 3**.

Table 3: Breakdown of types and numbers of protected areas in China

Type		Total Number	Number at National Level
1	Natural Reserves	2,740	446
2	Scenic and Historic Areas	962	225
3	Forest Parks	3,101	791
4	Geological Parks	240	240
5	Wetland Parks	727	429
6	Marine Special Protected Areas (including marine parks)	56	56
7	Water Scenic Spots	588	588
8	Mining Parks	72	72
9	Germplasm Resources Protected Areas	450	450
10	Closed Protected Areas of Desert Land	10	10
11	National Parks (pilot)	10	10
12	Desert Parks (pilot)	10	10
	Total:	**8,966**	**3,327**

Source: State of the Environment Report 2017, Ministry of Environmental Protection (now MEE)

32. **Baseline information relevant to the project demonstration areas**. There have been substantive investment in strengthening biodiversity conservation in the two project demonstration areas. Some of the key complementary baseline initiatives and policy and development frameworks are outlined below in **Table 4**.

Table 4: Baseline projects in the Sichuan and Yunnan demonstration areas

Project	Duration	Source of funding
WWF Qinling Giant Panda Focal Project	1982-ongoing	WWF
EU-China Biodiversity Programme (ECBP)	2009-2014	EU
Yunlong Tianchi National Nature Reserve in Yunnan Forestry Reform and Development Project funded by central finance in 2017	2017-2018	MOF
Yunlong Tianchi National Nature Reserve in Yunnan Forestry Reform and Development Project funded by central finance in 2018	2018-2019	MOF
Yunlong Tianchi Forest Restoration Scientific Research Monitoring Project	2017.01-2022.12	Shan Shui Conservation Center, GAC Toyota
Ant Forest Yunlong Yunnan Snub Nosed Monkey Habitat Restoration and Corridor Establishment Project of Ant Group	2019.01-2022.12	Yunnan Green Environment Development Foundation, TNC, Ant Group
Ya'an Administration Branch of Giant Panda National Park: Protection and Utilization Facilities Construction Project in Tianquan County	2019-2020	MOF
Conservation of Small Population of Giant Panda, Public Education, Community Conservation and Development Projects	2017-2021	TNC
Foping Giant Panda Habitat Restoration and Field Patrol Monitoring Project	2018-2022	China Green Committee
Motianling Social Public Welfare Protected Area Project	2011 to date	Sichuan Paradise International Foundation
Daxiangling PA Monitoring in areas for rewilding training and rehabilitation and controlling disturbance factors for giant panda Project	2018-2019	Chengdu Research Base of Giant Panda Breeding
Natural forest protection project of Giant Panda National Park (phase 2)	2011-2020	MOF
Conversion Farmland to Forest Project of Giant Panda National Park	2014-2020	MOF
Cultural tourism promotion project of Giant Panda National Park	2017-2020	MOF
GEF-5 CBPF-MSL wetland PA programme	2013 - 2019	NFGA
GEF-6 China's Protected Areas System Reform (C-PAR program)	2019-2025	MEE
GEF-7 Flyways Project (submitted)	2021-2027	NFGA
GEF-financed Project "A Landscape Approach to Wildlife Conservation in Northeastern China"	2012 to date	NFGA

33. These past and ongoing programmes and projects have reinforced one of the major gaps in China, being no workable landscape scale models beyond PAs, with no coordination mechanism and inadequate cross-sectoral policies and guidelines for acceptable development across threatened landscapes. With respect to Giant Panda National Park, it is important to note that with an area of 2,197,800 ha, 550,000 ha of this is still unprotected. In spite of investments made through GEF financed initiatives and several other internationally funded donors, there is a need to supplement a National Park connectivity approach with complimentary measures to link landscapes. By no means should there be collision in mainstreaming wildlife considerations across landscapes given the degree of variation in needs, characteristics, and landscape composition within the area. While there may be projects, such as C-PAR, which also propose activities related to enhanced connectivity within Giant Panda National Park, including a national level gap and connectivity analysis, these are largely focused on ensuring that the protection of globally significant biodiversity is optimized within the National Park system in China. The focus on the present project is a landscape approaches for the conservation of threatened wildlife beyond PAs and therefore, the supporting policy environment and guidelines at landscape level would be entirely different. This will be a significant value added to existing PA coordination mechanisms being proposed through parallel projects in China (i.e., C-PAR) but will be complimentary given its wildlife and landscape focus in the context of sectoral planning and which continues to be a gap that has not been addressed to date. Therefore, there is ample room for complementarity given the diverse set of needs, habitats, problems and nuanced related to the development activities and communities which operate both within and around the park.

34. The landscape approach with multi-sector wildlife specific policies and guidelines is different than the approaches being put forward by other GEF projects in China as follows:

a) The **C-PAR Program** (GEF Program ID 9403; UNDP Program ID 5695) ***China's Protected Area System Reform.*** The **C-PAR** Programme covers a total of six child projects, is timely, providing an opportunity to support the Chinese authorities in ensuring protection of globally significant biodiversity is expanded under the new NP system. Establishment of the NP system is the cornerstone of the major PA reform in China, including development of a National Park Law that would consolidate, and essentially supersede, the current fragmented set of laws and regulations associated with protected areas, and establishing a new PA management agency, integrating the relevant management functions of protected areas so that a unified management responsibility can be exercised on NP system.

b) Technical assistance through the GEF funding will feed into the PA reform processes, integrating international best practice into legislative and institutional frameworks, introduction of advanced policies and guidelines for increasing the representativeness of the NP system and enhancing management effectiveness, building institutional capacities, and improving financial sustainability, with an increase of at least 30% in available PA finances through diversification of funding sources, improved efficiency in access and utilisation of available funds, broadened participation through concession arrangements and value-based eco-compensation appropriations.

c) UNDP-GEF ***FLYWAY*** project (GEF ID: 10073; UNDP PIMS 6110) ***Strengthening the protected area network for migratory bird conservation along the East Asian-Australasian Flyway (EAAF) in China.*** The **FLYWAY** Project Alternative responds to the development challenge by systematically addressing the barriers associated with: 1) the absence of a strategic approach towards migratory waterbird conservation including inadequate representation of critical breeding, staging and wintering sites in the PA system, and insufficient financing and sustainable financing for effective PA management; 2) limited integration of flyway wetland conservation and needs into the policies, plans and operations of other sectors, and a lack of technical mechanisms and skills to support wetland-compatible co-management at landscape and site levels; and 3) lack of awareness of the value of wetland ecosystem services and management needs, and limited knowledge and information exchange on waterbird population status and best practice management techniques for key flyway sites.

d) The **UNDP-GEF-CBPF Main Streams of Life (MSL) – Wetland PA System Strengthening for Biodiversity Conservation** (GEF Program ID 4646; UNDP Program ID 4847). The **MSL Program** did not ascribe to a particular "integrated approach" in its Project Document, but the specific methodology can be considered one of Integrated River Basin Management (IRBM). As part of this initiative, the Chizhou municipal government established the Chizhou Shengjin Lake NNR Managment Committee at the basin level, meanwhile, the municipal govt. established a Joint law enforcement mechanism (Law: Regulations of the People's Republic of China on Nature Reserves).

Long-term Vision:

35. The project's vision is to build on the baseline scenario to maximize the benefits from a more holistic approach to biodiversity conservation across multiple use landscapes through an integrated and comprehensive set of policies, regulations and guidelines prioritizing actions for threatened wildlife and the strengthening of intersectoral coordination mechanisms. This aspiration is aligned with China's ambition in its blueprint *"Building a Shared Future for All Life on Earth: China in Action"*, of ensuring the strictest regulations and laws, together with novel approaches to be applied in protecting the environment and that an all nation effort is required for global ecological conservation success. The project will enhance existing concepts - and propose new ones - around restoration and corridor creation by deepening understanding around site suitability, application of remedial measures, including the informed deployment of innovative technologies and traditional knowledge to improve management effectiveness and longer term horizon planning and monitoring to generate multiple benefits.

Barriers towards Achieving the Long-term Vision:

36. There are a number of key drivers of the multiple threats to wildlife decline and poor biodiversity mainstreaming which have undermined the government's efforts to address them:

37. **Barrier 1: Highly sectoral-centralized approach to biodiversity conservation and systemic issues reinforcing inadequate integrated planning.** China's traditionally sectoral-centralized approach to biodiversity conservation, with limited cross-sectoral consultation and local participation, creates poor conditions for meaningful biodiversity mainstreaming. It can lead to competing interests, overlapping priorities, misaligned policies and practices, and conflicts between local communities and national administrators over the benefits of biodiversity goods and services. Effective landscape and biodiversity management is also constrained by a lack of cross-sectoral planning integration with targeted actions by sector and lack of coordination between different government agencies. Several government agencies covering fields such as agriculture, environmental protection, mining, construction, communications, water resources, tourism and culture etc. also operate inside and adjacent to protected areas, alongside the local Prefecture and County governments. Historically, these institutions have tended to operate independently from the protected areas management authorities. Sub-provincial governments also plan and implement work inside PAs without due coordination, or consideration to biodiversity conservation on a wider scale. This has led to promotion of many activities that have had negative biodiversity impacts. Institutional problems across regions and departments can be resolved through end-to-end biodiversity mainstreaming with a singular participatory mechanism and anchored by harmonized framework aligning policies, elevating biodiversity across sectors, as well as incentivizing cooperation across land types. Happily, there is a growing recognition of this barrier and as part of decentralization institutional reforms in 2018, China set up the Ministry of Natural Resources - effectively merging the functions of national natural resources administration previously split among several agencies - which was given the responsibility of coordinating land and space ecological restoration and implementing major projects related to ecological restoration, as well as a conservation profile since it is now also responsible for supervising the development, utilization, and protection of China's natural resources, establishing and implementing a spatial planning system, unifying investigations and rights registration, establishing a system for the paid use of natural resources and managing surveying, mapping and geological exploration industries. The Ministry of Natural Resources has also cooperated with Ministry of Ecology and Environment to work on the role of redlining, and therefore, its conservation function and mandate has been significantly strengthened since 2018. This is certainly a step in the right direction that is likely to open up new opportunities for a more holistic approach.

38. **Barrier 2: Inadequate institutional and staff capacities for restoration and connectivity management.** Giant panda and primate habitats are threatened by loss and degradation, and there is no systematic protection plan for habitat restoration and corridor establishment leading to unsustainable levels of fragmentation to meet species' lifecycle needs. In China, like the rest of the world, primates face the threat of habitat loss and degradation. Habitat restoration and habitat corridor establishment is needed to effectively reduce this threat. However, most of the existing primates are located in remote mountainous areas, making it difficult to carry out habitat restoration and habitat corridor establishment work. To adequately meet the needs of these species and increase the chances of an upward trajectory in their conservation status, long-term monitoring is required to fully document their habitat and food requirement, their behavioural responses to human disturbance, and

their sensitivity to climate change. There is no current long-term monitoring data and comprehensive genetic assessment to support the habitat needs of target species and consensus of optimal remediation efforts to prioritize approaches at specific sites. These are critical elements and a barriers to an effective long-term management plan.

39. **Barrier 3: Inadequate biodiversity assessments in remote areas, insufficient knowledge sharing and scale-able solutions to trigger a paradigm shift.** Due to harsh scientific research conditions in marginal and remote areas, the investigation and evaluation of wildlife species in northwest Yunnan has been suboptimal, thereby undermining protection planning. With the emergence and proliferation of 3D visual inspection technology and infrared camera technology, species have been gradually discovered and reported, but there is still a lack of systematic investigation, coordination and evaluation. This is compounded by a widespread lack of awareness about the importance and values of biodiversity in maintaining vital ecosystem services across all sectors along with in-depth understanding the self-healing power of nature and how to advance ecological restoration projects in a scientific manner. This results in insufficient investment in biodiversity conservation and mainstreaming across sectors leading to chronic underfunding for conservation. Awareness and access to up-to-date and accurate data needs to be exponentially scaled-up and strengthened at all levels of government, public, media and corporate society. This is the cornerstone of effective planning, mitigation and adaptation strategies.

40. For China to truly lead and make inroads on globally threatened biodiversity and wildlife, it will need to be proactive and consider its significant and rising ecological footprint outside its borders. This is only possible with the appropriate national preconditions, approaches and models that can be then tested for wider application globally. With abundant ingenuity and technological prowess, China is well positioned to further address the challenge of mainstreaming biodiversity across sectors and to help safeguard globally important threatened species through restoration and corridor enhancements and a landscape approach that facilitated by supportive policies, guidelines and innovative technology-aided and knowledge management solutions.

National Policy Alignment:

41. The rationale and policy of this project are fully consistent with broader government planning and policy at national and provincial level.

42. **Consistency with the Outline of the 13th Five-Year Plan for National Economic and Social Development**. “The Outline of 13th Five-Year Plan” in Chapter 45, requested to strengthen ecological protection: "adhere to the priority protection, natural recovery is given priority to, to promote the natural ecosystem protection and restoration, establishment of ecological corridors and biodiversity protection network, improve all kinds of natural ecological system stability and ecological service function, enhancing ecological security barrier. "The design concept and expected outcomes and outputs of this project are highly consistent with the content of the 13th Five-Year Plan. By establishing ecological corridors between existing protected areas in Yunnan and Sichuan provinces, wildlife circulation can be promoted, population expansion of key rare and endangered wildlife can be ensured, and the integrity of natural ecosystems can be protected to enhance the value of ecosystem services. In addition, measures such as natural restoration and engineering restoration can restore and expand the habitat area of wildlife under special protection, so as to ensure the maintenance of wildlife population and biosafety of wildlife under special protection.

43. The 14th Five-Year Plan also states that "the major projects will be carried out to protect and restore important ecosystems, with the focus on key national functional ecological zones, red lines for ecological protection, and national-level protected natural areas”. We will strengthen the construction and management of nature reserves and intensify efforts to protect the diversity of typical ecosystems, species, genes and landscapes, carry out background survey and assessment of biodiversity and improve the observation system. The implementation of this project will strengthen the construction and management of nature reserves in Yunnan, Sichuan and other provinces, and promote the protection of typical ecosystems and key species.

44. **Consistency with China's National Biodiversity Conservation Strategy and Action Plan (2011-2030)**. The "Strategy and Action Plan” in the comprehensive consideration of ecosystem types of representative, unique, special ecological function, and the species richness, degree of rare and endangered and threatened factors, regional representation, and economic purposes, scientific research value, the distribution of data, on

the basis of factors such as availability, identified 35 priority zones for biodiversity conservation including terrestrial lands, inland waters and marine and coast areas. This project's demonstration areas are all located within 35 biodiversity priority areas, namely the demonstration area in Yunnan province is located in the" South Hengduan Mountains (No 18) ", while Sichuan province demonstration area is located in the "Minshan-North Hengduan Mountains" (No 19). "Strategy and Action plan are put forward:" taking the Himalayan east edge, South and North Hengduan Mountains as the core, to strengthen the integration of nature reserves, protect alpine valleys and primitive forest ecological system, strengthen the giant panda, golden monkey, Taxus chinensis, orchid and other animal and plant species and their habitats under special state protection. The content of this project is fully consistent with the objectives of the Strategic and Action Plan.

45. The NBSAP also identifies 30 priority actions and 39 priority projects, of which Priority Action 4 calls for the mainstreaming of biodiversity conservation into sectoral and regional planning. In addition to requiring relevant central government departments to formulate their own sectoral biodiversity conservation strategies and action plans, it also states that the "provincial government is required to set up the local biodiversity conservation strategy and action plan" and "the valley or species biodiversity strategy and action plan". This project was designed in Yunnan province to make the priority to protect the golden monkey a provincial wildlife conservation strategy and action plan and set up in the province area of the giant panda to also prioritize a conservation strategy and action plan. Priority actions 29 and 30 propose the establishment of public participation mechanisms and biodiversity conservation partnerships involving non-governmental organizations and the private sector. This project is fully reflected in the design of its outcomes and outputs. In addition, the Strategy and Action Plan paid great attention to the protection of rare and endangered wild animals, such as the 27th Priority Project put forward to establish special protection for the species listed in National Protected Rare and Endangered Animals and their habitats in situ protection measures, through the implementation of the save program for the rare and endangered wildlife species to enlarge its habitat, in order to ensure its survival and reproduction.

46. Therefore, the objectives and content of this project are highly consistent with the Strategy and Action Plan, and the outcomes and outputs of the project implementation will provide the best practices for the implementation of the Strategy and Action Plan.

47. **Consistency with the Ecological and Environmental Protection Plan of the Yangtze River Economic Belt**. The Chinese government attaches great importance to the Yangtze River economic belt of the ecological environment protection work, published in 2017 which includes the planning of ecological environment protection in the Yangtze river economic belt, to promote the development of the Yangtze river economic belt on the premise of not destroying the ecological environment and providing protection to ensure no exploitation. The way of thinking should be clear and hard constraints should be established so that the ecological environment of the Yangtze River can only be optimized rather than deteriorated. This project's demonstration area is in Yunnan and Sichuan provinces and protects the golden monkey (including Yunnan golden monkey, Sichuan golden monkey, and Guizhou golden monkey and panda) in the distribution area in the Yangtze river shelter-forest region. The planning of ecological environment protection in the Yangtze river economic belt of ecological environment protection measures will be conducive to the protection of the wildlife in the region providing a political guarantee for the successful implementation of this project. By establishing ecological corridors and restoring habitats, the project effectively preserves key wildlife populations and their habitats, and also contributes to the protection of the ecological environment of the Yangtze River Economic Belt. Therefore, this project fully conforms to the objectives, contents and requirements of the Ecological and Environmental Protection Plan for the Yangtze River Economic Belt.

48. Major relevant national conservation strategies, programs, and plans are described below in **Table 5**.

Table 5: Summary of major relevant conservation strategies, programs, and plans

Plan/Project	Date	Content	Project relevance
14th Five-year Plan	2021-2025	It is a programmatic document for the national economic and social development, including the chapter on driving green development and promoting harmony between man and nature, especially the specific	Specific policies and project concepts related to biodiversity conservation in the 14th Five-Year Plan have been implemented by the local governments of the demonstration areas, which have

Plan/Project	Date	Content	Project relevance
		requirements and strategic tasks to improve the ecological security barrier system, build a system of natural protected areas, and improve the mechanism for compensating for ecological conservation.	given great support to this project. The plans underline the importance of achieving harmony with environment and creating an 'ecological civilization' and 'Beautiful China'
China National Biodiversity Conservation Strategy and Action Plan (NBSAP)	2011-2030	It proposes China's biodiversity conservation goals, strategic tasks, priority actions and projects within 20 years. It is a blueprint for biodiversity conservation in China.	The theme of this project is biodiversity conservation. Wildlife protection, corridor establishment and habitat restoration of nature reserves are important contents of biodiversity protection, which are closely related to this project
CBD Programme of Work for Protected Areas (PoWPA)	Updated at each COP bi-annually	Make many resolutions on "protected area" issues, including "the protected areas planning" adopted in COP7, and "voluntary guidance on effective governance models for management of protected areas" adopted in COP 14 (2018)	The demonstration areas of this project are nature reserves and national parks in Yunnan and Sichuan provinces, and the international policy has a great influence on this project. Such as the issues in PA mainstreaming, and co-management approaches, transfrontier issues (e.g. migrating species) and climate resilience are all emphasized
China Biodiversity Partnership and Framework for Action (CBPF)	2007-2017	Umbrella framework for action to coordinate and build momentum around the programs of different partners under CBD in China	Creates synergy with broader conservation work in biodiversity areas – legal framework, PA strengthening in general, information sharing etc. The project fills gap in the framework.
Guidelines on the establishment of a system of nature reserves dominated by national parks by China State Council	2019	Overall objectives: To establish a system of natural protected areas with Chinese characteristics, with national parks as the main body, promote the scientific setting of various natural protected areas, and establish new systems, mechanisms and models for the protection of natural ecosystems.	The document sets out guidelines, policies, major tasks and scientific management methods for national park management in the future. And the demonstration site of our project is in the Giant Panda National Park, which is very close.

49. **Consistency with China's vision for "Ecological Civilization"**. The concept of ecological civilization was written into the Chinese constitution in 2018 as the basis for articulating its vision of sustainable development across three dimensions – environmental, economic and social, as well as with specific features of Chinese political civilization, aspects of Chinese governance, and core elements of the Chinese sustainable economic development agenda. The concept has been adopted by the highest levels of political leadership and has gradually gained traction. It is regarded as the major ideological reference framework for Chinese environmental and actions at different levels of government. The position paper "Building a Shared Future for All Life on Earth: China in Action" is the long term blueprint and the themes of adopting strong policy measures, accelerated mainstreaming, improving policy and legal frameworks, improving livelihoods through co-management and ecological restoration with emphasis on the protection of rare and endangered species. Therefore, ecological civilization provides the necessary anchor for the business case for alignment of the project strategy with national policies and supports the linkages to the core business architecture through the National Biodiversity Commission going forward. COP15 and China's Presidency of the 15th Conference of the Parties to the Convention on Biological Diversity is also an important entry point and unique opportunity for China on the international stage to show that it is taking the lead on the prioritization of unprecedented biodiversity loss.

Relevance to Sustainable Development Goals (SDGs) and post-2020 Global Biodiversity Framework:

50. The project is relevant to a number of SDGs, most notably SDG 1 (No Poverty), SDG 5 (Gender Equality), SDG 13 (Climate Action), SDG 15 (Life on Land), and SDG 17 (Partnerships for the Goals), as outlined below in **Table 6.**

Table 6: Project contributions towards Sustainable Development Goals

SDG	Project Contribution:
	10,000 estimated direct beneficiaries, participating and benefitting in interventions on strengthening access to natural resources, appropriate new technology and financial services (aligned with SDG 1.1). Cross-sectoral strategies and action plans will provide pro-poor and gender-sensitive frameworks for accelerating development in poverty-stricken areas (aligned with SDG 1.b).
	40% of the envisaged direct beneficiaries are estimated to be female (4,000 individuals). Women empowerment is expected to be strengthened through increased autonomy with respect to natural resource management, enhanced decision-making regarding credit, increased leadership through active participation in women's groups, and reduction in workload (aligned with SDG 5.a).
	The project will facilitate strengthened resilience and adaptive capacity to climate-related hazards and natural disasters in the target landscapes (aligned with SDG 13.1). Climate change mitigation measures will be integrated into the cross-sectoral strategies and action plans for the two demonstration areas (aligned with SDG 13.2). Local communities will have increased awareness of climate change mitigation through learning-by-doing capacity building delivered through partnerships with expert organizations and interactions enabling stakeholders (aligned with SDG 13.3).
	The project aims to improve management practices (aligned with SDG 15.2) and facilitate restoration of degraded wildlife habitats (aligned with SDG 15.3). Biodiversity values will be integrated into the landscape strategies (aligned with 15.9), and co-financing from government and civil society will be mobilized to support conservation and restoration interventions (aligned with SDG 15.b).
	Enhancing South-South and triangular regional and international cooperation on and access to best management approaches, specifically participatory models of wildlife conservation and management (aligned with SDG 17.6).

51. The project will also contribute to achievement of the targets outlined in the post-2020 global biodiversity framework [9], which was under development at the time of developing the Project Document. The project is aligned with the following draft 2030 Action Targets of the zero draft of the post-2020 global biodiversity framework:

- **Target 1.** By 2030, [50%] of land and sea areas globally are under spatial planning addressing land/sea use change, retaining most of the existing intact and wilderness areas, and allow to restore [X%] of degraded freshwater, marine and terrestrial natural ecosystems and connectivity among them.
- **Target 7.** By 2030, increase contributions to climate change mitigation adaption and disaster risk reduction from nature-based solutions and ecosystems-based approaches, ensuring resilience and minimizing any negative impacts on biodiversity.
- **Target 13.** By 2030, integrate biodiversity values into policies, regulations, planning, development processes, poverty reduction strategies and accounts at all levels, ensuring that biodiversity values are mainstreamed across all sectors and integrated into assessments of environmental impacts.
- **Target 19.** By 2030, ensure that quality information, including traditional knowledge, is available to decision makers and public for the effective management of biodiversity through promoting awareness, education and research.
- **Target 20.** By 2030, ensure equitable participation in decision-making related to biodiversity and ensure rights over relevant resources of indigenous peoples and local communities, women and girls as well as youth, in accordance with national circumstances.

[9] CBD, 17 August 2020. Update of the Zero Draft of the Post-2020 Global Biodiversity Framework. Convention on Biological Diversity, CBD/POST2020/PREP/2/1. The term "post-2020 global biodiversity framework" is used as a placeholder pending decision on the final name at the fifteenth meeting of the Conference of the Parties.

III. STRATEGY

GEF alternative

52. In order to remove the aforementioned challenges and barriers, the objective of the project will be to safeguard biodiversity, especially key threatened and iconic wildlife in China through cross-sectoral engagement, community participation and innovative management technologies across landscapes. This will be made possible through supportive cross-sectoral policies and comprehensive guidelines developed and approved through strengthened intersectoral coordination mechanisms at the national and sub-national levels, the prioritization of restoration and ecological corridor enhancement techniques at key sites and by incorporating frontier technologies and knowledge management innovations in partnership with the civil society, private sector, academia and local communities. The alternative scenario involves a substantively more integrated and participatory approach to wildlife conservation planning and management, whose value chain includes all sectors that have touch points with biodiversity at the national, provincial and local level. This also includes local communities who are both custodians of and contributors to solutions through traditional knowledge, the private sector and academia through the deployment of approaches and technologies, and society at large, who are instrumental in the equation through enhanced consciousness of ecological civilization and a deeper appreciation of biodiversity values of threatened species and the interdependencies of their habitats with ecosystem functions around the world.

53. Against the backdrop of accelerated global biodiversity loss and the global impact of COVID-19, the targeted end state of the project is to use the recovery as an opportunity to build back better by ensuring that going forward, inter-sectoral landscape planning not only takes wildlife needs and their habitats into account, but prioritizes it. Governments around the world are actively preparing stimulus packages expected to pour trillions of dollars into initiatives to help their revive their economies and recover from the impacts of COVID-19. These efforts offer a once-in-a-lifetime chance to scale up support for critically needed solutions to help forests, landscapes and the most threatened habitats to remain intact and to continue providing benefits in a responsible and sustainable way. And there has never been a point in time that the interplay between the intactness of ecosystems, unchecked economic growth and impacts on human health have been so apparent. The risk is however, that in governments' haste to reverse the worst global downturn in recent memory, they will turn to quick fixes. Without new approaches and models - including those which promote intactness of landscapes - we risk a business as usual scenario that will only accelerate environmental degradation just when we can least afford it. The unprecedented cooperation for a vaccine and the effective leveraging of technology and data innovation has shown that society is capable of radical change when the stakes are high. The project is proposing a new model that responsible sectoral development is possible and will take steps during the project's lifespan for more informed and harmonized decisions regarding China's natural resource endowments to protect and restore nature, as well as human health. This will be supported by creating a supportive policy and regulatory environment with broad participation, by investing in community-led resilience and encouraging the private sector to take a more active role in the scaling up of solutions, including technological solutions, which along with the project outcomes can offer a scalable model both nationally and globally.

54. The approach to be taken in the roll-out of activities is participatory in nature through mutually supportive partnerships with other projects, initiatives and sectors, leveraging cost effective synergies with existing vehicles of biodiversity mainstreaming in China in the context of broader landscape approaches to wildlife conservation. This shall be achieved through the following nine outcomes designed under four complimentary and inter-related components.

Component 1: Mainstreaming wildlife conservation into integrated landscape planning through enhanced intersectoral coordination and supportive policy environment

Outcome 1.1: Intersectoral coordination and policies supporting biodiversity conservation through integrated approaches improved

Outcome 1.2: Mainstreaming wildlife conservation and sustainable management in Giant Panda National Park and primate conservation in Yunnan

Component 2: Demonstrating integrated landscape management approaches and innovative tools in key endangered globally important wildlife habitats

Outcome 2.1: Increased management effectiveness across the protected areas in the two demonstration areas

Outcome 2.2: Connectivity between patches of key protected wildlife habitats targeted for improvement through the creation of ecological corridors

Outcome 2.3: Key wildlife habitat enhanced through restoration

Outcome 2.4: Gender responsive- and community-based co-management, and sustainable utilization of natural resources among the project intervention sites providing socioeconomic benefits to local communities

Component 3: Deploying frontier technologies and innovative knowledge management solutions for wildlife conservation and landscape planning

Outcome 3.1: Data management and information technology capabilities and identification of use cases of frontier technologies and innovations for wildlife conservation management

Outcome 3.2: Knowledge sharing on wildlife management, habitat restoration and connectivity established at the national, regional and global levels

Component 4: Safeguards management, sustainability planning, and monitoring & evaluation

Outcome 4.1: Adaptive management enhanced through safeguards management, sustainability planning, and monitoring & evaluation

Theory of change:

55. The project Theory of Change is represented graphically for illustrative purposes in **Figure 2.** The ultimate impact of this project is to contribute to the conservation and sustainable use of globally iconic and threatened wildlife through improved landscape approaches made possible through cross-sectoral mainstreaming. This will be facilitated through strengthening the enabling environment for mainstreaming of wildlife conservation, enhancing engagement with local communities, deployment of frontier technologies, and improved flow of knowledge among the stakeholder community.

56. The global pandemic is the result of a degradation in the relationships between human systems and wildlife. There has never been a point in time that the interplay between the intactness of ecosystems, unchecked sectoral growth and impacts on human health have been so apparent. With the the backdrop of the global COVID-19 pandemic recover efforts, the hope is to build back better through a sustainable bridge between environmental and sectoral activities, by ensuring that going forward, multi-use landscape planning not only takes wildlife needs and their habitats into account, but prioritizes it.

57. To ensure that this long-term outcome is met, there are two main preconditions and several key assumptions:

1) Central level government is able to create supporting conditions through enhanced policies and comprehensive allowing for the mainstreaming of wildlife conservation across sectors to take root.
2) More robust landscape models are tested and developed together with community-level commitment towards managing wildlife and their threatened habitats.

58. Key assumptions underpinning the Theory of Change include the following:

a) It is assumed there will be a continuity of political commitment and prioritization of ecological arguments over narrow economic ones.
b) It is assumed there will be strong intersectoral and inter-agency partnerships and collaboration.
c) It is assumed that ministries and departments are willing to apply guidelines to development and sectoral planning.
d) It is assumed that local communities agree to the integrated approaches and that they will be direct beneficiaries of enhanced wildlife conservation across landscapes.
e) It is assumed that policies and wildlife impact guidelines are enforced and unsustainable activities curtailed.

59. To address these two preconditions, national-level policy needs to be designed in such a way that it provides practical support for a more sustainable approach to sectoral and local-level landscape management planning and decision-making. To achieve this, national level policy must be based on an understanding of how different sectors and local communities perceive environmental risk and changes to biodiversity. These perceptions along with various economic trade-offs, social and cultural factors, will strongly influence how sectors and local-level landscape planning and management decisions are made.

60. The main technical challenge will be to provide sectors with compelling arguments to elicit compliance and changes in behaviour in a manner that makes economic sense and that they are able to internalize trade-offs based on ecological benefits rather than simply economic ones alone. Local communities are also instrumental agents of change within the project and need to be equipped with the means to evaluate and adapt to putting less pressure on landscapes and wildlife, as well as need to fully appreciate the benefits of enhanced landscape connectivity and incentivized through economic safety nets. This will require finding innovative ways in which to bridge the gap between scientific knowledge and technology, with locally specific experiential knowledge coupled with traditional practices. To do this, a deep collaboration is required with carefully facilitated conversations to bring out the richness of local technical knowledge, as well as to share how frontier technologies can be an enabler to get them involved in co-management activities. Coupled with training on alternative income streams, the shared-learning process that results will aim to ensure that the jointly agreed project activities to reduce wildlife and landscape risks make sense in the context of the knowledge and the everyday lived-experiences of local people. The result will be a better understanding of the likely consequences of human interactions with ecosystems and the social norms that drive decision-making processes by both sectors and local communities. This improved understanding will be the foundation for better decision-making that effectively reduces ecological pressures on threatened and iconic wildlife.

61. The envisaged longer term outcomes catalyzed by the GEF funding are listed below:

a) Enabling environment facilitates mainstreaming of integrated landscape approaches and mainstreaming of wildlife conservation.
b) Populations of globally threatened species stable through collaborative management of critical wildlife habitats and regionally important ecosystems at scale.
c) Flows of ecosystem services, including sustainable livelihoods for local communities, inclusive of women, ethnic minorities, and other marginalized groups, maintained and improved through adoption of integrated approaches.

62. The above longer-term outcomes are underpinned by the following principles and causal pathways:

a) ***Operate at a Landscape Scale*****:** Interventions and activities ought to be framed and should occur through a multisectoral lens within a wider landscape, proactively engaging development sectors, private sector, academia and communities along the way. The reason for this is that persistent shortfalls in ecological representation and management effectiveness in landscapes diminish the potential role of area-based conservation in stemming biodiversity loss, especially as it relates to threatened wildlife falling outside protected areas, but which nonetheless deliver opportunities for effective conservation measures.[10] Effective management, therefore, needs to go beyond the scope of PAs and be managed at the landscape scale.
b) ***Strengthen institutional capacity at national, provincial, and local levels***: Activities articulated in the project emphasize a multi-pronged approach to help policy and decision makers internalize mainstreaming of wildlife across sectors at the national level, as well as capacity-building at a provincial level to connect national-level supportive policy measures with local-level environmental decision-making. Interventions are purpose-built to 'bridge the gap' by building the technical and institutional capacity across levels and domains.
c) ***Adopt a community-driven approach***: To ensure sustainability post-project all interventions and activities should be determined by the needs and priorities identified by communities themselves using a shared-learning process and cross-pollination of knowledge and approaches. Local knowledge is built upon by asking meaningful questions that do not lead to externally pre-imposed solutions. The central

[10] Maxwell, S.L., Cazalis, V., Dudley, N. et al. Area-based conservation in the twenty-first century. Nature 586, 217–227 (2020). https://doi.org/10.1038/s41586-020-2773-z

principle here is to adopt an 'asking' rather than 'telling' mindset so that the quality and value of local knowledge is respected and integrated into sectoral landscape planning and priorities.

d) ***Consider the diversity of gendered experiences and perspectives***: Women and men both experience and contribute differently to environmental change. Women are typically more marginalised and hence more vulnerable than men, and as a result, are usually disproportionately impacted by the negative consequences of environmental change. Community consultation and shared-learning approaches support integration of women's voices into community priorities, together with empowerment through robust alternative income generating solutions to reduce pressures on threatened ecosystems in important wildlife landscapes.

63. The following strengthening amplifiers are expected to strengthen results:

a) Private sector partnerships
b) Regional / global NGO participation
c) Inter/intra discipline multisectoral collaboration and global knowledge sharing
d) COVID-19 Recovery efforts
e) Locally driven nature-based solutions.

64. The development and piloting of a new landscape approach to conservation of iconic and threatened wildlife species across their habitats involves facilitating mechanisms from science, policy and livelihood engagement, including novel tools, methods, data or evidence and robust knowledge management that promote the adoption, influence or replication of such innovative approaches by others. The enabling environment at the national and landscape levels is the focus of the proposed activities and interventions under Outcome 1.1. Improved intersectoral coordination mechanisms and strengthened policies and incentive frameworks will support the implementation of the demonstrations planned under Component 2. For example:

- The landscape level cross-sectoral strategies and action plans developed under Outcome 1.2 will be implemented at a demonstration scale in Component 2. The integration of wildlife conservation considerations into the red-line policy will be reflected in the cross-sectoral strategies and action plans, and the sector-specific guidelines produced in Output 1.1.3 will inform how wildlife conservation is mainstreamed in the cross-sectoral strategies.
- The proposed ecological corridors planned under Outcome 2.2 will demonstrate intersectoral coordination and planning on mainstreaming wildlife conservation, e.g., through engaging the transportation sector in planning and operation of linear infrastructure; engaging with the agricultural sector in improved livestock management; engaging with the tourism sector in strengthening ecotourism experiences, safeguarding against impacts to wildlife habitat and mobility. The ecological corridors will be designed using the guidelines developed under Output 1.1.3.
- Moreover, the alternative livelihood interventions under Outcome 2.4 are designed to reduce threats posed by unsustainable practices, increasing the flow of information to local communities, and promoting improved collaboration between communities and protected areas in the demonstration areas. Incentives for encouraging local communities to engage in sustainable, alternative livelihood ventures will build upon the recommended measures formulated under Output 1.1.2.

65. The establishment of ecological corridors is a key mechanism for facilitating connectivity of fragmented wildlife habitat through multi-stakeholder coordination. For instance, coordination with local agriculture and animal husbandry departments will be required to formulate sustainable livestock management practices within the corridors; design and operation of roadways within the corridors will need to be coordinated with local transportation departments to better enable wildlife crossing and reduce fragmentation of wildlife populations; and local land use planning departments are expected to reflect critical wildlife habitats in the red-line process (i.e., areas where development is restricted). This is one of the ways in which the landscape level cross-sectoral strategies and action plans developed under Component 1, namely Outcome 1.2, will be demonstrated on the ground in Component 2. While the strengthened enabling environment promoted in Component is demonstrated under Component 2, Component 3 is about amplification and helps link Components 1 and 2 together so the model can be applied elsewhere.

66. The project outcomes are purpose-built to be ambitious as they aim to address changes at three levels simultaneously. Nonetheless, the targeted changes at multiple levels are undergirded by a logical flow and inter-connection between the intended outcomes. Therefore, if implemented effectively, the outputs can be mutually reinforcing, which can in turn contribute to improved potential for the success of the project overall and value-added to global biodiversity.

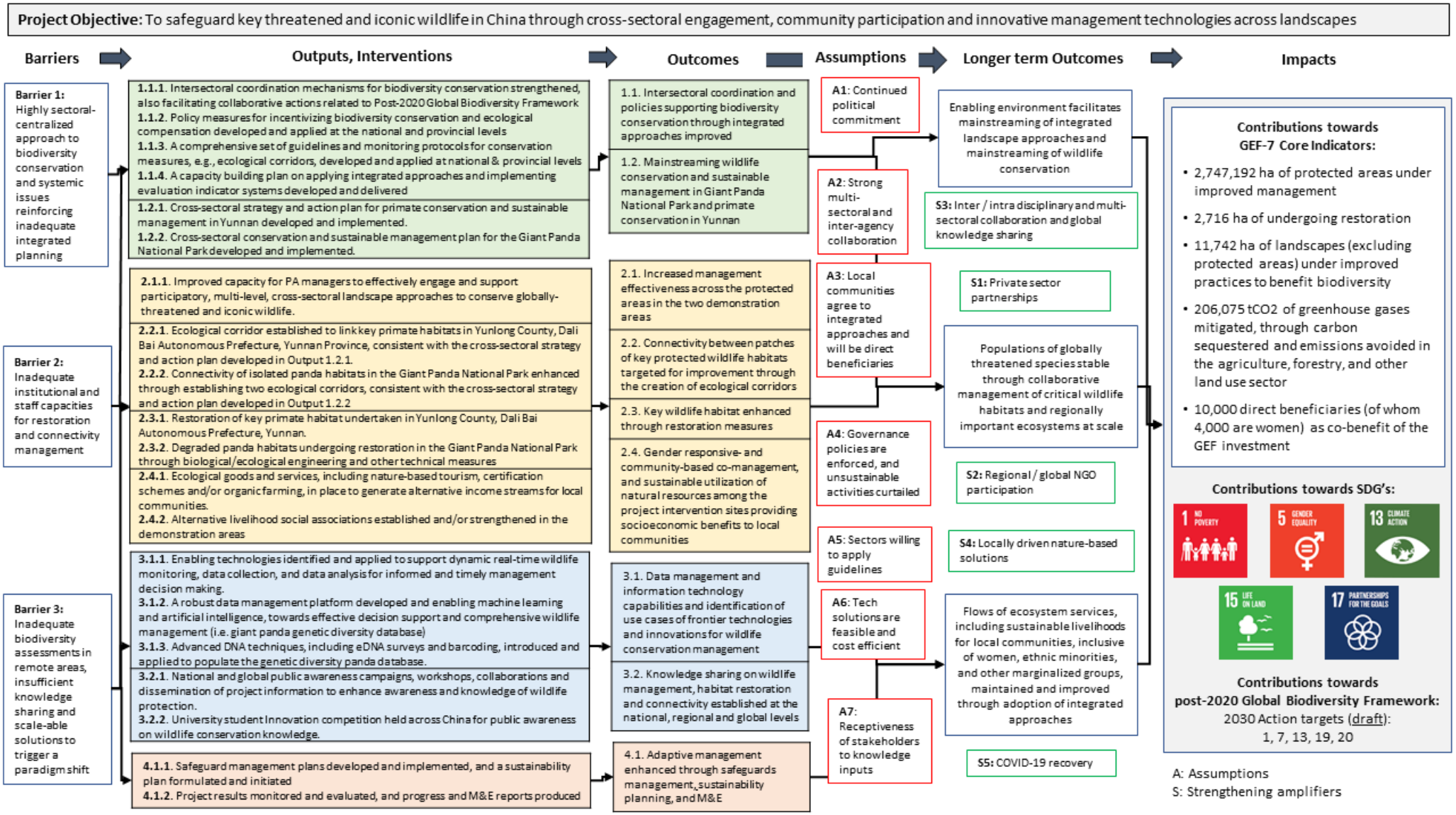


Figure 2: Project theory of change

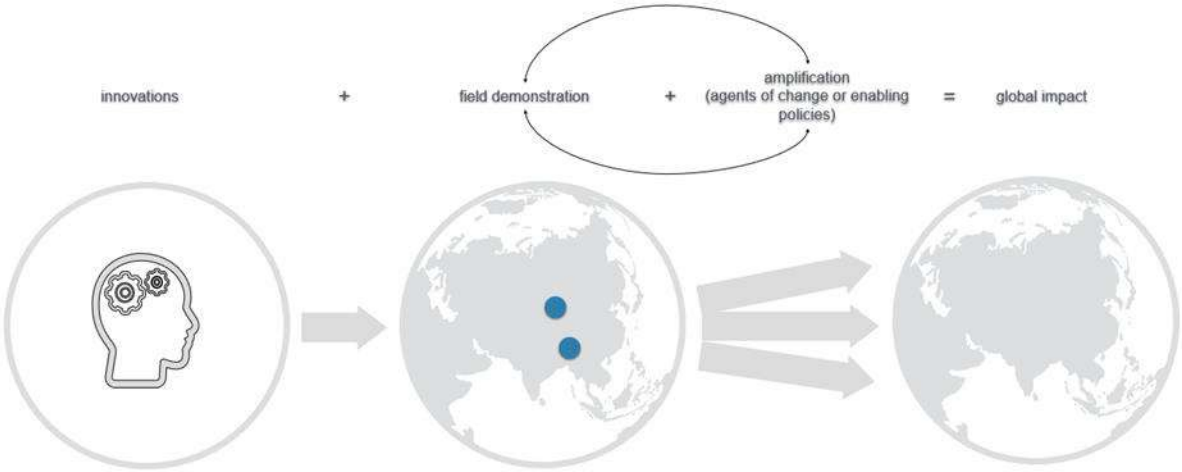


Figure 3: Amplification of biodiversity mainstreaming models through innovation and field interventions

Alignment with GEF focal area

67. The project is consistent with and aligns with GEF focal priority areas strategies for biodiversity as summarized below:

a) **BD-1-1**: Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors
b) **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

68. For the first priority area, the intent of the project is to mainstream biodiversity considerations into cross sectoral planning across large production landscapes where there continues to be vested interests not beneficial to biodiversity, a collision between competing priorities, and overlapping and uncoordinated impactful activities (i.e. infrastructure development) to the detriment of biodiversity and threatened species. The project will give rise to a more cohesive framework that will allow the government at the national level to better coordinate priorities, via the formation of committees with broad representation including at the Provincial level, and develop a coherent set of biodiversity protection policies and a technical standard system at the national level. Mainstreaming at an operational level will be supported by the adoption of bio-friendly sustainable infrastructure construction guidelines to ensure sectors that have significant biodiversity impacts will be more benign and therefore allow biodiversity to thrive through the application of nature-based management practices in place of business as usual solutions.

69. With respect to the second priority area, the project provides a conduit for addressing the drivers to protect habitats and species, with an emphasis on threatened wildlife, by enhancing the intactness and effectiveness of protected area systems across landscapes. The Giant Panda National Park, spanning 2,197,800 ha is somewhat fragmented giving rise to isolated populations of pandas. Linking up these habitats through increased connectivity and restoration activities will allow it to become one contiguous area where it will be a focus for species conservation as an anchor to improving management across the entire landscape. Similarly, an ecological corridor for key endangered primate species in Yunlong County, Dali, Yunnan is proposed to snub-nosed monkey habitats across two separated parts of the Tianchi Nature Reserve.

70. Giant pandas are a recognized and iconic landscape species that require specific and stable conditions to thrive. The assumption is that improved connectivity and providing habitat for pandas will also benefit a large number of other species in Giant Panda National Park.

71. Existing fragmented habitats remain a mosaic of disjointed land management units with incompatible objectives and management regimes. More broadly, an increased amount of habitat under overall management under a singular authority and a unified set of policies will improve species and landscape potential and reduce disturbances from contact with agricultural zones and people. Communities will be incentivized to manage

forests through the certification schemes and other custodianship activities, which includes biodiversity mainstreaming, resulting in long-term biodiversity benefits by reducing degradation while at the same time improving the financial sustainability of these communities through improved forest condition and alternative livelihood projects. By implementing the proposed knowledge management plan and a training plan, government will also learn to better interface with local communities and integrate knowledge on biodiversity into planning objectives to achieve conservation and sustainable resource management.

72. Through technology-aided mapping and strong cross-sectoral coordination mechanisms in multiple use landscapes, the project will directly address the key drivers of biodiversity loss, including a lack of large-scale planning, illegal activities, illegal killing of wildlife, loss of forest contiguity, landscape intactness, and habitat degradation. These key drivers are responsible for overall landscape degradation under the limited planning scenario that currently exists on this large landscapes.

Incremental/additional cost reasoning

73. The government already provides a large amount of funding for the protection and restoration of the natural environment and management of protected areas, however, more funding than is available for wildlife conservation management actions is required. The GEF support will help address critical gaps that remain in the harmonizing policies through strengthening intersectoral coordination mechanisms, with representation from the ministries of agriculture and rural affairs, natural resources, forestry and grassland, ecology and environment, transportation and water resources, and across government sectors that make decisions impacting biodiversity, especially in habitats housing threatened wildlife species. The project will develop and demonstrate integrated approaches, facilitating intersectoral and multi-stakeholder coordination across multiple use landscapes. By accessing the GEF grant, collaborating with the civil society, academia, the private sector and local communities, while adopting lessons learned from international experiences and previous and ongoing GEF funded projects, the project is expected to raise awareness of the special requirements needed to protect the giant panda, black-and-white snub-nosed monkey, and black crested gibbon. Innovative technologies and approaches drawing from local knowledge will also improve the efficiency of the use of national funds and achieve greatly improved conservation impacts per unit of funding.

74. The global benefits that will be delivered are significantly improved legal and systemic framework for, and management of, China's threatened wildlife habitats. A total of 2,759,434 ha of terrestrial area will be directly benefited through targeted activities delivered under the program. There will be 12,242 ha under improved management through enhanced connectivity measures (11,742 ha) and nature-based restoration (500 ha) outside the protected area network targeting 10,000 beneficiaries including 4,000 women.

Table 7: Incremental reasoning

Baseline practices	Alternative to be put in place by the project	Global environmental benefits
1. No cross sectoral mechanism to take an integrated landscape approach for the conservation and sustainable use of threatened wildlife and their habitat. 2. Incoherent set of policies and regulations across sectors that make decisions on biodiversity persist causing a collision of interests and priorities, compounding the lack of a landscape level approach leading to further fragmentation, increasing threats, and degradation of natural resources on which communities rely. 3. Insufficient rationalization for identifying the boundaries of key habitats for wild animals and ecological corridors in terms of	1. An effective cross sectoral conservation coordination mechanism under the National Biodiversity Commission established for threatened wildlife across landscapes. 2. A framework of supportive cross sectoral policies based on Priority Action 1 of China's NBSAP for a landscape approach to wildlife and their habitats 3. A comprehensive set of guidelines approved by a intersectoral coordination mechanism for the prioritization of restoration and ecological corridor enhancement techniques at key sites and by incorporating frontier technologies and knowledge management innovations, as well as enhancements to the national EIA system to include a special wildlife chapter.	Improved management of wildlife conservation of 2,747,192 ha, with 11,742 ha under improved management through enhanced connectivity measures outside of PAs and 2,716 ha through nature based restoration and targeting 10,000 beneficiaries including 4,000 women, with an array of globally significant biodiversity including endangered species such as the black-and-white snub-nosed monkey, black crested gibbon and vulnerable species such as the giant panda; increased options for sustainable financing to close conservation gaps and corridor management made more efficient and cost effective through innovative technologies and locally

Baseline practices	Alternative to be put in place by the project	Global environmental benefits
relative importance and role in ecological functioning, and inadequate due diligence by sectors in their development planning 4. Without fully operational corridors and connectivity, current PA network alone is not adequate to conserve viable populations of globally significant biodiversity where survival of individual species can be affected by integrity of a community. 5. Academia, NGOs and local communities are not fully engaged in conservation as a result of centralized planning, although they possess in-depth knowledge of restoration solutions, causing increased marginalization leading to unsustainable resource usage. 6. Insufficient long-term monitoring of key threatened species due to complex topography, geographical isolation and complex landscape features.	4. Increased movement, overall species persistence, habitat connectivity, genetic exchange, predation avoidance and healthy ecosystem functioning made possible together with planning for an entire community instead of sporadic populations. 5. Community-based restoration and corridor management and other tenure arrangements, (e.g. certification of scheme contracts) fostering increased collaboration, along with alternative income generation will be promoted to secure broad community support for conservation solutions, together with mission-driven partnerships with academia and NGOs. 6. Real time long-term monitoring and evaluation made possible by "real time" monitoring solutions and technology-aided innovations with specific use cases established.	sourced solutions with direct measurable impacts on biodiversity and ecosystem health; and reduced threats to biodiversity from hunting, over-exploitation and sector activities. A paradigm shift in ecological civilization and enhanced consciousness of the needs of iconic and threatened species whereby there is sector-driven prioritization and planning of wildlife needs and their habitats in development plans as a result if an internalization of their inherent values and solutions to biodiversity threats are made possible by scalable landscape approaches established by the project.

Global environmental benefits

75. The global environmental benefits of the Project will come from activities in two project demonstration sites, as well as policy, planning and mainstreaming activities at the national and provincial level. The global environmental benefits achieved by the project include improved effectiveness of 2.74 million ha of protected areas. These sites are primarily habitat for endangered wildlife of global significance. Targeted capacity-building and threat reduction activities and the application of advanced technology and financial innovations will help improve the condition and management effectiveness of protected areas and increase the income of the community. To develop ecological corridors in intervention sites across a cumulative area of 11,742 ha; habitat restoration on 2,716 ha of degraded habitats; develop community-based activities and alternative livelihood demonstrations benefiting 10,000 people (40% representation of women); design and implement innovative technologies and financing models, and conduct related activities to improve the effectiveness of protected land management to better respond to the needs of wildlife and biodiversity conservation. These activities are expected to increase connectivity, biodiversity and improved ecosystems services. These activities are essential for the existing protection of a wide range of endangered wildlife. More sustainable use and management of protected areas will provide conservation benefits for wildlife and human beings.

Intervention sites

76. The proposed intervention sites in the two demonstration areas are shown on the maps in **Figure 4** (Yunnan) and **Figure 5** (Giant Panda National Park) and described below in **Table 8**.

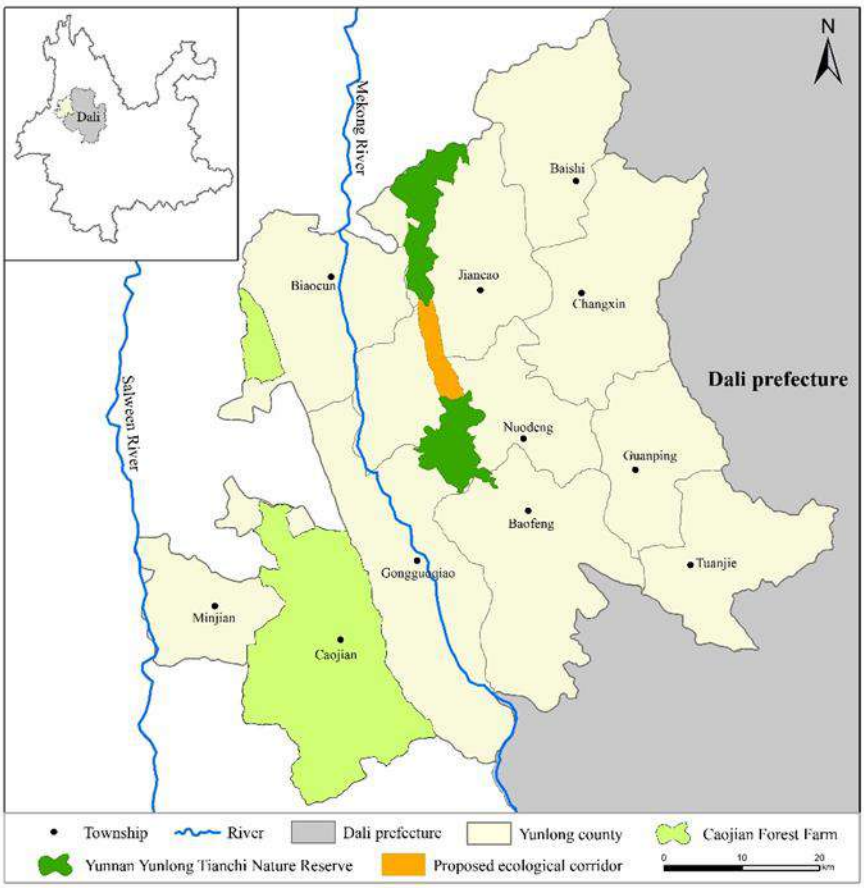


Figure 4: Map of intervention sites in the Yunnan demonstration area

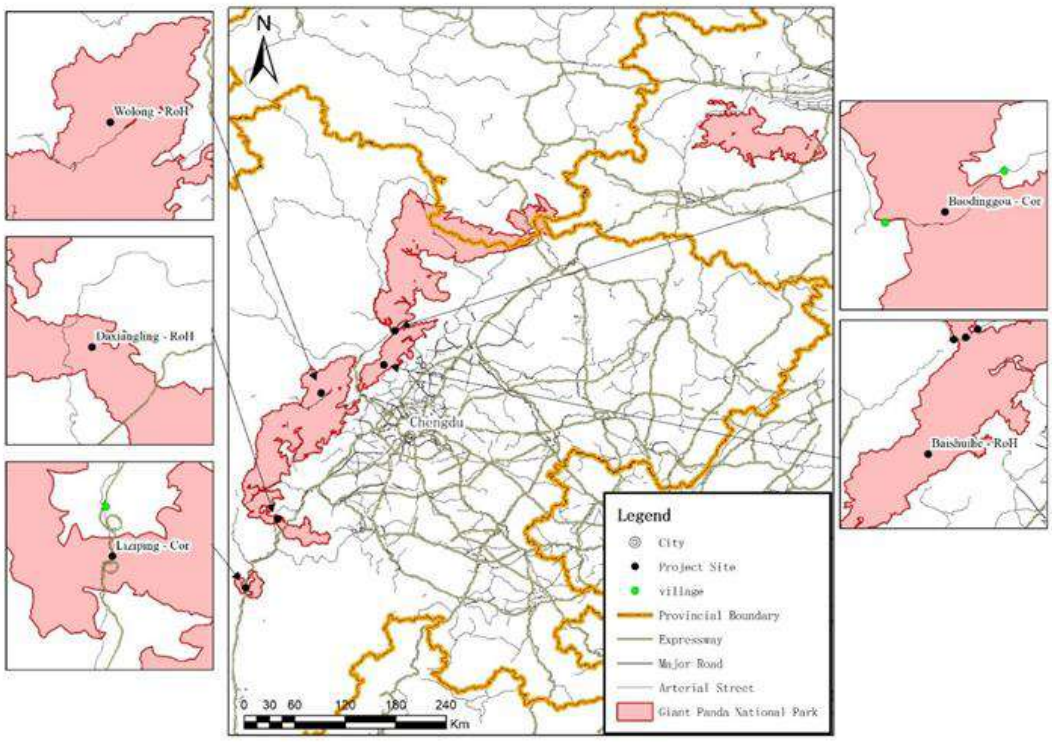


Figure 5: Map of intervention sites in the Giant Panda NP demonstration area

Table 8: Intervention sites

Intervention site	Province, Protected Area	Selection criteria	Project interventions	Area, ha	Est. number of local people affected by project intervention	Ethnic minorities among affected local people
Wolong NR E 103.183 N 31.083	Sichuan, Giant Panda National Park	-Important for panda habitat integrity. Opportunity to develop best practice in restoration of unsuccessful mono-culture approaches. -Restoration has been included in a masterplan of GPNP. -Local willingness for the project.	Restoration of degraded habitat in the Qionglai Mountains, including conversion of an unsuccessful mono-culture plantation of *larix kaempferi* into a mixed species forest. The intervention is planned at a remote area inside the Wolong Nature Reserve.	985 ha	None (The nearest villages, Wolong and Gengda, are located approx. 3 and 2 km, respectively, from the edge of the nature reserve. Considering these villages are located outside the reserve, local people are not expected to be affected by the project intervention.)	Not applicable. (The Wolong and Gengda villages are composed of 80% Tibetan and Qiang ethnic minorities.)
Daxiangling NR E 102.667 N 29.583	Sichuan, Giant Panda National Park	-Important for panda habitat integrity. Opportunity to develop best practice in restoration abandoned mining sites. -Restoration has been included in a masterplan of GPNP. -Local willingness for the project.	Restoration of degraded habitat in the Niba Mountains, involving rehabilitating abandoned mining (marble) sites by enrichment planting of native species and monitored natural regeneration. The intervention is planned at a remote area inside the Daxiangling Nature Reserve.	500 ha	None (There is one village, Shuanglin, located about 2 km from the edge of the nature reserve. In 2020 this village had 51 HHs and 255 people. Considering the Shuanglin village is located outside the reserve, local people are not expected to be affected by the project intervention.)	Not applicable. (There are limited numbers of ethnic minorities in this area; the Shuanglin village is composed primarily of Han people.)
Baishuihe NR E 103.817 N 31.333	Sichuan, Giant Panda National Park	-Important for panda habitat integrity. -Opportunity to develop best practice in restoration of earthquake damaged habitat. -Restoration has been included in a masterplan of GPNP. -Local willingness for the project.	Restoration of degraded habitat in the Longmen Mountains, involving rehabilitating landslide related damage from a major earthquake in 2008, by enrichment planting of native species and monitored natural regeneration. The intervention is planned at a remote area inside the Baishuihe Nature Reserve.	531 ha	None (There is one village, Baoshan, located about 3 km from the edge of the nature reserve. In 2020 this village had a population of 2,098. Considering the Baoshan village is located outside the reserve, local people are not expected to be affected by the	Not applicable (There are limited numbers of ethnic minorities in this area; the Baoshan village is composed primarily of Han people.)

Intervention site	Province, Protected Area	Selection criteria	Project interventions	Area, ha	Est. number of local people affected by project intervention	Ethnic minorities among affected local people
					project intervention.)	
Baodinggou NR E 103.917 N 31.783	Sichuan, Giant Panda National Park	-Importance for panda habitat integrity -Corridor establishment has been indicated as a priority of GPNP. -Local willingness for the project.	Ecological corridor and habitat restoration to enhance connectivity of fragmented giant panda populations. The establishment of the corridor will entail a multi-stakeholder agreement on grazing management, sustainable agriculture/horticulture, and other land use). Restoration interventions will focus on habitat degraded by unsustainable land use practices, and involve enrichment planting with native tree and shrub species and monitored natural regeneration. There are opportunities to collaborate with the governmental Grain to Green program. Planned community activities include strengthening and introducing alternative livelihoods, e.g., skills enhancement, ecotourism.	5,169 ha	978 (There are two villages near the intervention site: Jingzhou, and Shengli. The cumulative population of these two villages in 2020 was approx. 1,851. Considering the villages are near the proposed corridor, the some of the local people may be affected by and benefit from the project interventions).	More than 95% of the local people in the three villages are from the Qiang ethnic minority.
Liziping NR E 102.333 N 29.00	Sichuan, Giant Panda National Park	-Important for panda habitat integrity -Corridor establishment has been indicated as a priority of GPNP. -Local willingness for the project.	Ecological corridor (Tuowushan Habitat Corridor) and habitat restoration to enhance connectivity of fragmented giant panda populations. The establishment of the corridor will entail a multi-stakeholder agreement on grazing management, sustainable harvesting of NTFPs, agricultural land use, etc.). Restoration interventions will focus on habitat degraded by former unsustainable land use practices, and involve enrichment planting with native tree and shrub species and monitored natural regeneration. Planned community activities include strengthening and introducing alternative livelihoods, e.g., beekeeping, cultivation of Chinese medicinal herbs, mushroom planting, fruit tree planting, improved livestock management.	3,273 ha	There are two villages in / near the intervention site: Lizi village has 312 HHs, 1,074 people in 2017, Menghuo village had 150 HHs and 603 people in 2017. An estimated 339 of these people are may be affected by and benefit from the project)	99% of the local people in the Lizi and Menghuo villages are of the Yi ethnic minority.

Intervention site	Province, Protected Area	Selection criteria	Project interventions	Area, ha	Est. number of local people affected by project intervention	Ethnic minorities among affected local people
Caojian FF E 99.079 N 25.723	Yunnan, Caojian Forest Farm	1) Important habitat of key primate species in China. 2) Habitat of fragmentation and loss due to human activities, such as grazing land expansion, fire, grazing under forest, and collection, as well as hunting for other wildlife species. And without management of PA. 3) The northmost habitat for Western crested gibbon has no monitoring and research. 4) Habitat restoration of gibbon in this area will benefit to enhancing awareness of wildlife conservation from site level, province to nation level.	Restoration of degraded gibbon habitat in the north edge of the Caojian Forest Farm, involving rehabilitating land damaged from a fire that occurred about 10 years ago and also from over-grazing by livestock. Restoration is planned to involve enrichment planting of native species and monitored natural regeneration. The restoration work will likely be made by forest farm workers supported by people from the local community/village. Other activities involving the local community entail strengthening and introducing alternative livelihoods, e.g., fruit tree planting, cultivation of Chinese medicinal herbs, improved livestock management, and ecotourism.	200 ha	There is one village near the intervention site from Yunlong county: Caojian village had a population of 12,009 in 2019.	More than 85% of the local people in Caojian village are of Bai, Achang, and Yi ethnic minority groups.
Tianchi NR E 99.217 N 26.046	Yunnan, Tianchi Nature Reserve	1) The southernmost habitat of key primates black-and-white snub-nosed monkeys. 2) Habitat of black-and-white snub-nosed monkey in its southernmost range suffer serious fragmentation and loss, the two southernmost populations are isolated. 3) Habitat restoration and ecological corridor establish of this key primate involving cross-sector plan and action. 4) Community sustainable development will benefit wildlife conservation, and the way for resource sustainable use and management in the habitat area of key primates are	Ecological corridor and habitat restoration to enhance connectivity of fragmented snub-nosed monkey populations. The establishment of the corridor will entail a multi-stakeholder agreement on grazing management and other land use, etc.). Apart from the reaching agreement on land use practices, two overline wildlife crossings are planned to facilitate safe passage of the monkeys across two town roads. Restoration interventions will focus on habitat degraded by former over-grazing and also forest land damaged by a wildfire in 1980 in the vicinity of Mt. Longma. Planned restoration activities will involve enrichment planting with native species and monitored natural regeneration; local people from nearby villages are envisaged to take part in the restoration activities. The overline crossings will	3,300 ha corridor; 500 ha restoration	There are six villages in the vicinity of the intervention sites: Longfei, Dagonchang, Jiancao, Shijing, Tiandeng, and Shaoshang. The cumulative population of these six villages in 2021 was approx. 10,853. We estimate that approx. 830 of these people would be affected by and benefit from the project.	More than 85% of the local people in the six villages in the vicinity of the intervention sites are of the Bai, Lisu, Yi, and Miao ethnic minority groups.

Intervention site	Province, Protected Area	Selection criteria	Project interventions	Area, ha	Est. number of local people affected by project intervention	Ethnic minorities among affected local people
		importance for long-term population and habitat management. Which will mainstream wildlife conservation.	be contracted through competitive bidding. Other planned community activities include strengthening and introducing alternative livelihoods, e.g., fruit tree planting, cultivation of Chinese medicinal herbs, improved livestock management, and ecotourism.			

Socioeconomic Benefits:

77. The durability of integrated landscape management approaches and innovative tools in key endangered wildlife habitats restoration interventions demonstrated in the project and upscaling will largely depend on sustained involvement and generation of livelihood benefits for local communities. The estimated project direct beneficiaries include 2,000 local farmers, of whom 40% are women. These people from the local communities will benefit directly through strengthened and expanded sustainable livelihood initiatives. Engagement and generation of socioeconomic benefits for women and men from the local communities is an important aspect of the integrated landscape approach in the project design. The viability of the wildlife habitats and ecological corridor restoration approaches demonstrated on the project over the long-term will largely depend on sustained involvement of local communities and flow of sustainable livelihood benefits. The project will provide opportunities for local people to be involved in capacity building activities aimed at strengthening their existing or introducing new close-to-nature livelihood models, including joint management of natural resources, organic farming, ecotourism, certification schemes and alternative livelihood cooperatives, etc. Under the current conditions in China, one of the biggest barriers hindering economic prosperity in rural area is that farmers, especially women and ethnic minority farmers often have limited access to green supply chains, lack financial management skills, and are uninformed of real-time market information and of partnership opportunities. By facilitating linkages to local cooperatives and women's groups and ecologically conscious private enterprises which are closer to the marketplace, the prospects of their income generation capabilities and assets accumulation will be substantially improved.

78. Apart from these monetary gains, i.e., increased financial capital, the local direct beneficiaries will gain non-monetary benefits. Joint management of natural resources and improved nature conservation are expected to restore ecosystem functions and services, resulting in improved land productivity, water quality, climate regulation services, erosion control capabilities, etc. These improvements will generate increased nature capital of the local communities.

79. Significant gains in human capital are also expected through the project interventions. For example, local communities will benefit from knowledge achieved through skills trainings, learning-by-doing, financial management training, etc. The institutional level direct beneficiaries, including 500 people at the national and provincial level and 1,500 conservation workers and natural reserve managers and professionals at the landscape level, will also increase knowledge and hands-on experience. Strengthened institutional capacities will help ensure sustainability of the results achieved during the project and upscaling of the demonstrated interventions in other regions in the country.

80. The cumulative monetary and non-monetary benefits will strengthen the resilience of local communities with respect to the expected impacts of climate change, e.g., restored and protected ecosystem functions and services, and also in regard to socioeconomic disruptions, e.g., diversified income opportunities will allow local households to cope with possible market fluctuations or supply chain interruptions, such as those that occurred during the COVID-19 pandemic.

81. In addition, the project strategy emphasizes the need to strengthen social capital in the target landscapes, through establishment of multi-stakeholder, nature reserve and community joint management models to wildlife and nature conservation, which will provide local people, including women and ethnic minorities an opportunity to actively participate in the decision-making processes regarding sustainable management of natural resources in their communities. The project will also facilitate enhanced social networking, e.g., cooperatives, micro-enterprises, in partnership with governmental entities, NGOs, and private sector players, e.g., through insertion of local farmers into green value chains, In addition, the citizen science events planned will also attract tens of thousands of young students and general public to participate in the drive of nature conservation and wildlife protection.

IV. RESULTS AND PARTNERSHIPS

Expected Results:

82. **Project objective**: To safeguard key threatened and iconic wildlife in China through cross-sectoral engagement, community participation and innovative management technologies across landscapes.

Component 1: Mainstreaming wildlife conservation into integrated landscape planning through enhanced intersectoral coordination and supportive policy environment

Total Cost: USD 10,308,215; GEF project grant requested: USD 1,048,215; Cofinancing: USD 9,260,000

83. At the core of Component 1 is the strengthening intersectoral coordination mechanisms for biodiversity conservation and management, also facilitating collaborative actions related to the Post-2020 Global Biodiversity Framework (Output 1.1.1). The current coordination mechanisms are not aimed at adopting an integrated approach towards biodiversity conservation and management. The project will aim to strengthen intersectoral coordination mechanisms through promoting:

1) Oversight and coordinated actions and projects on wildlife conservation and management.
2) Conflict resolution between the sectors pertaining to wildlife conservation in production landscapes.
3) A mechanism for consultation on and harmonization of appropriate policies and planning on biodiversity conservation and sustainable utilization, including those pertaining to specific guidelines on green infrastructure and multi-use-sector ecological corridor establishment, as examples.

84. Under Output 1.2, policy measures for incentivizing biodiversity conservation and ecological compensation will be developed and applied at national and provincial levels. Considerations for policy measures and incentives under Output 1.1.2 include but are not limited to the following:

a) Government procurement policies related to biodiversity conservation and sustainable use.
b) Ecological compensation policies, expand their coverage and increase investment(s).
c) Incentivize reuse of biological resources and provide policy support for the development of technologies producing alternatives to usage of biological resource inputs in the production of goods and services.

85. The project will engage with ongoing government initiatives and other projects, including the ADB-GEF project "Innovating Eco-compensation Mechanisms in Yangtze River Basin" (GEF ID 10711), which is under development under GEF-7 with the objective to promote innovative eco-compensation mechanisms which contribute to improved and sustainable terrestrial and freshwater ecosystem health in the upper and middle Yangtze River Basin (YRB). The provinces of Yunnan and Sichuan are included in the YRB.

86. Under Output 1.1.3, a comprehensive set of guidelines and monitoring protocols for conservation measures outside protected areas, e.g., ecological corridor based on domestic and international best practices. Corridors are important management instruments for mainstreaming biodiversity conservation in production landscapes. The guidelines will emphasize a wide range of levers and tools to support conservation efforts, including lists of key species to be considered for enhanced protection under China's wildlife protection law, wildlife habitat definition standards and zoning plans, community engagement sessions on livelihoods, intersectoral dialogues, sector specific guidelines targeting agriculture, infrastructure, extractive industries, tourism and development sectors operating in close proximity to sensitive habitats. As part of the guidelines, the national Environmental Impact Assessment (EIA) system will also be augmented to include a Wildlife Impact Assessment chapter, which will also be applied as part of Component 2 in the context of sectoral activities in sensitive habitats across. These tools will be used to inform how and where mainstreaming activities are undertaken as part of Component 2 as well as to underpin the strategy and actions plan(s) also envisioned for Yunnan and for the Giant Panda National Park (Outputs 1.2.1 and 1.2.2, respectively).

87. The cross-sectoral strategies and action plans for primate conservation in Yunnan Province and the Giant Panda NP will be implemented at site level as part of Outputs 2.2.1 / 2.2.2 (establishment of ecological corridors) and 2.3.1 / 2.3.2 (restoration of degraded wildlife habitats) and as part of livelihood activities in Outputs 2.4.1 / 2.4.2, together with specific activities to be undertaken by each targeted sector, while also being

informed by the comprehensive set of guidelines developed. This will give an opportunity to test out the tools and levers for further refinement and therefore, there will be a dynamic feedback loop with Output 1.1.3, as well as technology enablers articulated in Component 3 to ensure that the guidelines have been tried and tested, delivering the desired impact and can be applied at scale.

88. Development of the cross-sectoral strategies and action plans will work through the two provincial intersectoral coordination mechanisms anticipated to be established to coordinate the efforts of relevant departments, including agriculture and rural areas, natural resources, forestry and grassland, ecological environment, transportation, culture and tourism to implement key measures during the project. Academia, civil society, and the private sector will also be invited to participate in provincial coordination mechanisms.

89. Component 1 also includes development and implementation of a capacity building program (Output 1.1.4) aimed at developing skills and capacities of the relevant sectors involved in the intersectoral coordination mechanisms (Output 1.1.1) targeting senior staff to help internalize wildlife considerations and biodiversity values and to promote adoption of integrated approaches for wildlife conservation and management. At the sub-national level, the capacity building program will be delivered through the Forest Chief scheme (see **Box 1**), aligning with current government reforms and priorities.

Box 1: Description of Forest Chief Scheme

Upon completion of successful trials in 2017, the general offices of the Communist Party of China Central Committee and the State Council announced that the Forest Chief scheme will be rolled out nationwide by June 2022. The Forest Chief scheme aims to strengthen protection and restoration of forests and grasslands through strengthening local responsibilities, enhancing monitoring and supervision, utilizing modern information technologies, encouraging improved prevention and control of pests, diseases and natural disasters, including fires. (source: QIUSHI CPC Central Committee Bimonthly, 14 Jan 2021).

The Forest Chief Scheme refers to the establishment of a five-level forest chief scheme at provincial, municipal, county, township and village levels in accordance with the principle of "responsibility at different levels". Forest chiefs at different levels are responsible for supervising and guiding the protection and development of forest and grassland resources within their respective areas of responsibility, coordinate the solution of major issues in the protection and development, and investigate and treat all kinds of illegal and criminal acts that destroy forest and grassland resources in accordance with the law.

In January 2021, the Chinese government issued guidelines on the full implementation of the Forest Chief Scheme, and issued a notification requiring all regions and departments to earnestly implement it in light of actual conditions.

In accordance with the requirements for systematic governance of mountains, rivers, forests, farmland, lakes and grasslands, China implements the Forest Chief Scheme across the country, making clear the target responsibility of local government officials for protecting and developing forest and grassland resources, and establishing a long-term mechanism under which the governments are responsible for protecting and developing forest and grassland resources so as to accelerate the development of an ecological civilization and a beautiful China.

The governor of each province is its Forest Chief-General and vice governors are deputy forest chief-generals, in charge of their implementation areas. Each province may, in light of actual conditions, establish forest chiefs at city, county and township levels. Local competent forestry and grassland authorities at various levels shall be responsible for the organization and implementation of the forester chief scheme.

Forest chiefs at all levels shall organize and lead the protection and development of forest and grassland resources in their responsible areas, implement the target responsibility system for the protection and development of forest and grassland resources, take forest coverage rate, forest stock amount, grassland comprehensive vegetation coverage, desertification land treatment area and other important indicators, and determine target tasks according to local conditions; to organize the formulation of plans for the protection and development of forest and grassland resources, strengthen overall management, promote institutional building, and improve accountability mechanisms.

It can be seen that the main goal of the Forest Chief Scheme is to strengthen the management of forest and grassland resources; however, wildlife, which is also the responsibility of forest and grassland departments, is not explicitly included in the coverage of the scheme. Therefore, working with the Chinese government in strengthening the protection of wildlife and its habitat and bringing wildlife resource management into the coverage of Forest Chief Scheme will greatly promote the mainstream process of wildlife conservation and help reverse the continuous decline of wildlife species around the world, including in China.

Outcome 1.1: Intersectoral coordination and policies supporting biodiversity conservation through integrated approaches improved

Output 1.1.1. Intersectoral coordination mechanisms for biodiversity conservation strengthened, also facilitating collaborative actions related to the Post-2020 Global Biodiversity Framework

90. Indicative activities under Output 1.1.1 include:

Activity description	National	Yunnan	Sichuan
1.1.1.1. Building upon the baseline studies and stakeholder consultations completed during the PPG phase, prepare a high-level policy brief on mainstreaming biodiversity conservation and management in China.	✓		
1.1.1.2. Review and improve the existing terms of reference for the intersectoral coordination mechanism, including composition, responsibilities, rules and mechanisms under the management system.	✓		
1.1.1.3. Organize intersectoral coordination mechanism meetings to oversee the development of guidance documents and action plans for integrated approaches for mainstreaming biodiversity conservation and management, and for facilitating collaborative actions related to the Post-2020 Global Biodiversity Framework.	✓		
1.1.1.4. Facilitate improvements to the provincial level intersectoral coordination mechanisms in Yunnan and Sichuan provinces, respectively. In addition to coordinating and decision-making functions, the provincial coordination mechanisms will supervise the guidance and application of integrated approaches to the conservation and management plan of target wildlife species and their habitats, focusing on the formulation and implementation of specific conservation strategies and action plans in Outputs 1.2.1 and 1.2.2.	✓	✓	✓

Output 1.1.2. Policy measures for incentivizing biodiversity conservation and ecological compensation developed and applied at national and provincial levels

91. Indicative activities under Output 1.1.2 include:

Activity description	National	Yunnan	Sichuan
1.1.2.1. Conduct a policy gap analysis on issues that restrict the reversal and mainstreaming of biodiversity conservation and management in the medium and long term, and the planning and policy frameworks of biodiversity-friendly incentive measures at the landscape scale need to be developed according to the special needs and policy gaps in the field.	✓		
1.1.2.2. Investigate the viability of developing innovative policy measures that can contribute to biodiversity conservation and sustainable use in pricing, tax, credit trade and sustainable source procurement/procurement of government departments, and search in preferential incentives in pricing, credit and tax, and focus on policy on ecological compensation for farmers/herders protecting wildlife habitats.	✓		
1.1.2.3. Formulate recommendations on improving ecological compensation strategy, expanding its coverage and increasing investment.	✓		
1.1.2.4. Develop special incentives and policies to encourage the reuse of biological resources, that also provides policy support for the development of technologies that replace biological resource inputs in the production of goods and services.	✓		
1.1.2.5. Facilitate integration of biodiversity conservation and management into the ongoing government working mechanisms and systems to improve its mainstreaming environment (e.g., key habitat managements, ecological corridor management, etc.).	✓		

Output 1.1.3. A comprehensive set of guidelines and monitoring protocols for conservation measures, e.g., ecological corridors, developed based on domestic and international best practices

92. Indicative activities under Output 1.1.3 include:

Activity description	National	Yunnan	Sichuan
1.1.3.1. Deliver training on UNDP social and environmental standards.			
1.1.3.2. Conduct a gap analysis on habitat degradation and fragmentation governance and development of action guidelines.	✓		
1.1.3.3. Develop guidelines and technical standards for habitat restoration.	✓		
1.1.3.4. Prepare a guidance document on the types, design standards, establishment planning and technical guidelines and monitoring protocols for ecological corridor establishment.	✓		
1.1.3.5. With free, prior and informed consent (FPIC), document biodiversity-friendly normative measures based on the traditional knowledge and practice, including but not limited to the Qiang, Tibetan and Yi ethnic groups.	✓		
1.1.3.6. Prepare sector-specific guidelines for agriculture, infrastructure (transport, energy), water resources, mining, tourism and development sectors operating in the vicinity of sensitive habitats.	✓		
1.1.3.7. Develop wildlife assessment elements for integration into national environmental impact assessment (EIA) regulations and practice.	✓		
1.1.3.8. Facilitate incorporation of the above guidelines, standards, and monitoring protocols into Yunnan and Sichuan conservation strategies and action plans and supervise the implementation, preparing case studies on experiences and lessons learned.		✓	✓

Output 1.1.4. A capacity building plan on applying integrated approaches and implementing evaluation indicator systems developed and delivered

93. Indicative activities under Output 1.1.4 include:

Activity description	National	Yunnan	Sichuan
1.1.4.1. According to the needs of mainstreaming biodiversity conservation and management, fully investigate the different cognition and knowledge requirements of intersectoral coordination mechanisms, develop capacity building plans and training contents on applying integrated approaches and implementing evaluation indicator systems, and make timely adjustments based on the training feedback of each period.	✓		
1.1.4.2. Develop selection criteria and follow-up performance tracking mechanism for trainees.	✓		
1.1.4.3. Develop training materials and lesson plans to promote upscaling.	✓		
1.1.4.4. Support implementation of trainings in cooperation with co-financing partners and other stakeholders.	✓		
1.1.4.5. Strengthen international collaboration, including organizing international learning exchanges, including with projects under the GEF Global Wildlife Program (GWP).	✓		

Outcome 1.2: Mainstreaming wildlife conservation and sustainable management in Giant Panda National Park and primate conservation in Yunnan

Output 1.2.1. Cross-sectoral strategy and action plan for primate conservation and sustainable management in Yunnan developed and implemented

94. Indicative activities under Output 1.2.1 include:

Activity description	National	Yunnan	Sichuan
1.2.1.1. Under the direction of the strengthened Yunnan Provincial intersectoral wildlife conservation coordination mechanism in Output 1.1.1, assemble and operationalize a intersectoral working group, including the All-China Women's Federation at provincial level, the ethnic minority affairs departments, among other relevant sectors.		✓	
1.2.1.2. Deliver training to the cross-sectoral working group members on UNDP Social and Environmental Standards and the objectives and scope of social and environmental strategic assessment (SESA).		✓	
1.2.1.3. Incorporating SESA considerations and utilizing existing studies and information, conduct a baseline assessment of primate conservation and sustainable management across production and protected landscapes in the key areas of Yunnan Province harboring primate habitats.		✓	
1.2.1.4. In collaboration with planning and development entities, support the development of a cross-sectoral strategy and action plan for primate conservation and sustainable management, aligned with the government's "One map" for land use policy and other sectoral plans.		✓	
1.2.1.5. Initiate and advocate the implementation of the cross-sectoral strategy and action plan by regularly reviewing and disseminating the lessons from the establishment and operationalization of the ecological corridor under Outcome 2.2.		✓	
1.2.1.6. Convene a stakeholder workshop, sharing experiences from implementation of the cross-sectoral strategy and action plan and advocating mainstreaming into provincial planning and budgetary frameworks.		✓	

Output 1.2.2. Cross-sectoral conservation and sustainable management plan for the Giant Panda National Park developed and implemented

95. Indicative activities under Output 1.2.1 include:

Activity description	National	Yunnan	Sichuan
1.2.2.1. Under the direction of the strengthened Sichuan Provincial intersectoral wildlife coordination mechanism established in Output 1.1.1, assemble and operationalize an intersectoral working group, having representation from the provinces of Gansu and Shaanxi and including the Provincial All-China Women's Federation, the ethnic minority affairs departments, among other relevant sectors.			✓
1.2.2.2. Deliver training to the intersectoral working group members on UNDP Social and Environmental Standards and the objectives and scope of social and environmental strategic assessment (SESA).			✓
1.2.2.3. Incorporating SESA considerations and utilizing existing studies and information, conduct a baseline assessment of giant panda conservation and sustainable management across production and protected landscapes in the three provinces harboring key habitats.			✓
1.2.2.4. In collaboration with planning and development entities, support the development of a cross-sectoral Conservation and sustainable management plan of Giant Panda National Park, aligned with the government's "One map" for land use policy and other sectoral plans.			✓
1.2.2.5. Initiate and advocate the implementation of the cross-sectoral Conservation and sustainable management plan by regularly reviewing and disseminating the lessons from the establishment and operationalization of the ecological corridors under Outcome 2.2.			✓
1.2.2.6. Convene a stakeholder workshop, sharing experiences from implementation of the cross-sectoral Conservation and sustainable management plan and advocating mainstreaming into provincial planning and budgetary frameworks.			✓

Component 2: Demonstrating integrated landscape management approaches and innovative tools in key endangered globally important wildlife habitats

Total Cost: USD 24,455,260; GEF project grant requested: USD 2,485,260; Cofinancing: USD 21,970,000

96. This component will consist of site-based management effectiveness at selected protected areas and their surrounding landscapes, that will embrace local community participation, as well as enhance livelihood opportunities through alternative revenue streams (see Stakeholder engagement plan in **Annex 7**). Activities will operate mainly at the site-level in the provinces of Yunnan and Sichuan. Activities aim to enhance the protection, rehabilitation and management of key habitats for key species including the Giant Panda, and two species of endangered primates, and to address barriers related to insufficient management effectiveness and mainstreaming of conservation with the practices of other sectors at site-level. The demonstration areas for this project consist of Giant Panda National Park, Yunnan Yunlong Tianchi National Nature Reserve, Caojian plantations (forest farm) in Yunlong County, with the goal to build capacity and to increase the METT scores at 1 national park with a category 2 designation; 1 Nature Reserve with a category 1 designation; and 1 PA with a category 6 designation, with a total area covering 2,233,808 hectares[11] (Outcome 2.1).

97. Armed with supportive policies, a comprehensive set of guidelines, training and action plan for both Giant Panda National Park and Yunnan, site-based landscape restoration and connectivity efforts under Component 2 (Outputs 2.2.1, 2.2.2, 2.3.1 and 2.3.2) will be better equipped and primed for success to demonstrate and refine these tools. There will be a feedback loop back to coordination mechanisms strengthened under Outcome 1.1 and the cross-sectoral strategies and action plans developed under Outcome 1.2. The likelihood for long-term sustainability will be improved by engaging local communities through co-management agreements[12] and emphasis on alternative income streams to reduce pressures on natural resources in sensitive landscape habitats. Linkages to both academia and the private sector will be made to embed ownership within ongoing research and development in this space. This will lead to a landscape approach model with support and ownership from communities, academic institutions and the private sector that can be applied at scale.

98. As part of Output 2.1.1, a training and a capacity building plan will also be developed and delivered at the site level to strengthen park rangers' and park management staff to augment their capacity and preparedness to engage with external stakeholders and different sectors to help them internalize wildlife considerations and biodiversity values within multi-use landscapes, as well as to be operationally effective in buffer areas. There will be training delivered in partnership with the private sector in the context of applying frontier technologies and innovative knowledge management solutions at site level to solve issues around landscape approaches to wildlife conservation such as remote monitoring and application of DNA technologies among others.

99. Efforts at intervention sites will include connectivity between patches of key protected wildlife habitats, targeted for improvement outside of PAs through the creation of ecological corridors (Outcome 2.2). Current types of land use in selected corridors includes agriculture, livestock grazing, road and transportation, power line transmission, tourism and so on which are compliance with local (county, prefecture or provincial level) planning and policies. The project will set up a multi-sector coordination mechanism to explore feasibility either to change land use plans for instance converting agriculture land to forestry land or improve productive management of relevant sectors for instance making incentive policy for drivers to use the available underground tunnel reducing surface transport on the mountain, limiting tourism activities in panda breeding time, controlling livestock grazing in the corridor areas. These wildlife-friendly practices may be taken into local land use plans and sectoral plans. The good practices on the sites will be demonstrations of the cross-sectoral strategies and action plans on the ground under Outcome 1.2. The project will focus on an ecological corridor to

[11] Of this total area, the respective coverage is 2,197,800 ha for Giant Panda National Park, 14,475 ha for Yunnan Yunlong Tianchi National Nature Reserve and 21,533 ha for Caojian plantations in Yunlong County.

[12] Almost all national nature reserves have formal co-management agreements in place with the surrounding villages (or townships). In the context of this project, co-management will occur in the buffer areas outside PAs. This model of co-management will be exploratory in the Yunnan landscape to understand whether or not it is feasible and if there is possibility to sign similar sorts of agreements in landscapes outside PAs to benefit wildlife in threatened habitats and across landscapes to encourage patrols by farmers and to support e cological monitoring by communities. For Giant Panda National Park, it is anticipated that co-management agreements will be signed between nature reserves and surrounding villages or townships, as the Park includes 69 nature reserves.

link key primate habitats, including black-and-white snub-nosed monkey (*Rhinopithecus bieti*) in Yunlong County, Dali, Yunnan, consistent with the cross-sectoral strategy and action plan developed under Outcome 1.2. Efforts for isolated panda habitats in Giant Panda National Park will form one adjoining management zone by establishing a protection system of 2 ecological corridors. This will be underpinned by the cross-sectoral strategy and an action plan for the Giant Panda National Park.

100. During the project's implementation, key wildlife habitat will be enhanced through restoration measures (Outcome 2.3) using either nature-based solutions to connect high conservation value areas. 200 hectares of black crested gibbon habitat in Dali (Yunlong County), Yunnan will be restored. Three targeted panda habitats will be restored in and adjacent to the Giant Panda National Park through biological/ecological engineering and other technical measures.

101. In parallel with site-based restoration efforts, Component 2 will embrace gender responsive-community-based (see Gender Action Plan in **Annex 10**) co-management to provide socio-economic benefits to the local communities. Local communities will directly benefit from sustainable natural resource management and the livelihood improvement approaches. The efforts will include ecological goods and services, including ecotourism, certification experiences and organic farming generating alternative income streams (Output 2.4.1) for the local communities. Moreover, alternative livelihood social associations will be established and/or strengthened (Output 2.4.2).

102. While operating at the national level, the strengthened intersectoral coordination mechanisms at the national level will also facilitate efforts at the provincial level through interactions with their counterparts at the sub-national level towards a Yunnan Primate Conservation Strategy and Action Plan, and to help create the necessary enabling conditions to link landscapes across Giant Panda National Park. The desired end state is for habitat improvement activities, including restoration and corridor establishment, to be tested together with supporting sectoral policies to identify a robust model and project best practices that can be replicated within China and globally.

103. In terms of complementarity, site level activities will build on the progress and early successes under C-PAR, including the national gap and connectivity analysis, which will inform the selection of ecological corridor sites; the collaborative PA governance guidelines, which will steer the way in which the cross-sectoral coordination mechanism under Component 1 will be shaped; and, the improvement of the regulatory framework resulting from the ongoing protected area reform, which will create a clearer landscape for wildlife conservation and management inside and outside the PAs.

104. The project is putting forward a landscape-level model that will take a holistic approach to landscape management, aiming to reconcile the competing objectives of wildlife conservation and sectoral activities across landscapes through supportive polices and guidelines (which have been tested and refined), with special attention to ecological corridors, co-management opportunities, threatened / fragmented habitats in and around PAs, and intersectoral coordination. The model will be informed by both international experiences and internalize the unique characteristics of the Chinese context, and will be accelerated by advances in technologies and knowledge management and further amplified by offerings of both academia and private sector R&D. This approach is also consistent with conclusions drawn from recent studies suggesting a wider landscape approach or "area-based conservation" as it is also known, will be essential to meeting PA targets and will be the cornerstone of conservation objectives long into the twenty-first century.[13]

105. Biodiversity mainstreaming, including through establishment of ecological corridors, also provides an opportunity to increase awareness among local communities and stakeholders in production sectors on the importance of sensibly managing human-wildlife conflicts, aimed at avoiding injury and damage, protection of endangered species, and minimizing the risk of zoonotic disease outbreaks.

Outcome 2.1: Increased management effectiveness across the protected areas in the two demonstration areas

[13] Maxwell, S.L., Cazalis, V., Dudley, N. *et al*. Area-based conservation in the twenty-first century. *Nature* **586,** 217–227 (2020). https://doi.org/10.1038/s41586-020-2773-z

Output 2.1.1. Improved capacity for PA managers to effectively engage and support participatory, multi-level, cross-sectoral landscape approaches to conserve globally-threatened and iconic wildlife

106. Indicative activities under Output 2.1.1 include:

Activity description	National	Yunnan	Sichuan
2.1.1.1. Conduct training needs assessments for the protected area management entities and community rangers in the two demonstration areas.		✓	✓
2.1.1.2. Based on the results of the training needs assessments and baseline METT assessments, develop a 5-year capacity building program, broken down by functional responsibilities and required competences.		✓	✓
2.1.1.3. Implement the 5-year capacity development program in the two demonstration areas, linking the training activities with site-based activities at the project intervention sites, including participation in GWF GWP sponsored trainings.		✓	✓
2.1.1.4. Organize two cross-province learning exchanges between the Sichuan and Yunnan demonstration areas, sharing best practices and knowledge among the protected area management entities.		✓	✓
2.1.1.5. Develop a performance based technical guideline for community ranger development, identifying competences and qualifications to reach different levels of this position.		✓	✓
2.1.1.6. Review lessons learned from implementation of the 5-year capacity building program and, together with the protected area management entities, develop an extended version of the program for mainstreaming into budgetary frameworks in the two demonstration areas.		✓	✓

Outcome 2.2: Connectivity between patches of key protected wildlife habitats targeted for improvement through the creation of ecological corridors

Output 2.2.1. Ecological corridor established to link key primate habitats in Yunlong County, Dali Bai Autonomous Prefecture, Yunnan Province, consistent with the cross-sectoral strategy and action plan developed in Output 1.2.1

107. Indicative activities under Output 2.2.1 include:

Activity description	National	Yunnan	Sichuan
2.2.1.1. Set up a multi-stakeholder local working group, with equitable representation of women, ethnic minorities, and other vulnerable groups, for guiding the process of establishing the proposed ecological corridor.		✓	
2.2.1.2. Deliver training on UNDP Social and Environmental Standards, including sharing lessons with the GEF GWP on implementation of social and environmental safeguards on wildlife conservation projects and on participatory rural assessments.		✓	
2.2.1.3. Building upon the biodiversity and socioeconomic information gathered during the PPG phase, conduct a Participatory Ecological Corridor Feasibility and Rural Assessment, for the proposed ecological corridor at the Tianchi Nature Reserve (indicative outline available in Annex 5 to the ESMF), fulfilling the requirements of an environmental and social impact assessment (ESIA), screened according to UNDP SES procedures, an evaluation of potential economic displacement, and FPIC consultations.		✓	
2.2.1.4. Prepare an Ecological Corridor Strategy and Action Plan for the proposed ecological corridor at the Tianchi NR, fulfilling the requirements of an environmental and social management plan (ESMP), a livelihood action framework, and an indigenous peoples plan		✓	

(IPP), including FPIC obtained from the ethnic minority communities having a stake in the operationalization of the corridor (indicative outline available in Annex 3 to the ESMF).			
2.2.1.5. Initiate implementation of the Tianchi NR Ecological Corridor Strategy and Action Plan, through specific conservation measures, such as (a) wildlife-friendly road management mechanisms in collaboration with the transport sector; (b) sustainable livestock management and agroecological practices; (c) participatory restoration of degraded habitats; etc.		✓	
2.2.1.6. Strengthen the capacities of the protected area management entities and support regular biodiversity monitoring in the corridor, including canopy, vegetation cover, wildlife populations.		✓	
2.2.1.7. Sharing international best practices (including among GEF GWP projects), support the design of the proposed wildlife crossing structures over the roads transecting the proposed corridor between the nature reserve.		✓	
2.2.1.8. Carry out socialization of the ecological corridor among the local communities residing and/or utilizing the land within the corridor areas, including communicating best practices for management and avoidance of human-wildlife conflicts.		✓	
2.2.1.9. Develop and disseminate a technical guideline based on the lessons and best practices of the conservation measures implemented for the corridor.	✓	✓	✓

Output 2.2.2. Connectivity of isolated panda habitats in the Giant Panda National Park enhanced through establishing two ecological corridors, consistent with the cross-sectoral strategy and action plan developed in Output 1.2.2

108. Indicative activities under Output 2.2.2 include:

Activity description	National	Yunnan	Sichuan
2.2.2.1. Set up two multi-stakeholder local working groups, with equitable representation of women, ethnic minorities, and other vulnerable groups, for guiding the process of establishing the proposed ecological corridors.			✓
2.2.2.2. Deliver training on UNDP Social and Environmental Standards, including sharing lessons with the GEF GWP on implementation of social and environmental safeguards on wildlife conservation projects, and on participatory rural assessments.			✓
2.2.2.3. Building upon the biodiversity and socioeconomic information gathered during the PPG phase, conduct Participatory Ecological Corridor Feasibility and Rural Assessments for the proposed ecological corridors at the Baodinggoou NR and Liziping NR (indicative outline available in Annex 5 to the ESMF), fulfilling the requirements of an ESIA, screened according to UNDP SES procedures, an evaluation of potential economic displacement, and FPIC consultations.			✓
2.2.2.4. Prepare Ecological Corridor Strategies and Action Plans for the proposed ecological corridors at the Baodinggou NR and Liziping NR, fulfilling the requirements of an ESMP, a livelihood action plan, and an IPP, including FPIC obtained from the ethnic minority communities having a stake in the operationalization of the corridors (indicative outline available in Annex 3 to the ESMF).			✓
2.2.2.5. Initiate implementation of the Baodinggou NR and Liziping NR Ecological Corridor Strategies and Action Plans through specific conservation measures, such as (a) wildlife-friendly road management mechanisms in collaboration with the transport sector, (b) easement compensation approach for collective forest use within the corridors, (c) sustainable livestock management and agroecological practices, (d) participatory restoration of degraded habitats, etc.			✓
2.2.2.6. Strengthen the capacities of the Baodinggou NR and Liziping NR management entities and support regular biodiversity monitoring in the corridors, including canopy, vegetation cover (including bamboo), wildlife populations.			✓
2.2.2.7. Conduct a feasibility study for wildlife crossings in the corridor areas.			✓

2.2.2.8. Carry out socialization of the ecological corridors among the local communities residing and/or utilizing the land within the corridor areas, including communicating best practices for management and avoidance of human-wildlife conflicts.			✓
2.2.2.9. Develop and disseminate technical guidelines based on the lessons and best practices of the conservation measures implemented for the corridors.	✓	✓	✓

Outcome 2.3: Key wildlife habitat enhanced through restoration measures

Output 2.3.1. Restoration of key primate habitat undertaken in Yunlong County, Dali Bai Autonomous Prefecture, Yunnan

109. Indicative activities under Output 2.3.1 include:

Activity description	National	Yunnan	Sichuan
2.3.1.1. Building upon the information gathered during the PPG phase, carry out a baseline habitat surveys of the areas earmarked for restoration at the Caojian Forest Farm and Tianchi NR, fulfilling the requirements of an ESIA, screened according to UNDP SES procedures, and, for the Caojian Forest Farm survey, an evaluation of potential economic displacement and FPIC consultations with communities potentially affected by the restoration measures.		✓	
2.3.1.2. In collaboration with the protected area management entity, develop a Degraded Habitat Restoration Plans for the Caojian Forest Farm and Tianchi NR (indicative outline available in Annex 4 to the ESMF), fulfilling the requirements of an ESMP and, for the Caojian Forest Farm plan, a livelihood action framework, and an IPP, including with FPIC obtained from the ethnic minority communities having a stake in the restoration measures.		✓	
2.3.1.3. Initiate implementation of the Caojian Forest Farm and Tianchi NR Degraded Habitat Restoration Plans, delivering site level capacity building and supervision to protected area management entities, local communities and contracted partners.		✓	
2.3.1.4. Strengthen the capacities of the Caojian Forest Farm and Tianchi NR management entities and support regular biodiversity monitoring of the area undergoing restoration, including canopy, vegetation cover (including bamboo), wildlife populations.		✓	
2.3.1.5. Develop and disseminate a technical guidance document on best practices for primate habitat restoration.	✓	✓	✓

Output 2.3.2. Degraded panda habitats undergoing restoration in the Giant Panda National Park through biological/ecological engineering and other technical measures

110. Indicative activities under Output 2.3.2 include:

Activity description	National	Yunnan	Sichuan
2.3.2.1. Building upon the information gathered during the PPG phase, carry out baseline habitat surveys of the areas earmarked for restoration at the Wolong NR, Daxiangling NR, and Baishuihe NR, fulfilling the requirements of an ESIA, screened according to UNDP SES procedures, and ground-truthing to verify there are no people residing in or utilizing the restoration areas.			✓
2.3.2.2. In collaboration with the protected area management entities, develop Degraded Habitat Restoration Plans for the Wolong NR, Daxiangling NR, and Baishuihe NR, specific to the conditions at the intervention sites (earthquake-related damage, unsuccessful monoculture forested area, and abandoned mining site) (indicative outline available in Annex 4 to the ESMF), fulfilling the requirements of an ESMP.			✓

2.3.2.3. Initiate implementation of the Degraded Habitat Restoration Plans for the Wolong NR, Daxiangling NR, and Baishuihe NR, delivering site level capacity building and supervision to protected area management entities and contracted partners.			✓
2.3.2.4. Strengthen the capacities of the Wolong NR, Daxiangling NR, and Baishuihe NR management entities and support regular biodiversity monitoring of the areas undergoing restoration, including canopy, vegetation cover (including bamboo), wildlife populations.			✓
2.3.2.5. Develop and disseminate technical guidance documents for the following types of degraded habitat restoration: (a) restoration of earthquake-damaged giant panda habitats; (b) restoration of unsuccessful monoculture forest areas within panda habitats by conversion to mixed species forests; and (c) restoration of abandoned mining sites within panda habitats	✓	✓	✓

Outcome 2.4: Gender responsive- and community-based co-management, and sustainable utilization of natural resources among the project intervention sites providing socioeconomic benefits to local communities

Output 2.4.1. Ecological goods and services, including nature-based tourism, certification schemes and/or organic farming, in place to generate alternative income streams for local communities

111. Indicative activities under Output 2.4.1 include:

Activity description	National	Yunnan	Sichuan
2.4.1.1. In connection with the ecological corridor strategies and action plans for the Tianchi NR, Baodinggou NR, and Liziping NR, and the habitat restoration plan for the Caojian Forest Farm, prepare Business Plans (4 total) for Nature-based Livelihood Development, fulfilling the requirements of a livelihood action plan.		✓	✓
2.4.1.2. As part of the Business Plans for Nature-Based Livelihood Development , carry out market analyses for potentially viable sustainable livelihood options for local communities.		✓	✓
2.4.1.3. Design and deliver capacity building to local beneficiaries for alternative sustainable livelihoods.		✓	✓
2.4.1.4. Deliver technical and investment assistance to local communities, including but not limited to: (a) improving nature-based tourism services, (b) harvesting non-timber forest products, (c) improving agroecological practices, (d) community nursery development, etc.		✓	✓
2.4.1.5. In collaboration with local governments and protected area management entities, organise workshops or trade fairs to promote fund-raising and partnerships for the livelihood ventures.			

Output 2.4.2. Alternative livelihood social associations established and/or strengthened in the demonstration areas

112. Indicative activities under Output 2.4.2 include:

Activity description	National	Yunnan	Sichuan
2.4.2.1. Based on the Business Plans for Nature-based Livelihood Development, develop sustainable livelihood business plans for strengthening and/or establishing local social associations.		✓	✓
2.4.2.2. Facilitate new and strengthened partnerships between business enterprises and local communities by strengthening social associations (e.g., cooperatives, women's groups, etc.), increasing awareness of available government programs and existing finance opportunities, etc.		✓	✓

2.4.2.3. Deliver training to local social associations (e.g., cooperatives, women's groups, etc.) on financial management and administration, and assisting in the process of formal registration of the associations.		✓	✓
2.4.2.4. Deliver targeted trainings to women's groups, organized in collaboration with existing programmes, e.g., implemented by the All-China Women's Federation.		✓	✓
2.4.2.5. Based on the sustainable livelihood business plans, deliver technical and investment assistance to local associations, including but not limited to: (a) developing improved nature-based tourism experiences, (b) improving quality of products and services, (c) obtaining ecolabeling of products or services, (c) insertion into green value chains, etc.		✓	✓
2.4.2.6. Organize two cross visits and learning exchanges between the Sichuan and Yunnan demonstration areas, to share experiences and foster partnerships.		✓	✓

Component 3: Deploying frontier technologies and innovative knowledge management solutions for wildlife conservation and landscape planning

Total Cost: USD 15,583,517; GEF project grant requested: USD 1,583,517; Cofinancing: USD 14,000,000

113. The vast amount of biodiversity and wildlife in China provides a virtually infinite source of inspiration and opportunity for problem-solving through technological innovation and knowledge sharing. Component 3 will play both a unifying and amplifying role in the project across components by integrating different strands of the project and documenting solutions through the utilization of advanced technologies, enhance the conservation status of species and facilitate the monitoring of and planning for threatened and iconic wildlife. While the focus will certainly be on technology-aided opportunities to improve monitoring and knowledge of key iconic and threatened wildlife, it also serves as the basis for crucial institutional innovations through automation to enhance information sharing and to underpin national spatial planning and management at the landscape level.

114. To engage people in biodiversity and wildlife issues across landscapes, one must provide the opportunity for enhanced understanding that empowers individuals to make choices, internalize shared responsibilities and take action based on sound science and reliable recommendations. Policies, therefore, need to be buttressed by a robust sustained public awareness to foster deeper appreciation and understanding of issues. Educational programming, media, exhibitions, and other means of public outreach (Outcome 3.2.1) should build on the welcome increase and build in hooks to public interest in global biodiversity loss and wildlife issues by demonstrating the interplay of various environmental disruptions and connections to human health. In the case of wildlife in landscapes, the importance of species in providing ecosystem services, natural beauty and pleasure, and sustaining human lives is a message that requires constant attention and recrafting to impact diverse audiences. Component 3 therefore, is expected to have both an amplification and enhanced awareness effects. Advances in technologies and up-and-coming innovations from the private sector show promise for wide application for effective wildlife monitoring and real-time situational awareness, especially in difficult to access terrain[14] (Outcome 3.1.1). These systems are expected to contribute to enhanced enforcement of PA regulations as they not only capture data on wildlife but also on human interference. This may however lead to risks related to law enforcement practices in case such interferences implicate human rights violations. Activity 3.1.1.1 will ensure that a specific law enforcement assessment will be developed as part of the technology need assessment. Special attention will be provided in the use of personal data, which should be based on the following legitimate and fair bases, subject to implementing UNDG member organizations' regulations, rules and policies[15] (including data privacy and data protection policies), this includes: (i) adequate consent of the individual whose data is used, (ii) in accordance with law, (iii) furtherance of international organizational mandate. The technology dimensions in Component 3 will compliment Component 2 to enhance efficiency, delivery effectiveness and deeper understanding of species, including through the use of[15] (outcome 3.1.3). Additionally, innovative knowledge management and data solutions can connect disparate data sets to enhance situational awareness and for more informed decision making (Output 3.1.2) making and will feed into further

[14] It is expected that project will apply enabling technologies such as Artificial intelligence (AI), 3D visualization, advanced communication grid (5G) and smart devices, sensors and unmanned aerial vehicles (UAVs) to support population monitoring of endangered primate populations in Dali, Yunnan province. It will also apply mobile phone terminal APP technology and data processing technology to block chain ledger Giant Panda Park patrol records and support dynamic monitoring, data analysis and data collection.

[15] Advanced DNA technologies will be tested to support the establishment of a database of giant panda genetic diversity.

refining thresholds for the policies and guidelines in Component 1. International and national events linked to the 2020 global biodiversity framework will be entry points, as will the proposed cross China university technology competition (Output 3.2.2).

115. The formulation of indicative activities and interventions under Output 3.1 and 3.2 was supported through a *Technology needs assessment* (**Annex 18**) conducted during the PPG phase. One of the findings of the needs assessment was the challenge many protected areas are facing in processing a large volume of images and videos captured from camera traps manually is extremely expensive, time-consuming and also monotonous. There is a pressing need to analyze the accumulated big data obtained from camera traps in creating a framework for intelligent monitoring of ecological systems. It is expected that automatic technology for infrared camera data judgment and identification like deep learning can be firstly applied for the automatic identification of empty photos, and then the identification of species. This automatic process of images has been applied in Tiger-Leopard Observation Network since 2018, followed by manual correction. The open AI platforms of BAT (Baidu, Alibaba, Tencent) companies in China make the AI-based identification more feasible and cost-efficient. Moreover, data sharing is also a relevant issue, which is related to data processing in the context of AI technology application. There is also appealing to standardize the metadata format in order to share data across institutions and with the larger conservation community. With multiple monitoring techniques in use, various data can be produced by a protected area. Besides the infrared camera, a considerable data source is from routing patrolling. Some protected areas have cooperated with research institutes and universities, which also give birth to data of specific investigation. However, without an integrated management system, data are dispersed and cannot effectively support management decision-making processes. In many protected areas in China, patrolling is supported by local communities and part-time rangers, local villagers are also engaged in agricultural affairs. Integrated GIS-based management systems would help incorporate different types and sources of data collected. The proposed focus of the GEF funding in regard to frontier technologies area summarized below.

116. **AI-based automatic data processing tool for NRs**. Although infrared cameras are widely applied, without timely data processing, little value is produced. Currently this has become a big bottleneck for many protected areas. An image recognition tool with machine learning (ML) algorithm is suggested. For safety reason, preprocessing of original pictures is suggested as they may contain location information. Since the amount of data collected is substantial, batch processing is needed to be convenient. Human verification is allowed since in some pictures only a tail or a blurred images appear. Such service is expected to save time and costs, but not to replace human labor. Service from open AI platform is encouraged since a big data base is already available, and the technique is cheap and affordable for most protected areas.

117. **Patrolling Applets**. Easy-to-use patrolling applets are already available developed by private companies, which can ease the work of forest rangers and help increase the efficiency of data collection. Compared to previous dedicated patrolling facilities, applets are hardware independent and can be installed in mobile phones which are commonly used in countryside. At places without sufficient reception, data can be saved locally and submitted later.

118. **GIS-based data management systems**. To manage and visualize the camera locations, the recognized information, the patrolling data, etc., GIS-based data management systems are suggested for protected areas. Pseudo 3D GIS platforms can be applied, while the real 3D GIS can also be applied because of rapid technique progress and price decrease in past years. Such systems can also help protected areas to easily present and interpret monitoring data.

119. **eDNA analysis for the Giant Panda National Park**. This in an ongoing work and worthy to be supported. The habitat of giant panda is seriously fragmented. Establishment of ecological corridors a management measure for facilitating connectivity of fragmented habitat, promoting the distribution, migration, communication and reproduction of wildlife in habitats, and reduce the risk of wildlife extinction. eDNA analysis can provide information, supporting the evaluation of the effectiveness of such management measures as ecological corridors.

120. **Framework of blockchain technology based management system**. There are multiple stakeholders involved with wildlife protection. Centralized data management, although expected by decision makers, is often not sustainable. Blockchain technology offers a fair and transparent data sharing environment, where

unauthorized modification to the data can be audited and traced. From managerial and technical perspectives, a block-chain based system has advantage of cost reduction and flexibility in redirecting manpower. It is worthy to design a framework of blockchain technology based management system considering the needs of project stakeholders.

121. Another major thrust of Component 3 is knowledge management, resulting in a range of national and global public awareness campaigns and workshops in the context of the post 2020 global biodiversity agenda, as well as the consolidation of best practices in mainstreaming through lessons learned disseminated through project specific websites and platforms, together with cooperation with academia (such as Beijing Education Academy) and the private sector to enhance global awareness of wildlife protection.

122. The planned knowledge, practices and attitudes (KAP) surveys will include local communities as one of the target stakeholder groups, along with subnational governmental stakeholders and the private sector. Based on the findings of the KAP surveys, more information will be available regarding knowledge, attitudes and practices. Based on the KAP baseline results, awareness and advocacy campaigns focusing on specific themes and defined target groups, a knowledge management strategy action plan will be developed and delivered. Meanwhile, under Output 2.4 the project will help facilitate more sustainable livelihoods for local people, leading to changes in practices and behavior over the long run. The livelihood interventions in Component 2 (namely Output 2.4) will be synchronized with the knowledge management and awareness raising activities in Component 3.

123. Taken together, Component 3 will lead to improved institutional capacity to coordinate cross-sectoral interventions, monitor and disseminate project results impactfully, and package them in a manner that provides compelling arguments for the application of improved models of landscape approaches for key threatened and iconic wildlife, as well as identification of entry points for south-south exchanges for restorative and collaborative actions.

Outcome 3.1: Data management and information technology capabilities and identification of use cases of frontier technologies and innovations for wildlife conservation

Output 3.1.1: Enabling technologies identified and applied to support dynamic real-time wildlife monitoring, data collection, and data analysis for informed and timely management decision making

124. Indicative activities under Output 3.1.1 include:

Activity description	National	Yunnan	Sichuan
3.1.1.1. Update the technology needs assessment prepared during the PPG phase, to ensure it also covers a law enforcement risk assessment and include-equitable representation of women and ethnic minorities in the process.	✓	✓	✓
3.1.1.2. Apply data management applets for recording monitoring data.		✓	✓
3.1.1.3. Carry out AI-based processing of photographic images, to more efficiently process data collected from the field.		✓	✓
3.1.1.4. Deliver capacity building to NR staff and other conservation practitioners on utilizing the wildlife data for making management decisions (e.g., 3D visualization decision-support GIS platform), ensuring an equitable percentage of women are included in the trainings, and also linking with complementary activities on GEF GWP projects to share best practices and lessons.	✓	✓	✓
3.1.1.5. Develop or adapt an application of applet for local villagers (citizen science) that is easily accessible in WeChat, with an emphasis on inclusion of women, ethnic minorities, and other vulnerable groups.		✓	✓
3.1.1.6. In coordination with village government and community-based organizations, support provision of citizen science related equipment, such as cameras, tablet computers, etc.		✓	✓

3.1.1.7. Deliver training of use of the citizen science applet, e.g., local schools, women's groups, ethnic minorities.		✓	✓

Output 3.1.2. A robust data management platform developed and enabling machine learning and artificial intelligence, towards effective decision support and comprehensive wildlife management (i.e., giant panda genetic diversity database)

125. Indicative activities under Output 3.1.2 include:

Activity description	National	Yunnan	Sichuan
3.1.2.1. Conduct an updated needs assessment on the data management platform, liaise with key stakeholders, and prepare a joint Terms of Reference on the roles and responsibilities for development and management of the platform.	✓		✓
3.1.2.2. Support the design of the architecture of management platform which allows local implementation.	✓		✓
3.1.2.3. Demonstrate integration of AI-based techniques for decision support with data analysis and visualization (for one of the key species at one of the project intervention sites), and also linking with complementary activities on GEF GWP projects to share best practices and lessons.	✓		✓
3.1.2.4. Design of a blockchain-technology-based data management system.	✓		✓
3.1.2.5. Convene a stakeholder workshop, sharing lessons and experiences on the demonstrated technologies.	✓		✓

Output 3.1.3. Advanced DNA techniques, including eDNA surveys and barcoding, introduced and applied to populate the genetic diversity panda database

126. Indicative activities under Output 3.1.3 include:

Activity description	National	Yunnan	Sichuan
3.1.3.1. In collaboration with key stakeholders, prepare a guidance document for eDNA data analysis enabling data comparison and exchange, and also linking with complementary activities on GEF GWP projects to share best practices and lessons.	✓	✓	✓
3.1.3.2. Develop a joint genetic diversity panda database for Giant Panda National Park.			✓
3.1.3.3. Deliver training on the use of the genetic diversity panda database.			✓

Outcome 3.2: Knowledge sharing on wildlife management, habitat restoration and connectivity established at the national, regional and global levels

Output 3.2.1: National and global public awareness campaigns, workshops, collaborations and dissemination of project information to enhance awareness and knowledge of wildlife protection

127. Indicative activities under Output 3.2.1 include:

Activity description	National	Yunnan	Sichuan
3.2.1.1. Design, administer and interpret baseline and end-of-project knowledge, attitudes and practices (KAP) surveys, assessing knowledge, attitudes regarding wildlife conservation.	✓	✓	✓

3.2.1.2. Based on the results of the baseline KAP survey of this project, develop and oversee the implementation of a knowledge management strategy and action plan.	✓	✓	✓
3.2.1.3. Establish and maintain information and knowledge sharing systems on the project, including internet platforms, social media, etc.	✓	✓	✓
3.2.1.4. Organize awareness and advocacy campaigns, focused on specific themes and aimed at defined target groups, e.g., women's groups, ethnic minorities, through methods identified in the knowledge management action plan, e.g., social media, print media, radio, local and provincial television, etc., and supported by advocacy materials, such as short videos, factsheets, guidebooks, photo exhibits, etc.	✓	✓	✓
3.2.1.5. Collaborate with protected area management agencies, academic institutions, and civil society in delivering nature education on wildlife conservation.	✓	✓	✓
3.2.1.6. Advocate the global environmental benefits generated through the project by participating in national, regional and international conferences, workshops, seminars and other events, including those sponsored by the GEF GWP.	✓	✓	✓

Output 3.2.2. University student Innovation competition held across China for public awareness on wildlife conservation knowledge

128. Indicative activities under Output 3.2.2 include:

Activity description	National	Yunnan	Sichuan
3.2.2.1. In collaboration with key universities specialized in wildlife conservation, develop a terms of reference for a student innovation competition.	✓	✓	✓
3.2.2.2. Organize two student innovation competitions, based on the details outlined in the terms of reference.	✓	✓	✓
3.2.2.3. Organize a workshop (including an online participation option) showcasing the results of the innovation competitions.	✓	✓	✓

Component 4: Safeguards management, sustainability planning, and monitoring & evaluation

Total Cost: USD 3,863,554; GEF project grant requested: USD 393,554; Cofinancing: USD 3,470,000

Outcome 4.1: Adaptive management enhanced through safeguards management, sustainability planning, and monitoring & evaluation

Output 4.1.1: Safeguard management plans developed and implemented, and a sustainability plan formulated and initiated

Key deliverables:

- Ecological Corridor Strategies and Action Plans and the Feasibility and Degraded Habitat Restoration Plan Environmental and Social Management Plan (ESMP)
- Sustainability Plan

129. This output includes development of a Sustainability Plan for the project, providing a practical framework for facilitating further progress towards achievement of longer-term outcomes and global environmental benefits, as outlined in the project Theory of Change. Implementation of the Sustainability Plan will be initiated during the project's lifespan, to guide FECO and demonstration area partners.

130. The scoped assessments will form the basis of the Ecological Corridor Strategies and Action Plans and the Feasibility and Degraded Habitat Restoration Plan which will serve as Environmental and Social Management plans (ESMPs) for the respective site. The development of the project Environmental and Social Management Plan (ESMP) is also included under this output. Based on the feedback obtained from monitoring & evaluation activities in Output 4.1.2, regular reviews and updates of the project safeguards management frameworks and plans will be carried out.

131. Development and initial implementation of a sustainability plan will be initiated during the project's lifespan, to provide a roadmap for ensuring durability of results achieved.

132. Indicative activities under Output 4.1.1 include:

Activity description	National	Yunnan	Sichuan
4.1.1.1. Based on the issues identified in the project ESMF, include the Environmental and Social Management Plan (ESMP) and other safeguard management plans determined in the ESMP.	✓	✓	✓
4.1.1.2. Based on M&E feedback in Output 4.1.2, carry out regular reviews and prepare updates of the SESP, Stakeholder Engagement Plan, Gender Action Plan, and other safeguard management frameworks and plans as warranted.	✓	✓	✓
4.1.1.3. Develop and initiate the implementation of the project sustainability plan.	✓	✓	✓

Output 4.1.2: Project results monitored and evaluated, and progress and M&E reports produced

Key deliverables:

- Project inception workshop and report
- Project progress reports and other monitoring and evaluation deliverables
- Regular reviews and updates of the SESP, Gender Analysis and Gender Action Plan, Stakeholder Engagement Plan, ESMP, Business Plans for Nature-Based Livelihood Development, IPP
- Midterm review report
- Terminal evaluation report
- Final project report

133. The activities under this output are designed to put in place enabling procedures and protocols to facilitate effective monitoring and evaluation. The project inception workshop, to be held within three months of signing of the project document, is a critical milestone on the implementation timeline, providing an opportunity to validate the project document, including the screening of social and environment risks; confirming governance implementation arrangements; assessing changes in relevant circumstances and making adjustments to the project results framework accordingly; verifying stakeholder roles and responsibilities; updating the project risks and agreeing to mitigation measures and responsibilities; and agreeing to the multi-year work plan. An inception workshop report will be prepared and disseminated among the project steering committee members. According to GEF requirements, two independent evaluations will be carried out of the project, a midterm review and terminal evaluation.

134. Under this output, the project safeguard assessments and management plans will be regularly reviewed and updated. These include the SESP, Indigenous Peoples Planning Framework (IPPF), Gender Analysis and Gender Action Plan, and Stakeholder Engagement Plan. A prolonged or recurrent COVID-19 pandemic (or similar crisis) could create challenges for the implementation of the project, i.e., associated with activities involving physical stakeholder workshops, delivering training in the field, convening community meetings, etc. The project will institute adaptive management as needed to reduce the risks of community spread. For example, meetings will be held remotely using virtual platforms as much as possible, health hazard assessments will be required for gatherings of multiple people, and mitigation measures will be implemented, e.g., ensuring physical distancing, providing personal protective equipment, avoiding non-essential travel, delivering trainings on risks and recognition of symptoms, etc. The SESP includes risks associated with COVID-19, and specific mitigation measures are described in the COVID-19 Analysis and Action Framework in **Annex 14.**

135. Indicative activities under Output 4.1.2 include:

Activity description	National	Yunnan	Sichuan
4.1.2.1. Design and convene the project inception workshop and prepare inception report.	✓	✓	✓
4.1.2.2. Carry out regular monitoring and evaluation of the GEF core indicators and project results framework and	✓	✓	✓
4.1.2.3. Prepare the GEF Project Implementation Reports (PIRs) and other progress reports.	✓	✓	✓
4.1.2.4. Conduct monitoring and evaluation of the Gender Action Plan, Stakeholder Engagement Plan, and other safeguard management frameworks and plans.	✓	✓	✓
4.1.2.5. Conduct supervision and learning missions.	✓	✓	✓
4.1.2.6. Procure and support the independent midterm review (MTR) of the project.	✓	✓	✓
4.1.2.7. Procure and support the terminal evaluation (TE) of the project.	✓	✓	✓
4.1.2.8. Prepare the final report for the project, including the PIR for the last year of implementation, the terminal evaluation report, and the management response to the terminal evaluation report.	✓	✓	✓

Partnerships:

136. The intersection of the contributions and complimentary activities of the project co-financing partners with the planned project results are presented below.

Co-financing source	Co-financing type	Co-financing amount	Included in project results?	If yes, list the relevant outputs
FECO/MEE (Recipient Country Government)	Public Investment	USD 10,000,000	No	N/A
	In-kind	USD 4,870,000	Yes	Project management
Yunnan Provincial Forestry and Grassland Bureau (Recipient Country Government)	Public Investment	USD 10,000,000	No	N/A
	In-kind	USD 1,000,000	No	N/A
Giant Panda National Park Administration (Recipient Country Government)	Public Investment	USD 20,000,000	No	N/A
	In-kind	USD 1,390,000	No	N/A
The Nature Conservancy (Civil Society Organization)	Grant	USD 150,000	No	N/A
Shan Shui Conservation Center (Civil Society Organization)	Grant	USD 1,158,000	No	N/A
Yunnan Green Environment Development Foundation (Civil Society Organization)	Grant	USD 1,880,000	No	N/A
UNDP (GEF Agency)	Grant	USD 284,000	No	N/A
	In-kind	USD 426,000	Yes	4.1.1, 4.1.2

137. The project strategy has a strong emphasis on building upon baseline activities implemented by project partners, as well as on establishing new and strengthening existing partnerships to ensure the sustainability of the results achieved. The project will collaborate with and build on the lessons of a range of related initiatives. Some of the key related initiatives where partnerships will be fostered are listed below.

a) **The C-PAR Program *China's Protected Area System Reform* (GEF Program ID 9403; UNDP Program ID 5695)**. The C-PAR program, supported by UNDP, CI and FECO, received CEO Endorsement of its six child projects. The C-PAR program is being implemented in parallel with the proposed project, but a few years ahead. This provides a good opportunity to piggyback on knowledge exchange and coordination processes used by the C-PAR program, particularly as the projects all share a focus on PA sub-system strengthening. The coordination with C-PAR is proposed to include: i) While this project will have its own Project Board, there will be coordination and information exchange between the two governing bodies by inviting a member of the C-PAR Program Board to attend Board meetings of this project as

an observer – and vice versa allowing this project to observe at C-PAR program level (with SFGB represented on both boards, it will be appropriate for SFGA to take on this role; ii) Participation of C-PAR relevant subjects within technical advisory groups of wildlife management and biodiversity conservation project; iii) Inclusion of C-PAR project demonstration sites within the knowledge exchange program of wildlife management and biodiversity conservation project, such that this project can also benefit from – and share – lessons and best practices learned on PA strengthening, and view first-hand through domestic site visit the approaches being used by the project, iv) Establishment of We-Chat coordination group for relevant wildlife management and biodiversity conservation projects in China.

The C-PAR national project is also expected to conduct a national level gap analysis of PA coverage to identify new area needs and re-assignment of existing PAs based on service values and functions. New PAs will be gazetted based on the analysis, expanding the national PA system. The project could benefit potentially from this gap analysis from the perspective of selecting areas for the establishment of corridors and priorities for connectivity from a broader landscape perspective. There are opportunities as well to leverage and dovetail efforts on the piloting of the national and two provincial committees from the perspective of collaborative protected area governance.

b) **UNDP-GEF project *Strengthening the protected area network for migratory bird conservation along the East Asian-Australasian Flyway (EAAF) in China* (GEF ID: 10073; UNDP PIMS 6110)**. The EAAF Project covers four provinces including Liaoning, Shandong, Shanghai and Yunnan, Dashanbao NR in Yunnan Province is one of the demonstration areas of the project. UNDP as GEF Agency can help facilitate this coordination; the Yunnan Forestry and Grassland Bureau will also coordinate from provincial and local levels.

c) **UNDP-GEF project *Restoration of Degraded Natural Forests and Soil Erosion Management Improvement in Erosion-Prone Regions of China* (UNDP PIMS 6489; GEF ID 10533).** This land degradation focal area project covers 5 provinces including Gansu, Chongqing, Fujian, Yunnan and Guizhou. The pilot in Yunnan is located in Xishuangbanna, UNDP as GEF Agency can help facilitate this coordination, Yunnan Forestry and Grassland Bureau will also coordinate from provincial and local levels.

d) **WB-GEF GEF-7 Global Wildlife Program (GWP), the GWP Global Coordination Project (WB ID P171016; GEF ID 10647)**. The objective of the GWP Global Coordination Project is to enhance knowledge and coordination services to promote wildlife-based economic development and combat illegal wildlife trade. The project will coordinate with the GWP Coordination Project on knowledge management, learning and sharing best practice on frontier technologies, etc..

e) **IUCN-GEF *Yangtze River Basin Biodiversity Conservation Programme* (GEF Program ID 10710); *Mainstreaming biodiversity in the development of the Yangtze River Economic Belt* child project (GEF ID 10753); and *Strengthening in-situ Biodiversity Conservation in the Yangtze River Economic Belt* child project (GEF ID 10754)**. There are potential synergies between the projects, particularly with respect to project 10754. The subject project and project 10754 include intervention sites in Sichuan Province; it has been confirmed that there is no overlap with respect to the specific intervention sites, as shown in the map below. The intervention sites of project 10754, including the Ma Bian Nature Reserve, Hei Zhu Gou Nature Reserve, and the Ma Mi Ze Nature Reserve, are located within delineated Giant Panda Habitat. These areas may be included in the cross-sectoral conservation and sustainable management plan proposed in Output 1.2.2 of the subject project. This will be a point of coordination between the two projects, facilitated through regular technical working group meetings, convened based on specific thematic discussions. The technical working group meetings will also provide a mechanism for discussing technological aspects of the two projects. The UNDP-GEF project is primarily focusing on strengthening processing of imagery data collected. The IUCN-GEF project is proposing to improve acoustic monitoring, improving transmission across 4G and 5G networks, and enhancing the use of remote-sensing based methods. The two projects will coordinate on procurement of technological assistance, e.g., avoiding the purchase of the same equipment. The projects will also coordinate on capacity building and knowledge management.

f) **ADB-GEF Innovating Eco-compensation Mechanisms in Yangtze River Basin (GEF ID 10711)**. This is envisaged to be implemented over the period of 2022-2027, covering 30 counties in the upper and mid-reaches of the Yangtze River Basin, including Yunnan and Sichuan provinces. There are potential synergies with respect to developing innovative policy measures and incentives for wildlife

conservation and management and enhancing participation of the private sector and local communities.

g) **GEF-6 PRC-GEF Partnership Program for Sustainable Agricultural Development (C-SAP) program (GEF Program ID 9768; UNDP Program ID 5820):** The C-SAP program, supported by UNDP, FAO and World Bank is planned for launching one by one. There are five child projects within the C-SAP program, with the national child project focused on strengthening China's frameworks for IAS management and control. This proposed project will coordinate with that project to ensure that technical approaches, systems and standards for best practice IAS management reflect the learnings from that project. UNDP, as GEF Agency for both projects, can help facilitate this coordination.

h) **International waters projects in China and IW: Learn initiative:** There are lessons to be learned from past and ongoing projects in the IW portfolio in China including in the Yellow Sea and South China Sea. Knowledge exchange and coordination can be facilitated through engagement in the online IW: Learn knowledge platform and participation in biennial IW: Learn conferences and regional events.

Risks:

138. The identified risks that could affect the implementation and results of the project are described in the risk register in **Annex 5**, along with proposed mitigation measures and recommended risk owners who would be responsible to manage the risks during the project implementation phase. The social and environmental risks that were assessed as part of the *Social and Environmental Screening Procedure* (SESP) are also consolidated into the risk register. The SESP (see **Annex 4**) was finalized during the PPG phase, as required by UNDP's Social and Environmental Standards (SES). The SESP identified eight risks for this project that could have potential negative impacts in the absence of safeguards, seven of these risks were rated moderate and one substantial. Therefore, the overall SESP risk categorization for the project is Substantial. The safeguard principles triggered by these risks include Principle 1 on Human Rights, 2 Gender equality and women´s empowerment, and 3 Accountability. The Safeguards standards triggered are Standard 1. Biodiversity Conservation and Sustainable Natural Resource Management; Standard 2. Climate Change and Disaster Risks; Standard 3. Community Health, Safety and Security; Standard 4. Cultural Heritage; Standard 5. Displacement and Resettlement; Standard 6. Indigenous Peoples; Standard 7. Labour and Working Conditions.

139. In accordance with UNDP's SES guidelines, an Environmental and Social Management Framework (ESMF) has been developed for this substantial risk project during the project preparation phase (see **Annex 9**). This ESMF is supported by:

- An Indigenous People Planning Framework (see **Annex 11**);
- A Stakeholder Engagement Plan including a description of the project Level Grievance Redress Mechanism to address concerns raised by affected stakeholders from the project (see **Annex 7**);
- A Gender Analysis and Gender Action Plan (see **Annex 10**);
- Covid-19 Analysis and Action Framework (see **Annex 14**); and
- Climate and Disaster Screening Report (see **Annex 13**).

140. This ESMF sets out the additional safeguards measures that apply to the project during the inception phase, including but not limited to: (i) incorporation of Strategic Environmental and Social Assessment (SESA) considerations in connection with the cross-sectoral strategies and action plans under Outcome 1.2 to further assess potential risks and impacts due to project activities; (ii) conduct of participatory ecological corridor feasibility and rural assessments, fulfilling the requirements of an environmental and social impact assessment (ESIA), screened according to UNDP SES procedures, an evaluation of potential economic displacement, and FPIC consultations with communities potentially affected by the corridor interventions; (iii) preparation of ecological corridor strategies and action plans, fulfilling the requirements of an environmental and social management plan (ESMP), a livelihood action framework, and an indigenous peoples plan (IPP); (iv) conduct of baseline degraded habitat surveys, fulfilling the requirements of an ESIA, screened according to UNDP SES procedures, and for the Caojian Forest Farm, an evaluation of potential economic displacement, and FPIC consultations with communities potentially affected by the restoration measures; (v) development of degraded habitat restoration plans, fulfilling the requirements of an ESMP and, for the Caojian Forest Farm, a livelihood action framework and an IPP; and (vi) preparation of business plans for nature-based livelihood development, fulfilling the

requirements of a livelihood action plan. The integration of safeguard instruments into project outputs is outlined below.

Output	Demonstration area / intervention site	Output deliverable	Integrated safeguard instruments
1.2.1	Yunnan Province	Cross-sectoral strategy and action plan for primate conservation and sustainable management in Yunnan Province	SESA considerations integrated into the strategy and action plan
1.2.2	Giant Panda National Park	Cross-sectoral conservation and sustainable management plan for the Giant Panda National Park	SESA considerations integrated into the plan
2.2.1	Yunnan Province / Tianchi Nature Reserve	Participatory ecological corridor feasibility and rural assessment	Fulfilling the requirements of an environmental and social impact assessment (ESIA), screened according to UNDP SES procedures, an evaluation of potential economic displacement, and FPIC consultation.
		Ecological corridor strategy and action plan	Fulfilling the requirements of an environmental and social management plan (ESMP), a livelihood action framework, and an indigenous peoples plan (IPP), including FPIC obtained from the ethnic minority communities having a stake in the operationalization of the corridor.
2.2.2	Giant Panda NP / Baodinggou Nature Reserve	Participatory ecological corridor feasibility and rural assessment	Fulfilling the requirements of an ESIA, screened according to UNDP SES procedures, an evaluation of potential economic displacement, and FPIC consultation.
		Ecological corridor strategy and action plan	Fulfilling the requirements of an ESMP, a livelihood action framework, and an IPP, including FPIC obtained from the ethnic minority communities having a stake in the operationalization of the corridor.
2.2.2	Giant Panda NP / Liziping Nature Reserve	Participatory ecological corridor feasibility and rural assessment	Fulfilling the requirements of an ESIA, screened according to UNDP SES procedures, an evaluation of potential economic displacement, and FPIC consultation.
		Ecological corridor strategy and action plan	Fulfilling the requirements of an ESMP, a livelihood action framework, and an IPP, including FPIC obtained from the ethnic minority communities having a stake in the operationalization of the corridor.
2.3.1	Yunnan Province / Caojian Forest Farm	Baseline habitat survey (including participatory rural assessment of affected communities)	Fulfilling the requirements of an ESIA; screened to UNDP SES procedures, an evaluation of potential economic displacement and FPIC consultations with communities potentially affected by the restoration measure.
		Degraded habitat restoration plan	Fulfilling the requirements of an ESMP and a livelihood action framework, and an IPP, including with FPIC obtained from the ethnic minority communities having a stake in the restoration measures.
2.3.1	Yunnan Province / Tianchi Nature Reserve (restoration site)	Baseline habitat survey	Fulfilling the requirements of an ESIA; screened to UNDP SES procedures, ground-truthing for local people residing and/or utilizing resources.
		Degraded habitat restoration plan	Fulfilling the requirement of an ESMP.
2.3.2		Baseline habitat survey	Fulfilling the requirements of an ESIA; screened to UNDP SES procedures, ground-

	Giant Panda NP / Wolong Nature Reserve		truthing for local people residing and/or utilizing resources.
		Degraded habitat restoration plan	Fulfilling the requirement of an ESMP.
2.3.2	Giant Panda NP / Daxiangling Nature Reserve	Baseline habitat survey	Fulfilling the requirements of an ESIA; screened to UNDP SES procedures, ground-truthing for local people residing and/or utilizing resources.
		Degraded habitat restoration plan	Fulfilling the requirement of an ESMP.
2.3.2	Giant Panda NP / Baishuihe Nature Reserve	Baseline habitat survey	Fulfilling the requirements of an ESIA; screened to UNDP SES procedures, ground-truthing for local people residing and/or utilizing resources.
		Degraded habitat restoration plan	Fulfilling the requirement of an ESMP.
2.4.1	Yunnan Province / Tianchi Nature Reserve (corridor)	Business plan for nature-based livelihood development	Fulfilling the requirements of a livelihood action plan.
	Yunnan Province / Caojian Forest Farm (restoration)	Business plan for nature-based livelihood development	Fulfilling the requirements of a livelihood action plan.
	Giant Panda NP / Baodinggou Nature Reserve	Business plan for nature-based livelihood development	Fulfilling the requirements of a livelihood action plan.
	Giant Panda NP / Liziping Nature Reserve	Business plan for nature-based livelihood development	Fulfilling the requirements of a livelihood action plan.

141. The project will adhere to UNDP SES Guidance Note Standard 6 on Indigenous Peoples. An Indigenous Peoples (i.e., Ethnic Minorities) Planning Framework (IPPF) was developed during the project preparation phase to provide guidance on processes and responsibilities for assessing and managing risks associated with ethnic minorities. Specific project-related risks on ethnic minorities in the demonstration areas will be further assessed as part of the SESA and the Participatory Ecological Corridor Feasibility and Rural Assessments under Outcome 2.2. In accordance with Standard 6, project activities that could adversely affect the existence, value, use or enjoyment of indigenous lands, resources or territories shall not be conducted unless agreement has been achieved through the free, prior and informed consent (FPIC). Culturally appropriate consultation will be carried out with the objective of achieving agreement and FPIC will be ensured on any matters that may affect the rights and interests, lands, resources, territories (whether titled or untitled to the people in question) and traditional livelihoods of ethnic minorities.

142. The implementation of the safeguard frameworks and management plans will be overseen by the Project Safeguards-M&E-KM Officer, supported by an International Safeguards Consultant, and monitored throughout the duration of the project.

143. No project activities that could result in physical displacement, reduced access to land or resources or that could provide livelihoods restoration support for economically displaced communities can commence until the Cross-sectoral Strategies and Action Plans, Ecological Corridor Strategies and Action Plans, Degraded Habitat Restoration Plans, and Business Plans for Nature-Based Livelihood Development have been completed and approved and the identified management measures are put in place.

144. Per the ESMF, a project-level Grievance Redress Mechanism (GRM) will be established during the first year of project implementation and detailed within the Stakeholder Engagement Plan.

145. Consistent with UNDP Social and Environmental Standards (SES), namely Standard 1 (SES S1) on Biodiversity Conservation and Sustainable Natural Resource Management, project activities in or near environmentally sensitive areas require an abundance of caution. Overall, the project is expected to result in major long term positive impacts for biodiversity conservation and socio-economic benefits to China through more effective wildlife conservation and management, improved engagement of rural communities in

conservation and improved flows of benefits from sustainable livelihood activities and ecosystem services. Through the implementation of the ESMF and the subsequent Ecological Corridor Strategies and Action Plans and the Degraded Habitat Restoration Plans, the project therefore will closely manage, avoid or mitigate the indicated social and environmental risks. The E*cological Corridor Strategies and Action Plans* and the *Degraded Habitat Restoration Plans* will be prepared in line with the requirements of UNDP SES S1 and will be reviewed and cleared by UNDP prior to initiating any field interventions. While the IPP including a *Business Plans for Nature-Based Livelihood Development* will ensure compliance with SES S4, S5, S6 and S7.

146. As outlined in the *Climate and Disaster Risk Screening* (see **Annex 13**), the project landscapes are susceptible to a number of climate and disaster hazards, including extreme precipitation and flooding, strong winds, drought, extreme temperature, and geophysical hazards. The project will implement a series of measures to mitigate the risks associated with climate and disaster hazards on outcome/service delivery, consistent with the requirements and guidelines outlined in UNDP SES Standard 2 on *Climate and Disaster Risks*. Implementation of integrated, cross-sectoral approaches on the project reduces climate and disaster risks, through increased awareness on the value of safeguarding environmentally sensitive areas. The project will involve high-level policy makers and advocate for mainstreaming wildlife conservation and management for generating co-benefits for ecosystems and their services, including strengthening resilience to catastrophic events such as flooding and landslides, and negative impacts to agriculture and forest production systems. As to implementing restoration interventions, the project will ensure that qualified professionals are engaged and provide supervisory and advisory support and coordination. Knowledge generated from the habitat restoration interventions will be disseminated among key stakeholder groups, facilitating mainstreaming and upscaling in other regions in the country.

147. Facilitated by integrated, cross-sectoral approaches, the project strategy promotes participatory approaches for achieving sustainable management of natural resources. Bringing together cross-sectoral and multiple stakeholders into participatory processes will help enhance the knowledge of the risks associated with zoonotic diseases like COVID-19 and integrated approaches can help mitigate the risks and build social and ecological resilience of local communities. The project will also promote sustainable close-to-nature livelihoods, which will contribute to increased food and income security of local communities, strengthening their coping capacities in response to the COVID-19 pandemic and other socioeconomic disruptions. Project implementation will also ensure full adherence to government and UNDP directives related to COVID-19. The project will follow a flexible approach to stakeholder consultations including use of social distancing and virtual measures as needed, as outlined in the COVID-19 Analysis and Action Framework in **Annex 14**).

148. Risks associated with inadvertent collection of images and personal information through the application of frontier technologies under Component 3 have also been assessed. Mitigation measures will be integrated in the design of the new and/or improved frontier technologies. For example, different levels of authority and data management standards can be defined, e.g., only photos that meet certain standards will be stored and made available to designated stakeholders. The standards can also define how to deal with images and other personal information of people. With respect to data sharing, the information shared is suggested to only include processed results, not original data. Similarly, for patrolling applets, the time duration can be limited, e.g., only to work periods, to avoid collection of local rangers when they are not conducting patrolling.

149. Other aspects of the project's risk management measures include:

- Implementation of the project *Stakeholder Engagement Plan* (see **Annex 7**) and *Gender Action Plan* (see **Annex 10**).
- Adherence to local and national, as well as UNDP SES Standard 7 (*Labour and Working Conditions*) and Standard 8 (*Pollution Prevention and Resource Efficiency*), including worker safety and safe handling, use, and management of agrochemicals and associated wastes generated.
- Safeguard measures developed by co-financing partners, including governmental entities and civil society organizations, for activities that are directly coordinated with the project will be reviewed by the project management team and UNDP for consistency with UNDP's SES prior to initiating work on the ground. Any gaps will be discussed with the co-financing partners and reviewed regularly, including during the annual project progress review stakeholder workshops.

Stakeholder Engagement and South-South Cooperation:

150. A stakeholder analysis was undertaken during project preparation to identify key stakeholders, consult with them regarding their interests in the project and define their roles and responsibilities during project implementation. Based on these analyses, a *Stakeholder Engagement Plan* (**Annex 7**) has been developed to guide the implementation team.

151. The project design has a strong emphasis on inclusive stakeholder participation, particularly with respect to women, ethnic minorities, elderly, youth and other vulnerable groups. Specifically, the project will ensure the mainstreaming of women and ethnic minorities into the project trainings and various livelihood schemes.

152. The project strategy is built upon the principle of multi-stakeholder and cross-sectoral collaboration, and promotes genuine participation of local communities. Governance systems in which all duty bearers, institutions and entities, public or private, Will be accountable to laws and regulations that will be publicly promulgated, equally enforced, independently adjudicated, and consistent with international human rights norms and standards. Stakeholder consultation is required throughout, and a transparent project-level grievance redress process is freely available.

153. The multi-stakeholder, cross-sectoral approaches integrated into the project strategy entail broad engagement, among different administrative levels (e.g., national, provincial, county, local), across different sectors (e.g., conservation, forestry, agriculture, transportation, water resources, tourism, disaster management, community development, etc.), and involving multiple types of stakeholders, including governmental, civil society, private sector, and research-academic institutional sectors.

154. The *Stakeholder Engagement Plan* also includes a description of the project's grievance redress mechanism (GRM) and information on UNDP's Accountability Mechanism. The *Stakeholder Engagement Plan* is an integral part of the project design, will be communicated to project stakeholders during the inception workshop and referenced in each of the terms of reference developed for implementation of project activities.

Table 9: Project stakeholders

Stakeholders	Roles and Responsibilities
Implementing Partner (Executing Agency)	
Foreign Environmental Cooperation Center, Ministry of Ecology and Environment (FECO)	FECO is a public institution directly under the Ministry of Ecology and Environment. In January 2019, it was established by integrating the Foreign Economic Cooperation Office of the Ministry of Environmental Protection (Technology Center for Environmental Convention Implementation, MEP), and the China-ASEAN Environmental Cooperation Center (China Center for Shanghai Cooperation Organization Environmental Cooperation, Lancang -Mekong Environmental Cooperation Center). The newly formed Center combines the functions of the four above-mentioned organizations. FECO provides support and services for the Ministry of Ecology and Environment for international cooperation in the fields of green BRI, policy research, implementation of international conventions, regional, bilateral and multilateral cooperation, industrial technology exchanges and capacity building. It is an important platform for China's international cooperation and exchanges in ecological and environmental protection. FECO will be the Implementing Partner (Executing Agency) for the project, chairing the Project Board, facilitating national level intersectoral coordination mechanisms, ensuring alignment with complementary government programs and initiatives, and responsible for day-to-day execution of the project. FECO is also one of the project's governmental co-financing partners.
GEF Agency	
UNDP	The UNDP is the development agency for the United Nations and coordinates UN assistance in China. Responsible for creating project proposals and providing project assurance during implementation. In so doing, UNDP help eligible governments and non-governmental organizations (NGOs) to develop, implement and execute these projects.

Stakeholders	Roles and Responsibilities
	UNDP will serve as the GEF Agency for the project, acting as one of the members of the Project Board, ensuring global environmental benefits are generated, and delivering project assurance to ensure effective and efficient project implementation.
Key national ministries and central governmental stakeholders	
Ministry of Finance (MOF)	The GEF Operational Focal Point (OFP) responsible for coordination and implementation of GEF projects in China. The mandate of MOF to support wildlife conservation is mainly from financing mechanism approach. MOF will overall support with co-financing for the conservation, especially under Output 1.1.2 for this project from finance perspective. During the project implement, MOF will be a member of Project Board. Will be briefed on project development and endorse final Project Document.
Ministry of Ecology and Environment (MEE)	The MEE's mandate includes: To guide, coordinate and supervise the restoration of ecological protection, including the supervision of wildlife protection, wetland ecological environment protection and desertification prevention and control; To guide, coordinate and supervise the protection of rural ecological environment; to supervise the environmental safety of biotechnology; To lead the work of biological species (including genetic resources); To organize and coordinate the protection of biodiversity; and to participate in the compensation work of ecological protection. The MEE is responsible for overall coordination, supervision and management of ecological and environmental issues, CBD implementation and clearinghouse. It is the agency that guides, coordinates and supervises ecological conservation. As the competent administrative ministry of the State Council for environmental protection, MEE is engaged in the comprehensive management of nature reserves across the country, including guiding, coordinating, supervising environmental protection work of various kinds of nature reserves, scenic spots and forest parks. The MEE will be a member of the Project Board and also be one of the ministries involved in the intersectoral coordination mechanism strengthened under the project.
National Forestry and Grassland Administration (NFGA)	An entity of the Ministry of Natural Resources, the NFGA is responsible for the supervision and management of forests and grasslands and their ecological protection and restoration, as well as the supervision and management of terrestrial wildlife resources. NFGA's mandate includes: To supervise and administer the protection of land wildlife throughout the country; to draft relevant laws and regulations and departmental rules; to formulate relevant plans and standards and implementation. To undertake the specific work of implementing CITES; To undertake the implementation of non-trade wildlife protection; To undertake the work related to the cross-sectoral implementation and law enforcement coordination mechanism. The NFGA will be a member of Project Board, participate in the intersectoral coordination mechanisms and help ensure alignment with complementary government programs and initiatives.
Ministry of Natural Resources (MNR)	The MNR was established in 2018 as part of the central ministerial reform process. The main responsibilities of the MNR include: the rational development and utilization of natural resources, and acting as an important stakeholder in the ownership of land, minerals, forests, grasslands, wetlands, water, oceans and other assets, as well as the management of the use of all land space; to administer the National Forestry and Grassland Administration (NFGA), etc. The MNR will be one of the ministries involved in the national level intersectoral coordination mechanism strengthened under the project.
Ministry of Agriculture & Rural Affairs (MARA)	The MARA will also be one of the ministries involved in the intersectoral coordination mechanism strengthened under the project. The MARA is responsible for establishing national level objectives and policies on alternative

Stakeholders	Roles and Responsibilities
	rural livelihood programs, good agricultural practices, and promotion of green value chains.
Ministry of Water Resources (MWR)	The MWR will also be one of the ministries involved in the intersectoral coordination mechanism strengthened under the project. The MWR is responsible for establishing national policies on water resources management, which often requires coordination with respect to wildlife conservation and management objectives.
Ministry of Transport (MOT)	The MOT will also be one of the ministries involved in the intersectoral coordination mechanism strengthened under the project. The MOT is responsible for establishing national policies on transportation, including infrastructure developments that involve coordination with wildlife conservation and management.
National Development and Reform Commission (NDRC)	The NDRC is responsible for macro-control, including drafting and organizing the implementation of national economic and social development strategies, master plans, annual plans, etc. The project will engage with the NDRC to ensure alignment with national strategies and policies related to mainstreaming biodiversity conservation into socioeconomic development plans and annual plans..
State Council Working Committee on Women and Children (SCWCWC)	Contributing to promotion of women's role in national biodiversity deliberations. The project will engage with the SCWCWC as part of activities designed to contribute towards gender equality and women empowerment.
Key subnational government stakeholders	
Yunnan Provincial Forestry and Grassland Bureau	Responsible for planning, supervision and management of wildlife conservation in Yunnan Province. Project co-financing partner and proposed member of the Project Board. The Yunnan Provincial Forestry and Grassland Bureau will provide oversight for the activities carried out in the two demonstration areas, ensuring involvement of relevant departments and sectors, and facilitating alignment with complementary initiatives.
Giant Panda National Park Management Administration	Responsible for the management of the Giant Panda National Park. Project co-financing partner and proposed member of the Project Board. The Giant Panda National Park Management Administration will provide oversight for the activities carried out in the two demonstration areas, ensuring involvement of relevant departments and sectors, and facilitating alignment with complementary initiatives.
Dali Bai Autonomous Prefecture Forestry and Grassland Bureau	Responsible for the nature reserves and forest farms located in the project demonstration area in Yunnan Province. The prefecture forestry and grassland bureau will help facilitate the intersectoral coordination processes, directly involved in the execution of project activities, and help ensure other sectors are involved in the prefecture.
Yunlong County	Responsible for the nature reserves and forest farms located in the project demonstration area in Yunnan Province. The Yunlong County will help facilitate the intersectoral coordination processes, directly involved in the execution of project activities, and help ensure other sectors are involved in the county.
Protected area management stations in the project demonstration areas	Managers and staff of the protected area management stations will be directly involved in the project activities, including capacity building of PA staff, establishment of ecological corridors, restoration of degraded habitats, strengthening livelihoods of local communities, etc.
Local Forestry Bureaus	Participate in intersectoral coordination mechanisms. Strengthen capacities in demonstration areas and mainstreaming of wildlife conservation into sectoral strategies
Local Energy & Environmental Bureaus	Help guide, coordinate and supervise the restoration activities, including the supervision of wildlife conservation at local level.

Stakeholders	Roles and Responsibilities
Local Natural Resources bureau	Responsible for management of all land space and other natural resources at local level. Participate in intersectoral coordination mechanisms, and will be involved in the development of cross-sectoral strategies and action plans and establishment of ecological corridors.
Local County Road and Transportation Bureaus	Participate in intersectoral coordination mechanisms, coordination and mainstreaming of wildlife conservation into sectoral development strategies. Will also be involved in resolving conflicts between transportation infrastructure and wildlife.
Local Agriculture & Rural Affairs Bureau	Participate in intersectoral coordination mechanisms, establishment ecological corridors, facilitating cooperation between project and local agriculture-based livelihood interventions.
Local Rural Revitalization Bureaus	Facilitating cooperation between project and local agriculture-based livelihood interventions
Township governments	Participate in intersectoral coordination mechanisms, strengthen coordination and promotion of community participation.
Social organizations and non-governmental organizations (NGOs), Academic and research organizations	
Academic institutes, colleges and universities	Will be invited through competitive procurement processes to conduct field surveys, monitoring, data collection and database development, these including Beijing Forestry University (BFU), Chinese Academy of Sciences (CAS), Sichuan University, Dali University, etc. Strengthen capacities, dissemination of best practices and approaches in wildlife protection and biodiversity. Also participate in organizing communication and nature education activities, and development and implementation of the university student competitions in Component 3.
International conservation agencies/NGOs	There are several opportunities for international conservation agencies and NGOs to be involved in the project, e.g., providing technical expertise and sharing international experience, networking and participating in intersectoral and multi-stakeholder platforms for communication. NGOs will also have opportunities to execute specific project activities through competitive bidding processes. The Nature Conservancy (TNC) is one of the project co-financing partners. Other potential partners include, but are not limited to the Paulson Institute, IUCN, Wildlife Conservation Society (WCS), World Wide Fund for Nature (WWF), and Conservation International (CI).
National/local NGOs	There are several opportunities for national and local NGOs to be involved in the project, e.g., participating in multi-stakeholder groups, providing inputs conservation strategies and/or restoration plans, participating in biodiversity monitoring and surveys, arranging public awareness events, share experiences in development and deployment of frontier technologies, providing capacity building on biodiversity conservation and mainstreaming, deliver training to local communities on sustainable livelihood options. For direct execution of specific project activities, NGOs will be invited through competitive bidding processes. The Yunnan Green Environment Development Foundation and the Shan Shui Conservation Center are project co-financing partners. Other partners include, but are not limited to Alashan SEE Foundation, Snub-nosed Monkey Network in Yunnan. Other associations at the county level include the All-China Women's Federation, Mao, Shimian, will be invited to participate in the project activities, to strengthen capacities and promotion of women empowerment.
Local communities where project interventions are planned	
Local communities	Local communities in the two demonstration areas are among the direct beneficiaries of the project, involved in participatory conservation and restoration activities and strengthening of livelihood options.
Ethnic minorities	Ethnic minorities (Bai, Lisu, Yi, and Miao minority groups) in Dali Yunlong County and (Qiang, Tibetan, Yi minority groups) in Panda National Park covering Sichuan, Shaanxi, Gansu provinces among the direct beneficiaries of the project.

Stakeholders	Roles and Responsibilities
Primary and secondary schools	Primary and secondary schools (including teachers and students) in Yunnan and Sichuan will be beneficiaries of nature education on wildlife conservation, and invited to be involved in public awareness campaigns.

155. Engagement with the Private Sector. With the growth of the private enterprise economy in China, more and more companies are taking an active role in conservation initiatives, with some establishing foundations for implementation of public welfare investments. On the whole, private sector involvement in environmental protection and wildlife protection is still in its infancy but it is expected to grow rapidly. With the continuous reform and improvement of the national tax policy, the private sector will be encouraged to increase its input in public welfare undertakings. Wildlife conservation has always been a hot spot in ecological and environmental protection, and Yunnan and Sichuan provinces are the regions with the most abundant biodiversity in China, and therefore have attracted extensive attention, in particular, primates such as golden monkeys and gibbons and rare and endangered flagship species such as giant pandas have been.

156. Two private sector enterprises, Ant Forest and GAC Toyota, are providing financial support to two of the project's civil society organization co-financing partners: Yunnan Green Environment Development Foundation and Shan Shue Conservation Center (see co-financing letters in **Annex 23**). GAC Toyota continues to support ecological restoration in Yunnan Province, and representatives from the initiative will be invited join the Yunnan intersectoral coordination mechanism and participate in establishment of the planned ecological corridor, as well as the planned restoration of degraded habitats. Ant Forest is a scheme launched by Alipay by the Ant Financial Services Group in 2016, promoting low-carbon lifestyles. Credits are earned that are subsequently converted to real trees planted in areas throughout China. Direct consultations were held with Ant Forest during the project preparation phase, discussing opportunities to add value to the module on wildlife conservation. These opportunities will be further explored during project implementation.

157. Apart from Ant Forest and GAC Toyota, other private sector enterprises will be encouraged to join the multi-stakeholder processes in the two demonstration areas, and to partner with local community enterprises and associations in strengthening livelihood interventions. Under Output 2.4.1, the private sector will be engaged in the market analyses and development and implementation of business plans for nature-based livelihoods. Moreover, information technology companies will be invited through competitive procurement processes to be involved with the planned development and deployment of frontier technologies. Private sector enterprises and/or associations will be invited to contribute to the development of sector-specific guidelines on mainstreaming wildlife conservation in production landscapes (Output 1.1.3), e.g., with respect to the agricultural and tourism sectors.

158. **South-South Cooperation**: The project will also seek to engage other developing countries facing similar challenges with the aim of fostering broader South-South cooperation. It will among other do this by taking full advantages of FECO/MEE's participation in international engagements. Through this the proposed project can provide influence and create international synergies. With no more than 2,000 individuals remaining in the wild, the black crested gibbon is Critically Endangered, according to the International Union for Conservation of Nature (IUCN, 2015). Black crested gibbons are primarily found in Southern China (Yunnan), including in the project demonstration area in Dali Bai Autonomous Prefecture, and within certain ranges in Northwestern Laos and Northern Vietnam. The frontier technologies, corridor standards, replicable alternative livelihood, and other wildlife conservation best practices, especially primate species (black crested gibbon) conservation summarized from this project will be shared with countries listed above and other the Association of Southeast Asian Nations (ASEAN) countries under Outcome 3.2.

159. The project will connect with similar country projects based on similar approaches to share resources combined and collective knowledge management products, and to facilitate dissemination through global ongoing South-South and global platforms, the UN South-South Galaxy knowledge sharing platform and PANORAMA[16].

160. In addition, to bring the voice of China to global and regional fora, the project will explore opportunities for meaningful participation in specific events where UNDP could support engagement with the global

[16] https://panorama.solutions/en

development discourse on wildlife conservation. The project will furthermore provide opportunities for regional cooperation with countries that are implementing initiatives on innovative conservation initiatives in geopolitical, social, and environmental contexts relevant to the proposed project in China.

Gender Equality and Women's Empowerment:

161. Women are directly engaged in agriculture activities and natural resources management, particularly among local communities in the ecological corridors and areas targeted for restoration. Traditional communities and especially women, are expected to significantly influence current practices, and can be effective agents of change and community advocates of biodiversity management strategies. Among Indigenous Populations and Local Communities (IPLCs) there are clear roles for women as community leaders, resource managers, trainers of youth and custodians of threatened biodiversity and habitats. Among remote farming and agricultural communities, women make important decisions regarding production, and have vital roles in marketing of the produce, allocation of domestic resources and harvests. As nurturers of families, women are most directly affected by resource degradation or drastic changes in natural resources productivity.

162. Due to underrepresentation of women within the biodiversity sector in China, this initiative also presents an opportunity to promote women's participation at all levels of the project. As such, the project will make a concerted effort to layer in gender across sectors through biodiversity mainstreaming and also increase the proportion of women participants in various areas to a level substantially above the business-as-usual scenario. The project has adopted aggressive targets to ensure that 40% of all beneficiaries are women.

163. The project's risk register includes a risk explicitly about gender noting that "*prevailing gender biases in China unintentionally discriminate against women limiting or adversely impacting their possibilities for accessing opportunities, benefits from and/or influence on project interventions and outcomes.*" To mitigate this, a comprehensive gender assessment is needed to clarify relevant gender concerns and determine how mainstreaming of women into the project interventions can be ensured. It will be underpinned by a thorough needs assessment and focus on how to provide specific trainings for women, how to best facilitate women livelihood operations etc. In this regard during the project development phase, specific consultations with relevant women's groups/leaders will be undertaken by the project's development team but also through consultation coordinated by FECO. The project will ensure that gender indicators and key performance indicators are ambitious yet pragmatic, anchored to discussions on what is possible in the time available

164. The comprehensive gender analysis describes the differentiated roles of women and men in biodiversity conservation and natural resources management, the impacts of biodiversity loss and resource degradation on women, and their potential role in reversing these trends. The results will be used to develop more responsive gender development program under the Project, including the project gender mainstreaming plan and gender disaggregated indicators, that will become the vehicle going forward for monitoring and evaluation of the Project's impact on promoting gender equity and empowerment of women and youth including through the application of the UNDP gender marker – that assesses project's potential contribution to mainstreaming gender. In addition, this gender assessment will also identify areas where negative impacts can be reduced, and positive ones enhanced. Both during design and implementation period, the project will ensure equal opportunities for women and men to participate in decision making. Steps will be taken to ensure that women's needs are considered in management arrangements set up by the community, including encouraging women to actively participate in community meetings and platforms that discuss project activities.

165. More information on gender mainstreaming is included in **Annex 10** (*Gender Analysis and Gender Action Plan*) to the project document. Specific gender equality and women's empowerment targets have been set, including ensuring equitable representation of women in project decision-making bodies; ensuring equitable proportion of benefits realized from the project will be delivered to women; promoting gender awareness throughout the project implementation phase; and promoting equal opportunity for employment for positions within the project management office, consultancies and other service providers.

Knowledge management

166. Knowledge management and knowledge sharing will be a central part of this project and is the core of Component 3, with careful attention on knowledge sharing, learning and sharing of experiences. The GEF

biodiversity set-aside funding being earmarked to the project will be allocated towards South-South cooperation and Knowledge Management. A cornerstone of this effort will be the design and maintenance of a project website that will act as a "digital front door" for all project knowledge products and information. Bespoke campaigns using multi-modal channels such print media, online media, social media and television will be designed to raise public awareness and elevate biodiversity in the national consciousness with an emphasis on iconic threatened wildlife species. More importantly, through targeted events such as COP15 and those to acknowledge China's COP Presidency, awareness raising efforts will signal to the world China is best positioned and ready to meet the Post-2020 Global Biodiversity Framework and that China will actively share conservation and technological approaches, experiences and knowledge through and generated by this project.

167. The project's approach to knowledge management focuses on knowledge exchange and transfer at multiple levels:

a) Intersectoral: between relevant national ministries that have a mandate related to ensuring sectors provide biodiversity and community benefits, and between government, private sector and communities.
b) Spatial: between individual project sites/communities to ensure exchange of lessons and best practices between sites and support upscaling to other local landscapes where threatened wildlife and habitats are pervasive and in other Provinces, as well as in other countries (e.g. ASEAN, Global Wildlife Program countries).
c) Institutional: between governments at different levels, from the Prefecture level and local administrations to national ministries, as well as at the regional and global levels though enhanced opportunities for South-South cooperation and enriching knowledge platforms.

168. A knowledge management and communication strategy will underpin efforts to distill lessons and documentation of experiences, in particular the tools, guidelines and methods. Targeted communication and advocacy activities will be organized to consistently repeat the project's key messages, particularly the need for cross sectoral biodiversity mainstreaming through legislative dialogues, inputs to broader policy debates, engaging with academia and involving the youth in research. The knowledge management and communication strategy will include outreach to global and national knowledge networks, including but not limited to the UNDP-World Conservation Monitoring Centre (WCMC) and the Big Earth Data Science Engineering Program of the Chinese Academy of Sciences (CASEearth).

169. In the selected corridors of Giant Panda National Park, livestock grazing, horticulture cultivation, firewood collection are currently threats from local people. Similar threats are relevant in the Yunnan demonstration area, near the Tianchi Nature Reserve and Caojian Forest Farm. In fact, some of the local people may not know that key primate species are distributed near their communities and are unaware of how their practices may be affecting them. The planned KAP surveys will include local communities as one of the target stakeholder groups, along with subnational governmental stakeholders and the private sector. Based on the findings of the KAP surveys, more information will be available regarding knowledge, attitudes and practices. Based on the KAP baseline results, awareness and advocacy campaigns focusing on specific themes and defined target groups, a knowledge management strategy action plan will be developed and delivered. Meanwhile, under Output 2.4 the project will help facilitate more sustainable livelihoods for local people, leading to changes in practices and behavior over the long run. The livelihood interventions in Component 2 (namely Output 2.4) will be synchronized with the knowledge management and awareness raising activities in Component 3.

170. Being at the forefront of technology will also enable China - through this project and its ambitious use of innovative technologies envisioned under Outcome 3.1 - to mentor other GEF biodiversity projects and child projects under the GWP (both during implementation and post-project) through south-south cooperation on the practical use cases, application of and positive results different technologies can have on biodiversity when deployed effectively.

171. Whist the project focus is on biodiversity mainstreaming, it will nonetheless maintain links to and seek active engagement in the Global Wildlife Programme (GWP) knowledge exchange to share biodiversity conservation approaches with high value proposition. The project's data management platform (Outcome 3.2), expected to be powered by machine learning and AI capabilities, will also support knowledge dissemination and business intelligence capabilities from site to the global level and vice versa. This will establish a baseline product

from which to scale the platform and enrich the data therein. As a decision support tool, attention will be drawn to opportunities for scaling up and replication, along with the level of learning and knowledge exchange from the perspective of outcome assessment functionality.

172. The project is not a child project under the GWP. Notwithstanding, dissemination of lessons-learned and experiences from engagement of communities at site-level such as the creation of nature-based income-generating activities, the project will not only share its successes and challenges, but will also benefit from the extensive global network provided through interfacing with the GWP. All knowledge accumulated will assist China with scaling up and sustainability, as well as identify additional innovative and adaptable techniques to a) monitor and conserve key threatened and iconic wildlife species and biodiversity b) develop purpose-build and engaged cross-sectoral committees at national and provincial level, c) identify and develop alternative livelihood options to deter illegal activities in PA buffer zones.

Innovativeness, Sustainability and Potential for Scaling Up:

173. **Innovativeness:** The project is suggesting an innovative model for an integrated landscape approach by proposing a number of "firsts" for China with the aim of reconciling competing objectives and prioritization of wildlife conservation and sectoral landscapes through supportive polices and guidelines (which will have been tested and refined at the site level). There has been inconsistent coordination among relevant sectors to work collaboratively with special attention to ecological corridors, co-management opportunities, threatened / fragmented habitats in and around PAs, and intersectoral coordination. The recommendation of a designated wildlife chapter in the national EIA system is again, a novel concept together with green infrastructure guidelines and the proposition that wildlife impact assessments also extend to culture and tourism. This model is also expected to be honed by both international experiences and will be accelerated by advances in technologies and knowledge management and further amplified by offerings of both academia and private sector R&D. This is consistent with conclusions drawn from recent studies that there has been inadequate investment and understanding of landscapes and open areas to connect and meet PA targets.

174. At the provincial, committees responsible for the primate strategy and action plan, as well as that for Giant Panda National Park, will be done in full consultation with the private sector which would be new and innovative in its own right. This also makes sense from an execution point of view given the heavy technology-focused and data driven knowledge management that will support the implementation of the action plan.

175. On the technology front, the project's engagement with the private sector and academia means that it will get access to cutting edge innovations, with use cases that perhaps have not been applied to a conservation setting before. The project will actively utilize innovative frontier technologies and data driven advances on key wildlife species and biodiversity conservation within China. The use of technologies, for remote landscapes monitoring and the adoption of technologies for new purposes for which they may have not originally been intended offers replication opportunities across other types of wildlife species and within similar landscapes. Innovative forms of monitoring will be supported including the application of enabling technologies, such as: Artificial intelligence (AI), 3D visualization, advanced communication grid (5G), smart devices, sensors and unmanned aerial vehicles (UAVs), to support population monitoring in Dali, Yunnan province and the application of advanced DNA technologies to support the establishment of a database of giant panda genetic diversity in Sichuan. Data driven technology informed by machine learning and AI will also help with real time decision making and refinements to policies based on the outcome at site life, closely integrated the results of testing the landscape model so it can be strengthened.

176. Balancing these needs through the landscape approach is an innovative strategy that is highly relevant to the rest of the ecological corridors in China and therefore, the upscaling of this approach in the management of iconic and threatened wildlife species shall be ensured through the replication strategy. Through national level partnerships that will be strengthened in the two demonstration areas, together with the private sector and academia, it is expected that the project will be able to influence policies and procedures of other sectors; and develop model institutional arrangements to successfully work out similar arrangements in other landscapes

177. **Sustainability**: The approach is also cost-effective and the most-optimal arrangement. By dovetailing on existing governance structures the coordination can avoid delays, growing pains and overhead which come with establishing new entities and can be effective from the outset since there are already established protocols

and processes. With the dissolution of the CBD Implementation Coordination Group and the Joint ministry Conference on Genetic Resources not having the clout it once had, there is no other body with State support to address the core issues of the project, also a nod to it being able to operate at the highest level of government.

178. The different project components will act in an inter-connected fashion to improve biodiversity conservation policies, augment and create sector specific recommendations and guidelines to facilitate the adoption of more sustainable landscape practices that reduce the threat to wildlife through alternative livelihood cooperatives establishments, increase the local residents' benefits, and raise awareness among the decision-makers, the public and the next generation to build support for biodiversity conservation and wildlife protection beyond the life of the project.

179. The proposed project builds on a strong and supportive government baseline for biodiversity conservation. A new announced policy includes proposing a new list of wild animals under State priority conservation. The proposed project is strongly aligned to government policies and will further mainstream biodiversity/wildlife conservation within the central policy and planning via integration into the 14th Five-Year Plan and the associated sector plans.

180. Institutionalization of participatory and sectoral planning processes to mainstream key iconic and threatened wildlife species will be inherently sustainable through the piloting and gradual incremental accountability of the national and provincial (2) intersectoral coordination mechanisms. Livelihood enhancement activities will include sound due diligence through business planning and market analysis to ensure markets exist for products and sufficient capital and organizational training to result in a high probability of success. Cooperatives that will benefit 300 households will similarly be trained with a focus on alternative livelihoods opportunities and income streams. Use and application of advanced technologies that are easily applied will help also to provide a cost-effective and sustainable monitoring results over the long-term, especially as technologies are deployed elsewhere and economies of scale are reached.

181. From a species perspective, well-connected ecosystems across different types of landscapes are critical for maintaining important ecological and evolutionary processes (including species migration and gene flow), especially when species face chaotic non-linear shocks and rapid climatic and environmental changes.[17]

182. **Potential for scaling up:** The knowledge learned from the two demonstration areas will be used to inform the development of policies and technical guidelines for managing biodiversity resources at a site level to support the replication of project activities across different PAs in China. With the successful implementation of the project, this concept will be disseminated across other PAs in China, strengthening intersectoral coordination on wildlife conservation and management and policies with an emphasis on key wildlife species. A long-term monitoring network, standards development and data management of the proposed program will enable China to have a more complete understanding of the population dynamics, genetic diversity and patterns of endangered wildlife, will offer new toolkits that can be adopted elsewhere and will provide data that informs management decisions. The project fits well with the vision of the GEF and CBD and will contribute to the fulfillment of the goal of the post-2020 Global Biodiversity Framework, especially in the context of meeting aggressive PA targets.

183. Considering that the project is directly relevant to and complementary to landscapes and buffer areas supporting adjacent to PAs, there is a strong replication dimension. Once the comprehensive guidelines are completed under this project (which will include among other things direction on the design and management of participatory connectivity conservation and restoration efforts in multi-use landscapes prioritization guidelines/gap analyses, sector specific guidelines for agriculture and rural affairs, transportation and infrastructure, and tourism, as well as enhanced EIA assessments focusing on wildlife), there will be no shortage of entry points; these will certainly be applicable to other areas of the country. The supportive policies and guidelines developed under Component 1 and demonstrated in landscapes together with remediation work at the proposed sites in Component 2 will provide scalable models in other areas with similar parameters. The Giant Panda National Park is part of China's blueprint to establish a system of 10 national parks in the country,

[17] Magris, R. A. et al. Biologically representative and well-connected marine reserves enhance biodiversity persistence in conservation planning. *Conserv. Lett*. **11**, e12439 (2018). **and** Mendenhall, C. D., Karp, D. S., Meyer, C. F. J., Hadly, E. A. & Daily, G. C. Predicting biodiversity change and averting collapse in agricultural landscapes. Nature 509, 213–217 (2014).

including in the Qilian Mountains where sectoral harmonization and a landscape approach is also needed as a result of decades of logging, mining, the building of factories and unsustainable tourism. This project and the landscape model could be considered for those initiatives as well. The intersectoral coordination mechanisms strengthened under the project will be important platforms for facilitating upscaling not only across governmental entities but also including the civil society, academia, and the private sector.

184. The work under Component 1 focuses on strengthening the enabling environment for upscaling integrated approaches beyond the site-level work in Component 2. The cross-sectoral strategies and action plans proposed under Outcome 1.2 involve provincial and central level stakeholders, e.g., the Yunnan Forestry and Grassland Bureau and the Giant Panda National Park Administration. The site level interventions under Component 2 are designed to be demonstrations of these cross-sectoral strategies and action plans, providing practical models for upscaling across the landscapes in the demonstration areas as well as in other landscapes in China.

185. With respect to wildlife conservation and sustainable management, protected areas are important parts of most landscapes in China. Protected areas have leading roles with respect to efforts aimed at improving connectivity of wildlife habitats and mainstreaming conservation in production sectors. The recent establishment of national parks in China has often entailed linking existing nature reserves into consolidated networks of protected areas. The Giant Panda National Park, consisting of more than 50 nature reserves, is a good example of this. The process of linking nature reserves is essentially an integrated landscape approach, requiring coordination and collaboration with multiple sectors and stakeholders.

V. PROJECT RESULTS FRAMEWORK

This project will contribute to the following Sustainable Development Goal (s): SDG 1, SDG 5, SDG 13, SDG 15, SDG 17

This project will contribute to the following country outcome (UNDAF/CPD, RPD, GPD): UNDP Country Programme Document for China (2021-2025), Pillar 2 (A healthier planet and resilient environment), Output 2.1: Adaptive policies developed at target level (subnational), financed and applied for nature-based systems to align with multilateral agreements and transboundary platforms; UNSDCF Outcome 3: People in China and the region benefit from a healthier and more resilient environment.
Aligned with UNDP Strategic Plan (2022-2025) Development setting/direction of change #3 "Building Resilience" and Signature Solution #4 (Environment); contributing to UNDP SP 2018-2021 Output 1.4.1: Solutions scaled up for sustainable management of natural resources, including sustainable commodities and green and inclusive value chains: Output 2.4.1: Gender-responsive legal and regulatory frameworks, policies and institutions strengthened, and solutions adopted, to address conservation, sustainable use and equitable benefit sharing of natural resources, in line with international conventions and national legislation.

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target
Project Objective: To safeguard key threatened and iconic wildlife in China through cross-sectoral engagement, community participation and innovative management technologies across landscapes	**GEF-7 Core Indicator 1: Terrestrial protected areas created or under improved management for conservation and sustainable use** (hectares) (Sub-Indicator 1.2: Terrestrial protected areas under improved management) **SDG 15.1, 15.4, 15.5** *(UNDP IRRF indicator: 1.4.1 Natural resources that are managed under a sustainable use, conservation, access and benefit-sharing regime: a) Area of land or marine habitat under protection (hectares; b) Area of existing protected area under improved management (hectares))*	2,233,808 ha METT scores: Giant Panda National Park (2,197,800 ha): 55%; Tianchi National Nature Reserve (14,475 ha): 42%; Caojian Forest Farm (21,533 ha): 14%	2,747,192 ha* METT scores: Giant Panda National Park: 64%; Tianchi National Nature Reserve: 55%; Caojian Forest Farm: 33% *Hectarage adjusted with 2,216 ha of restoration under Core Indicator 3 occurring inside protected areas. METT scores need to be assessed 3 months before MTR starts.	2,747,192 ha* METT scores: Giant Panda National Park: 75%; Tianchi National Nature Reserve: 67%; Caojian Forest Farm: 50% *Hectarage adjusted with 2,216 ha of restoration under Core Indicator 3 occurring inside protected areas. METT scores need to be assessed 3 months before Terminal Evaluation starts.
	GEF-7 Core Indicator 3: Area of land restored (hectares) (Sub-Indicator 3.2: Area of forest and forest land restored) **SDG 15.1, 15.2, 15.3**	0	2,716 ha end target confirmed in *Degraded Habitat Restoration Plans* approved by midterm	2,716 ha undergoing restoration
	GEF-7 Core Indicator 4: Area of landscapes under improved practices (hectares; excluding protected areas) (Sub-Indicator 4.1: Area of landscapes under improved management to benefit biodiversity; qualitative assessment, non-certified) **SDG 15.2, 15.3**	0	11,742 ha end target confirmed in *Ecological Corridor Strategies and Action Plans* approved by midterm	11,742 ha of landscapes under improved practices (excluding protected areas)
	GEF Core Indicator 6: Greenhouse Gas Emissions Mitigated (million metric tons of carbon dioxide equivalent – tCO2e) **SDG 13.1, 13.2; SDG 13.3**	0	End target of 206,075 tCO23 of lifetime direct project GHG emissions mitigated confirmed through approved *Degraded Habitat Restoration Plans*	206,075 tCO2e (lifetime direct project GHG emissions mitigated)
	GEF-7 Core Indicator 11: Number of direct project beneficiaries disaggregated by gender as a co-benefit of GEF investment (individual people) **SDG 1.4; SDG 1.b; SDG 5.a**	0	5,000 direct project beneficiaries, of whom 2,000 are women, through partnership building, skills training, financial management training, communication activities, etc.	10,000, of whom 4,000 are women. Of this total, there will be 1,000 local beneficiaries (400 of which will be women), who will directly benefit from livelihood improvement activities.

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target
Project Component 1	**Mainstreaming wildlife conservation into integrated landscape planning through enhanced intersectoral coordination and supportive policy environment**			
Project Outcome 1.1: Intersectoral coordination and policies supporting biodiversity conservation through integrated approaches improved	**Indicator 6: Stakeholder coordination mechanisms strengthened**, as measured by the number of cases of intersectoral coordination for biodiversity conservation and management at (a) the central level, and (b) sub-national level **SDG 15.9; SDG 17.9**	N/A	(a) two (2) cases of intersectoral coordination for biodiversity conservation and management at the central level, (b) one case each (2) in the Yunnan and Giant Panda NP demonstration areas	(a) five (5) cases of intersectoral coordination for biodiversity conservation and management at the central level, (b) two cases each (4) in the Yunnan and Giant Panda NP demonstration areas
	Indicator 7: Policy framework for biodiversity conservation enhanced, as measured by the number of gender-responsive policy measures for improving biodiversity conservation through integrated approaches developed, adopted and being applied **SDG 15.1** *(UNDP IRRF indicator: 2.4.1 Gender-responsive legal and regulatory frameworks, policies and institutions strengthened, and solutions adopted, to address conservation, sustainable use and equitable benefit sharing of natural resources in line with international conventions and national legislation; a) policy frameworks)*	N/A	At least 4 gender-responsive policy measures drafted and under review by relevant central and/or subnational governmental entities	At least 4 gender-responsive policy measures developed, adopted and being applied
Outputs to achieve Outcome 1	**Output 1.1.1**. Intersectoral coordination mechanisms for biodiversity conservation strengthened, also facilitating collaborative actions related to the Post-2020 Global Biodiversity Framework **Output 1.1.2**. Policy measures for incentivizing biodiversity conservation and ecological compensation developed and applied at national and provincial levels **Output 1.1.3**. A comprehensive set of guidelines and monitoring protocols for conservation measures, e.g., ecological corridors, developed based on domestic and international best practices **Output 1.1.4**. A capacity building plan on applying integrated approaches and implementing evaluation indicator systems developed and delivered			
Outcome 1.2: Mainstreaming wildlife conservation and sustainable management in Giant Panda National Park and primate conservation in Yunnan	**Indicator 8: Stakeholder coordination in wildlife conservation strengthened**, as measured by the number of cross-sectoral wildlife conservation strategies and action plans developed and implementation initiated at the sub-national level **SDG 15.9**	N/A	2 cross-sectoral wildlife conservation strategies and action plans drafted and under review by subnational governmental entities, for (1) primate conservation and sustainable management in Yunnan Province and (2) Giant Panda conservation and sustainable management	2 cross-sectoral wildlife conservation strategies and action plans developed and implementation initiated, for (1) primate conservation and sustainable management in Yunnan Province and (2) Conservation and sustainable management plan of Giant Panda National Park
Outputs to achieve Outcome 1.2	**Output 1.2.1**. Cross-sectoral strategy and action plan for primate conservation and sustainable management in Yunnan developed and implemented. **Output 1.2.2**. Cross-sectoral conservation and sustainable management plan for the Giant Panda National Park developed and implemented.			
Project component 2	**Demonstrating integrated landscape management approaches and innovative tools in key endangered globally important wildlife habitats**			
Outcome 2.1: Increased management effectiveness across the protected areas in the two demonstration areas	**Indicator 9: Sustained resources committed for capacity building,** as measured by an extended version of the capacity development program included in the annual budgets of the protected area management entities in the two demonstration areas.	N/A	5-year capacity building program approved and under implementation in the demonstration areas	Annual budgets of the protected area management entities include an extended version of the capacity building program

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target
Outputs to achieve Outcome 2.1	**Output 2.1.1**. Improved capacity for PA managers to effectively engage and support participatory, multi-level, cross-sectoral landscape approaches to conserve globally-threatened and iconic wildlife.			
Outcome 2.2: Connectivity between patches of key protected wildlife habitats targeted for improvement through the creation of ecological corridors	**Indicator 10: Wildlife conservation mainstreamed**, as indicated by the number of conservation measures taken up by production sectors. Examples of conservation measures include (a) wildlife-friendly road management mechanisms in collaboration with the transport sector, (b) easement compensation approach for collective forest use within the corridors, (c) sustainable livestock management and agroecological practices, (d) participatory restoration of degraded habitats, etc.	N/A	Conservation measures under demonstrated implementation in the ecological corridors established in the two demonstration areas.	Two of the demonstrated conservation measures taken up by production sectors in the demonstration areas.
	Indicator 11: Improved status of threatened species in demonstration areas, as measured by stable or increased populations of indicator species, including *Ailuropoda melanoleuca* (giant panda), *Rhinopithecus bieti* (black-and-white snub-nosed monkey), and *Nomascus concolor* (black crested gibbon)	*Ailuropoda melanoleuca* (giant panda): 1,340 (date: 2021); *Rhinopithecus bieti* (black-and-white snub-nosed monkey): 200 (date: 2020); *Nomascus concolor* (black crested gibbon): 30 (date: 2019)	Updated baseline information confirmed by midterm	All stable – as updated baseline
Outputs to achieve Outcome 2.2	**Output 2.2.1.** Ecological corridor established to link key primate habitats in Yunlong County, Dali Bai Autonomous Prefecture, Yunnan Province, consistent with the cross-sectoral strategy and action plan developed in Output 1.2.1. **Output 2.2.2.** Connectivity of isolated panda habitats in the Giant Panda National Park enhanced through establishing two ecological corridors, consistent with the cross-sectoral strategy and action plan developed in Output 1.2.2			
Outcome 2.3: Key wildlife habitat enhanced through restoration measures	**Indicator 12: Restoration best practices mainstreamed**, as measured by the number of restoration guidance documents adopted by the MEE and shared with the members of the national and subnational intersectoral coordination mechanisms. Examples of restoration guidance documents include (a) restoration of steep terrain forest habitats damaged by earthquake induced landslides, (b) restoration of wildfire-damaged habitats, (c) restoration of abandoned mining sites within wildlife habitats, (d) conversion of monoculture forested areas to mixed species forest systems, etc.	N/A	*Degraded Habitat Restoration Plans* developed and approved by midterm in the two demonstration areas	Two restoration guidance documents adopted by the MEE and shared with the members of the national and subnational intersectoral coordination mechanisms
Outputs to achieve Outcome 2.3	**Output 2.3.1**. Restoration of key primate habitat undertaken in Yunlong County, Dali Bai Autonomous Prefecture, Yunnan. **Output 2.3.2**. Degraded panda habitats undergoing restoration in the Giant Panda National Park through biological/ecological engineering and other technical measures			
Outcome 2.4: Gender responsive- and community-based co-management, and sustainable utilization of natural resources among the project intervention sites providing socioeconomic benefits to local communities	**Indicator 13: Socioeconomic benefits generated from participatory wildlife conservation**, as measured by the number households (gender disaggregated) economically benefitting from participation in livelihood social associations established and/or strengthened	0	Livelihood social associations established and/or strengthened among the project intervention sites, through partnership building, skills training, financial management training, etc.	300 households / 1,000 local beneficiaries (400 of which will be women) economically benefitting from participation in livelihood social associations

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target
Outputs to achieve Outcome 2.4	**Output 2.4.1**. Ecological goods and services, including nature-based tourism, certification schemes and/or organic farming, in place to generate alternative income streams for local communities. **Output 2.4.2**. Alternative livelihood social associations established and/or strengthened in the demonstration areas			
Project component 3	**Deploying frontier technologies and innovative knowledge management solutions for wildlife conservation and landscape planning**			
Outcome 3.1 Data management and information technology capabilities and identification of use cases of frontier technologies and innovations for wildlife conservation management	**Indicator 14: Knowledge of innovative conservation technologies increased and citizen science involvement strengthened**, as measured by the number of (a) key staff equipped with and trained on the use of innovative conservation technologies as part of their job; and (b) local communities trained on citizen science methods to support integration of biodiversity conservation practices	0	(a) modules developed and/or adapted and training initiated for 360 key staff (of whom 70 are women); (b) modules on citizen science developed and/or adapted and training initiated for 12 local communities	(a) 360 key staff (of whom 70 are women); (b) 12 local communities
	Indicator 15: Application of frontier technologies increased, as measured by the number of (a) ecological corridors moved to an automated system of monitoring of biodiversity and threats and (b) innovative technologies implemented among the intervention sites	0	(a) automated systems for monitoring biodiversity and threats designed and installation initiated for 3 ecological corridors, and (b) 3 types of innovative technologies designed and deployment initiated	(a) 3 ecological corridors moved to automated monitoring of biodiversity and threats, and (b) 3 types of innovative technologies under implementation among the intervention sites
Outputs to achieve Outcome 3.1	**Output 3.1.1**. Enabling technologies identified and applied to support dynamic real-time wildlife monitoring, data collection, and data analysis for informed and timely management decision making. **Output 3.1.2**. A robust data management platform developed and enabling machine learning and artificial intelligence, towards effective decision support and comprehensive wildlife management (i.e. giant panda genetic diversity database) **Output 3.1.3**. Advanced DNA techniques, including eDNA surveys and barcoding, introduced and applied to populate the genetic diversity panda database.			
Outcome 3.2 Knowledge sharing on wildlife management, habitat restoration and connectivity established at the national, regional and global levels	**Indicator 16: Key stakeholder groups' understanding of the value of conservation improved**, as measured by results of knowledge, attitude and practices (KAP) surveys (disaggregated by women, ethnic minorities, and youth), among the following stakeholder groups: (a) Subnational governmental stakeholders, (b) Local communities, (c) Private sector	Baseline to be established in Year 1	Knowledge Management Strategy and Action Plan for the project, formulated on the basis of the baseline KAP survey findings, approved by the Project Board	Provisional end targets: (a) Increase of at least 20% percentage points (b) Increase of at least 20% percentage points (c) Increase of at least 20% percentage points
	Indicator 17: Involvement in wildlife conservation expanded, as measured by the number of university student innovation competitions held across China to showcase cost-effective solutions and technologies for wildlife management and conservation	0	University student innovation competition designed, announced, and solution(s)-technology(ies) selected	One university student innovation competition across China completed.
Outputs to achieve Outcome 3.2	**Output 3.2.1**. National and global public awareness campaigns, workshops, collaborations and dissemination of project information to enhance awareness and knowledge of wildlife protection. **Output 3.2.2**. University student Innovation competition held across China for public awareness on wildlife conservation knowledge.			
Project component *4*	**Safeguards management, sustainability planning, and monitoring & evaluation**			

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target
Outcome 4.1 Adaptive management enhanced through safeguards management, sustainability planning, and monitoring & evaluation	**Indicator 18: Effective monitoring and evaluation**, as measured by number of progress review sessions conducted	N/A	Three progress review sessions held	Six progress review sessions held
Outputs to achieve Outcome 4.1	**Output 4.1.1.** Safeguard management plans developed and implemented, and a sustainability plan formulated and initiated **Output 4.1.2.** Project results monitored and evaluated, and progress and M&E reports produced			

VI. MONITORING AND EVALUATION (M&E) PLAN

186. Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the UNDP POPP (including guidance on GEF project revisions) and UNDP Evaluation Policy **The UNDP Country Office is responsible for ensuring full compliance with all UNDP project M&E requirements including project monitoring, UNDP quality assurance requirements, quarterly risk management, and evaluation requirements.**

187. Additional mandatory GEF-specific M&E requirements will be undertaken in accordance with the GEF Monitoring Policy and the GEF Evaluation Policy and other relevant GEF policies[18]. The M&E plan and budget included below will guide the GEF-specific M&E activities to be undertaken by this project.

188. In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed – including during the Project Inception Workshop - and will be detailed in the Inception Report.

Minimum project monitoring and reporting requirements as required by the GEF:

189. Inception Workshop and Report: A project inception workshop will be held within 2 months from the First disbursement date, with the aim to:

a. Familiarize key stakeholders with the detailed project strategy and discuss any changes that may have taken place in the overall context since the project idea was initially conceptualized that may influence its strategy and implementation.
b. Discuss the roles and responsibilities of the project team, including reporting lines, stakeholder engagement strategies and conflict resolution mechanisms.
c. Review the results framework and monitoring plan.
d. Discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E; discuss the role of the GEF OFP and other stakeholders in project-level M&E.
e. Update and review responsibilities for monitoring project strategies, including the risk log; SESP report, Social and Environmental Management Framework (where relevant) and other safeguard requirements; project grievance mechanisms; gender strategy; knowledge management strategy, and other relevant management strategies.
f. Review financial reporting procedures and budget monitoring and other mandatory requirements and agree on the arrangements for the annual audit.
g. Plan and schedule Project Board meetings and finalize the first-year annual work plan. Finalize the TOR of the Project Board.
h. Formally launch the Project.

GEF Project Implementation Report (PIR):

190. The annual GEF PIR covering the reporting period July (previous year) to June (current year) will be completed for each year of project implementation. UNDP will undertake quality assurance of the PIR before submission to the GEF. The PIR submitted to the GEF will be shared with the Project Board. UNDP will conduct a quality review of the PIR, and this quality review and feedback will be used to inform the preparation of the subsequent annual PIR.

GEF Core Indicators:

191. The GEF Core indicators included as **Annex 21** will be used to monitor global environmental benefits and will be updated for reporting to the GEF prior to MTR and TE. Note that the project team is responsible for updating the indicator status. The updated monitoring data should be shared with MTR/TE consultants prior to required evaluation missions, so these can be used for subsequent ground-truthing. The methodologies to be used in data collection have been defined by the GEF and are available on the GEF website.

[18] See https://www.thegef.org/gef/policies_guidelines

Independent Mid-term Review (MTR):

192. The terms of reference, the review process and the final MTR report will follow the standard UNDP templates and UNDP guidance for GEF-financed projects available on the UNDP Evaluation Resource Center (ERC).

193. The evaluation will be 'independent, impartial and rigorous'. The evaluators that UNDP will hire to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project under review.

194. The GEF Operational Focal Point and other stakeholders will be actively involved and consulted during the evaluation process. Additional quality assurance support is available from the BPPS/NCE-VF Directorate.

195. The final MTR report and MTR TOR will be publicly available in English and will be posted on the UNDP ERC by May 2025. A management response to MTR recommendations will be posted in the ERC within six weeks of the MTR report's completion.

Terminal Evaluation (TE):

196. An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the UNDP Evaluation Resource Center.

197. The evaluation will be 'independent, impartial and rigorous'. The consultants that will be hired by UNDP evaluation specialists to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. Equally, the consultants should not be in a position where there may be the possibility of future contracts regarding the project being evaluated.

198. The GEF Operational Focal Point and other stakeholders will be actively involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the BPPS/GEF Directorate.

199. The final TE report and TE TOR will be publicly available in English and posted on the UNDP ERC by June 2028. A management response to the TE recommendations will be posted to the ERC within six weeks of the TE report's completion.

Final Report:

200. The project's terminal GEF PIR along with the terminal evaluation (TE) report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

201. Agreement on intellectual property rights and use of logo on the project's deliverables and disclosure of information**:** To accord proper acknowledgement to the GEF for providing grant funding, the GEF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the project, and project hardware. Any citation on publications regarding projects funded by the GEF will also accord proper acknowledgement to the GEF. Information will be disclosed in accordance with relevant policies notably the UNDP Disclosure Policy[19] and the GEF policy on public involvement[20].

[19] See http://www.undp.org/content/undp/en/home/operations/transparency/information_disclosurepolicy/

[20] See https://www.thegef.org/gef/policies_guidelines

Monitoring Plan:

202. The project results, corresponding indicators and mid-term and end-of-project targets in the project results framework will be monitored by the Project Management Unit annually, and will be reported in the GEF PIR every year, and will be evaluated periodically during project implementation. If baseline data for some of the results indicators is not yet available, it will be collected during the first year of project implementation. Project risks, as outlined in the risk register, will be monitored quarterly.

Table 10: Monitoring plan

Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
Project objective from the results framework	**GEF-7 Core Indicator 1: Terrestrial protected areas created or under improved management for conservation and sustainable development** (hectares) (Sub-Indicator 1.2: Terrestrial protected areas under improved management)	Midterm: 2,231,592 ha* METT scores: Giant Panda National Park: 64%; Tianchi National Nature Reserve: 55%; Caojian Forest Farm: 33% End: 2,231,592ha* METT scores: Giant Panda National Park: 75%; Tianchi National Nature Reserve: 67%; Caojian Forest Farm: 50%	This indicator refers to the number of hectares of Giant Panda National Park（GPNP）(2,197,800 ha)，Yunnan Tianchi NNR (14,475 ha) and Caojian Forest Farm of Yunlong County (21,533 ha), whose management has been improved (see Annex on baseline Management Effectiveness Tracking Tool (METTs). *Hectarage adjusted with 2,216 ha of restoration under Core Indicator 3 occurring inside protected areas.	METT assessments	Midterm and End of Project	National Project Coordinator, Chief Technical Advisor, Safeguards-M&E-KM Officer, Demonstration Area Coordinators	Review of midterm and terminal METT assessments	Risk: Improvements in management effectiveness not as successful as envisaged. Assumption: Improvements in management effectiveness achieved as envisaged.
	GEF-7 Core Indicator 3: Area of land restored (hectares) (Sub-Indicator 3.2: Area of forest and forest land restored)	Midterm: 2,716 ha end target confirmed in *Degraded Habitat Restoration Plans* approved by midterm End: 2,716 ha undergoing restoration	This indicator refers to degraded habitats earmarked for restoration, including 985 ha within the Wolong NR, 500 ha outside the Daxiangling NR, 531 ha within the Baishuehe NR, 200 ha within the Caojian Forest Farm, and 500 ha within the Tianchi NR.	Restoration Plans, M&E reports, including photo records, GIS maps, and possibly remote sensing	Verify at project inception, assess progress annually, and evaluate at midterm review and terminal evaluation	National Project Coordinator, Chief Technical Advisor, Safeguards-M&E-KM Officer, Demonstration Area Coordinators	Review of Restoration Plans, M&E and field visit reports including photographic records, GIS maps, and remote sensing.	Risks: Co-financing does not materialize as planned; disaster hazards. Assumptions: Co-financing pledges are realized; risks associated with disaster hazards effectively mitigate; consultation processes for restoring the targeted species habitats secures the agreement of local and provincial government agencies.

Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
	GEF-7 Core Indicator 4: Area of landscapes under improved practices (hectares; excluding protected areas) (Sub-Indicator 4.1: Area of landscapes under improved management to benefit biodiversity; qualitative assessment, non-certified)	Midterm: 11,742 ha end target confirmed in *Ecological Corridor Strategies and Action Plans* approved by midterm End: 11,742 ha of landscapes under improved practices (excluding protected areas)	This indicator refers to terrestrial habitats outside protected areas put under collaborative protection through ecological corridor establishment, including 5,169 ha near the Baodinggou NR, 3,273 ha near the Liziping NR, and 3,300 ha near the Tianchi NR.	Ecological Corridor Strategies and Action Plans; M&E reports.	Verify at project inception, assess progress annually, and evaluate at midterm review and terminal evaluation	National Project Coordinator, Chief Technical Advisor, Safeguards-M&E-KM Officer, Demonstration Area Coordinators	Official government maps and statistics of PAs.	Risks: Insufficient stakeholder engagement leads to low ownership of the ecological corridor strategies and action plans. Assumptions: The multi-stakeholder coordination mechanisms will facilitate stakeholder engagement, including deliberation and advocacy for implementation of the ecological corridor strategies and action plans; official consultation process for establishing ecological corridors secures the agreement of local and provincial government agencies; consultation process for establishing ecological corridors can be completed within the project period.
	GEF Core Indicator 6: Greenhouse Gas Emissions Mitigated (million metric tons of carbon dioxide equivalent – tCO2e)	Midterm: End target of 206,075 tCO23 of lifetime direct project GHG emissions mitigated confirmed through approved *Degraded Habitat Restoration Plans* End: 206,075 tCO2e (lifetime direct project GHG emissions mitigated)	GHG mitigation is derived from: restoration of degraded habitats. The estimations of GHG emissions avoided are presented in FAO Ex-Ante Carbon Balance Tool (EX-ACT) annexed to the Project Document.	EX-ACT; mapping and review of actual-agreed restoration areas;	Verify at project inception, assess progress annually, and evaluate at midterm review and terminal evaluation	National Project Coordinator, Chief Technical Advisor, Safeguards-M&E-KM Officer, Demonstration Area Coordinators	EX-ACT calculation results documented in project M&E reports	Risks: restoration activities are delayed or reduced in scope and scale; inadequate or insufficient monitoring and maintenance of restored areas. Assumptions: restoration targets are achieved as planned. Effective monitoring and maintenance continue after the GEF funding ceases (post-project).
	GEF-7 Core Indicator 11: Number of direct project beneficiaries disaggregated by gender as a co-benefit	Midterm: 5,000 direct project beneficiaries, of whom 2,000 are women End:	The indicator is the number of direct beneficiaries including the proportion of women beneficiaries; i.e. those who receive targeted support from a given GEF project/activity and/or who use the specific resources that the project	Annual review of direct project beneficiaries, through training	Verify at project inception, assess annually, and	National Project Coordinator, Chief Technical Advisor, Safeguards-	Information summarized in project M&E reports, training records, etc.	Risks: Local communities are reluctant to participate in project sponsored activities; women are not actively engaged in project activities.

Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
	of GEF investment (individual people)	10,000, of whom 4,000 are women	maintains or enhances. Support is defined as direct assistance from the project/activity. Direct beneficiaries are all individuals receiving targeted support from a given activity. Targeted support is the intentional and direct assistance of the project to individuals or groups of individuals who are aware that they are receiving that support and/or who use the specific resources.	records, interventions under implementation, their participation in sustainable livelihood initiatives, etc.	evaluate at midterm review and terminal evaluation	M&E-KM Officer, Demonstration Area Coordinators		Assumptions: Local communities, including women are actively involved in project activities; project community engagement, sustainable natural resource management and livelihood, capacity development, awareness raising and human-wildlife conflict mitigation outcomes reach intended target groups and are sustainable.
Project Outcome 1.1	**Indicator 6: Stakeholder coordination mechanisms strengthened**, as measured by the number of cases of intersectoral coordination for biodiversity conservation and management at (a) the central level, and (b) sub-national level	Midterm: a) two (2) cases of intersectoral coordination for biodiversity conservation and management at the central level, (b) one case each (2) in the Yunnan and Giant Panda NP demonstration areas End: (a) five cases (5) of intersectoral coordination for biodiversity conservation and management at the central level, (b) two cases each (4) in the Yunnan and Giant Panda NP demonstration areas	The indicator is stakeholder coordination mechanisms established and operated for biodiversity -friendly policies, techniques and integrated landscape planning and aims to measure the target agencies' capacity to (1) conceptualize and formulate policies, legislation, strategies and programmes; (2) to implement policies, legislation, strategies and programmes; (3) to engage and build consensus among all stakeholders at central level at provincial level and local levels; (4) mobilize information and knowledge; and (5) to monitor, evaluate, report and learn.	Documentary evidence of cases that demonstrate intersectoral coordination in biodiversity conservation and management.	Assess annually, and evaluate at midterm review and terminal evaluation.	National Project Coordinator, Chief Technical Advisor, Safeguards-M&E-KM Officer, Demonstration Area Coordinators	Review of documentary evidence of cases that demonstrate intersectoral coordination in biodiversity conservation and management	Risks: Political or institutional management changes impact the coordination processes Assumptions: Increases in institutional coordination are sustained through retention of trained staff and organizational stability; there is political support for setting up coordination mechanisms at national level and provincial level (Yunnan and Sichuan) to strengthen biodiversity conservation and to support its sustainable.
	Indicator 7: Policy framework for biodiversity conservation enhanced, as measured by the number of	Midterm: At least 4 gender-responsive policy measures drafted and under review by relevant central and/or	Base on the problems, there are special needs and policy gaps in the development of biodiversity conservation and management, this indicator focus on the exploration and implementation of Priority Actions of	Policy briefs, approved policy measures	Assess annually, and evaluate at midterm review and	National Project Coordinator, Chief Technical Advisor, Safeguards-	Review of documentary evidence of approved policy measures	Risks: Lack of study on gender-responsive policy and biodiversity -friendly incentives and policies; insufficient time to adopt the policy measures

Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
	gender-responsive policy measures for improving biodiversity conservation through integrated approaches developed, adopted and being applied	subnational governmental entities End: At least 4 gender-responsive policy measures developed, adopted and being applied	NBSAP to enhance gender-responsive policy and develop incentives and policies for biodiversity conservation at the landscape scale, which can ensure GEF-7 Core Indicator 11 and be applied in the project Outcomes 2.2-2.4 and 3.1 for test, adjustment and application to ensure that the results are self-sustaining after the project is over.		terminal evaluation.	M&E-KM Officer, Demonstration Area Coordinators		within the timeframe of the project. Assumptions: biodiversity-friendly incentives and policies are adopted and applied during the project timeframe.
Project Outcome 1.2	**Indicator 8: Stakeholder coordination in wildlife conservation strengthened**, as measured by the number of cross-sectoral wildlife conservation strategies and action plans developed and implementation initiated at the sub-national level	Midterm: 2 cross-sectoral wildlife conservation strategies and action plans drafted and under review by subnational governmental entities, for (1) primate conservation and sustainable management in Yunnan Province and (2) Giant Panda conservation and sustainable management End: 2 cross-sectoral wildlife conservation strategies and action plans developed and implementation initiated, for (1) primate conservation and sustainable management in Yunnan Province and (2) Conservation and sustainable management plan of	This indicator is associated with the development and implementation of 2 conservation strategies and action plans for targeted species conservation and sustainable management for scaling up in China	Approved cross-sectoral strategies; local and provincial planning and budget frameworks	Assess annually, and evaluate at midterm review and terminal evaluation.	National Project Coordinator, Chief Technical Advisor, Safeguards-M&E-KM Officer, Demonstration Area Coordinators	Review of approved cross-sectoral strategies, as well as local and provincial planning and budget frameworks	Risks: Implementation of the strategies and action plans are not reflected in provincial and local budget allocations. Assumptions: Provincial planning stakeholders will be involved in the development and approval of the strategies and action plans, and help facilitate integration into planning and budgetary frameworks.

Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
		Giant Panda National Park						
Project Outcome 2.1	**Indicator 9: Sustained resources committed for capacity building,** as measured by an extended version of the capacity development program included in the annual budgets of the protected area management entities in the two demonstration areas	Midterm: 5-year capacity building program approved and under implementation in the demonstration areas End: Annual budgets of the protected area management entities include an extended version of the capacity building program	Capacity building is an essential element to achievement of improved management effectiveness of PAs. In order to ensure the capacity building of the demonstration areas at least, this indicator refers to the development of capacity building programs with annual budgets of the protected area management entities.	Budgets of PA's; extended capacity building plans	Assess annually, and evaluate at midterm review and terminal evaluation.	National Project Coordinator, Chief Technical Advisor, Safeguards-M&E-KM Officer, Demonstration Area Coordinators	Review of annual budgets of PA's, as well as extended capacity building plans	Risks: Staff turnover and budget shortfalls may constrain PA management performance; Assumptions: Central, Provincial and Local Government agencies provide the political support and adequate financing to sustain improvements in management effectiveness of targeted PAs.
Project Outcome 2.2	**Indicator 10: Wildlife conservation mainstreamed**, as indicated by the number of conservation measures taken up by production sectors. Examples of conservation measures include (a) wildlife-friendly road management mechanisms in collaboration with the transport sector, (b) easement compensation approach for collective forest use within the corridors, (c) sustainable livestock management and agroecological practices, (d) participatory	Midterm: Conservation measures under demonstrated implementation in the ecological corridors established in the two demonstration areas End: Two of the demonstrated conservation measures taken up by production sectors in the demonstration areas	To mainstream wildlife conservation into China is not only response of biodiversity-related agencies but also cross-sectoral respondence, especially production sectors, which are related to habitat fragmentation and local community and livelihoods. This indicator gives several examples to explore more conservation measures when project implementer practice in habitat connection of targeted species.	Documentary evidence of adopted conservation measures	Assess annually, and evaluate at midterm review and terminal evaluation.	National Project Coordinator, Chief Technical Advisor, Safeguards-M&E-KM Officer, Demonstration Area Coordinators	Review of documentary evidence of adopted conservation measures.	Risks: Production sectors have low interest in wildlife conservation and have rule-conflicted issues. Assumptions: Official consultation process for mainstreaming wildlife conservation leads to production sectors to adopt conservation measures demonstrated in the project and follow FPIC principle.

Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
	restoration of degraded habitats, etc.							
	Indicator 11: Improved status of threatened species in demonstration areas, as measured by stable or increased populations of indicator species, including *Ailuropoda melanoleuca* (giant panda), *Rhinopithecus bieti* (black-and-white snub-nosed monkey), and *Nomascus concolor* (black crested gibbon)	Midterm: Updated baseline information confirmed by midterm End: All stable – as updated baseline	*Ailuropoda melanoleuca* (giant panda): 1,340 (date:2021); *Rhinopithecus bieti* (black-and-white snub-nosed monkey): 200 (date: 2020); *Nomascus concolor* (black crested gibbon): 30 (date: 2019) The indicator aims to monitor the trends in numbers of targeted species at the project demonstration areas as a measure of their conservation status.	Wildlife survey reports	Wildlife surveys carried out according to PA planning	Wildlife survey teams	Review of wildlife survey reports	Risks: Extreme climatic, environmental or disease conditions impact species populations; wildlife surveys delayed due to harsh weather conditions or possible prolonged COVID 19 pandemic. Assumptions: Removal of threats through improved protection and management allows habitat condition and integrity to improve and globally threatened species populations to persist and recover; cross-sectoral conservation strategy and action plan for primates and giant panda can be put into effect within the project period; local conditions will remain conducive for the wildlife surveys to be carried out; possible directives associated with a prolonged pandemic will not affect the wildlife surveys.
Project Outcome 2.3	**Indicator 12: Restoration best practices mainstreamed**, as measured by the number of restoration guidance documents adopted by the MEE and shared with the members of the national and subnational intersectoral	Midterm: *Degraded Habitat Restoration Plans* developed and approved by midterm in the two demonstration areas End: Two restoration guidance documents adopted by the MEE and shared with the	This indicator refers to development of the restoration guidance documents through the results of project support by restoration of targeted species habitats in different habitat destruction, which have the values to adopted by the MEE and shared with the members of the national and sub-national intersectoral coordination mechanisms.	Documentary evidence of adopted restoration guidance documents	Assess annually, and evaluate at midterm review and terminal evaluation.	National Project Coordinator, Chief Technical Advisor, Safeguards-M&E-KM Officer, Demonstration Area Coordinators	Review of documentary evidence of adopted restoration guidance documents	Risks: restoration efforts do not produce satisfactory results; delay in adopting the guidance documents due to administrative procedures. Assumptions: Project support restoration interventions result in best practice results to share across the sector; adoption of the guidance documents is not hindered by administrative

Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
	coordination mechanisms. Examples of restoration guidance documents include (a) restoration of steep terrain forest habitats damaged by earthquake induced landslides, (b) restoration of wildfire-damaged habitats, (c) restoration of abandoned mining sites within wildlife habitats, (d) conversion of monoculture forested areas to mixed species forest systems, etc.	members of the national and subnational intersectoral coordination mechanisms						processes. Follow FPIC principle.
Project Outcome 2.4	**Indicator 13: Socioeconomic benefits generated from participatory wildlife conservation**, as measured by the number households (gender disaggregated) economically benefitting from participation in livelihood social associations established and/or strengthened	Midterm: Livelihood social associations established and/or strengthened among the project intervention sites, through partnership building, skills training, financial management training, etc. End: 300 households (40% representation of women) economically benefitting from participation in livelihood social associations	This indicator assesses the benefits generated for local communities by alternative livelihood cooperatives established over 300 households (3-5 members/household) in the demonstration areas, through partnership building, marketing support, skills training, investment assistance, etc.	Business plans, household surveys, M&E reports, partnership agreements	Annually, and evaluated at midterm review and terminal evaluation	Demonstration Area Coordinators, Safeguards-M&E-KM Officer	Review of business plans, household surveys, M&E reports, partnership agreements	Risks: selected alternative livelihoods are not suitable or affected by disasters; communities lack interest; elite capture; insufficient market demand; tourism levels reduced due prolonged pandemic or similar. Assumptions: local communities accept selected alternative livelihoods and follow cooperatives; multi-stakeholder approaches will help facilitate durable partnerships; tourism levels will be promoted and sustained; benefits reach the envisaged number of households. Follow FPIC principle.
Project Outcome 3.1	**Indicator 14: Knowledge of innovative**	Midterm: (a) modules developed and/or adapted and	The indicator(a) refers to the number of trained key staff who could use innovative conservation technologies	Training records and reports,	Annually, and evaluated	Safeguards-M&E-KM Officer,	Review of training records and	Risks: Capacity building efforts are not sufficiently effective; limited institutional capacity

Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
	conservation technologies increased and citizen science involvement strengthened, as measured by the number of (a) key staff equipped with and trained on the use of innovative conservation technologies as part of their job; and (b) local communities trained on citizen science methods to support integration of biodiversity conservation practices	training initiated for 360 key staff (of whom 70 are women); (b) modules on citizen science developed and/or adapted and training initiated for 12 local communities End: (a) 360 key staff (of whom 70 are women); (b) 12 local communities	and train others, which are based on needs of managers and staff in different levels of management agencies related this project. The indicator (b) assesses the state of knowledge, attitudes and practices of specific target groups trained for wildlife conservation and specific awareness raising activities.	capacity building assessments	at midterm review and terminal evaluation	Demonstration Area Coordinators	reports, capacity building assessments	retention in case of staff departure; inconsistency in assessment techniques Assumptions: Regular assessments made as part of the capacity development activities; institutions mainstream capacity building approaches; ensure consistency in assessment techniques
	Indicator 15: Application of frontier technologies increased, as measured by the number of (a) ecological corridors moved to an automated system of monitoring of biodiversity and threats and (b) innovative technologies implemented among the intervention sites	Midterm: (a) automated systems for monitoring biodiversity and threats designed and installation initiated for 3 ecological corridors, and (b) 3 types of innovative technologies designed and deployment initiated End: (a) 3 ecological corridors moved to automated monitoring of biodiversity and threats, and (b) 3 types of innovative technologies under implementation among the intervention sites	The indicator (a) enumerates the ecological corridors moved to an automatic monitoring system of wildlife and threats, which is based on the automated and AI technology developed in collaboration with the NFGA, provincial FGA's, and PA's. The indicator (b) enumerates innovative technologies developed through the project and project pilot sites implemented the innovative technologies, which could identify and apply to support dynamic real-time wildlife monitoring, collect and analyze the data for informed and timely management decision making, including: a)a robust data management platform developed and enabling machine learning and artificial intelligence, towards effective decision support and comprehensive wildlife management (i.e. giant panda genetic diversity database); b) advanced DNA techniques, including	Monitoring reports, installation records, technology investments	Annually, and evaluated at midterm review and terminal evaluation	Safeguards-M&E-KM Officer, Demonstration Area Coordinators	Review of monitoring reports, installation records, technology investments	Risk: some ecological corridors are unused by targeted species because of habitat recovery processes, interference, wildlife behavior. Assumptions: Frontier technologies are successfully deployed and taken up by the project partners; local PA's are capacitated and motivated to operate the technologies.

Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
			eDNA surveys and barcoding, introduced and applied to populate the genetic diversity panda database.					
Project Outcome 3.2	**Indicator 16: Key stakeholder groups' understanding of the value of conservation improved**, as measured by results of knowledge, attitude and practices (KAP) surveys (disaggregated by women, ethnic minorities, and youth), among the following stakeholder groups: (a) Subnational governmental stakeholders, (b) Local communities, (c) Private sector	Midterm: Knowledge Management Strategy and Action Plan for the project, formulated on the basis of the baseline KAP survey findings, approved by the Project Board End: Provisional end targets: (a) Increase of at least 20% percentage points (b) Increase of at least 20% percentage points (c) Increase of at least 20% percentage points	The indicator assesses the state of knowledge, attitudes and practices of specific target groups for wildlife conservation and specific awareness raising activities. By applying the same assessment at the start of the awareness raising activity and after its end, the actual changes in KAP will be assessed through 3 targeted groups. A framework for the KAP survey is annexed to the Project Document. The design of the KAP survey will be finalized at project inception by one or more independent service provider recruited through competitive procurement processes.	Baseline and end-of-project KAP survey results.	KAP surveys conducted at project inception (baseline) and at the end of the project. Knowledge management reported annually in progress reports.	Independent service provider(s); National Project Coordinator; Safeguards-M&E-KM Officer	Review of baseline and end-of-project KAP survey results.	Risks: Inconsistent survey techniques; knowledge management approach does not address the identified gaps; improved awareness may not result in support for conservation activities if other interests take priority; Assumptions: Qualified independent service providers will carry out the KAP surveys; the project's knowledge management strategy and action plan will be developed based on the findings of the baseline KAP survey; the media will support the project to deliver positive empathy towards biodiversity conservation; awareness campaigns targeted at specific stakeholder groups are able to achieve tangible change in terms of real conservation impacts, not just improved understanding.
	Indicator 17: Involvement in wildlife conservation expanded, as measured by the number of university student innovation competitions held across China to showcase cost-effective solutions and technologies for wildlife	Midterm: University student innovation competition designed, announced, and solution(s)-technology(ies) selected End: One university student innovation competition across China completed	This indicator assesses public participation to wildlife conservation through the promotion and organization of a university student Innovation competition national wide. The competition would hold with online/offline by several universities related bio-conservation and rise understanding, awareness and knowledge on wildlife conservation and mainstream by showcasing cost-effective solutions and technologies,	Competition results, written reports, dissemination of results.	Annually, and evaluated at midterm review and terminal evaluation	Safeguards-M&E-KM Officer, Chief Technical Advisor	Review of competition results, written reports, dissemination of results	Risk: Limited interest or quality shortcomings could result in an insufficient number of quality proposals. Assumption: the competition could be designed and organized well.

Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
	management and conservation		which is possible to attract lot public and contribute their innovative ideas and practices.					
Project Outcome 4.1	**Indicator 18: Effective monitoring and evaluation**, as measured by number of progress review sessions conducted,	Midterm: Three progress review sessions held End: Six progress review sessions held	Annual stakeholder workshops will be organized to review progress and contribute towards the development of the annual work plans.	Records of progress review sessions,	Annual	National Project Coordinator; Safeguards-M&E-KM Officer	Records of progress review sessions,	Assume participatory M&E, supported by annual progress review sessions.

Monitoring and Evaluation Budget for project execution:

203. *The M&E budget presented below in* **Table 11** *provides a breakdown of costs for M&E activities to be led by the Project Management Unit during project implementation. These costs are equivalent to those of the M&E Component of the Results Framework and TBWP. Other project M&E activities can be added to this budget if they are included under the M&E component of the results framework. The oversight and participation of the UNDP Country Office/Regional technical advisors/HQ Units in these M&E activities and in performing standard UNDP M&E requirements are not included as these are covered by the GEF Fee*.

Table 11: Monitoring and evaluation budget

GEF M&E requirements to be undertaken by Project Management Unit (PMU)	Indicative costs (US$)	Time frame
Inception Workshop and Report	$24,713 (budget for Output 4.1.2 includes $6,740 for the National Project Coordinator, $9,873 for the Safeguards-M&E-KM Officer, $3,600 for the Chief Technical Advisor, $3,000 in travel expenses, $1,500 in workshop expense)	Inception Workshop within 2 months of the First Disbursement
M&E required to report on progress made in reaching GEF core indicators and project results included in the project results framework	$10,360 (budget for Output 4.1.2 includes $3,600 for the Chief Technical Advisor, $4,510 for the Demonstration Area Coordinators, $2,250 in travel expenses)	Annually and at mid-point and closure (including midterm and end-of-project METT assessments)
Preparation of the annual GEF Project Implementation Report (PIR)	$7,047 (budget for Output 4.1.2 includes $2,247 for the National Project Coordinator and $4,800 for the Chief Technical Advisor)	Annually typically between June-August
Monitoring of SESP, ESMF/ESMP, Stakeholder Engagement Plan, Gender Action Plan, Business Plans for Nature-Based Livelihood Development and corresponding Indigenous Peoples Plan, ESIA, Climate and Disaster Risk Screening, COVID-19 Action Framework	$47,937 (budget for Output 4.1.2 includes $9,873 for the Safeguards-M&E-KM Officer, $6,314 for the Project Management Associate, $6,000 for the Chief Technical Advisor, $18,000 for local Safeguards-M&E Consultants, $6,750 in travel expenses, $1,000 in community workshop expenses)	On-going
Supervision missions	$8,000 (budget for Output 4.1.2 includes $6,000 for the Chief Technical Advisor and $2,000 in travel expenses)	Annually

GEF M&E requirements to be undertaken by Project Management Unit (PMU)	Indicative costs (US$)	Time frame
Independent Mid-term Review (MTR): ***costs associated with conducting the independent review/evaluation to be commissioned by UNDP not the Implementing Partner or PMU.***	$32,000 (budget for Output 4.1.2 includes $21,000 for the International Lead Midterm Reviewer, $6,000 for a National Consultant, and $5,000 in travel expenses)	May 2025
Independent Terminal Evaluation (TE): ***costs associated with conducting the independent evaluation to be commissioned by UNDP not the Implementing Partner or the PMU.***	$32,000 (budget for Output 4.1.2 includes $21,000 for the International Lead Terminal Evaluator, $6,000 for a National Consultant, and $5,000 in travel expenses)	June 2028
TOTAL indicative COST	$162,056	Equivalent to TBWP Component 4, Output 4.1.2 (M&E)

VII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

Section 1: General roles and responsibilities in the project's governance mechanism

204. Implementing Partner: The Implementing Partner for this project is the Foreign Environmental Cooperation Center of the Ministry of Ecology and Environment (FECO). FECO is an experienced implementing partner (IP) on other UNDP-GEF projects. The overall risk assessment conducted in the Partner Capacity Assessment Tool and the HACT assessment (**Annex 24**) concluded a Low risk for this IP.

205. The Implementing Partner is the entity to which the UNDP Administrator has entrusted the implementation of UNDP assistance specified in this signed project document along with the assumption of full responsibility and accountability for the effective use of GEF resources and the delivery of outputs, as set forth in this document.

206. The Implementing Partner is responsible for executing this project. Specific tasks include:

- Project planning, coordination, management, monitoring, evaluation and reporting. This includes providing all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary. The Implementing Partner will strive to ensure project-level M&E is undertaken by national institutes and is aligned with national systems so that the data used and generated by the project supports national systems.
- Risk management as outlined in this Project Document.
- Procurement of goods and services, including human resources.
- Financial management, including overseeing financial expenditures against project budgets.
- Approving and signing the multiyear workplan.
- Approving and signing the combined delivery report at the end of the year.
- Signing the financial report or the funding authorization and certificate of expenditures.

207. Project Stakeholders and Target Groups: The project stakeholders and target groups include national and subnational governmental ministries, departments and agencies tasked with biodiversity conservation, local communities who depend on natural resources for their livelihoods, as well as civil society organizations, academic-research institutes, and business enterprises. Intersectoral coordination mechanisms will be strengthened at the national (1) and subnational (2) levels to help facilitate cross-sectoral coordination.

208. UNDP: UNDP is accountable to the GEF for the implementation of this project. This includes overseeing project execution undertaken by the Implementing Partner to ensure that the project is being carried out in accordance with UNDP and GEF policies and procedures and the standards and provisions outlined in the Delegation of Authority (DOA) letter for this project. **The UNDP GEF Executive Coordinator, in consultation with UNDP Bureaus and the Implementing Partner, retains the right to revoke the project DOA, suspend or cancel this GEF project.** UNDP is responsible for the Project Assurance function in the project governance structure and presents to the Project Board and attends Project Board meetings as a non-voting member.

Section 2: Project governance structure

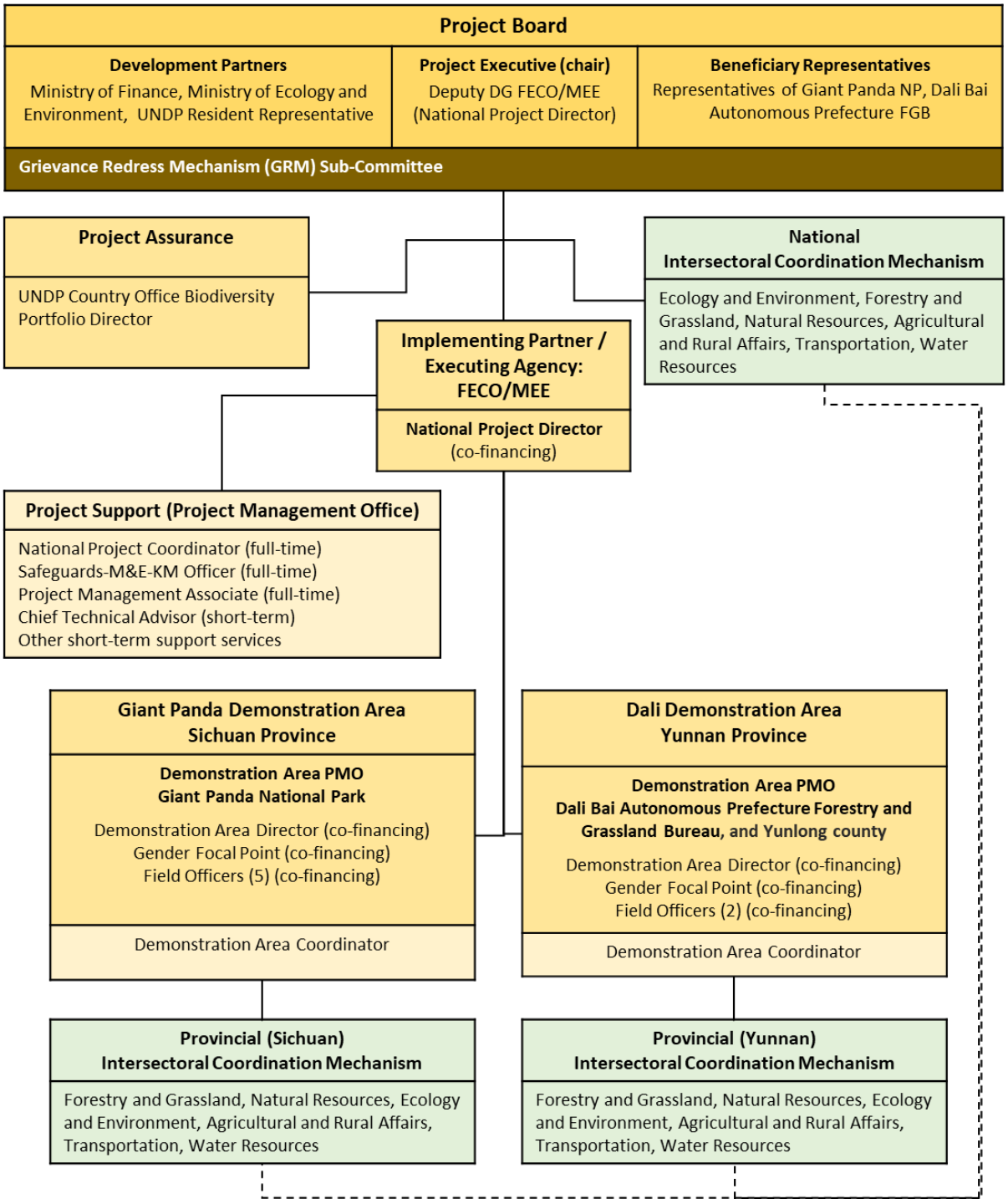


Figure 6: Project Organization Structure

209. Second line of Defense

- Regional Bureau oversees RR and Country Office compliance at portfolio level
- BPPS NCE RTA oversees technical quality assurance and GEF compliance. BPPS NCE PTA oversees RTA function
- UNDP GEF Executive Coordinator and Regional Bureau Deputy Director can revoke DOA/cancel/suspend project or provide enhanced oversight

210. The UNDP Resident Representative assumes full responsibility and accountability for oversight and quality assurance of this Project and ensures its timely implementation in compliance with the GEF-specific requirements and UNDP's Programme and Operations Policies

and Procedures (POPP), its Financial Regulations and Rules and Internal Control Framework. A representative of the UNDP Country Office will assume the assurance role and will present assurance findings to the Project Board, and therefore attends Project Board meetings as a non-voting member.

211. The MOF will be a core member of the Project Board. MOF will have a core role in providing guidance, coordination and supervision on the disbursement and expense of the GEF grant, performance evaluation, documentation, and promotion of project results. The GEF Operational Focal Point (OFP), on behalf of the Ministry of Finance, conducts guidance over the implementation of the project. As the communication authority with GEF in China, the Ministry of finance provides high-level strategic guidance and participates in project proposal endorsement. Major changes in the project, such as the adjustment of investment funds and policy coordination funds in the project by more than 15%, terminating the implementation of Project and some other important changes, should be reported to, seek advice of and agreed by the Ministry of Finance. The OFP coordinates various departments in the ministry to express their opinions on major changes. For the adjusted plan, the Ministry of Finance, together with UNDP, is responsible for supervising the implementation of major changes.

Section 3: Segregation of duties and firewalls vis-á-vis UNDP representation on the Project Board

212. As noted in the Minimum Fiduciary Standards for GEF Partner Agencies, in cases where a GEF Partner Agency (i.e. UNDP) carries out both implementation oversight and execution of a project, the GEF Partner Agency (i.e. UNDP) must separate its project implementation oversight and execution duties, and describe in the relevant project document a: 1) Satisfactory institutional arrangement for the separation of implementation oversight and executing functions in different departments of the GEF Partner Agency; and 2) Clear lines of responsibility, reporting and accountability within the GEF Partner Agency between the project implementation oversight and execution functions.

213. In this case, UNDP is only performing an implementation oversight role in the project vis-à-vis our role in the project board and in the project assurance function and therefore a full separation of project implementation oversight and execution duties has been assured.

Section 4: Roles and responsibilities of the project organization structure

a) **Project Board:**

214. All UNDP projects must be governed by a multi-stakeholder board or committee established to review performance based on monitoring and evaluation, and implementation issues to ensure quality delivery of results. The Project Board (also called the Project Steering Committee) is the most senior, dedicated oversight body for a project.

215. The two main (mandatory) roles of the Project Board are as follows:

1) **High-level oversight of the execution of the project by the Implementing Partner** (as explained in the "Provide Oversight" section of the POPP). This is the primary function of the project board and includes annual (and as-needed) assessments of any major risks to the project, and decisions/agreements on any management actions or remedial measures to address them effectively. The Project Board reviews evidence of project performance based on monitoring, evaluation and reporting, including progress reports, evaluations, risk logs and the combined delivery report. The Project Board is responsible for taking corrective action as needed to ensure the project achieves the desired results.
2) **Approval of strategic project execution decisions of the Implementing Partner** with a view to assess and manage risks, monitor and ensure the overall achievement of

projected results and impacts and ensure long term sustainability of project execution decisions of the Implementing Partner (as explained in the "Manage Change" section of the POPP).

216. Requirements to serve on the Project Board:

- ✓ Agree to the Terms of Reference of the Board and the rules on protocols, quorum and minuting.
- ✓ Meet annually; at least once.
- ✓ Disclose any conflict of interest in performing the functions of a Project Board member and take all measures to avoid any real or perceived conflicts of interest. This disclosure must be documented and kept on record by UNDP.
- ✓ Discharge the functions of the Project Board in accordance with UNDP policies and procedures.
- ✓ Ensure highest levels of transparency and ensure Project Board meeting minutes are recorded and shared with project stakeholders.

217. Responsibilities of the Project Board:

- ✓ Consensus decision making:
  - The Project Board provides overall guidance and direction to the project, ensuring it remains within any specified constraints, and providing overall oversight of the project implementation.
  - Review project performance based on monitoring, evaluation and reporting, including progress reports, risk logs and the combined delivery report;
  - The Project Board is responsible for making management decisions by consensus.
  - In order to ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition.
  - In case consensus cannot be reached within the Project Board, the UNDP representative on the Project Board will mediate to find consensus and, if this cannot be found, will take the final decision to ensure project implementation is not unduly delayed.
- ✓ Oversee project execution:
  - Agree on project manager's tolerances as required, within the parameters outlined in the project document, and provide direction and advice for exceptional situations when the project manager's tolerances are exceeded.
  - Appraise annual work plans prepared by the Implementing Partner for the Project; review combined delivery reports prior to certification by the implementing partner.
  - Address any high-level project issues as raised by the project manager and project assurance;
  - Advise on major and minor amendments to the project within the parameters set by UNDP and the donor and refer such proposed major and minor amendments to the UNDP BPPS Nature, Climate and Energy Executive Coordinator (and the GEF, as required by GEF policies);
  - Provide high-level direction and recommendations to the project management unit to ensure that the agreed deliverables are produced satisfactorily and according to plans.
  - Track and monitor co-financed activities and realisation of co-financing amounts of this project.
  - Approve the Inception Report, GEF annual project implementation reports, mid-term review and terminal evaluation reports.

- Ensure commitment of human resources to support project implementation, arbitrating any issues within the project.

✓ Risk Management:
- Provide guidance on evolving or materialized project risks and agree on possible mitigation and management actions to address specific risks.
- Review and update the project risk register and associated management plans based on the information prepared by the Implementing Partner. This includes risks related that can be directly managed by this project, as well as contextual risks that may affect project delivery or continued UNDP compliance and reputation but are outside of the control of the project. For example, social and environmental risks associated with co-financed activities or activities taking place in the project's area of influence that have implications for the project.
- Address project-level grievances.

✓ Coordination:
- Ensure coordination between various donor and government-funded projects and programmes.
- Ensure coordination with various government agencies and their participation in project activities.

218. **Composition of the Project Board**: The composition of the Project Board must include individuals assigned to the following three roles:

1. **Project Executive:** This is an individual who represents ownership of the project and chairs (or co-chairs) the Project Board. The Executive usually is the senior national counterpart for nationally implemented projects (typically from the same entity as the Implementing Partner), and it must be UNDP for projects that are direct implementation (DIM). In exceptional cases, two individuals from different entities can co-share this role and/or co-chair the Project Board. If the project executive co-chairs the project board with representatives of another category, it typically does so with a development partner representative. The Project Executive (National Project Director) is the Deputy Director General of FECO.
2. **Beneficiary Representatives**: Individuals or groups representing the interests of those groups of stakeholders who will ultimately benefit from the project. Their primary function within the board is to ensure the realization of project results from the perspective of project beneficiaries. Often representatives from civil society, industry associations, or other government entities benefiting from the project can fulfil this role. There can be multiple beneficiary representatives in a Project Board. The Beneficiary representatives are:
   i. Giant Panda National Park
   ii. Dali Bai Autonomous Prefecture Forestry and Grassland Bureau and Yunlong county
      1) Yunnan Yunlong Tianchi National Nature Reserve；
      2) Yunlong County Forestry and Grassland Bureau.
3. **Development Partners:** Individuals or groups representing the interests of the parties concerned that provide funding, strategic guidance and/or technical expertise to the project. The Development Partners are:
   i. Ministry of Finance (MoF).
   ii. Ministry of Ecology and Environment (MEE)
   iii. United Nations Development Programme (UNDP)

b) Project Assurance:

219. Project assurance is the responsibility of each project board member; however, UNDP has a distinct assurance role for all UNDP projects in carrying out objective and independent project oversight and monitoring functions. UNDP performs quality assurance and supports the

Project Board (and Project Management Unit) by carrying out objective and independent project oversight and monitoring functions, including compliance with the risk management and social and environmental standards of UNDP. The Project Board cannot delegate any of its quality assurance responsibilities to the National Project Coordinator. Project assurance is totally independent of project execution.

220. A designated representative of UNDP playing the project assurance role is expected to attend all board meetings and support board processes as a non-voting representative. It should be noted that while in certain cases UNDP's project assurance role across the project may encompass activities happening at several levels (e.g. global, regional), at least one UNDP representative playing that function must, as part of their duties, specifically attend board meeting and provide board members with the required documentation required to perform their duties. The UNDP representative playing the main project assurance function is: Dr. Ma Chaode, BD Portfolio Director of CO.

c) Project Management – Execution of the project:

221. The Project Manager (PM) (also called National Project Coordinator) is the senior most representative of the Project Management Unit (PMU) and, supported by the Project Management Associate, is responsible for the overall day-to-day management of the project on behalf of the Implementing Partner, including the mobilization of all project inputs, supervision over project staff, responsible parties, consultants and sub-contractors. The National Project Coordinator typically presents key deliverables and documents to the board for their review and approval, including progress reports, annual work plans, adjustments to tolerance levels and risk registers.

222. The PMU will be set up in the FECO office in Beijing. Roles and responsibilities of the PMU members are detailed in the **Annex 6**. A designated representative of the PMU is expected to attend all board meetings and support board processes as a non-voting representative.

223. The primary PMU representative attending board meetings is: the National Project Coordinator, who will be recruited after Project Document signature and before the inception workshop.

VIII. FINANCIAL PLANNING AND MANAGEMENT

224. The total cost of the project is USD 56,944,073. This is financed through a GEF grant of USD 5,786,073 administered by UNDP, and additional support of USD 51,158,000. UNDP, as the GEF Implementing Agency, is responsible for the oversight of the GEF resources and the cash co-financing transferred to UNDP bank account only.

225. **Co-financing**: The actual realization of project co-financing amounts will be monitored by the UNDP Country Office and the PMU on an annual basis in the GEF PIR and will be reported to the GEF during the mid-term review and terminal evaluation process as follows.

Co-financing source	Co-financing type	Co-financing amount
FECO/MEE (Recipient Country Government)	Public Investment	USD 10,000,000
	In-kind	USD 4,870,000
Yunnan Provincial Forestry and Grassland Bureau (Recipient Country Government)	Public Investment	USD 10,000,000
	In-kind	USD 1,000,000
Giant Panda National Park Administration (Recipient Country Government)	Public Investment	USD 20,000,000
	In-kind	USD 1,390,000
The Nature Conservancy (Civil Society Organization)	Grant	USD 150,000
Shan Shui Conservation Center (Civil Society Organization)	Grant	USD 1,158,000
Yunnan Green Environment Development Foundation (Civil Society Organization)	Grant	USD 1,880,000
UNDP (GEF Agency)	Grant	USD 284,000
	In-kind	USD 426,000

226. **Budget Revision and Tolerance**: As per UNDP POPP, the project board may agree with the project manager on a tolerance level for each detailed plan under the overall multi-year workplan. The agreed tolerance should be written in the project document or approved project board meeting minutes. It should normally not exceed 10 percent of the agreed annual budget at the activity level, but within the overall approved multi-year workplan at the activity level. Within the agreed tolerances, the project manager can operate without intervention from the project board. Restrictions apply as follows:

227. Should the following deviations occur, the Project Manager/IP through UNDP Country Office will seek the approval of the BPPS/NCE-VF team to ensure accurate reporting to the GEF. It is **strongly encouraged** to maintain the expenditures within the approved budget at the budgetary account and at the component level:

a) Budget reallocations must prove that the suggested changes in the budget will not lead to material changes in the results to be achieved by the project. A strong justification is required and will be approved on an exceptional basis. Budget re-allocations among the components (including PMC) of the approved Total Budget and Work Plans (TBWP) that represent a value greater than 10% of the total GEF grant.
b) Introduction of new outputs/activities (i.e. budget items) that were not part of the agreed project document and TBWP that represent a value greater than 5% of the total GEF grant. The new budget items must be eligible as per the GEF and UNDP policies.
c) Project management cost (PMC): budget under PMC component is capped and cannot be increased.

228. Any over expenditure incurred beyond the available GEF grant amount will be absorbed by non-GEF resources (e.g. UNDP TRAC or cash co-financing).

229. **Project extensions:** The UNDP Resident Representative and the UNDP-GEF Executive Coordinator must approve all project extension requests. Note that all extensions incur costs and the GEF project budget cannot be increased. A single extension may be granted on an exceptional basis and subject to the conditions and maximum durations set out in the UNDP POPP; the project management costs during the extension period must remain within the originally approved amount, and any increase in PMC costs will be covered by non-GEF resources; the additional

UNDP oversight costs during the extension period must be covered by non-GEF resources, in accordance with UNDP's guidance set out in UNDP POPP

230. Audit: The project will be audited as per UNDP Financial Regulations and Rules and applicable audit policies. Audit cycle and process must be discussed during the Inception workshop. If the Implementing Partner is an UN Agency, the project will be audited according to that Agencies applicable audit policies.

231. **Project Closure**: Project closure will be conducted as per UNDP requirements outlined in the UNDP POPP. All costs incurred to close the project must be included in the project closure budget and reported as final project commitments presented to the Project Board during the final project review. The only costs a project may incur following the final project review are those included in the project closure budget.

232. **Operational completion**: The project will be operationally completed when the last UNDP-financed inputs have been provided and the related activities have been completed. This includes the final clearance of the Terminal Evaluation Report (that will be available in English) and the corresponding management response, and the end-of-project review Project Board meeting. **Operational closure must happen at the end date calculated by the approved duration after the Project Document signature or at the revised operational closure date as approved in the project extension. Any expected activity after the operational date requires project extension approval.** The Implementing Partner through a Project Board decision will notify the UNDP Country Office when operational closure has been completed. At this time, the project should have completed the transfer or disposal of any equipment that is still the property of UNDP.

233. **Transfer or disposal of assets**: In consultation with the Implementing Partner and other parties of the project, UNDP is responsible for deciding on the transfer or other disposal of assets. Transfer or disposal of assets is recommended to be reviewed and endorsed by the project board following UNDP rules and regulations. Assets may be transferred to the government for project activities managed by a national institution at any time during the life of a project (it is strongly encouraged to be done before the operational closure date). In all cases of transfer, a transfer document must be prepared and kept on file[21]. The transfer should be done before Project Management Unit complete their assignments.

234. **Financial completion (closure)**: The project will be financially closed when the following conditions have been met: a) the project is operationally completed or has been cancelled; b) the Implementing Partner has reported all financial transactions to UNDP; c) UNDP has closed the accounts for the project; d) UNDP and the Implementing Partner have certified a final Combined Delivery Report (which serves as final budget revision).

235. The project will be financially completed **within 6 months of operational closure or after the date of cancellation**. If Operational Closure is delayed for any justified and approved reason, the Country Office should do all efforts to Financially Close the project within 9 months after TE is completed. Between operational and financial closure, the implementing partner will identify and settle all financial obligations and prepare a final expenditure report. The UNDP Country Office will send the final signed closure documents including confirmation of final cumulative expenditure and unspent balance to the BPPS/NCE-VF Unit for confirmation before the project will be financially closed in Atlas by the UNDP Country Office.

236. Refund to GEF: Should a refund of unspent funds to the GEF be necessary, this will be managed directly by the BPPS/NCE-VF Directorate in New York. No action is required by the UNDP Country Office on the actual refund from UNDP project to the GEF Trustee.

[21] See https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PPM_Project%20Management_Closing.docx&action=default.

IX. TOTAL BUDGET AND WORK PLAN

Total Budget and Work Plan		
Atlas Award ID:	00132366	Atlas Output Project ID: 00124919
Atlas Proposal or Award Title:	Transformational wildlife conservation management in China	
Atlas Business Unit	CHN 10	
Atlas Primary Output Project Title	Transformational wildlife conservation management in China	
UNDP-GEF PIMS No.	6607	
Implementing Partner	Foreign Environmental Cooperation Center of the Ministry of Ecology and Environment (FECO)	

Atlas Activity (GEF Component)	Atlas Implementing Agent	Atlas Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Amount Year 5 (USD)	Amount Year 6 (USD)	Total (USD)	See Budget Note:
COMPONENT 1. Mainstreaming wildlife conservation into integrated landscape planning through enhanced intersectoral coordination and supportive policy environment	**FECO**	**62000**	**GEF**	71200	International Consultants	0	0	30,000	0	0	0	**30,000**	1
				71300	Local Consultants	18,400	44,300	59,300	44,300	44,300	18,400	**229,000**	2
				71600	Travel	2,400	6,800	46,800	11,800	11,800	4,400	**84,000**	3
				71800	Contractual Services - Impl. Partner	18,400	38,660	40,520	42,380	44,730	22,525	**207,215**	4
				72100	Contractual Services - Companies	32,000	195,500	99,250	52,250	24,000	22,000	**425,000**	5
				74200	Audio Visual & Print Prod Costs	0	5,000	5,000	0	0	0	**10,000**	6
				75700	Training, Workshops and Confer	2,800	6,600	26,600	11,600	11,600	3,800	**63,000**	7
						74,000	**296,860**	**307,470**	**162,330**	**136,430**	**71,125**	**1,048,215**	
Total Component 1						**74,000**	**296,860**	**307,470**	**162,330**	**136,430**	**71,125**	**1,048,215**	
COMPONENT 2. Demonstrating integrated landscape management approaches and innovative tools in key endangered globally important wildlife habitats	**FECO**	**62000**	**GEF**	71300	Local Consultants	7,700	41,600	41,600	24,100	22,900	6,600	**144,500**	8
				71600	Travel	1,400	6,350	13,350	6,350	10,350	3,200	**41,000**	9
				71800	Contractual Services - Impl. Partner	32,270	67,800	71,060	74,320	78,620	39,690	**363,760**	10
				72100	Contractual Services - Companies	54,500	414,250	384,000	354,500	374,500	298,250	**1,880,000**	11
				74200	Audio Visual & Print Prod Costs	0	2,000	3,000	0	0	0	**5,000**	12
				75700	Training, Workshops and Confer	11,100	14,850	10,850	4,850	7,850	1,500	**51,000**	13
						106,970	**546,850**	**523,860**	**464,120**	**494,220**	**349,240**	**2,485,260**	
Total Component 2						**106,970**	**546,850**	**523,860**	**464,120**	**494,220**	**349,240**	**2,485,260**	
COMPONENT 3. Deploying frontier technologies and innovative knowledge management solutions for wildlife conservation and landscape planning	**FECO**	**62000**	**GEF**	71300	Local Consultants	2,550	11,100	11,100	9,100	9,100	6,550	**49,500**	14
				71600	Travel	0	16,400	16,400	18,400	16,400	16,400	**84,000**	15
				71800	Contractual Services - Impl. Partner	16,470	34,620	36,300	37,980	39,990	20,455	**185,815**	16
				72100	Contractual Services - Companies	7,000	149,000	185,000	152,000	131,000	86,000	**710,000**	17
				72400	Communic & Audio Visual Equip	0	3,000	3,000	3,000	3,000	3,000	**15,000**	18
				72800	Information Technology Equipment	0	0	180,000	140,000	0	0	**320,000**	19
				74200	Audio Visual & Print Prod Costs	0	35,702	37,500	37,500	37,500	0	**148,202**	20
				75700	Training, Workshops and Confer	0	13,600	13,600	13,600	13,600	16,600	**71,000**	21
						26,020	**263,422**	**482,900**	**411,580**	**250,590**	**149,005**	**1,583,517**	

Atlas Activity (GEF Component)	Atlas Implementing Agent	Atlas Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Amount Year 5 (USD)	Amount Year 6 (USD)	Total (USD)	See Budget Note:
Total Component 3						**26,020**	**263,422**	**482,900**	**411,580**	**250,590**	**149,005**	**1,583,517**	
Component 4. Safeguards management, sustainability planning	**FECO**	**62000**	**GEF**	71200	International Consultants	9,000	9,000	3,000	3,000	3,000	3,000	**30,000**	22
				71300	Local Consultants	2,400	12,000	12,000	12,000	12,000	9,600	**60,000**	23
				71600	Travel	0	2,400	2,400	2,400	2,400	2,400	**12,000**	24
				71800	Contractual Services - Impl. Partner	10,400	17,154	17,988	18,822	19,779	20,355	**104,498**	25
				72100	Contractual Services - Companies	5,000	5,000	0	0	0	0	**10,000**	26
				75700	Training, Workshops and Confer	3,000	5,000	4,000	1,000	1,000	1,000	**15,000**	27
						29,800	**50,554**	**39,388**	**37,222**	**38,179**	**36,355**	**231,498**	
Total Component 4						**29,800**	**50,554**	**39,388**	**37,222**	**38,179**	**36,355**	**231,498**	
M&E	**UNDP**	**62000**	**GEF**	71200	International Consultants	0	0	21,000	0	0	21,000	**42,000**	22
				71300	Local Consultants	2,400	7,920	13,920	7,920	7,920	13,920	**54,000**	23
	FECO			71600	Travel	3,000	2,800	6,800	2,800	1,800	6,800	**24,000**	24
				71800	Contractual Services - Impl. Partner	5,250	6,256	6,562	6,868	7,208	7,412	**39,556**	25
				75700	Training, Workshops and Confer	1,500	200	200	200	200	200	**2,500**	27
						12,150	**17,176**	**48,482**	**17,788**	**17,128**	**49,332**	**162,056**	
Total M&E						**12,150**	**17,176**	**48,482**	**17,788**	**17,128**	**49,332**	**162,056**	
Project Management	**FECO**	**62000**	**GEF**	71600	Travel	600	1,200	1,200	1,200	1,200	600	**6,000**	28
				71800	Contractual Services - Impl. Partner	30,400	32,000	33,600	35,200	36,900	36,900	**205,000**	29
				72500	Supplies	600	1,200	1,200	1,200	1,200	600	**6,000**	30
				72400	Communic & Audio Visual Equip	600	1,200	1,200	1,200	1,200	600	**6,000**	31
				72800	Information Technology Equipment	7,527	0	0	0	0	0	**7,527**	32
	UNDP			74100	Professional Services	6,000	6,000	6,000	6,000	6,000	6,000	**36,000**	33
	FECO			75700	Training, Workshops and Confer	900	1,800	1,800	1,800	1,800	900	**9,000**	34
	Sub-total, Project Management GEF					**46,627**	**43,400**	**45,000**	**46,600**	**48,300**	**45,600**	**275,527**	
Total Project Management						**46,627**	**43,400**	**45,000**	**46,600**	**48,300**	**45,600**	**275,527**	
PROJECT TOTAL						**295,567**	**1,218,262**	**1,447,100**	**1,139,640**	**984,847**	**700,657**	**5,786,073**	

Summary of Funds:

	Amount Year 1	Amount Year 2	Amount Year 3	Amount Year 4	Amount Year 5	Amount Year 6	Total
GEF grant administered by UNDP	$295,567	$1,218,262	$1,447,100	$1,139,640	$984,847	$700,657	**$5,786,073**
FECO/MEE (public investment)	$1,000,000	$1,800,000	$1,800,000	$1,800,000	$1,800,000	$1,800,000	**$10,000,000**
FECO/MEE (in-kind)	$470,000	$880,000	$880,000	$880,000	$880,000	$880,000	**$4,870,000**
Yunnan Provincial Forestry and Grassland Bureau (public-investment)	$1,000,000	$1,800,000	$1,800,000	$1,800,000	$1,800,000	$1,800,000	**$10,000,000**
Yunnan Provincial Forestry and Grassland Bureau (in-kind)	$100,000	$180,000	$180,000	$180,000	$180,000	$180,000	**$1,000,000**

Giant Panda National Park Administration (public investment)	$2,000,000	$3,600,000	$3,600,000	$3,600,000	$3,600,000	$3,600,000	**$20,000,000**
Giant Panda National Park Administration (in-kind)	$190,000	$240,000	$240,000	$240,000	$240,000	$240,000	**$1,390,000**
The Nature Conservancy (TNC)	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	**$150,000**
Shan Shui Conservation Center	$158,000	$200,000	$200,000	$200,000	$200,000	$200,000	**$1,158,000**
Yunnan Green Environment Development Foundation	$180,000	$340,000	$340,000	$340,000	$340,000	$340,000	**$1,880,000**
UNDP (grant)	$34,000.0	$50,000.0	$50,000.0	$50,000.0	$50,000.0	$50,000.0	**$284,000**
UNDP (in-kind)	$26,000	$80,000	$80,000	$80,000	$80,000	$80,000	**$426,000**
TOTAL:	**$5,478,567**	**$10,413,262**	**$10,642,100**	**$10,334,640**	**$10,179,847**	**$9,895,657**	**$56,944,073**

Budget Note No.	Project output (Description)
Component 1:	
1	**71200. International consultants.** Output 1.1.4. **International Wildlife Conservation Specialist**, for 10 weeks at USD 3,000 per week (USD 30,000), supporting capacity building activities, sharing international best practice, supporting the planned international learning exchanges. **Total: USD 30,000**
2	**71300. Local consultants.** **Chief Technical Advisor**, for 32 weeks at USD 2,000 per week (USD 64,000), providing technical and strategic guidance for strengthening the intersectoral coordination mechanisms (Output 1.1.1), development of wildlife conservation policies and incentive mechanisms (Output 1.1.2), development of ecological corridor guidelines (Output 1.1.3), capacity building, including the international learning exchanges (Output 1.1.4), and development and implementation of cross-sectoral strategies and action plans for the project demonstration areas (Outputs 1.2.1, 1.2.2). **Facilitator-Central**, for 20 weeks at USD 1,500 per week (USD 30,000), facilitating the strengthening of intersectoral coordination mechanisms associated with wildlife conservation, throughout the duration of the 6-year project implementation (Output 1.1.1). **Facilitator-Yunnan**, for 40 weeks at USD 1,500 per week (USD 60,000), facilitating the establishment and operation of the multi-stakeholder, intersectoral coordination mechanism in the Yunnan demonstration area (Output 1.1.1), and for facilitating the development and implementation of the multi-stakeholder, cross-sectoral strategy and action plan for the Yunnan demonstration area (Output 1.2.1). **Facilitator-Giant Panda NP**, for 40 weeks at USD 1,500 per week (USD 60,000), facilitating the establishment and operation of the multi-stakeholder, intersectoral coordination mechanism in the Giant Panda NP demonstration area (Output 1.1.1), and for facilitating the development and implementation of the multi-stakeholder, cross-sectoral strategy and action plan for the Giant Panda NP demonstration area (Output 1.2.2). **Interpreter/Translator**, for 10 weeks at USD 1,500 per week (15,000), supporting the international learning exchanges and the International Wildlife Conservation Specialist (Output 1.1.4). **Total: USD 229,000**
3	**71600. Travel.** Output 1.1.1. Travel expenses associated with the intersectoral coordination at the central level (USD 6,000), in the Yunnan demonstration area (USD 6,000), and in the Giant Panda NP demonstration area (USD 6,000). Output 1.1.4. Travel expenses associated with domestic capacity building activities (USD 10,000), and associated with international learning exchanges (USD 40,000). Output 1.2.1. Travel expenses associated with running the multi-stakeholder, intersectoral coordination mechanism in the Yunnan demonstration area throughout the 6-year project implementation (USD 8,000). Output 1.2.2. Travel expenses associated with running the multi-stakeholder, intersectoral coordination mechanism in the Giant Panda NP demonstration area throughout the 6-year project implementation (USD 8,000). **Total: USD 84,000**
4	**71800. Contractual Services – Implementing Partner.** **National Project Coordinator**, for 23 months out a total of 72 months at a gross salary of USD 4,000 per month, with a 5% cost of living adjustment starting from year 2 and extending through year 6 (sub-total: USD 103,385), coordinating the activities under Component 1 including strengthening intersectoral coordination mechanisms at the centra level and in the two demonstration areas (Output 1.1.1), development of policy measures and incentive mechanisms (Output 1.1.2), development of guidelines for the establishment of ecological corridors (Output 1.1.3), capacity

Budget Note No.	Project output (Description)
	building, including international learning exchanges (Output 1.1.4), and development and implementation of the cross-sectoral strategies and action plans in the two demonstration areas (Outputs 1.2.1, 1.2.2). **Safeguards-M&E-KM Officer**, for 8 months out a total of 72 months at a gross salary of USD 2,900 per month, with a 5% cost of living adjustment starting from year 2 and extending through year 6 (sub-total: USD 26,240), assisting in the activities under Component 1 including strengthening intersectoral coordination mechanisms at the centra level and in the two demonstration areas (Output 1.1.1), development of policy measures and incentive mechanisms (Output 1.1.2), development of a FPIC guidance document based on traditional knowledge of biodiversity conservation and development of guidelines for the establishment of ecological corridors (Output 1.1.3), capacity building, including international learning exchanges (Output 1.1.4), and completion of a SESA as part of the cross-sectoral strategies and action plans and development and implementation of the cross-sectoral strategies and action plans in the two demonstration areas (Outputs 1.2.1, 1.2.2) **Project Management Associate,** for 6 months out of 72 months total at a gross salary of USD 2,800 per month, with a 5% cost of living adjustment starting from year 2 and extending through year 6 (sub-total: USD 18,960), providing support for execution of Component 1 activities. **Demonstration Area Coordinators (2)** for 26 months out a total of 144 months at a gross salary of USD 2,000 per month, with a 5% cost of living adjustment starting from year 2 and extending through year 6 (sub-total: USD 58,630), coordinating the activities under Component 1 including strengthening intersectoral coordination mechanisms in the two demonstration areas (Output 1.1.1), development of policy measures and incentive mechanisms (Output 1.1.2), development of guidelines for the establishment of ecological corridors (Output 1.1.3), capacity building, including international learning exchanges (Output 1.1.4), and development and implementation of the cross-sectoral strategies and action plans in the two demonstration areas (Outputs 1.2.1, 1.2.2). **Total: USD 207,215**
5	**72100. Contractual services – Companies.** Output 1.1.1. Policy briefs on wildlife conservation mainstreaming at the central and subnational levels, and update and/or prepare terms of reference for improving intersectoral coordination among key ministries and departments (USD 30,000 for central level; USD 20,000 for Yunnan; USD 20,000 for Giant Panda NP). Output 1.1.2. Policy gap analysis; investigate viability of developing innovative wildlife conservation policies; formulate recommendations on improving ecological compensation strategies; develop draft policies and incentive mechanisms (USD 25,000). Output 1.1.2. Integration of biodiversity conservation and management into ongoing governmental working mechanisms (USD 20,000). Output 1.1.2. Develop special incentives and policies to encourage reuse of biological resources, supporting policy measures on development of technologies that replace biological resources in production of goods and services (USD 20,000). Output 1.1.3. Gap analysis on wildlife habitat degradation and fragmentation; guidelines on wildlife habitat restoration; guidelines on ecological corridor establishment (USD 30,000). Output 1.1.3. FPIC guidance document on traditional wildlife-friendly normative measures based on traditional knowledge (USD 10,000). Output 1.1.3. Sector-specific guidelines on wildlife conservation mainstreaming: agriculture (USD 5,000); transportation and energy infrastructure (USD 5,000); water resources (USD 5,000); mining (USD 5,000). Output 1.1.3. Wildlife assessment elements integrated into EIA regulations and practice (USD 5,000). Output 1.1.3. Wildlife habitat designation criteria formulated for land use zoning and planning (USD 10,000). Output 1.1.4. Capacity needs assessment; develop capacity building plan including selection criteria and performance tracking; develop and/or adapt training materials (USD 20,000). Output 1.1.4. Deliver capacity building trainings in coordination with cofinancing partners, through multiple contracts (USD 100,000). Output 1.2.1. Cross sectoral strategy and action plan: Yunnan (USD 40,000). Output 1.2.2. Cross-sectoral strategy and action plan: Giant Panda NP (USD 55,000). **Total: USD 425,000**
6	**74200. Audio visual & print production costs**. Output 1.1.4. Audiovisual and print production supporting capacity building activities. **Total: USD 10,000**
7	**75700. Training, workshop, conference.** Output 1.1.1. Workshop expenses associated with the intersectoral coordination at the central level (USD 6,000), in the Yunnan demonstration area (USD 6,000), and in the Giant Panda NP demonstration area (USD 6,000). Output 1.1.4. Training/workshop expenses associated with domestic capacity building activities (USD 5,000) and international learning exchanges (USD 20,000).

Budget Note No.	Project output (Description)
	Output 1.2.1. Workshop expenses associated with running the multi-stakeholder, intersectoral coordination mechanism in the Yunnan demonstration area throughout the 6-year project implementation (USD 10,000). Output 1.2.2. Workshop expenses associated with running the multi-stakeholder, intersectoral coordination mechanism in the Giant Panda NP demonstration area throughout the 6-year project implementation (USD 10,000). **Total: USD 63,000**
Component 2:	
8	**71300. Local consultants.** **Chief Technical Advisor**, for 34 weeks at USD 2,000 per week (USD 68,000), providing technical and strategic guidance for capacity building of PA managers and staff (Output 2.1.1), ecological corridor design and implementation (Outputs 2.2.1 and 2.1.2), assessment of degraded habitats and design and implementation of restoration activities (Outputs 2.3.1 and 2.3.2), and strengthening livelihood opportunities for local communities and social associations in the two demonstration areas (Outputs 2.4.1 and 2.4.2). **Facilitator-Yunnan**, for 10 weeks at USD 1,500 per week (USD 15,000), for facilitating stakeholder coordination associated with the design and implementation of the ecological corridor in the Yunnan demonstration area (Output 2.2.1). **Facilitator-Giant Panda NP**, for 20 weeks at USD 1,500 per week (USD 30,000), for facilitating stakeholder coordination associated with the design and implementation of the ecological corridors in the Giant Panda NP demonstration area (Output 2.2.2). Business Development Consultant, for 21 weeks at USD 1,500 per week (USD 31,500), developing business plans, delivering trainings, fostering partnerships with private sector enterprises, and helping to facilitating insertion of local social associations into green value chains (Output 2.4.2). **Total: USD 144,500**
9	**71600. Travel.** Output 2.1.1. Capacity building travel expenses: Yunnan demonstration area (USD 2,000); capacity building travel expenses: Giant Panda NP demonstration area (USD 2,000); Cross-province learning exchanges, travel expenses (USD 3,000). Output 2.2.1. Travel expenses related to socialization of the ecological corridor in Yunnan (USD 2,000). Output 2.2.2. Travel expenses related to socialization of the ecological corridors in the Giant Panda NP (USD 5,000). Output 2.3.1. Travel expenses related to restoration planning and implementation in Yunnan (USD 3,000). Output 2.3.2. Travel expenses related to restoration planning and implementation in the Giant Panda NP (USD 3,000). Output 2.4.1. Travel expenses associated with the livelihood activities under Output 2.4.1 (USD 10,000). Output 2.4.2. Travel expenses for capacity building delivered to social associations (USD 3,000); travel expenses for cross-province learning exchanges (USD 8,000). **Total: USD 41,000**
10	**71800. Contractual Services – Implementing Partner.** **National Project Coordinator**, for 20 months out a total of 72 months at a gross salary of USD 4,000 per month, with a 5% cost of living adjustment starting from year 2 and extending through year 6 (sub-total: USD 89,900), overseeing the capacity building of PA managers and staff (Output 2.1.1), establishment and implementation of ecological corridors (Outputs 2.2.1 and 2.2.2), planning and implementing restoration of degraded habitats (Outputs 2.3.1 and 2.3.2), and strengthening livelihood opportunities for local communities (Outputs 2.4.1 and 2.4.2). **Safeguards-M&E-KM Officer**, for 19 months out a total of 72 months at a gross salary of USD 2,900 per month, with a 5% cost of living adjustment starting from year 2 and extending through year 6 (sub-total: USD 62,320), supporting the capacity building of PA managers and staff and completing the METT together with two demonstration sites. (Output 2.1.1), training on UNDP SES to multi-stakeholder working groups and other project partners and establishment, FPIC consultations as part of establishment of ecological corridors, ESIA, and implementation of ecological corridors (Outputs 2.2.1 and 2.2.2), planning and implementing restoration of degraded habitats (Outputs 2.3.1 and 2.3.2), and training on UNDP SES to local government officials and other project partners related to strengthening livelihoods of local communities, participatory rural assessments of the project intervention sites and strengthening livelihood opportunities for local communities (Outputs 2.4.1 and 2.4.2). **Project Management Associate,** for 7 months out of 72 months total at a gross salary of USD 2,800 per month, with a 5% cost of living adjustment starting from year 2 and extending through year 6 (sub-total: USD 22,120), providing support for execution of Component 2 activities. **Demonstration Area Coordinators (2)** for 84 months out a total of 144 months at a gross salary of USD 2,000 per month, with a 5% cost of living adjustment starting from year 2 and extending through year 6 (sub-total: USD 189,420), coordinating the capacity building of PA managers and staff (Output 2.1.1), establishment and implementation of ecological corridors (Outputs 2.2.1 and 2.2.2), planning and implementing restoration of degraded habitats (Outputs 2.3.1 and 2.3.2), and strengthening livelihood opportunities for local communities (Outputs 2.4.1 and 2.4.2). **Total: USD 363,760**

Budget Note No.	Project output (Description)
11	**72100. Contractual services – Companies.** Output 2.1.1. Training needs assessment and 5-year capacity development program: Yunnan demonstration area (USD 10,000). Output 2.1.1. Training needs assessment and 5-year capacity development program: Giant Panda NP demonstration area (USD 10,000). Output 2.1.1. Deliver capacity development trainings: Yunnan demonstration area (USD 75,000). Output 2.1.1. Deliver capacity development trainings: Giant Panda NP demonstration area (USD 150,000). Output 2.1.1. Develop performance based technical guideline for community ranger professional development (USD 10,000). Output 2.2.1. Participatory ecological corridor feasibility and rural assessment, Yunnan demonstration area (USD 15,000). Output 2.2.2. Participatory ecological corridor feasibility and rural assessments, Giant Panda NP demonstration area (USD 30,000). Outputs 2.2.1. Develop *Ecological Corridor Strategies and Action Plan* for the Yunnan demonstration area (USD 10,000). Outputs 2.2.2. Develop *Ecological Corridor Strategies and Action Plans* for the Sichuan demonstration area (USD 15,000). Output 2.2.1. Initiate implementation of the ecological corridor strategy and action plan (Yunnan demonstration area) through technical and investment assistance for operationalizing conservation measures (USD 100,000). Output 2.2.2. Initiate implementation of the ecological corridor strategies and action plans (Giant Panda NP demonstration area) through technical and investment assistance for operationalizing conservation measures (USD 250,000). Output 2.2.1. Participatory biodiversity monitoring within the ecological corridor, Yunnan demonstration area (USD 40,000). Output 2.2.2. Participatory biodiversity monitoring within the ecological corridors, Giant Panda NP demonstration area (USD 75,000). Output 2.2.1. Develop and disseminate technical guidelines based on lessons and best practices of the conservation measures implemented as part of the ecological corridor, Yunnan demonstration area (USD 5,000). Output 2.2.2. Develop and disseminate technical guidelines based on lessons and best practices of the conservation measures implemented as part of the ecological corridors, Giant Panda NP demonstration area (USD 15,000). Outputs 2.3.1. Conduct habitat surveys and develop *Degraded Habitat Restoration Plans* for the project intervention sites in Yunnan (USD 15,000). Outputs 2.3.2. Conduct habitat surveys and develop *Degraded Habitat Restoration Plans* for the project intervention sites in Sichuan (USD 60,000). Output 2.3.1. Initiate implementation of restoration plan through site level capacity building for PA management entities, contracted partners, local communities, Yunnan demonstration area (USD 75,000). Output 2.3.2. Initiate implementation of restoration plans through site level capacity building for PA management entities, contracted partners, local communities, Giant Panda NP demonstration area (USD 160,000). Output 2.3.1. Support biodiversity monitoring of areas undergoing restoration, Yunnan demonstration area (USD 40,000). Output 2.3.2. Support biodiversity monitoring of areas undergoing restoration, Giant Panda NP demonstration area (USD 75,000). Output 2.3.1. Develop and disseminate technical guidance document on best practices for primate habitat restoration, Yunnan demonstration area (USD 10,000). Output 2.3.2. Develop and disseminate technical guidance documents on best practices for giant panda habitat restoration, Giant Panda NP demonstration area (USD 20,000). Output 2.2.1. Develop Business Plans for Nature-Based Livelihood Development, Yunnan Demonstration Area (USD 20,000). Output 2.2.2. Develop Business Plans for Nature-Based Livelihood Development, Sichuan Demonstration (USD 3,000). Output 2.4.1. Market analyses potentially viable livelihood options, Yunnan demonstration area (USD 5,000). Output 2.4.1. Market analyses potentially viable livelihood options, Giant Panda NP demonstration area (USD 10,000). Output 2.4.1. Deliver capacity building on alternative livelihoods to local beneficiaries, Yunnan demonstration area (USD 25,000). Output 2.4.1. Deliver capacity building on alternative livelihoods to local beneficiaries, Giant Panda NP demonstration area (USD 30,000). Output 2.4.1. Deliver technical and investment assistance to local communities, including but not limited to: (a) improving nature-based tourism services, (b) harvesting non-timber forest products, (c) improving agroecological practices, (d) community nursery development, etc., Yunnan demonstration area (USD 75,000). Output 2.4.1. Deliver technical and investment assistance to local communities, including but not limited to: (a) improving nature-based tourism services, (b) harvesting non-timber forest products, (c) improving agroecological practices, (d) community nursery development, etc., Giant Panda NP demonstration area (USD 150,000). Output 2.4.2. Deliver training to local social associations (e.g., cooperatives, women's groups, etc.) on financial management and administration, and assisting in the process of formal registration of the associations, fostering partnerships with private sector, Yunnan demonstration area (USD 10,000).

Budget Note No.	Project output (Description)
	Output 2.4.2. Deliver training to local social associations (e.g., cooperatives, women's groups, etc.) on financial management and administration, and assisting in the process of formal registration of the associations, fostering partnerships with private sector, Giant Panda NP demonstration area (USD 20,000). Output 2.4.2. Deliver targeted trainings to women's groups, organized in collaboration with existing programmes, e.g., implemented by the All-China Women's Federation, Yunnan demonstration area (USD 5,000). Output 2.4.2. Deliver targeted trainings to women's groups, organized in collaboration with existing programmes, e.g., implemented by the All-China Women's Federation, Giant Panda NP demonstration area (USD 10,000). Output 2.4.2. Technical and investment assistance to local associations, including but not limited to: (a) developing improved nature-based tourism experiences, (b) improving quality of products and services, (c) obtaining ecolabeling of products or services, (c) insertion into green value chains, etc., Yunnan demonstration area (USD 75,000). Output 2.4.2. Technical and investment assistance to local associations, including but not limited to: (a) developing improved nature-based tourism experiences, (b) improving quality of products and services, (c) obtaining ecolabeling of products or services, (c) insertion into green value chains, etc., Giant Panda NP demonstration area (USD 150,000). **Total: USD 1,880,000**
12	**74200. Audio visual & print production costs**. Output 2.1.1. Audiovisual and print production costs associated with capacity development activities delivered to PA managers and staff. **Total: USD 5,000**
13	**75700. Training, Workshop, Conference.** Output 2.1.1. Capacity building: Yunnan demonstration area (USD 3,000); capacity building: Giant Panda NP demonstration area (USD 3,000); Cross-province learning exchanges (USD 3,000). Outputs 2.2.1. Community consultations for socializing the ecological corridor in Yunnan (USD 2,000). Output 2.2.2. Community consultations for socializing the ecological corridors in the Giant Panda NP (USD 2,000). Outputs 2.2.1 and 2.2.2. Training workshops on UNDP Social and Environmental Standards (USD 10,000). Output 2.3.1. Trainings on habitat restoration in Yunnan (USD 2,000). Output 2.3.2. Trainings on habitat restoration in the Giant Panda NP (USD 3,000). Output 2.4.1. Trainings on UNDP SES and participatory rural assessment approaches for PA management entities, local government officials, and other project partners (USD 10,000). Output 2.4.1. Capacity building workshops associated with strengthening livelihoods of local communities (USD 5,000). Output 2.4.2. Capacity building workshops delivered to local social associations (USD 2,000). Output 2.4.2. Cross-province learning exchanges (USD 6,000). **Total: USD 51,000**
Component 3:	
14	**71300. Local consultants.** **Chief Technical Advisor**, for 18 weeks at USD 2,000 per week (USD 36,000), providing technical and strategic guidance towards the development and deployment of frontier technologies (Outputs 3.1.1, 3.1.2, and 3.1.3) and for knowledge management, awareness-raising, and the student innovation competition (Outputs 3.2.1 and 3.2.2). **Interpreter/Translator**, for 9 weeks at USD 1,500 per week (13,500), supporting participation in regional and global workshops, seminars and other events (Output 3.2.1). **Total: USD 49,500**
15	**71600. Travel.** Output 3.1.1. Travel expenses associated with applying enabling technologies and dynamic real-time wildlife monitoring (USD 10,000). Output 3.1.2. Travel expenses associated with platform design and implementation, and for the workshop on training stakeholders on use of the platform (USD 5,000). Output 3.1.3. Travel expenses associated with applying and delivering training on eDNA technologies at one or more project intervention sites (USD 4,000). Output 3.2.1. Travel expenses associated with implementation of the project knowledge management plan, including organizing awareness and advocacy campaigns, participating in national, regional, and international conferences, workshops, seminars and other events (USD 60,000). Output 3.2.2. Travel expenses associated with delivering and advocating for the university student innovation competition (USD 5,000). **Total: USD 84,000**
16	**71800. Contractual Services – Implementing Partner.**

Budget Note No.	Project output (Description)
	National Project Coordinator, for 9 months out a total of 72 months at a gross salary of USD 4,000 per month, with a 5% cost of living adjustment starting from year 2 and extending through year 6 (sub-total: USD 40,455), supporting the activities on developing and deploying frontier technologies (Outputs 3.1.1, 3.1.2, 3.1.3), and overseeing knowledge management and student innovation competition activities (Outputs 3.2.1 and 3.2.2). **Safeguards-M&E-KM Officer**, for 23 months out a total of 72 months at a gross salary of USD 2,900 per month, with a 5% cost of living adjustment starting from year 2 and extending through year 6 (sub-total: USD 75,440), facilitation of increased citizen science participation in the communities where the project intervention sites are located and supporting generation and dissemination of knowledge from development and deployment of frontier technologies (Outputs 3.1.1, 3.1.2, 3.1.3), baseline and end-of-project KAP surveys, awareness raising events and nature education outreach and directing and guiding the knowledge management activities on the project (Output 3.2.1), and supporting the innovation competition (Output 3.2.2). **Project Management Associate,** for 5 months out of 72 months total at a gross salary of USD 2,800 per month, with a 5% cost of living adjustment starting from year 2 and extending through year 6 (sub-total: USD 15,800), providing support for execution of Component 3 activities. **Demonstration Area Coordinators (2)** for 24 months out a total of 144 months at a gross salary of USD 2,000 per month, with a 5% cost of living adjustment starting from year 2 and extending through year 6 (sub-total: USD 54,120), coordinating the deployment of frontier technologies at the local level in the two demonstration areas (Outputs 3.1.1, 3.1.2, 3.1.3), supporting knowledge management activities at the local levels (Output 3.2.1), and participating in the process of designing and implementing the student innovation competitions (Output 3.2.2) **Total: USD 185,815**
17	**72100. Contractual services – Companies.** Output 3.1.1. Updated technology needs assessment (USD 10,000). Output 3.1.1. Apply data management applets for recording monitoring data in the two demonstration areas (USD 100,000). Output 3.1.1. Deliver capacity building to NR staff and other conservation practitioners on utilizing the wildlife data for making management decisions (e.g., 3D visualization decision-support GIS platform), ensuring an equitable percentage of women are included in the trainings in the two demonstration areas (USD 100,000). Output 3.1.1. Develop and/or adapt an application of applet for local villagers (citizen science) that is easily accessible in WeChat, with an emphasis on inclusion of women, ethnic minorities, and other vulnerable groups in the two demonstration areas (USD 80,000). Output 3.1.1. Deliver training of use of the citizen science applet, e.g., local schools, women's groups, ethnic minorities in the two demonstration areas (USD 20,000). Output 3.1.2. Conduct an updated needs assessment on the data management platform, liaise with key stakeholders, and prepare a joint Terms of Reference on the roles and responsibilities for development and management of the platform (USD 10,000). Output 3.1.2. Support the design of the architecture of management platform which allows local implementation, and demonstrate integration of AI-based techniques for decision support with data analysis and visualization (for one of the key species at one of the project intervention sites) (USD 60,000). Output 3.1.2. Design of a blockchain-technology-based data management system (USD 30,000). Output 3.1.3. In collaboration with key stakeholders, prepare a guidance document for eDNA data analysis enabling data comparison and exchange (USD 10,000). Output 3.1.3. Develop a joint genetic diversity panda database for Giant National Park (USD 40,000). Output 3.1.3. Deliver training on the use of the genetic diversity panda database (USD 20,000). Output 3.2.1. Design, administer and interpret baseline and end-of-project knowledge, attitudes and practices (KAP) surveys, assessing knowledge, attitudes regarding wildlife conservation (USD 10,000). Output 3.2.1. Based on the results of the baseline KAP survey of this project, develop and oversee the implementation of a knowledge management strategy and action plan (USD 5,000). Output 3.2.1. Establish and maintain information and knowledge sharing systems on the project, including internet platforms, social media, etc. (USD 20,000). Output 3.2.1. Organize awareness and advocacy campaigns, focused on specific themes and aimed at defined target groups, e.g., women's groups, ethnic minorities, through methods identified in the knowledge management action plan, e.g., social media, print media, radio, local and provincial television, etc., and supported by advocacy materials, such as short videos, factsheets, guide books, photo exhibits, etc. (USD 80,000). Output 3.2.1. Collaborate with protected area management agencies, academic institutions, and civil society in delivering nature education on wildlife conservation (USD 50,000). Output 3.2.2. In collaboration with key universities specialized in wildlife conservation, develop a terms of reference for a student innovation competition (USD 5,000). Output 3.2.2. Organize two student innovation competitions, based on the details outlined in the terms of reference (USD 60,000). **Total: USD 710,000**
18	**72400. Communication and Audio Visual Equipment**. Output 3.2.1. Connectivity charges, and other communication and audio visual equipment related costs for delivering the project's knowledge management plan (USD 15,000). **Total: USD 15,000**

Budget Note No.	Project output (Description)
19	**72800. Information technology equipment**. Output 3.1.1. Provide hardware for demonstration of innovative frontier technologies at selected PA's in the two demonstration areas (USD 100,000). Output 3.1.1. In coordination with village government and community-based organizations (total of 12 villages at $10,000 per village), support provision of citizen science related equipment, such as cameras, tablet computers, etc. (USD 120,000). Output 3.1.2. Updated platform architecture for demonstration of AI-based technologies (USD 60,000). Output 3.1.3. Procure eDNA field equipment for demonstrating application in the project sites (USD 40,000). **Total: USD 320,000**
20	**74200. Audio visual & print production costs**. Output 3.2.1. Audiovisual and print production costs associated with implementation of the project's knowledge management plan. **Total: USD 148,202**
21	**75700. Training, Workshop, Conference.** Output 3.1.1. Capacity building trainings and workshops associated with development and deployment of frontier technologies (USD 8,000). Output 3.1.3. Training expenses associated with the application of eDNA technologies and approaches (USD 5,000). Output 3.2.1. Training, workshop, and conference related costs associated with advocating the global environmental benefits generated through the project by participating in national, regional and international conferences, workshops, seminars and other events (USD 50,000). Output 3.2.2. Training and workshop expenses associated with designing and delivering the student innovation competitions (USD 5,000). Output 3.2.2. Workshop expenses associated with the stakeholder workshop on showcasing the results of the innovation competitions (USD 3,000). **Total: USD 71,000**
Component 4	
22	**71200. International consultants.** Output 4.1.1. International Safeguards Consultant, providing quality assurance and technical guidance on project safeguards management, for 10 weeks at USD 3,000 per week (USD 30,000). Output 4.1.2. International Midterm Review Lead Consultant, for 7 weeks at USD 3,000 per week (USD 21,000). Output 4.1.2. International Terminal Evaluation Consultant, for 7 weeks at USD 3,000 per week (USD 21,000). **Total: USD 72,000**
23	**71300. Local consultants.** **Chief Technical Advisor**, for 24 weeks at USD 2,000 per week (USD 48,000), supporting the Project Board meetings, stakeholder workshops and progress reviews, annual work plans, project sustainability plan (Output 4.1.1.), supporting the project inception workshop and report, monitoring and evaluation, and preparation of PIR and other progress reports (Output 4.1.2). **National Midterm Review Consultant**, for 4 weeks at USD 1,500 per week (USD 6,000), supporting the midterm review. **National Terminal Evaluation Consultant**, for 4 weeks at USD 1,500 per week (USD 6,000), supporting the terminal evaluation. **Local Safeguards-M&E Consultants (Yunnan and Sichuan),** for 36 weeks at USD 1,500 per week (sub-total: USD 54,000), assisting with community consultations, FPIC consultations, development and reviews of ESMP and other safeguards frameworks and plans, delivering trainings (Output 4.1.1), and assisting with monitoring and evaluation of project activities and implementation of safeguards management frameworks and plans (Output 4.1.2). **Total: USD 114,000**
24	**71600. Travel.** Output 4.1.1. Travel expenses associated with developing ESMP, Project Board meetings (USD 12,000). Output 4.1.2. Travel expenses associated with the inception workshop (USD 3,000), M&E missions (USD 9,000), supervision missions (USD 2,000), midterm review (USD 5,000), terminal evaluation (USD 5,000). **Total: USD 36,000**
25	**71800. Contractual Services – Implementing Partner.** **National Project Coordinator**, for 8 months out a total of 72 months at a gross salary of USD 4,000 per month, with a 5% cost of living adjustment starting from year 2 and extending through year 6 (sub-total: USD 35,944), supporting the Project Board meetings, stakeholder engagement, annual work plans, and sustainability plan (Output 4.1.1); supporting the project inception workshop and report, preparation of PIR and other progress reports, monitoring & evaluation of results (Output 4.1.2).

Budget Note No.	Project output (Description)
	Safeguards-M&E-KM Officer, for 22 months out a total of 72 months at a gross salary of USD 2,900 per month, with a 5% cost of living adjustment starting from year 2 and extending through year 6 (sub-total: USD 72,770), providing technical assistance and guidance for activities under Component 4, including development of the project ESMP and other safeguards management plans identified in the ESMP, regular reviews and updates of the SESP, Stakeholder Engagement Plan, Gender Action Plan, ESMP, Business Plans for Nature-Based Livelihood Development, IPP, ESIA, and other safeguards frameworks and management plans, and supporting the Project Board meetings, stakeholder engagement, and sustainability plan (Output 4.1.1.); monitoring and evaluation of the ESMP, Stakeholder Engagement Plan, Gender Action Plan, Business Plans for Nature-Based Livelihood Development, IPP, and other safeguards frameworks and management plans, and overseeing project monitoring and evaluation activities, supporting the project inception workshop and report (Output 4.1.2). **Project Management Associate,** for 4 months out of 72 months total at a gross salary of USD 2,800 per month, with a 5% cost of living adjustment starting from year 2 and extending through year 6 (sub-total: USD 12,670), providing support for execution of Component 3 activities. **Demonstration Area Coordinators (2)**, for 10 months out a total of 144 months at a gross salary of USD 2,000 per month, with a 5% cost of living adjustment starting from year 2 and extending through year 6 (sub-total: USD 22,670), coordinating stakeholder engagement and annual performance reviews, implementation of the project sustainability plan (Output 4.1.1); coordinating inputs to the project monitoring and evaluation activities in the two demonstration areas (Output 4.1.2). **Total: USD 144,054**
26	**72100. Contractual services – Companies.** Output 4.1.1. Develop the project Environmental and Social Management Plan (USD 10,000). **Total: USD 10,000**
27	**75700. Training, Workshop, Conference.** Output 4.1.1. Stakeholder review workshops, including annual environmental, social and climate change performance workshops (USD 5,000). Output 4.1.1. Community workshops for socializing (outreach) of safeguards management plans (USD 10,000). Output 4.1.2. Inception workshop, training venues (USD 2,500). **Total: USD 17,500**
Project Management:	
28	**71600. Travel** Local travel expenses associated with the operations of the Project Management Unit during the 6-year implementation timeframe. **Total: USD 6,000**
29	**71800. Contractual services – Implementing Partner.** **National Project Coordinator,** for 12 months out of 72 months total at a gross salary of USD 4,000 per month, with a 5% cost of living adjustment starting from year 2 and extending through year 6 (sub-total: USD 53,800). **Project Management Associate,** for 48 months out of 72 months total at a gross salary of USD 2,800 per month, with a 5% cost of living adjustment starting from year 2 and extending through year 6 (sub-total: USD 151,200). **Total: USD 205,000**
30	**72500. Supplies**. Costs of office supplies for the Project Management Unit during the 6-year implementation timeframe. **Total: USD 6,000**
31	**72400. Communication and Audio Visual Equipment**. Communication and audio visual equipment expenses associated with the operation of the Project Management Unit, including mobile telephone charges, email subscriptions, connectivity charges, courier charges, etc., during the 6-year implementation timeframe. **Total: USD 6,000**
32	**72800. Information technology equipment**. Information technology equipment (e.g., laptops, printers, scanner, projector, etc.) for the Project Management Unit. **Total: USD 7,527**
33	**74100. Professional services**. Financial audits and spot-checks during the 6-year project implementation timeframe, at USD 6,000 per year.

Budget Note No.	Project output (Description)
	Total: USD 36,000
34	**75700. Training, Workshop, Conference** Workshop related expenses. **Total: USD 9,000**

X. LEGAL CONTEXT

237. This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of China and UNDP, signed on 29 June 1979. All references in the SBAA to "Executing Agency" shall be deemed to refer to "Implementing Partner."

238. This project will be implemented by the **Foreign Environmental Cooperation Center of the Ministry of Ecology and Environment** ("Implementing Partner") in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

239. The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations or UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

XI. RISK MANAGEMENT

1. Consistent with the Article III of the SBAA , the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP's property in the Implementing Partner's custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:
   a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried out.
   b) assume all risks and liabilities related to the Implementing Partner's security, and the full implementation of the security plan.

2. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner's obligations under this Project Document.

3. The Implementing Partner agrees to undertake all reasonable efforts to ensure that no UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml .

4. The Implementing Partner acknowledges and agrees that UNDP will not tolerate sexual harassment and sexual exploitation and abuse of anyone by the Implementing Partner, and each of its responsible parties, their respective sub-recipients and other entities involved in Project implementation, either as contractors or subcontractors and their personnel, and any individuals performing services for them under the Project Document.
   a. In the implementation of the activities under this Project Document, the Implementing Partner, and each of its sub-parties referred to above, shall comply with the standards of conduct set forth in the Secretary General's Bulletin ST/SGB/2003/13 of 9 October 2003, concerning "Special measures for protection from sexual exploitation and sexual abuse" ("SEA").

   b. Moreover, and without limitation to the application of other regulations, rules, policies and procedures bearing upon the performance of the activities under this Project Document, in the implementation of activities, the Implementing Partner, and each of its sub-parties referred to above, shall not engage in any form of sexual harassment ("SH"). SH is defined as any unwelcome conduct of a sexual nature that might reasonably be expected or be perceived to cause offense or humiliation,

when such conduct interferes with work, is made a condition of employment or creates an intimidating, hostile or offensive work environment.

5. a) In the performance of the activities under this Project Document, the Implementing Partner shall (with respect to its own activities), and shall require from its sub-parties referred to in paragraph 4 (with respect to their activities) that they, have minimum standards and procedures in place, or a plan to develop and/or improve such standards and procedures in order to be able to take effective preventive and investigative action. These should include: policies on sexual harassment and sexual exploitation and abuse; policies on whistleblowing/protection against retaliation; and complaints, disciplinary and investigative mechanisms. In line with this, the Implementing Partner will and will require that such sub-parties will take all appropriate measures to:

i. Prevent its employees, agents or any other persons engaged to perform any services under this Project Document, from engaging in SH or SEA;

ii. Offer employees and associated personnel training on prevention and response to SH and SEA, where the Implementing Partner and its sub-parties referred to in paragraph 4 have not put in place its own training regarding the prevention of SH and SEA, the Implementing Partner and its sub-parties may use the training material available at UNDP;

iii. Report and monitor allegations of SH and SEA of which the Implementing Partner and its sub-parties referred to in paragraph 4 have been informed or have otherwise become aware, and status thereof;

iv. Refer victims/survivors of SH and SEA to safe and confidential victim assistance; and

v. Promptly and confidentially record and investigate any allegations credible enough to warrant an investigation of SH or SEA. The Implementing Partner shall advise UNDP of any such allegations received and investigations being conducted by itself or any of its sub-parties referred to in paragraph 4 with respect to their activities under the Project Document, and shall keep UNDP informed during the investigation by it or any of such sub-parties, to the extent that such notification (i) does not jeopardize the conduct of the investigation, including but not limited to the safety or security of persons, and/or (ii) is not in contravention of any laws applicable to it. Following the investigation, the Implementing Partner shall advise UNDP of any actions taken by it or any of the other entities further to the investigation.

b) The Implementing Partner shall establish that it has complied with the foregoing, to the satisfaction of UNDP, when requested by UNDP or any party acting on its behalf to provide such confirmation. Failure of the Implementing Partner, and each of its sub-parties referred to in paragraph 4, to comply of the foregoing, as determined by UNDP, shall be considered grounds for suspension or termination of the Project.

6. Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (http://www.undp.org/ses) and related Accountability Mechanism (http://www.undp.org/secu-srm).

7. The Implementing Partner shall: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.

8. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.

9. The Implementing Partner will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, responsible parties, subcontractors and sub-recipients in implementing the project or using UNDP funds. The Implementing Partner will ensure that its financial management, anti-corruption and anti-fraud policies are in place and enforced for all funding received from or through UNDP.

10. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to the Implementing Partner: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and Investigations Investigation Guidelines. The Implementing Partner agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.

11. In the event that an investigation is required, UNDP has the obligation to conduct investigations relating to any aspect of UNDP projects and programmes in accordance with UNDP's regulations, rules, policies and procedures. The Implementing Partner shall provide its full cooperation, including making available personnel, relevant documentation, and granting access to the Implementing Partner's (and its consultants', responsible parties', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with the Implementing Partner to find a solution.

12. The signatories to this Project Document will promptly inform one another in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.

13. Where the Implementing Partner becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, the Implementing Partner will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). The Implementing Partner shall provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

14. UNDP shall be entitled to a refund from the Implementing Partner of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the Implementing Partner under this or any other agreement. Recovery of such amount by UNDP shall not diminish or curtail the Implementing Partner's obligations under this Project Document.

15. Where such funds have not been refunded to UNDP, the Implementing Partner agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to the Implementing Partner for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

Note: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

16. Each contract issued by the Implementing Partner in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from the Implementing Partner shall cooperate with any and all investigations and post-payment audits.

17. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.

18. The Implementing Partner shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to each responsible party, subcontractor and sub-recipient and that all the clauses under this section entitled "Risk Management Standard Clauses" are included, *mutatis mutandis*, in all sub-contracts or sub-agreements entered into further to this Project Document.

XII. MANDATORY ANNEXES

Annex 1: GEF Budget template

Annex 2: Project maps and geospatial coordinates of the project demonstration areas

Annex 3: Multiyear Workplan

Annex 4: UNDP Social and Environmental Screening Procedure (SESP)

Annex 5: UNDP Risk Register

Annex 6: Overview of Project Staff and Technical Consultancies

Annex 7: Stakeholder Engagement Plan

Annex 8: Stakeholder consultations during project preparation phase

Annex 9: Environmental and Social Management Framework (ESMF)

Annex 10: Gender analysis and gender action plan

Annex 11: Indigenous Peoples Planning Framework (IPPF) (under development)

Annex 12: Procurement plan

Annex 13: Climate and disaster screening report

Annex 14: COVID-19 analysis and action framework

Annex 15: Profiles of demonstration areas

Annex 16: METT baseline assessments

Annex 17: Information sheets and maps of project intervention sites

Annex 18: Technology needs assessment

Annex 19: Knowledge, Attitudes and Practices (KAP) Survey Framework

Annex 20: Estimation of greenhouse gas emissions mitigated

Annex 21: GEF 7 Core Indicator Worksheet

Annex 22: GEF 7 taxonomy

Annex 23: Additional agreements (cofinancing letters)

Annex 24: Partner capacity assessment tool and HACT assessment

Annex 25: UNDP project quality assurance report

Annex 26: UNDP checklist for all projects pending GEF approval