

PROJECT IDENTIFICATION FORM (PIF) PROJECT TYPE: Full-sized Project TYPE OF TRUST FUND:GEF Trust Fund

PART I: PROJECT IDENTIFICATION

| Project Title: | CBPF-MSL: Strengthening the management effectiveness of the protected area network in the Daxing'anling Landscape | | | |
|--------------------------------|---|--|---------------------------------|--|
| Country(ies): | People's Republic of China | GEF Project ID: | <mark>4868</mark> | |
| GEF Agency(ies): | UNDP | GEF Agency Project ID: | 4824 | |
| Other Executing Partner(s): | State Forestry Administration of China (SFA) | Submission Date: <mark>Re-submission Date:</mark> | March 14, 2012 April 2, 2012 | |
| GEF Focal Area (s): | Biodiversity | Project Duration (months): | 60 | |
| Name of parent program: | China Biodiversity Partnership Framework and | Agency Fee (\$): | 319,021 | |
| For SFM/REDD+ N/A | Action Plan (CBPF) and Main Streams of Life - Wetland PA System Strengthening Programme | | | |

A. FOCAL AREA STRATEGY FRAMEWORK:

| Focal Area Objectives | Expected FA Outcomes | Expected FA Outputs | Trust Fund | Indicative grant amount | Indicative co- financing (\$) |
|--------------------------|---|---|------------|----------------------------|----------------------------------|
| Objectives | | | | (\$) | Thuncing (\$) |
| BD-1 | Outcome 1.1: Improved management effectiveness of existing and new | Output 1.1. New protected areas (8) and coverage (1,210,000 hectares) of unprotected ecosystems. | GEFTF | 1,356,300 | 11,000,000 |
| | protected areas. | Output 1.2. New protected areas (8) and coverage (1,210,000 hectares) of unprotected threatened species (10). | | 1,191,900 | 10,400,000 |
| | Outcome 1.2: Increased revenue for protected area systems to meet total expenditures required for management. | Output 1.3. Sustainable financing plans (1). | GEFTF | 819,479 | 1,884,661 |
| Sub-total | | | 3,367,679 | 23,284,661 | |
| Project mana | agement cost | GEFTF | 177,000 | 1,215,339 | |
| Total projec | et cost | | | 3,544,679 | 24,500,000 |

B. PROJECT FRAMEWORK:

Project Objective: To strengthen the management effectiveness of protected areas to respond to threats to the globally significant biodiversity in the Daxing'anling Landscape in Heilongjiang Province and Inner Mongolia Autonomous Region

| Project Component | Grant type | Expected Outcomes | | Trust Fund | Indicative Grant Amount (\$) | Indicative co-financing (\$) |
|---|---------------|--|--|---------------|---------------------------------------|------------------------------------|
| 1. Expansion of forest and wetland PAs and mainstreaming in the development planning framework in Daxing'anling Landscape | ΤΑ | Strengthened regional development and sector planning framework provides safeguards from economic sector practices in and near wetland PAs in the long term reducing pressures on biodiversity from forestry, agricultural, industrial and mining-related encroachment | PA objectives and its management in Daxing'anling Landscape <u>mainstreamed</u> within the regional development planning framework: through (i) establishment and institutionalisation of the inter-sectoral coordination mechanisms at the landscape level among different stakeholders including SFA, two Daxing'anling Forestry Management Authorities¹, and provincial forestry and sectoral agencies | GEF TF | 700,000 | 9,584,661 |

¹ Daxing'anling landscape straddles two administrative units; namely Heilongjiang Province and Inner Mongolia Autonomous Region. Nature reserves and forest resources are managed by the Heilongjiang Daxing'anlingForestry Management Authority and Inner Mongolia Daxing'anling Forestry Management Authority, which report to the State Forestry Administration.

| | | and habitat degradation. | in Heilongjiang and Inner Mongolia; and | | | [] |
|--------------------------------------|------------|---|---|-----|----------------------|-----------|
| | | PA coverage in the | (ii) development and operationalisation of | | | |
| | | Daxing'anling landscape | an action plan for the Daxing'anling PA | | | |
| | | expanded from the baseline | network and biodiversity conservation | | | |
| | | of 2.99 million ha to 4.20 | including the climate change adaptation | | | |
| | | million ha, with an increase | measures, under the Master Plan of | | | |
| | | of natural wetland (including | Ecological Conservation and Economic | | | |
| | | NRs and wetland parks) | Transition in Daxing'anling and | | | |
| | | from the baseline of 1.35 | Xiaoxing'anling Forested Region;. | | | |
| | | million ha to 2.12 million ha | • <u>Tools and safeguards</u> developed to | | | |
| | | by EoP. | control the sector expansion (forestry, | | | |
| | | | agriculture, tourism and/or mining) to ensure that these sectors do not grow at | | | |
| | | PA PA area | the expense of biodiversity and ecological | | | |
| | | Types (mil. ha) | health. | | | |
| | | Baseline Target | Wetland and forest PA network in | | | |
| | | Forest 1.67 2.08 | Daxing'anling Landscape <u>expanded</u> based | | | |
| | | NRs 1 1 1 1 1 1 75 | on a systematic review of PA coverage | | | |
| | | Wetland 1.19 1.75 | viz biodiversity conservation needs and | | | |
| | | NRs Wetland 0.13 0.37 | climate change threats and adaptation | | | |
| | | Wetland 0.13 0.37 Parks | needs; new PAs gazetted and | | | |
| | | Total 2.99 4.20 | operationalized with staff, budget and | | | |
| | | 10001 2.77 4.20 | management infrastructure in critical | | | |
| 2 Stree ettering of | T A | | areas. | GEF | 700.000 | 7,800,000 |
| 2.Strengthening of the PA network | TA | Strengthened capacity of Devine capacity | <u>Special regional PA management</u> regulations and policies in Daxing'anling | TF | <mark>700,000</mark> | 7,800,000 |
| management in | | Daxing'anling Forestry Management Authorities to | <u>Landscape</u> developed by SFA providing, | 11 | | |
| Daxing'anling | | effectively manage the PA | for, <i>inter alia</i> : different categories of PAs, | | | |
| Landscape | | network with wetland PA in | each with clear criteria for establishment, | | | |
| 1 | | particular, indicated by | management objectives and standards for | | | |
| | | improved capacity | the Forestry Management Authorities, and | | | |
| | | assessment scorecard scores | an effective monitoring and reporting | | | |
| | | over baseline (to be | regime for PAs. | | | |
| | | determined during PPG). | Institutional strengthening: Supervisory | | | |
| | | Strengthened management | capacity of the two Daxing'anling | | | |
| | | of Daxing'anling wetland | Forestry Management Authorities for | | | |
| | | PA Complex provides | planning and monitoring wetlands and | | | |
| | | effective landscape level | PAs and enforcement and compliance monitoring of new sector standards. This | | | |
| | | biodiversity conservation indicated by: (i) | includes (i) establishment of the training | | | |
| | | improvement in the average | system; (ii) revision of the staff structure; | | | |
| | | METT scores of the PAs; | (iii) application of the professional | | | |
| | | (ii) improvement in the | competency standards for wetland PA | | | |
| | | biodiversity health index ² | management staff (to be developed at | | | |
| | | especially designed for the | the national level), as a basis for enhanced | | | |
| | | PAs in the landscape. | performance; (iv) specific wetland | | | |
| | | PAs in the Daxing'anling | regulations for Daxing'anling Landscape | | | |
| | | landscape upgraded for | developed by referring to the provincial wetland conservation regulations in | | | |
| | | enhanced protection by EoP. | Heilongjiang and Inner Mongolia. | | | |
| | | PA Levels PA area (mil. ha) | PA and biodiversity information | | | |
| | | Baseline Target | <u>management</u> system established in | | | |
| | | National 0.73 1.08 | support of wetland PA system in | | | |
| | | level | Daxing'anling Landscape covering 2.99 | | | |
| | | Provincial 1.86 2.42 | million ha for biodiversity and ecosystem | | | |
| | | level 2.50 2.50 | health monitoring, with data sharing and | | | |
| | | Total 2.59 3.50 | joint monitoring activities. | | | |
| | | | • Financing for the PAs increased through: | | | |

² Biodiversity health is reflected in the ability of a site to maintain its biodiversity values. Many wetland sites are very dynamic and it is important to measure this ability as this will become increasingly important as climate and water flow patterns change. The project will set up a biodiversity index linked to habitat suitability in each site for important biodiversity and its status, to measure biodiversity health and potential to adapt to climate induced change.

C. INDICATIVE <u>CO-FINANCING</u> FOR THE PROJECT BY SOURCE and BY NAME if available (\$)

| Sources of Co-financing for baseline project | Name of Co-financier | Type of Co- financing | Amount (\$) |
|---|--|--------------------------|-------------|
| Central Government | State Forestry Administration | Grant | 7,500,000 |
| Local Government | Heilongjiang Daxing'anling Forestry Management Authority | Grant | 8,000,000 |
| Local Government | Inner Mongolia Daxing'anling Forestry Management Authority | Grant | 8,000,000 |
| GEF Agency | UNDP | Grant | 1,000,000 |
| Total Co-financing | | | 24,500,000 |

D. GEF RESOURCES REQUESTED BY FOCAL AREA(S), AGENCY (IES) SHARE AND COUNTRY(IES):

| GEF Agency | Type of Trust Fund | Focal Area | Country Name | Project Preparation | Grant Amount | Agency Fee | Total |
|--------------------|-----------------------|--------------|-----------------|------------------------|-----------------|---------------|-----------|
| UNDP | GEF TF | Biodiversity | China | 125,046 | 3,544,679 | 330,275 | 4,000,000 |
| Total Grant | Resources | | | 125,046 | 3,544,679 | 330,275 | 4,000,000 |

PART II: PROJECT JUSTIFICATION

1. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

A.1. THE GEF FOCAL AREA STRATEGIES:

The project is aligned with the GEF BD-1 objective: Improve Sustainability of Protected Area (PA) Systems. More specifically, the project contributes to Outcome 1.1: Improved management effectiveness of existing and new Pas, and Outcome 1.2: Increased revenue for PA systems to meet total expenditures required for management. The project will contribute to the afore-mentioned objective and outcomes by strengthening the capacities of the authorities in Daxing'anling Landscape to manage the PA system, in particular the sub-system of wetland PAs, and improving the spatial design of the wetland PA system. The project will bring an additional 400,000 ha of threatened wetlands under protection in the Daxing'anling Mountains and Wetland Landscape (Daxing'anling Landscape). This will increase the resilience of the sub-system in the face of a fast changing climate by maintaining connectivity between core areas and allowing the gradual redistribution of component species of different wetland ecosystems and ensuring adequate protection of upstream non-wetland habitats such as forests and grasslands that serve as vital catchments for the wetlands themselves. The project will consolidate and strengthen the enabling legal, planning and institutional framework governing the management of PAs in Heilongjiang and Inner Mongolia; and implement measures to enhance the financial sustainability of the PA network. The Project directly contributes to the goals of the Programme of Work on Protected Areas (PoWPA) in particular: Goal 1.2: To integrate PAs into broader land and seascapes and sectors so as to maintain ecological structure and function; Goal 2.1: To promote equity and benefit sharing; Goal 2.2: To enhance and secure involvement of indigenous and local communities and relevant stakeholders; 3.1: To provide an enabling policy, institutional and socio-economic environment for PAs; Goal 3.2: To build capacity for the planning, establishment and management of PAs; Goal 3.4: To ensure financial sustainability of PAs and national and regional systems of PAs; Goal 4.1: To develop and adopt minimum standards and best practices for national and regional PA systems; and Goal 4.2: To improve the effectiveness of PA management. The Project, furthermore, directly contribute to achievement of the Aichi Targets, in particular under the strategic goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity. It contributes to Target 11 through increasing significantly the coverage and connectivity of the PA system in regions with high biodiversity importance and significant ecosystem services, and increasing management effectiveness of the PA network, integrated into the wider landscapes.

A.2. NATIONAL STRATEGIES AND PLANS OR REPORTS AND ASSESSMENTS UNDER RELEVANT CONVENTIONS:

The Daxing'anling Region was listed in the 27 forest areas of international importance in China's National Biodiversity Strategy and Action Plan (NBSAP) which was approved in May 1994 and updated in 2010. One wetland site in Daxing'anling was designated among the 173 Wetlands of National Importance in the China National Wetlands Conservation Action Plan issued in 2000. Daxing'anling has been a priority area under the China Natural Forest Protection Programme launched in 1998. The Forestry Department has developed and is implementing a comprehensive Master Plan for Wildlife Conservation and Nature Reserve Development in Daxing'anling for the period 2006-2030 in Heilongjiang Province and for the period 2004-2030 in Inner Mongolia Antonymous Region. This plan includes both forest and wetland components. This project will provide specific guidance for many of the implementation steps of the Master Plan that are now stated only in general terms and for which capacity development is required. At the national level, the project is fully consistent with the China National Wetland Conservation Programme that covers the period 2002-2030 and is adopted by SFA and nine other national ministries/agencies, and the China National Wildlife Conservation and Nature Reserve Development Programme (2000-2050). The project is also directly supportive of the national wetlands strategy that was proclaimed by the State Council (Council Circular 50) in 2004 in which mainstreaming is of major national concern, and in which the State Forestry Administration and provincial forestry departments are given the overall mandate to coordinate sector involvement in wetlands planning and management. The project is part of the GEF/UNDP Programme Main Streams of Life - Wetland PA System Strengthening for Biodiversity Conservation. which is a sub-programme of the CBPF. The project is one of the six provincial level initiatives planned under the umbrella framework programme, and will contribute to the national level programme outcomes under all three programmatic components.

B. PROJECT OVERVIEW:

B.1. Describe the baseline project and the problem that it seeks to address:

The Daxing'anling Region is located in the most northern part of China and straddles the northwest of Heilongjiang Province and the northeast of Inner Mongolia Autonomous Region (latitude between $47^{\circ}03' 40$ " and $53^{\circ}33' 25''$ N and longitude 119°36′20″and 127°01′17″E), adjacent to Russia. This region comprises a vast mountainous wilderness area of 189,775 km² (106,275 km² in Inner Mongolia and 83,500 km² in Heilongjiang) of cold temperate forest, wilderness rivers and extensive marshes, peatlands and bogs. It is underlain by discontinuous permafrost at 0.8 – 1.5 m. Annual rainfall is approximately 400-500mm with temperatures ranging from 35° C to –50 ° C. Drainage is to the Heilongjiang (Amur) directly or via the Songhua River and represents the principal source of water for the rest of Heilongjiang Province and of water to other wetlands further downstream. Wetlands comprise 21,842 km² (11.51%) of the total area of Daxing'anling and the rest is mixed deciduous and coniferous forest with a small amount of agriculture. The arboreal, shrub, carex meadow and peat bog wetland ecosystems are important due to their geographic location, climatic condition and frozen sub-soils with extensive but largely un-quantified amounts of peat and organic-rich soils. The annual carbon sequestration is likely to be very substantial due both to the annual

primary (forest) productivity of 25.2 million m³ and to the large proportion of larch and deciduous species that shed needles/leaves in winter which accumulate in the forest and wetlands soils and bogs and are converted to organic carbon.

Daxing'anling represents a unique forest and wetland wilderness habitat and is home to cold temperate and polar species that are found nowhere else in China. It is one of the 35 priority areas identified in the NBSAP for biodiversity conservation, and supports 11 Important Bird Areas (IBAs). It is also one of the 50 National Ecological Function Zones (3) identified for targeted conservation and protection. It is a transition area from cold temperate to warm temperate forest conditions. Wild animals include arctic and northern species such as moose, woodland caribou, brown bear, black bear, fox, mink, arctic hare and deer, however these have low populations due to past hunting (now illegal), current poaching and destruction of habitat. There are 55 species of animals listed under national key protection (first and second classes). Contiguity with Russia & Mongolia and its wilderness nature makes it an important route for migrating forest animal species between Siberia and north China and its wetlands serve as an important staging and breeding area for a large number of migrating water birds such as red-crowned crane, Siberian crane, black stork, white stork, whooper swan, Mandarin duck, as well as various other species of geese and ducks. Rare and globally endangered species include 39 bird species and 12 mammals listed in the IUCN Red Book. Rivers provide spawning habitat for migrating fish species in the Amur River basin such as the endangered Amur sturgeon and Siberian huso sturgeon.

Daxing'anling is an area of low population - around 1.5 million people in the 33 counties (including, cities, leagues and municipalities). The majority of the population depends on timber production and related products such as mushrooms, wild vegetables and wild berries, animal fur, and traditional medicine products. Other minor economic activities include mining, animal husbandry and farming. The area's economy is still very dependent on forestry, with timber production accounting for 60% of the region's income. Poverty is a serious issue in the region and the income of forestry workers is low (50% of the provincial average). Governance in Daxing'anling is unique insofar as it is co-managed by the State Forestry Administration (SFA) and the Governments of Heilongjiang Province and Inner Mongolia Autonomous Region. Until now, even civic and social functions including education and public health care were under the Heilongjiang and Inner Mongolia Forestry Management Authorities (FMAs) under the SFA. However, part of these functions is being transferred to the Heilongjiang and Inner Mongolia Provincial Governments. The FMAs with 123,515 full-time employees in total wear two hats: a group of subsidiary institutions responsible for forest protection, including establishment and management of the nature reserves; and a group of subsidiary enterprises responsible for utilisation of forest resources including commercial forestry operations. SFA, as the national competent authority in charge of forestry in China, is responsible for managing the forest and woodland resources of the commercial arm of the FMAs, assigning the annual forest management, production and aforestation plans and land use quotas, giving instructions to the FMAs in terms of forest management, and assigning the forestry development projects such as natural forest conservation programme. The government is currently in the process of fully separating the forest protection and commercial forestry functions of the FMAs. The commercial arm of the FMAs will be turned into an independent state owned enterprise, leaving the nature reserve planning and management functions to the FMAs.

Threats: The globally significant biodiversity of Daxing'anling is under threat. Compared to the pre-exploitation baselines, the southern forest edge of Daxing'anling has retreated by more than 100 km northward, and permafrost has been degraded and is shrinking. Soil erosion and desertification have also become a serious issue in the region. Ecosystem functions and services have also been degraded, resulting in the increased frequency of natural disasters such as floods, droughts, forest fires and pests and disease occurrence. Main threats to biodiversity and ecosystem functions are:

Loss/degradation of habitat: As much as a half the wetland area in Daxing'anling region has been lost in recent decades, mainly for agricultural development. Agricultural encroachment on wetlands is prominent especially in the southern areas of Daxing'anling. This presents not only a threat to wetlands habitat and loss of surface water retention and regulation, but also it causes the permafrost to melt which increases the probability of anaerobic release of methane gas. Irrational forestry practice to sustain local livelihoods is another culprit for habitat loss and degradation. As the local economy is heavily dependent on forestry, the Forestry Management Authorities operate all the logging activities as a means of providing local livelihoods and as revenue for the prefecture. This has resulted in the shrinkage of nature reserves from 15 to 13% in the past to maintain the forestry industry. Irrational forestry also has resulted in fragmentation of habitat, and loss of biological corridors for migrating animal species.

<u>Overexploitation of natural resources</u>: Forestry practice in the region has been carried out in an unsustainable fashion, resulting in severe land degradation described above and overexploitation of timber resources. In the Heilongjiang portion of the Daxing'anling region, the harvestable stock of mature forests has dropped from 460 million m³ in pre- exploitation times to 21 million m³ in 2008. The forest age structures are seriously unbalanced. Of the state owned forest in Heilongjiang Province, the young-and middle-aged forests account for 85%, resulting in a 50% decrease in average forest stock volume. Yet to meet the needs of both local governments and livelihoods of foresters, even some of the fast growing middle-aged forests are being

³ In 2008, the 50 National Ecological Function Zones was jointly issued by the Ministry of Environment Protection and the Chinese Academy of Sciences, identifying the most important zones for ecological function of biodiversity conservation and water retention in China.

harvested. In addition, illegal trapping of animals such as deer is a significant contributor to the low animal populations. This is exacerbated by meagre incomes of forest workers who supplement their incomes by poaching activities.

<u>Chaotic development</u>: Daxing'anling is on the cusp of significant economic development with potential in mining; expansion of wood processing industries; collection and marketing of forest products (mushrooms, berries, etc.) that is expanding but is causing social conflict and loss of biodiversity; ecotourism that is widely seen as a major future development however the sensitivity of this area is such that mass tourism will cause significant damage to biodiversity; and infrastructure development (future oil pipeline from Russia, road bridge to Russia, railways, etc.).

<u>Forest fire</u>: Forest fire is a constant threat with occasional large scale fires such as the one in 1987. It is mainly caused by natural events (lightening strikes). Fire does not only burn forests, but also results in more immature forests than mature forests. Forest in this cold environment requires over 100 years to mature for harvest, however significant areas are now only less than 20 years old partially due to fire.

<u>Climate change:</u> There have been increased incidents of forest diseases due to the increased temperature in this region. Climate changes will cause redistribution of major ecological zones across the face of China requiring adjustments in species distributions, migration patterns and phenology. Climate changes dramatically impact wetlands by affecting seasonality of water flow, water temperature, pH and oxygen content. It will cause thawing of the Daxing'anling's extensive permafrost, resulting in increased GHG emissions. These in turn impact the biota including suitability of sites for migrating species.

The Government conservation efforts to date: The SFA has taken concrete steps to address these threats in order to safeguard Daxing'anling's globally significant biodiversity and wetland and water resources. As the cornerstone of its biodiversity conservation efforts, the SFA has established an extensive network of PAs. There are currently 29 nature reserves (5 national, 11 provincial, 13 local) designated under the Regulations on Nature Reserves. In addition there are 7 wetland parks (6 national, 1 local) covering 2.99 million ha, which are designated under the National Wetland Park Management Regulations.⁴ Although there is no difference in the management objectives of national and provincial NRs, national NRs generally receive much higher government investment and are therefore taken more seriously. National NRs can access national funding for: improvement of basic capacity and facilities for NR management –i.e. personnel cost and construction of buildings and roads within PAs, however, it does not usually cover training, monitoring and law enforcement.

| PA types and | Heilongjiang Daxing'anling Forestry Management Authority | | | Inner Mongolia Daxing'anling Forestry Management Authority | | | Total | | |
|-------------------|---|----------------|----------------------------------|---|----------------|---------------------------------|--------|----------------|---------------------------------|
| levels | Number | PA area(ha) | in which wetland area (ha) | Number | PA area(ha) | in which wetland area(ha) | Number | PA area(ha) | in which wetland area(ha) |
| Wetland | | | | | | · · · · | | | |
| National NR | 1 | 229,523 | 78,416 | 0 | 0 | 0 | 1 | 229,523 | 78,416 |
| Provincial NR | 2 | 234,539 | 43,712 | 3 | 182,620 | 48,234 | 5 | 417,159 | 91,946 |
| League NR | 6 | 331104 | 112,267 | 2 | 109,242 | 8,275 | 8 | 440,346 | 120,542 |
| Wetland Park | 5 | 66,273 | 30,415 | 2 | 64,473 | 21,480 | 7 | 130,746 | 51,895 |
| Sub-total | 14 | 861439 | 264,810 | 7 | 356,335 | 77,989 | 21 | 1,217,774 | 342,799 |
| Forest and others | | | | | | | | | |
| National NR | 2 | 256,062 | 42,523 | 2 | 221,875 | 23,960 | 4 | 477,937 | 66,483 |
| Provincial NR | 3 | 261,000 | 37,093 | 3 | 805,720 | 57,250 | 6 | 1,066,720 | 94,343 |
| League NR | 5 | 225063 | 43,610 | 0 | 0 | 0 | 5 | 225,063 | 43,610 |
| Sub-total | 10 | 742125 | 123,226 | 5 | 1,027,595 | 81,210 | 15 | 1,769,720 | 204,436 |
| Total | 24 | 1,603,564 | 388,036 | 12 | 1,383,930 | 159,199 | 36 | 2,987,494 | 547,235 |

| Table 1: | Overview | of PAs in | Daxing'anling | Landscape |
|----------|----------|-----------|---------------|-----------|
|----------|----------|-----------|---------------|-----------|

These PAs are managed by the Heilongjiang and Inner Mongolia Daxing'anling FMAs which directly report to the SFA. The Government invest US\$ 6.26 million per year for operational management of the PA cluster in Daxing'anling region with a total of 1,134 staff in the PAs. After the personnel cost is deducted, actual available budget for PA management operation is around US\$ 480,000 per PA. Despite these efforts, biodiversity is still being lost both within PAs and in critical conservation areas outside the current PA cluster. There is an urgent need to strengthen the management effectiveness of the Daxing'anling region,

⁴ A wetland park is defined in the Government Regulation as "Specific areas aiming to protect wetland ecosystems and wisely use wetland resources, which can be used for conserving and restoring wetlands, promoting public awareness, knowledge and understanding of wetlands, conducting wetland monitoring and scientific research, and providing ecotourism facilities." The functions of wetland parks are similar to NRs, but are usually located near urban areas, where people can easily visit. In addition, one of the important functions of wetland parks is the provision of an entertainment area for the general public.

expand the PA cluster to incorporate unprotected high biodiversity areas into it, and integrate PAs into the development framework.

Baseline: In 2010, the State Council issued the "Master Plan of Ecological Conservation and Economic Transition in Daxing'anling and Xiaoxing'anling Forested Regions (2010-2020)" as a key policy document with the objectives of increasing ecosystem functions and developing an "ecosystem-centred" regional economy for local development. The government is expected to spend over US\$ 900 million for implementation of this plan. There are four main pillars for the implementation strategy; 1) strengthening ecological protection by establishing a sustainable forest management system reducing the timber harvest, forest rehabilitation and aforestation, and strengthening the nature reserves for wetland and forest conservation; 2) optimizing the spatial distribution of different land uses including forest farms, nature reserves, industrial areas and settlements etc.; 3) diversifying economy through actively developing new nature based industries such as tourism and NTFP industries including mushroom, vegetables and Chinese medicines, while better controlling mining development; and 4) promoting the social development in the forest areas with improved infrastructure for increasing social welfare. The main targets of the master plan include: (i) increase in forest areas by 1.7 million ha, with an increase in timber volume by 400 million m³, which is 30% of the increased volume of the country; (ii) expansion of nature reserves to account for 18% of the Daxing'anling region; (iii) increased value of non-timber production accounting for 80% of regional increased GDP; (iv) increase in the GDP per capita to 30,000 RMB and rural per capita net income to be 10,000 RMB or more; (v) unemployment rate is decreased to less than 4%; (iv) 100% drinking water supply. In addition, the Central and local governments are investing approximately US\$ 4.25 million between 2011 and 2015 to build infrastructure and facilities for selected nature reserves. Furthermore, the government is injecting over US\$ 5 million special project funding between 2011 and 2015 for wetland and forest rehabilitation, strengthening law enforcement and promotion of ecotourism within selected nature reserves. Although the government investment in the nature reserves in the Master Plan implementation is considerable, there has been no attempt to improve the PA network in the Daxing'anling landscape as a whole by targeting barriers at different levels of PA administration – at SFA, province, local governments and site levels.

Long-term vision and barriers to achieving it: The long-term solution this project proposes to safeguard wetland biodiversity and essential ecosystems is to strengthen the PA network in the Daxing'anling landscape, through redesigning and expanding the network, strengthening its management and through better mainstreaming the PA network in the regional development plans to reduce threats. Such a PA network will have a robust biodiversity and ecological health monitoring system to inform its management. It will be managed by knowledgeable and skilled staff following the PA management plan fulfilling its expected conservation functions in conformity with clear national standards. The PA network will have strong government financial backing for actual habitat management activities, protecting biodiversity and providing essential ecosystem services contributing to people's welfare and the regional economy. However, a number of barriers exist which prevent the government from achieving the vision on its own. The project addresses these barriers to the effective management of the Daxing'anling protected area network.

Barrier 1: Disconnect between PA planning and management and regional development and sectoral planning with insufficient coverage of PAs

Uncoordinated development represents a major future threat to sustainable forest management and to biodiversity conservation. There are increasing clashes amongst these sectors in their pursuit of sector objectives under relevant sector laws and regulations at provincial and national levels. Despite the planned implementation of the Master Plan of Ecological Conservation and Economic Transition, development and fiscal planning framework remains sector oriented in the traditional manner. With the separation for the forestry function as well as social service provision function from the FMAs, as well as the increased jurisdiction of provincial and local governments over the Daxing'anling landscape, there is a growing need for establishing a mechanism for joint planning and close inter-sectoral coordination in order to realise the green economy envisioned in the master plan. Currently there is no tool nor mechanism to safeguard the integrity of PAs from the planned rapid expansion of various nonforestry sectors to diversify the local economy, such as agriculture, tourism and mining, as well as planned large scale energy and infrastructure development including water resource development schemes. Similarly, without mainstreaming of the PA cluster in the Master Plan, it is likely that there will be increasing conflict between sector objectives and PA objectives, increasing pressure on the PAs and the biodiversity and natural resources they harbour. Furthermore, the ambitious PA expansion plan, without proper mainstreaming in development planning process, may only cause friction and undermine the integrity of the expanded PA network. In addition, currently the expansion of the PA network is mainly driven by the need to protect forests from irrational and unsustainable timber cutting practices. The expansion needs to be aimed to conserve representative natural forests and their habitat, to enhance ecosystem resilience and connectivity between PAs as well as to enhance catchment wide ecosystem health, rather than simply nurturing timber stock for future exploitation.

Barrier 2: Weak systemic and institutional capacity for PA network management

Effective PA management in Daxing'anling remains hindered by a weak national legal basis for PA establishment and management. The Nature Reserve Regulations (1994) that allow for the establishment of NRs is outdated and does not provide much flexibility in terms of zoning and management options. The result is that most PAs are managed in ways that are contradictory to both the word and spirit of those regulations. Daxing'anling as a special administrative region has an opportunity

to develop region-specific regulations and policies for PA management that for local circumstances and is conducive for PA management in the boreal forests and unique transitional zones. Management standards and guidelines for each type of PAs would also be needed. The institutional capacity for the two FMAs for PA management needs improving. Although there are over 1,100 staff and a US\$ 6.26 million budget working for PA management in two FMAs, staff tend to be trained mainly as foresters and forestry workers rather than as PA managers and conservation officers. The staffing structure and competency standards are largely inadequate to support an effective PA cluster and the remuneration level of the PA staff is extremely low with an average of US\$ 130-160 per month paid to field staff. Information and tools for biodiversity monitoring and management are also limited. There is no information management system or systematic monitoring protocol for biodiversity and ecosystem functions in Daxing'anling. There is a notable deficiency of ecological information and data base on which the PAs could be managed in an adaptive manner. Subsequently, the government budget for actual operation of the PA cluster is very small (estimated US\$ 480,000 per year). An underlying issue behind this is that there is no real understanding of the value of wetland biodiversity and ecosystem services and how the loss of these will economically affect various industries and peoples' livelihoods. At the same time, there is no real basis to determine how much the effective PA network management would cost and what needs to be done to safeguard the natural capital of the region.

Barrier 3: Weak site level management

Currently the PAs in Daxing'anling are characterised by weak management. Despite a large number of personnel for the nature reserve section of the FMAs, many of them are under-skilled and poorly trained for managing biodiversity and its threats. As a result, agricultural encroachment, illegal mining and overharvesting continue. Similarly, despite the seemingly large investment of the government in the nature reserve cluster as described earlier, it is mainly for sustaining the large number of government employees, with only a very small budget devoted to actual management actions. There is no management plan for most of the PAs in the region, and there is no framework for biodiversity and ecological health monitoring system. Although tourism is viewed as one of the most promising industries for regional development, there is no successful high value / low impact model for PA tourism development/operation and tourism development activities within the nature reserve remain ad-hoc. With the anticipated accelerated economic development and the reduction of influence of the forest management sector over governance decisions in the regions, it is paramount that individual PAs are strengthened to fulfil their functions for biodiversity conservation and to be able to meaningfully partake in the development discussions and actions in the region.

B.2. <u>Incremental/Additional cost reasoning</u>: DESCRIBE THE INCREMENTAL (GEF TRUST FUND) AND THE ASSOCIATED <u>Global environmental benefits</u> TO BE DELIVERED BY THE PROJECT:

The project seeks to move PA management effectiveness from the low end towards the effectively managed end of the spectrum in order to effectively address threats to biodiversity. **The incremental approach of the proposed project is summarised as follows:** The Government of China has clearly identified ecosystem service protection and enhancement as a priority and is making significant investments and efforts for ecological conservation, under the Master Plan for Ecological Protection and Economic Transformation of the Daxing'anling and Xiaoxing'anling Regions. However, the focus of investments tends to be on timber stock enhancement and forest protection through aforestation for ecosystem services enhancement, with very little attention to forest and wetland biodiversity conservation and species and habitat management. In parallel, the governments invest in a number of new industries in order to realise a shift from the forestry dependent economy and to alleviate poverty, but without due consideration for biodiversity conservation. GEF funding provides the catalyst for sectoral integration, rational and comprehensive planning, and a holistic approach to forest and wetland landscape management that generates global environmental benefits. Furthermore, there has been no systematic effort to remove the existing barriers to a sustainable and effective PA network to ensure at a minimum forest and wetland biodiversity within PAs can be safeguarded. Daxing'anling is on the cusp of major development. Many existing PAs are and will be under serious pressure for land and water resources. This requires urgent action in order to prevent further degradation of critical wetland ecosystems and loss of endangered species.

Without the GEF investment in the proposed project, there will be no regional framework and tools for systematic management of the PA network in the Daxing'anling landscape. Although the Master Plan calls for expansion of the PA network, the sectoral approach to resources and economic management will continue. Master Plan implementation will be mainly done based on the forest stock parameter rather than biodiversity conservation. The PAs will continue to be under pressure from the agriculture, forestry, tourism and industrial development which the two regions will be pursuing towards improving the economic situation of the rural population. The two FMAs will have limited capacity for effective PA management and have neither tools nor capacities for mitigating threats coming from outside the PAs. The government investment in PA management will remain disproportionally small compared with other "ecological restoration activities" such as afforestation. Hence the management effectiveness of wetland PAs will remain weak and highly vulnerable to encroachment, illegal harvesting and external influences such as inappropriate development and economic activities within the PAs and in the watershed beyond PA and provincial borders that directly affect the wetlands within the Daxing'anling landscape. As such, the Daxing'anling PA network will remain unable to fulfil its role in safeguarding globally significant biodiversity. Insufficient technical and functional capacity of the regional FMAs and lack of robust system for biodiversity monitoring and management and weak law enforcement capacity will remain a serious bottleneck.

Alternative scenario enabled by the GEF: The project complements aforementioned baseline projects, by addressing biodiversity conservation through strengthening the PA network at the landscape level, rather than just focusing on PA sites. Enabling legal and regulatory frameworks for PA management at the Daxing'anling landscape level will be established. A strengthened PA management framework in Daxing'anling will improve conservation security of the biodiversity rich region securing immediate global environmental benefits by doing so. Furthermore, the project will ensure mainstreaming of the PA cluster in the provincial development and sectoral planning and operational system and put in place safeguard standards and measures to ensure that land uses in and outside PAs particularly in areas directly affecting the integrity of wetland biodiversity within the PAs and their broader landscape are regulated. While strengthening the ability of PA authorities to manage threats in the PA cluster itself, the project will also increase financing available for PA and biodiversity management activities on the ground. The project will directly capitalise on government commitments for green development in Daxing'anling, and ensure that the substantial investment in the regional development will enhance biodiversity in the region instead of diminishing the essential natural capital for sustainable regional development.

Global benefits: The GEF funding will secure critically important biodiversity in the Daxing'anling Landscape, maintaining 189,775 km² of the cold temperature and boreal forest and wetland habitats including coniferous and broadleaf forests, shrub, grassland, rivers and meadow, marsh, grass pond formed by volcano remains. These ecosystems provide important habitats for many fauna and flora, including rare and globally endangered 39 bird and 12 mammal species listed in the IUCN Red Book. By doing this, it will deliver global benefits including the strengthening of the PA cluster and enhanced conservation and management of the habitats of endangered species including moose, woodland caribou, brown bear, black bear and arctic hare and deer. The project will also enhance management of IBAs, providing important staging and breeding areas for a large number of migrating water birds such as red-crowned crane, Siberian crane, black stork, white stork, whooper swan, Mandarin duck, as well as various other species of geese and ducks.

Although many of the threats addressed by this project operate across the landscape as a whole, both within PAs and the contiguous ecosystems outside the PAs, the project has been divided into three components under the objective of: *Strengthening the management effectiveness of protected areas to respond to threats to the globally significant biodiversity in the Daxing'anling Landscape in Heilongjiang Province and Inner Mongolia Autonomous Region*. This will enable the project to provide the coordinated responses to these threats can be led from mainstreaming the different tiers of PA management.

Component 1: Expansion of the forest and wetland PA network and mainstreaming in the development planning framework in Daxing'anling Landscape

By removing barrier 1, the project will mainstream the PA network and its management in Daxing'anling Landscape within the regional development planning framework. The project will do this through the establishment and institutionalisation of the intersectoral coordination mechanisms at the landscape level among different stakeholders including SFA, the two Daxing'anling FMAs and their subsidiary enterprises and institutions, and provincial sectoral agencies in Heilongjiang and Inner Mongolia. Using the inter-sectoral forum, an action plan of PA network and biodiversity conservation in Daxing'anling Landscape will be developed and operationalised which will directly fall under the Master Plan of Ecological Conservation and Economic Transition in Daxing'anling and Xiaoxing'anling Forested Region. The plan will include climate change adaptation measures based on the existing assessments of future scenarios and impact on biodiversity and ecosystem services. The Plan will also be supplemented by a review of spatial arrangements of the PA network, taking into account biodiversity conservation needs and wetland integrity at the landscape level as well as climate change threats and adaptation needs. Based on the review, the wetland and forest PA network in Daxing'anling Landscape will be expanded, by at least 1,010,000 ha, with increased coverage of wetland PAs by 680,000 ha. New PAs (or additional areas adjacent to the existing PAs) will be officially gazetted and operationalised with adequate staff, operational budget and management infrastructure. Furthermore, tools and safeguards will be developed to control the sector expansion to ensure that these sectors do not grow at the expense of biodiversity and ecological health. Possible target sectors are forestry, agriculture, tourism and/or mining. A landscape level land use plan will be developed with biodiversity concerns integrated, to determine the most effective and sustainable land use patterns within the landscape. Tools will include a timber quota decision making system that integrates biodiversity and ecosystem health concerns, and integrated soil erosion monitoring and management system in river basins and catchments. This will include placement of a stricter control on exploration and mining operations that impact on the integrity of wetlands and PAs. System for controlling exploration and mining operations will be emplaced, such as a tighter inspection of mining sites with higher technology and environmental standards to prevent pollution and other adverse impacts on ecosystems, in order to reduce impact on the integrity of wetlands and PAs. Rehabilitation of mining sites will be made obligatory at the expense of the companies. Necessary safeguards will be put in place for development of new sectors such as nature tourism, and natural food and medicine industry development.

Component 2: Strengthening of the PA network management in Daxing'anling Landscape

This component focuses on strengthening of capacity of the two Daxing'anling FMAs to effectively manage the PA network to safeguard wetland and forest ecosystems and biodiversity. Special regional PA management regulations and policies in Daxing'anling Landscape developed by SFA providing for, inter alia: different categories of PAs, each with clear criteria for establishment, management objectives and standards for the FMAs, and an effective monitoring and reporting regime for PAs.

The supervisory capacity of the two Daxing'anling FMAs will be strengthened for planning and monitoring wetlands and PAs and enforcement and compliance monitoring of new sector standards. This includes: (i) establishment of a training system to ensure sustainable and appropriate human resource development geared towards effective PA management; (ii) revision of the staff structure for adequate and skilled staffing particularly in light of the envisaged structural reform of the FMAs; (iii) application of the professional competency standards for wetland PA management staff (which will be developed by the national level project under the MSL Programme), as a basis for enhanced performance; (iv) development of specific wetland regulations for Daxing'anling Landscape in line with the provincial wetland conservation regulations in Heilongjiang and Inner Mongolia. A PA and biodiversity information management system will be established in support of the wetland PA network in Daxing'anling Landscape, covering 3,192,139 ha, for biodiversity and ecosystem health monitoring, with data sharing and joint monitoring activities. The project will further support increased operational budget allocation for PA network management. For this, a total economic valuation of the Daxing'anling PA cluster (market and non-market values) will be conducted including the roles wetlands will play in water storage and flood regulation under conditions of climate change and the cost of inaction for sector development. Simultaneously, a financing plan for the Daxing'anling PA network will be developed, using the economic valuation results to make the case for increased investment in, and costing of, the PA network management activities needed to manage threats to biodiversity, including development of a mechanism for incorporating new funding sources from ecocompensation initiatives in support of PA management. Critical existing PAs will be status upgraded to provincial and national level nature reserves to ensure a higher level of protection and investment.

Component 3: Effective management at the site level

Component 3 will provisionally target 2 provincial nature reserves and 2 wetland parks, covering a total of 253,996 ha, to demonstrate effective management and the reduction of local threats to biodiversity. This component will apply mainstreaming work of component 1 and strengthened wetland PA system management under component 2 at the PA site level, and establish model PAs with robust management with effective operational system for biodiversity management and for reduction of local threats. This will be achieved through: (i) establishment of biodiversity and ecological health monitoring and wetland use management systems; (ii) establishment of visitor management system and infrastructure in the PAs; (iii) enforcement strengthening (surveillance, interception of malfeasance and prosecution) including provision of field equipment; (iv) reduction of biodiversity pressure (agricultural encroachment, illegal mining, uncontrolled mass tourism and fire); (v) establishment of comanagement system for reducing NTFP overharvesting and hunting pressure; (vi) staff training tailored to improve management of individual PAs. Table 2 below provides basic information for the four provisional target PAs and specific threat removal actions. The information and selection will be confirmed during the PPG phase.

| | Turget I tu | | eserves and wedand Parks | | | | |
|--------------------------------------|--|---------|---|---|--|--|--------------|
| Area Size Wetland Area (ha) | Coordi- nates | Year | Biodiversity | Local Threats to Biodiversity | Threat Reduction Actions | Annual Budget (US\$) | Staff No. |
| | ongolia Bila | River P | rovincial Nature Reserve - Inner Mongo | olia FMA (Bila River Forestry I | Bureau) | | |
| 62,852 | E123°01'1"- 123°19'10 , N49°23'54″ 49°26'53″ | 2004 | Six vegetation types (forest, shrub, grassland, meadow, marsh and grass pond formed by volcano remains); 15 sub-types, 703 species of higher plants, 415 species of lower plans, 322 species of vertebrates and 369 species of invertebrate. Habitat for specially protected endangered and vulnerable species including, Swan Goose (<i>Anser</i> <i>cygnoides</i>), Baikal Teal (<i>Anas</i> <i>Formosa</i>), Hooded Crane (<i>Grus</i> <i>monacha</i>) and Lesser White-fronted Goose (<i>Anser erythropus</i>), red- crowned crane (<i>Grus japonensis</i>), black strork (<i>Ciconia nigra</i>), black- billed capercaillie tetrao (<i>Tetorao</i> <i>parvirostnis</i>), golden eagle (<i>Aquila</i> <i>Chrysaetos</i>), Eurasian Otter (<i>Lutra</i> <i>lutra</i>), Siberian Musk Deer (<i>Moschus</i> <i>moschiferus</i>), Brown Bear (<i>Ursus</i> <i>arctos</i>), Red Deer (<i>Cervus elaphus</i>) and sable (<i>Martes zibellina</i>). Important water source area. | Forest fire; mainly caused by thunder and lightning but sometimes man-made fire such as smoking and camping. The 1987 man- made catastrophic fire in the nearby country lasted for 28 days killing 211 people and affecting 1.01 million ha of forest. Overharvesting of NTFP e.g. mushroom, herbal medicine, and flowers, by local people living in the surrounding area of NR. Illegal hunting of snow hare, boar, Siberian roe deer and pheasants by local residents, with hunting traditions. Forest disease and melting and recession of permafrost. | Establishment of integrated fire management system. Strengthening law enforcement to prevent man-made fire and illegal harvesting Demonstrate reduction of the threats through community co- management and sustainable livelihood, and raised management capacity (patrolling, biodiversity monitoring, public education and community-co- management skills). | Staff salary and operation costs paid by Bila River Forestry 276,000; 60,500 NFPP | 28 |

Table 2: Target Nature Reserves and Wetland Parks

| Heilongjiang Duobukur River Provincial Nature Reserve – Heilongjiang FMA (Jiagedaqi Forestry Bureau) | | | | | | | |
|--|---|---------|---|--|--|--|----|
| 128,959 93,455 | N50°19' ~50°43' E 124°18' ~125°04' | 2002 | Five vegetation types (forest, shrub, meadow, marsh and grass pond). 416 species of higher plants, 326 species of vertebrate accounting for 57% of all the vertebrate in the Heilongjiang province. 53 species of mammals, 232 species of birds, 6 species of reptiles, 6 species of amphibians, and 30 species of important breeding site for the migratory water birds such as Siberian Crane, Baer's Pochard and Swan Goose. Habitat for specially protected, Baikal Teal, Hooded, Lesser White-fronted Goose, Demoiselle Crane (<i>Grus virg</i>) <i>o</i> ; Osprey (<i>Pandion haliaetus</i>), Black Stork (<i>Ciconia nigra</i>); Horned Grebe (<i>Podiceps auritus</i>), and Eurasian Otter, Siberian Musk Deer, Brown Bear and Red Deer. Important water source areas. | Agriculture development (wheat, corn and soybean) has converted 10,280 ha of wetlands and grasslands into farmland in the adjacent area of the NR. This has caused fragmentation of habitats in the area. In addition, the farmland is encroaching on the NR in the marginal parts of the NR. Gold mining in the river channels before the establishment of the NR destroyed 2,590 ha wetlands inside the NR. Currently gold mining activities have been stopped, but the restoration of the destroyed wetland and habitats are urgently needed. Forest disease and melting and recession of permafrost. | Strengthen law enforcement under the Heilongjiang Wetland Conservation Regulation and Environmental Protection Law to reduce the external threats from economic sectors. Strict application of the sector specific standards and safeguards. Public education to raise awareness of local people on wetland conservation. | Staff salary and operation cost from the National Natural Forest Protec- tion Program- me: 560,000 207,100 NFPP | 28 |
| Genheyu | an National | Wetlan | d Park – Inner Mongolia FMA (Genh | | - | | |
| 59,060 20,291 | 121°34'E 122°41'E 50°48'N - 51°13'N | 2011 | Three vegetation types (forest, shrub, and meadow). 553 species of higher plants, 117 species of vertebrate , including 5 species of mammals, 74 species of birds, 2 species of reptiles, 6 species of amphibians, and 20 fish species. Important summer feeding and breeding ground for many migratory birds including endangered: Little Curlew (<i>Numenius minutes</i>) CR, Siberian Crane , Scaly-sided Merganser (<i>Mergus squamatus</i>), Hooded Crane and White-naped Crane (<i>Grus vipio</i>). Important water source for Heilongjiang. | Non-sustainable tourism, e.g. excessive construction of roads, building and tourism facilities. The main tourism attractions include pristine forest and wetlands, cold weather in the summer and cultural experience of local Ewenki people. In 2011, the total tourist number in Genhe County was 20,000, who came mainly in the summer time due to the cold climate. However, it is estimated the tourist number will exceed 100,000 in coming years, which will cause high human disturbance to local ecosystems. | Establishment of visitor management system and infrastructure, including formulation of a wetland park and tourism management plan, capacity building of the park staff in tourism management and public education for the tourists. | Staff salary and operation costs paid by Genhe Forestry Bureau: 356,000 | 30 |
| Amur Na | ational Wetl | and Par | k – Heilongjiang FMA (Amur Forest | try Bureau) | | <u> </u> | |
| 3,225 2,942 | 122°58'30" E - 123°9'10"E 52°50'2"N - 52°54'14"N. | 2011 | Three vegetation types (forest, shrub, and meadow), 474 species of higher plants, 194 species of vertebrate, including 35 species of mammals, 111 species of birds, 4 species of reptiles, 6 species of amphibians, and 38 fish species. Important summer feeding and breeding ground for many migratory birds including Scaly-sided Merganser, Hooded Crane and White-naped Crane. | Non-sustainable tourism, e.g. excessive construction of roads, building and tourism facilities. The main tourism attractions include pristine forest and wetlands, and water tours on the Emur River. In 2011, the total tourist number was 14,200, who came mainly in the summer time due to the cold climate. However, it is estimated the tourist number will exceed 60,000, by when which will cause high human disturbance to local ecosystems. | Establishment of visitor management system and infrastructure including formulation of a wetland park and tourism management plan, capacity building of the park staff in tourism management and public education for the tourists. | 50,000 | 17 |

B.3. DESCRIBE THE SOCIOECONOMIC BENEFITS TO BE DELIVERED BY THE PROJECT AT THE NATIONAL AND LOCAL LEVELS, INCLUDING CONSIDERATION OF GENDER DIMENSIONS, AND HOW THESE WILL SUPPORT THE ACHIEVEMENT OF GLOBAL ENVIRONMENT BENEFITS. AS A BACKGROUND INFORMATION, READ <u>Mainstreaming Gender at the GEF.</u>:

It has been estimated (CCICED 2004/2010) that these combined services and benefits derived from biodiversity are worth the equivalent of at least 50% of national GDP and that the largest share of this contribution is made by protected areas. Effective

management and good governance of China's wetlands is crucial to the welfare of many millions of people via the invaluable ecosystem services provided, such as water security, silt retention, nutrient recycling, purification, flood control, carbon fixation and preservation of valuable genetic resources. In total these services are worth many billions of \$US per annum and protect the lives and property of hundreds of millions of people.

In the Daxing'anling Landscape, the vast majority of the population is dependent on forest and wetland resources for its livelihood, through employment in timber production and forestry, and through collection and marketing of other renewable resources – medicinal plants, berries and mushrooms, fuel wood etc. Furthermore, forest and wetland NRs offer additional sources of employment as well as opportunities for ecotourism development. Safeguarding of biodiversity, natural resources and ecosystem services is essential for sustainable development in the region.

Unsustainable forestry in the region has resulted in economic hardships for local populations, with net out-migration of young people who cannot find work locally. This is disproportionately high among young females. The project will develop an alternative livelihoods approach that balances biodiversity conservation, sustainable forestry management, and non-timber based economic options and ecotourism opportunities. Given that forestry is the dominant industry that covers virtually all of Daxing'anling, the project will catalyze an orderly transition from business as usual by mainstreaming a new form of ecological governance that better suits the local economy with greater attention given to alternative livelihoods that will bring about the environmental and social benefits that have eluded local authorities

Furthermore, the project will improve the eco-compensation schemes that can be used to reward local units and communities for good stewardship of wetland sites. Efforts will also be made to ensure that gender-specific targets are built into community involvement programmes and activities where applicable. Gender analysis will be conducted to ensure full participation of women in project activities and to ensure that any activities do not adversely affect women or men.

B.4. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS THAT MIGHT PREVENT THE PROJECT OBJECTIVES FROM BEING ACHIEVED, AND IF POSSIBLE, PROPOSE MEASURES THAT ADDRESS THESE RISKS

The following potential risks have been identified. These will be reviewed and updated during the project preparatory phase.

| Risk | Rating | Mitigation Measure |
|---|------------------|--|
| Mainstreaming PA into development and sectoral planning process will be hindered by poor inter-agency coordination, lack of incentives for other sectors and poor enforcement of agreed priorities and plans that may be incompatible with major engineering- oriented development programmes. | Medium | Although this risk is historically very high, given the existence of the Master Plan for Ecological Protection and Economic Transformation Planning of the Daxing'anling and Xiaoxing'anling Regions, which places strong emphasis on ecosystem protection and rehabilitation, there should be sufficient power for the SFA and regional Forest Management Agencies to exert its influence and there should be sufficient incentive for sector agencies for mainstreaming. The project will provide support for establishment and institutionalisation of the inter-sectoral coordination mechanisms at the landscape level. In addition, the project will support development of tools and safeguards specific to forestry, agriculture, tourism and mining sectors in support of mainstreaming. In addition, the full participation of the private sector, local communities, scientists and other members of civil society in the project development and implementation will also be helpful to mitigate this risk. |
| Severity of climate change may undermine conservation efforts promoted by the project through changes in water availability and biodiversity distribution etc. | Medium | Given that climate change impacts are likely to increase over the long term, the project will assess these changes as part of the PA cluster analysis and propose actions and management approaches to increase ecosystem resilience (in part by addressing non climate change related anthropogenic stressors on ecosystems). These will include realignment of wetland PA zones and boundaries and improving functional connectivity. Migration patterns and timings may change, requiring adjustments in the PA design to accommodate migratory species. |
| Coordination of action between SFA and other PA management authorities proves difficult, as a result of institutional rigidities—thus undermining the conservation efforts promoted through the project. | Low to medium | The Government has recognised the need for better coordination, and has specifically requested support to develop the coordination apparatus, as a key measure to improve environmental governance. The project is fully positioned as an integral part of the CBPF, in order to ensure that it contributes directly to overall biodiversity conservation efforts of the country through implementation of the NBSCAP. CBPF and NBSAP implementation fora will be fully utilised in order to ensure that essential coordination between the PA management authorities. During project preparation, initial consultative efforts will lay the basis for the creation of a new, permanent inter-agency coordination and management committee for individual provincial sites, as necessary (component 1). |
| After 2013, China will launch a new round of government institutional reforms to mainstream the people's livelihood-related issues (such as increasing incomes, regional equality, and health) into the agenda of governments. This may reduce the focus on environmental protection (including wetlands), disproportion the national investment and budget on wetland conservation in national | Low to medium | Wetland conservation and people's livelihoods are closely interlinked, in particular in terms of clean and steady water provision, as well as disaster mitigation. The Project will ensure that this inter-linkage will be adequately acknowledged by policy makers at the national and provincial level as well as by the general public. The Project will support necessary strategic studies and production of toolkits and materials to foster better understanding of wetland PAs' contributions to the economy and peoples' welfare and livelihoods. Furthermore, the project will support establishment of eco-compensation mechanisms to provide increased opportunities for the local households, communities and institutions engaged in wetland conservation to directly benefit from |

B.5. Identify key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable:

Key stakeholders and roles and responsibilities in the program

| Stakeholder | Roles and Responsibilities | | | | |
|--|--|--|--|--|--|
| Ministry of Finance | GEF Operational Focal Point (OFP). Coordination and implementation of GEF projects | | | | |
| State Forestry Administration -SFA (including National Wetland Conservation Center) | Key agency for the project implementation as the supervisory organisation for the two co-executing agencies. Responsible for forest lands, most of China's nature reserves, wildlife issues, wildlife trade (CITES), wetlands protection (Ramsar Convention), drafting of departmental level regulations especially wetlands. In Daxing'anling landscape, SFA is responsible for sustainable utilisation of the timber resources and set quota for timber extraction. SFA is also responsible for ensuring effective wetland PA management and provide supervisory and technical support to PA management. Manages the vast majority of NRs (over 80% of the NR areas) and provide financial support for national NRs. | | | | |
| Inner Mongolia Forestry Management Authority (FMA) | The main co-executing agency for the project. Responsible for administration of the Inner Mongolia part of the Daxing'anling Region (106,275 km ²). The administrative arm of the FMA is responsible for providing social services including education and health services as well as for the development and management of nature reserves through its subsidiary institutions. The business arm of the FMA is responsible for commercial forestry operation with 16 forestry companies. FMA employs 60,546 staff and report to the SFA. | | | | |
| Heilongjiang Forestry Management Authority (FMA) | The main co-executing agency for the project. Responsible for administration of the Heilongjiang part of the Daxing'anling Region (83,500 km ²). The administrative arm of the FMA is responsible for providing social services including education and health services as well as for the development and management of nature reserves through its subsidiary institutions. The business arm of the FMA is responsible for commercial forestry operation through 13 subsidiary enterprises. FMA employs 62,969 staff and report to the SFA. | | | | |
| The government of the Inner Mongolia Autonomous Region and Heilongjiang Province | Responsible for administration and development of the province and autonomous region, and therefore key project partners. Each provincial government has its own forestry department that is responsible for forest areas and resources outside the Daxing'anling special region. The provincial government will soon take over the social administrative functions from the FMAs over the Daxing'anling region. They will be a key implementer of the Master Plan for Ecological Protection and Economic Transformation of the Daxing'anling and Xiaoxing'anling, responsible for non-forestry sector development. | | | | |
| Standing Committee of People's Congress of Heilongjiang and Inner Mongolia | Responsible for coordination of legislation and regulation functions under in Heilongjiang and Inner Mongolia, including the provincial regulation of nature reserve management and regulation of wetland conservation. | | | | |
| Local communities (PA neighbours) | Possible beneficiaries and implementing partners for site level activities of the project. Although the region is sparsely populated, neighbouring communities to the PAs (where applicable) will have a major role as hubs for non-timber industry development initiatives that mainly engage local citizens. The Ewenki indigenous community subsist on grazing and hunting near the Geheyuan National Wetland Park with a special traditional hunting permit granted to the people. The project will ensure that the Ewenki community will be consulted during the PPG process in order to ensure that the community will not be adversely affected by project activities, and will be represented in the local consultation forum to be established during the project implementation. | | | | |
| Private sector | Private Sector is a major resource users and have potentially negative impacts on the integrity of biodiversity and PAs. There is also a potential for cauterising their contribution to conservation activities. Active engagement of the existing and emerging private sector companies (tourism, mining, infrastructure etc.) will be sought as appropriate for implementation of the project. | | | | |
| Institutes of forestry survey, planning and design (SFA, SFA Daxing'anling, and Inner Mongolia Daxing'anling). | Responsible for wetland and forest survey, monitoring, and planning, including developing standards, GIS-based database and reporting systems. | | | | |
| Chinese Academy of Sciences, several specialized and regional institutes | Technical expertise available on hydrological, botanical and zoological aspects. | | | | |

B.6. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:

The official investment plan for economic development in Daxing'anling is very substantial, but requires direction on how to balance development spending with the principles of SFM and biodiversity conservation. This project will directly contribute to the implementation of the Master Plan on Ecological Protection and Economic Transformation. Under the CBPF, the Main Streams of Life Programme has been established, comprising this project and six other projects executed by the SFA at the national level and at its provincial bureaus. A programme level steering committee will be established chaired by the SFA, to ensure complementarity, synergetic outcome and lessons and experience sharing. This project also follows on from, and will build on, the experiences and lessons learned by wetland components of previous EU and GEF supported projects and other externally supported wetlands projects. In particular, the project will closely coordinate and build on lessons learned from the GEF/ADB financed Sanjiang Plain Wetlands Protection Project, targeting the eastern part of Heilongjiang. Lessons will be mined during the PPG process. Although the spatially coverage is quite different, UNDP will closely liaise with the World Bank

to ensure coordination between the PPG phase of this project and that of the GEF/World Bank financed "A Landscape Approach to Wildlife Conservation in the Northeastern China" project, in order to ensure synergetic effects.

C. DESCRIBE THE GEF AGENCY'S COMPARATIVE ADVANTAGE TO IMPLEMENT THIS PROJECT: C.1. INDICATE THE CO-FINANCING AMOUNT THE GEF AGENCY IS BRINGING TO THE PROJECT:

UNDP provides a grant of US\$ 1,000,000 to this project.

C.2. HOW DOES THE PROJECT FIT INTO THE GEF AGENCY'S PROGRAM (REFLECTED IN DOCUMENTS SUCH AS UNDAF, CAS, ETC.) AND STAFF CAPACITY IN THE COUNTRY TO FOLLOW UP PROJECT IMPLEMENTATION:

Protected Areas is one of UNDP's signature programmes and the agency has a large portfolio of PA projects globally and across Asia, including China. In particular, UNDP is equipped with a wealth of accumulated knowledge and experience from projects around the world in promoting PA cluster objectives in development and sectoral planning.

UNDP has been supporting natural resource management, biodiversity and ecosystem management in China for over three decades, and has a large biodiversity portfolio in the country. UNDP has implemented and is implementing a number of GEF-supported projects that are complementary to this project, and is also the implementing agency for the EC-funded ECBP programme. In addition, since 2007, UNDP has been the co-executing agency of the GEF-supported CBPF, together with the Ministry of Finance and the Ministry of Environmental Protection.

The United Nations Development Assistance Framework (UNDAF) for 2011 to 2015 provides the framework for the UN-China partnership over the coming five years, coinciding with the period of China's 12th Five Year Plan. One of the three priority areas, or UNDAF Outcomes, is Outcome 1: Government and other stakeholders ensure environmental sustainability, address climate change, and promote a green, low carbon economy. The components of this programme are a strategic way of achieving this outcome, in particular through directly contributing to: Output 1.1. Policies and regulations are strengthened to create a green economy; Output 1.2. Policy and implementation mechanisms to manage natural resources are strengthened, with special attention to poor and vulnerable groups; and Output 1.3. China's vulnerability to climate change is better understood and adaptation responses are integrated into Government policy.

Corresponding to the UNDAF, the UNDP Country Programme (2011-2015) seeks to reduce the vulnerability of biodiversity to climate change impact and safeguard local communities potentially affected by negative impacts of climate change by building ecosystem resilience, which is the fundamental building block of ecosystem's provisioning, regulating and support services essential for China's social and economic development. The proposed programme will contribute directly to Outcome 4: Low carbon and other environmentally sustainable strategies and technologies are adapted widely to meet China's commitments and compliance with Multilateral Environmental Agreements; and to Outcome 5: The vulnerability of poor communities and ecosystems to climate change is reduced.

The country office has a large biodiversity portfolio, with one Programme Manager and one Programme Associate specifically assigned to biodiversity related projects with broader support from the policy, administrative and financial sections. The UNDP Regional Technical Adviser based in Bangkok will provide technical support to the CO for implementation, monitoring and evaluation of the project.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

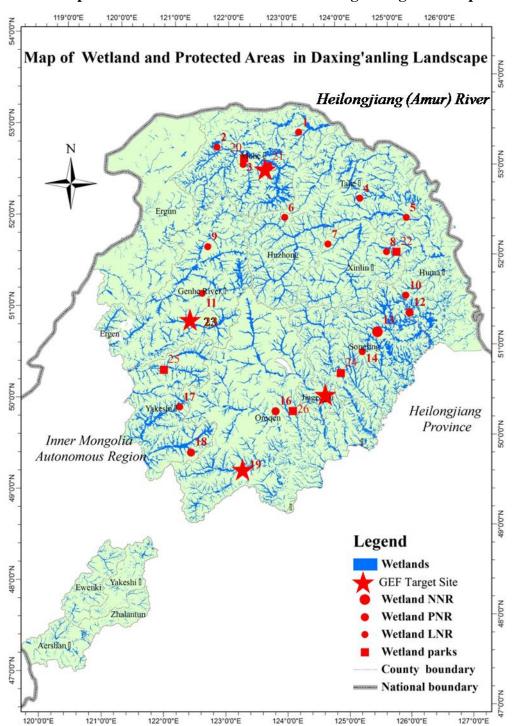
A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):

| NAME POSITION | | MINISTRY | DATE (MM/DD/YYYY) |
|-----------------------------|---|-------------|-------------------|
| | | | 1 |
| Jiandi Ye | Director: International Financial | Ministry of | 03/12/2012 |
| GEF Operational Focal Point | institution Division III, International | Finance | |
| | Department | | |

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for project identification and preparation.

| Agency Coordinator, Agency name | Signature | Date | Project Contact Person | Telephone | Email Address |
|---|-----------|---------------|---|-------------------|----------------------------|
| Yannick Glemarec, GEF Executive Coordinator, UNDP | Mr. | April 2, 2012 | Midori Paxton, Regional Technical Adviser – EBD, UNDP | +66- 818787510 | midori.paxton @undp.org |



Annex: Map – Wetland and Protect Areas in Daxing'anling Landscape