



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

PART I: PROJECT IDENTIFICATION

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| Project Title: | CBPF-MSL: Strengthening the management effectiveness of the protected area landscape in Altai Mountains and Wetlands | | |
| Country(ies): | People's Republic of China | GEF Project ID: | 4653 |
| GEF Agency(ies): | UNDP | GEF Agency Project ID: | 4596 |
| Other Executing Partner(s): | Xinjiang Forestry Department, Liangheyuan Provincial Nature Reserve Management Bureau, Altai Mountains Forestry Bureau | Submission Date: | August 31, 2011 |
| | | Resubmission Date: | September 16, 2011 October 13, 2011 |
| GEF Focal Area (s): | Biodiversity | Project Duration (months): | 60 |
| Name of parent program: For SFM/REDD+ N/A | China Biodiversity Partnership Framework and Action Plan (CBPF) and Main Streams of Life - Wetland PA System Strengthening Programme | Agency Fee (\$): | 319,021 |

A. FOCAL AREA STRATEGY FRAMEWORK:

| Focal Area Objectives | Expected FA Outcomes | Expected FA Outputs | Trust Fund | Indicative grant amount (\$) | Indicative co-financing (\$) |
|---------------------------|---|--|------------|------------------------------|------------------------------|
| BD-1 | Outcome 1.1: Improved management effectiveness of existing and new protected areas. | Output 1.1. New protected areas (2) and coverage (150,000 hectares) of unprotected ecosystems. Output 1.2. New protected areas (2) and coverage (150,000 hectares) of unprotected threatened species (7). | GEFTF | 1,356,300 | 11,555,952 |
| | Outcome 1.2: Increased revenue for protected area systems to meet total expenditures required for management. | Output 1.3. Sustainable financing plans (1). | GEFTF | 1,191,900 | 7,815,500 |
| Sub-total | | | | 3,367,679 | 20,901,452 |
| Project management cost | | | GEFTF | 177,000 | 1,098,548 |
| Total project cost | | | | 3,544,679 | 22,000,000 |

B. PROJECT FRAMEWORK:

| Project Objective: <i>To strengthen the management effectiveness of protected areas to respond to existing and emerging threats to the globally significant biodiversity and essential ecosystem services in the Altai Mountains and Wetland Landscape in Xinjiang UAR</i> | | | | | | |
|---|------------|--|--|------------|------------------------------|------------------------------|
| Project Component | Grant type | Expected Outcomes | Expected Outputs | Trust Fund | Indicative Grant Amount (\$) | Indicative co-financing (\$) |
| 1. Systemic and institutional capacity for planning and managing PA system and the sub-system of wetland PAs in Xinjiang UAR ¹ | TA | Effective legal framework for the Xinjiang PA system emplaced, enhancing the conservation status of 748,071 ha of natural wetlands within the 35 PAs in Xinjiang UAR through application of approved provincial regulations providing for establishment and management of different categories of PAs, and enabling framework for co-management. ▪ Strengthened capacity of Forestry Dept of Xinjiang UAR to effectively manage the | <ul style="list-style-type: none"> ▪ <u>Provincial PA management regulations</u> developed providing for, <i>inter alia</i> : (i) different categories of PAs, each with clear criteria for establishment, management objectives and standards; (ii) an effective monitoring and reporting regime for PAs; (iii) a framework for the development and management of revenue generating activities within PAs; (iv) measures to prevent adverse impacts from prospecting and mining and grazing; (v) a regulatory framework allowing for collaborative management of PAs with residents and PA adjacent communities. NR specific regulation development will also be explored. ▪ <u>Sector-related governance and regulatory</u> | GEFTF | 515,000 | 6,070,000 |

¹ Wetlands PAs are a sub-system of the larger PA system comprising sites primarily established to protect important wetlands including lakes and water-ways.

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| | | provincial PA system, indicated by: (i) improved scores capacity assessment scorecard scores over baseline (<i>to be determined during PPG</i>); (ii) development and establishment of safeguard measures to protect wetland biodiversity from overgrazing and mining | <p><u>framework for supporting PA system:</u></p> <ul style="list-style-type: none"> (i) Embedding of PA management concerns in the provincial development plans, cross-sectoral plans such as climate change mitigation and adaptation, tourism and the plan for achieving water security; (ii) Sector specific standards developed for areas near wetland PAs including standards and procedures for regulating mining and oil/gas extractive activities; (iii) Official guidelines for ecological compensation and restoration by mining and tourism investors. ▪ <u>Institutional strengthening:</u> Supervisory capacity of the provincial Forestry Department for planning and monitoring wetlands and PAs and enforcement and compliance monitoring of new sector standards. This includes strategic training activities and application of the professional competency standards for wetland PA management staff (to be developed at the national level), as a basis for enhanced performance. | | | |
| 2. Altai Mountains and Wetland Landscape (AMWL) PA Cluster ensures effective biodiversity conservation at landscape scale [including Altai Liangheyuan NR, Burgen River Beaver NR, Kanas NR, Altai Kekesu Wetland NR, Ertix River Keketuohai Wetland NR and other smaller NRs] | TA | <ul style="list-style-type: none"> ▪ Strengthened AMWL PA Complex provides effective landscape level biodiversity conservation indicated by: (i) improvement in the average METT scores of the PAs; (ii) improvement in the biodiversity health index² especially designed for the PAs in the landscape; (iii) realignment of PA system to enhance ecosystem resilience and connectivity adding a minimum of 150,000 ha of important wetlands to the PA system; (iv) reduction of grazing and mining threats; (v) development of management agreements with Mongolia and Russia for coordinated management of critical transfrontier habitat and species such as beaver and otter <i>Baseline will be established during PPG.</i> ▪ Increase in the provincial and local government operational budgets for the AMWL PA network by 40% from the baseline of US\$ 1,100,000 per year. <i>Baseline will be confirmed during PPG</i> | <ul style="list-style-type: none"> ▪ PA system in AMWL <u>expanded based</u> on a systematic review of PA coverage viz biodiversity conservation needs and climate change threats and adaptation needs; new PAs gazetted and operationalized in critical areas. ▪ <u>Systematic PA management and biodiversity</u> monitoring system established for the Altai PA network, with data sharing and joint training and survey activities. ▪ Altai PA cluster management objectives are <u>mainstreamed in the provincial development</u> planning process and included in the provincial 13th 5-year plan, through: (i) development of a financing plan for the Altai PA network, costing PA management activities needed to manage threats to biodiversity; (ii) economic valuation of the Altai PA system (market and non-market values) including the roles wetlands will play in reducing vulnerability to water scarcity under conditions of climate change; (iii) development of a mechanism for incorporating new funding sources from eco-compensation initiatives and new financing investments from public and private sector players in support of PA management; (iv) strengthened inter-sectoral coordination at the landscape level. ▪ <u>Awareness of the importance of the PAs in safeguarding biodiversity</u> and ecosystem services in the Altai landscape increased through targeted campaigns, communication and a data sharing platform. ▪ <u>Transfrontier conservation</u> improved through increased capacity of PA authorities to participate in the existing four-country transfrontier cooperation forum (China-Russia-Mongolia- Kazakhstan) to improve monitoring of species that occur across the Altai Sayan Ecoregion and to reduce transboundary threats including hunting, poaching and habitat degradation and habitat fragmentation by border | GEF TF | 1,631,000 | 7,679,500 |

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.

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| | | | fences. | | | |
| 3.Demonstration of effective wetland PA management through community co-management | TA / INV | <ul style="list-style-type: none"> Community co management of the Altai Liangheyuan improves PA management effectiveness indicated by: (i) reduction in biodiversity pressure (overgrazing, illegal mining) over an area of 1,130,000 ha; (ii) a total ban on grazing within core areas of PAs; (iii) increase in the METT score; (iv) threatened species populations (beavers, moose, wolverine) are stable; (v) 20% increase in the average income of park residents (approximately 3,000 people) <p><i>Baseline will be established during PPG.</i></p> | <ul style="list-style-type: none"> <u>Altai Liangheyuan NR operations strengthened to address grazing and mining threats through:</u> (i) management planning; (ii) setting up of ecological monitoring and wetland use management systems; (iii) enforcement strengthening (surveillance, interception of malfeasance and prosecution); (iv) restoration of ecosystems fragmented and degraded by mining or overgrazing, including peatlands (v) staff training tailored to improve management of specific threats to the PA. <u>Joint PA governance and management structure put in place,</u> with clear rules, roles and responsibilities for site co-management agreed between the Altai Liangheyuan NR authority and Kazakh communities residing in the PA. The co-management agreement will define mechanisms for reducing the grazing pressure and maintain biodiversity patterns and processes (such as peat land in mountainous headwaters), as well as mechanisms for securing alternative livelihoods. A sustainable use management system will be established for pasture and other resources that are used or harvested by local communities in designated zones, with resource inventories, plans, enforcement and monitoring system | GEF TF | 1,221,679 | 7,151,952 |
| Sub-total | | | | GEF/TF | 3,367,679 | 20,901,452 |
| Project management cost | | | | GEF/TF | 177,000 | 1,098,548 |
| Total project costs | | | | | 3,544,679 | 22,000,000 |

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

| Sources of Co-financing | Name of Co-financier | Type of Co-financing | Amount (\$) |
|-------------------------|------------------------------------|----------------------|-------------|
| Local Government | Xinjiang UAR Provincial Government | Grant | 16,500,000 |
| Local Government | Xinjiang UAR Provincial Government | In-kind | 4,500,000 |
| GEF Agency | UNDP | Grant | 1,000,000 |
| Total Co-financing | | | 22,000,000 |

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

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 aforementioned objective and outcomes by strengthening the capacities of authorities in Xinjiang Province 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 Altai Mountains and Wetland Landscape (AMWL), thus improving terrestrial wetland ecosystem representation in the PA system in this critical biodiversity area (part of the Altay Sayan Ecoregion, which is listed as a Global 200 ecoregion). 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 Xinjiang Province; and implement measures to enhance the financial sustainability of the PA system. 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.

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

The proposed Project is well aligned with national and provincial policies and programmes. The 12th National Five-year Plan (2011-2015) emphasises the need to promote sustainable growth and environmental protection in tandem. The plan treats biodiversity conservation as a priority, highlighting the need to strengthen the management of Nature Reserves (NR) – the main protected area category. The project is also in line with the Government’s Western Development Strategy, which aims to assist the underdeveloped western region (six provinces, and five autonomous regions including Xinjiang and one municipality) to catch up economically with the more prosperous eastern region. The project will enable the State Forestry Administration (SFA) to achieve its target of adequately protecting 55% of the natural wetlands in China by the end of 2015, mitigating further loss of natural wetland areas and degradation of their functions. Meanwhile, the newly approved National Biodiversity Conservation Strategy and Action Plan (NBCSAP 2011-2030) identifies 35 areas in China, as the priority loci for conservation action. This includes the Inner Mongolia – Xinjiang Plateau and Altai Mountain Region which is partially targeted by the project. The project will address key priorities under the NBCSAP, which places a priority on strengthening the effectiveness of the PA system in China. The project contributes directly towards the achievement of the following action programmes under Plan Action lines 12,13 and 14 respectively, including: coordinating action to implement and improve the national nature reserve plan; enhancement of biodiversity conservation in priority areas for conservation; and standardisation of management in nature reserves so as to improve the quality of nature reserve management. The project is also in line with the China Biodiversity Partnership and Framework for Action (CBPF), China’s primary investment strategy for biodiversity conservation, which is supported by the GEF and other partners. This project has been designed to implement urgent and catalytic interventions identified under the CBPF, in particular under Theme 3: Investing in PA management so as to reduce biodiversity loss in PAs. It will contribute directly and substantially to Results 4, 16, 17, 18 and 19 of the agreed CBPF Framework which are respectively: financial flows to biodiversity conservation increase over current baseline; effective governance and legal framework for the national protected area system; harmonised and effective national system for selecting, designing, managing and monitoring protected areas; NRs and PNRs are effectively managed; National NRs and PNRs have stable and sufficient finance. 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 Xinjiang Uygur Autonomous Region (XUAR) constitutes the largest provincial-level administrative region in China, with a total area of 166 million ha (almost three times larger than France). Along its northeast, west and southwest frontiers, Xinjiang shares borders with 8 countries, namely Mongolia, Russia, Kazakhstan, Kirghizstan, Tajikistan, Afghanistan, Pakistan and India. The population of Xinjiang is approximately 20.5 million, comprising 55 ethnic groups. The annual population growth rate is a staggering 16.8% as a result of large in migration into the region from other areas of China. The XUAR is at an intermediate position nationally in terms of its economic development score, ranking 13th out of 31 provinces/autonomous regions/municipalities³. Xinjiang is known for its fruits and other agricultural produce; grapes, melons, pears, cotton, wheat, silk, walnuts and sheep. About 7% of land is utilised for agriculture. Xinjiang also has large deposits of minerals and oil and provides natural gas to Shanghai via the West-East Gas Pipeline. The oil and petrochemical sector accounts for 60% of Xinjiang's economy.

Most of Xinjiang lies within the arid and semi-arid zone. The region straddles China’s two largest deserts – the 38,000,000 ha Taklimakan desert and the 4,800,000 ha Gurbantunggut desert. The total wetland area in Xinjiang UAR is 1,480,000ha, accounting for 0.89% of the total area, located at altitudes ranging from 154 m to 4,800 m. There are 45 riverine wetlands, 108 lake wetlands, 148 marsh wetlands, and 134 artificial wetlands, which collectively form a diverse inland wetland complex. Many of these wetlands contain large peat deposits that serve a valuable climate regulatory role as carbon sinks. Forest cover is limited, covering only 2.1% of the land area and is mostly confined to the Altai and Tianshan mountain ranges. 31 % of the province is covered by grasslands—predominating in particular on the slopes of the Province’s great mountain ranges. Xinjiang is located along the south-central slope of the Altai Mountains, which extend across 4 countries (China, Kazakhstan, Mongolia and Russia). The highest peak in this range in China is 4,374 m. There are two other major mountain ranges in Xinjiang, namely the Tianshan Mountains that reach up to 7,443 m and Altun/Kunlun Mountains (the highest peak of which rises to 8,611m). The high peaks of all three mountain ranges are glaciated. There are 18,600 glaciers, covering an area of 2,218,400 ha (38% of the total for China).

³ GDP per capita in 2006 was US\$ 1,403 in urban areas and US\$ 421³ in rural areas.

Despite its arid conditions Xinjiang boasts high levels of biodiversity richness. The Province harbours more than 10% of the higher plant and vertebrate species recorded in China – with a total of 3,537 higher plant species and 717 vertebrate species (including 87 fish, 6 amphibians and 43 reptile species, 398 bird and 146 mammal species). These include 28 species under Category-I protection and 74 under Category-II protection. Xinjiang contains 40 Important Bird Areas (IBAs) as identified by Birdlife International – the third highest number of all Chinese provinces after Sichuan and Chongqing. The biodiversity of the Altai Mountains region is particularly remarkable, being part of the biodiversity rich Altai-Sayan Ecoregion (a designated WWF Global 200 Ecoregion). The Altai Mountains and Wetland Landscape (AMWL), covers an area of 11,770,000 ha straddling a huge altitudinal transect from 315 m to 4374 m. It has 1,047,000 ha of forest covering 8.97% of the landscape. The area has 1,378 species of flowering plants, 222 species of birds and 54 of mammals; 73 of its 300 vertebrate species are nationally protected species. In particular, the AMWL harbours many globally endangered species including ibex, Argali sheep, red deer, otters and snow leopards. The landscape supports a small remaining population of the Chinese sub-species of Eurasian beaver (*Castor fiber birulai*) which is endemic to the Ulungur River. The landscape has 21 lakes larger than 100 ha including Kanas, Ulungur and Jili lakes, and 416 glaciers with a water storage capacity of 16.492 billion cubic metres. There are 56 rivers linked to 3 river systems - Ertix, Ulungur and Jeminay, with a total run off of 12.59 billion cubic meters. The Altai mountain/ and wetland ecosystems provide many key ecosystem services such as watershed protection and regulation of water quality for key rivers as well as climate regulation. More than 90,000 ha of peatlands have been identified in the Altai mountains, containing up to 3,000 tonnes per ha or an estimated total of 300 million tonnes of carbon or over 1 billion tonnes of carbon dioxide equivalent.

Threats: The biodiversity of the AMWL is threatened as a result of growing anthropogenic pressures. Forest and grassland areas are being degraded as a result of illegal timber harvesting and overgrazing—the latter of particular concern. The Altai Mountains comprise the summer pasture grounds for local Kazakh nomadic pastoralists. And a good portion of the pasture ground is within the PAs. The upper mountain grasslands, a mosaic ecosystem comprising grasslands and wetlands, used to comprise the richest pasture for the local nomadic herdsman. Overgrazing in this area is leading to the loss of species diversity, productivity and soil erosion. Summer pasture biomass has declined tremendously as a result of over stocking. Supplementary feeding of livestock during the winter months has led to a more than tenfold increase in livestock numbers since 1949, from 432,000 standard sheep units to 4,334,500 currently. Overgrazing is in turn causing a decline in the water retention capacity of wetlands, including peatlands, which is detrimental to wetland biodiversity and is impairing ecosystem services such as the sequestration and storage of carbon. Fencing by herders and border fences along the Altai Mountain range pose threats to wildlife migration. Gold mining poses another threat, leading to habitat degradation in the river valleys and water pollution within the PAs. Altai means “Mountains of Gold” in the Altai language. The region experienced a gold rush in the 1980s and 1990s. In 2000, the local government issued a ban on placer gold mining, but illegal gold mining activities nonetheless occur. Growing tourism in ecologically sensitive scenic areas poses a growing problem; rare plants are being harvested from the wild for the curio trade, and tourism is also leading to habitat disturbance from trampling, and pollution of streams. An emerging threat stems from the planned construction of a natural gas pipeline and associated roads linking gas fields in Russia to Xinjiang along the Kanas Lake within the national NR, and to the existing west-east gas pipeline. Climate Change poses a new threat to the biodiversity of the Altai region. Since the 1960s, the temperature of Altai Mountains has seen an upward trend: according to statistics supplied by the meteorological department of Qinghe and Fuyun County, the annual average temperature in the Altai region was - 0.22°C over the period 1961-1970, while it was 3.31°C over 2000-2009. The Altai Mountains region is prone to desertification, which is likely to be exacerbated by climate change induced temporal and spatial perturbations in precipitation patterns. These perturbations will have an impact on wetland functioning, adding additional stress on the system.

Xinjiang’s Conservation Efforts to Date: The Chinese Government and XUAR Government have taken concrete steps to address these threats in order to safeguard Altai region’s globally significant biodiversity and wetland and water resources, which are vital to the livelihoods of people in the region and Xinjiang as a whole. As the cornerstone of its biodiversity conservation efforts, XUAR has established 35 nature reserves (NR), including 9 national NRs, 20 provincial NRs and 6 local NRs. These protect a total of 23,422,152 ha or 20% of the land area. Most are managed by the Xinjiang Forest Department, though a small number of NRs are managed by Ministry of Environmental Protection (MEP). On the ground, these NRs are managed by the local forestry departments which are located within the prefectural and county governments. The forestry departments are at the same time subsidiary units of the SFA at the national level, and therefore have two reporting lines – to the local and the national governments. While the national authority sets technical standards, provides technical programme support, manages the central database, and ensures effective management of the national PA system, provincial authorities are responsible for the management of the provincial PA system and for site management including staffing and financing of site level operations. Prefectural (or lower tier) governments are also responsible for site level PA management and operations, and provide staff and financing for operation of some PAs. Although there is no difference in 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.

XUAR plans to extend the NR coverage to a total of 26% of Xinjiang land area by 2030, in line with the NBCSAP and with the wetland NRs as a priority. In the Altai Mountain region there are 6 NRs, including 4 wetland NRs, that cover a total area of 1,541,569 ha. Those NRs are listed in Table 1 below:

Despite these efforts, biodiversity is still being lost both within protected areas and in critical conservation areas outside the current PA system. There is an urgent need to strengthen the management effectiveness of the Altai PA system, expand the PA system to incorporate unprotected high biodiversity areas into it, and integrating protected areas into the development framework.

Table 1: Nature Reserves in Altai Mountains Region of China

| Name of Nature Reserve | Area Size (Ha) | Main Object of Protection | Year | Management Authority | Main Threats | Annual operating budget and sources | Staff number |
|--|----------------|---|------|----------------------|---|--|----------------------|
| Kanas National NR | 220,162 | Forest ecosystems and natural landscapes | 1980 | Forestry | Planned gas pipeline, overgrazing, tourism | US\$ 590,769 Altai prefecture | 80 prefectural staff |
| Ertix River Keketuohai Wetland Provincial NR* | 99,040 | River, lake, swamp wetlands flora and fauna | 2005 | Forestry | Mining pollution, development conflict, overgrazing | US\$ 110,769 Altai and Fuyun counties | 15 prefectural staff |
| Jinasi Mountain Alpine Grassland Provincial NR | 56,700 | Alpine grassland ecosystems | 1986 | Agriculture | Overgrazing | US\$ 46,154 Provincial government | 7 provincial staff |
| Liangheyuan (Altai Two Headwater) Provincial NR* | 1,130,000 | Forests, flora and fauna, wetlands | 2001 | Forestry | Overgrazing, gold mining, fencing | US\$ 170,769 Provincial government | 18 provincial staff |
| Altai Kekesu Wetlands Provincial NR* | 30,667 | Wetlands, plant and animal resources | 2001 | Forestry | Overgrazing | US\$ 118,462 Altai prefecture | 16 prefectural staff |
| Buergen Beaver Provincial NR* | 5,000 | Beavers and their habitat | 1980 | Forestry | Destruction of riverine forests vegetation, overgrazing | US\$ 66,154 Altai and Qinghe counties | 9 prefectural staff |

*Indicates NRs consisting of predominately wetland ecosystems.

Baseline: The XUAR Government and local governments currently allocate US\$ 1,100,000 for the management of the 6 NRs in Altai. This appropriation covers staff salaries, administration and equipment. The National Government has established a grassland ecological conservation subsidy incentive scheme (US\$ 62.475 million; 2011-2020), which aims to improve local herders' income and conserve and restore grasslands by providing subsidies to reduce livestock numbers and to fence degraded grasslands for regeneration. The National Government also has several projects that are geared toward improving conservation management within NRs. The NR Wetlands Conservation and Capacity Building Project (US\$ 4.518 million; 2011-2013) aims to support the development of infrastructure and restoration of wetlands in Xinjiang. The NR Wetland Ecological Conservation Project (US\$ 618,000; 2010-2011) is piloting advanced technology for restoring wetlands in the Liangheyuan (Altai Two Headwater) Provincial NR. The NR Natural Forest Protection Project (US\$ 12.893 million; 2011-2020) aims to build a strategic timber reserve base through restoration efforts, so as to improve forest condition, the forest stock and the socioeconomic conditions of the local people living in forested areas. It also aims to improve ecological functions of the forest and increase biodiversity.

The EU-China Biodiversity Programme (2005-2011), implemented through the UNDP, has invested US\$ 80 million in strengthening biodiversity conservation in the country and supported the mainstreaming of wetlands management into broader development through 18 field projects. It has facilitated *inter alia* a range of training courses, and supported development of management plans and strengthening of data management. Three of the 18 projects were focussed on Xinjiang UR. These included peatland rehabilitation and development of the Altain Mountain wetland Conservation and Sustainable Use Strategy developed in collaboration with the Wetland International, and approved by the Altai Prefectural Government in August 2010. The strategy provides the foundation for actively managing wetlands for biodiversity in the region.

The Government is also investing US\$ 25 million (2006-2014) in the Support Capacity Building and Innovations to Promote Green Development in China Project, with US\$ 7.6 million co-financing from the UNDP; Xinjiang is one of the target provinces of that project. The provincial level project, which started in 2009, aims to integrate poverty reduction and rural green economy development with an improved environment and capacity to adapt to climate change impacts. It supports the rehabilitation of ecosystems, the reduction of agro-GHG emissions, and the establishment of carbon trade and compensation schemes in the rural areas in the Xinjiang UAR. These investments aim to improve forest and wetland management at the site level, and to reward local communities for their efforts to reduce livestock and develop their capacity to benefit from conservation activities. There has been no attempt to improve the PA system as a whole by targeting barriers at different levels of PA administration – at province, local governments and site levels.

Long-term vision and barriers to achieving it: The long-term solution that this project proposes to safeguard Altai Mountains and wetland biodiversity and essential ecosystem processes is to strengthen the sub-system of Altai PAs through redesign, better mainstreaming, strengthened legislative and institutional frameworks, secure funding, improved coordination between sectors, and collaborative natural resource management with the PA residents. Through strengthening the network of the PAs in a

wetland biodiversity-rich landscape, the project will be able to address systemic and institutional issues at three different levels: at the provincial level, it will strengthen the legal foundations and governance of the entire PA system of Xinjiang UAR; at the landscape level, it will develop a model wetland PA cluster management framework in the Altai region; and at the site level, it will introduce a government- community co management scheme in one NR where resident communities are currently alienated from PA management. The project addresses a number of barriers to the effective management of the Xinjiang protected area system.

Barrier 1: Insufficient systemic and institutional capacity at the provincial level to plan and manage the PA system and the sub-system of wetland PAs

Effective PA management in Xinjiang 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. Xinjiang as an Autonomous Region has a much stronger legislative right than provinces, however it does not have any laws that could augment the weakness of the national legal framework and that could be more specifically tailored to local conditions, which carry more weight in local courts. The result is that most PAs are managed in ways that are contradictory to both the word and spirit of those regulations. In the Altai Mountains and wetland PAs—which house approximately 65,000 residents who are mainly livestock herders—different agencies have jurisdiction over different natural resources within the PAs; as a result, zonation of NRs as stipulated in the regulations often cannot be applied. To match local conditions and needs there is a need for wider categories and more flexible zoning options in the legislation to allow for different levels of protection and sustainable utilisation. Management standards and guidelines for each category of PAs would also be needed. Such legislation also needs to fully recognise the vital role of PAs—particularly wetland PAs—in maintaining essential ecosystem services; in short, a legal foundation for ensuring ecosystem resilience and connectivity between PAs is needed.

In addition, the development of agriculture, mining, livestock, and mass tourism in XUAR is leading to the rapid exploitation of water and wetland resources both inside and outside the PAs. This development happens even inside the PAs without due consideration being paid to the management objectives of the PAs, as well as the roles of wetlands in sustaining biodiversity and essential water resources. This is caused by the fact that there are inadequate sector specific standards for safeguarding biodiversity and ecosystems in areas near, or areas that affect, NRs. PA system and its objectives are not well integrated in the provincial development and sector planning process which largely determines land-use and development activities within the province. There is a notable lack of integration of PA concerns in cross sectoral plans such as the tourism plan and the plan for achieving water security.

Due to the large size of these PAs and limited funding of PA management, the enforcement of legislation has been difficult. The monitoring of development activities within the PAs and those that affect the wetlands in the PAs has been difficult has also proven to be onerous. The PA system has grown fast, though most PAs are under-staffed. Additionally, many staff members lack the knowhow needed to discharge their duties. For example, the Laingheyuan NR has only 25 staff covering 1.13 million ha. There are no accepted competence or performance standards, and the PA system suffers from chronic operational budget shortages. The XFD's current institutional capacity to oversee multiple PAs, make sound operational decisions, manage budgets, deploy staff, and monitor performance is not adequate for effective PA management.

Barrier 2: Disconnect between PA system management and development planning and sectoral planning at the Altai landscape level.

Although the PA system covers 20% of the XUAR's land surface, a large number of important wetlands are excluded from the PA system. This includes Altai sedge marshes such as the Burqing River Rakorlor marsh (1,532 ha) and Sawur Mt. lowland marsh (3,471 ha), Ulungur and Jili Lakes (92,700 ha), Sayaram Lake (46,800 ha), and Weili District Lake group (100,000 ha including 25 lakes).

The PA system is currently maladapted towards addressing threats to biodiversity posed by development outside PA boundaries. Wetlands in particular are vulnerable to external influences. Wetlands are dependent on water flow, and low lying wetlands at least are affected by the movement of pollutants from far outside the PA boundaries—thence far beyond the control of the PA management authority. A landscape approach to maintaining wetland biodiversity and ecosystem functions is called for to ensure the integrity of the wetland PA system. For instance, the unique Burgen River NR, with its dramatic riparian willow forests, is threatened by both dam construction in its upper reaches and uncontrolled removal of water from the river by surrounding land use activities. Whilst XUAR is too large an area in which to implement a landscape approach to management, such a management system can be executed at the catchment or prefecture level. This will require amongst other things, within the PA system a shift from site-based management to cluster based management of protected areas at the landscape level (including monitoring and enforcement functions), and the strategic expansion of PAs to incorporate ecologically sensitive areas and corridors from future development. It will also require coordination of conservation efforts in PAs with PA management actions in neighbouring countries. Progress has been made in the latter respect, through an agreement between two prefectures in Mongolia and XUAR to jointly work on law enforcement in the border areas. But further work is needed. Since 2002, there have been 6 regional meetings of the countries that share the Altai-Sayan Ecoregion to coordinate conservation action. China has not as yet participated.

There is a parallel need to integrate PA management and prefecture level development/ economic sector planning. There is an urgent need to coordinate biodiversity management and development interventions, to reduce the direct and indirect threats posed to biodiversity by development. Unlike the typical authority structure of NRs containing predominantly forest ecosystems, the authority over the land areas of wetland NRs is not exclusive to the SFA as the NR management authority; instead there are complexities to the authority structures. For example, the user rights for surface waters of lacustrine NRs belong to fishery authorities (or local fishermen/farmers), while the user rights for palustrine wetlands often belong to herders. Different agencies, such as agriculture, mining and water resources, all have jurisdiction over some resources within the PAs. These institutions tend to operate independently from the PA management authorities. Sub-provincial government agencies often plan and implement work inside PAs without due coordination or consideration to biodiversity conservation. This disconnect among authorities and institutions has meant that many activities have been promoted that have negative impacts on biodiversity and ecosystems. For example, fencing for grassland protection implemented by agriculture sectors disrupts the migration patterns of wild ungulates; dam construction along Ulungur River has fragmented the habitat and the population of beavers, which critically threatens the survival of this endemic sub-species; and large-scale opencast gold mines leave ugly, polluted scars across Altai Liangheyuan NR.

An underlying issue behind this disconnect—and behind the chronic shortage of funds allocated for protection of wetlands and other PAs—is the limited understanding of the economic value of wetland biodiversity and ecosystem services; authorities and communities are unaware of how the loss of these resources will negatively impact the overall economy, various industries and livelihoods. Insufficient understanding of actual PA management costs and benefits, and a lack of clear vision for the AMWL PA network are also major factors in the sub-optimal budget allocation for the operation of the PAs. Large amounts of funding will sometimes be made available for engineering projects within PAs (such as infrastructure such as roads and buildings), though these resources have been concentrated on few national level NRs, and little funding has been used for conservation work such as patrolling, monitoring, and ecological restoration. Such funds are not guaranteed and mostly come from different central government programmes such as “from grain to green”, “natural forest protection”, and the national wetland restoration programme. Awareness of the importance of wetlands for both biodiversity and the delivery of ecosystem services is not well developed among government planners, the general public or local communities. Even the managers of wetlands NRs often have poor or partial recognition of the functional values of wetland sites. These sites must be recognised and managed as areas of high economic and social value rather than merely as nice places for recreation. Even where ecological and other data exists, lack of access to data and data sharing prevents them from being used for effective planning of PA systems, developments that might adversely impact PAs and biodiversity and planning of mitigation and adaptations strategies in face of a changing climate.

Barrier 3: Limited local capacities and participation in PA management

At the site level, PA operation is weak and, in many cases, unable to adequately address grazing, mining and other threats. There is no systematic management planning system or biodiversity monitoring system. The XFD is understaffed and under-capacitated. At the sub-provincial level, on-the-ground PA management is the primary responsibility of field staff who the local governments (prefecture and county) assign, and thus they are under local government control and supervision. Most field staff lack the relevant technical background to perform their designated duties and many only work part-time on PA management activities; such field staff have a limited mandate for legal enforcement. When they apprehend persons undertaking prescribed illegal activities, they have to hand them over to forestry police, who may be located a considerable distance away. Most PAs also suffer from lack of basic infrastructure (such as field stations for staff) and lack adequate field equipment for surveillance and communication.

As is the case in other parts of China, the PAs in Xinjiang are composed of State and community lands. Much of the pasture lands have been given to local households on 30-year contracts for use. Given that the area is both vast and sparsely populated, this land is difficult to manage by Government through a ‘command and control’ system. The current system is not proving effective in addressing biodiversity loss. The effective management of PAs will depend on the sustainable management of community lands as well as management of government lands with local communities. In the Altai Liangheyuan NR and other NRs in Xinjiang, local communities and herders can freely access NRs for the purposes of pasturing livestock and other economic activities, but are not themselves involved in the management of the PAs. Since most wild animals move freely across PA borders and ecosystem functions need to be maintained beyond PA borders, effective community management of lands inside and around (particularly adjacent to) PAs is critical for biodiversity conservation. Currently, the PA management authority’s institutional arrangements and staff capacities are inadequate with respect to engaging communities as co-managers of PA sites and surrounding areas. The institutional apparatus needed for co management is lacking, as is experience, and the capacities of communities to effectively manage ecosystems and support PA functions such as enforcement are low. While communities have usufruct rights—which could in theory provide an incentive for improving management, there is currently no *quid pro quo* attaching responsibilities to these rights, for ensuring sound management of ecosystems. There is a need to address these shortcomings.

B.2. Incremental/Additional cost reasoning: DESCRIBE THE INCREMENTAL (GEF TRUST FUND) AND THE ASSOCIATED Global environmental benefits 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 Programme can be summarised as follows:** The Government of China and the XUAR government have clearly identified habitat conservation as a priority and are making significant investments and efforts for wetland conservation and wetland PA management. However, many investments tend to be for physical work such as wetland restoration and infrastructure development, with very little focus on wetland biodiversity conservation and species management. In parallel, the governments invest in large scale physical infrastructure projects such as gas pipeline development without due consideration for biodiversity conservation. There has also been no systematic effort to remove the existing barriers to a sustainable and effective PA system to ensure at a minimum wetland biodiversity within PAs can be safeguarded. In particular, in many existing PAs, pressure for land and water resources, as well as threats coming from distant areas through water courses, requires urgent action in order to prevent further degradation of critical wetland ecosystems and loss of critically endangered species.

Without the GEF investment in the proposed Programme, there will be no provincial framework and tools for systematic management of the sub-system of wetland PAs. There will also be no coordinated PA system management at the landscape level in the ecologically important regions such as AMWL. The wetland PAs in the AMWL will continue to be managed at the site level under the national regulations that are not suitable for the reality on the ground. The provincial and prefectural wetland PA management authorities will have limited capacity for effective management and have neither tools nor capacities for mitigating threats coming from outside the PAs. Hence the management effectiveness of wetland PAs will remain weak and highly vulnerable to overgrazing and external influences such as inappropriate development and economic activities within the PAs and in the watershed beyond PA and national borders that directly affect the wetlands within the AMWL PAs. As such, the AMWL PA system will remain unable to fulfil its role in safeguarding globally significant biodiversity. Insufficient technical and functional capacity of the provincial and local forestry departments and lack of mechanisms for viable co-management with resident herding communities will remain a critical bottleneck.

Alternative scenario enabled by the GEF: The project complements baseline programmes and projects, by addressing wetland biodiversity conservation through strengthening the wetland PA sub-system rather than focusing on PA sites. Enabling legal and regulatory frameworks for PA management at the XUAR level will be established. The integrated PA management framework in the AMWL will be created to improve conservation security of the Chinese part of the Altai-Sayan Ecoregion securing immediate global environmental benefits in doing so. Furthermore, the project will demonstrate effective PA management through community co-management. While strengthening the ability of PA authorities to manage emerging threats in the PA cluster itself, the project also seeks to 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. The following table describes threat specific responses of the project.

Table 2: Threat specific responses of the project

| Threats | Project's Response |
|----------------------|---|
| Overgrazing | <ul style="list-style-type: none"> ✓ Provincial level regulatory measures to prevent adverse impacts from grazing ✓ Establishment of joint PA governance and management structure, including sustainable use management system and alternative livelihood programmes ✓ Setting up of ecological monitoring and wetland use management system ✓ Strengthening of enforcement and compliance monitoring capacity |
| Mining | <ul style="list-style-type: none"> ✓ Sector specific standards for regulating mining activities ✓ Strengthening of enforcement and compliance monitoring capacity |
| Uncontrolled tourism | <ul style="list-style-type: none"> ✓ Integration of PA system and its objectives in provincial level tourism planning ✓ Strengthening of enforcement and compliance monitoring capacity |
| Gas pipeline | <ul style="list-style-type: none"> ✓ Sector specific standards for regulating oil/gas extractive activities ✓ Strengthening of enforcement and compliance monitoring capacity ✓ Increasing capacity to participate in the transfrontier conservation initiatives |
| Climate change | <ul style="list-style-type: none"> ✓ Integration of PA system and its objectives in provincial level climate change mitigation and adaptation planning ✓ Economic valuation of Altai PA system including the roles wetlands will play in reducing vulnerability to water scarcity under conditions of climate change ✓ AMWL PA system planning ✓ Increasing capacity to participate in the transfrontier conservation initiatives |

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, so that the coordinated responses to these threats can be led from different tiers of PA management.

Global benefits. The GEF funding will secure critically important biodiversity in the Chinese portion of the Altai Sayan Ecoregion, maintaining 1.5 million ha of the Altai Alpine Meadows and Tundra Ecoregion and 1.8 million ha of the Montane

Forest and Steppe Ecoregion, richly endowed with post-glacial montane peat bogs and riverine forests providing important habitats for many fauna and flora. By doing this, it will deliver global benefits including the strengthening of the sub-network of wetland PAs and enhanced conservation and management of the habitats of endangered species including Chinese beaver, wolverine and moose.

Component 1: Systemic and institutional capacity for managing wetland ecosystem and PAs in Xinjiang UAR

Under this component, the project will aim to develop an effective governance and legal framework for the Xinjiang PA system at the level of the autonomous regional government. The project will support the development of a XUAR law governing NR planning and the management of NRs, in close coordination with the corresponding activities at the national level under the proposed programmatic approach (Main Streams of Life- Wetland PA System Strengthening for Biodiversity Conservation Programme). The new law will provide for, *inter alia*: (i) different categories of PAs each with clear criteria for establishment, management objectives and standards catering for different ecosystem types and with specific emphasis on wetlands; (ii) an effective monitoring and reporting regime for PAs; (iii) a framework for the development and management of revenue generating activities within PAs; (iv) measures to prevent adverse impacts from prospecting, mining and grazing; and (v) a regulatory framework for collaborative management of PAs and resources with residents and neighbours. Development of NR specific regulations will also be explored. Simultaneously, PA specific operational guidelines and procedures in the form of PA management plans will be developed and formalised for selected wetland NRs, so as to allow for the practical application of the above principles in the absence of new legislation.

This component will also establish a cross-sectoral governance framework to regulate development within and adjacent to protected areas. This will include embedding of PA management objectives and concerns in the provincial development plans, along with cross-sectoral plans related to, for example, climate change mitigation and adaptation, tourism, and water resource management. Sector specific standards will be developed for areas near wetland PAs, including standards and procedures for regulating mining and infrastructure placement activities. Official guidelines for ecological compensation and restoration will also be developed targeting mining and tourism investors. The supervisory capacity of the XFD for planning and monitoring wetland PAs, and enforcement of new sector standards will be strengthened. This work will include strategic training activities and the application of professional competency standards for PA management staff, which are to be developed as part of the national level project.

Component 2: Altai PA Network demonstrated a model for effective biodiversity conservation at landscape scale

This component will focus on strengthening management of the PA cluster in the AMWL to address threats at a landscape level, comprising one national NR and 5 provincial NRs. Four of these 6 NRs are predominantly wetland ecosystems and one houses the 4,573 ha Kanas Lake, the headwaters of the Kanas River. The area of PAs in the AMWL will be realigned based on a systematic review of PA coverage—in particular the coverage of natural wetlands—in relation to biodiversity coverage and climate change threats and adaptation needs; PAs will be expanded or established in critical areas, gazetted, and operationalised. Systematic PA management and biodiversity monitoring systems will also be established within the AMWL PA cluster, with data sharing and joint training and survey activities between sites. For example, at the headwaters of Qingur River and Ulungur River Altai Liangheyuan NR will work with Burgen NR and other stakeholders to develop a conservation action plan for the beaver and its habitats, which are ecologically connected along the upper and lower reaches of the river tributaries. The project will mainstream the AMWL PA cluster into the provincial development planning process at the prefecture level and ensure the inclusion of measures to strengthen the PA network as part of the provincial 13th 5-year plan. This will be done through: (i) the development of a financing plan for the Altai PA network, costing PA management activities needed to manage threats to biodiversity; (ii) an economic valuation of the Altai PA system (market and non-market values) including roles of wetlands in climate change adaptation and disaster mitigation to be determined through a series of strategic assessments; (iii) the development of a mechanism for incorporating new funding sources from eco-compensation initiatives and new financing investments from the public and private sector in support of PA management; and (iv) strengthened inter-sectoral coordination at the landscape level. This work is expected to lead to increased government investment in the PA system as well as reduced threats to the biodiversity in the AMWL.

The park agencies' capacity will be strengthened for participating in the existing four-country transfrontier cooperation forum (China-Russia-Mongolia-Kazakhstan) to improve monitoring of species that occur across the Altai Sayan Ecoregion and to reduce transboundary threats including hunting, poaching and habitat degradation. Transfrontier species conservation plans will be developed in collaboration with neighbouring countries for beavers and other endangered transfrontier species, to ensure the integrated and effective management of the entire basin in the Altai Watershed. The endemic Chinese beavers are not only a flagship species for the conservation, but are also the umbrella species for the wetland conservation, including the riparian forests and grasslands which are the key habitat for wildlife and provide important natural resources for the local Kazakh pastoralists. The project will also promote inclusion of the Chinese portion of Altai in the Golden Mountains Transfrontier World Heritage Site which is being established. This would greatly facilitate better planning for transfrontier resource protection and conservation management of species that cross borders and would allow for greater level of technical sharing. In addition it would result in far higher national budgets being allocated to those PAs. The higher level of transparency and regular World Heritage inspection and reporting must result in higher standards of protection. Project will promote joint biodiversity inventory and biodiversity data

sharing to enhance PA management and connectivity. Awareness of the importance of the PAs in safeguarding biodiversity and ecosystem services in the AMWL will be increased through targeted campaigns, and communication and data sharing platforms established in the AMWL PA Network, including a awareness handbook for provincial decision makers, a website, a database, publications, media coverage, blogs and outdoor events.

Component 3: Demonstration of effective wetland PA management in Altai Liangheyuan NR through alternative livelihood programme and community co-management

This demonstration component will focus on developing viable co-management arrangements to improve the management effectiveness of the Altai Liangheyuan NR, which is home to approximately 3,000 herding park residents. The 1,130,000 ha NR is the largest protected unit of the Altai Mountains. It is critically important for the conservation of peat marshes and beaver populations. Liangheyuan, which means “two rivers”, is the watershed of the Ulungur and Ertix Rivers. The NR was established in 2001 to protect the watershed and biodiversity. Over grazing constitutes the main threat in the NR, and illegal gold mining activities also occur. Along with the Kanas National Nature Reserve within the AMWL, the Altai Liangheyuan NR is being nominated as a World Heritage Site. The project will strengthen the NR operations to address grazing and mining threats through: (i) establishing an institutional apparatus for co management, including decision making fora; (ii) determination of management responsibilities and the attachment of responsibilities to rights, a system of incentives and penalties for malfeasance (iii) participatory management planning with local communities; (iv) setting up ecological monitoring and wetland use management systems involving communities; (v) strengthening of enforcement (surveillance, interception of malfeasance and prosecution); (vi) restoration of ecosystems fragmented and degraded by mining or overgrazing, including peatland; and (vii) training for communities tailored to improve management of specific threats to the PA. As part of the process of developing a PA management plan for the NR, a baseline survey in the reserve and the surrounding areas, including the key ecologically interconnected areas, will be conducted. The critical sites for wetland biodiversity conservation will then be identified with a view towards enhancing protection in these areas. The co-management structure will be agreed upon by the NR authority and Kazakh communities residing in the PA. The co-management agreement will define mechanisms for reducing grazing pressures and maintaining biodiversity patterns and processes (such as peat land in mountainous headwater areas), as well as mechanisms for securing alternative livelihoods. A sustainable use management system will be established for pasture and other resources that are used or harvested by local communities in designated zones, with provision made for resource inventories, and development of enforcement and monitoring systems. Co-management arrangement will draw heavily on the lessons learnt from past and current co-management pilots in China and around the world. Grazing threats in the NR cannot be reduced without reducing the number of livestock, which is only possible through development of alternative livelihoods and/or eco-compensation arrangements. These schemes will be funded through baseline initiatives, geared to addressing specific conservation needs. Building on eco-compensation schemes tried and tested in different parts of China, a pilot community-based ecotourism venture will be promoted and demonstrated, from which the local nomadic Kazakh communities can obtain benefits and lower the number of livestock without losing income. The traditional nomadic culture will be marketed as an attraction as will biodiversity.

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 Mainstreaming Gender at the GEF:

The target PAs make an enormous contribution to the provincial economy, and ecological and social welfare of people in Xinjiang. Wetland PAs provide essential water resources to people and industries; up to 300 million people in China consume contaminated water every day and 190 million suffer from water related illnesses each year. The wetland PAs provide a valuable service, regulating water provision and quality. More than 50 rivers originate in the Altai Mountains, and eventually converge into two major rivers, the Ertix and the Ulungur. These two rivers are the lifeblood of an estimated 1 million people of all ethnicities in Altai and the foundation of economic development in north Xinjiang. By safeguarding vital hydrological services, the project will generate large positive social and economic externalities to the Province. Wetlands also support various livelihood and economic opportunities, such as fisheries, agriculture, and tourism. They also offer opportunities for public recreation—local tourism is growing fast in China, as the economy grows and incomes increase. By strengthening management of PAs, and putting in place measures to manage the adverse impacts of tourism, the project will make an important contribution to safeguarding future recreational use options in Xinjiang. The estimated 3,000 residents in Liangheyuan NR will directly benefit from the sustainable use management system as well as full participation in PA co-management and benefit sharing arrangements, and alternative livelihood programmes. As women in the local communities are often more engaged in natural resource gathering and use and play a major role in herding work, they would be the primary beneficiaries. A thorough gender analysis will be conducted during further project preparation to ensure their full participation in the PA co-management framework. Tangible socioeconomic benefits with gender dimensions will be determined and appropriate indicators will be developed during the project preparation phase.

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 |
|--|----------------|--|
| 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 2). |
| Even under co-management (where communities have usufruct rights to natural resources), economic development interests of communities will override conservation priorities, leading to continued loss and degradation of biodiversity | Low to medium | Whilst there is significant interest amongst local communities to be entrusted with conservation of the land where they live, both “carrot and sticks” may be required for some communities to implement agreed conservation actions (when it is not of direct economic benefit for them or actually causes losses in some livelihood opportunities). The government is already experimenting with a variety of eco-compensation schemes and the project will build directly on these government efforts. The project will also build on global experiences in co-management of PAs and natural resources, and will provide support at every stage of co-management agreement development and negotiations between stakeholders. The project will build on existing co-management models in China. The distributional implications of management actions between and within communities will be assessed as part of the economic assessments that will be undertaken under component 2. |
| Severity of climate change impacts, increased incidence and extended duration of extreme weather (e.g., floods and drought), retreat of glaciers may undermine conservation efforts promoted by the project through changes in water availability, biodiversity distribution and changes in community resource use intensities | 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 system 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. This will be accommodated. |
| There may be a political risk in the ethnically sensitive region of Xinjiang. Any repeat of former rioting could halt or compromise smooth project operations in that Autonomous Region | Medium | Recently the ECBP Programme was able to complete two projects in Xinjiang despite recent riots. Sensitivity of the region can even be an asset in guaranteeing high level of government attention to good governance. Being an autonomous region, with a higher legislative power than provinces, Xinjiang presents an interesting opportunity to establish a modern and solid legal framework for PA management. In order to minimise this risk, the Ministry of Finance will sign an agreement with the Government of Xinjiang Uighur Autonomous Region before the project inception, which require necessary enabling conditions in Xinjiang including social stability, detailing various risk mitigation measures. |
| Mainstreaming wetland PAs into sectoral policies will be hindered by lack of incentives for other sectors and poor enforcement of agreed priorities and plans that may be incompatible with larger mining concerns. E.g. Karamaily ungulate reserve is already threatened by approval of large open-cast coal mining inside the NR. Lop Nur wetlands have dried up as a result of water diversions upstream. | Medium to high | Although this risk is historically very high, with the elevation of environmental agency to a Ministry, it is expected that the government will have a better capacity for identifying and mitigating the severe threats these engineering-oriented programmes poses on biodiversity. This project proposes to not just focus on coordination but also on joint planning, approval of policy, programmes and legislation at the provincial level with participation of key wetland biodiversity impacting sectors and agencies. The project will support development of a strong PA regulations and a framework for development of tools for mainstreaming such as the sector specific standards developed for areas near wetland PAs including standards and procedures for regulating mining and oil/gas extractive activities, consolidated information data base on wetland PAs, wetland PA system review, and economic valuation studies. Under the CBPF umbrella, efforts will be made to develop viable partnership between different (and sometime competing) agencies |

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 | Operational Focal Point (OFP). Coordination and implementation of GEF projects |
| UNEP, WB, ADB | Partners in the CBPF umbrella programme for CBD actions for biodiversity in China. WB manage another GEF financed wetlands project in Xinjiang (Lake Aibi) that should be closely coordinated. |
| Environment protection sector of different level (such as Ministry of Environmental | Coordination of environmental issues, pollution and CBD implementation and reporting, execution of CBPF. Processing and coordination of drafting legislation related to environmental protection. |

| Stakeholder | Roles and Responsibilities |
|---|---|
| Protection, Xinjiang Department of Environment Protection, Altai Environment Protection Bureau) | Responsible for Regulations on Nature Reserves. Manages 21 national wetland NRs and 28 provincial wetland NRs. Must be involved in any proposed regulatory revisions. |
| State Forestry Administration (including National Wetland Conservation Centre) | 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. 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. |
| Water resource sector of different levels (such as the Ministry of Water Resources, Xinjiang Department of Water Resources and Altai Water Resource Bureau) | Responsible for water security. Important stakeholder with high interest in terms of water quality, flood control and other ecological functions. |
| Agriculture sector of different level, such as Ministry of Agriculture, Xinjiang Agriculture and Pastoralism Department, Altai Agriculture and Pastoralism Bureau | Responsible for agriculture, pastoralism and grasslands. Major stakeholder in terms of water use and sources of agricultural water pollution, grassland management and pastoralism development; responsible for freshwater fisheries. Should mainstream biodiversity and PA protection within their plans and avoid causing pollution of wetland sites. Can help monitor wetland biodiversity on agricultural lands adjacent to NRs. Need cooperation in controlling fishing within sustainable limits. |
| Standing Committee of People's Congress of Xinjiang UAR | Responsible for coordination of legislation and regulation functions under in Xinjiang UAR , including the provincial regulation of nature reserve management and regulation of wetland conservation. |
| Provincial Forestry Department and Altai Montane Forestry Bureau | Planning and management of wetland PAs; project execution of other projects under the framework at provincial level. |
| Altai Liangheyuan NR Management Bureau | Responsible for the management of Altai Liangheyuan NR and technically coordinate the biodiversity conservation in Altai Mountains watershed |
| GIZ, Wetlands International and national and local NGOs | Involvement in wetlands and biodiversity projects. Available for technical support, consultancies, training and monitoring. High capacity for grass roots action with local communities. GIZ undertake a parallel project at 4 sites that should be closely coordinated with this programme. Other potential CSO partners include the Altai Wildlife Conservation Association, forest protection unions, herder's unions, and ecotourism home-stay associations. A stakeholder advisory group will be formed to avoid duplication and ensure synergies. |
| Communities | Principal natural resource users in Altai Region. Community members are mainly Kazakh people, but also include other minority groups such as Tuwa, Mongol and Uygur people who also herd livestock in and around the nature reserves. The local community members will be involved in the planning of the project during the preparatory phase. Appropriate consultation will be undertaken to ensure community participation and their consent for the project. |
| 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 CBPF will provide a national platform to ensure strong coordination between approved and planned GEF biodiversity projects as well as other relevant initiatives of the Government and development agencies. This will be done through the CBPF Steering Committee and the Partner Coordination Group. The project will also build on the achievements of the UNDP/GEF supported Altai-Sayan Projects in Mongolia, Kazakhstan and Russia; such as an agreement has already been signed between two prefectural authorities in Mongolia and XUAR on law enforcement at the border points, thus facilitating cooperation. The lessons learned from these Altai-Sayan Projects will be distilled and applied in the project development work during the PPG phase. The project will complement the WB/GEF supported Mainstreaming Biodiversity Protection within the Production Landscapes and PAs of the Lake Aibi Basin (2009-2014) by strengthening the XUAR's PA system—which includes the Lake Aibi National NR—with a particular emphasis on developing wetland safeguard measures from sector activities. Coordination between the two projects will be assured through the Forestry Department and through the project steering committee where the project management office of Lake Aibi project will be included. 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 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.

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, targeting improvement in environmental governance in XUAR. UNDP investment will promote green development of the autonomous region, integrating poverty reduction and rural green economy development with improved environment and capacity to adapt to climate change. Support will be given to XUAR's environmental governance, including inter-agency collaboration for green development and strengthen the activities for carbon trade market. It will also support empowerment of rural communities to take environmentally friendly actions in their livelihood activities.

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 system 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 Ministry of Finance and 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 to 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 its 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) |
|--|--|---------------------|-------------------|
| Jiandi Ye GEF Operational Focal Point | Director: International Financial institution Division III, International Department | Ministry of Finance | 08/31/2011 |

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 |  | 10/13/2011 | Midori Paxton, Regional Technical Adviser – EBD, UNDP | +66- 818787510 | midori.paxton @ undp.org |

Annex 1: Map – Protect Areas in Xinjiang AUR

