



United Nations Development Programme
Country: China
PROJECT DOCUMENT

Project Title: Strengthening the effectiveness of the protected area system in Qinghai Province, China to conserve globally important biodiversity

UNDAF Outcome(s): Outcome 1.2. Policy and implementation mechanisms to manage natural resources are strengthened, with special attention to poor and vulnerable groups

UNDP Strategic Plan Environment and Sustainable Development Primary Outcome: Mobilizing environmental financing

UNDP Strategic Plan Secondary Outcome: Mainstreaming environment and energy

Expected CP Outcome(s): Low carbon and other environmentally sustainable strategies and technologies are adopted widely to meet China's commitments and compliance with Multilateral Environmental Agreements. Provincial capacities of key institutions are strengthened to implement global environmental commitments at regional level through integration of biodiversity and other environmental concerns into relevant policies and programmes involved.

Expected CPAP Output(s): Capacity to implement local climate change action plans for mitigation and adaptation, and sustainable development built.

Executing Entity/Implementing Partner: Department of Forestry, Qinghai Province Government, China

Implementing Entity/Responsible Partners: Ministry of Environmental Protection (through umbrella project China Biodiversity Partnership Framework for Action)

UNDP GEF PIMS 4179
GEF Project ID 3992

Brief description

As the fourth largest province in China, with a total area of 720,000 km², Qinghai serves as a significant store of the national biodiversity, exhibits unique high altitude grassland, mountain, wetland, desert and forest ecosystems, and serves as a significant controller of the Asian monsoon system that affects the climate of 3 billion people. The province includes the headwaters of three of Asia's major rivers – the Yellow, Yangtze and Mekong rivers. Although Qinghai lists 11 nature reserves totalling an impressive 31% of the territory, the existing protected area (PA) system lacks adequate balance and shows significant gaps in ecosystem coverage and contains extensive overlap with other interests such as road construction, water diversion plans and border community tenure rights. It also includes areas exhibiting serious land degradation resulting from a combination *inter alia* of overgrazing, engineering damage and climate change. Other problems facing the PA system include illegal gold mining and poaching, livestock fences interrupting wildlife migratory pathways, and aggressive pest control programmes aimed at small burrowing mammals but that also harm many collateral species.

Qinghai's PA system also lacks sufficient authority (legal status) to adequately plan and execute appropriate biodiversity conservation measures, should incorporate the biological needs of species and ecosystems as well as the concerns and participation of local people and communities residing adjacent to, the nature reserves in the province. In addition, the PAs themselves are severely under-staffed and under-funded. Although they perform a heroic role in extremely harsh conditions, the few staff present enjoy only poor work equipment, basic facilities and inadequate low levels of training.

This project seeks to strengthen Qinghai's systemic, institutional and operational capacity: (i) to ensure better integration and mainstreaming of the PA system into provincial socio-economic development priorities, in order to avoid conflicts of interest and ensure the PA System's long-term financial sustainability; (ii) to effectively plan, resource and manage an enhanced PA System, including *inter alia* to identify, prioritize and target gaps in ecosystem representation through PA expansion, or through complementary conservation efforts on the state land; (iii) to develop regulatory drivers and incentives framework to support PA establishment and management, as well as complementary conservation measures such as the establishment of genetic corridors; (iv) to support and expand (to establish more widely) and administer environmental stewardship programmes in traditional rangelands, wetlands and community forests based on lessons learned in initial trials with PA co-management to be developed in the project; and (v) to respond effectively to the needs and aspirations of, and to meaningfully involve, different stakeholder groups in the on-going planning and operation of the enhanced PA System.

The global environmental benefits of the project are represented by: (i) significant reduction in the number or extent of threats to global biodiversity from incompatible development projects; (ii) addition of an anticipated 250,000 ha of terrestrial landscapes under formal protection in the form of corridors and new PA territory; (iii) increased management effectiveness at PA level (from a METT baseline ranging from <27% to 57%, to a METT target of all PAs scoring >65%); (iv) improvement of overall PA institutional capacity (from a baseline of 36% in the Capacity Assessment scorecard, to a final value >60%); and (v) increased financial sustainability of PAs (from a financial sustainability baseline score of 31%, to final score of 50%) as a result of the project. Institutionalization and increased support for community-based environmental stewardship within PA System extends both the reach of environmental awareness programmes and the human resources necessary to achieve widespread conservation impact through local environmental monitoring and management.

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PAC Meeting Date	TBD

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GEF	US\$ 5,354,545
Co-Financing:	
Government in-cash	US\$ 14,602,900
Government in-kind	US\$ 3,746,100

Agreed by (Executing Entity/Implementing Partner):

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ACRONYMS

ADB	Asian Development Bank
APM	Assistant Project Manager
APR	Annual Project Report
ARR	Annual Review Report
AWP	Annual Work Plan
BD	Biodiversity
BSAP	Biodiversity Strategy and Action Plan
CAS	Chinese Academy of Sciences
CBD	Convention on Biological Diversity
CCICED	China Council for International Cooperation on Environment and Development
CDR	Combined Delivery Report
CEPF	Critical Ecosystems Partnership Fund
CHM	Clearing House Mechanism (under CBD)
CI	Conservation International
CITES	Convention on International Trade in Endangered Species
COP	Conference of Parties (e.g. of CBD)
CPAP	Country Programme Action Plan
CR	Critically Endangered (IUCN red list category)
CSP	Conservation Stewardship Programme
CTA	Chief Technical Advisor
EA	Executing Agency
EBA	Endemic Bird Area
ECBP	EU-China Biodiversity Programme
EIA	Environmental Impact Assessment
EN	Endangered (IUCN red list category)
EPB	Environmental Protection Bureau (under MEP)
EU	European Union
FAO	Food and Agriculture Organization of United Nations
FFI	Fauna and Flora International
GDP	Gross Domestic Product
GEF	Global Environment Facility
GIS	Geographical Information System
GOC	Government of China
IA	Implementing Agency
IBA	Important Bird Area
IAS	Invasive alien species
IPM	Integrated Pest Management
IPCC	Intergovernmental Panel on Climate Change
IR	(Project) Inception Report
ISS	Implementation Support Services
IUCN	International Union for the Conservation of Nature
IW	(Project) Inception Workshop
M&E	Monitoring and evaluation
MEA	Multilateral Environmental Agreement
MEP	Ministry of Environmental Protection
METT	Management Effectiveness Tracking Tool
MoA	Ministry of Agriculture
MoF	Ministry of Finance

MoU	Memorandum of Understanding
MTEF	Medium Term Expenditure Framework
MYFF	Multi-year Funding Framework
NBSAP	National Biodiversity Strategy and Action Plan
NEX	National Execution
NGO	Non-Governmental Organisation
NNR	National Nature Reserve
NR	Nature Reserve
NRDC	National Reform and Development Commission
NT	Near threatened (IUCN red list category)
PA	Protected Area (with 6 categories of PA under IUCN, including Nature Reserves)
PBB	Performance-Based Budgeting
PCU	Project Coordinating Unit
PD	Project Director
PIMS	Project Information Management System
PIR	Project Implementation Review
PIU	Project Implementation Unit
PM	Project Manager
PNR	Provincial Nature Reserve
PP	Plateau Perspectives
PPG	Project Preparation Grant (for GEF)
PPR	Project Progress Report
PRC	People's Republic of China
PSC	Project Steering Committee
PTR	Project Technical Report
PoWPA	Programme of Work on Protected Areas (of CBD)
PWC	Project Working Committee
QDF	Qinghai Department of Finance
QFD	Qinghai Forest Department
QPR	Quarterly Progress Report
RCU	(UNDP-GEF) Regional Coordinating Unit
RMB	Chinese currency (yuan)
SEA	Strategic Environmental Assessment
SECP	Sanjiangyuan Ecological Construction Programme
SFA	State Forestry Administration
SBAA	Standard Basic Assistance Agreement
SGP	(UNDP-GEF) Small Grants Programme
SGREPA	Snowland Great Rivers Environmental Protection Association
SLM	Sustainable Land Management
SMART	Specific, Measurable, Achievable, Relevant and Time-bound
SNNR	Sanjiangyuan National Nature Reserve
SO	Strategic Objective
SP	Strategic Programme
SRF	Strategic Results Framework
TBD	To Be Determined
TOR	Terms of Reference
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNDP-CO	UNDP Country Office
UNFCCC	United Nations Framework Convention on Climate Change

UNCBD	United Nations Convention on Biological Diversity
UNDAF	United Nations Development Assistance Framework
UNEP	United Nations Environment Programme
USD	United States Dollar
VU	Vulnerable (IUCN red list category)
WWF	World Wide Fund for Nature
Y1, Y2, etc.	Year 1, Year 2 , etc.
3-D	Three Dimensional

SECTION I: Elaboration of the Narrative

PART I: Situation Analysis

CONTEXT AND GLOBAL SIGNIFICANCE

ENVIRONMENTAL CONTEXT

Situated between 31°39' - 39° 19'N and 89°35' - 103°04'E, Qinghai includes most of the north-eastern part of the Qinghai-Tibetan Plateau (also known just as 'Tibetan Plateau') of western China. With an area of 720,000 km², Qinghai is the fourth largest of China's provinces and autonomous regions. In clock-wise direction, it is surrounded by Gansu Province in the north and east, Sichuan Province in the south, Tibet Autonomous Region in the south and west, and Xinjiang Uygur Autonomous Region in the west. It is named after one of the largest inland saltwater lakes of the world (and the largest lake in China).

The harsh environmental conditions of Qinghai – it is extremely cold, arid, and high – have made it one of the most sparsely populated regions of China. The estimated provincial population is 5.5 million people (with a high growth rate of nearly 10% including migrants). Approximately 46% of the people are from 54 recognized ethnic minority groups. The province is one of the least developed in the country: it ranked 27th in terms of the human development index amongst 31 provinces/autonomous regions and municipalities of China in 2007/08. Economic conditions in rural areas remain very poor. Communications are limited, educational levels are basic, health services lag far behind levels in urban areas and the income of rural citizens is on average only one third the mean income of urban residents..

Qinghai is a mountainous plateau bounded by the Altun and Qilian Mountains in the north and the Tanggula Mountains in the south, and traversed by the Kunlun Mountains in the centre and west. The largest part of the province, except for the Qaidam Basin, consists of mountainous areas interspersed with valleys and basins.

The mountainous region of the province stretches from the northeast of the province to the eastern, southern and western parts of the province. The mean altitude of this region is about 4000m. Most of the mountains attain elevations above 4500m and many are covered in snow or glaciers throughout the year. Below 2500m there are usually fertile soils in inter-montane basins where agriculture and larger habitations are concentrated. The main soil is alpine steppe soil which is thin, coarse and alkaline.

Southern Qinghai, from the Kunlun Mountains southwards, is the highest part of the province with an average elevation around 5000m. Many mountains reach a height of 6000 - 7000m and possess well-developed glaciers. This region is also famous as the source of China's largest rivers: the Changjiang (Yangtze River), Huanghe (Yellow River) and Lancang (Mekong). The upper streams of the Changjiang and Lancang Rivers are known in Qinghai as the Tongtian and Zaqu rivers, respectively. Areas near the river sources are generally well above 4000m with a gentle topography, whereas further down the rivers, deep gorges and canyons are common due to the heavy erosion.

The Qaidam Basin in northwest Qinghai is delimited in the north by the Altun Mountains and the western stretch of the Qilian Mountains, and it is delimited in the south by the Kunlun Mountains. General elevations decrease from around 3500m on the peripheral mountain slopes to 2600 - 2700 m at the centre of the basin, which is the lowest graben fault basin in the province. Succession of landforms follow each other, such that denudational mountains and hills occur at the periphery, then denudational and depositional gobi on the piedmont plains, followed by sand dune, yardang and, finally, salty marsh with sandy loam or clay at the centre of the basin. This is an important centre of mineralization and hence where large areas of sulphate chloride salt crusts are created. Numerous salt lakes including the Zaerhan Graben (the biggest in China) are interspersed through the basin.

The climate in the province is typical of continental high plateaus. It is dry, cold and windy, with a very long frigid winter and a short cool summer. Sunlight is plentiful, total annual hours of sun reaching 2200 – 3600 per year. Mean annual temperature ranges between 3.7°C and 6.0°C. Vertical stratifications of temperature and rainfall are apparent due to the extreme altitudes.

Total annual rainfall varies widely from less than 20mm at the centre of the Qaidam Basin to 300-400mm over much of the plateau, and over 700mm in some lower altitude forested areas of the province. Most of the rain (80 - 90%) falls between May and September. Thunderstorms and hail are common in the summer months. Due to the barrier effect of the lofty Tibetan Plateau to the southwest, the Qaidam Basin is almost completely cut off from maritime air masses and is thus the driest region of the Tibetan Plateau. There is a general increase in aridity from east to west. High winds and sandstorms often strike the province between February and April throughout the province.

29% of Qinghai is classed as high-altitude desert. The dominant vegetation types in Qinghai are the alpine meadows of *Kobresia pygmaea* on the high mountains and plateaus surrounding much of the province, and alpine steppes of *Stipa purpurea* and *Carex moorcroftiana* across the central parts of the province where there is less moisture at slightly lower altitudes. At very high altitudes (around 6000m), mainly on the Kunlun Mountains and towards the south, vegetation becomes sparse and composed largely of cushion-shaped species such as *Arenaria nusiformis*, *Androsace tapete* and *Thylacospermum* sp. The alpine steppe species *Ceratoides compacta*, an endemic to the Tibetan Plateau, is also commonly found in the alpine deserts on the lacustrine plains of the high Kunlun Mountains.

Along the southern edge of Qaidam Basin is an extensive stretch of saline meadows and, where rivers gather, swamps and salt marshes abound. *Koresia littledalei*, *Aneurolepidium dasistachyum* and *Polygonum sibiricum* are the common species. The basin proper is, on the other hand, a desert, predominantly with gravel and dwarf shrubs such as *Haloxylon ammodendron* and *Phedra przewalski* due to the extreme aridity. Forests are restricted in Qinghai, covering only 6% of the land area and consisting mainly of small scattered blocks of *Abies* and *Picea* on the western slopes of the Qilian Mountains. There are also areas of *Tsuga* forest in the south-eastern part of the province, primarily along the Huanghe or Yellow River.

With grassland coverage of 57%, Qinghai is one of the four main grazing regions of China, constituting 15% of the national available pastures. However animal productivity is often low, in part due to insufficient winter pastures (with low forage availability which may occur where there is inadequate division of land and consequent imbalance between seasonal pastures). The major livestock are sheep and yak, but horses also occur at lower altitudes. Domestic camels are not uncommon in the Qaidam deserts.

Many important wetlands cover 6% of the province including rivers, flooded grasslands, freshwater and saline lakes. These are the key habitats for migratory birds, and Black-necked Crane *Grus nigricollis*, Common Crane *Grus grus*, Tundra Swan *Cygnus cygnus*, Brown-headed Gull *Larus brunnicephalus* and Common Tern *Sterna hirundo tibetana* depend on such wetlands, with large summer breeding populations.

The extreme cold and arid climates and risk of salinization make Qinghai unfavourable for agriculture which occupies only 1% of the province's area. Farmland is mostly restricted to small areas along Huangshui and Yellow River valleys (in the east) and in the river valleys south and southeast of the Qaidam Basin (in the northwest). The system is single cropping of arid crops with cold-tolerant species. Spring wheat and ginkgo make up over 80% of the agricultural areas in the province. The main cash crop is cotton, which also supports a honey industry. Small amounts of other food crops (broad bean, garden pea and potato) are also grown.

GLOBAL SIGNIFICANCE OF QINGHAI'S BIODIVERSITY

Qinghai is a complex region and belongs to five major biogeographic divisions. They are, from north to south: Qilian Mountains, Qaidam Basin, Kunlun Mountains, Bayan Har Mountains and Southeast Plateau. Four of WWF Global 200 Ecoregions fall inside Qinghai, including the upper sections of the Mekong River ecoregion and Tibetan Plateau Alpine Steppe ecoregion. P. Conservation International's biodiversity hotspot, Mountains of Southwest China, also falls in Qinghai.

. Being an arid region and at very high altitude, Qinghai is not particularly rich in species but the flora and fauna form unique assemblages with a high proportion of endemic forms as well as economically valuable species. The Tibetan Plateau is often known as 'the roof of the world'. It is the remotest and wildest place in China and the only place where one can still see huge herds of wild animals migrating across a vast wilderness. This confers to the province high eco-tourism potential as well as high conservation importance.

. The province harbours more than 10% of the higher plant and vertebrate species recorded in China – with a total of 3,000 higher plant species and 465 vertebrate species (including 56 fish, 16 amphibians and reptiles, 290 birds and 103 mammals). The high level of endemism in the area: more than 50% of the plant species are endemic to China, as well as several fish and bird species. Birdlife International, for example, has identified Qinghai Mountains as a high priority endemic bird area (EBA) of the world and the northern Tibetan Plateau as an EBA of secondary importance. The latter area includes the biologically unique Qaidam basin, which is home for the endemic and vulnerable Rusty-necked partridge *Alectoris magna*.

. *Gymnocarpus przewalskii* and *Circaeastes agrestis* are two of the more important endangered plants of Qinghai. The province's extensive grassland ecosystems also support significant populations of globally threatened vertebrates such as the Wild yak *Bos grunniens*, Wild Ass *Equus kiang*, Tibetan Antelope *Pantholops hodgsonii*, Przewalski's Gazelle *Procapra przewalskii*, White-lipped Deer *Cervus albirostris*, Brown bear *Ursus arctos* and Snow leopard *Uncia uncia*. Several endangered wild sheep including Argali *Ovis ammon*, Blue sheep *Pseudois nayaur* and Ibex *Capra sibirica* are found in mountain areas as well.

. Rare and endangered (protected) birds include several narrowly distributed species that are adapted to steppe and desert habitats such as Pheasant Grouse *Tetraophasius obscurus*, Chinese Hazel Grouse *Tetrastes sewerzowi* and Chinese Monal Pheasant *Phoebastria immonis ihuysi*. Black-necked Cranes *Grus nigricollis* nest widely in the high grasslands and wetlands of the plateau. Qinghai Lake is a major breeding site for Brown-headed Gull *Larus brunnicephalus* and several important endemic fish. Qinghai Lake, Kaling Lake and Eling Lake are all listed as Ramsar Sites. The Qinghai Lake area is a key habitat of the Przewalski's Gazelle, and both the Sangjiangyuan and Kekexili PAs include breeding habitat of the endemic Tibetan antelope (also known as *chiru*). There are many geological, culturally sacred and scenic areas that also warrant protection in the province.

SOCIO-ECONOMIC CONTEXT AND LAND USE

. The total population of Qinghai is 5.5 million (2008) with a mean population density of only 7.6 persons per km² (in some grassland areas, the density is around 1 person per km²) compared to a national average of 135 persons per km². However the provincial population is very dynamic and the total number of people has risen 3.5 times above the level of 1952.

. This rise in population is largely due to immigration to urban areas. The urban population has increased 27-fold in that time whilst the rural population has risen only 2.1 times. The increase has also seen a swing in proportions of ethnic make-up, with the largely Han immigrants now more numerous than the original ethnic groups, which nonetheless still predominate in the rural areas. There are presently 3.27 million rural people in Qinghai. The main ethnic minorities are Tibetan, Tu and Hui (see Figure 1, below).

. As the province has only a very small agricultural area, its chief land-use is herding livestock, but the main economic earnings come from mining which brings little direct benefit to local rural populations. Other growing industries include tourism which does have some potential for benefitting rural populations.

. Perhaps the most valuable asset of the province is its ecological services – in the form of water catchment and regulation and climate regulation. However, these services are largely unpaid for by the many wealthier downstream communities and sectors (industry, hydro-power, irrigation and urban water users).

. Economic conditions in rural areas of the province remain very poor. Communications are limited, education levels basic and health services lag far behind levels in urban areas, and income of rural citizens is on average only one third of the mean income of urban residents (see Figure 2, below).

The rise in the provincial population has not been accompanied by an equivalent increase in agricultural production. The *per capita* production has been decreasing and more food has to be imported into the province. The *per capita* food production fell from 258 kg in 1990 to 184 kg in 2008, with meat production falling from 46.2 kg to 34.6 kg, and aquatic products from 0.8 to 0.5 kg. This contrasts with the enormous increase in mining production in the province: between 2004 and 2008, gold production increased from 2 to 103 tons (a 51.5-fold increase), coal rose from 2,490,000 tons to 9,330,000 tons (a 3.74 fold increase), and the excavation of building sand rose from 1,240,000 tons to 274 million tons (up 2.2 times) in the same time span.

FIGURE 1: ETHNIC MAKE-UP OF QINGHAI PROVINCE, 1952-2008 (AS PERCENTAGE OF PROVINCIAL POPULATION, BY YEAR)

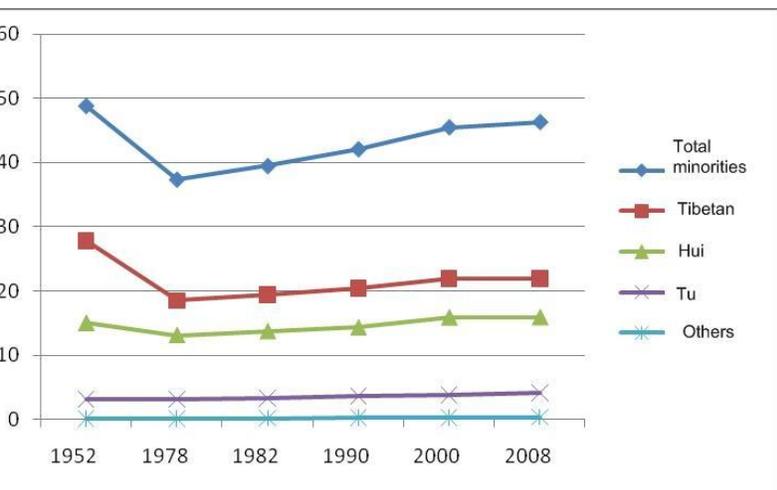
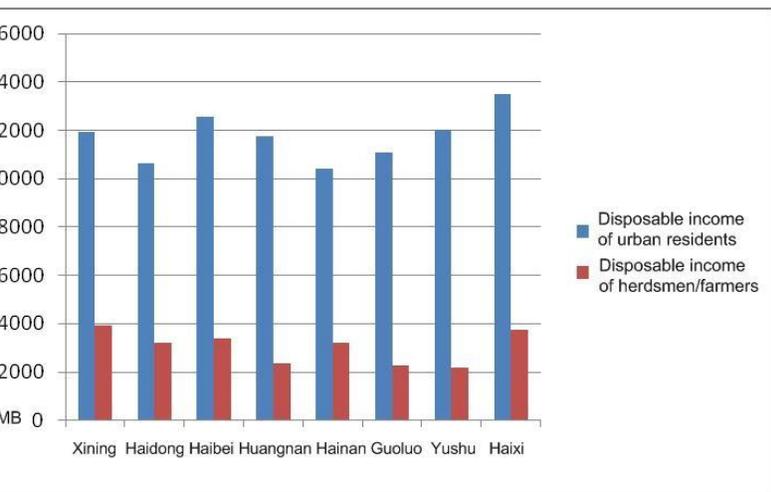


FIGURE 2: DISPOSABLE INCOME OF URBAN AND RURAL RESIDENTS IN QINGHAI PROVINCE (IN RMB PER ANNUM, BY PREFECTURE)



With only a small area of farmland in the north-east of the province, most of the province is classed as pasture (56%), unused land (34%) and forest (4%). As a consequence, herding is still the basis for the primary income of the rural population.

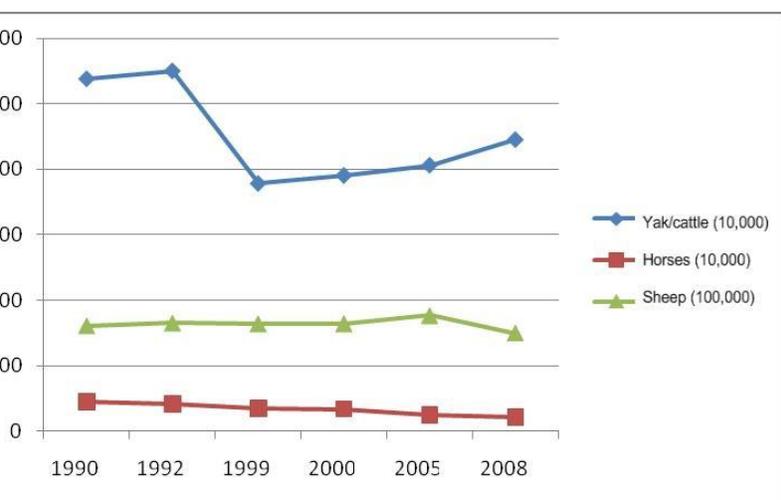
Livestock herds suffered severe losses in the early 1990s due to land degradation, severe winters and disease, and in some areas still have not recovered to those former levels (see Figure 3, below). Even so, the pastures show evidence of severe degradation as a result of over-grazing (either present or former) and it is estimated that herd levels are currently (or were un-

cently) about 30% higher than sustainable levels. Degradation poses threats to biodiversity, local livelihoods and the important ecological services delivered by the province.

In response, the government allocates many resources to ecological restoration and environment protection. A GEF financed project Integrated Ecosystem Management (IEM) and Land Degradation Control has been operating in the province since 2000. In addition, the provincial government manages a large-scale (7.5 billion RMB) national programme entitled Sanjiangyuan Ecological Construction Programme (SECP), comprising 22 projects related to ‘ecological engineering’.

A large earthquake (of magnitude 7.1 on the Richter scale) struck Yushu town on April 14, 2010, causing the death of over 200 people and destroying much of the town. The local and provincial government and other parts of the country have rallied around the people of Yushu and enormous funds are now being spent on the region’s restoration, including additional sums for ecological restoration. Some of the new physical developments may have marked impacts on the ecological protection functions of the Sanjiangyuan National Nature Reserve (SNNR), half of which (approximately) lies within Yushu Tibetan Autonomous Prefecture. There is also already collaboration between the reconstruction programme and the GEF/UNDP supported project “Emergency Biodiversity Conservation Measures for the Recovery and Reconstruction of Wenchuan Earthquake Hit Regions in Sichuan Province.” This project will similarly ensure full involvement of the Yushu reconstruction committee and its member institutions to ensure that reconstruction activities will not have major adverse impact on Sanjiangyuan NNR biodiversity, and rather will complement the PA strengthening activities supported in this project.

FIGURE 3: HERD NUMBERS IN QINGHAI PROVINCE, 1990-2008



PROTECTED AREA SYSTEM: CURRENT STATUS AND COVERAGE

In order to conserve its biodiversity and ecological functions, Qinghai has established a network of PAs comprising five National Nature Reserves (NNRs) and six Provincial Nature Reserves (PNRs). NNRs cover 202,524.9 km² and PNRs cover 49,100 km² of the province, jointly accounting for approximately 35% of the provincial area (251,665 km²). The PA system looks impressive (Table 1). However, in reality there remain gaps and challenges. For example, two of the PNRs, namely the Qaidam *Haloxylon* Forest PA and Qilian Mountains PA, covering 45,689 km², are listed as NRs but are without any designated boundaries or management structure; accordingly, these PAs are not shown on provincial PA maps (see Map 1, below).

These PAs are established under the Regulations on Nature Reserves (1994) and administered by the Qinghai Forestry Department (QFD), which reports to the Qinghai Provincial Government and the State Forestry Administration (SFA) in Beijing. There are two kinds of PAs in Qinghai - national nature reserves (NNRs) and provincial nature reserves (PNRs). NNRs must

proved by SFA and MEP and are generally allocated higher levels of funding and staffing and have an annual reporting duty to the SFA. The designation of a NNR status allows the PA to access funding resources from the central government (as well as provincial and local governments) for its management. Any park infrastructure development work planned inside NNRs requires central government permission. Central government funding is limited and usually only available for reserve ‘development’ or for specific ‘projects’. The burden of additional construction and on-going (regular) operations falls primarily on local sources. NNRs are designated as such, based on their global and national importance. The provincial government can make legislation and its own special management arrangements for provincial PAs but there are no differences between NNRs and PNRs in terms of permissible land and resource use inside such areas. Currently, there are no specific provincial level laws for PA management in Qinghai.

MAP 1: QINGHAI’S PROTECTED AREAS (2000) (SHADED BLUE)

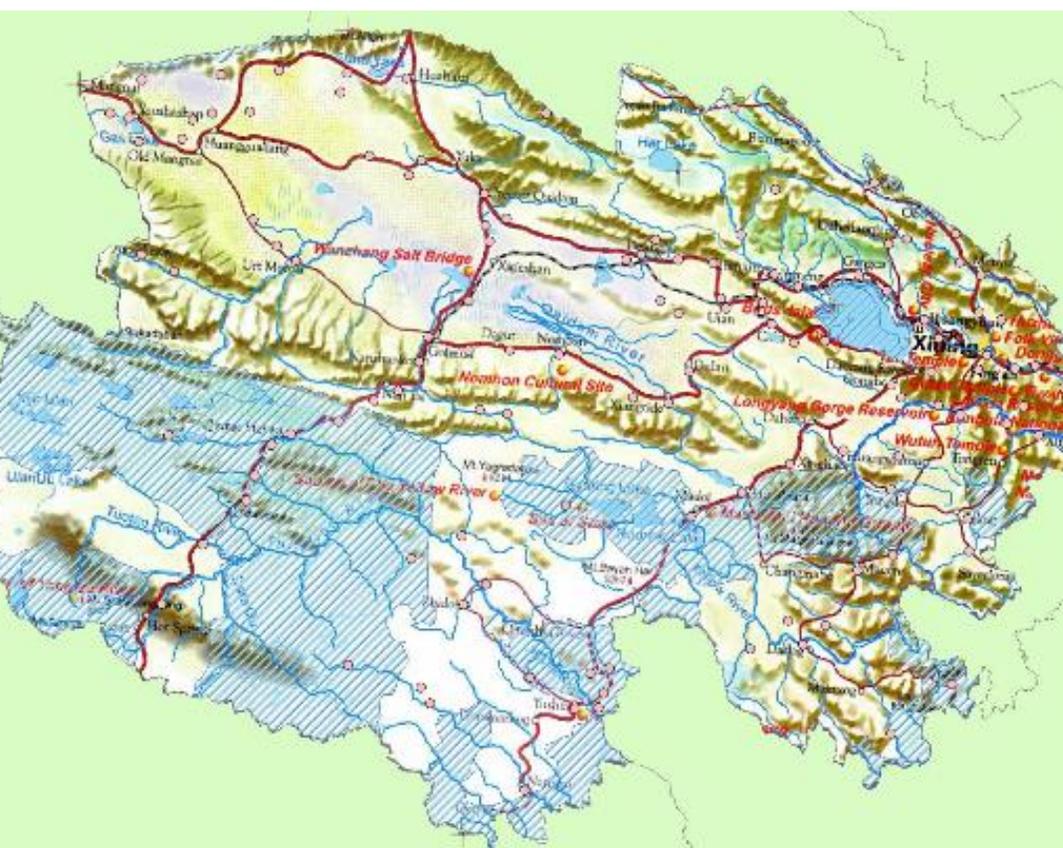


TABLE 1: QINGHAI’S PAS

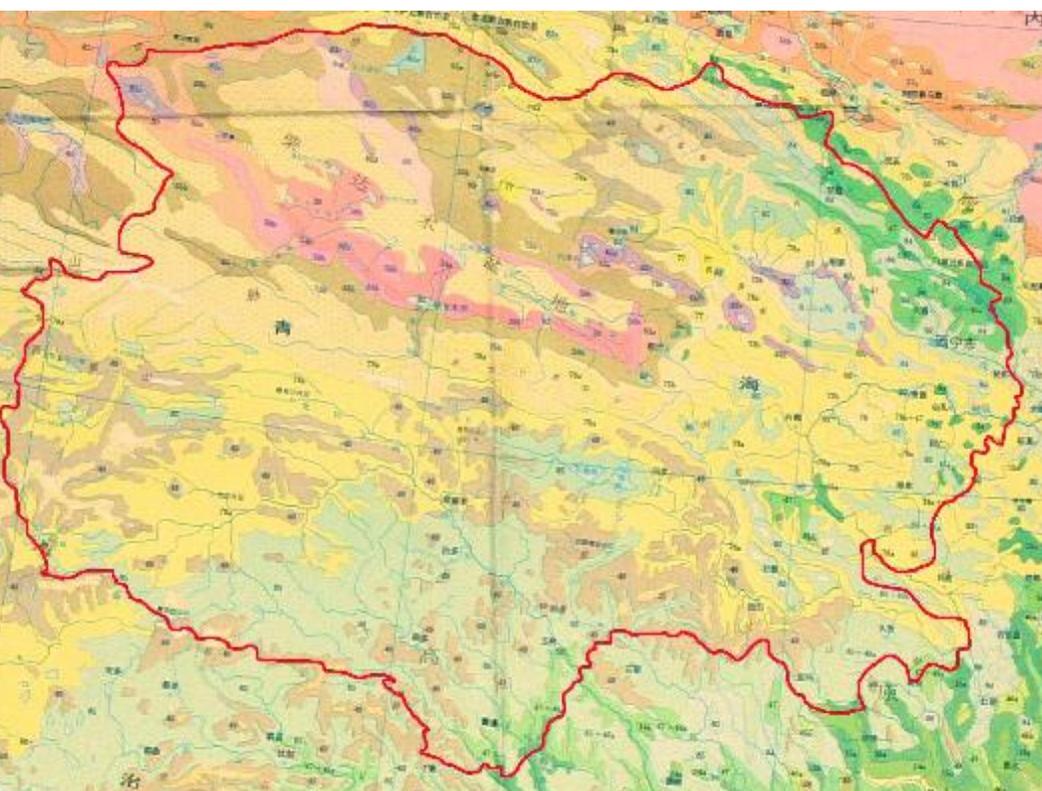
Title	National / Provincial	Counties	Area (km ²)	Year of gazette	Human population	International designation
Qaidam <i>Haloxylon</i> Forest *	P	Delingha City	37,345	2005	0	Part of IBA
Golmud <i>Populus euphratica</i>	P	Golmud City	42	2000	0	
Kekexili	N	Zhiduo County	45,000	1995	0	
Keluke Lake -Tuosu Lake	P	Delingha City	1,150	2000	No data	
Longbao wetland	N	Yushu County	100	1984	~200 families	
Mengda	N	Xunhua Salar Autonomous County	173	1980	No data	

Title	National / Provincial	Counties	Area (km ²)	Year of gazette	Human population	International designation
Qinghai Lake (Bird Island)	N	Gonghe, Gangcha and Haiyan counties	4,952	1975	Several hundred	IBA, part is Ramsar site
Sanjiangyuan	N	Zhiduo, Yushu, Nangqian, Chengduo, Zaduo, Qumalai, Jiuzhi, Banma, Maqin, Maduo, Zeku, Henan, Xinghai, Tongde, Geermu (Tuotuohe)	152,300	2000	Several tens of thousands	IBA, Ramsar sites
Datong Beichuan	P	Datong County	1,079	2005	No data	Part of IBA
Qilian Mountains*	P	Qilian, Menyuan, Tianjun, Delingha counties	8,344	2005	No data	
Nomuhong	P	Dulan County	1,180	2005	0	

Note: * indicates NRs that are listed but have no boundary or management structure at all.

(Source: CSIS, 2010 and QFD 2010)

MAP 2: VEGETATION MAP OF QINGHAI PROVINCE (SCALE 1:4,000,000)



NRs have been added on a case-by-case, *ad hoc* basis. There is no guiding systems plan and no clear policy about aiming representational coverage. The 11 existing NRs cover more than 34% of province's area, but they are mostly located in the south and highly biased towards plateau alpine grasslands and wetlands. Many other important ecosystems in Qinghai remain underrepresented in the PA system, especially forested areas in the Qilian Mountains, and the desert systems and salt marshes of the Qaidam basin¹. Provincial authorities are addressing these gaps and 2 large new reserves are now listed without boundaries. Out

Although Qinghai currently only has one type of PA (nature reserve), the term PA in GEF parlance includes 6 PA categories identified by IUCN. These may be managed by government, community or individuals.

vegetation types mapped on the national vegetation map of the Chinese Institute of Botany (Figure 5, below), only 13 types are included in the existing NNR network: Kekexili (6 types), SNNR (11 types), Qinghai Lake (4 types). A more detailed gap analysis is now possible with the new provincial level vegetation map which distinguishes 70 formations, allowing precise analysis of representative cover and systems planning.

There is a plan to create a Qilian forest PA linking to Gansu PAs on the other side of the provincial border, which was identified in a national review as one of the 40 priority areas in China for Biodiversity protection as early as 1992 (WWF, 1996) but remains uncompleted. The Qaidam remains a big gap in the PA network. This is a globally unique geological graben (collapsed plateau) with very distinct flora containing many endemic forms of resilient and potentially useful plants. The Qaidam basin is intermediate between the cold deserts of the plateau and the more arid deserts of Gansu and Xinjiang to the north. Whilst it formerly had wild camels, only domestic ones remain. The region is recognized as one of the global Endemic Bird Areas by BirdLife International and is the home of the endemic partridge *Alectoris magna*.

Although Qaidam is rich in mineral resources and slated as a development area, a representative nature reserve could be planned, without much effort or funds, in such a way that development of any discovered minerals could be permitted providing compensatory replacement of similar vegetation types become added for any exclusions required.

Of the 11 existing PAs, Sanjiangyuan NNR² is the largest and most important in terms of biodiversity and the vital ecosystem services it provides, as it encompasses the source area of 3 major rivers: the Mekong, Yellow and Yangtze.³ The 152,300 km² reserve covers more than 60% of the whole PA system in the province and is the second largest NR in China (nearly four times the size of Switzerland). It comprises six isolated sections (blocks) and falls within 14 different counties; in total, it has 18 units (conservation areas), each with its own set of core zone, buffer zone and experimental zone (see Table 2 and Map 3, below). The Sanjiangyuan NNR has an estimated 420,000 herding Tibetan residents in and around the NR, with 52 towns between or near its conservation areas (units). The reserve is of great importance for wildlife, wetlands, water catchment functions, and cultural values. Even the huge expanse of the reserve, different units include different habitats, wildlife and other features.

The SNNR's western unit in Geermu (Tuotuohe) forms an extension of the extremely harsh Changtang region of Tibet usually known as Kekexili in Qinghai. The large southern unit of Dangqu contains extensive marshy wetlands. Several units contain important lakes, notably the unit "Zhaling and Eling lakes" which is a Ramsar site. The Tongtianhe unit is an important riverine wetland, a breeding area for black-necked cranes. The extreme southern and eastern units are situated at relatively low altitudes and enjoy milder climates with forests in the valleys. Flagship species in the NNR include wild yak, Tibetan antelope, wild cat, snow leopard, brown bear, and black-necked crane. Although such an extensive nature reserve and PA system provides a foundation for protection of Qinghai's biodiversity and represents a valuable tool for conservation, there are growing challenges and new emerging threats. The PA system in Qinghai suffers from chronic underfunding and understaffing, which results in low level of management effectiveness.

TABLE 2: CURRENT MANAGEMENT PRESCRIPTIONS FOR DIFFERENT ZONES WITHIN NRS

Management Zone	Purpose	Management Prescriptions
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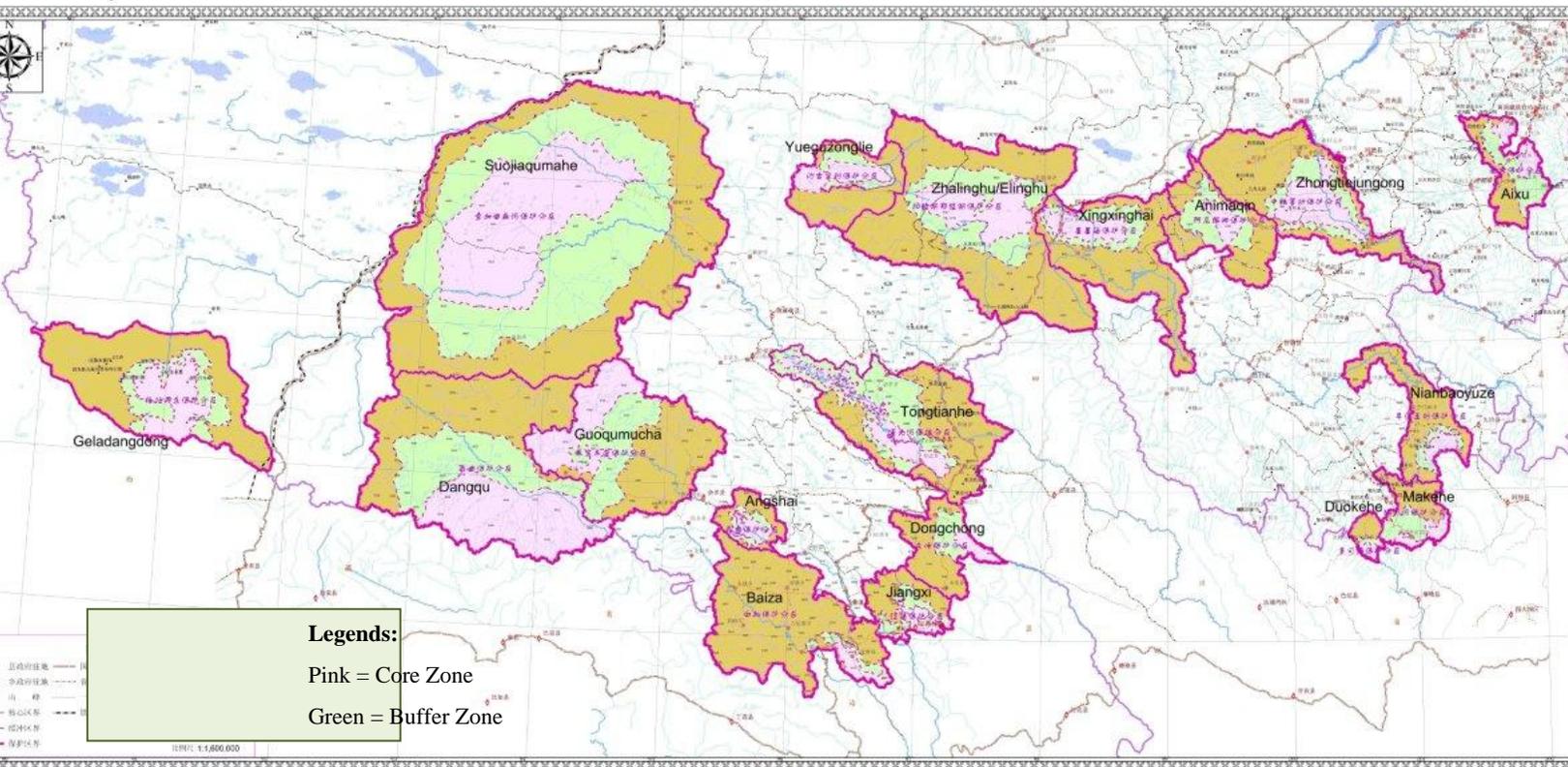
For more details, see the Sanjiangyuan NNR profile in Section IV, Part III.

It is worth noting that nearly 600 million people (over 40% of the population in China and over 9% of the world's population!) who live downstream are affected by or depend on the protection – and hence the long-term protection – of these rivers (and their associated watersheds) for their livelihood.

Core zone	To protect intact ecosystems where rare and endangered animals and plants are concentrated	<ul style="list-style-type: none"> No entry, except with special permission accorded for scientific studies. If necessary, people living inside are to be resettled. Construction of production facilities is prohibited.
Buffer zone	Area surrounding the core zone	<ul style="list-style-type: none"> No tourism, production or trading activities. Entry permitted on special permission for non-destructive research, collection, and educational purposes Construction of production facilities is prohibited.
Experimental zone	Area surrounding the buffer zone	<ul style="list-style-type: none"> Visiting and tourist activities allowed with special permission. Tourism promotion should not damage or pollute original landforms and scenery. Visiting and tourist projects that violate the general guidelines of NRs are prohibited Construction of production facilities that may pollute the environment or damage the natural resources or landscapes prohibited. Existing facilities are required to reduce and control pollution discharge to be within prescribed standards.

MAP 3: SANJIANGYUAN NATIONAL NATURE RESERVE WITH 18 UNITS (IN 6 LARGE BLOCKS), EACH WITH 3 DIFFERENT MANAGEMENT ZONES

Qinghai Sanjiangyuan National Nature Reserve. Management Units and Zoning 2010.



STITUTIONAL CONTEXT

The main agency managing PAs in Qinghai Province is the Qinghai Forest Department (QFD). This department has supporting duties both to the provincial government and also to the State Forestry Administration (SFA) in Beijing. PAs are divided into national level NNRs and provincial level PNRs. NNRs must be approved by SFA and MEP and are generally allocated high

levels of funding and staffing. They must report to SFA annually. The designation of a NNR status allows the PA to access funding sources from the central government (as well as provincial and local governments) for its management; any development work planned inside such reserves requires central government permission. Central government funding is limited and usually only available for reserve 'development' or 'projects'. The burden of additional construction and operations falls primarily on local resources. NNRs are designated as such based on their global and national importance. The provincial government can make legislation and its own special management arrangements for provincial PAs but there are no differences between NNRs and PNAs in terms of permissible land and resources use inside such areas. Currently, there are no specific provincial level laws for PA management in Qinghai.

Other agencies such as Ministry of Agriculture and Ministry of Environmental Protection may also establish NRs under existing national regulations. However, currently these institutions manage only two very small sites in the province.

Each NR requires a management bureau which is responsible for developing master plans for the development of the site, focusing in particular on securing budgets for developments, staff (full-time and hired), operations and other projects. The management bureau for the SNNR is based in Xining, but most other management bureaus are based in the largest county town concerned. Each NR bureau posts field staff in field offices (at county or sometimes village level) and must make appropriate negotiations with local communities to recognize and demarcate the boundaries and zones of the NR. They must also establish the land or resource uses permissible in the experimental zones (see "policy and legislative context", below).

Two forms of Collaborative Management have been noted in Qinghai Province:

- Community Co-Management (currently being trialled in Zhiduo County)
- Contract Conservation (currently being trialled in Cuochi community, Qumalai County)

An example of Community Co-Management is the on-going Snow Leopard Conservation Project in Muqu Village, which is being carried out as a partnership between the local community, SNNR and the NGO Plateau Perspectives. Local monitors have for several years been monitoring key snow leopard habitats and have documented their findings. Simultaneously, automatic camera traps have been trialled for comparative purposes, to determine the degree of overlap and/or complementarity of the two methods. Goals of the project include better understanding of the distribution and hence the conservation needs of snow leopard, supporting community efforts for wildlife conservation and raising environmental awareness in the region.

Under the Contract Conservation model, the local community is given nearly full autonomy in conserving wildlife and protecting the environment. If the agreed conservation targets are achieved, the community receives a small financial contribution which it can disburse at its own discretion. Generally, such funding is used for community purposes in health and/or education, and sometimes for social assistance (e.g., for community members in desperate need). It must be noted, however, that conservation targets must be agreed beforehand with the SNNR or other government authority. Thus this is not an example of independent autonomous decision-making, but rather (as with community co-management) a collaborative form of management.

Most land management and conservation rights belong to the government, including nature reserve authorities. Local communities therefore lack the authority to engage in conservation. But in the case of Cuochi village, by way of example, a special exemption has been made to trial a new form of PA management and conservation, namely Contract Conservation. The local community is given appropriate rights to manage natural resources for conservation. Through the process of carrying out a Conservation Stewardship Program, this new model of Contract Conservation has several key stages including a feasibility study, signing of conservation contracts, transfer of legal rights to local herder communities, implementation of contracts, and final project evaluation, followed by consideration of how to extend or scale-up the PA management model. More detail on the development of the model is provided in Table 3, below.

The provincial bureau of MEP has a mandate for overall coordination of biodiversity conservation. It is responsible for developing a provincial level Biodiversity Strategy and Action Plan (BSAP), under the recently approved National Biodiversity Strategy and Action Plan (NBSAP, 2010). MEP is also responsible for the development of EIA and SEA legislation to limit the negative environmental impacts of development activities.

POLICY AND LEGISLATIVE CONTEXT

5. All nature reserves in China are established under one administrative rule ‘Regulations of the People’s Republic of China on Nature Reserves’ (1994); there are no other supporting laws. To date, no consensus has been reached concerning the new legislation which was drafted recently. This results in a situation whereby the forestry department and other departments operate their conservation areas as they see fit, without uniform criteria for PA establishment, management standards or operational guidelines. This lack of legislation hinders effective management of the PA system.

6. The ‘Regulations of the People’s Republic of China on Nature Reserves’ allows for only one PA category (Nature Reserves). These can be established for three main objectives – wildlife protection, ecosystem protection or natural monument protection.

7. These Regulations are very restrictive and rarely match actual land-use patterns on the ground. Three zones are permitted: 1) the *core zone* with no use, habitation or interference permitted, apart from limited observational scientific research; 2) the *buffer zone*⁴, where some scientific collection, measurements, management and research are permitted; and 3) the *experimental zone* where scientific investigation, public education, tourism and raising of rare and endangered wild species are permitted. An external protection zone (which is a buffer zone in the usual international meaning of that term) may also exist, where the normal range of human activity is allowed, with restrictions only if those activities have damaging effects inside the NR.

8. All three zones would fall under the definition of strict nature reserve (1a) of IUCN’s classification of PA categories. None of the zones, according to IUCN’s classification, would allow even sustainable extraction of natural resources such as firewood, medicinal plants, game hunting, fishing or grazing. The current boundaries and zones of the SNNR are thus in contradiction with the Regulations, inasmuch as townships, small agricultural plots, fences and domestic grazing are present or occur across all three management zones.

9. The legal aspect of animal and plant protection is highly relevant to biodiversity conservation. China has at least 20 regulations and 4 laws in this regard, administered by multiple departments in a loose manner. The forestry department is responsible for the implementation of laws on wildlife protection, while the departments of agriculture, customs, commerce and public security are responsible for the rest. There are separate legislations regarding wild animals and plants: the wild animal protection only focuses on the conservation of species but neglects habitat protection, while biodiversity conservation stresses ecosystem integrity protection. The decentralized management model is fundamentally inconsistent with requirements for the integrated protection of biodiversity in China.

10. This gap in *national* legislation and coordination can potentially be compensated by *local legislation*. Provinces can enact local regulations tailored to specific needs that do not contradict national legislation. This has not been done in Qinghai to date. However, several other provinces (notably Yunnan) have drafted local laws as specific as regulating management of single PA sites.

11. Several reviews of shortcomings of the existing regulations point out that they do not permit restorative habitat management, wildlife management, make no allowance for community involvement in planning or management, provide no advice on controlling regulation of eco-tourism, make no reference to alien invasive species, and also make no reference to climate change. A more detailed review of the overall legal context is included in Annex 4.

⁴The term buffer zone in this context is confusing. Maybe a better term would be ‘protected buffer’ to be distinguished from ‘external buffer’ which is an area external to the PA and thus not formally protected, although requiring some limits on development options adjacent to a NR.

THREATS, ROOT CAUSES AND IMPACTS

. The globally significant ecosystems of Qinghai are fragile. Their constituent flora and fauna are under increasing threat from a number of factors.

. Habitat conversion: Construction of dams, roads and other development infrastructure has been undertaken without adequate coordination with PA authorities and sometimes without due consideration of environmental impacts. This poses direct threats to biodiversity, including roadside erosion, water diversions from important wetlands and peat extraction, as well as indirect threats (e.g. increasing access to resources within PAs, and increasing markets for unsustainably and/or illegally harvested products). Creation of new towns in connection with major environmental programs, associated with inadequate employment opportunities, may also lead to increased threats to biodiversity through poaching or over-harvesting of local natural products including e.g. caterpillar fungus, or *chongcao*, and/or wild animal products).

. Ecosystem degradation: Many pastures show evidence of severe degradation as a result of over-grazing and it is estimated that herd levels are currently (or were up to recently) about 30% higher than sustainable levels. Ecosystem degradation is also evident from excavations for construction and mining, increases in rodent or pika populations and climatic change (which can lead to expansion of areas dominated by unpalatable species). Some PAs in Qinghai have a large human population in and around the boundaries. For example, in the Sanjiangyuan NNR, several tens of thousands of residents follow a nomadic/pastoral lifestyle, and several towns exist between different blocks of the NR. Degradation poses threats to biodiversity, local livelihoods and the important ecological services delivered by the province.

. Overexploitation of natural resources: Unsustainable timber extraction from forests, wetland reclamation for cultivation, environmentally unsound mining and over-extraction of water are also threatening biodiversity. Many species of economically important medicinal plants are being over-extracted (such as the endemic medicinal plant *Rhodiola chrysanthemifolia*), while collection of others (such as the valuable caterpillar fungus) results in digging damaging holes in the turf. Poaching of wildlife has also led to rapid population declines of some species, such as Tibetan antelope (chiru).

. Climate change: The climate on the Qinghai plateau has been changing rapidly in recent years: it is becoming the globe's greatest heat receptor of solar energy. Average temperatures on the plateau are rising 2-4 times faster than for the rest of China, having risen 2°C in just 2 decades; the average temperature in 2009 was 1.5°C warmer than the average over the previous 20 years (see Figure 4, below). Half of this 'extra' warming effect is attributable to the loss of the insulating herb layer due to overgrazing. This results in exponentially accelerating melting of remaining glaciers, melting of permafrost, and spread of forests higher into the mountain. The melting of ice, warming of the plateau and upward migration of flora and fauna is a medium term natural process. In addition, the open plateau is a main driver of the Asian monsoon pattern. The low pressure that builds up on the plateau during summer draws winds from the surrounding oceans and brings rain to the agricultural lands of Asia (as shown in Figure 5, below). However, the recent great increase in the warming of the plateau is causing a devastating super-monsoon system, with increasing occurrence and intensity of cyclones, floods and droughts. A range of predictive climate change scenarios all point to significant changes in the distribution of forests, grasslands and alpine tundra on the plateau. This will dramatically affect not only the survival of wildlife but also the patterns of grazing on which the local human population is almost totally dependent. More details are available in Annex 4.

FIGURE 4: AVERAGE ANNUAL TEMPERATURES IN QINGHAI PROVINCE, 1961-2008

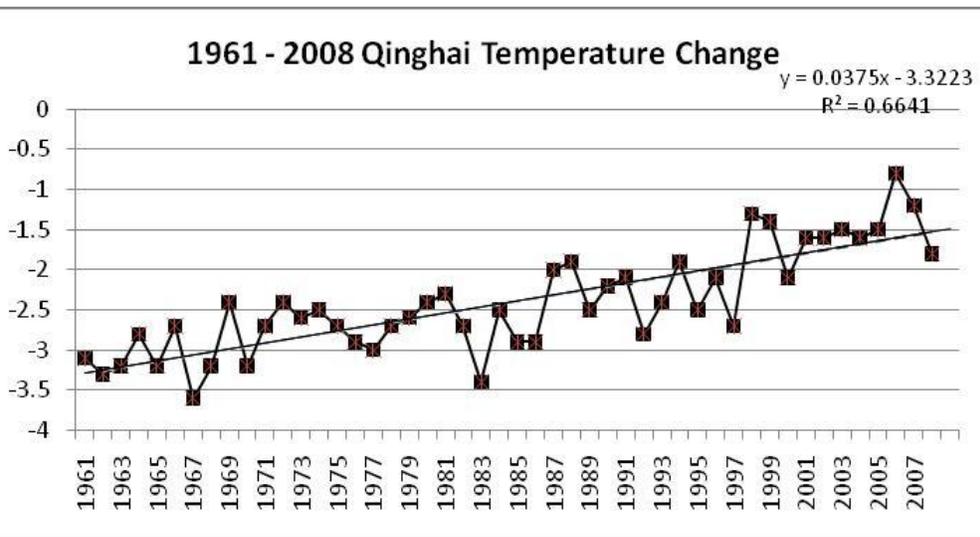
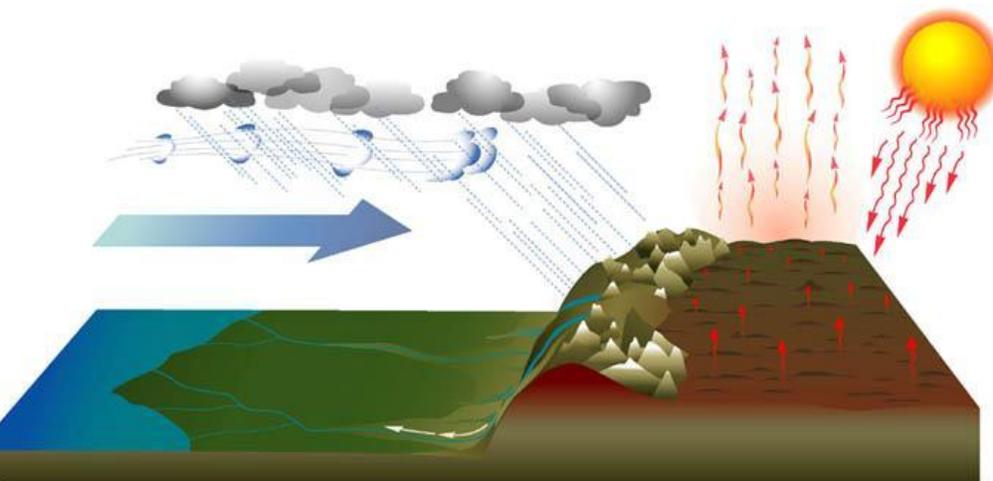


FIGURE 5: THE ASIAN MONSOON PATTERN



The threats to biodiversity in the province are promoted by a series of underlying causes. With increasing population growth and increased aspirations for higher levels of income, resources have been utilized in an unsustainable way (particularly grassland and wildlife, and medicinal plants harvested from the wild). Ecosystem degradation, particularly of grassland and wetlands, which serve as the most important water storage systems in the country, is the result of multiple layers of negative influences. In addition to those listed above such as overgrazing and occasional hunting by local people (mainly due to wildlife-human conflicts), many threats are also rooted outside, especially in the development initiatives with cross-sectoral government involvement. These include mining, grassland and animal husbandry development including privatization and fencing of leased land, road construction without consideration of ecological needs, and 'pest' control that is damaging to ecosystems. The specifics of the threats and the underlying causes vary with locality and ecosystem type. An overall matrix of threats and root causes is included in Annex 1 of this document. Long-term solution, and barriers to achieving the solution

. The long-term solution to the above issues is the establishment and effective management of a representative system of PA fulfilling its role for safeguarding globally significant biodiversity. This will not only ensure the survival of representative species but will also deliver a range of vital ecological services such as protection of the upper catchments of the three major rivers. Such a system should be underpinned by the following principles:

- Sufficient level of understanding and appreciation for the PA system and its vital roles in socio-economic development.
- Integration of the PA system and its objectives in the provincial and sectoral planning processes and their *modus operandi*.
- Adequate management knowledge and capacity should be available at different levels of government for future planning and interventions.
- The design of the PA system should meet immediate biodiversity conservation needs yet also allow for adaptation and range changes as may be needed for species facing a rapidly changing climate. Climate change will in turn dictate the types of pressures placed upon native biota as farming and forestry may become possible on a greater area of the plateau; grazing pressures will also change.
- The PA system should be designed and zoned in a way that creates minimum hardship and requires minimal adjustment to the economic activities (and further development) of poor local communities. It should ideally even bring greater economic opportunities, such as ecotourism or employment as PA staff or paid community co-management workers.
- In exchange for the ecological services provided by these catchment areas, downstream beneficiaries should provide direct or indirect eco-compensation to upstream regions and communities. This will create an incentive for local communities to maintain the ecological integrity of catchment areas and PAs.

. The province has made efforts in the above direction including listing of two NRs in 2005 which cover up to then underrepresented ecosystems, drafting a provincial Biodiversity Strategy and Action Plan (BSAP), and organising a programme to support herding communities' livelihoods within and around the NRs. Despite these advances, though, a number of barriers remain that prevent the establishment of an effectively managed and sustainable PA system in Qinghai, grouped in three categories: (i) disconnect between PA planning and management and provincial development and sectoral planning processes; (ii) inadequate resources and weak institutional and staff capacities for PA management; and (iii) limited participation and capacity of local communities in the context of environmental conservation, in particular PA planning and management.

Barrier 1: Disconnect between PA planning and management and provincial development and sectoral planning process

. No mainstreaming of PA and weak coordination and cooperation: Effective PA management in Qinghai is hindered by lack of mainstreaming of the PA system and its objectives in the province's development and sector planning process. The provincial 5-year plans and sector plans are the bread and butter of actual site level determination of land-use and development. This makes it critical to ensure that future development plans include clear strategy for enhancing effectiveness of the PA system and that they do not include projects and programmes that cause adverse impacts on PA management and on biodiversity and ecosystems within the PA system. At the same time, the provincial and local budget allocation is by far the most important financing source for PA management, covering the personnel and operational costs, which are the foundation for PA management. While national budget appropriation (only applicable to national NRs) is used only for specific project and infrastructure activities, without proper integration of PA system management in development and sector plans, the PAs will remain under-funded.

. Coordination and cooperation between different government agencies is also almost non-existent. Government agencies responsible for agriculture, livestock, environmental protection and water resources operate inside PAs alongside the local prefecture and county governments. These institutions tend to operate independently from PA management authorities, such as the IFD. Sub-provincial governments also plan and implement work inside PAs without due coordination or consideration for biodiversity conservation. The recently approved provincial biodiversity strategy and action plan also needs to integrate concrete strategy to ensure the PA system and its objective and functions will be optimised.

. Biodiversity-insensitive (negative) sector practices: The above has led to activities with negative biodiversity impacts. For example, large scale fencing of natural pastures inside and outside PAs (argued to increase forage production for domestic animals) has reduced grazing areas for wild ungulates such as wild yak, wild ass, gazelles (2 species) and white-lipped deer. Such fences also block migratory routes of Argalis and the Chiru, and sometimes cause injuries or death of wild animals. Even government programmes such as the Sanjiangyuan Ecological Construction Programme (SECP)⁵, a Central Government's major US\$ 1 billion investment programme aimed at protecting the water sources of the three major rivers and halting land degradation, have been largely construction-oriented and have not strengthened biodiversity conservation or PA management to date. The SECP started in 2008 and is expected to continue for another 10 years. There is an urgent need for developing official measures and standards for infrastructure development and operation and other activities within the PAs.

. Knowledge for Ecosystem Management represents another barrier. While much knowledge on climate, geography and grassland ecologies has been accumulated through research by academia and government bureaus, it has not been made easily accessible to decision makers and thus has not contributed to better management of natural ecosystems inside and outside PAs, within major programmes such as the SECP. For example, much engineering for road-making, laying of cables and collecting gravel and sand involves destruction of the surface turf. At high altitudes it takes several hundred years for new turf to develop. Meanwhile, without the turf protection, the land is open to rapid erosion. This could be avoided if turf were set carefully aside at the outset for re-laying when engineering works are completed. In another example, a massive campaign to poison the plateau pika has recently attempted to eradicate pikas from wide areas of the province, including much land within PAs. The plateau pika is a dominant mammal in the grasslands, considered by the Department of Agriculture as a pest that competes with livestock for forage and contributes to grassland degradation through burrowing. Many national and international ecologists, however, contest such assertions and recognise the plateau pika as a keystone species that contributes to grassland health, productivity and biodiversity and hence resiliency in the face of change.

. At the national level, MEP is developing a biodiversity information system. Software has been developed to handle biodiversity information on a transparent platform for public access and information purposes. Qinghai has been selected as one of the pioneer provinces, so there is likely to be some improvement in the holding and sharing of biodiversity data organized under the Provincial Environmental Protection Bureau. However, the system is not catered for the purpose of PA management planning and will need additional support for it to include PA management-oriented information. In addition, climate change impacts are already being felt in the region, with temperature increases accelerating, reductions in ice volumes in glaciers, drying up of small wetlands, and creep up of forest boundaries to higher elevations. However, such information is not widely available and thus has not yet contributed to effective plans, policies or management actions, such as delineation of PA zones or planning for future range shift needs of species.

Barrier 2: Inadequate resources, and weak institutional and staff capacities for PA management

. Weak legal basis and systemic capacity: These problems are exacerbated by weaknesses in the legal basis for PA development and management. Despite many laws and regulations relating to wildlife protection and management of forests, grasslands and other natural systems, there is no comprehensive law for the establishment of PAs. The PAs are established under Ministerial Nature Reserve Regulations only, making them vulnerable to pressure from other sectors with strong sector laws⁶. The Regulations on Nature Reserves provides for the process of establishing NRs at different administrative levels, setting broad criteria

Sanjiangyuan Ecological Construction Programme started in 2008 and consists of 22 different projects which fall into three main categories: 1) ecological protection and construction projects; 2) infrastructural facilities construction for farmer livelihood projects; and 3) ecological protection support projects. Several of Category 1 projects are of direct relevance to this project, specifically: turning rangeland to grassland; Reforestation of cultivated land; Control and restoration of deteriorated/degraded grassland; Prevention of fire in forest/grassland; Water and soil conservation; and grassland rodent control. The second phase of the Programme is expected to commence by the end of 2011, and it will also continue in the subsequent 13th Five Year Development Plan period beginning in 2016.

⁶ In China, laws are formulated and issued by the National People's Congress, the highest order in China's legal system. Regulations are formulated and issued by the State Council and provincial people's Congress, or some people's congress of autonomous prefectures and municipalities. Regulations are less powerful than laws. Decrees can be issued by government at different levels through departments.

for the NRs and indicating possible and prohibited activities in the three zones⁷. However, the regulations do 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 the word and spirit of those regulations. There is a possibility for a province to develop its own regulations and there also has been some examples of PA site specific regulations, however, Qinghai Province has not yet explored such options. Similarly, the compliance monitoring and law enforcement capacity is insufficient, with very few officers having policing mandates and without a system for reporting and analysing incidents.

5. ***Institutional capacity barrier:*** The Qinghai Forest Department's current institutional capacity to oversee multiple PAs and plan and manage a large PA like Sanjiangyuan NNR with many residents, which in fact requires landscape management beyond the PA boundaries, is inadequate. Capacity to make sound operational decisions, manage budgets, deploy staff and monitor the performance is also inadequate. There have been some comprehensive studies of Qinghai Lake and Sanjiangyuan NNRs, but the expertise is not mobilized into strategic planning, as departmental planners rarely invite academic experts to participate in the planning process. The Bureau is understaffed, with many positions not filled. There are approximately 160 staff in the QFD working for PAs, and it is estimated that staffing levels for PA management are between 8-15% of what is required. Each NNR requires a management bureau which is responsible for developing master plans for the development of the site, with focus on securing budgets for developments, staff (full-time and temporary), operations and other projects. The management bureau for the Sanjiangyuan NNR is based in the provincial capital of Xining, but most other bureaus are based in the largest county town concerned. Each bureau posts field staff in offices (at county or sometimes village level) and must make appropriate negotiations with local communities to recognize and demarcate the boundaries and zones of the NR. It must also establish the use of experimental zones, where certain types of resource utilization are permitted. Most PAs are understaffed: for instance, there are only 38 staff for the entire Kekexili NNR. Even the largest NRs like Sanjiangyuan NNR have no management plan (as compared to master plans, which focus instead on questions of financial investment; not on necessary actions for conservation management). The Sanjiangyuan NR has only 13 full time staff and 18 temporary staff, while there should be at least 300 staff to properly manage the vast area with many varied and complex interactions between ecosystems, wildlife and people/communities.

6. ***Financial barrier:*** Inadequate financing and suboptimal allocation of resources also hinder effective PA management in Qinghai. The Qinghai government invested US\$ 553 million in the PA system during the period between 2006 and 2009. Though the overall financing of PAs has been significant, the vast majority of this amount has been allocated to engineering projects (infrastructure such as roads and buildings), with only an estimated US\$ 1.18 million per year (i.e., less than 1% over four years) used for conservation work such as patrolling and afforestation, often without proper planning. It is estimated that, in total, the annual government investment for PA operation is only US\$ 2 million per year, whereas it is estimated that US\$ 6.6 million per year is required for the basic operation of the PA system in the province. For optimal level of operation/performance, it is estimated that US\$ 53.8 million would be required per annum. "Development" funds, such as funding from the SECP, are not guaranteed and mostly come from different central government programmes such as the "grain to green" (rangeland to grassland) programme, the "natural forest protection" programme, the national wetland restoration programme, etc. These funds do not cover staff salaries which are mostly covered by the provincial forestry bureau and by prefecture and county governments. In addition, investment is extremely skewed towards some NRs namely Sanjiangyuan NNR and Qinghai Lake NNR, with only 1.5% of the total investment allocated to the remaining 9 NRs in the province. Furthermore, despite seemingly large investment in, and priority setting towards Sanjiangyuan NNR, it still only receives a field operations budget of less than US\$ 80,000 per annum.

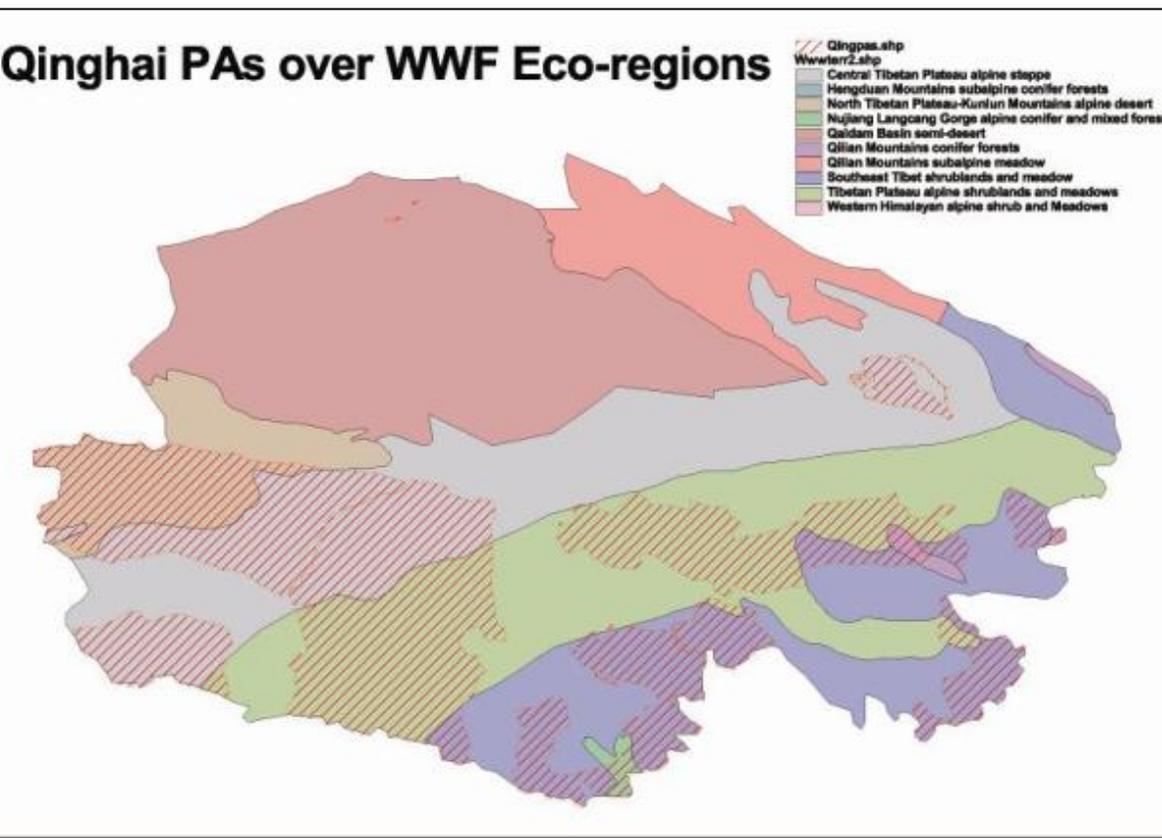
7. The underlying causes for the insufficient financing of the PAs are a lack of understanding of actual management needs and management costs, insufficient appreciation for the economic value of the PAs' varied ecological services as the 'water tower' and climate regulator of China and the Asia region. There is also insufficient appreciation within government and the general public of the value the PAs as some of the last remaining vast wilderness areas in the world, which are home/habitat for many international rare and endangered wildlife species.

Three management zones in the Regulations are: core zone (no entry except on special permission accorded for scientific studies), buffer zone (no tourism or trading activities and no construction or production facilities) and experimental zone (visiting and tourist activities allowed, construction of facilities are possible as long as it does not have negative effects on biodiversity.)

. **Individual capacity barrier:** At the sub-provincial level, on-the-ground PA management is the primary responsibility of field staff provided by local governments (prefecture and county). Such staff have almost no specific training in PA management and no job standards are applied (although such standards are available in Chinese and have been adopted in other provinces such as Yunnan). Many field staff have a limited mandate for legal enforcement: if they apprehend persons undertaking prescribed legal activities, they must hand them over to forestry police, who may be a considerable distance away. Most PAs also suffer from a lack of basic management infrastructure (such as field stations for field staff) and of adequate field equipment for surveillance and communication. Although past projects and government efforts have attempted to address some issues of institutional and staff capacity, they have been sporadic, unstrategic, largely dependent on external (once-off) support and site-based rather than systemic. Staff performance is also difficult to assess as PAs do not have management plans or business plans, making it impossible to monitor performance against PA objectives. In addition, the QFD division responsible for NRs lacks GIS capability to undertake elaborate systems planning and has only limited data management capability.

. **Biogeographical barrier:** There is also a serious geographical representational gap in the Qinghai PA system (see Map 4). Although the PAs cover a significant area, major gaps remain in coverage of important ecosystems – with 3 of 10 WWF Eco-regions found in Qinghai (PA1015 Qilian Mountains sub-alpine meadows, PA0517 Qilian Mountains conifer forests, and PA1324 Qaidam Basin semi-desert) not represented at all. The two paper NRs, Qilian Mountains PNR and Qaidam *Haloxylon* Forest PNR, were proclaimed in 2005 to improve representation, but to date there is no set boundary or any management structure or staff. Similarly, the current PA system includes only 13 out of the 30 vegetation types in the province (when the aforementioned two paper NRs are included).

MAP 4: QINGHAI PAS OVER WWF REGIONS



Effectiveness of NRs is reduced as a result of the limited funding mechanism options available to the Forestry Department. A wider range of PA categories could be piloted under provincial regulations, such as multiple use reserves, tourism reserves, genetic corridors, etc., and these could be financed by innovative involvement of private funds and eco-compensation systems. Some national government-led eco-compensation programmes exist, including Sanjiangyuan Ecological Construction Programme and Grassland Eco-compensation Programme. However, the use of such funding systems remains geared mostly toward engineering-oriented water schemes or some short-term measures; or toward reducing grazing pressure by relocating herders from towns, which is causing social problems as well as ecologically harmful effects such as undesirable fencing. The failure of the province to allocate sufficient resources for basic NR protection and monitoring operations is to a large extent a consequence of the low awareness of the importance and economic contributions that a well-managed PA system can deliver.

Barrier 3: Limited participation and capacity of local communities in PA management

As in other parts of China, Qinghai's PAs are composed of state and community managed lands⁸. Much of the pasture lands have been allocated to local households on 30-year contracts for management and use. Given the province's vast and sparsely populated area, the government's supervision of individual households' use of land and natural resources is largely ineffective. Therefore, effective PA management will depend on sustainable management of land by *local communities*. NRs were established either recently (1975-2005) and overlay pre-existing community rangelands, resulting in considerable potential for conflict between additional land-use rights and NR protected status. Finding solutions to this inherent inconsistency (with misunderstandings and disagreement) about user rights and governance remains a key challenge of the province.

In China, communities are allowed to be involved in management of government lands inside PAs through agreements with the government. However, there are no guidelines on community-based conservation and co-management of PAs providing clear definition of community use rights and responsibilities for such arrangements. Many pilot co-management schemes have been attempted in different parts of the country, including Qinghai, such as those supported by the large-scale EU-China Biodiversity Programme (ECBP) which were operating in several villages and townships from 2007-2010. Establishment of viable co-management schemes can take many years, but, this said, under the ECBP and other projects, six co-management agreements have already been reached in the province to date.⁹

Two main forms of Collaborative Management have been noted in Qinghai Province: (a) community co-management; and (b) contract conservation. An example of community co-management is the on-going Snow Leopard Conservation Project in Muli village, which is being carried out as a partnership between the local community, Sanjiangyuan NNR and a NGO. Local monitors have for several years been monitoring key snow leopard habitats and have begun to document their findings. Simultaneously, automatic camera traps have been trialled for comparative purposes, to determine the degree of overlap and/or complementarity of the two methods. Goals of the project include better understanding of the distribution and hence the conservation needs of snow leopards, supporting community efforts for wildlife conservation, and raising environmental awareness in the region.

Under the Contract Conservation model, the local community is given nearly full autonomy in conserving wildlife and protecting the environment. If the agreed conservation targets are achieved, the community receives a financial contribution, which it can use or disburse at its own discretion. Generally such funding is used for community purposes in health and/or education, and sometimes for social assistance (e.g., for community members in desperate need). It must be noted, however, that conservation targets must be agreed beforehand with Sanjiangyuan NNR. In the "contract conservation" model that has been applied in Cuochi village in Sanjiangyuan NNR, the community is given rights to manage or steward natural resources for conservation. Through t

⁸ These community managed lands are still owned by the State – as all land resources in China – but are leased to individual households for 30 or 50 years (depending on several variables).

⁹ The six co-management agreements are between QFD and the Hudong Sheep Farm (village), Haiyan County, Gangcha County and Gonghe County in the Qinghai Lake area (3 contracts) and Cuochi village and Junqu village in the Suojia-Qumahe conservation area of the Sanjiangyuan NNR (2 contracts).

contract-based stewardship programme, several key stages are followed as outlined above. More detail on the historic development of this community-based model, from *circa* 1999 to 2010, is provided in Table 3 below.

TABLE 3: MAJOR DATES IN THE TIMELINE OF DEVELOPING THE NEW CONTRACT CONSERVATION MODEL IN CUOCHI VILLAGE

99 -	Community mobilization, with significant local financial contribution (as well as livestock) to establish the village school and village clinic
00 -	Translation and dissemination of wildlife conservation regulations; anti-poaching group established; request for assistance/input from Plateau Perspectives and grassroots Upper Yangtze Organization (and later of SGREPA)
01 -	Site visit by Plateau Perspectives with community workshop, training about conservation and wildlife monitoring, support to village school and clinic establishment during this trip of Wildlife Monitoring Unit; Plateau Perspectives donation of 13 binoculars for wildlife monitors
02 -	Beginning of formal, regular monitoring of selected wildlife species (by local community decision)
04 -	Establishment of the grassroots organization, 'Friends of Wild Yak'
04-06 -	Community initiated and motivated monitoring of selected wildlife (wild yak) with support from the Snowland Great Rivers Environmental Protection Association (SGREPA)
06 -	Initiation of a Conservation Steward Program (CSP) by local community together with SNNR and SGREPA, with additional support from CI
06-09 -	Implementation (trial) of CSP with regular dialogue and interaction between community and SGREPA, oversight by SNNR, joint evaluation with SNNR and CI
09 -	Initial evaluations of CSP, with consideration of scaling-up the model

Despite the good progress made over the years, without rapid up-scaling of such approaches, the small conservation gains in some community co-management areas are unlikely to have sustained conservation benefits over a larger scale – particularly for wildlife species that seasonally migrate across the province¹⁰. However, the PA management authority's institutional arrangements and staff capacities are inadequate for rapid expansion of such co-management arrangements. Likewise, community institutional arrangements for such management do not exist in most places, and their capacities for effective management and legal enforcement are also weak. As such, the involvement of local communities in biodiversity conservation is at an early pilot stage and will require considerable strengthening and expansion to achieve significant regional conservation impacts. There has also been little involvement of other stakeholders such as local non-government organizations and private businesses in supporting conservation efforts to date.

It will be difficult to capitalize on the potential for co-management as long as there is general low awareness about the importance of healthy ecosystems among development practitioners, decision makers and local communities themselves. There is also insufficient sharing of lessons learned from on-going work, so that successful models can be broadcast, replicated, upscaled and institutionalised. In addition to needing government enthusiasm and policy direction explicitly promoting co-management, it may also be helpful to gain the support of local religious or other cultural institutions, formerly more involved in land management and these remain respected by local communities. Finally, local capacity is low in terms of technical know-how and local people have limited ability or authority to participate in the planning, operations and monitoring for biodiversity management. There is also generally limited availability of operational budgets and equipment to undertake such activities. Just as important, NR staff have poor understanding of the merits of community-based conservation and insufficient experience or capacity to provide support and encourage the participation of local communities in their conservation efforts.

¹⁰ Given that most wild animals move within and outside PAs, community management of lands within PAs alone will not reduce threats to many globally important species. Therefore, community management of lands outside (particularly adjacent to) PAs is also critical.

STAKEHOLDER ANALYSIS

Table 4 (below) lists government institutions, NGOs and private sector stakeholders for the project. However, it should be noted that the primary beneficiaries of adequate ecosystem protection on the Tibetan Plateau (in terms of population) are the millions of downstream water users (including farmers) who are dependent on the water flow from Qinghai's catchment areas. In addition, many millions of coastal dwellers in China and other parts of Asia also will suffer from harmful effects of global warming and sea level rises, which will continue to accelerate so long as the plateau grasslands' ecological functions remain compromised (degraded) due to anthropogenic and other causal factors.

TABLE 4: KEY STAKEHOLDERS AND THEIR ROLES AND RESPONSIBILITIES IN THE PROJECT

Stakeholder	Roles and Responsibilities
Qinghai Governor's Office	Leadership and coordination for implementation of the project
Qinghai Province Development and Reform Commission	Coordination and implementation of Qinghai's Development Plan, restoration of Yushu town and surrounding area (post-earthquake) and Sanjiangyuan Ecological Conservation Programme
Qinghai Bureau of Finance	Financial responsibility for the project, including compilation and submission of budget requests
Qinghai Forest Department	Day-to-day operational execution of the project Management of nature reserves, wetlands and wildlife
Qinghai Environmental Protection Bureau	Coordination of environmental issues, pollution, and CBD implementation and reporting
Management bureaus of major NNRs (Sanjiangyuan, Kekexili, Qinghai Lake)	Protection and management of NNR, visitor control and environmental education/awareness
Qinghai Forest Inventory & Planning Institute	Studies and planning within the forestry sector
Qinghai Bureau of Agriculture / Department of Animal Husbandry	Responsible for grassland utilization, health and management of domestic livestock, pest control programmes, also management of aquatic products (including fisheries)
Qinghai Department of Land and Resources	Supervision and promotion of exploration and the development of Qinghai's mineral resources (department can lead to environmental damage, can even prevent the establishment of NNRs in mineral-rich areas of the province, e.g. in the Qaidam Basin).
Qinghai Meteorological Bureau	Monitoring of climatic factors, models of climate change, effects on vegetation, etc.
Qinghai Water Resource Department	Water security (quantity, seasonality and quality) with particular interest in safeguarding the catchments areas of the Yellow, Yangtze and Mekong rivers
Qinghai Environmental Monitoring Center	Monitoring of environmental conditions in the province
Qinghai Fishery Environmental Monitoring Center	Monitoring of aquatic resources in rivers and lakes
Northwest Plateau Institute of Biology, CAS	Multi-disciplinary studies of Tibetan plateau ecosystems, including Qinghai Lake, Sanjiangyuan and Kekexili areas
Qinghai Academy of Social Sciences	Multi-disciplinary studies in socio-economic development, policy analysis, culture
Academic institutions (e.g., universities)	Sub-contracted research, specialist training workshops, post-graduate courses and programmes
Local target communities / project partners	Traditional management of grassland/rangeland, wetland and forest ecosystems Co-management and environmental monitoring in several parts of NNRs
Other local communities	Traditional management of grassland/rangeland, wetland and forest ecosystems Not formal partners in co-management, but communities with institutions from which the project can learn (e.g., forms of community governance, traditional use of biodiversity, pastoralism)
NGOs in Qinghai Province (e.g., SGRIPA, Plateau Perspectives)	Concerns for the environment, biodiversity, and/or the welfare of local communities
Other NGOs (e.g., Shan Shui, WWF, FFI, WCS, TNC, etc.)	Concerns for the environment, biodiversity, and/or the welfare of local communities

verage of this project. At national level, MEP has revised EIA and SEA regulations to include biodiversity concerns. However, these newly revised environmental regulations will need to be tailored to be more relevant to specific conditions in Qinghai.

. **Nature-based tourism:** Even without this project, several different forms of tourism development will take place. However, without the guidance of this project, such developments could easily be detrimental to ecosystems, wildlife habitat and biodiversity in general. It is also likely that such tourism/recreation developments will be externally driven, poorly regulated and without financial benefit accruing to local communities. Within the scope of nature-oriented tourism, there could also be suggestion of inappropriate wildlife or game hunting (which some elements of local government are keen to develop); but if ever this form of tourism were to be developed, it must be conservation-driven (with a strong monitoring programme of target wildlife populations, and explicit conservation goals), not be market- or tourism-driven. Inasmuch as eco-tourism is being developed (e.g., in Yushu and elsewhere in the province), this also remains poorly defined (it is generally confused with nature tourism) and it may not bring any benefit to conservation or local communities – ecotourism is about uniting conservation, communities, and sustainable travel.¹²

. **Financing of PAs:** Whilst funding for PAs throughout China is expected to increase in the next few years, this funding will focus mainly on physical infrastructure (town offices and buildings), rather than on increased staffing, field posts (stations) and operational costs. The current distribution of PA funding within the province is also very skewed, with two NRs receiving almost all of current funds available.

PA system planning and monitoring

. **Expansion of the conservation estate:** Over 30% of the province's land is already included in the PA system. Therefore, it would be difficult to justify creation of new major PAs, changes to the existing reserves or establishment of genetic corridors to improve climate change resilience without first undertaking a thorough systems review including ecosystem- or habitat-based gap analysis. In 2010, MEP developed a National Biodiversity Strategy and Action Plan (NBSAP). Following the successful development of provincial- and municipality-level BSAPs in several regions of China, MEP has subsequently requested that all provincial EPBs develop BSAPs. Without being informed by a full PA systems review (one of the activities under this project, and not otherwise planned), a BSAP for Qinghai is unlikely to adequately address PA development needs. Further development of the provincial PA estate also would likely remain weak due to critical shortages of staff, low staff capacity and insufficient funding.

. **Information and knowledge management:** At the national level, MEP is developing a biodiversity information system. Software has been developed to handle biodiversity information on a transparent platform for public access and to inform decision-making. Qinghai has been selected as one of the pioneer provinces, so there is likely to be some improvement in collection, storage and sharing of biodiversity data organized under EPB. However it is difficult to predict how useful such a data system will be for EPB's planning and management of the PA system, and it is likely to fall short of the information management system envisaged under this project (in terms of data to be collected, geographic coverage and quality/accuracy).

. **Biodiversity monitoring:** The baseline status of biodiversity (fauna and flora) monitoring remains very patchy. However, measurements (for example) of fisheries stocks, birds visiting and nesting at Qinghai Lake's Bird Island, and incidence of snow leopards recorded with photo-trapping at selected sites of interest to local communities and NGOs would all continue. Individual scientists and experts would continue to pursue their own taxonomic interests. Global monitoring of endangered species, trade, and wetland conditions would also continue. But there is no plan to institutionalise routine biodiversity monitoring at a provincial level and no plan to consolidate various elements of biodiversity monitoring that already are occurring.

. **Information management:** The Environmental Information System (EIS) will be maintained by Qinghai's Environmental Protection Bureau (EPB). However, without this project, the EIS will remain focused on EPB's primary concerns only, focusing most exclusively on pollution and physical environment issues.

The International Ecotourism Society defines ecotourism as "responsible travel to natural areas that conserves the environment and improves the well-being of local people".

Institutional capacity building

. **Strategic planning:** There is adequate technical (biological) expertise at the provincial level. For example, the Northwest Institute of Biology (NWPIB, under Chinese Academy of Sciences, CAS) has prepared comprehensive studies of Qinghai Lake and Sanjiangyuan NNRs. However this expertise is not mobilised into strategic planning, as department planners rarely involve academic experts to participate in their planning processes. Different departments also tend to plan independently of each other, resulting in lack of cross-sectoral integration of different plans and programmes. There are also insufficient social scientific studies on a variety of topics affected conservation outcomes, including *inter alia* inter-community comparisons regarding the sociological and other factors that may affect the success/failure of co-management initiatives. Such paucity of relevant sociological information will be redressed in part by the project.

. **PA staffing:** Staff levels are totally inadequate to patrol even existing nature reserves, let alone PA system expansion. QFD is also limited in its ability to hire new staff due not only to funding shortages but also to government structural arrangements. The chronic shortage will remain without specific inputs from external sources that tackle the substantial recruitment bottleneck.

. **Law enforcement capacity:** QFD field staff currently do not have powers of arrest, and community stewards (or wardens, wildlife monitors) have even less authority. Both groups are also handicapped by lack of transport, travel budgets, communication equipment and adequate training. This situation will not change unless it is specifically addressed by this or other similar projects.

. **Training activities:** The few staff currently working on PA management in Qinghai have a variety of training backgrounds (in administration, management, accounting, basic forestry, etc.), but there is no specific training in Qinghai in PA management, wildlife management, ecology, or biodiversity monitoring – and there are no plans to rectify this situation. ECBP and NGO projects have provided significant assistance for co-management initiatives from 1996 to present, but the largest component (ECBP) is now ending. Therefore, prospects for significant further training opportunities in co-management at a regional level remain low without the GEF intervention.

Public awareness and participation (including co-management)

. **Education and awareness:** Without the project, public education and awareness programmes will remain generally low key. Poster exhibitions, brochures, newspaper articles and films will form part of the general awareness programmes of SFA and ME. Visitor centres with interpretive displays will be maintained at Qinghai Lake's Bird Island Reserve and in Geermu (Golmud) town (representing the Kekexili NNR to the public). General programmes of wildlife and biodiversity are shown periodically on different national and provincial TV channels. However, such environmental education and awareness projects associated with wildlife and PAAs will remain largely unstructured.

. **Co-management:** Existing co-management initiatives will continue to depend on the long-term commitment and financial support of the concerned NGOs spearheading community-centred conservation projects. There is no opportunity to significantly upscale this approach without additional external funding.

Habitat restoration initiatives

. **Restoration of degraded land:** Under GEF and national programmes, very large budgets will continue to be expended on different types of ecological restoration and construction projects. However, most of this work is focused on engineering and not based on sound understanding of the local ecology or wildlife. Much of the construction of fences, control of pest species, water diversions, forest planting schemes and grass reseeding projects are in stark contradiction to the needs of biodiversity conservation, which requires a more hands-off approach to allow the natural environment to heal itself (to be restored to its equilibrium state, or its pre-disturbance condition).

Sanjiangyuan Ecological Protection and Construction Programme is a Central Government's major investment programme aimed at protecting the water sources of the three major rivers and halting land degradation. The programme's total investment is 5 billion RMB, 30% of which was expended by 2008. The programme consists of 22 different projects which fall in three major categories: 1) ecological protection and construction projects; 2) infrastructural facilities construction for farmer livelihood projects; and 3) ecological protection support projects. Several of the Category 1 projects are of direct relevance to this project, specifically:

- ✓ Returning grazing lands (rangelands) to grassland
- ✓ Reforestation of (marginal) cultivated farmland
- ✓ Control of deteriorated/degraded grassland
- ✓ Fire prevention in forests and grassland
- ✓ Water and soil conservation
- ✓ Grassland rodent control

Climate change research and adaptation

Climate change has become a growing concern of the government. It forms the basis of numerous international negotiations and national programmes for finding a 'green development' path forward. The lead national agency on climate change issues is the National Reform and Development Commission (NRDC), and China was the first developing country to publish a National Action Plan on Climate Change. The thrust of national efforts is on increasing energy efficiency, increasing proportions of 'green' energy and developing alternative energy sources. However the contribution of healthy ecosystems to better fixation of atmospheric carbon has given inadequate attention, and the impact of climate change on biodiversity is not specifically addressed.

In conclusion, baseline activities would be inadequate to significantly improve the current management effectiveness of, and the mitigation of threats to, the existing PAs in Qinghai. Public awareness of the threats to native habitats, wildlife and biodiversity will remain low and the value of PAs to the economy of Qinghai will not be optimized. Local communities resident in or near PAs would remain largely marginalised. Moreover, major engineering projects would proceed without consideration of implications for PAs, and the opportunity to tackle basic inadequacies in legislation and mainstreaming PAs and biodiversity into planning would be missed.

PART II: Strategy

PROJECT RATIONALE AND POLICY CONFORMITY

Consistency with the GEF Focal Area Strategy and Strategic Programme

The project is aligned with Strategic Objective (SO) 1 of the Biodiversity focal area, 'Catalyzing Sustainability of Protected Areas Systems'. The project will contribute to this SO by marginally increasing the spatial extent of protected areas in Qinghai and upgrading the status of some PAs from provincial to national level; but also substantially improving the spatial design and management effectiveness of the PA system; consolidating and strengthening the enabling legal, planning and institutional framework for the revision and effective management of terrestrial protected areas; and strengthening the capacity (strategies, tools, mechanisms, knowledge, skills and resources) to support the operational management and financing of PAs. More specifically, the project complies with the eligibility criteria for the Strategic Programme (SP3) on Strengthening Terrestrial Protected Area Networks. The focus of the SP is on ensuring better terrestrial ecosystem representation through filling ecosystem coverage gaps and giving the PA system greater resilience in the face of fast changing climate by maintaining connectivity between core areas allowing the gradual redistribution of component species of different plateau ecosystems. Ancillary support will be provided to improve the operational efficiency of the PA system. In addition to strengthening overall PA management effectiveness, the project's work to increase areas under co-management with local communities will, in effect, increase the area under effective

conservation management (this will be measured against control areas). The project’s work on building capacities will also include a component on sustainable PA financing, particularly on increasing cost-effectiveness through establishment of partnerships and increasing the involvement of local communities, which will contribute to Strategic Program 1: Sustainable Financing of Protected Area Systems.

2. The project will contribute to the achievement of GEF’s main indicators under this priority programming area as follows:

Relevant GEF-4 Strategic Program (SO)	Expected outcomes	Relevant GEF-4 BD Indicators	Project contribution to GEF-4 BD Indicators
Strengthened terrestrial protected Area networks	Improved ecosystem coverage of under-represented terrestrial ecosystems as part of provincial / national protected area system	Terrestrial ecosystem coverage in provincial and national protected area systems	Proportion of major vegetation types represented in NNR PA system raised from baseline of 43% to 75%
		Connectivity of ecosystems	Genetic corridor system in place
		Changes of status of threatened species	Threatened species maintain or improve Red List status
		Area of habitat under sustained use	Percentage of land within selected pilot sites rated as sustainably used raised from baseline <i>circa</i> 10% to 80%
		Trends in alien species	AIS remains low threat despite changing climate
	Improved management of terrestrial PAs	Protected area management effectiveness as measured by individual PA scorecards	METT scores of state protected areas increase from a mean baseline of 40% to all PAs >70%
			Financial sustainability scorecard increases from 31% to >50%
			Capacity development scorecard increases from a baseline of 44%, 29% and 22%, to 75%, 65% and 60% for the systemic, institutional and individual PA capacity development scores, respectively

3. China’s commitment to PA development and biodiversity conservation is also evident in China’s early signature to the Convention on Biological Diversity (CBD) in 1992, and many other conservation conventions (CITES, Ramsar, etc.). China has remained steadfast in its commitments under CBD and in particular with activities under article 8 (*in situ* conservation; including especially sub-articles 8 (a-e) regarding protected areas and landscape conservation, and articles 8 (i-j) regarding sustainable use of natural resources, local communities and traditional knowledge). A very extensive national system of protected areas has already been established. By 2010 China had established over 5,000 PAs covering more than 18% of the national territory.

Rationale and summary of GEF Alternative

4. The project will directly target the previously described barriers through a series of steps that aim to enhance PA system effectiveness. The global and national biodiversity significance of Qinghai’s PA system, its vital role as the catchment area for three major rivers, the nature and severity of on-going threats to the PA system and the persistence of important barriers limiting effectiveness have led the Government to prioritise and present this project for GEF support.

5. The focus of the project is to redesign the PA system in Qinghai to better protect a representative sample of its unique biodiversity and more effectively manage this PA network as a whole. With GEF support, interventions at the level of Qinghai PA system will (i) strengthen the enabling legal framework, incentives and participative mechanisms, and mobilize necessary investments to support the expansion and effective management of the PA network; and (ii) strengthen the institutional and human resource capacity to establish and maintain an effectively managed PA system over the long-term and support the cost-effective and sustainable management of PAs by building up their operational capacities, and generating investments, to manage threats

biodiversity at a PA site level. To reach such goals, the project will seek to help direct provincial strategic planning, policy-making, legislation, funding, tools and incentive structures towards more active biodiversity management through the provincial PA system and link PA development priorities with the priorities of other sectors by recognizing, promoting and optimizing the true value of PAs within the socio-economic development of the province and with beneficiary downstream provinces. The project will also (i) promote and upscale models of community co-management within PAs in selected demonstration areas in the Sanjiangyuan NNR.

6. In recent years, conservation grants have been awarded to various individuals in Qinghai under the ECBP programme. They included a warden grantee, Aheluo, who promotes awareness and active conservation of Przewalski's Gazelles near Qinghai Lake. Another grant recipient was the bird-loving monk, Zhaxi Sange of Baiyu monastery in Guoluo Tibetan Autonomous Prefecture. He organized a team to protect the local Tibetan buntings, has written and illustrated a book on Qinghai's birds, and made a film about the plight of the vanishing Himalayan griffons. The search for, and support of, such local champions is another clear option the GEF project should pursue. Involvement of existing respected community/cultural leaders can form a good, solid foundation for engaging and partnering with local communities resident in areas of high biodiversity and environmental conservation value.

7. A range of institutions will be involved in the project, including experts from provincial academic institutes, NGOs active in the province in the field of biodiversity conservation, and other government departments concerned with the delivery of ecosystem services originating in PAs, such as the Water Resources Department, Tourism Department, and provincial Ecological Restoration Leading Group. Details of these agencies and their roles in the project are included in the Stakeholder analysis (Part XI). Broad partnerships for conservation will be promoted through GEF involvement, compared to the original "business as usual" scenario.

PROJECT GOAL, OBJECTIVE, OUTCOMES AND OUTPUTS/ACTIVITIES

8. The project **goal** is to strengthen the effectiveness of the PA system in Qinghai Province, China to conserve globally important biodiversity. The project objective is ***to catalyse management effectiveness of Qinghai's PA system to fulfil its purpose in conserving globally important biodiversity***, by removing the barriers mentioned above with three inter-related outcomes. The focus of the project is to strengthen the PA system in Qinghai to better protect a representative sample of its unique biodiversity and more effectively manage this PA network as a whole. With GEF support, interventions at the level of Qinghai PA system will:

i) **Mainstream the PA system and its objectives into provincial development and sector planning framework**, develop a comprehensive PA system plan with climate change adaptation strategies, and establish a knowledge management system to support biodiversity-sensitive decision-making in various sector activities and PA planning and management, strengthen the enabling legal framework, incentives and participative mechanisms, and mobilize necessary investments to support the expansion and effective management of the PA network;

ii) **Strengthen the institutional and human resource capacity** to establish and maintain an effectively managed PA system over the long term and support the cost-effective and sustainable management of PAs by building up their operational capacities, and generating necessary investments to manage threats to biodiversity. This implies directing provincial strategic planning, policy-making, legislation, funding, tools and incentive structures towards active biodiversity management of the Qinghai PA system, and linking PA development priorities toward optimizing the true value of PAs in the socio-economic development of the province and beneficiary downstream provinces.

iii) **Promote and upscale models of community co-management in PAs** in selected demonstration areas/communities within Sanjiangyuan NNR. Co-management activities would support enhancement of PA effectiveness through increased community participation and co-ownership of natural resources and their sustainable utilisation, improved data collection storage and analysis, and development of appropriate compensation plans for continued or enhanced provision of ecological services.

9. A range of other institutions will also be involved in the project, including experts from provincial academic institutes, NGOs active in the province in the field of biodiversity conservation and other departments concerned with the delivery of ecosystem services from the PAs, such as the Water Resources Department, Tourism Department and the provincial Ecological Restoration Leading Group (synonymous with steering committee) consisting of provincial and local government departments and

specialists. Details of these agencies and their roles in the project are included in the Stakeholder Analysis section of this document (part XI).

0. Activities under these three outcomes will be focused at three levels of intervention: (i) the provincial level, through working with public institutions and agencies to develop the systemic, institutional and individual capacity to revise, plan and effectively supervise the PA system; (ii) at the site (or unit) level, by developing strong model management plans and enhancing staff management capacity for selected PAs; and (iii) at the local level, through working directly with target stakeholder groups and local communities in the *in situ* implementation of PA co-management activities.

Outcome 1: Mainstreaming PA management objectives and needs into the provincial development and sector planning

Process (Total cost: 8,450,000 US\$; GEF 550,000 US\$; Co-financing 7,900,000 US\$)

1. Designed to tackle barrier 1, this component will focus on building an inter-sectoral mechanism to mainstream protected area management objectives into provincial and sectoral policies and plans (such as agriculture, land use, meteorology and infrastructure development planning with sub-provincial local governments). Through such a mechanism, indicators will be developed to periodically assess the status of Qinghai's ecosystems. This coordination mechanism, along with a strengthened Provincial Government guided by a cross sectoral provincial leading group will ensure that different sectors continue to plan and implement their actions in a biodiversity-friendly way. The Provincial government's capacities for effective monitoring and enforcement to avoid/mitigate threats to PAs from activities of sectoral agencies will be also built through the use of biodiversity information tools, Strategic Environment Assessment and EIA. Capacities will be also built to develop the government's ability to use such tools. The outputs necessary to achieve these outcomes are described below.

Output 1.1: Inter-sectoral coordination and planning mechanism established to integrate PA systems and objectives into development and sectoral planning process

2. Work under this output will focus on the establishment of a cross-sectoral planning body to ensure the PA system and objectives are fully mainstreamed in the provincial development and sectoral planning. It is recommended that rather than creating a new body, revision should be made for the terms of reference of an existing cross sectoral planning body such as the provincial Leading Group for the Sanjiangyuan Ecological Construction Programme. It should be considered whether the Leading Group could also play the role of the Project Steering Committee (PSC). This will ensure that the plans developed under this project can smoothly mainstreamed into larger development and sectoral plans at provincial level. This would include recently developed provincial level Biodiversity Strategy and Action Plan (BSAP) as required by the Ministry of Environmental Protection and the Qinghai Development Plan based on National 5-year Plans. Although the provincial BSAP is a responsibility of the Environmental Protection Bureau (EPB) of the provincial government, it is important to ensure that the systems plan and specific NR management plans to be developed under Outcome 2 of the project are fully integrated into it. The BSAP may thus ensure the sustainability of project progress and achievements in Qinghai for many years beyond the project lifetime. Undertaking awareness activities to ensure that the existence and function of the coordination body (PSC) is well known should include a website, newsletters, media releases and distribution of key documents and guidelines. The main targeted audience includes relevant departments of provincial government, the media and general public. For rural areas, awareness products should also be translated into the local languages.

Output 1.2: Institutional capacity of the provincial government built for monitoring and enforcement of biodiversity management to avoid/mitigate threats to PAs

3. This output aims to build the institutional capacity of the provincial government to ensure mainstreaming of the PA system for effective implementation of biodiversity management and to avoid or mitigate threats to the NRs. The most effective way to ensure cross-sectoral mainstreaming is to add strong provisions for inclusion of biodiversity and PA concerns into EIA regulation and EIA planning and practical regulations or guidelines for undertaking engineering works (road-making, underground cable bridges, quarrying) in fragile ecosystems. Although the national EIA and SEA regulations have been recently reviewed to include biodiversity aspects, there is a need for a provincial level regulation which safeguards NRs catering for unique and fragile ecosystems of the Qinghai plateau. For example, the soil profile on the high plateau is particularly fragile, requiring long recovery

ne (hundreds of years in some cases) once the turf is disturbed. Therefore, there should be local regulations relating disturbance and after-operations replacement of the turf layer in all engineering activities. Stakeholder participation mechanisms in the EIA process will also be strengthened.

4. Another essential tool for raising institutional capacity for monitoring and enforcement of biodiversity management is the development and use of practical regulations related to engineering work. Infrastructure development sector specific standards and measures for safeguarding biodiversity within NRs will be developed. Operationalisation of the standards and measures will be supported through establishment of the enforcement section within the provincial government and training of the personnel in this section. In addition, policy and practice in livestock and grassland management, especially with regards to fencing and control of yaks and other 'pests', will be reviewed; and standards and measures for safeguarding biodiversity will be developed.

5. In order for the QFD to be able to make the best use of mainstreaming tools that are developed under output 1.1, compliance monitoring and law enforcement mechanism will be strengthened at the provincial level. In addition, the province level biodiversity and ecological condition monitoring indicators will be established. A selection of suitable indicators will be identified for monitoring biodiversity, ecological conditions, management effectiveness and socio-economic conditions. This will involve a workshop of experts to come up with an agreed list of indicators (key species, vegetation cover, social and economic data, climate data, water table, water flow data, etc.) that should be routinely monitored, and identify responsibilities and reporting requirements. The theme should include monitoring at provincial and sub-provincial levels. A monitoring programme will also be developed and operationalised, making sure responsible agencies have adequate funding, equipment and training to perform their respective roles.

Output 1.3: Establish a knowledge management system, including climate change resilience monitoring component

6. Work under this output is designed to harness and add to local capacity to collect, manage and analyse environmental and biodiversity data to form a platform for planning and decision making in the province. Many of the components are already in place at the provincial level, but are currently scattered between research institutes, different management bureaus and NGOs.

7. A GIS based Biodiversity Monitoring Database will be developed, comprising species inventory, status and trends of key species, vegetation conditions, climatic and physical information, essential information about individual NRs, incident monitoring systems to address wildlife crimes, and development programmes and activities/socio-economic information. A set of variables to assess climate resilience of Qinghai ecosystems will be developed and a monitoring system will be established. Province-wide biodiversity monitoring baselines and procedures will be developed with participation of different data holders. Gaps in information availability will be identified, and plans for filling the gaps will be devised. This could include targeted research, for instance, on the impact of fencing, control of putative pests, wildlife abundance and distribution, grazing pressures and pasture conditions. Agreement will be reached on reporting and information sharing protocols between different provincial agencies such as the EPB, QFD, Chinese Academy of Sciences' Institutes and sub-provincial monitoring units at county and NR level.

8. The necessary hardware and software will be put into place, and training, network, data flows, data sharing protocols and data reporting forms necessary to operationalise the database will be developed. Collaboration of several existing institutions (EPB, Northwest Plateau Institute of Biology, CERN, Department of Aquatic Products, Department of Meteorology) is envisaged and should constitute government contribution to the project. The database should be accessible online so that duly cleared information can be accessed by any user, linking existing sub-databases. The database should accommodate the flow of new data from the field-based monitoring to be implemented under the project and include a legal incidents database. A monitoring guidelines booklet will also be developed, including sections for data management at different levels – community, NR, provincial, etc. – and data sharing and reporting protocols.

9. This is a large and complex activity that will require periodic follow up and supervision. It should be undertaken as a service contract, awarded to a qualified NGO or institution. Strong GIS capacity is essential. Training will be provided for database developers and managers within the provincial government.

Outcome 2: Increasing PA management effectiveness through strengthened systemic, institutional and staff capacities

Total cost: 5,610,000 US\$; GEF 1,510,000 US\$; Co-financing 4,100,000 US\$).

0. This component will focus on systemic, institutional and staff capacity building of the Qinghai Forest Department and associated prefecture and county level forest bureaus (and other bureaus, as appropriate; since NR field staff are seconded from a variety of local government bureaus including grassland and animal husbandry bureaus at county level) for effective PA management, especially the SNNR bureau that administers the largest PA in the province. The project aims to streamline institutional arrangements so that not only are staff hired at prefecture and county levels for PA management trained regularly, but they have planning and reporting responsibilities that are common to all other PA management staff. Competence standards will be established to serve as the basis for training, promotions and appointments. A provincial level PA institutional strengthening plan will be developed that will define issues such as staffing; accountability along the decision-making chain; administrative processes; financial and human resources development and management; and optimal budget allocations. The project's work on improving PA operations at the landscape level will ensure that staff, equipment and other resources will be used optimally. Appropriate guidelines will be developed for management and business planning, effective enforcement, policing, reporting, survey/ monitoring, and participatory/collaborative management. As far as possible, capacity building will be done through practical "learning-by-doing" and with peer support. A particular focus will be placed on strengthening prefecture level and county level PA staff. In addition, staff capacities will also be developed for promoting community-State co-management of PAs.

1. Given the importance of sustainable financing of PAs, the project will identify and strengthen the overall legal, policy, regulatory and institutional arrangements for financial planning, revenue generation, and revenue retention at site and PA system level. It will also strengthen business planning of PAs to ensure more effective use of scarce resources and help identify and complement additional streams of financing. A business case for the PA system will be developed that defines economic benefits which will be used as a tool for mainstreaming activities under Output 1.1. Roles and responsibilities of different institutions at different levels of government, and costs of PA functions (for planning, policing, monitoring, and enforcement) will be defined. Efforts will be made to justify greater leverage of eco-compensation payments to be directed towards rewarding ecosystem stewardship within the PA system. Innovative financing mechanisms will be explored including inviting private enterprise to manage and fund PAs suitable for eco-tourism. The focus is on enhancing the management effectiveness of the existing PA system which will help guide planned expansion or revision as developed under the PA systems plan. This component will also be strongly linked with component 3 below, which deals with demonstration.

2. A PA systems plan will be developed to identify overall needs for further protection, including anticipated needs to ensure the PA system is better able to sustain itself in a changing climate. This is expected to lead to the realignment of the PA system, to present 22 out of the 30 major vegetation types and adding at least 200,000 ha to the existing PA system and an additional 100,000 ha of co-managed areas. The outputs necessary to achieve these outcomes are described below.

Output 2.1: Systemic capacity strengthened for effective PA system management

3. This output will fill the gap in national legislation through developing and enacting the PA specific provincial regulations for the SNNR, given its critical nature for China's water security and regional climatic stability. The PA specific regulations will include provisions for, *inter alia*: (a) community co-management, defining community use rights and responsibilities as well as participation mechanisms for PA management and decision making processes; (b) ensuring adequate level of staffing and management facilities; (c) establishment of new protection zonation categories such as community reserve, genetic corridor across wetlands forests and rangeland, privately managed areas, and nature tourism areas; (d) establishment of sustainable financing mechanisms; (e) EIA and SEA guidelines that are tailored for the ecological and socioeconomic conditions of the SNNR, with clear mechanisms for participation by resident and neighbouring communities; (f) guidelines for IAS response and for pest control; (g) regulations on presence and/or types of fencing in different PA zones; and (h) climate change adaptation needs of the NR, which should also be mainstreamed in the regulations.

4. In addition, this output will establish a system of policing records from the province down to county level. A database designed to accommodate offence records and links to police/court cases will be established. Greater policing mandate may

anted to NR staff and designated co-managers, and a policing report form will be designed to allow numerical analysis. Such system would allow managers to monitor the effectiveness of law enforcement efforts and focus attention more accurately on where greater enforcement or alternatives is needed.

Output 2.2: Institutional strengthening plan adopted and operationalised

5. An Institutional reform plan will be developed by a suitable institutional expert. This consultant should review PA institutional capacity and suggest reforms needed to streamline operations, clarify roles and responsibilities and encourage high standards of performance. The review should look at existing roles and responsibilities, areas of overlap, conflicts or gaps, ways to improve coordination, reporting needs, financial needs and opportunities, staffing level, in-service training, career structure and standards, operational procedures. The institutional strengthening plan should be integrated with output 2.1 in order to ensure that identified possibly new functions are fully integrated in the institutional strengthening plan. There needs to be close links between this output and outputs 2.5 and 2.6, to ensure adequate financing for optimal institutional set up and training activities. Ideally PAs should enjoy the support of a strong alliance of synergetic agencies rather than be the sole responsibility of single weak institutions. Based on the management effectiveness tracking tool and capacity scorecard assessment conducted during the PPG work under this output will focus on identifying and rectifying current weaknesses and shortcomings in institutional organisation and management. IUCN toolkit for PA management self-assessment (<http://data.iucn.org/dbtw-wpd/edocs/PAG-006.pdf>) will also be useful for guiding the process. Once areas in need of strengthening are identified, a stepwise plan will be developed to outline necessary actions including identification of training needs.

Output 2.3: Budgeting and resource allocation improved directly addressing threats to PAs

6. Financial assessment under PPG revealed big gaps in financial allocations for PA development and operation. Many PAs receive only a fraction of what they realistically need for basic operations such as patrolling, monitoring and law enforcement. In tandem with output 2.2, work under this output is focused on ensuring that budgeting is done based on the actual needs on the ground and that budgets available for PAs are directed efficiently to operational essentials rather than 'showy' facilities. For this project will support a thorough review of annual budget planning and allocation process to identify areas for improvement and actions that are necessary. In tandem with the management planning under 2.6, the project will also support costing of PA system management activities and development of a convincing official budget request document motivating for increased operational funds based on the results of this output (2.3).

Output 2.4: Business case justification shows economic benefits from PA functions

7. The project will undertake an economic valuation of ecosystem services delivered by PAs in Qinghai and work these results into a proper business plan which will identify novel financing mechanisms for PA operations including better use of eco-compensation mechanisms e.g. from downstream water taxation. Work under this output is intended to strengthen the justification for protection policy and help leverage greater payments from eco-compensation initiatives that could be used to motivate and reward local communities for good environmental stewardship. It is necessary to put both the PA needs (inputs) and multiple services and opportunities (outputs) onto a clear business footing to allow cost-benefit analysis. This will help encourage private and sectoral investment in improving PA protection and will clarify key items that should be monitored.

8. Work under this output is intended to strengthen the justification for protection policy and increased government investment in PA management. It is also intended to help leverage greater payments from eco-compensation initiatives that could be used to motivate and reward local communities for good environmental stewardship. The project will support development of a PA system business plan which will estimate management costs of the PAs and PA system, and develop a plan to meet the required costs by identifying novel financing mechanisms for PA operations. Such mechanisms will include introduction of tourism concession systems, tourism tax, and better use of eco-compensation mechanisms e.g. from downstream water taxation. The business plan should also evaluate the potential of other types of revenue such as eco-tourism potential, advertising rights and promotion, carbon credits, branding of local products, access payments from railway, roads, underground cables, power lines etc. across PAs, towards the objective of achieving financial sustainability of the PA system. In support of the business case, building on previous ecosystem valuation work in Qinghai, the project will undertake an economic valuation of the PA system. It will identify and quantify

economic values of a range of ecosystem services or opportunities delivered by the PAs such as economic benefits from tourism. The results will strengthen the business plan, putting both the PA needs (inputs) and multiple services and opportunities (outputs) on a clear business footing, thus allowing for a comprehensive cost-benefit analysis to be made.

9. This work can be combined into a single consultancy or undertaken in specialized parts, but all must be closely coordinated. Better evidence is needed of the value of economic services especially in terms of water catchment security, water quality, carbon storage as peat and carbon fixation in grasslands and in forests, to serve as leverage for negotiations with national authorities and downstream beneficiary provinces to secure greater eco-compensation payments to Qinghai and a greater share of those payments for the local communities responsible for good ecosystem governance. The insulation role played by grass and other vegetation in reducing heat absorption of the plateau should be evaluated as a contribution to climate change mitigation. The business plan should also evaluate the potential of other types of revenue across PAs (as outlined above), towards the objective of achieving financial sustainability of the PA system. Awareness activities are required to broadcast the results of these analyses to help government planners, financiers and the general public better understand the need for investment in NR and PA protection.

Output 2.5: PA staff skills raised with 200 PA staff meeting occupational competence standards

10. PPG reveals that not only are staff way below requirements in numerical terms, they also lack basic training. With the QP committed to increase the number of the staff to an appropriate level, generic competency standards that have been developed at national level by CCICED can be quickly adapted to provincial requirements. Work under this output is designed to put in place an effective system of competence standards. Adoption of such standards will raise capacity of PA management staff, and also will serve as a basis for identifying training needs. Adoption of promotional guidelines based on the standards will give a career structure to the PA service, and raise morale through application of a fairer skills-based promotional system.

1. Based on the agreed competency standards, a training programme will be developed with implementation of a series of training workshops and/or courses supported. Several different training targets have already been identified including biodiversity monitoring, law enforcement techniques, community-based conservation and co-management approaches to conservation, specialized database management skills, and vehicle maintenance. Some training might also be undertaken in/with universities in the provincial capital, Xining, supported by additional organizations or institutions as necessary.

2. Support for further development of post-graduate training opportunities in the province is also encouraged. Where institutional capacity is sufficiently developed (e.g., at Qinghai Normal University/QNU) to deliver relevant workshops, courses and other learning opportunities in conservation, wildlife management, community development, local governance, etc., the forestry department and other relevant government departments would send PA and other staff for upgrading and/or they would target graduates from this programme for recruitment. Shorter courses would also be developed and included in the programme for field staff upgrading, possibly with subsequent (follow-up) distance learning approaches and related technological innovations employed. Also in support of effective PA management and biodiversity conservation in Qinghai, the establishment of a Research Centre focused on sustainability and its socio-economic and environmental foundations is recommended. One or more sister institutions of higher learning will assist in the necessary planning and development of this Centre, such as DICE (Durrell Institute for Conservation and Ecology) at University of Kent in Canterbury, UK (DICE/UoK and QNU already have reached in principle agreement for such a conservation training, teaching and research venture). As necessary, other co-financing mechanisms will also be pursued; e.g., Ford Foundation has expressed interest in supporting QNU with Plateau Perspectives for post-graduate course development in the province, and University of Kent may seek additional financial support from UK DEFRA through the Darwin Initiative. With the input of a senior Plateau Perspectives consultant, who as CTA in a UNDP/FAO project assisted in the establishment of the Wildlife Institute of India (WII) in the 1980s (WII trains all senior PA management staff within India's forest department) and more recently in the development of a conservation management MSc programme in one of Myanmar's major universities, initial outline of the structure, purpose and expected outputs of this Research Centre in the Tibetan plateau region has already been adopted in principle by a provincial university.

3. Specialist skills also needed in the project include training in community co-management and use of participatory 3D modelling for conflict resolution. The latter approach involves organising villagers to construct 3D models of their own land

based on detailed GIS topographical maps. The activity of making the models and then colouring the surface to reflect land cover, ownership, trails, waterholes and other significant sites has been found to be a break-through approach in getting local community interest and participation and can serve as a valuable tool in then negotiating zones, fence lines, harvest areas, quotas and other terms of conflict resolution (see http://www.iapad.org/participatory_p3dm.htm or download manuals from http://www.iapad.org/publications/ppgis/p3dm_arcbc.pdf).

4. A staff recruitment programme will be organised to substantially increase staff numbers (both full-time and temporary) to fulfil the required functions identified under output 2.2. Evaluation of staff will be put in place to identify deficiencies where skills need to be developed

Output 2.6: Develop the PA Systems Plan including climate change considerations

5. Although only a desk study, the PA systems plan is an important output of the project and a key ingredient for strengthening the PA system as well as mainstreaming the PA system into other provincial development plans. Expert consultant(s) in PA systems design will work together with a team of provincial planners to undertake a provincial PA systems review. Starting from the near policy objective of what is expected from the provincial PA system, the consultant should analyse the current distribution of PAs, distribution of species, habitats and NRs and review how well it meets this objective. Gaps in coverage of major ecosystems, species and areas where gap-filling new PAs may be required should be identified. The review should comment on the boundaries and zones of existing PAs in relation to biodiversity needs and the socio-economic context.

6. The climate change adaptation needs of biodiversity and ecosystems will be fully integrated into the PA system plan. Available climate change scenarios and prediction on impacts and vegetation/animal responses will be closely reviewed, and the PA system adaptation strategy and appropriate genetic corridor design will be developed. Genetic corridors aim to allow for animal migration needs and gradual species range shifts in response to changing climates. The plan will suggest amendments to the boundaries and zones of PA system and identify critical connectivity points where genetic corridors are needed. In most cases corridors will comprise fence-free zones linking core areas of different PAs or different sections of a PA. In some cases they may require habitat restoration. In cases where corridors are required across or beneath roads, railways, around dams or other engineering structures, these should be incorporated into the engineering designs. Better understanding of the insulation effect of vegetation cover and relations to carbon storage is required to guide policy on grazing levels over the SNNR. To this end, the project will fund small-scale research of differential grazing impacts on micro-climate.

7. The ultimate product of the above activities is the provincial level PA Systems Plan with a concrete action plan, including plans to ensure inclusion of PA support and investment in the 13th 5-year plan and the Sanjiangyuan Ecological Construction Plan.

8. In tandem with the PA system planning, up to three NR management plans will be developed for the SNNR and other priority PAs (Kekexili, Qinghai Lake and/or Mengda). Management plans should have a component of costing of the management and clarification of inputs necessary to implement the management plans. Given the vast size of SNNR, the management plan for the SNNR will be a framework plan under which more detailed management plans for different management sections (or management units or blocks) will be developed under component 3. An international expert in NR management planning, a national expert in NR management planning and a national ecologist should be recruited to help provincial planning teams develop Management Plans. The international expert would assist in developing the first Management Plan. The domestic experts should then assist with subsequent plans (up to 3 PAs). The international concept of Management Plan differs from the Master Plans developed in China. The former plan guides habitat and species management, zoning, visitor use, education programmes, community relationships, buffer zone development, concessions and local regulations, patrolling, monitoring reporting, communications programmes, etc; the latter guides investment in the physical construction of NRs. It is exactly these operational aspects that are traditionally ignored and under-financed in China. In order to guide the management plans, targeted research therefore will be supported on the spatial and temporal distribution and abundance of key endangered wildlife species of national concern as well as on biological pest control (as opposed to chemical control of species such as plateau pika, which are still considered 'pests' by some government departments). Different options of reducing grazing without fencing, or using different types of fencing, and on the effects on different levels of grazing on turf conditions.

Outcome 3: Demonstration of effective PA management through local community involvement (co-management) in the Sanjiangyuan National Nature Reserve (SNNR)

Total cost: 7,336,828 US\$; GEF 2,764,000 US\$; Co-financing 4,572,828 US\$).

9. Under Outcome 3, the focus will be on the continued trialling and development and scaling-up of prior conservation oriented collaborative management experiences in Qinghai and China, with a focus on Sanjiangyuan experiences, and on ensuring the effectiveness of PA collaborative management (co-management) mechanisms. Community co-management will be developed and demonstrated in the SNNR, applying the improved systemic and institutional capacity developed under the previous outcomes of the project. A broad ‘landscape approach’ will be promoted in managing this vast NR with unconnected blocks and resident human population. Initially, 6 communities (covering 8,866 km²) in three of SNNR’s six management blocks (covering 59,100 km² of the NR’s total 152,300 km²) have been selected as project sites (see Table 5). Up to a total of 12 community sites will be selected and assisted in developing co-management plans in the lifespan of the project; the exact number depending on identification of appropriate candidate sites/communities and project capacity and progress in Y1-Y3. Co-management sites (communities) that prove to be most successful will be further assisted and publicized to serve as demonstration or model communities. Community selection was (or will be) made using the following criteria: critical nature of the area for biodiversity conservation; community interest and willingness to be involved; community capacity (including community cohesiveness, basic awareness or experience with the concept of co-management, and the existence of local champions); and potential demonstration value of the community for addressing unique sets of conservation issues (e.g., overgrazing, human-wildlife conflict, poaching, mining, infrastructure construction, tourism). The SNNR management units in which the initial communities were selected are characterised by different ecosystems – forest, grassland, and wetland – and are thus envisaged to contribute to improved understanding and implementation of ecosystem-specific models of co-management. Other communities may be added later in the project to fill observed gaps or learn from cooperation and collaboration with yet unknown (undocumented or unreported) community conservation efforts, agreed by all the parties – to broaden the scope of the project’s learning experience as much as possible, which will help inform and guide future strategic planning and assist in scaling-up co-management approaches to strengthen PA management effectiveness.

10. The project will help to support and strengthen up to 12 community co-management agreements, covering at least 8,866 km² (the land area of the initial six community areas). Based on existing community experiences and lessons learned in Qinghai, for example in Cuochi Village, community-NR institutional agreements (including roles, rights and responsibilities) and management capacities will be developed and strengthened. Community resource management plans will be developed and sustainable use thresholds established as well as mechanisms developed for regular monitoring of sustainable resource off-takes. It is expected that clear resource access and use rights will give local communities incentive to better manage local resources and to protect them from unsustainable use whether by local community members or by outsiders. Furthermore, a variety of eco-compensation schemes will be assessed and piloted in the selected community areas, which ultimately should lead to reduction in pressure from overgrazing and other threats to biodiversity; ultimately over an area of 152,300 km². The critical roles of the Forestry Bureau and other agencies, local communities and NGOs will be clarified to ensure that all the partners in trial collaborative management schemes (field projects) abide to their relevant parts of joint agreements.

TABLE 5: PROJECT DEMONSTRATION COMMUNITIES¹³

Pilot Village	SNNR Management Unit (Ecosystem)	SNNR Section Size (km ²)	Community Area Size (km ²)	Population	Household Number	Ecosystem and Biodiversity Significance	Threats
Chongzhi Village	Makahe (Forest)	1,970	36	508	90	Forest ecosystem; White-lipped deer, Alpine musk deer, Golden Cat, Chestnut throated partridge	Poaching Over-harvesting

¹³ More detailed information is found in Section III, Part IV Target Community Profiles on page 81.

Yunqu Village	Suojia-Qumahe (Grassland)	41,630	1,459	541	132	Grassland ecosystem; Habitat for Tibetan antelopes, wild yaks, white-lipped deer, black-necked cranes, golden eagles, and snow leopards	Poaching
Yunxiu Village			2,756	840	244		Overgrazing
Yunchi Village			2,440	920	230		Human-wildlife conflict
Yunqu Village			1,500	800	200		
Yunyong Village	Zhaling-Elinghu (Wetland)	15,500	695	256	82	Alpine wetland; 38 species of birds, 29 mammals, 4 amphibians, 7 fish. Estimated 130-230 Black Necked Crane	Infrastructure development Pest control Infrastructure (tourism) Overgrazing
TOTAL		59,100	8,886	3,865	978		

Output 3.1: PA management system in three management blocks covering 59,100km² (Makahe, Suojia-Qumahe, Zhaling-Elinghu) improved through co-management

1. Several different activities will be centred under this output, sequentially applying the provisions that are included in the SNNR regulations to be developed under Component 2. Based on the framework management plan for the entire Sanjiangyuan SNNR developed under output 2.6, management unit-specific plans will be developed, with substantial participation of resident communities including both women and men, leading to identification of biodiversity hotspots and ecologically sensitive areas in the conservation area (management unit) as well as initial in principle agreement regarding co-management mechanisms and potential socio-economic contributions or compensation that may be gained from collaboration amongst the parties. Although there already exists a zonation map for all 18 management units of the SNNR – including core, buffer and experimental zones – a more realistic zonation that takes into account historic/current use and local socio-economic realities shall be discussed. The current zonation system is largely meaningless, as the same range of production activities occur in each of the different zones and no prior and informed consent was given by communities before the original (current) SNNR maps were drawn up. Under the project the zones in each management unit – in Makahe, Suojia-Qumahe, and Zhaling-Elinghu – will be reviewed and redesigned where necessary, including agreements on corridors and no fence zones, resource collection areas, harvest/grazing quotas and seasonal access. Such a process should include participation and agreement/acceptance not only of resident communities, but also of the Forest Bureau and SNNR as well as local government including a variety of different bureaus. Local people and communities shall be present in such discussions and review activities through consultation with community group representatives.

2. It is important to note that the afore-mentioned management unit review and planning work, which aims to strengthen and enlarge the scope for co-management within NR management/development plans (both the broader framework plan and unit-specific plans), does not in itself include either specific detail about or opportunity for experimentation with co-management approaches – that is, the former is a management unit-wide partnership and zonation planning activity, while the latter comprises the field-based, community-centred work that shall be undertaken in direct and close partnership with local communities. The main purpose of the latter set of activities – described below – is to develop, trial and demonstrate successful co-management approaches for biodiversity conservation from which a suite of *best practices* can be developed and shared, leading to a scaling-up of co-management throughout the entire SNNR and across the Qinghai PA system.

3. Within the selected communities sites (trial co-management projects), specific application of the more general unit-wide management plans will be undertaken. However it is recognized that making management plans a reality on the field will be a difficult job, one of the greatest challenges in the entire project. This will require a lot of acceptance and participation by local herders, as well as socio-cultural sensitivity on the part of external project participants. Where sustainable use thresholds need to be agreed, for example, a management system that includes monitoring and adaptive management components for pasture use

The use of other resources harvested by local communities shall be developed. It is not realistic, however, to simply apply the same NR regulations to all the different units or zones in the NR. Rather it will be necessary to negotiate on a case-by-case basis with communities the specific ways in which certain activities, collection quotas or seasons, types of fencing used (if any), levels of grazing by domestic animals, etc., are to be organised. In addition, concurrent with discussions about resource use including both stipulations and limitations, there shall also be discussion leading to agreement regarding resource monitoring (mentioned above, also see Outcome 3.2) and discussion regarding local socio-economic development needs and aspirations and the ways that these can be met, including in particular how Payment for Ecosystem Services (PES) and other Eco-Compensation mechanisms could be developed or used for local community benefit (see Outcome 3.3) in light of their incurred costs (opportunities) due to environmental restrictions or as payment for their active, regular participation in agreed conservation activities such as resource monitoring, patrolling/policing, or conducting applied conservation research.

4. Throughout the above process, a series of focused extension and consultation activities at the community level will take place, aiming to create good and widespread understanding of the principles and guidelines as well as the merits of community co-management among envisaged co-management partners, in particular community leaders, to demonstrate how co-management may be an effective approach. Engagement of certain cultural authorities such as locally influential monasteries may also be tried. Building on such understanding, the co-management policy will be applied and tested at the trial community sites – initially with a few communities, but possibly more as the project progresses. This activity (replicated for each of the selected communities) will provide the means to test and develop – in fact, to operationalize – an effective, relevant zoning system for each SNN co-management unit, as envisaged above. Through development of local level co-management frameworks, with joint governance and co-management structures including clear rules, roles and responsibilities agreed at site level by all parties, effective biodiversity conservation is strengthened. Establishment of tourism concessions will also be explored, with independent private companies and potential third-party co-managers.

5. Work under this output will involve much on-the-ground (field-based) face-to-face discussions and negotiations with local communities. It is therefore recommended that local NGOs, where present, play a significant role in these activities. External NGOs with long track-record of working in the same geographic area on co-management and related issues, and that also have worked in close partnership with local communities and their socio-economic development needs/interests, also are highly recommended for this component.

6. Development and use of 3D models (topographic maps) may be tried as an approach to engaging some communities, or to deepen partnerships and enhance learning in/with communities where relationships have already been established. This approach has proven useful in conflict resolution in some situations, and as a basis for sharing information and stakeholder/individual opinions in a variety of other conservation projects. A full manual on this method can be downloaded from http://www.iapad.org/p3dm_guiding_principles.htm (see training activity under output 2.4).

7. Successful models of collaborative management (often called co-management but covering an array of activities) developed locally or elsewhere in China may be followed under this component, and/or refined in the light of the local situation and the majority interests of the community – cultural, environmental, or otherwise. Stewardship programs, contractual arrangements, voluntary partnerships, co-management projects, indigenous initiatives, business-driven models of resource use, community cooperatives, revolving funds, trust funds, etc. – there are many different forms and variations or emphases within the broad conceptual approach of ‘collaborative management’ that are already present, at least in trial and documented form, in Qinghai and elsewhere in China. The project can and in fact should learn from this wealth of experience; no single or particular co-management approach should *a priori* take dominance in the project. What works best is what is driven and owned by the local community with support from government and the project.

8. Where co-management already has some local history, such as in Cuochi and Muqu villages, their current favoured approach(es) should simply be refined, that is, improved or adapted according to known best practices to make their model approach even better. Thus, the project shall adopt an approach of considering and refining a ‘menu’ of options for communities to consider, not developing or promoting single narratives or purported ideals. Pragmatism with co-management, not pre-conceived

solutions (blueprint approach), will prevail in the project's dealing with the concerns of communities, and dealing with known conserved opportunities and threats to conservation.

9. In establishing the local level co-management framework, traditional knowledge on grassland management will also be revitalized. Resource monitoring systems will be instituted to assess pressures on natural resources and biodiversity, as well as state of the environment (biodiversity, wildlife, plant species) and its response project interventions (output 3.2). Development and application of eco-compensation schemes will equally be explored in demonstration areas with a view to reducing biodiversity threats (output 3.3). Work at the community level will also need to involve active patrolling and law enforcement activities based on training given, staff increase and capacity delivered, and based on the community agreements signed. Patrols will be paid from operational budgets, co-management agreements, stewardship contracts or other sources. Various cost-effective ways to minimize human-wildlife conflicts will also be explored and demonstrated. It is anticipated that local, national and/or international NGOs will be contracted to undertake some or all of these tasks.

Output 3.2: Monitoring and adaptive resource management systems in place

10. The project will develop and deploy an Ecological Monitoring System. This will involve a review of relevant data already being collected by different agencies (climate, aquatic resources, socioeconomic, vegetation, key mammals and birds), both on the ground and via remote sensing, and collected by locally based individuals or groups/communities. Identification of data gaps required for overall ecological monitoring of the entire SNNR, including data requirements to assess climate change risks including 'wildlife species' (potential) spatio-temporal adaptation. The project will design links and reporting channels necessary to bring key datasets together for analysis and reporting and to allow access to previously analysed data as appropriate for planning and monitoring purposes. Resource inventories, enforcement plans and monitoring system will be developed. This work should be undertaken by a team combining biologists, ecologists and data management experts, as well as social scientists (for socioeconomic and community-related data); understanding of Chinese database systems is essential, and knowledge of Tibetan plateau conditions is desirable.

11. Targeted training will be provided to NR staff, project leaders (including field projects) and selected co-managers on data collection and reporting, and appropriate guidelines will be developed for monitoring data collection. This activity will be fully integrated with training activities supported under Component 2. A network of community-based monitoring systems will be developed as a fundamental component to PA management. Management infrastructure development including community guards posts will also be established. The secret to success is the tight relationship between use of local natural resources and monitoring the levels of use (or harvest, off-take). It is recommended to contract an NGO to supervise this aspect of the project. It is suggested also to explore various novel approaches, such as to see if the army is willing to help organise helicopter monitoring of wildlife in some of the most remote areas of the SNNR and other PAs.

12. The SNNR is seriously lacking in operational equipment needed for patrolling and monitoring such vast areas. The project will ensure that strengthened PA field staff and co-managers have the equipment necessary for them to undertake their operational activities including wildlife monitoring and basic research, which may include communication equipment such as satellite phones, binoculars, motorbikes and other basic tools. Necessary training in the use and maintenance of such equipment (for environmental monitoring, wildlife research, etc.) will be provided, together with a maintenance plan as appropriate. Most of the equipment and construction costs will be covered as part of the government co-financing. GEF expenditure on this aspect will be limited to computers, and communications equipment such as satellite phones. It is important to emphasise that field equipment also requires both physical and financial resources for storage, maintenance and operation, costs that must be borne under the government operational budget.

13. Supervision of co-management and of monitoring activities is a large and complicated part of the programme, which will involve many ground-level activities in many locations spread over several years. It is suggested to bundle the entire implementation and supervision of the community co-management (demonstration) component of the project into one or several service contracts to be undertaken by one or more qualified international NGOs. Several NGOs have relevant experience in the area.

Output 3.3: Piloting of eco-compensation schemes in demonstration areas in reducing biodiversity threats

4. In exchange for the ecological services provided by these catchment areas, downstream beneficiaries should provide direct or indirect eco-compensation to upstream regions and communities, to create incentive (and provide recognition) for local communities' contributions to the maintenance and long-term conservation of the catchment areas and PAs in Qinghai. Under this output, the project will develop and establish eco-compensation schemes targeting the SNNR, in particular the target communities in the demonstration areas. In October 2010, the national government announced that US\$ 2 billion will be allocated annually for subsidizing pastoralists for grassland conservation under the national Grassland Eco-compensation Programme. The goal is to reduce grazing pressure on grassland without compromising the income level of pastoralists. With the vast grassland areas present in Qinghai Province, a total of US\$ 299 million of the eco-compensation funding is earmarked for the Province. These compensation funds are expected to be used as subsidy for no-grazing zones, livestock reductions, grass planting (restoration, or creation of artificial grassland) and livelihood development.

5. Eco-compensation funds can be delivered in several ways: they may be allocated for PA management and operations, they could be transferred as direct payment to individual households, they could be provided as a contribution to local community funds, they may be allocated to recognized local community cooperatives (such as herders cooperatives), etc. Whichever approach is selected, either for China generally or in this project, transparent mechanisms must be established for the selection of donees and the execution of all such financial transfers, along with follow-up monitoring of funds.

6. Two approaches/beneficiaries for the use of eco-compensation funds are recommended in this project: a portion of funds should serve as (partial) financing mechanism for the SNNR (and the broader PA system), in particular for field operations including monitoring and support for community co-management within PAs and for important wildlife research and repeated monitoring of selected wildlife species' abundance and distribution (in part with co-managers); and a portion of these funds should serve to assist local resident communities, as payment for services rendered (both labour contributions and protection and safeguarding of ecosystem function and wildlife). Payment to communities should be as transfers into community funds, which will all be administered with clear accountability and governance structures. Support in the development or improvement of such structures, for example community cooperatives or community trust funds, should be an integral part of community-based co-management activities in this project, as appropriate or necessary. Local committees (such as the membership of herders' cooperatives, or leadership/management of trust funds) may choose occasionally also to pay dividends to member households, thus leading to individual payments without necessitating one-on-one discussions with every resident household in target communities. Other forms of direct payment for specific services such as monitoring activities can equally be made, to be decided in community management dialogue through the project.

7. As one of the key challenges to developing an eco-compensation scheme to offset the cost of conservation action, which benefits a large downstream constituency (as well as local livelihoods), is the valuation of ecological services and of the existing wildlife populations; and as the process of developing adequate valuation tools and protocols and building consensus among multiple and varied stakeholders may be a long, sometimes arduous process; an interim stop-gap measure is recommended to move forward the development, trialling and up-scaling of the co-management approach for biodiversity conservation in the province, which remains vital, through the increased labour and support provided through this approach, unattainable through formal government employment alone). This interim stop-gap measure would be the provision, from government environmental compensation funds (i.e., the reserves from which eco-compensations shall be made), of annual contributions to co-management community funds in amounts up to the lower initial estimates for an area's ecological services, or according to novel 'willingness-to-pay' approaches – so that, simultaneously with the development of appropriate valuation tools, there can also be adequate experimentation and development of the other fundamental part of the eco-compensation equation, namely the co-management component together with the transfer, accounting, local decision making, use and monitoring of compensation funds. Such interim transfers to local communities, in amounts up to the initial estimated *minimum environmental value* of an area – so that nobody could argue that such payments should be deferred, on the premise of a concern of over-paying for ecological services – can be accounted as subsidies to farmers and herders' livelihood costs; until such time as the full valuation of environmental services is complete and adequate internalization of environmental costs and benefits is made in context of national sustainable development programmes.

8. The potential of this project to pilot and demonstrate national strategies as currently being developed under the SECC Initiative – such as fund transfers, environmental valuation tools, operationalisation of eco-compensation, integration of conservation and rural development, etc. – is large, and this can help to create much buy-in from partners in the project.
9. Several examples of community governance structures already exist in China, some of them actively being developed and trialled in the Tibetan plateau region (including, e.g., in Sichuan, Gansu, Inner Mongolia, Yunnan and Qinghai provinces). In particular there is scope to explore options with community-based herder cooperatives and associations, social enterprises and businesses, etc. Whether using business models of sustainable resource use, or voluntary association of like-minded people, or more formal herder cooperatives – the development and further strengthening of community development funds (possibly revolving funds, as already trialled in Cuochi village by SGREPA) and community trust funds (as being trialled with assistance from Ford Foundation and local business partners in Sichuan province) should be central in this project, with regard to detailed discussion of planning, management and monitoring of receipt and use of eco-compensation funds at community level. Details of how such community/trust funds are administered and for what purpose loans or payments will subsequently be made within the community (e.g., to individual community members, or as start-up grants for local enterprises, or as social contributions) will remain to be determined by the communities themselves, but with project input for funding and facilitation and government input for additional funding, monitoring and wider support.
10. The project will equally develop the direct and systematic linkage between the grassland eco-compensation funds and the strengthening of the SNNR's management effectiveness. This will include use of the eco-compensation funds for increasing NR staff numbers, management infrastructure consolidation and establishment of training programme for NR staff and community co-managers, and development of grassland management tools such as a revitalisation of traditional knowledge on grassland management.
11. The community compensations will be fully integrated with the co-management mechanisms and the operational framework developed under 3.1 and 3.2, including deployment of eco-compensation schemes to help motivate adoption of suitable thresholds.
12. The project will develop detailed design of the eco-compensation programme in SNNR, detailing the actions necessary to achieve the desired social as well as ecological outputs and outcomes. The project will further support operationalisation of the programme in the target areas and other suitable communities that may be identified, creating model arrangements that can be replicated across the province.
13. In addition, to further enhance the effectiveness of PA management and promote conservation in Qinghai, as well as to support co-management and strengthen community governance structures in the area, establishment of an *International Centre for Reindeer Husbandry* is recommended (along the lines of the International Centre for Reindeer Husbandry, or ICR). In other similar circumstances (cf. reindeer herding), such a Centre has proven to be a valuable initiative, supporting the sustainable development (and sustainability) of livestock herding as livelihood and researching as appropriate natural resource conservation issues.
14. In the light of current plans for massive tourism development across the entire province, with a special focus on the Qilianjiangyuan region, it is also recommended that an *Ecotourism Network* (either at prefecture or regional level, or at the provincial level) be established. Such a network should create new or enhanced opportunity for varied stakeholders to discuss and learn about 'sustainable and responsible tourism, about destination tourism (as opposed to site-based tourism), and about the possibilities for 'tourism for community development'. Best practices in tourism can be elaborated, and opportunity increased for local partners (community management communities) to participate in such developments. Biodiversity conservation, integration (coordination) with PAs and community participation/ownership in tourism will remain central in the agenda and the purpose of such a Network. Members should include communities, tour companies, tourism bureaus, academics (as advisors), PAs, NGOs, etc. Places such as Qili County (where further development of the PA system is recommended in this project; also known for snow mountains and forests) seek to rapidly develop their local tourism industry – a situation that presents a unique opportunity for convergence of interests between regional economic development (tourism in general), local community benefit (with development of community-based tourism), and nature conservation and PA development (through planning for tourism in/near PAs, and development of ecotourism that benefits both conservation and local communities). Such synergies should be encouraged and supported in the project, both

sure that development be kept in-check and that all conservation opportunities be maximized.

5. **Global Benefit:** By implementing the above-mentioned components, the project is expected to achieve significant global benefits. These will be achieved from the reduction of pressures on biodiversity through an improvement in PA management effectiveness in Qinghai of over 251,665 km² of PA estate that will lead to improved biodiversity status in PAs. This will improve the efficacy of PAs as a mechanism to address current threats and likely climate change. In particular, the demonstration work at the Sanjiangyuan NNR will have global biodiversity impacts covering an area of over 152,300 km². This PA is well known for its extensive wetlands and as habitats for globally threatened species such as the snow leopard, Tibetan antelope, wild yak, argali and black-necked crane.

PROJECT INDICATORS

6. The project indicators are contained in Section II / Part I (Strategic Results Framework) and include a number of ‘SMART’ impact (or ‘objective’) and outcome (or ‘performance’) indicators and targets (summarised in Table 6).

TABLE 6: PROJECT OBJECTIVES, OUTCOMES, INDICATORS AND TARGETS

Objective/ Outcome	Indicator	Baseline	End of Project target
Objective: Catalyze management effectiveness of Qinghai’s PA system to fulfill its purpose of conserving globally important biodiversity	Financial sustainability score (%) for national systems of protected areas:		
	- Component 1 – Legal, regulatory and institutional frameworks	42.3 %	50%
	- Component 2 – Business planning and tools for cost-effective management	32.8%	50%
	- Component 3 – Tools for revenue generation	36.8%	50%
	METT scores for different PAs:		
	SNNR	32	70
	Mengda	54	65
	Kekexili	40	55
	Qinghai Lake	53	75
	Golmud Poplar forest	23	50
	Selected indicator species that are rare and threatened show stable or upward trends in numbers (including <i>inter alia</i> wild yak, wild ass, Tibetan antelope, snow leopard, Pallas' cat, musk deer, white-lipped deer, black-necked crane, etc.)	Baseline survey of selected indicator species at outset of project, in three target units of the SNNR (Suojia-Qumahe, Zhaling-Elinghu, Makahe)	Key wildlife populations maintained or increasing; appropriate population structure
Outcome 1 Mainstreaming PA management into provincial development, plans and policies	PA system and its management mainstreamed within the provincial sectoral and development planning framework at the provincial level: indicated by clear inclusion of due consideration and concrete measures for biodiversity conservation and PA development, as well as ear	No sectoral plans integrate PA objectives Development plans include no vision and development	At least 3 sectoral plans integrate consideration of PAs and of biodiversity conservation measures 13 th 5 year-Plan recognises clear

Specific, Measurable, Achievable, Relevant and Time-bound.

Objective/ Outcome	Indicator	Baseline	End of Project target
	marked budget in the sectoral development plans at provincial levels and in the (national) 13th 5-year plan.	plan for PAs and no link is made between the PAs and development, nor no concrete measure for biodiversity conservation	linkage between PAs and provincial development, and includes PA- and biodiversity-related targets and budgets
	Threats to PAs from infrastructure placement (roads, dams) and other adverse forms of land use avoided, mitigated or offset, leading to more effective conservation in Qinghai's PA system covering 251,665km ² .	No procedure in place to deal with incompatible developments	Official standards for infrastructure development and operation within the PAs are developed and operationalised with clear rehabilitation/offset mechanism.
Outcome 2: Increasing PA management effectiveness through strengthened institutional and staff capacities	Capacity development scorecard (%) for the protected area system.	35.5%	60%
	Strategic plans prepared for PA institutions and procedures and investment, and PA staff numbers dramatically increased - Permanent staff - Temporary staff	No strategic plans 160 5	Strategic Plan developed and adopted 360 150
	Province's system level PA financing increased to close the existing annual financing gap of US\$3.6 million for basic expenditure scenario (tracked with PA financial sustainability scorecard)	US\$ 2.8 million / year	US\$ 6.4 million per year
	Ratio of total PA budget spent on field operations raised to narrow spending gap	<10% of PA revenue spent on field operations	>30% of PA revenue spent on field operations
	Reduction in illegal incident cases within the NRs – poaching, illegal harvesting, illegal-grazing, etc.	Currently no monitoring system in place. Baseline for the number of illegal incidents will be estimated at onset of the project.	Functioning policing records system with links to police/ court cases and an enhanced policing mandate of NR staff. Routine report forms designed for numerical analysis. Incidents reduced to 50% of the baseline level.
	Annual income diverted to PA management from eco-compensation agreements (excluding funds arising from the Sanjiangyuan Ecological Construction Plan)	0	>US\$1.0m
	More representative PA system approved with most of 'major vegetation types' represented (>5% coverage) in the NNR's	13 of 30 habitats	22 of 30 habitats (with the addition of desert and Qilian montane habitats, and with overall increase of 2,000 km ² in provincial PA system)
	Outcome 3: Demonstration of Effective PA management through community involvement	Extent of area (ha) closed from domestic grazing Area of open corridors Area within the PA under community co-management	1,000 km ² 0 km ² 2,440 km ²

Objective/ Outcome	Indicator	Baseline	End of Project target
	Increase in the key species number and distributions in target co-management community sites (up to 12 community field sites)	Baseline wildlife populations TBD at onset of project (Target species will be rare or endangered, to be agreed with SNNR and local communities)	Key wildlife populations maintained or increasing in co-management areas
	Management effectiveness increased in SNNR due to co-management arrangements using the METT tracking tool	33% Management unit baselines TBD at onset of project	70%
	Number of private-NR or of community co-management agreements: - Private enterprise management agreements - Informal, non-binding, agreements - Formal, legally binding, agreements	 0 6 0	 At least 1 >10 agreements >2 agreements
	Awareness surveys among communities show increased positive attitude towards PA conservation	Baseline awareness TBD by Knowledge Attitudes & Practice (KAP) survey at onset of project	Baseline + 50% positive attitude

PROJECT RISKS

7. The following potential risks and mitigation measures have been identified. These risks and the mitigation measures will be continuously monitored and updated throughout the project, and will be logged in ATLAS and reported in the PIRs.

TABLE 7: RISK TABLE

<i>Risk</i>	<i>Rating</i>	<i>Mitigation Measure</i>
Mainstreaming biodiversity into sectoral policies will be hindered by lack of incentives for other sectors and poor enforcement of agreed priorities and plans	Medium	Inter-sectoral coordination has generally tended to mean joint meetings to share information as opposed to joint actions for results. Therefore, this project proposes to not just focus on coordination but joint planning, approval of policy, programmes and legislation at provincial level with participation of key biodiversity impacting sectors and agencies. The Project enjoys leadership by the Finance Department of the Provincial Government and support for this project from different departments of the Provincial Government has been cultivated. The Project will continue to directly engage with the various departments to ensure partnership with and participation from different (and sometime competing) agencies. Given the importance the Central Government has put on ecological management of this region because of the fact that Qinghai is the source of three major rivers in China, there is an added impetus for all agencies in the Province to work together and the project has been formulated with this spirit of partnership. In addition, participation of the private sector, local communities, scientists and other members of civil society in project design and implementation will also be helpful to mitigate this risk. Success in Qinghai can be up-scaled to national level using the successful coordination mechanisms now in place in several other provinces through a BSAP process and using the CBPF forum.
Severity of climate change impacts will undermine conservation efforts promoted by the project through changes in biodiversity distribution and changes in community resource use intensities	Low to medium	Given that climate change impacts are likely to increase over the long term, the project will assess these and propose actions to enhance and support approaches that increase ecosystem, local livelihood and PA system resilience. This is expected to help in addressing threats of climate change to biodiversity in the region, particularly through co-management, which will use both traditional and scientific knowledge to cope with changed climate variability and changes.

<p>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 quality, and health) into the agenda of governments. This may reduce the focus on environmental protection (including PA system strengthening), disportion the national and provincial investment and budget on PA planning and management, thereby hindering the process of achieving biodiversity conservation objectives.</p>	<p>Low to medium</p>	<p>Biodiversity conservation and people's livelihoods are closely interlinked, in particular in terms of pasture resource production, clean and steady water provision, as well as disaster mitigation. The project will ensure that these inter-linkages will be adequately acknowledged by policy makers at provincial and local levels as well as by the general public. The project will support necessary strategic studies and the production of practical toolkits and materials to foster better understanding of PAs' contributions to the economy and peoples' welfare and livelihoods. Furthermore, the project will promote co-management and equitable sharing of benefits from PAs, as well as the establishment of eco-compensation mechanisms to provide increased opportunities for the local households, communities and institutions engaged in biodiversity conservation to directly benefit from conservation-oriented activities. The Programme will actively support Communication, Education, Participation and Awareness (CEPA) as tools for conservation and wise use of biodiversity resources.</p>
<p>Even under co-management, economic development interests of communities will override conservation priorities, leading to continued loss and degradation of biodiversity</p>	<p>Low</p>	<p>Whilst there is significant interest amongst local communities to be entrusted with conservation of the land where they live, the project realizes that both incentives and penalties 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 or through increased conflict with wildlife). The project will ensure that communities are not completely or unduly burdened with the cost of conservation actions and that they receive reasonable financial and other support for the conservation work they do. In addition the government is already experimenting with a variety of models of eco-compensation schemes, and it is anticipated that rewards for good stewardship of ecosystems (and wildlife) can be greatly improved over coming years.</p>

INCREMENTAL REASONING AND EXPECTED GLOBAL, NATIONAL AND LOCAL BENEFITS

8. The Government of China has clearly identified biodiversity conservation as a priority and strengthening the PA system is a fundamental pillar of the country's biodiversity conservation strategy as evident in the NBCSAP and CBPF. Although the country is making significant investments and efforts for PA planning and management, **under the baseline scenario without the GEF investment**, global biodiversity conservation and financing in Qinghai will remain at a basic level and will not gain wider support from multiple stakeholders including different government departments and programmes, local communities and the private sector. Sector activities in particular engineering works will continue to have negative impacts on biodiversity and PAs. Systemic and institutional capacity for mainstreaming biodiversity objectives in development planning and management will remain weak with rigid and un-implementable PA regulations, resulting in a major discrepancy between actual management on the ground and what the regulations stipulate. The PA planning will continue to be ad hoc and vulnerable to climate change, without any province-wide PA system plan which take into account the potential climate change impact on biodiversity. Biodiversity information in the province will be scattered and not easily accessible for use in PA management and sector planning.

9. Inadequate resources for PA operations, small number and under-capacitated PA staff will continue to hamper the progress of PA strengthening. Currently, there are no plans by the Qinghai Provincial government to bring about any significant institutional or policy reforms to strengthen the PA management in the province. Though the need to strengthen the financial and human resources for PA management is recognized, without technical support from the project any follow-up actions will be limited in nature and will not be informed by best available knowledge and practices from China and around the world. Some issues related to sustainable financing may be addressed at some sites, but the requisite comprehensive and systemic approach to financing is unlikely to occur without this project's support, and infrastructure financing will dominate in the mind of most PA planners and provincial decision-makers. Traditional grassland eco-compensation scheme will be used largely for large-scale infrastructure and resettlement schemes to move herders from within PAs to towns, which may only have a very short-term impact for improving ecological conditions of the PAs, yet may create enormous long-term (generational) social problems. Capacity building of reserve staff will be insufficient and will not bring about significant changes in the overall capacities of reserve managers. At the PA unit level, under the baseline, different agencies will continue to promote their agenda and

tions without due consideration to their impacts on biodiversity in and adjacent to PAs and this may actually increase future costs of amelioration of biodiversity loss and degradation. With the presence of a large number of residents within the PAs, park-people and human-wildlife conflicts will continue. Levels of participation in PA management and support by local people for conservation activities will remain low. It is unlikely that any formal and sustainable co-management framework or actual new examples of co-management will be established without support of this project.

10. **Under the alternative GEF scenario**, Qinghai's PA system will be significantly strengthened, better fulfilling its objective of biodiversity conservation. Under this scenario, the legal framework for the establishment, management and regulation of PAs in Qinghai will be greatly strengthened through development of the SNNR specific regulations, which will act as a model for the PA system in the province. The required institutional arrangements and coordination mechanisms will also be permanently improved with expected dramatic increase in staff numbers through mainstreaming the PA system in provincial development and sectoral planning processes and through proving the economic value of the PAs. The project will provide a sound basis for monitoring biodiversity, planning an adequate PA system both to protect representative samples of biota found today and also designed to meet the challenges posed by rapidly changing climate. The alternative scenario will equally provide the additional capacity needed to undertake the massive task of controlling illegal poaching and regulating damaging activities as over-grazing, ill-conceived pest eradication programmes and insensitive engineering projects. The mind-set shift of the provincial government will be realised regarding the importance of PAs and how conservation policy shall be pursued, while also ensuring appropriate/sensitive community development through eco-compensation schemes that will have truly long-term and effective impacts on ecosystems and local peoples' livelihood.

11. An environmental stewardship programme will be in place to facilitate community co-management of large areas of remote natural reserve, rangeland and genetic corridors. Such a system is cheaper than recruiting government staff, takes advantage of the great knowledge, local skill and mobility (traditionally horses, now also motorbikes) of local herdsmen. At the same time the stewardship programme helps break the inherent animosity between protection authorities and resource users as well as bringing new financial opportunities and alternative livelihoods to these remote and generally poor communities. The stewardship system can build on decades to centuries of communal pastoral practices and cultural-religious beliefs and traditions. Models developed under this project can be up-scaled cost-effectively over much larger areas, not only in Qinghai but also in other provinces such as Tibet, Sichuan, Gansu, Inner Mongolia, etc., where similar pastoral communities and grassland ecosystems exist.

12. Development of a business plan for the PA system based on economic valuation and exploration of possible new financing mechanisms is expected to improve the financing situation of the PA system. Communication, education and awareness programmes linked to the PA will be coordinated as a strategic, sustained and focused intervention. Improved awareness among both the herding communities and urban public will feed into media interest and national mind-set, and support government's confidence in further investment into biodiversity conservation. Provincial pride in the unique values of Qinghai's unique fauna and flora, together with better appreciation of how their protection contributes to vital national ecosystem services will be engendered and this in turn will assist the province in negotiations with central government and downstream beneficiary provinces to leverage greater eco-compensation payments to cover the costs of good ecosystem stewardship.

13. The Project will generate global benefits directly in an area estimated at 59,110 km² through co-management and piloting of eco-compensation schemes, and in total 152,300 km² through strengthened institutional and staff capacities for overall PA management in the SNNR. By strengthening overall provincial institutional arrangements and coordination capacities and actions for mainstreaming biodiversity, and by strengthening the PA management authority's institutional and individual capacities, the project will also contribute to overall effective management of Qinghai's total PA system, which covers 251,665 km².

COST-EFFECTIVENESS

14. The project approach has aimed at maximizing cost-effectiveness by targeting system level barriers that will have wide rippling effects. The project is considered cost-effective in several ways. Firstly, the project's approaches in building support from across multiple sectors, local communities, and building capacities of the provincial forestry bureau are expected to lead to cost-effective PA management by avoiding duplication of work, avoiding biodiversity degrading investments (which would require additional resources for ecosystem rehabilitation, should that even be feasible) and by ensuring sharing of timely information and resources. The project is also considered cost-effective because it will build on pilot community conservation projects and approaches which have already undergone preliminary testing in the province as described earlier. Successful models will be scaled over the wider areas of the Sanjiangyuan NNR and in other NRs in Qinghai. Furthermore, the total project investment f

strengthening overall PA effectiveness in Qinghai means that per year the investment per square km will be around US\$ 20 for Sanjiangyuan National Nature Reserve, which will be under direct project support, and only US\$ 15 per square km if Qinghai's other natural protected areas are considered. Comparable figures are not available for most NRs in China. Most NR's receive totally inadequate funding, whilst a few that benefit from international assistance or have large tourism revenues spend much higher amounts. The unit cost of protecting SNNR is relatively low, given the low human population density, wide visibility for patrolling and relatively high connectivity of the site, enabling the project to produce cost effective impacts.

COUNTRY OWNERSHIP: COUNTRY ELIGIBILITY AND COUNTRY DRIVEN-NESS

5. There are clear elements of policy embedded in the national 5-year plans (12th 5-year plan to start in 2011), national biodiversity strategy and action plan (NBSAP, 2010), provincial development plans and many national programmes. These all amount to a clear commitment on behalf of the government to ensure adequate protection and restoration of the natural environment in the country to protect biodiversity, maintain vital ecosystem functions (especially water catchment protection) and help regulate the climate. The recently approved NBSAP specifically identifies 35 priority areas where ecosystem protection will be a national priority (see Figure 17, below). Most of southern Qinghai is included as a priority for PA development.

6. China's commitment to PA development and biodiversity conservation is also evident in China's early signature to the Convention on Biological Diversity (CBD) in 1992, many other conservation conventions (CITES, Ramsar etc.). China has remained steadfast in its commitments under CBD and in particular with activities under article 17 (*in situ* conservation). A very extensive national system of PAs has been established.

PROJECT CONSISTENCY WITH NATIONAL PRIORITIES/PLANS

7. The project forms a part of the China Biodiversity Partnership and Framework for Action (CBPF), which is China's umbrella GEF investment strategy for biodiversity conservation. The project is designed to advance CBPF objectives, addressing key, priority and catalytic outputs under the framework, in particular under Theme 3: "Investing and Managing Effectively to Reduce Biodiversity Loss in Protected Areas".

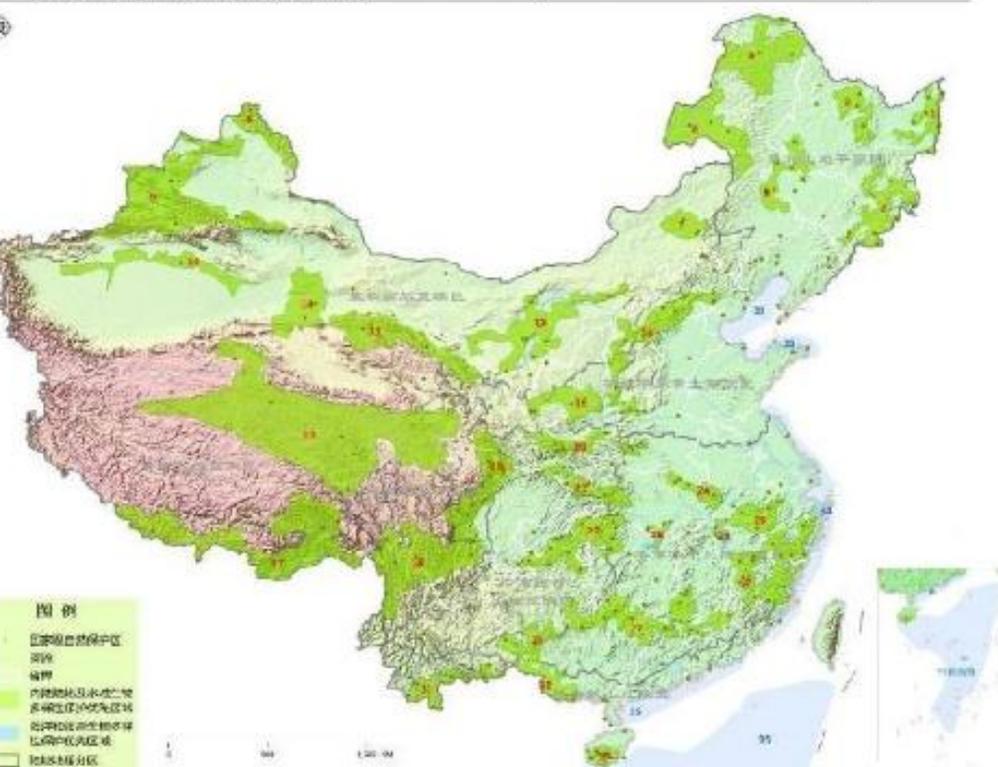
8. The project is well aligned with several national and provincial policies and programmes. The Constitution of the People's Republic of China is the basic law which establishes that the State will protect and will improve the living and ecological environment, prevent and eliminate pollution and other hazards to the public; ensure reasonable use of nature resources, and protect rare animals and vegetation. The 11th National Five-year Plan (2006 - 2010) identifies protection of ecosystems and environmental quality as a key strategy and clearly stipulates the principle of "polluters pay". The project is also in line with the Government's Western Development Strategy, which was launched in 2000, aiming to help the underdeveloped western region (6 provinces, five autonomous regions and one municipality with a combined population of about 370 million) catch up with the more prosperous eastern region. The project will implement one of the key principles guiding the Strategy to strengthen environmental protection including biodiversity conservation and restoration of natural ecosystems and their services. The 12th National Five-year Plan (2011-2015) promotes environmental protection and sustainable growth, enhancing "ecological conservation and restoration." The plan also urges the reinforcement of biodiversity conservation, strengthening monitoring in NRs – the main protected area category – and improving their management and protection.

9. The project also addresses key priorities under the National Biodiversity Conservation Strategy and Action Plan (NBCSAP, 2011-2030), launched in September 2010, through implementing its priority strategy of strengthening the effectiveness of the protected area system in China. The NBCSAP lists Sanjiangyuan as the largest of the 35 biodiversity priority protection regions in China.

AP 5: 35 PRIORITY AREAS IDENTIFIED IN NBSAP 2011-2015

中国生物多样性保护优先区域

35 Priority areas identified in NBSAP for PA development



0. More recently, the Government of China has promoted the concept of Ecological Function Conservation Area as an innovation in the ecological conservation. In July 2008, the National Ecological Function Zones was jointly issued by Ministry of Environment Protection and Chinese Academy of Sciences. The targeted project demonstration area has been identified as one of the most important zones for ecological function of biodiversity conservation and water retention in China. Similarly, in 2008, the National Overall Planning of Land Use (issued by the State Council) stated the need for plateau wetland conservation, combated degraded grassland, and SNNR conservation.

1. At the provincial level, the Sanjiangyuan headwaters area conservation and management is also a provincial priority stated in the Provincial Ecological Environment Construction Planning and Provincial Implementation of National Decision on Forestry Development by the State Council and Central Communist Party Committee, regarding to habitat protection, natural reserve management, and biodiversity conservation and its sustainable use.

SUSTAINABILITY AND REPLICABILITY

2. The project has been designed to be both sustainable and replicable:

- Financial sustainability is achieved through the project's emphasis on improving funding security for PA operations, both for development (i.e., new PA projects or construction activities) and routine management tasks and programmes.
- Institutional sustainability is improved by raising the profile of PA management within the QFD and provincial government and by establishing permanent coordination links to broader provincial development planning and coordination bodies. The project specifically focuses on building staff and institutional capacity for enhanced planning and management effectiveness.

in the provincial PA system. The development of new legal instruments will also help to enhance effective protection and governance mechanisms within the PA system.

- Social sustainability is improved through efforts to support and empower local communities for greater involvement in PA planning, environmental monitoring and co-management. Long-term improvements in legal and institutional contexts, long-term investments to raise staff and institutional capacities, and sustained improvements in relations with local communities (through good communication, joint field operations and targeted awareness raising activities) that lead to increased levels of local participation and improved governance in PA management systems also promote overall project sustainability.
 - Environmental sustainability is attained through PA system design in terms of size, habitat representation and connectivity. Foremost, the revisions planned in systems planning are forward-looking and made specifically to increase resilience in the PA system in the face of climate change and other anticipated future developments and environmental change.
3. The project is replicable because the models of community co-management being developed in this project in Qinghai are applicable over vast areas of rangelands across China, including Tibet, Xinjiang, Gansu, western Sichuan and Inner Mongolia. All these areas were formerly managed by pastoral herdsman; all are now going through similar transitions of land conversion and/or social movement toward sedentarisation with concomitant fencing of grasslands, control of pest species, serious degradation and over-grazing in some areas, and rapidly changing climate. It is certain that best practices and successful models of biodiversity conservation developed in Qinghai would be relevant over much of this vast and biologically important area of Asia. Several activities for capturing best practices and cultural knowledge will be used in the project to help promote replicability, including UNDP's Learning and Knowledge Sharing electronic platform.

ART III: Management Arrangements

4. The project's implementation and execution arrangements will focus on maintaining strong collaboration and cooperation and avoid duplication of effort, among PA conservation initiatives in the province. The project will be implemented over a period of five years. The Qinghai Forest Department (QFD) is the government institution responsible for the daily execution and coordination of the project and will serve as the government *Executing Agency* (EA). UNDP is the *GEF Implementing Agency* (IGA) for the project. The project is nationally executed (NEX), in line with the Standard Basic Assistance Agreement between UNDP and the Government of China, and the Country Programme Action Plan (CPAP).

5. The QFD will take overall responsibility for the project execution, and the timely and verifiable attainment of project objectives and outcomes, but will report to the Project Steering Committee. QFD will provide support to, and inputs for, the implementation of all project activities, and recruitment of project staff and contracting of consultants and service providers with the advice from and involvement of the UNDP. International procurement will be mainly handled by the UNDP upon request of the QFD. The QFD will nominate a high level official who will serve as the National Project Director (NPD) for the project implementation. The NPD will chair the PSC and be responsible for providing government oversight and guidance to the project implementation. The NPD will not be paid from the project funds, but will represent a Government in-kind contribution to the project.

6. The UNDP Country Office (UNDP-CO) will be responsible for: (i) providing financial and audit services to the project; (ii) overseeing financial expenditures against project budgets approved by PSC; (iii) appointment of independent financial auditors and evaluators; and (iv) ensuring that all activities including procurement and financial services are carried out in strict compliance with UNDP/GEF procedures. A UNDP staff member will be assigned the responsibility for the day-to-day management and control over project finances.

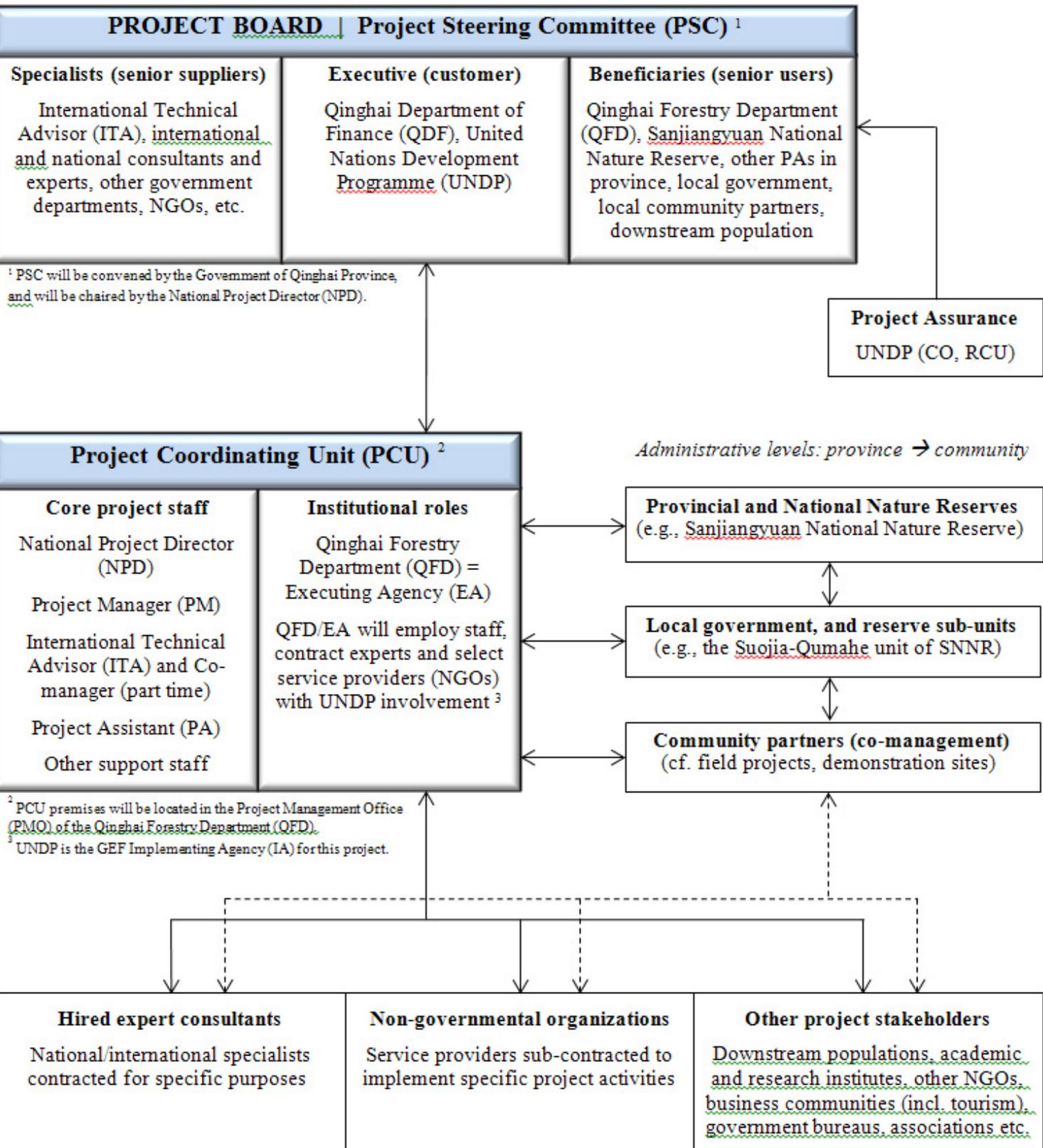
7. A *Project Steering Committee* (PSC) will be convened by the provincial government as a provincial leading group and

may include NGO membership. The PSC will comprise several relevant provincial agencies and membership by those agencies could remain consistent. The PSC will serve as the project's coordination and decision-making body. The PSC meetings will be chaired by the NPD. It will meet according to the necessity, but not less than once in 4 months, to review project progress, approve project work plans and approve major project deliverables. The PSC is responsible for ensuring that the project remains on course and deliver products of the required quality to meet the outcomes defined in the project document. The PSC's role will include: (i) overseeing project implementation; (ii) approving annual project work plans and budgets, at the proposal of the Project Manager (PM), for submission to UNDP ; (iii) approving any major changes in project plans or programs; (iv) providing technical input and advice; (v) approving major project deliverables; (vi) ensuring commitment of resources to support project implementation; (vii) mediating any conflicts within the project and/or negotiating solutions between the project and any parties beyond the scope of the project; and (viii) overall project evaluation.

8. The PSC will include in its composition representation of the following stakeholders: QDF, Provincial Forest Department (PFD), UNDP, local government (county and/or prefecture), and selected NGOs. Specific PSC membership and terms of reference will be finalized in the Project Inception Workshop (IW). The Sanjiangyuan Nature Reserve Ecological Protection and Construction Programme has established a roster of 271 technical experts, who may also be called upon to advise on this GR project.

9. The day-to-day administration of the project will be carried out by a *Project Coordinating Unit* (PCU) within the QFD, comprised of a Project Manager (PM), a part-time International Technical Adviser (ITA) who would also act as the project co-manager, a Project Assistant, and additional support staff. The project staff will be recruited following UNDP and QFD recruitment procedures. The PM will, with the support of the ITA and Project Assistant, manage the implementation of all project activities including: (i) preparation/updates of project work and budget plans, record keeping, accounting and quarterly and annual progress reporting; (ii) drafting of terms of reference, technical specifications and other documents as necessary; (iii) identification, proposal and approval of project consultants to be approved by the PSC, coordination and supervision of consultants and suppliers; (iv) organization of site visits, travel, seminars, public outreach activities and other project events; and (v) maintaining working contacts with project partners at the central and local levels. The Project Manager and the ITA (project co-manager) will liaise and work closely with all partner institutions to link the project with complementary national programmes and initiatives. The PM and ITA are accountable to the QFD and the PSC for the quality, timeliness and effectiveness of the activities carried out, as well as for the use of funds. The PM and ITA will produce Annual Work and Budget Plans to be approved by the PSC at the beginning of each year. These plans will provide the basis for allocating resources to planned activities. The PM and ITA will further produce quarterly operational reports and Annual Progress Reports (APR) for submission to the PSC. These reports will summarize the progress made by the project versus the expected results, explain any significant variances, detail the necessary adjustments and be the main reporting mechanism for monitoring project activities. The PM and ITA will also be technically supported by contracted national and international service providers. Recruitment of specialist services for the project will be done by the PM and ITA in consultation with the UNDP and the QFD. Figure 6, below, illustrates the working relationship between all the main project implementation entities or bodies.

FIGURE 6: PROJECT ORGANOGRAM



ART IV: Monitoring and Evaluation Plan and Budget

MONITORING AND REPORTING

0. Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures and will be supported by the project team and the UNDP Country Office (UNDP-CO) with support from the UNDP/GEF Regional Coordination Unit (RCU) in Bangkok. The Logical Framework Matrix in Section II - Part I provides performance and impact indicators for project implementation along with their corresponding means of verification. The METT tool, Financial Scorecard and Capacity Assessment Scorecard will all be used as instruments to monitor progress in PA management effectiveness. The M&E Plan includes: inception report, project implementation reviews, quarterly and annual review reports, a mid-term and final evaluation. The following sections outline the principal components of the Monitoring and Evaluation Plan and indicative cost estimates related to M&E activities. The project's Monitoring and Evaluation Plan will be presented and finalized in the Project Inception Report following a collective fine-tuning of indicators, means of verification, and the full definition of project staff M&E responsibilities.

Inception Phase

1. A Project Inception Workshop (IW) will be conducted within the first 6 months of project start, with the full project team, relevant government counterparts, co-financing partners, the UNDP-CO and representation from the UNDP RCU. A fundamental objective of this Inception Workshop will be to assist the project team to understand and take ownership of the project's goal and objective, as well as finalize preparation of the project's first annual work plan on the basis of the logframe matrix. This will include reviewing the logframe (indicators, means of verification, assumptions), imparting additional detail as needed, and on the basis of this exercise, finalizing the Annual Work Plan (AWP) with precise and measurable performance indicators, and in a manner consistent with the expected outcomes for the project. Additionally, the purpose and objective of the IW will be to: (i) introduce project staff with the UNDP-GEF team which will support the project during its implementation, namely the CO and responsible RCU staff; (ii) detail the roles, support services and complementary responsibilities of UNDP-CO and RCU staff *vis à vis* the project team; (iii) provide a detailed overview of UNDP-GEF reporting and monitoring and evaluation (M&E) requirements, with particular emphasis on the Annual Project Implementation Reviews (PIRs) and related documentation, the Annual Review Report (ARR), as well as mid-term and final evaluations. Equally, the IW will provide an opportunity to inform the project team on UNDP project related budgetary planning, budget reviews, and mandatory budget re-phasing. The IW will also provide an opportunity for all parties to understand their roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff and decision-making structures will be discussed in order to clarify for all, each party's responsibilities during the project's implementation phase.

Monitoring responsibilities and events

2. A detailed schedule of project review meetings will be developed by the project management, in consultation with project implementation partners and stakeholder representatives and incorporated in the Project Inception Report. Such a schedule will include: (i) tentative time frames for Project Steering Committee Meetings and (ii) project-related Monitoring and Evaluation activities. Day-to-day monitoring of implementation progress will be the responsibility of the Project Manager based on the project's Annual Work Plan and its indicators. The Project Manager will inform the UNDP-CO of any delays or difficulties facing implementation so that the appropriate support or corrective measures can be adopted in a timely and remedial fashion. The Project Manager will fine-tune the progress and performance/impact indicators of the project in consultation with the full project team at the Inception Workshop with support from UNDP-CO and assisted by the UNDP-GEF RCU. Specific targets for the first year implementation progress indicators together with their means of verification will be developed at this Workshop. These will be used to assess whether implementation is proceeding at the intended pace and in the right direction and will form part of the Annual Work Plan. Targets and indicators for subsequent years would be defined annually as part of the internal evaluation and planning processes undertaken by the project team.

3. Measurement of impact indicators related to global biodiversity benefits will occur according to the schedules defined in the Inception Workshop. Besides the METT and Financial baseline presented in this Project Document, subsequent applications of the METT are expected at the occasion of the Mid-term Evaluation and Final Evaluation. The measurement of certain indicators will be undertaken through subcontracts or retainers with relevant institutions. Periodic monitoring of implementation progress will be undertaken by the UNDP-CO through quarterly meetings with the Implementing Partner, or more frequently as deemed necessary. This will allow parties to take stock and to troubleshoot any problems pertaining to the project in a timely fashion to ensure smooth implementation of project activities.

4. Annual Monitoring will occur through the Project Steering Committee meetings. This is the highest policy-level meeting of the parties directly involved in the implementation of a project. The project will be subject to PSC meetings at least three times a year. The first such meeting will be held within the first six months of the start of full implementation.

5. The Project Manager in consultations with UNDP-CO and UNDP-GEF RCU will prepare a UNDP/GEF PIR/ARR and submit it to PSC members at least two weeks prior to the PSC for review and comments. The PIR/ARR will be used as one of the basic documents for discussions in the PSC meeting. The Project Manager will present the PIR/ARR to the Project Steering Committee, highlighting policy issues and recommendations for the decision of the PSC participants. The Project Manager also informs the participants of any agreement reached by stakeholders during the PIR/ARR preparation on how to resolve operational issues. Separate reviews of each project component may also be conducted if necessary. The Project Steering Committee has the authority to suspend disbursement if project performance benchmarks are not met. Benchmarks will be developed at the Inception Workshop, based on delivery rates, and qualitative assessments of achievements of outputs.

6. The terminal PSC meeting is held in the last month of project operations. The Project Manager is responsible for preparing the Terminal Report and submitting it to UNDP-CO and UNDP-GEF RCU. It shall be prepared in draft at least two months in advance of the terminal PSC meeting in order to allow review, and will serve as the basis for discussions in the PSC. The terminal meeting considers the implementation of the project as a whole, paying particular attention to whether the project has achieved its stated objectives and contributed to the broader environmental objective. It decides whether any actions are still necessary, particularly in relation to sustainability of project results, and acts as a vehicle through which lessons learnt can be captured to feed into other projects under implementation of formulation.

7. UNDP Country Offices and UNDP-GEF RCU as appropriate, will conduct yearly visits to project sites based on an agreed schedule to be detailed in the project's Inception Report/Annual Work Plan to assess first hand project progress. Any other member of the Project Steering Committee can also accompany this visit. A Field Visit Report will be prepared by the UNDP-CO and UNDP-GEF RCU and circulated no less than one month after the visit to the project team, all Project Steering Committee members, and UNDP-GEF.

Project Reporting

8. The Project Manager in conjunction with the project team will be responsible for the preparation and submission of the following reports that form part of the monitoring process. The first six reports are mandatory and strictly related to monitoring while the last two have a broader function and the frequency and nature is project specific to be defined throughout implementation.

9. A Project Inception Report will be prepared immediately following the Inception Workshop. It will include a detailed First Year/ Annual Work Plan divided into quarterly time-frames detailing the activities and progress indicators that will guide implementation during the first year of the project. This Work Plan will include the dates of specific field visits, support missions from the UNDP-CO or the RCU or consultants, as well as time-frames for meetings of the project's decision making structure. The Report will also include the detailed project budget for the first full year of implementation, prepared on the basis of the Annual Work Plan, and including any monitoring and evaluation requirements to effectively measure project performance during the targeted 12 month time-frame. The Inception Report will include a more detailed narrative on the institutional roles and responsibilities, coordinating actions and feedback mechanisms of project related partners. In addition, a section will be included on progress to date on project establishment and start-up activities and an update of any changed external conditions that may affect project implementation. When finalized, the report will be circulated to project counterparts who will be given a period of one

calendar month in which to respond with comments or queries. Prior to this circulation of the IR, the UNDP Country Office and the UNDP-GEF RCU will review the document.

10. An Annual Review Report shall be prepared by the Project Manager and shared with the Project Steering Committee. As a self-assessment by the project management, it does not require a cumbersome preparatory process. As minimum requirement, the Annual Review Report shall consist of the Atlas standard format for the Project Progress Report (PPR) covering the whole year with updated information for each element of the PPR as well as a summary of results achieved against pre-defined annual targets at the project level. As such, it can be readily used to spur dialogue with the Project Steering Committee and partners. An ARR will be prepared each year prior to the Project Steering Committee meeting to reflect progress achieved in implementing the Annual Work Plan and assess performance of the project in achieving intended outcomes/outputs and partnership work. The ARR should consist of the following sections: (i) project risks and issues; (ii) project progress against pre-defined indicators and targets and (iii) outcome performance.

11. The Project Implementation Review (PIR) is an annual monitoring process mandated by the GEF. It has become an essential management and monitoring tool for project managers and offers the main vehicle for extracting lessons from ongoing projects. Once the project has been under implementation for a year, a Project Implementation Report must be completed by the UNDP CO together with the project team. The PIR should be prepared in a participatory manner in July and discussed with the UNDP CO and the UNDP/GEF RCU during August with the final submission to the UNDP/GEF Headquarters in the first week of September.

12. Quarterly progress reports (QPR) are short reports outlining main updates in project progress and will be provided quarterly to the local UNDP Country Office and the UNDP-GEF RCU by the project team. Their timely and regular completion is important, as a compound report with QPRs for all projects under implementation is submitted to the GEF Council at the occasion of their meetings.

13. A Combined Delivery Report (CDR) summarizing all project expenditures, is mandatory and should be issued quarterly. The Project Manager should send it to the Project Steering Committee for review and the Implementing Partner should certify that the following logs should be prepared: (i) The Issues Log capture and track the status of all project issues throughout the implementation of the project. It will be the responsibility of the Project Manager to track, capture and assign issues, and to ensure that all project issues are appropriately addressed; (ii) the Risk Log is maintained throughout the project duration to capture potential risks to the project and associated measures to manage risks. It will be the responsibility of the Project Manager in collaboration and consultation with the UNDP CO to maintain and update the Risk Log, using Atlas; and (iii) the Lessons Learned Log is maintained throughout the project to capture insights and lessons based on good and bad experiences and behaviours. It is the responsibility of the Project Manager to maintain and update the Lessons Learned Log.

14. During the last three months of the project the project team will prepare the Project Terminal Report. (PTR) This comprehensive report will summarize all activities, achievements and outputs of the Project, lessons learnt, objectives met (or not achieved), structures and systems implemented, etc. and will be the definitive statement of the Project's activities during its lifetime. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the Project's activities.

15. As and when called for by UNDP CO, UNDP-GEF or the Implementing Partner, the project team will prepare specific Thematic Reports, focusing on specific issues or areas of activity. The request for a Thematic Report will be provided to the project team in written form by UNDP and will clearly state the issue or activities that need to be reported on. These reports can be used in a number of forms of lessons learnt exercise, specific oversight in key areas, or as troubleshooting exercises to evaluate and overcome obstacles and difficulties encountered. UNDP is requested to minimize its requests for Thematic Reports, and when such are necessary within low reasonable timeframes for their preparation by the project team.

16. Technical Reports are detailed documents covering specific areas of analysis or scientific specializations within the overall project. As part of the Inception Report, the project team will prepare a draft Reports List, detailing the technical reports

are expected to be prepared on key areas of activity during the course of the Project, and tentative due dates. Where necessary, the Reports List will be revised and updated, and included in subsequent APRs. Technical Reports may also be prepared by external consultants and should be comprehensive, specialized analyses of clearly defined areas of research within the framework of the project and its sites. These technical reports will represent, as appropriate, the project's substantive contribution to specific areas, and will be used in efforts to disseminate relevant information and best practices at local, national and international levels.

7. Project Publications will form a key method of crystallizing and disseminating the results and achievements of the Project. These publications may be scientific or informational texts on the activities and achievements of the Project, in the form of journal articles, multimedia publications, etc. These publications can be based on Technical Reports, depending upon the relevance, scientific worth, etc. of these Reports, or may be summaries or compilations of a series of Technical Reports and other research. Project publications may also include documentary films of video clips, pages on websites or other digital publications. The project team will determine if any of the Technical Reports merit formal publication, and will also (in consultation with UNDP, the Government and other relevant stakeholder groups) plan and produce these Publications in a consistent and recognizable form. Project resources will need to be defined and allocated for these activities as appropriate and in a manner commensurate with the project's budget. Since the project is located in a predominantly Tibetan-speaking area, those publications that are aimed at local stakeholders or communities should be also published in Tibetan.

DEPENDENT EVALUATIONS, AUDITS AND FINANCIAL REPORTING

8. QFD will require internal audit of use of government contribution funds. In addition the project will be subjected to at least two independent external evaluations as follows: An independent Mid-Term Evaluation will be undertaken as near as possible to the mid-point of the project lifetime. The Mid-Term Evaluation will determine progress being made towards the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. The review will pay close attention to achievement of indicators identified in the project document and subsequent AWP. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the mid-term evaluation will be decided after consultation between the parties to the project document. The Terms of Reference for this Mid-term evaluation will be prepared by the UNDP CO based on guidance from the UNDP-GEF RCU.

9. An independent Final Evaluation will take place three months prior to the terminal Project Steering Committee meeting and will focus on the same issues as the mid-term evaluation. The final evaluation will also look at impact and sustainability results, including the contribution to capacity development and the achievement of global environmental goals. The Final Evaluation should also provide recommendations for follow-up activities. The Terms of Reference for this evaluation will be prepared by the UNDP CO based on guidance from the UNDP-GEF RCU.

LEARNING AND KNOWLEDGE SHARING

10. Capturing and sharing knowledge and lessons learned will constitute an important component of the project and an essential way to ensure sustainability and replicability of project achievements. The component cuts across all three outcomes and relevant outputs are included under each respectively. As the local stakeholders are mostly Tibetan, it is important that the communication activities have the necessary facilities for translation and distribution in appropriate languages. Most of the field areas are unable to receive electronic information so reliance on printed materials will be high.

11. Results from the project will be disseminated within and beyond the project intervention zone through a number of existing information sharing networks and fora. In addition, the project will participate, as relevant and appropriate, in UNDP/GEF sponsored networks, organized for Senior Personnel working on projects that share common characteristics. UNDP/GEF RCU has established an electronic platform for sharing lessons between the project coordinators. The project will identify and participate,

relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to project implementation through lessons learned. The project will identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects. Identifying and analyzing lessons learned is an ongoing process, and the need to communicate such lessons as one of the project's central contributions is a requirement to be delivered not less frequently than once every 12 months. UNDP/GEF shall provide a format and assist the project team in categorizing, documenting and reporting lessons learned.

COMMUNICATIONS AND VISIBILITY REQUIREMENTS

2. Full compliance is required with UNDP’s Branding Guidelines. These can be accessed at <http://intra.undp.org/branding.shtml>, and specific guidelines on UNDP logo use can be accessed at: <http://intra.undp.org/branding/useOfLogo.htm>. Amongst other things, these guidelines describe when and how the UNDP logo needs to be used, as well as how the logos of donor UNDP projects needs to be used. For the avoidance of any doubt, when logo use is required, the UNDP logo needs to be used alongside the GEF logo. The GEF logo can be accessed at: http://www.thegef.org/gef/GEF_logo. The UNDP logo can be accessed at <http://intra.undp.org/branding.shtml>.

3. Full compliance is also required with the GEF’s Communication and Visibility Guidelines (the “GEF Guidelines”). The GEF Guidelines can be accessed at: http://www.thegef.org/gef/sites/thegef.org/files/documents/C.40.08_Branding_the_GEF%20final_0.pdf. Amongst other things, the GEF Guidelines describe when and how the GEF logo needs to be used in project publications, vehicles, supplies and other project equipment. The GEF Guidelines also describe other GEF promotion requirements regarding press releases, press conferences, press visits, visits by Government officials, productions and other promotional items.

4. Where other agencies and project partners have provided support through co-financing, their branding policies and requirements should be similarly applied.

AUDIT CLAUSE

5. The Government of China will provide the Resident Representative with certified periodic financial statements and annual audit of the financial statements relating to the status of UNDP (including GEF) funds according to the established procedures set out in the Programming and Finance manuals. The Audit will be conducted according to UNDP financial regulations, rules and audit policies by the legally recognized auditor of the Government of China, or by a commercial auditor engaged by the Government.

TABLE 7: M&E ACTIVITIES, RESPONSIBILITIES, BUDGET AND TIME FRAME

Type of M&E activity	Responsible Parties	Budget (US\$)	Time frame
Reception Workshop	Project Coordinator UNDP CO UNDP GEF	Cost: 10,000	Within first two months of project start up
Reception Report	Project Team UNDP CO	None	Immediately following IW
Measurement of Means of Verification and Project Purpose Indicators	Project Manager will oversee the hiring of specific studies and	Indicative cost: 10,000	Start, mid and end of project

Type of M&E activity	Responsible Parties	Budget (US\$)	Time frame
	institutions, and delegate responsibilities to relevant team members	Cost to be finalized in Inception Phase and Workshop.	
Measurement of Means of Verification of Project Progress and Performance (measured on an annual basis)	Oversight by Project Director. Project Team	No separate M&E cost: to be absorbed within salary and travel costs of project staff	Annually prior to ARR/PIR and the definition of annual work plan
ARR and PIR	Project Team UNDP-CO, UNDP-GEF	No separate M&E cost: paid from IA fees and operational budget	Annually
Quarterly progress reports	Project team		Quarterly
QDRs	Project Manager		Quarterly
Issues Log	Project Manager		Quarterly
Tasks Log	UNDP CO Programme Staff		Quarterly
Lessons Learned Log		Quarterly	
Mid-term Evaluation	Project Director and Team. UNDP-CO. UNDP-GEF RCU. External Consultants (i.e. evaluation team)	Cost: 40,000	At the mid-point of project implementation.
Final Evaluation	Project Director and Team. UNDP-CO. UNDP-GEF RCU. External Consultants (i.e. evaluation team)	Cost: 40,000	At the end of project implementation
Terminal Report	Project team UNDP-CO	None	At least one month before the end of the project
Lessons Learned	Project team UNDP-GEF RCU (suggested formats for documenting best practices, etc)	Cost :10,000 (average 2,000 per year)	Annually
Audit	UNDP-CO Project team	Cost: 4,000	Annually
TOTAL indicative COST <i>(including project team staff time and UNDP staff and travel expenses (see WP Budget, Annex 2 in prodoc)</i>		US\$ 114,000 (Some items covered under Government contribution)	

ART V: Legal Context

6. This Project Document shall be the instrument referred to as such in Article I of the Standard Basic Assistance Agreement (SBA) between the Government of China and the United Nations Development Programme, signed by the parties on. The host country-implementing agency shall, for the purpose of the Standard Basic Assistance Agreement, refer to the government coordinating agency described in that Agreement.

7. The UNDP Resident Representative in Beijing is authorized to effect in writing the following types of revision to the Project Document, provided that he/she has verified the agreement thereto by the UNDP-EEG Unit and is assured that the other signatories to the Project Document have no objection to the proposed changes:

- a) Revision of, or addition to, any of the annexes to the Project Document;
- b) Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation;
- c) Mandatory annual revisions which re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility; and
- d) Inclusion of additional annexes and attachments only as set out here in this Project Document.

SECTION II: STRATEGIC RESULTS FRAMEWORK (SRF) AND GEF INCREMENT

PART I: Strategic Results Framework (SRF)

Objective/ Outcome	Indicator	Baseline	End of Project target	Source of Information	Risks and assumptions
Objective: To catalyze management effectiveness of Qinghai's PA system to fulfil its purpose of conserving globally important biodiversity	Financial sustainability score (%) for national systems of protected areas:			Financial Sustainability Scorecard	<u>Assumptions:</u> – The government remains committed to strengthening the PA system and to an incremental growth in the funding allocation to finance the protected area network – The government continues to be committed to provide eco-compensations. <u>Risks:</u> – Mainstreaming biodiversity into sectoral policies will be hindered by lack of incentives for other sectors and poor enforcement of agreed priorities and plans
	- Component 1 – Legal, regulatory and institutional frameworks	15.4 %	30%		
	- Component 2 – Business planning and tools for cost-effective management	11.5%	50%		
	- Component 3 – Tools for revenue generation	8.5%	40%		
	METT scores for different PAs:			METT applied at PPG, Mid-Term and Final Evaluation	
	SNNR	32	70		
	Mengda	54	65		
	Kekexili	40	65		
	Qinghai Lake	54	75		
	Golmud Poplar forest	23	50		
	Selected indicator species that are rare and threatened show stable or upward trends in numbers (including <i>inter alia</i> wild yak, wild ass, Tibetan antelope, snow leopard, Pallas' cat, musk deer, white-lipped deer, black-necked crane, etc.)	Baseline survey of selected indicator species at outset of project, in three target units of the SNNR (Suojia-Qumahe, Zhaling-Elinghu, Makahe)	Key wildlife populations maintained or increasing; appropriate population structure	Biodiversity monitoring database	

Objective/ Outcome	Indicator	Baseline	End of Project target	Source of Information	Risks and assumptions
Outcome 1 Mainstreaming PA management into provincial development and sector planning process	Outputs: 1.1 Inter-sectoral coordination and planning mechanism established to integrate PA systems and objectives into development and sectoral planning process. 1.2 Institutional capacities of the provincial government built for planning, monitoring and enforcement of biodiversity management to avoid/mitigate threats to PAs. 1.3 Knowledge management system established including climate change resilience monitoring component.				
	PA system and its management mainstreamed within the provincial sectoral and development planning framework at the provincial level: indicated by clear inclusion of due consideration and concrete measures for biodiversity conservation and PA development, as well as earmarked budget in the sectoral development plans at provincial levels and in the (national) 13th 5-year plan.	No sectoral plans integrate PA objectives Development plans include no vision and development plan for PAs and no link is made between the PAs and development, nor no concrete measure for biodiversity conservation	At least 3 sectoral plans integrate consideration of PAs and of biodiversity conservation measures 13 th 5 year-Plan recognises clear linkage between PAs and provincial development, and includes PA- and biodiversity-related targets and budgets	Provincial sectoral plan 13 th 5-Year Plan	<u>Assumptions:</u> – The Provincial Government continues to be committed to the establishment of co-management options and genetic corridors – Distributional data of threatened native species is updated and maintained at provincial level
	Threats to PAs from infrastructure placement (roads, dams) and other adverse forms of land use avoided, mitigated or offset, leading to more effective conservation in Qinghai’s PA system covering 251,665km ² .	No procedure in place to deal with incompatible developments	Official standards for infrastructure development and operation within the PAs are developed and operationalised, with clear rehabilitation/offset mechanism.	Approved standards for infrastructure development and operation	<u>Risks:</u> – The effects of climate change degrade the conservation value of PAs and areas targeted for PA expansion – The processes for development of regulations and safeguard measures to support effective management are prolonged and drawn out
Outcome 2: Increasing PA management effectiveness through strengthened institutional and staff capacities	Outputs 2.1 Systemic capacity strengthened for effective PA system management. 2.2 Institutional strengthening plan adopted and operationalised. 2.3 Budgeting procedures and resource allocation improved, directly addressing threats to PAs. 2.4 Business case made to show economic benefits from PA functions. 2.5 PA staff skills raised, with 200 PA staff and other participants receiving training to better meet occupational competence standards. 2.6 PA system plan developed with climate change considerations.				

Capacity development scorecard (%) for the protected area system.	35.5%	60%	Institutional capacity development scorecard	<u>Assumptions:</u> <ul style="list-style-type: none"> – Stakeholder institutions constructively engage in the identification of the most cost-effective institutional and governance arrangements for the PAN – The individual PA institutions maintain a clear mandate and unequivocal authority to fulfil local oversight and management obligations for the protected area network – Information to support the planning and management of the PAs is made available by government and institutional data holders <u>Risks:</u> <ul style="list-style-type: none"> – Government institutions cannot agree on the rationalisation of the management authority for PAs – Severity of climate change impacts will undermine conservation efforts promoted by the project through changes in biodiversity distribution and changes in community resource use intensities
Strategic plans prepared for PA institutions and procedures and investment, and PA staff numbers dramatically increased - Permanent staff - Temporary staff	No strategic plans 160 5	Strategic Plan developed and adopted 360 150	Approved institutional strengthening plan Staff complement	
Province's system level PA financing increased to close the existing annual financing gap of US\$ 3.6 million for basic expenditure scenario (tracked with PA financial sustainability scorecard)	US\$ 2.8 million / year	US\$ 6.4 million per year	Audited financial reports of PAs	
Ratio of total PA budget spent on field operations raised to narrow spending gap	<10% of PA revenue spent on field operations	>30% of PA revenue spent on field operations	Departmental budgets and audits. Approved investments under 12 th & 13 th 5-year plans.	
Reduction in illegal incident cases within the NRs – poaching, illegal harvesting, illegal-grazing, etc.	Currently no monitoring system in place. Baseline for the number of illegal incidents will be estimated at onset of the project.	Functioning policing records system with links to police/court cases and an enhanced policing mandate of NR staff. Routine report forms designed for numerical analysis. Incidents reduced to 50% of the baseline level.	Incident database established at the onset of the project (output 2.1)	
Annual income diverted to PA management from eco-compensation agreements (excluding funds arising from the Sanjiangyuan Ecological Construction Plan)	0	>US\$1.0m	PA financial accounts	
More representative PA system approved with most of 'major vegetation types' represented (>5% coverage) in the NNR's	13 of 30 habitats	22 of 30 habitats (addition of desert and Qilian montane habitats, with an	Approved Systems Plan harmonised with other key plans	

			overall increase of 18,000,000 ha in the provincial PA system)	Database and information management system in support of PA system Annual reports on state of biological environment	
Outcome 3: Demonstration of Effective PA management through community involvement in the Sanjiangyuan National Nature Reserve (SNNR)	Outputs 3.1 PA management system in three management units covering 59,100 km ² in SNNR (Makahe, Suojia-Qumahe, Zhaling-Elinghu) improved through co-management projects. 3.2 Monitoring and adaptive resource management systems in place. 3.3 Piloting of eco-compensation schemes in demonstration areas to reduce biodiversity threats.				
	Extent of area (ha) closed from domestic grazing Area of open corridors Area within the PA under community co-management	1,000 km ² 0 km ² 2,440 km ²	4,000 km ² 500 km ² 8,886 km ² (or more)	Stewardship and co-management plans and agreements in SNNR	<u>Assumptions:</u> – Government policy remains favourable to greater involvement and responsibility of local communities in co-management of grasslands, forests and wetlands <u>Risks:</u> – Even under co-management, economic development interests of communities will override certain conservation priorities, leading to continued loss and degradation of biodiversity – Insufficient incentives are created by eco-compensation and other co-financing schemes to facilitate conservation through co-management negotiations
	Increase in the key species number and distributions in target co-management community sites (up to 12 community field sites)	Baseline wildlife populations TBD at onset of project (Target species will be rare or endangered, to be agreed with SNNR and local communities)	Key wildlife populations maintained or increasing in co-management areas	SNNR annual reports, project field reports, end project survey (sub-contract)	
	Management effectiveness increased in SNNR due to co-management arrangements using the METT tracking tool	33% Management unit baselines TBD at onset of project	70%	METT applied at mid-term and at the end of the project.	
	Number of private-NR or of community co-management agreements: - Private enterprise management agreements - Informal, non-binding, agreements - Formal, legally binding, agreements	0 6 0	At least 1 >10 agreements >2 agreements	Filed and documented agreements	
	Awareness surveys among communities show increased positive attitude towards PA conservation	Baseline awareness TBD by Knowledge Attitudes & Practice (KAP) survey at onset of project	Baseline + 50% positive attitude	Initial KAP and end-of-project repeat KAP surveys in demo communities	

RT II: Incremental Cost Analysis

line

Without GEF support, PA management in Qinghai will continue to be hindered by weak support at the provincial and government levels and at the community level. Multi-sectoral support for PA development (and their on-going operations) will be limited. PA management capacities will also remain at a basic level and system-wide institutional policy reforms and capacity building will not occur within the timeframe required to address urgent threats to global biodiversity values. Under the baseline, PAs will remain under-resourced, and park-people and human-wildlife conflicts will continue – with low levels of participation and support by local people and communities for conservation action within PAs. In addition, different agencies will continue to promote their agendas through programmes without due consideration to impacts of their actions on biodiversity in and adjacent to PAs, which may even increase the costs of amelioration of biodiversity loss and degradation.

al Environmental Objectives

The increment of the project in terms of global environmental benefits is represented by: (i) increasing management effectiveness at the PA level through multiple interventions (from a METT baseline of 22-58% to a METT target of all PAs score of 60% or more, in particular through an up-scaling of co-management arrangements; (ii) improving the overall PA institutional capacity (from a baseline of 35.5% in the Capacity Assessment Scorecard to >60%); and (iii) increasing the financial sustainability of the PA system (from a sustainability baseline average score of 31% to >50%, as measured through UNDP's Financial Sustainability Scorecard). The project will be expanding and significantly improving the PA system design with addition of 200,000 ha of terrestrial landscapes under protection. In the long-term (by 2017 and beyond), threats to biodiversity such as wildlife poaching, the spread of alien invasive species, unsustainable grazing, restriction of wildlife movements/migrations by fence construction, destructive pest control programmes, illegal logging of forest products and uncontrolled wildfires will be contained at levels determined appropriate and published in a region-wide PA system plan.

The Project will generate global benefits directly in an area estimated at 59,100 km² through enhanced PA effectiveness through co-management approaches, and in an additional 93,200 km² through strengthened institutional and staff capacity for PA management in the Sanjiangyuan National Nature Reserve (with a total area of 152,300 km²). By strengthening overall provincial institutional arrangements and coordinating capacities and actions to mainstream biodiversity considerations in provincial planning and decision-making, and by strengthening provincial and local PA management authorities' institutional and individual capacities, the project will contribute to improving the overall effective management of Qinghai's entire PA system, with a total land area of 251,665 km².

Alternative

Under the alternative (GEF project) scenario, the systemic capacity for effective PA management in Qinghai will be greatly strengthened, and the institutional arrangements and coordination mechanisms necessary to promote biodiversity conservation will be permanently improved. The project will provide a sound basis for monitoring biodiversity, and for planning an adequate PA system both to protect representative samples of biota found today and also to meet the challenges posed by rapidly changing climate. The alternative scenario will also provide the additional capacity needed to undertake the massive task of controlling illegal poaching and curbing damaging activities such as insensitive engineering projects, widespread fencing, over-grazing, ill-conceived pest eradication programmes, hasty and often illegal mining operations and water diversion schemes that threaten the viability of this important ecosystem.

A collaborative approach to environmental stewardship will be put in place to facilitate co-management of large areas of reserve, rangeland and genetic corridors. Such a system is less expensive and more effective than recruiting government staff. The advantage of the great knowledge, field skill and mobility (horses) of local herdsmen. At the same time a collaborative stewardship programme will help break some of the animosity occasionally found between formal protection authorities and local resource users. It can bring new financial opportunities and alternative livelihood options to remote and poor communities. The stewardship system is based on decades-to-centuries of communal pastoral practices and cultural/religious beliefs and traditions. Models developed under the project can be up-scaled cost-effectively over much larger areas as well, not only in Qinghai but also in Tibet, Sichuan, Inner Mon

Kinjiang provinces (or autonomous regions) where similar pastoral communities and vast, semi-arid grassland ecosystems also exist.

Experiments in novel financing mechanisms in areas with eco-tourism potential, developed by/with local communities or user groups, and improved site management, may also lead to additional sustainable ways in which biodiversity conservation can be financed in the province. The involvement of other agencies in synergetic environmental protection efforts, a sharing of the responsibility and financial burden, and the relaxation of rules currently upheld by the relatively poor Forestry Department for the protection and sustainable management of such vast areas (which cover 34% of the province) may also be achieved.

Primary benefits from improved PA management will be secured water supply from the three major rivers (Yellow, Yangtze, and Lancang) and reduced heat absorption resulting from improved vegetation cover, which will both ameliorate the present climate and reduce the impact of climate change. Communication, education and awareness programmes linked to the PA system will be coordinated as a strategic and focused intervention. Improved awareness among both herding communities and urban public will feed into media interventions to enhance the government’s confidence to make further investment in biodiversity conservation. Provincial pride in the unique biodiversity of Qinghai’s unique fauna and flora, together with better appreciation of how their protection contributes to vital national (and regional) ecosystem services will be engendered, and this in turn will assist the province in negotiations with central government and downstream beneficiary provinces to lever greater eco-compensation payments to cover the costs of good ecosystem stewardship.

System Boundary

In biological terms, the project is focused on the *in situ* conservation of local fauna, flora, habitats and ecological processes. Geographically, the project is limited to the province of Qinghai in a stratified manner. Some aspects of the project cover the entire province; in-depth management planning and institutional capacity building will cover selected PAs; and trialling and development of community co-management models and field research will be undertaken at specific demonstration sites. The strategic emphasis of the project is greatly improved effective management of a network of provincial and national PAs that conserves the unique biodiversity of Qinghai, redesigned with consideration of the need for resilience in light of rapidly changing climate, together with moderate expansion (in terms of coverage and representation) of the provincial PA system. Baseline and incremental costs have been assessed over the 5-year span of the project.

Summary of Costs

The GEF financing for the project totals US\$5,354,545.¹⁵ Total co-financing for the project is US\$18,500,000. The total cost is broken down as follows: a) US\$2,990,000 for Component 1; b) US\$7,550,000 for Component 2; c) US\$6,934,000 for Component 3; and d) US\$1,026,000 for project management. Co-financing is provided by the Government in cash, in kind, and from other sources. The details below detail the **co-financing commitment** to the project.

Name of Co-financier (source)	Classification	Type	Project	%*
Qinghai Department of Finance	Government	In cash	13,150,000	79.6
Qinghai Department of Finance	Government	In kind	3,746,100	20.4
Total Co-financing			18,349,000*	100%

*The amount does not include government co-financing of US\$ 151,000 for PPG.

	Component 1	Component 2	Component 3	Project Management	Total
In kind	1,500,000	1,300,000	546,100	400,000	3,746,100
In cash	6,400,000	2,800,000	4,026,728	1,376,172	14,602,900
Total	7,900,000	4,100,000	4,572,828	1,776,172	18,349,000

*Including PPG costs.

SECTION III: Total Budget and Workplan

Short Title:	Strengthening Qinghai's PAs to conserve globally important biodiversity
Award ID:	00063658
Project ID:	00080635
Award Title:	PIMS 4179 Qinghai, PA System Strengthening
Business Unit:	CHN10
Project Title:	Strengthening the effectiveness of the protected area system in Qinghai Province, China to conserve globally important biodiversity
Implementing Partner (Executing Agency)	Department of Forestry, Qinghai Province Government, People's Republic of China

GEF Outcome/ Atlas Activity	Implementing Agent	Fund ID	Donor Name	Atlas Budgetary Acct Code	Atlas Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Amount Year 5 (USD)	Total (USD)	Budget Note
COMPONENT 1: Mainstreaming PA management into provincial development and sector planing process	QFD	62000	GEF	71200	International Consultants	5,000	40,000	40,000	40,000	25,000	150,000	1
				71300	Local Consultants	2,000	15,000	15,000	8,000	0	40,000	2
				72100	Contractual service companies	5,000	15,000	15,000	15,000	10,000	60,000	3
				71600	Travel	7,000	10,000	10,000	8,500	4,500	40,000	4
				72100	Contractual service companies	0	80,000	80,000	30,000	0	190,000	5
				74200	Audio-visual and printing production costs	30,000	10,000	10,000	10,000	0	60,000	6
				74500	Miscellaneous	2,000	2,000	2,000	2,000	2,000	10,000	7

					Total	51,000	172,000	172,000	113,500	41,500	550,000	
COMPONENT 2: Increasing PA management effectiveness through strengthened institutional and staff capacities	QFD	62000	GEF	71200	International Consultants	20,000	67,000	80,000	75,000	20,000	262,000	8
				71300	Local Consultants	15,000	20,000	30,000	14,200	0	79,200	9
				71600	Travel	20,000	20,000	20,000	20,000	20,000	100,000	10
				72100	Contractual service companies	20,000	70,000	70,000	60,000	20,000	240,000	11
				72100	Contractual service companies	0	80,000	90,000	90,000	90,000	350,000	12
				72200	Equipment and furniture	50,000	100,000	40,000	0	0	190,000	13
				72100	Contractual service companies	10,000	40,000	49,000	30,000	0	129,000	14
				72800	Information technology equipment	0	60,000	30,000	0	0	90,000	15
				74200	Audio-visual and printing production costs	0	10,000	20,000	20,000	10,000	60,000	16
				74500	Miscellaneous	2,000	2,000	2,000	2,000	1,800	9,800	17
					Total	137,000	469,000	431,000	311,200	161,800	1,510,000	
COMPONENT 3: Demonstration of effective PA management through community involvement in the Sanjiangyuan National Nature Reserve (SNNR)	QFD	62000	GEF	71200	International Consultants	14,000	40,000	60,000	50,000	10,000	174,000	18
				71300	Local Consultants	20,000	100,000	130,000	97,000	40,000	387,000	19
				71600	Travel	15,000	50,000	60,000	50,000	20,000	195,000	20
				72100	Contractual service companies	30,000	200,000	500,000	300,000	120,000	1,150,000	21
				72100	Contractual service companies	24,000	30,000	30,000	30,000	30,000	144,000	22
				72200	Equipment	50,000	70,000	80,000	60,000	30,000	290,000	23
				75700	Training	15,000	30,000	70,000	70,000	20,000	205,000	24

				74200	Audio-visual and printing production costs	10,000	20,000	30,000	30,000	30,000	120,000	25
				74500	Miscellaneous	10,000	25,000	25,000	25,000	14,000	99,000	26
					Total	188,000	565,000	985,000	712,000	314,000	2,764,000	
PROJECT MANAGEMENT	QFD	62000	GEF	71200	International Consultants	5,000	12,000	33,000	12,000	30,000	92,000	27
				71300	Local Consultants	47,000	76,000	91,000	76,000	84,000	374,000	28
				71600	Travel	1,000	3,000	3,000	3,000	0	10,000	29
				72200	Equipment	50,545	0	0	0	0	50,545	30
				74100	Audit fees	0	1,000	1,000	1,000	1,000	4,000	31
					Total	103,545	92,000	128,000	92,000	115,000	530,545	

Budget Notes	
1	Protected Area Planning and Mainstreaming Specialist (US\$3,000 X 40 mw), Biodiversity monitoring and database expert (US\$3,000 X 10mw).
2	National Senior Mainstreaming Specialist (US\$1,000 X 40 mw)
3	Key planning and consultation meetings for, <i>inter alia</i> , : production of the inception report; development of sector specific standards and measures; development of reporting and information sharing protocols; mainstreaming of the PA system and objectives in the 5-year plans and budget and provincial biodiversity strategy and action plan; monitoring programme; development of province specific EIA and SEA regulations and procedures; GIS platform establishment; establishment of biodiversity monitoring baseline; development of a guidebook on data management.
4	<i>Pro rata</i> in-country travel for international and national consultants and project staff.
5	Service contract to develop the knowledge management system including climate change resilience monitoring component, and link up data network system (Output 1.3). Targeted applied research to fill the gaps in the current data sets: biological pest control approaches; grazing controls without fences; micro-climate impacts under differential grazing intensity.
6	Translation, editing, design and printing of reports and awareness materials and other publications
7	Contingency to cover exchange rate fluctuations and miscellaneous costs associated with organizing focused specialized meetings (venue, catering, facilitation, interpretation etc.).
8	The technical assistance component of the International Technical Adviser (US\$2,000 X 35 mw); Protected Area Law and Law Enforcement Specialist (US\$3,000 X 12); Training Programme Development Specialist (US\$ 3,000X10mw); PA Tourism Development and Financing Specialist (US\$3,000 X 12 mw); Climate resilient Protected Area System Planning and Management Specialist (US\$3,000 X 30mw). <i>Domestic expertise in protected area management related disciplines is still in the early stage of development and international expertise in</i>

Budget Notes	
	<i>the mentioned areas would be critical for ensuring transformational change.</i>
9	National: Protected Area Law and Law Enforcement Specialist (US\$900 X 40mw); Legal Drafter (US\$900 X 8 mw); Protected Area Financing Specialist (US\$900 X 20mw); Biodiversity and Ecosystem Management Specialist (US\$900 X 20mw) .
10	<i>Pro rata</i> travel costs for international, national consultants and project staff.
11	Service contract/s to cover: Institutional strengthening planning including financial management system and process analysis (Output 2.2, 2.3); Protected Area System Economic Valuation (Output 2.4); community based ecotourism and nature tourism development, destination planning (Output 2.4); management oriented research for development of protected area system planning and management planning (Output 2.6)
12	Development of training programmes and delivery of special training for PA managers at the QFD and prefecture/county forestry staff, police, agricultural bureaus, as well as technical short-term exchange arrangements. (Output 2.5)
13	Equipment costs from GEF sources in support of PA management (discussions with local government have enabled co-funding to be used to cover the bulk of equipment and vehicle costs under government co-financing; GEF to cover only needs of PMO and consultants plus some items not readily available in China). GEF Funds cover purchase of 3 x 4-wheel vehicles, 3 pick-ups, motor bikes, and assorted satellite telephones, optical and camping equipment. <i>Vehicles are critical for this project given the sheer size of the target PA.</i>
14	A number of key planning meetings and consultations including: SNNR regulation development; competence standards review and application; law enforcement mandate review and strengthening of the current system; PA system plan development, PA management plans development, PA valuation exercise and financing planning etc.
15	Computers, software, peripherals and communication equipment (GPS, sat phones) for PA operations.
16	Translation, editing, design and printing of reports and awareness materials developed under component.
17	Contingency to cover exchange rate fluctuations and miscellaneous costs associated with organizing focused specialized meetings (venue, catering, facilitation, printing, interpretation etc.).
18	Community Co-management Specialist (US\$3,000 X 50mw); Conservation Area Management Planning Specialist (US\$ 3,000 X 8mw).
19	National experts: Community Based Natural Resources Management Specialist (US\$900 X 200 mw); Community Cooperative Development Specialist (US\$800 X 40mw); Community Participation Specialist (US\$700 X 150mw); Traditional Knowledge Specialist (US\$700 X 100mw).
20	<i>Pro rata</i> travel costs for international and national consultants and project staff. (Extensive travel over very large areas)
21	Service contracts to cover supervision of several aspects of component including: Development of co-management structure and management system, community extension agreement, operationalisation of zonation system etc. (Output 3.1); Establishment of ecological monitoring system in SNNR including monitoring plan, selection of species, training, guideline development etc. (Output 3.2); Establishment of eco-compensation schemes in direct support of the SNNR management (Output 3.3). <i>Contracts will be awarded to specialised institutions/NGOs on a competitive basis, based on both thematic and geographic experience, to undertake relevant work.</i>
22	Key planning meetings with community leaders, community gatherings, religious leaders, local government etc. for, <i>inter alia</i> ; development of unit-specific management plans and zonation for three target SNNR units; extension of co-management concept and its benefits to community members; development of co-management agreements; establishment of ecological monitoring system; development of a network of community based monitoring system in conjunction with expansion of successful co-management models; management

Budget Notes	
	infrastructure development; development of eco-compensation schemes in SNNR.
23	Procurement of equipment that are necessary for field operations in the demonstration areas.
24	Implementation of training aiming at PA managers and co-managers at the demonstration sites within the SNNR.
25	Translation, editing, designing and printing of reports and awareness materials, handbooks for community managers, monitoring, traditional knowledge. All reports for local use should be printed in Chinese and Tibetan.
26	Contingency for exchange rate fluctuations and small costs associated with organizing focused specialized stakeholder engagement workshops and hosting issue-based stakeholder workshops (venue, catering, facilitation, printing, interpretation, etc.).
27	The project management support part of the International Technical Adviser (co-manager) (US\$2,000 X 25mw); International Project Evaluator (US\$ 3,000 X 14mw) .
28	National Project Manager (US\$ 800 X 260 mw) ; Project Assistant (US\$ 600 X 260 mw); National Evaluation Consultant (US\$1,000 X 10 mw)
29	Travel associated with project monitoring.
30	Project management equipment (transport and office equipment)
31	Annual project audit cost.

Summary of Funds

Source	Year 1	Year 2	Year 3	Year 4	Year 4	Total
GEF	479,545	1,298,000	1,716,000	1,228,700	632,300	5,354,545
Government	2,000,000	4,820,000	4,820,000	4,709,000	2,000,000	18,349,000
Total	4,479,545	6,118,000	6,536,000	5,937,700	4,632,300	23,703,545

*Excludes PPG funding

SECTION IV: ADDITIONAL INFORMATION

PART I: Co-financing and Support Letters

青海省人民政府

关于全球环境基金青海三江源生物多样性 保护项目配套资金的承诺函

联合国开发计划署驻华代表处：

为确保全球环境基金青海三江源区生物多样性保护项目顺利实施，青海省人民政府承诺为该项目提供地方配套资金 1850 万美元，其中：现金配套 535 万美元、实物配套 1315 万美元。

真诚感谢贵署对我省项目工作的大力支持！

特此致函。

联系人及电话：青海省财政厅 刘 锋 0971-6118200

二〇一一年五月二十六日

青海省人民政府

May 26 2011

To: UNDP China

From: People's Government of Qinghai Province

Subject: Counterpart Fund Commitment Letter of Strengthening the Effectiveness of the Protected Area System in Qinghai Province, China to Conserve Globally Important Biodiversity

The People's Government of Qinghai Province promises to contribute the local counterpart fund USD 18.5 million, of which USD 5.35 million will be provided in cash and USD 13.15 million will be furnished in kind, in order to implement the Strengthening the Effectiveness of the Projected Area System in Qinghai Province, China to Conserve Globally Important Biodiversity smoothly.

Thank you very much for your great support to our project.



People's Government of Qinghai Province

RT II: Summary of the METT Capacity Development and Financial Scorecards Results

Section One: Project General Information

Project Name: Strengthening the effectiveness of the protected area system in Qinghai Province, China to conserve globally important Biodiversity

Project Type (MSP or FSP): FSP

Project ID (GEF): 3992

Project ID (IA): 4179

Implementing Agency: UNDP

Country(ies): P.R.China

Project duration: 5 years

Project Executing Agency (ies): Qinghai Forest Department / Qinghai Finance Department

Table of reviewers completing tracking tool and completion dates

	Name	Title	Agency
Endorsement Sept 2010	Li Diqiang	Prof. consultant	Beijing University
Project Mid-term			
Evaluation/project completion			

Table of project coverage in hectares

Targets and Timeframe	Foreseen at project start (ha)	Achievement at Mid-term Evaluation of Project (ha)	Achievement at Final Evaluation of Project (ha)
Total Extent in hectares of protected areas targeted by the project by WWF ecoregion			
Central Tibetan Plateau alpine steppe	5,818,000		
South Tibetan Plateau-Kunlun Mountains alpine desert	2,357,000		
Qiang-Lancang Gorge alpine conifer and mixed forest	126,000		
Qaidam basins semi-desert	3,971,000		
Qilian Mts subalpine meadow	834,400		
Southeast Tibet shrublands and meadow	4,413,000		
Tibetan Plateau alpine shrublands and meadows	6,600,000		
Tibetan Himalayan alpine shrub and meadows	152,600		
Tibetan Plateau lakes (not WWF ecoregion)	776,500		
Total	25,048,500		

view of Protected Areas that are the target of the GEF intervention

Name of Protected Area	Is this a new protected area? (Y / N)	Area (ha)	Biome type (WWF 200 ecoregions)	Global designation or priority lists	Local Designation of Protected Area	IUCN Category for each Protected Area ¹⁶				
						I	II	III	IV	V
Qinghai Lake	N	495,200	Central Tibetan Plateau alpine steppe	Ramsar Site	National Nature Reserve		*			
Nujiangyuan	N	15,230,000	Central Tibetan Plateau alpine steppe, Tibetan Plateau alpins shrublands and meadows, Southeast Tibet shrublands and meadow, Western Himalayan alpine shrub and meadows, Nujiang Langcang Gorge alpine conifer and mixed forest.	Erling-Jaling Lakes are Ramsar Lake	National Nature Reserve					
Kexili	N	4,500,000	North Tibetan Plateau-Kunlun mountains alpine desert, Central Tibetan Plateau alpine steppe		National Nature Reserve				*	
Yungda	N	17,300	Southeast Tibet shrublands and meadow		National Nature Reserve C	*				
Qaidam basin semi-desert (Mud pulus phratica)	N	4,200	Qaidam basin semi-desert		Provincial Nature reserve	*				
Qaidam basin semi-desert (Doxylon rest)	N	3,734,500	Qaidam basin semi-desert		Provincial Nature reserve	*				
Qaidam basin semi-desert (Kule Lake - Kosu Lake)	N	115,000	Qaidam basin semi-desert		Provincial Nature reserve	*				
Qaidam basin semi-desert (Gang Bao ke)	N	10,000	Southeast Tibet shrublands and meadow		National Nature Reserve					
Qaidam basin semi-desert (Tong chuan)	N	107,900	Central Tibetan Plateau alpine steppe		Provincial Nature reserve	*				
Qaidam basin semi-desert (Qilian Mts)	N	834,400	Qilian Mts subalpine meadow		Provincial Nature reserve	*				
Qaidam basin semi-desert (Qumuhong)	N	118,000	Qaidam basin semi-desert		Provincial Nature reserve	*				

Legend on IUCN PA Categories

- Strict Nature Reserve/Wilderness Area: managed mainly for science or wilderness protection
- National Park: managed mainly for ecosystem protection and recreation
- Natural Monument: managed mainly for conservation of specific natural features
- Habitat/Species Management Area: managed mainly for conservation through management intervention
- Protected Landscape/Seascape: managed mainly for landscape/seascape protection and recreation
- Protected area with sustainable use of natural resources

China's nature reserve system does not follow the IUCN category system. Equivalent categories in this table are assigned by experts based on current land uses.

ing PPG, METT scorecards were completed by small teams for the 3 largest and most important NRs in Qinghai plus two other NRs for comparison. In total this sample covers more than 80% of the total NR area of the province. Results are summarized below.

METT scores for different PAs	
QNR	32
Qingda	54
Qixili	40
Qinghai Lake	53
Qinghai Yellow River	23

A financial scorecard was used to assess the baseline financial sustainability for the entire NR system. The result of the assessment was 31%.

A standard capacity development scorecard was used to assess Qinghai Forest Department overall capacity for the PA system management. By separating the questions into three classes it was possible to separately assess capacity at systemic, institutional and individual levels. The results were 35.5% of the optimal score.

Full METT and Financial scorecards are attached as a separate Excel file in the form of the GEF BD Tracking Tool. Capacity scorecard is attached as Annex 3.

RT III: Profile of the SNNR

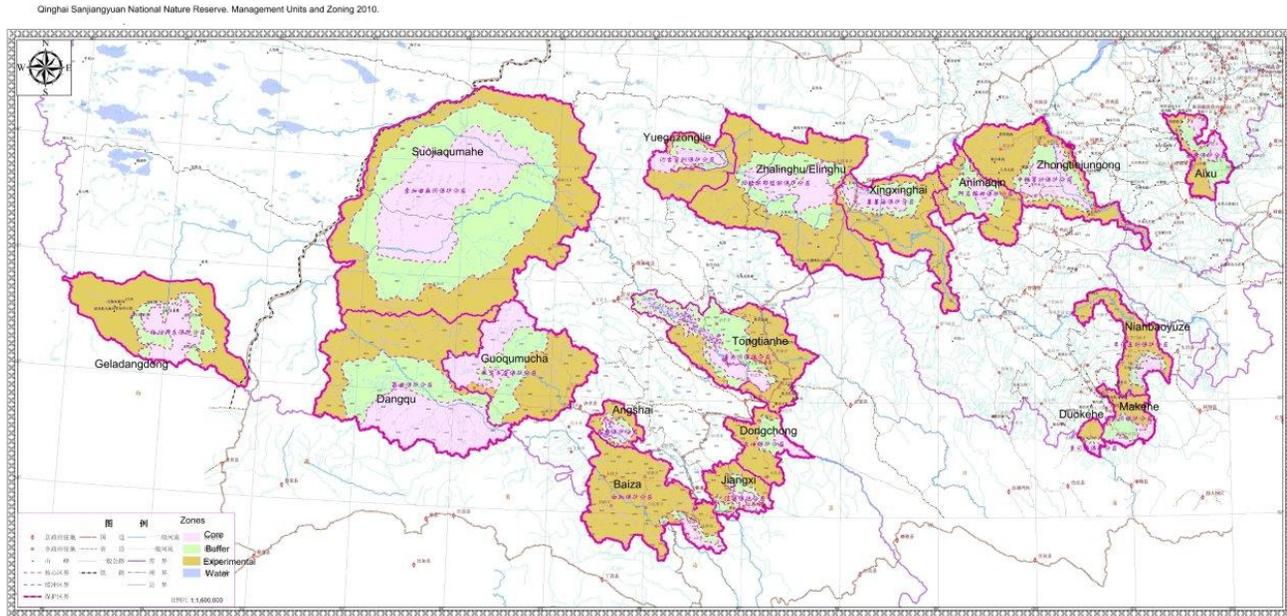
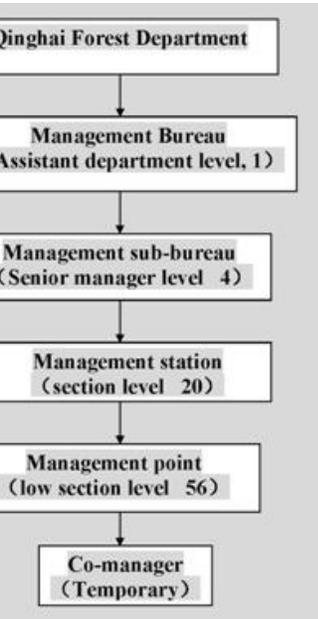
NR is the largest PA in Qinghai and the 2nd largest PA in China. At 152,300 km², it is more than 3 times the size of Switzerland and is of great importance for wildlife, wetlands, water catchment functions, and cultural values. However, as revealed by the reserve lacks a management plan; has very limited staff numbers (and of these staff, most are located in the distant NNR bureau in the provincial capital, Xining); has very little capacity or operational budget; and in some parts of the NNR there are sedimentation problems. The human population in the reserve (and human activities) are widely scattered. In addition a large part of the reserve (in Yushu Tibetan Autonomous Prefecture) was recently severely set back by the destruction of its main town, Yushu, due to an earthquake in April 2010, which registered at a magnitude of 7.1 on the Richter scale.

The reserve currently has a total staffing of only 13 full-time and 18 temporary workers. Large investments have been made into physical development of the reserve, but the field operations budget is less than 500,000 RMB per annum. Protection activities are largely delegated to county government offices (see reporting structure below). The reserve encompasses parts of 15 county level administrative units: Quidong, Guoluo, Zaduo, Nangqian, Yushu, Chengduo (all 6 counties of Yushu Tibetan Autonomous Prefecture), Maduo, Maqin, Jiuzhi, Baishan (all 6 counties in Guoluo Tibetan Autonomous Prefecture), Zeku, Henan (2 of 4 counties in Huangnan Tibetan Autonomous Prefecture), Xinghai, Tongde (2 of 4 counties in Hainan Tibetan Autonomous Prefecture) and Geermu/Golmud (in Haixi Mongolian Autonomous Prefecture).

The reserve is currently (2010) divided into 18 management units each with its own core zone, buffer zone and experimental zone (see map and table below). Note that buffer zones in Chinese NRs are a strict protection category very different from external PA buffer zones in common international parlance. These 18 units are partly contiguous, partly disconnected; they form six isolated blocks.

There are plans to further expand and link (some of) these management units, and this project can provide detailed zoning plans for the expansion including proper consideration for needs of greater connectivity and climate adaptations in reserve design. The SNNR encompasses a human population over 210,000 people, while the Sanjiangyuan area as a whole has an estimated 590,000 inhabitants (2005 data).

Management structure, with map of nature reserve including three management zones in 18 reserve units

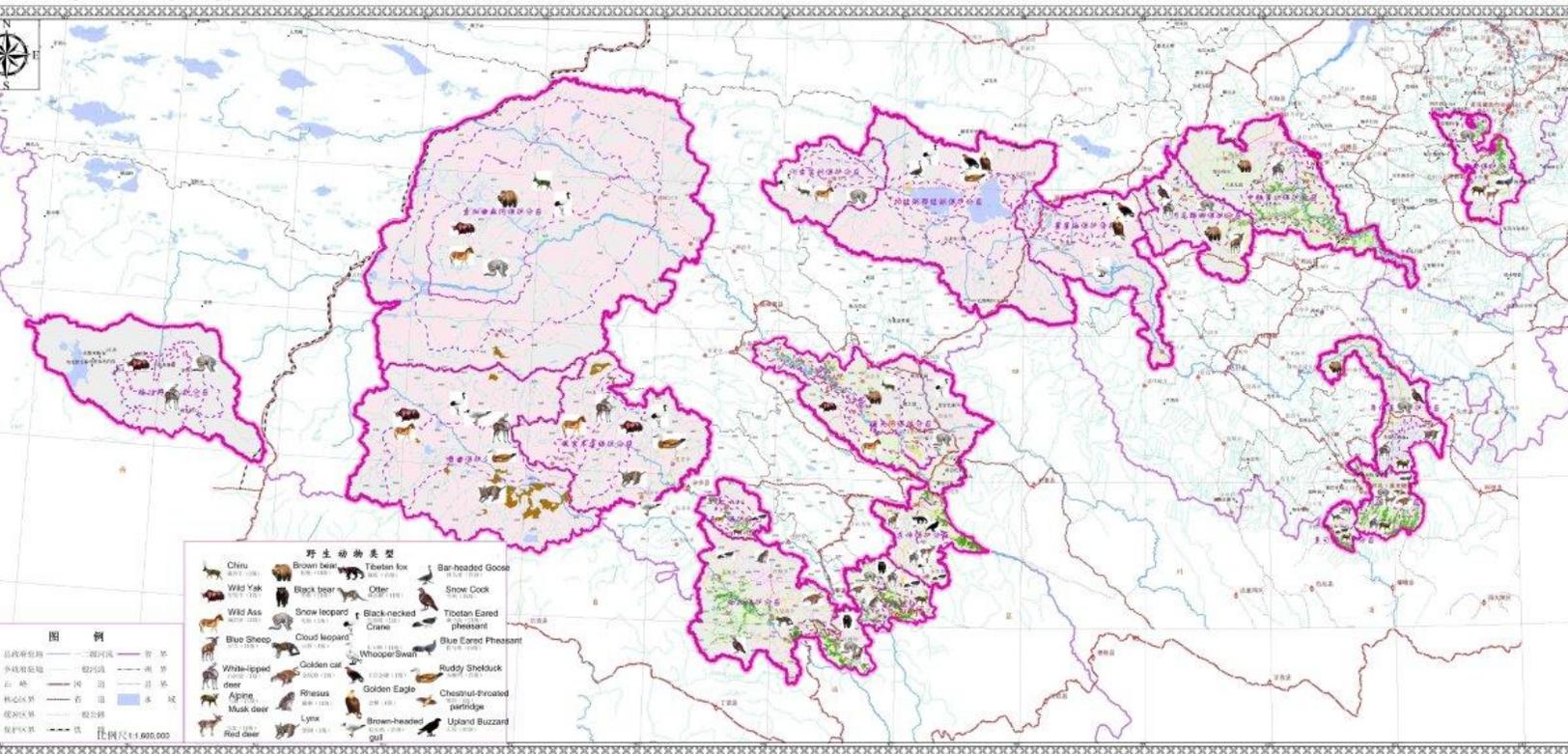


Management Details of Units of Sanjiangyuan NNR

SNNR units (conservation areas)	Areas (in km ²)				Townships (<i>xiang</i>) included within NNR	Counties included within NNR
	Total area	Core area	Buffer area	Experimental area		
Geladandong	10,380	1,910	1,990	6,470	Tuotuohe xiang	Geermu (Golmud)
Dangqu	16,420	5,620	4,370	6,430	Chadan xiang, Moyun xiang	Zaduo
Guozong mucha	11,190	2,860	2,680	5,650	Zhaqing xiang, Aduo xiang	Zaduo
Suojia-Qumahe	41,630	10,180	15,640	15,810	Qumahe xiang, Yege xiang (in Qumalai), Zhahe xiang, Suojia xiang (in Zhiduo)	Qumalai, Zhiduo
Yuegu zonglie	4,060	950	660	2,450	Maduo xiang	Qumalai
Zhaling-Elinghu	15,510	2,320	2,910	10,280	Zhalinghu xiang	Maduo
Xingxing hai	6,910	930	1,100	4,880	Heihe xiang, Huanghe xiang, Tehetu xiang, Mazhi xiang	Maduo
Animaqing	4,280	500	1,220	2,560	Xiadawu xiang, Xueshan xiang	Maqin
Zhongtie jungong	7,860	1,560	1,360	4,950	Wenquan xiang, Longzang xiang, Zhongtie xiang, Ashizha xiang, Lajia zhen, Qushian xiang	Xinghai
Meixu	2,680	540	1,050	1,090	Duofudun xiang, Duohemao xiang, Xibusha xiang	Zeku
Nianbao yuze	3,470	290	380	2,800	Mentang xiang, Suohurima xiang	Jiuzhi, Gande
Makahe	1,970	360	590	1,020	Dengta xiang	Banma, Jiuzhi
Dukehe	580	140	100	340	Zhi qin xiang	Ban ma
Tongtianhe	9,590	1,590	3,110	4,890	Gaduo xiang, Anchong xiang, Qingshuihe zhen, Zhenqin xiang, Zhongda xiang, Labu xiang, Xiewu zhen	Chengduo, Yushu, Qumalai, Zhiduo
Dongzhong	2,930	350	670	1,910	Zhenda xiang, Batang xiang, Xiaofangmang xiang	Yushu
Jiangxi	2,420	340	730	1,360	Niangla xiang, Jiangxi linchang, Maozhuang xiang	Nangqian, Yushu
Baizha	8,900	420	380	8,130	Dongba xiang, Zhaoxiao xiang, Gayong xiang, Jinisai xiang, Jiqu xiang, Baizha linchang, Baizha xiang	Nangqian
Angsai	1,510	350	510	850	Angsai xiang	Zaduo
Totals	152,300	31,200	39,200	81,900		

Due to the huge expanse of the reserve, different units include different habitat, wildlife and other features. The most western unit of Geladandong, forms part of the extreme harsh Changtang region of Qinghai and Tibet. The large southern unit of Dangqu contains extensive marshy wetlands. Several units contain important lakes, notably Zhaling and Eling Lakes unit, which is a Ramsar site. The Tongtianhe (Yangtze River) unit is an important riverine wetland, with significant breeding area for black-necked cranes. The western and eastern units of SNNR are at relatively lower altitudes and enjoy milder climate with forests in the deep valleys. The following table shows the basic distribution of some of the most significant large wildlife in the nature reserve and the Sanjiangyuan region.

Qinghai Sanjiangyuan National Nature Reserve. Forest and wildlife resources.



RT IV: Target Community Profiles

The project will select and work closely with up to 12 different communities in the Sanjiangyuan National Nature Reserve (SNNR) to reduce, develop, enhance or refine, strengthen and/or scale-up (increase the scope of) community co-management conservation activities in the region, including wildlife protection and monitoring, environmental awareness, anti-poaching patrols and adoption of sustainable natural resource use by local herding and farming communities. Through the development of eco-compensation schemes, adequate long-term financing mechanisms will be developed and put in place for community-based environmental conservation as well to support or contribute to community development funds or trust funds (managed under appropriate government structures) to bring socio-economic benefit to local communities.

Other areas and communities may also be added later in the project to fill gaps or to learn from cooperation and collaboration with national community conservation efforts, in order to broaden the scope of the project's learning experience as much as possible. Additional community partnerships (co-management field projects) will help inform and guide future planning and assist in the scaling-up of co-management approaches, which will help strengthen PA management effectiveness.

To select communities to participate in the project's co-management work (Component 3), the following criteria shall be considered: the natural nature of the local community's area for biodiversity conservation; community interest and willingness to be involved; community capacity (including community cohesiveness, basic awareness or experience with the concept of co-management, and presence of local champions); and the potential demonstration value of a site to address unique sets of conservation issues (e.g., grazing, human-wildlife conflict, poaching, mining, infrastructure, tourism).

The initial set of communities selected to partner with the project to achieve biodiversity conservation goals through co-management is described below. These six communities were selected based on their previous experience of working within a co-management network, or proposed as candidate sites based on prior relationship with the project's main national implementing partner (FORA). The six initial sites include a cluster of herding communities where co-management has been trialed in various forms over a decade, as well as a site near the source of the Yellow River and a site in a forest area near the border with Sichuan province:

Duoxiu Village Community	(in Qumalai County; Suojia-Qumahe unit; grassland habitat)
Cuochi Village Community	(in Qumalai County; Suojia-Qumahe unit; grassland habitat)
Junqu Village Community	(in Zhiduo County; Suojia-Qumahe unit; grassland habitat)
Muqu Village Community	(in Zhiduo County; Suojia-Qumahe unit; grassland habitat)
Duoyong Village Community	(in Maduo County; Zhaling-Elinghu unit; wetland habitat)
Zhongzhi Nomad Village Community	(in Banma County; Makehe unit; forest habitat)

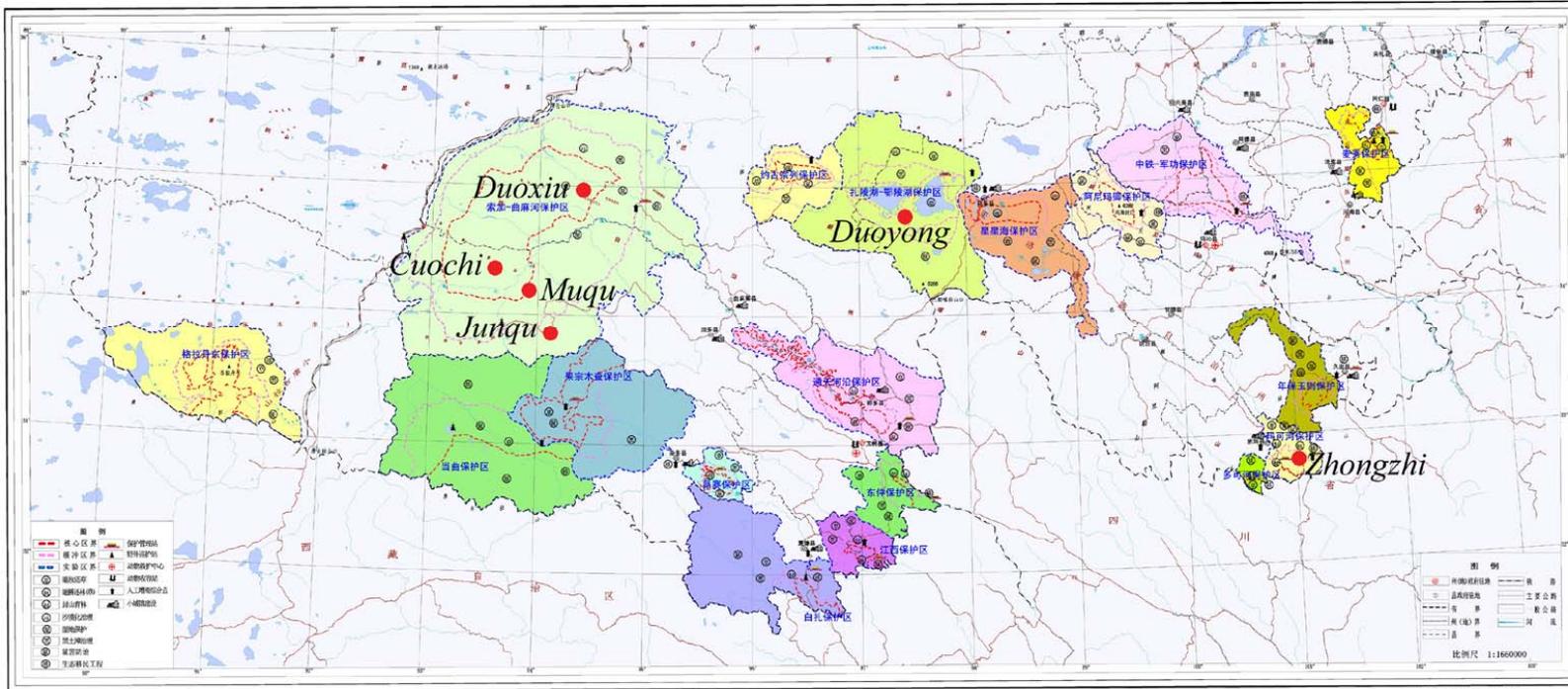
A brief summary of these initial sites is provided in the following table:

	Duoxiu	Cuochi	Junqu	Muqu	Duoyong	Zhongzhi
<i>SNNR's Unit Name</i>	(Suojia-) Qumahe*	(Suojia-) Qumahe*	Suojia* (-Qumahe)	Suojia* (-Qumahe)	Zhaling-Elinghu	Makehe
<i>Ecosystem type</i>	Grassland	Grassland	Grassland	Grassland	Wetland	Forest
	Duoxiu	Cuochi	Junqu	Muqu	Duoyong	Zhongzhi

Main reason selected	Co- management begun 2011	Co- management experience since 2006	Co-management experience since 2009	Co- management experience since 2006	Ecological significance, prior research	Forest bureau relations already well established
Local species, or other conservation rationale	Grassland species	Focus on wild yak	Focus on wild ass	Focus on snow leopard	Migratory birds, lakes	Forest biodiversity
Community area (km²)	2756 km ²	2440 km ²	1459 km ²	~1500 km ²	695 km ²	36 km ²
Estimated households	244 families	230 families	132 families	~200 families	82 families	~90 families
Estimated population	840 people	920 people	541 people	~800 people	256 people	508 people
Altitude	~4600 m	~4400 m	4500-5496 m	~4600 m	~4400 m	3270-5100 m
Rainfall	260-470 mm	300-450 mm	300-400 mm	300-400 mm	300-400 mm	400-665 mm
Key threats identified	Overgrazing, HWC	Overgrazing, HWC	Overgrazing, HWC	Overgrazing, HWC	Overgrazing, HWC	Overgrazing, forest harvest

Suojia-Qumahe Unit is spread over townships in 2 counties (i.e., Suojia township in Zhiduo County, and Qumahe township in Qumalai County); the township in which each community is located is indicated by an asterisk above.

青海三江源国家级自然保护区生态保护和建设规划区域位置及工程布局图



Additional information about each of the initial selection of communities (and counties and townships) is provided below:

QUMALAI COUNTY 曲麻莱县

Qumalai County is situated in Yushu Tibetan Autonomous Prefecture in southwest Qinghai Province. It is bordered to the north by the snow-capped Kunlun Mountains and to the west by the alpine desert region known as Kekexili. On the east, it is adjacent to the counties of Zhaling and Eling, which together are recognized as main source area of the Yellow River; these lakes and surrounding region are part of the Guoluo Tibetan Autonomous Prefecture. On the south, Qumalai County is adjacent to Zhiduo County (see more information on page 10) and Chengduo County. Much of its southern border is formed specifically by the Tongtianhe or Tongtian River (local name of the Yangtze River), which in its lower portion in Yushu Tibetan Autonomous Prefecture is included in the Tongtianhe conservation area (part of the SNNR). In the north-east of the county is the SNNR Yuegu Zonglie conservation area, and in the west of the county is the Qumahe section of the Suojia-Qumahe conservation area. The county covers 47,000 km² and has a population of around 20,000 people. The main town and 5 townships: Bagan 巴干乡, Maduo 麻多乡, Qiuzhi 秋智乡, Yege 叶格乡 and Qumahe 曲麻河乡.

Qumahe Township 曲麻河乡

Qumahe Township has a population of 4,636 people in 1,009 households, which is over 99% Tibetan. The land area is 17,000 km² and is divided amongst four pastoral associations or villages/communities – Cuochi 措池村, Lechi 勒池村, Duoxiu 多秀村 and Angla 昂拉村. Each in turn are divided into 12 sub-villages or ‘small villages’.

Duoxiu Village Community

Geographical Context

Duoxiu village is located in northwest Qumalai County, within the Qumahe section of the SNNR’s Suojia-Qumahe Unit (or conservation area). Its southern boundary is comprised of the Tongtianhe (local name for the Yangtze river) and the Qumahe (river); it reaches west to the Qinghai-Tibet Highway, with the Lariqu, Yongnaguqu and Duojuqu (rivers) nearby; it reaches north in proximity to the Ganganqu and Gannainiqa (rivers) and the snow-capped peaks of the Kunlun Mountains; and it is bounded in the east by the Qumahe Township. Duoxiu also is adjacent to Lechi community to the southwest, and beyond that to Cuochi community; where several other conservation management trials also are underway, with most assistance and support given by Snowland Great Rivers Environmental Protection Association (SGREPA). Duoxiu’s administrative centre is situated 60 km from Budongquan on the Qinghai-Tibet Highway, and 8 km from the Qumahe town.

Duoxiu village is itself divided into three sub-villages, with in total 352 households and 1,272 people. The region has an annual average temperature of -3° Celsius, is situated at around 4500 meters above sea level, and has a land area of 4,978 km² of which 3,047 km² is high-altitude land.

Duoxiu village is situated at very high altitude, with low oxygen, large temperature fluctuations between day and night, and an alpine tundra land ecosystem. The project area covers 2756 km², with an average altitude of 4600 m. The area’s windy and dry high-altitude continental climate results in low annual accumulated temperatures. Affected by the vertical distribution of mountains, it has a large range of temperature, and a small annual range of temperature. Solar radiation is strong. During the (relatively) warm season the climate offers abundant rainfall; during the cold season, windy and snowy climate can bring snowstorms – there is frost throughout the year. Annual rainfall is between ~265 and 475 mm, however with an uneven spatio-temporal distribution, precipitation is more concentrated in July-September. The project area also experiences greater rates of evaporation than precipitation. Habitat types within the project area include: alpine meadows and grasslands, wetlands, bare rocks and glaciers. [Apart from specific land areas and altitude, and the relative proportion of open grassland versus more rugged mountain areas, this summary also applies to the following selected communities: Cuochi, Junqu and Muqu villages].

Economic Context

Duoxiu Village (Chinese: *cun*, or *dadui*) is an administrative village under Qumahe Township (*xiang*) of Qumalai County (*xian*). It is divided into 3 production units (*xiaodui*) with 244 households, 840 residents and 19,718 livestock of various types. The main sources of income are:

me is animal husbandry, mostly yak. Since the 1980s, with support from local government and the efforts of the community, infrastructure has been built in the area including village schools and clinics, production units departments, temples, photovoltaic power plants, and a road from Qumahe to the Qinghai-Tibet Highway.

Biodiversity Summary

According to the Qumalai County Animal Husbandry Journal, within the county there are 44 mammals in 19 genera, 15 families and 10 species (of which 6 species have been declared “first class” national protected species and 14 as “second class” protected species). There are also 64 bird species in 13 families and 13 orders (of which 4 are “first class” and 10 are “second class” protected species). Surveys and interviews in 2001 and 2005 in Qumahe township have confirmed 25 species of mammals and 18 species of birds in the area, and of which 14 are first class national protected animals, including wild yak, Tibetan antelope, white-lipped deer, snow leopard, black-necked sturgeon, whooper swan, and golden eagle; in addition, there are 6 ungulates species which are endemic species of the Tibetan Plateau [this information also applies in large part to the other communities in Qumalai and Zhiduo counties, targeted by this project].

Potential Threats to Biodiversity

1. Overgrazing; 2. Poaching; 3. Human-Wildlife Conflict (HWC)

Ongoing Conservation Initiatives in Community Area

Since June 2011, a two-year Conservation Steward Program is being carried out in the village. None other known. However various government conservation and development policies – e.g., Returning Rangeland to Grassland *tuimu huancao*, Ecological Resettlement *qingtai yimin*, and other grassland protection programmes – also affect nearly all grassland community sites in Qumalai and Zhiduo counties.

Cuochi Village Community

Geographical Context

Cuochi village is located further west and south from Qumahe town, bordering with the Tongtianhe river to the south and extending along river to the west. The Lema river borders the village to the north and east. Lechi village is situated to its north, beyond the extensive Kunlun mountain range, and to the northeast lies Duoxiu community. By every measure the village is very remote and difficult to access.

Socioeconomic Context

Cuochi village is divided into three sub-villages, and has a total population of 812 people in 152 families. The village is entirely Tibetan and has a history of tribal herdsman migrating and co-mingling. Nomadic lifestyles are slowly declining and the population is increasingly settled (with winter homes); but they are still pastoralists, and most people still move livestock seasonally between winter and summer pastures. Like most villages in the area, Cuochi still has some conflicts with neighboring communities over issues of traditional natural resources utilization – but not disproportionately so, and probably only known more widely (e.g., reported in this document) because of the innovative work they have carried out over the past few years, which has brought additional support and attention to the community. Cuochi village is entirely within the Suojia-Qumahe unit (or conservation area) of the SNNR.

Biodiversity

Qinghai-Tibetan Plateau alpine grassland and wetland ecosystem characterizes the region. All typical Plateau wildlife species including Tibetan antelope, Tibetan gazelle, wild yak, wild ass, etc., occur here; the area is also known as the headwaters of the Yarlung Zaskuonang River, as it includes two of the largest tributaries, the Tongtian and Qumahe (Chuma'er) rivers. The community is most concerned about the loss of native species – such as wild yak, as it can bring new genes to the domestic yak population, or the white-lipped deer, for its religious

ificance. The nature reserve, on the other hand, is more concerned with Tibetan antelope (cf. conservation value and poaching) and migratory wetland birds (cf. bird flu risk).

Threats to Biodiversity

Overgrazing; 2. Poaching; 3. Human-Wildlife Conflict (HWC)

Existing Conservation Initiatives

To protect the wildlife living in the area, community set up a 'wildlife protection team' in May 2000; initially it was comprised of 10 people, but grew to 36 people by 2003 (when it adopted the name of *Friends of the Wild Yak*) and today is comprised of 55 members. At the beginning, some external support was provided by the founder of the Upper Yangtze Organization, who later worked as the leader of *Snowland Great Rivers Environmental Protection Association* (SGREPA). Early on, some assistance was given by PLA soldiers (training about wildlife monitoring techniques, and co-management principles; also support was given for the community center and school).

Following establishment of the SNNR, even more input was given by SGREPA and Conservation International in coordination with the reserve management bureau. The local community, through its *Friends of the Wild Yak*, presently organizes four patrols each lasting five days, in 17 designated zones in the village. Each of the three responsible teams are in charge of such patrolling. In addition, some key areas are monitored for external dangers, such as illegal poaching. This cooperation between SNNR and the community (facilitated by SGREPA and CI) led to the signing of a first-of-its-kind agreement, in recognition of the community's contributions to nature conservation.

The Cuochi community conserved area (CCA) is largely managed by the village, represented by the Village Committee. The head of the committee is nominated by the villagers, and the committee head appoints the members. The afore-mentioned contract/agreement is signed as a CCA; yet it also works closely with the indigenous *Friends of the Wild Yak* (FWY) group. The Party Secretary of the village is assigned by the government and is also a member of the committee. The village head happens to be the leader of FWY. The village head and party secretary have been serving the community for many years and are well respected in the community. The FWY members work on a voluntary basis.

ZHIDUO COUNTY 治多县

Zhiduo County is situated in Yushu Tibetan Autonomous Prefecture in southwest Qinghai Province. It is bordered by the Tongtong County to the north, Qumalai County to the north, and by Zaduo County (which includes the source of the Mekong River) to the south. The Kekexili National Nature Reserve. In the east, the county is also bordered by the Tongtianhe, a region that falls under the Tongtong of the SNNR. The county covers nearly 80,000 km² with a population of around 25,000 people, in one main town and 6 townships: 立新乡, Dangiāng 当江乡, Zhiqu 治渠乡, Duocai 多彩乡, Zhahe 扎河乡 and Suojia 索加乡.

Suojia Township 索加乡

Suojia Township has (or recently had, prior to recent 'ecological migration' policy) a population of 5,296 people in 1,324 households, which is over 98% Tibetan. The land area (excluding the Kekexili) is around 10,000 km² divided in four villages or communities – Jinchuan 锦川村, Yaqu 牙曲村, Dangqu 当曲村 and Muqu 莫曲村 – which in turn are divided into ~16 sub-villages or 'small villages'.

Junqu Village Community

Geographical Context

Junqu village lies 200 km distant from the Zhiduo County seat and 120 km from the Qinghai-Tibet highway (state road 109). It is located in the Suojia-Qumahe unit, the largest conservation area in the SNNR. To the south it is bordered by the Zhagenqingequ river, to the east it is bordered by the Shachizhuogen and Qiongxiugonggo mountains, and the Mogesuoja and Zachizhaji ranges mark its northern boundary. The area is comprised of high altitude plains, mountains and wetlands. Main vegetation types are alpine meadow, alpine rangeland, alpine ‘cushion-like’ vegetation, and alpine plants that thrive on rock screes. Alpine meadow predominates and is primarily used as grazing land. The village is situated by the Jiong (or Jun) river – which means ‘wild ass river’ – and the plateau climate is generally dry and windy. During winter heavy snow can occur; in 1985, a prolonged storm with snow accumulation that lasted for several weeks resulted in mass die-offs in the domestic livestock (and wildlife) population. [This snowstorm, the largest in living memory, affected Muqu village; indeed, nearly all of Zhiduo county was greatly affected].

Economic Context

Animal husbandry is the principle source of income and the latest available figures (2006) describe the communities herds as comprising 1,235 yaks, 5,562 sheep, 1,292 goats and 313 horses. This yields a total of 12,747 head of livestock. (Before the snowstorm of 1985, around 200 domestic animals were grazed here.) The human population is decreasing as families are either relocated by the government as a result of its pasture restoration initiatives, or move away for their own reasons (since the 1985 snowstorm, around 200 families have moved, now residing in Zhiduo town).

Table 1: Population of Residents and Livestock in 2006, Junqu Village, Suojia Township.

Sub-villages	Households	Residents	Yaks	Sheep	Goats	Horses
	37	149	1235	1246	421	92
	36	149	1609	901	366	109
	31	120	1373	1412	182	45
	28	123	1363	2030	323	67
Total	132	541	5580	5562	1292	313

Biodiversity:

Junqu Village is the habitat of “first class” national protected animals, such as Tibetan wild ass (kiang), white-lipped deer, black-necked stork and golden eagles, and “second class” national protected animals such as brown bear and the saker falcon.

Threats to Biodiversity

Overgrazing; 2. Poaching; 3. Human-Wildlife Conflict (HWC)

Existing Conservation Initiatives

Despite government policies such as ‘returning rangeland to grassland’ and ‘ecological resettlement’, few conservation initiatives are apparent in the area until several years ago. The Suojia field station (of the SNNR) began its Yicun Yidian (community-based conservation-partnership conservation) project in 2007, with Plateau Perspectives; however most effort to date in this project has been focused on the Muqu village community. The local Upper Yangtze Organization (UYO) has been more active in developing (or facilitating) community festivals with focus on conservation; UYO with Plateau Perspectives gave strong support to the first festival in Junqu in 2007, during which time a Tibetan wild ass monitoring team was founded. More recently, the SNNR has exported the model of ‘contract conservation’ that was initially trialed (and continues to be trialed) in Cuochi village to Junqu village – and continues today. A final type of conservation initiative was begun in 2009 by Plateau Perspectives and extended in 2010 by SNNR through the use of solar-powered electric fences as deterrent for brown bear, which has become a significant problem across the region, breaching

local herders' winter homes after they leave for the summer pastures. Financial costs (burden) can be very high, and there is personal anxiety too. Not only can financial and other costs be minimized with use of such electric fencing, also the local population of interest in conservation (with increasing human-wildlife conflict, or HWC) can be stemmed.

Junqu Village Community

Geographic context

Junqu village is situated at over 4,500 meters a.s.l., with average annual temperatures of -4° degrees Celsius. Comprised of mountains, wetland and grasslands, it is divided into four different sub-villages with a total population of 774 people (with sub-villages as follows: unit 1 has 164 people, unit 2 has 234 people, unit 3 has 207 people, and unit 4 has 169 people). It is bounded to the north by the Tongtianhe, and to the south and east by two other villages in Suojia Township (including Junqu village). In the region it encompasses the entire Kekexili region; a high altitude desert.

Economic context

Like Junqu, its economy is almost entirely based on animal husbandry. In terms of services, a village school was established early on – first as a tent-school (which was moved, by community decision, on several occasions), and now as a permanent set of buildings that was determined as the ‘centre’ of the community. To this was added a village clinic (also built with co-financing between the government and Plateau Perspectives; but it has proven difficult to find a doctor willing to reside permanently at this location) and frequently a small ‘environmental centre’ as well (under the direction of UYO). Thus the community has mobilized itself quite effectively in the past decade. (Also see section ‘conservation initiatives’ below). Most recently, a portion of the community has organized the development of a herders cooperative, similar to the first herders cooperative that was established a couple years earlier in the (Rari) community in Duocai Township – the Kegawa Herders Cooperative – near/adjacent to the SNNR.

Some economic costs also have been incurred, as the community sees rising wildlife numbers. A table summarizing losses to wildlife is presented below.

Number (and cost) of livestock eaten by wildlife per year, among 21 herding families (around 2005)

	Average livestock /family	Predation by Wolf	by Predation by Bear	Predation by Snow leopard	Sub-total	Average loss per family (livestock)	Average cost (CNY) per livestock	Average loss per family (CNY)
Yak	21.3	75-79	0	0	75-79	3.57-3.76	1,200-1,300	4,284-4,888
Sheep	62.4	286-314	20-29	11-19	317-362	15.1-17.2	280	4,298-4,988
Horses	0.98	14	0	0	14	0.67	7,000-8,000	4,690-5,360
TOTAL							13,202-15,236 CNY	Per family per year

Biodiversity:

Junqu Village includes prime habitat for “first class” national protected animals such as the snow leopard, and also for Tibetan wild sheep, black-necked cranes and golden eagles, etc.; and for “second class” national protected animals such as brown bear and the Tibetan antelope.

Threats to Biodiversity

Overgrazing; 2. Poaching; 3. Human-Wildlife Conflict (HWC)

ing Conservation Initiatives

t from government policies (as elsewhere) such as ‘returning rangeland to grassland’ and ‘ecological resettlement’, the comm
n its own conservation work around 1998 with the establishment of the Upper Yangtze Organization (UYO); of which
ding members were from Muqu. More recently, it has been participating with the SNNR (through its Suojia field station,
au Perspectives in the *Yicun Yidian* project, a trial form of community co-management in the Yangtze River headwaters. In
community members have mobilized into snow leopard monitoring and wild yak monitoring teams, grassland protection teams
e members of the snow leopard team has been collaborating also in the setting up of a camera trap-based monitoring of
ard, to complement information gathered through local efforts using transect surveys. Several planning workshops and tra
ons have been carried out in tandem with members of the Junqu community, at the Suojia field station. School programs also
carried out with children participating in environmental awareness raising activities.

DUO COUNTY 玛多县

uo County is situated in Guoluo Tibetan Autonomous Prefecture in central Qinghai Province. It is bordered by the Ku
ntains to the north, but known primarily as headwater of the Yellow River. The county includes the two large lakes, Zhaling
g lakes (also known as Gyaring and Ngoring lakes). The county covers 25,253 km², around 4,500-5,000 meters above sea level,
population of ~10,000 people in one town and 3 townships: Huanghe 黄河乡, Heihe 黑河乡 and Zhalinghu 扎陵湖乡.

inghu Township 扎陵湖乡

inghu Township a population of around 2,000 people, over 97% Tibetan. The land area is 6,137 km² divided in 6 villag
unities – Xiagaze 辖尔泽村, Duoyong 多涌村, Chaze 擦泽村, Eling 鄂陵村, Qingna 勤那村 and Ayong 阿涌村.

uoyong Village Community

ographical Context

ing Lake and Ngoring Lake are an internationally-recognized important wetland in south-central Qinghai province. They are lo
adu County in the northern foothills of the Bayan Mountains. The wetland sits over 500 km from the provincial capital, Xi
around 80 km from Maduo town. The two largest lakes and associated wetlands constitute the main source of the Yellow River
comprise a very important conservation area within the 18 designated areas (or units) of the SNNR. The total area of the Gy
wetland is 526 km² and the Ngoring Lake wetland is 695 km². The altitude of both lakes is around 4,300m. In February 2
ing Lake-Ngoring Lake (or Zhaling-Elinghu) was listed in the Internationally Important Wetland Directory (cf. RAM
vention). As a great natural reservoir at the upper reaches of the Yellow River, the lakes play a key role in maintaining water ba
regard to the flow of the major river, including its lower sections – and as such they serve a purpose of flood control due to
r storage functions, as well as other ecological security functions. The two lakes are located in the Zhalinghu Township of M
ty.

conomic Context

ong village, the proposed pilot site in Zhalinghu township, is located at the foot of the mountain on which an ox-head shaped
s the origin of the Yellow River. Neighbouring tourist spots include Duoka Temple and the Wedding Pasture. The village ha
eholds with a population of 256 and an area of 695 km², all grassland. Animal husbandry is the main source of income,
stock population of 2,676 sheep, 782 yak and 26 horses. Based on long-term work and cooperation with the local for
rtment, the community already has a good partnership relationship with the township government and local people have a high
awareness with regard to the importance of ecological protection.

Biodiversity

In this wetland area, there are 38 species of birds (including three that enjoy “first class” national protection status), 29 mammals species, 10 amphibians, and seven fish. Long-term point location observation and research by the SNNR Management Bureau show that there are 100-200 black-necked crane in the area, as well as a large population of Tibetan antelope in the region. Other species like Snow Leopard and Brown Bear are present but no population figures exist yet.

Threats to Biodiversity

Overgrazing; 2. Human-Wildlife Conflict; 3. Infrastructure and uncontrolled tourism (possible)

Existing Conservation Initiatives

To advance effective conservation of Gyaring Lake and Ngoring Lake, both of which are recognized as *Wetlands of International Importance*, a wetland monitoring station was established in 2003 under the supervision of Maduo County Agriculture & Husbandry Industry Bureau. The station conducts patrols and monitoring task on a regular basis. Since 2008, the SNNR together with the Chinese Academy of Science’s Northwest Plateau Institute of Biology (CAS NWPIB) have carried out monitoring in this region. Two wetland monitoring areas, 6 birds monitoring areas, 2 wildlife monitoring transects, and 20 wild plant transects with an area of 100 km² were established to assess water levels, population and trend of bird and wildlife population, vegetation conditions, etc. With several years of data gathering, ecological monitoring factors show that the water levels of the two lakes are increasing, the numbers of wild bird populations is increasing, and the grassland (vegetation) situation is ameliorating too. No NGOs, local or external, have implemented any ecological conservation projects in this area.

BANMA COUNTY 班玛县

Banma County is situated in southern Guoluo Tibetan Autonomous Prefecture in Qinghai Province. It is adjacent to the Nianbo Tibetan County, shares a border with Sichuan Province, and famous for its forest area. The county covers 6,452 km² and has a population of 100,000 people, over 95% Tibetan. It has one town and 8 townships: Duogongma 多贡麻乡, Makehe 马可河乡, Jike 吉卡乡, Zhongzhi 忠知乡, Zhiqian 知钦乡, Jiangritang 江日堂乡, Yaertang 亚尔堂乡 and Dengta 灯塔乡.

Dengta Township 灯塔乡

Dengta Township has a population of around 1,475 people in 388 families, almost entirely Tibetan. The land area is approx. 600 km² and divided in 3 villages or communities – Yaoshendao 要什道村, Kepei 科培村, Gerize 格日则村, Zhongzhi 忠知村, Renqinggang 仁青根甘村, and Banqian 班前村. Dengta township also includes the Makehe Forest Area, or Zhongzhi Forest Area, administered under the forestry bureau.

Zhongzhi Village Community

Geographical Context

Zhongzhi Village lies 58 km from Banma County and is characterised by two types of mixed forest; spruce and fir, and, on the shady mountainsides, fir and birch. Higher elevations are dominated by alpine meadows and shrubs.

Economic Context

Zhongzhi Village community includes three villages (Zhongzhi, Baocang and Jiala), all of which are difficult to access and economically undeveloped. The whole area was designated a “poverty alleviation village” by the Qinghai Forest Department in 2008 and the community is still partially dependent on State aid. The village area supports 2,000 head of livestock, and small scale farming yields 210 tons of grain annually. There are a few small businesses – shops, medicinal traders – but no factories, mines or industrial plants.

Makehe Forestry Bureau, a branch of Qinghai Forestry Department, provides seasonal employment to around 30 individuals – involving maintenance of Bureau infrastructure and participation in annual afforestation projects. The Makehe Forestry Bureau provides health care for the community in its staff hospital, with transport to other health facilities in emergency situations. The bureau also has enlisted local respected monks and doctors, as well as the “Three Elders” (senior cadres, Communist party members and workers) to encourage and support herdsmen living in poverty. The village is administered exclusively by Tibetans.

Biodiversity

Abundant in animal and plant resources, the Zhongzhi region serves as an important gene bank in southwest Qinghai province. It comprises 297 genera in 67 plant families. Cold temperate coniferous forest in the extreme marginal zone of forest distribution is composed of *Picea balfouriana* and *Abies squamata*. Among vertebrates, there reportedly are white-lipped deer, snow leopard, common leopard and other species listed nationally as first category protected animal (in total, 48% of first class protected species in the province are found here); and red panda, yellow-throated marten and another ~30 species listed as second class nationally protected species (it total, 40% of second class protected species in the province are found here). Also, the *Hucho bleekeri* is found in the Makehe river, listed fourth class nationally protected species. *Thymus gladius*, *Acipenser sinensis* and *Acipenser dabryanus sumeril* in the China National Biodiversity Conservation Plan.

Threats to Biodiversity

Overgrazing and (inappropriate) farming, possibly also poaching

Conservation Initiatives

Makehe Forestry Bureau plays an active role in the community providing healthcare in its hospital, and providing employment. Staff are employed as full time foresters, and each year 30 more are hired to work on seasonal projects involving infrastructure maintenance and afforestation. The Qinghai Forest Department has addressed issues such as sustainable animal husbandry, access to drinking water, and the introduction of solar lighting. The Bureau has enlisted local “champions” – Tibetan monks, doctors and workers, to help build support and trust in the community and promote environmentally-friendly attitudes and practices. During Spring Festival, Bureau staff and champions visit local members of the community including poor herding families to share ideas and support.

RT V: Terms of References for key project staff

PROJECT MANAGER

Background

The Project Manager (PM), will be nationally recruited based on an open competitive process. He/She will be responsible for the overall management of the project, including the mobilization of all project inputs, supervision over project staff, consultants and sub-contractors. The PM will report to UNDP-CO, in close consultation with the host institution for all of the project's substantive and administrative issues. From the strategic perspective of the project, the PM will report on a periodic basis to the Project Steering Committee (PSC). Generally, the PM will be responsible for ensuring government obligations under the project, under the national execution modality (NEX). He/She will perform a liaison role with the Government, UNDP and other UN Agencies, NGOs and project partners, and maintain close collaboration with any donor agencies providing financing.

Functions and Responsibilities

- Supervise and coordinate the production of project outputs, as per the project document;
- Mobilize all project inputs in accordance with UNDP procedures for nationally executed projects;
- Supervise and coordinate the work of all project staff, consultants and sub-contractors;
- Coordinate the recruitment and selection of project personnel;
- Prepare and revise project work and financial plans, as required by UNDP;
- Liaise with UNDP, relevant government agencies, and all project partners, including donor organizations and NGOs for effective coordination of all project activities;
- Facilitate administrative backstopping to subcontractors and training activities supported by the Project;
- Oversee and ensure timely submission of the Inception Report, Combined Project Implementation Review/Annual Project Report (PIR/AIR), Technical reports, quarterly financial reports, and other reports as may be required by UNDP, GEF, SFA and other oversight agencies;
- Disseminate project reports and respond to queries from concerned stakeholders;
- Report progress of project to the steering committees, and ensure the fulfilment of steering committees directives.
- Oversee the exchange and sharing of experiences and lessons learned with relevant community based integrated conservation development projects nationally and internationally;
- Ensures the timely and effective implementation of all components of the project;
- Assist community groups, townships, NGOs, staff, students and others with development of essential skills through training workshops on the job training thereby upgrading their institutional capabilities;
- Coordinate and assist scientific institutions with the initiation and implementation of all field studies and monitoring components of the project
- Ensure good communication on project results and lessons, liaising with media and stakeholders.
- Carry regular, announced and unannounced inspections of all sites and the activities of any project site management units.

Qualifications

- A university degree (preferably a MSc or PhD degree) in Environmental or Natural Sciences;
- At least 10 years of experience in natural resource management (preferably in the context of PA planning and management);
- At least 5 years of project/programme management experience;
- Working experience with the project's national stakeholder institutions and agencies is desirable;
- Ability to effectively coordinate a large, multi-stakeholder project;

Ability to administer budgets, train and work effectively with counterpart staff at all levels and with all groups involved in the project;
Strong drafting, reporting and presentation skills;
Good computer skills;
Excellent written communication skills; and
A good working knowledge of English (written and spoken) is a requirement. A working knowledge of Tibetan is strongly desirable.

PROJECT ASSISTANT

Background

The Project Assistant will be locally recruited based on an open competitive process. He/She will be responsible for the overall administration of the project. The Project Assistant will report to the Project Manager. Generally, the Project Assistant will be responsible for supporting the Project Manager in meeting government obligations under the project, under the national execution modality (NEX).

Functions and Responsibilities

- Collect, register and maintain all information on project activities;
- Contribute to the preparation and implementation of progress reports;
- Monitor project activities, budgets and financial expenditures;
- Advise all project counterparts on applicable administrative procedures and ensure their proper implementation;
- Maintain project correspondence and communication;
- Support the preparations of project work-plans and operational and financial planning processes;
- Assist in procurement and recruitment processes;
- Assist in the preparation of payments requests for operational expenses, salaries, insurance, etc. against project budgets and work plans;
- Follow-up on timely disbursements by UNDP CO;
- Receive, screen and distribute correspondence and attach necessary background information;
- Prepare routine correspondence and memoranda for Project Managers signature;
- Assist in logistical organization of meetings, training and workshops;
- Prepare agendas and arrange field visits, appointments and meetings both internal and external related to the project activities and minutes from the meetings;
- Maintain project filing system;
- Maintain records over project equipment inventory; and
- Perform other duties as required.

Qualifications

- A post-school qualification (college diploma, or equivalent);
- At least 5 years of administrative and/or financial management experience;
- Demonstrable ability to administer project budgets, and track financial expenditure;
- Demonstrable ability to maintain effective communications with different stakeholders, and arrange stakeholder meetings and/or workshops;
- Excellent computer skills, in particular mastery of all applications of the MS Office package;
- Excellent written communication skills; and
- A good working knowledge of English and Tibetan.

INTERNATIONAL TECHNICAL ADVISER (PROJECT CO-MANAGER)

Background

The International Technical Adviser (ITA) will be internationally recruited through an open competitive process. He/She is responsible for ensuring the strategic and technical soundness of the Project, providing overall technical backstopping to the Project. He/She will render technical support to the Project Director, Project Manager, PA agency staff and other government counterparts. The ITA will ensure provision of required technical input in the review and preparation of Terms of Reference, and provision of technical support to assure the outputs of consultants and other sub-contractors meet the required standards. He/She will report directly to the Project Director.

Functions and Responsibilities

- Provide technical support to the Project Director, Project Manager and other counterparts in areas of project management and planning, in particular the development of annual work plans, monitoring progress, and ensuring annual, mid-term and end-of-project targets will be met;
- Bring international experiences to project planning and implementation to ensure that full use is made of global and national lessons learned and that best practices are used to achieve the project goal of enhancing the effectiveness of the PA system to protect biodiversity;
- Support the Project Manager in preparing Terms of Reference for consultants and sub-contractors, and assistance in the selection process;
- Support the Project Manager in coordinating the work of all consultants and sub-contractors, ensuring timely and quality delivery of expected outputs, effective synergy among the various sub-contracted activities, and integration of project outputs in the Government work;
- Oversee the work of subcontractors and consultants, ensuring both the direction and quality of their work and deliverables, and promoting continuity and linkages between various project activities and the outputs of consultancy services;
- Provide technical support for management of site activities, monitoring, and impact assessment, as well as technical support in the area of biodiversity conservation strategic planning and protected area planning and innovative approaches of collaborative management;
- Assist and advise the Qinghai Forest Department in key strategic and policy issues related to biodiversity, protected areas, institutional strengthening processes, and appropriate monitoring and evaluation systems and knowledge management systems;
- Assist the Project Director and Project Manager with technical input in preparation of the inception report, Project Implementation Review, Annual Project Report, and quarterly financial reports for submission to UNDP, the GEF, other donors and the Government, as required;
- Assist the Project Director and Project Manager in mobilizing staff and consultants in the conduct of a mid-term project evaluation, and undertaking revisions in the implementation programme and strategy, based on evaluation results;
- Provide capacity building support to Qinghai Forest Department staff and PA managers;
- Assist the Project Director and Project Manager in liaison work with project partners, donor organizations, NGOs and other groups to ensure effective coordination of project activities, and coordination with local, national and international complementary projects and programmes;
- Support the Project Manager in documenting lessons learned through implementation of the project and assist in making recommendations to the Steering Committee for more effective implementation and coordination of project activities;
- Produce policy briefing papers and technical reports to support decision-making processes, advocacy and knowledge management; and
- Perform other tasks as may be requested by the Project Director and Project Manager.

Qualifications

- University education (PhD degree) with expertise in PA and conservation planning and management, co-management, and regional experience;
- At least 15 years of professional experience in conservation planning and management and proven ability to work with multiple stakeholders;
- Demonstrable experience in the implementation of multilateral donor funded or government funded international development projects;
- Demonstrable experience in project organization and ability to serve as effective negotiator with excellent oral presentation skills;
- Good knowledge of international best practice in PA planning and management, and conservation in general, is desirable;
- Excellent written communication skills; and
- Fluency in English is required, and a working knowledge of Chinese is desirable (ability to speak or understand Tibetan is also desirable).

RT VI: Overview of Inputs from Technical Assistance Consultants Financed by GEF¹⁷

Position/Service Titles	\$/person week	Estimated person weeks	Tasks to be performed
For Project Management			
<i>Technical consultant</i>			
Project Manager	800	260	<p>The Project Manager is responsible for overall coordination of the project activities and timely and quality delivery of project outputs. S/he will:</p> <ul style="list-style-type: none"> ▪ Supervise and coordinate the production of project outputs, as per the project document; ▪ Mobilize all project inputs in accordance with UNDP procedures for nationally executed projects; ▪ Supervise and coordinate the work of all project staff, consultants and sub-contractors; ▪ Coordinate the recruitment and selection of project personnel; ▪ Prepare and revise project work and financial plans, as required by UNDP; ▪ Liaise with UNDP, relevant government agencies, and all project partners, including donor organizations and NGOs to ensure effective coordination of all project activities; ▪ Facilitate administrative backstopping to subcontractors and training activities supported by the Project; ▪ Oversee and ensure timely submission of the Inception Report, Combined Project Implementation Review/Annual Progress Report (PIR/APR), Technical reports, quarterly financial reports, and other reports as may be required by UNDP, CCA, SFA and other oversight agencies; ▪ Disseminate project reports and respond to queries from concerned stakeholders; ▪ Report progress of project to the steering committees, and ensure the fulfilment of steering committees directives. ▪ Oversee the exchange and sharing of experiences and lessons learned with relevant community based integrated conservation and development projects nationally and internationally; ▪ Ensures the timely and effective implementation of all components of the project; ▪ Assist community groups, townships, NGOs, staff, students and others with development of essential skills through training workshops and on the job training thereby upgrading their institutional capabilities; ▪ Coordinate and assists scientific institutions with the initiation and implementation of all field studies and monitoring components of the project ▪ Ensure good communication on project results and lessons, liaising with media and stakeholders. ▪ Carry regular, announced and unannounced inspections of all sites and the activities of any project site management unit
Project Assistant	600	260	<p>Project Assistant will be responsible for overall administration of the project. S/he will:</p> <ul style="list-style-type: none"> ▪ Collect, register and maintain all information on project activities; ▪ Contribute to the preparation and implementation of progress reports; ▪ Monitor project activities, budgets and financial expenditures; ▪ Advise all project counterparts on applicable administrative procedures and ensure their proper implementation; ▪ Maintain project correspondence and communication; ▪ Support the preparations of project work-plans and operational and financial planning processes; ▪ Assist in procurement and recruitment processes; ▪ Assist in the preparation of payments requests for operational expenses, salaries, insurance, etc. against project budgets and work plans;

Some of the activities listed in the draft workplan could be combined for contracting purposes. The exact TOR and timing of consultancies will be reviewed on an annual basis in preparation of annual work plans. TOR for different consultancy inputs are given above under the relevant outputs in section Part One – Section II Strategy.

Position/Service Titles	\$/person week	Estimated person weeks	Tasks to be performed
			<ul style="list-style-type: none"> ▪ Follow-up on timely disbursements by UNDP CO; ▪ Receive, screen and distribute correspondence and attach necessary background information; ▪ Prepare routine correspondence and memoranda for Project Managers signature; ▪ Assist in logistical organization of meetings, training and workshops; ▪ Prepare agendas and arrange field visits, appointments and meetings both internal and external related to the project activities and write minutes from the meetings; ▪ Maintain project filing system ▪ Maintain records over project equipment inventory; and ▪ Perform other duties as required.
Evaluation experts	1000	10	The standard UNDP/GEF project evaluation TOR will be used. This will include: participate, alongside the international consultants, in the mid-term and final evaluation of the project, in order to assess the project progress, achievement of results and impacts; develop draft evaluation report and discuss it with the project team, government and UNDP; as necessary, participate in discussions to realign the project time-table/logframe at the mid-term stage
International Consultant			
International Technical Adviser (Project co-manager) ¹⁸	2000	25	<p>Working closely with the Project Manager, the International Technical Adviser (ITA) will assume a role of project co-manager on a part-time basis during the lifespan of the Project. S/he will be responsible for overall coordination of the project activities and timely and quality delivery of project outputs. Duties include:</p> <ul style="list-style-type: none"> ▪ Co-manage the project being responsible for quality and timely delivery of outputs and ensuring the project progress; ▪ Provide technical inputs to the Inception Report, Project Implementation Review, technical reports, quarterly financial reports for submission to UNDP, the GEF, other donors and Government Departments, as required; ▪ Be responsible for preparing ToR and developing methodology in the execution of various technical studies to be carried out through the project, as well as assuring quality of technical reports compiled by consultants and link with project outputs and outcomes; ▪ Support technical consultancy procurement process, reviewing technical proposals and applications; ▪ Ensure the linkage between different consultancies, or different periods of the consultancy services continuing over several years; ▪ Ensure the development and implementation of project monitoring and evaluation plans, and annual update of the project towards project impact indicators; ▪ Bring in international experiences to ensure that the project will operate making full use of global experiences, good practices and lessons learned in improving PA management effectiveness; ▪ Provide capacity building support to QFD staff and PA managers; ▪ Support the Project Manager in documenting lessons from project implementation and make recommendations to the Steering Committee for more effective implementation and coordination of project activities. provision of technical inputs, preparation of project work and budget plans, quarterly and annual progress reporting; ▪ Provision of technical support to seminars, public outreach activities and other project events; ▪ Coordination with project partners at the provincial and local levels, linking the project with complementary international and national programmes and initiatives.
Evaluation experts (mid-term and final evaluation)	3000	14	<p>The standard UNDP/GEF project evaluation TOR will be used. This will include:</p> <p>Lead the mid-term and the final evaluations; Work with the local evaluation consultant in order to assess the project progress, achievement of results and impacts; develop draft evaluation report and discuss it with the project team, government and UNDP; As necessary participate in discussions to extract lessons for UNDP and GEF.</p>

For Technical Assistance

the technical part of the adviser's role under outcome 2, the adviser or the co-manager will have a total of 60 weeks inputs during the project period.

Position/Service Titles	\$/person week	Estimated person weeks	Tasks to be performed
COMPONENT 1			
Local Consultant			
Sector mainstreaming specialist	1000	40	<p><u>Output 1.2 - Sector specific biodiversity safeguard development.</u> (a) review of national EIA/SEA regulations and procedures and development of province-specific regulations and procedures; (b) review and analyse sectoral planning process and operational procedure of transport and infrastructure, livestock (animal husbandry) ; (c) design sector specific standards and measures within the planning and operational framework of the transport sector and engineering work, in order to safeguard biodiversity within NRs in close consultation with the relevant agencies and industry stakeholders; (d) design biodiversity safeguarding measures in the grassland and livestock (animal husbandry) planning and management framework of the province, in close consultation with the relevant agencies and stakeholders including communities.</p>
National Consultant			
Sector mainstreaming specialist	3,000	40	<p>Working closely with the National Project Director and Project Manager and Assistant the specialist will provide part-time continuous technical support for outputs under outcome 1 for the duration of the project period. Tasks will entail:</p> <ul style="list-style-type: none"> ▪ Assist the QFD through the institutional strengthening process to ensure that adequate human and financial resources are secured for effective biodiversity conservation outcomes and effective park management; ▪ Ensure that the QFD institutes effective and sustainable biodiversity monitoring and evaluation mechanisms at both local and national levels, including knowledge management system establishment, support for PA system planning and park management planning; ▪ Provide capacity building support to QFD staff and PA managers; ▪ Bring in international experiences to ensure that the project will operate making full use of global experiences, good practices and lessons learned in improving PA management effectiveness; ▪ Produce policy briefing papers and project technical reports for supporting decision making processes, advocacy and knowledge management as appropriate; ▪ Be responsible for ensuring a sound conservation basis for project intervention and intended biodiversity conservation outcomes of the project; ▪ Support preparation of ToR and development of methodology in the execution of various technical studies to be carried through the project, as well as assuring quality of technical reports compiled by consultants and links with project outcomes and outcomes; ▪ Provide technical inputs to the Inception Report, Project Implementation Review, technical reports, Quarterly financial reports for submission to UNDP, the GEF, other donors and Government Departments, as required. <p><u>Output 1.1 - Intersectoral coordination and planning mechanism:</u></p> <ul style="list-style-type: none"> ▪ advise the QFD in key strategic and policy issues related to biodiversity conservation strategy and protected area planning; ▪ support the QFD in development of a inter-sectoral coordination and planning mechanisms and integration of the systems and objectives into development and sectoral planning process; ▪ provide technical support to the coordination body to be established/designated; ▪ mainstream the PA system in the provincial BSAP; ▪ support for targeted communication activities fostering inter-sectoral collaboration. <p><u>Output 1.2 – Development of sector based standards and measures:</u></p> <p>Working closely with the national sector mainstreaming specialist, and through full consultation with sector agencies and stakeholders:</p> <ul style="list-style-type: none"> ▪ review national EIA/SEA regulations and procedures, and development of province-specific regulations and procedures; ▪ develop practical regulations related to transportation and engineering work, including development of specific standards and measures to safeguard biodiversity within NRs; ▪ develop biodiversity safeguarding measures in the grassland and livestock (animal husbandry) planning and management framework of the province. <p><u>Output 1.3 – Establishment of knowledge management system:</u></p>

Position/Service Titles	\$/person week	Estimated person weeks	Tasks to be performed
			Working with the service providers, ensure the establishment of a virtual biodiversity data centre by network linking existing sub-centres, as well as establishing a biodiversity monitoring baseline and procedures. production of a GIS platform analysing biodiversity data, based on an agreement on reporting and information sharing protocols;
Biodiversity monitoring and baseline expert	3,000	10	Output 1.3 - Establishment of a knowledge management system: The expert will assist national consultants and local subcontractors in designing and setting up suitable biodiversity data management systems that are user friendly and PA management oriented. The expert will also support the establishment of a biodiversity monitoring baseline and procedures and contribute to development of a guidebook on data management.

COMPONENT 2

International Consultant			
Protected area law and law enforcement specialist	900	40	<p>Output 2.1 – Systemic capacity for PA management: Working with the international protected area law and law enforcement specialist and in close consultation with the QFD and stakeholders, the specialist will:</p> <ul style="list-style-type: none"> ▪ Develop provincial regulations on the management of the SNNR, providing for, <i>inter alia</i>: (a) community co-management defining community use rights and responsibilities as well as participation mechanisms for PA management and decision making processes; (b) ensuring adequate levels of staffing and management facilities; (c) establishment of new protection zonation categories such as community reserve, genetic corridor across farmlands forests and rangeland, privately managed areas, and nature tourism areas; (d) establishment of sustainable financing mechanisms; (e) EIA and SEA guidelines tailored for the ecological and socioeconomic conditions of the SNNR, with clear mechanisms for participation by residents and neighbouring communities; (f) guidelines for IAS response and pest control; (g) regulations on presence and/or type of fencing in different PA zones; and (h) climate change adaptation needs of the NR, which should also be mainstreamed in regulations. ▪ Establish compliance monitoring and law enforcement mechanisms at the provincial level; ▪ Design routine report forms for numerical analysis and establish a system of policing records from the province down to county level.
Legal drafter	900	8	Output 2.1 – Draft SNNR regulations: Translate the final draft regulations in legal language and format which can be submitted for official processing.
Protected Area financing specialist	900	20	Output 2.4 - PA system business plan: Working closely with the international PA tourism and financing specialist, prepare business plan for the PA system in Qinghai province, including (a) Based on the PA system plan, management plans and institution development plans, develop a realistic costing of managing Qinghai's PA system; (b) Analyse the current revenue streams for the Qinghai PA system; (c) prepare a comprehensive list of current, and potential, revenue generating activities for the five priority PAs, including innovative revenue generating mechanisms in addition to the traditional ones, suggested responsible entities and projections of the expected revenue over 10 years, comparing this with the itemized investment list needed to fully activate and process these revenue generating activities; (d) Conduct an in-depth feasibility study of using eco-compensation schemes for PA financing; (e) Develop an action plan for achieving financial sustainability.
Biodiversity and system management specialist	900	20	Output 2.6 – PA system Plan and PA management Plans: Working closely with the international Climate Resilient Protected Area System planning and management specialist, the specialist will: (a) collate biodiversity data including species distribution, habitats and spatial coverage of NRs; (b) collate climate change scenarios and expected impacts in Qinghai; (c) provide technical inputs to development of climate resilient provincial PA system; (d) collect biodiversity and ecosystem information and data for development of PA management plans for target PAs with climate change consideration; (e) facilitate consultation meetings with the QFD, PA staff and PA stakeholders; (f) develop management plans for Kekexili, Qinghai Lake and Megda.
International Consultant			
International Technical Adviser (Project co-manager)	2,000	35	<p>Working closely with the National Project Director and Project Manager and Assistant the specialist will provide part-time continuous technical support for outputs under outcome 2 for the duration of the project period. Tasks will include;</p> <ul style="list-style-type: none"> ▪ Advise the QFD in key strategic and policy issues related to biodiversity conservation strategy and protected area planning; ▪ Assist the QFD through the institutional strengthening process to ensure that adequate human and financial resources are secured for effective biodiversity conservation outcomes and effective park management;

Position/Service Titles	\$/person week	Estimated person weeks	Tasks to be performed
			<ul style="list-style-type: none"> Ensure that the QFD institutes effective and sustainable biodiversity monitoring and evaluation mechanisms at both local and national levels, including knowledge management system establishment, support for PA system planning and park management planning; Produce policy briefing papers and project technical reports for supporting decision making processes, advocacy knowledge management as appropriate; Be responsible for ensuring sound conservation basis for project intervention and intended biodiversity conservation outcomes of the project.
Protected Area law enforcement specialist	3,000	12	<p>Output 2.1 – Systemic capacity for PA management: Working with the national protected area law and law enforcement specialist and in close consultation with the QFD and stakeholders, the specialist will:</p> <ul style="list-style-type: none"> Develop provincial regulations on the management of the SNNR, providing for, <i>inter alia</i>: (a) community co-management defining community use rights and responsibilities as well as participation mechanisms for PA management and decision making processes; (b) ensuring adequate level of staffing and management facilities; (c) establishment of new protection zonation categories such as community reserve, genetic corridor across farmlands, forests and rangeland, privately managed areas, and nature tourism areas; (d) establishment of sustainable financing mechanisms; (e) EIA and SEA guidelines tailored for the ecological and socioeconomic conditions of the SNNR, with clear mechanisms for participation by residents and neighbouring communities; (f) guidelines for IAS response and pest control; (g) regulations on presence and/or type of fencing in different PA zones; and (h) climate change adaptation needs of the NR, which should also be mainstreamed in regulations. Establish compliance monitoring and law enforcement mechanisms at the provincial level; Design routine report forms for numerical analysis and establish a system of policing records from the province down to county level.
Training programme development specialist	3,000	10	<p>Output 2.5 – Training programme for PA managers and co-managers: including; (a) review and finalisation of the competence standards for PA managers; (b) confirmation of target audiences, including both trainees and potential employers and relevant list of topics, expertise; (c) assessment and comparison of value for purpose of different training formats: post graduate course, short-term course, workshops, learning by doing (in situ training), refresher and follow-up courses, residential classroom versus distance learning approaches, etc. ; (d) needs assessment, course outline development, detailed course development in preliminary topics, identification of teaching roster; (e) provision of compiled list of teaching resources available online and from other sources (to avoid duplication), and course primers.</p>
Tourism development and financing specialist	3,000	12	<p>Output 2.4 – PA system business plan: Working closely with the national protected area financing specialist and the PA valuation contractor, the specialist will develop a business plan for the Qinghai PA system, in order to strengthen the justification for protection policy and increased government investment in PA management. The specialist will: (a) estimate management costs of the PAs and PA system; (b) develop a plan to meet the required costs, identifying novel financing mechanisms for PA operations; (c) investigate the viability of establishing a tourism concession system in Qinghai PAs in terms of tourism investment control and increasing PA and community income and develop an initial plan for establishing such an official system; (d) provide practical advice on improving destination marketing in support of the PA and local communities.</p>
Develop climate resilient protected area system planning and management specialist	3,000	30	<p>Output 2.6 - PA system plan with climate change considerations and PA management plans: Working with the national biodiversity and ecosystem management specialist, the specialist will provide international experience and advice in the development of the PA systems plan and the development of the first PA management plan. The plan will include: (a) biodiversity adaptation strategies to a series of climate change scenarios; (b) the provincial level PA system consolidation plan with a concrete action plan; (c) design of appropriate migration corridor system for biodiversity adaptation to climate change for inclusion in systems plan and respective management plans. Simultaneously, a framework PA management plan will be developed for SNNR and another priority PA (Kekexil or Qinghai Lake), using existing information and results obtained from targeted management oriented research activities.</p>

COMPONENT 3

Local Consultant			
Community based natural resource management	900	200	Working closely with the international co-management specialist and community participation specialist, the specialist will work with the SNNR management bureau and target communities, to provide technical assistance to Output 3.1 Co-management system establishment in three management units in SNNR ; entailing (a) development of area specific

Position/Service Titles	\$/person week	Estimated person weeks	Tasks to be performed
CBNRM specialist			management plans and workable zonation for the target NR management unit, with identification of suitable small scale management infrastructure such as fly camps for patrolling; (b) development of local-level co-management agreement with joint management PA /natural resource governance and management structure, with clear rules, roles, responsibilities and benefits for site co-management agreed by all parties, including sustainable threshold. The specialist will also support <u>Output 3.2 Establishment of community-based monitoring and adaptive resource management system</u> , providing technical support establishment of an ecological monitoring system, selection of a data to be monitored for climate resilience, and provision training of PA field staff and community co-managers on data collection, record keeping and reporting. Furthermore, the specialist will provide technical support to <u>Output 3.3 Eco-compensation scheme pilot</u> , in developing community level structures to receive and utilise funding in a transparent and equitable manner.
Community cooperative development specialist	800	40	<u>Output 3.1 and 3.3 Development of community governance structure</u> : Working with CBNRM and community participation specialists, the specialist will support community process of determination and trial of implementation of community governance structures for decision-making, receipt and utilization of eco-compensation funds, including also monitoring and evaluation.
Community participation specialist	700	150	Working closely with the community based natural resource management specialist, the specialist will provide support for <u>Output 3.1, 3.2 and 3.3</u> , assuming the role of community liaison officer. The specialist will closely work with the target communities to ensure smooth communication between communities and the SNNR management bureau, QFD and the project, and fostering community member's full understanding and participation in the project. The specialist will play a pivotal role, <i>inter alia</i> , in the extension of the co-management concept and its benefits to community members, in negotiation on co-management agreements, participatory planning processes for development of area specific management plans, and determination of sustainable use level thresholds. Broad specialist knowledge is required for this. Ability to do PRA exercises is not sufficient.
Traditional knowledge specialist	700	100	<u>Output 3.3: Review traditional sustainable practices and create an action plan to revitalise traditional knowledge</u> : The specialist will draw together knowledge from literature and via interviews and compile documentation of traditional methods of sustainable resource use and grazing practices. Develop an action plan for revitalising traditional knowledge regarding sustainable rangeland management. The specialist will also provide technical support to implement the action plan in target communities.
International Consultant			
Observation area management planning specialist	3,000	8	<u>Output 3.1 and 3.2 Management unit specific management plans</u> : The specialist will provide technical inputs to the detailed practical planning of three management units with co-management integrated at unit-level in the three target units. The management planning will be done with full participation of the local PA staff (field station) and local government and communities.
Community co-management specialist	3,000	50	Working closely with the community based natural resource management specialist, community participation specialist and traditional knowledge specialist, the international specialist will provide strategic guidance and technical support to the three outputs under outcome 3. The specialist will bring in international experiences and global best practices and lessons which can be applied/adapted to the local situation in SNNR. <u>Output 3.1 Establishment of local-level co-management framework in SNNR</u> : The specialist will support (a) development of area specific management plans and workable zonation for the three target SNNR management units; (b) development of co-management agreements that strengthen PA management and increase benefits to communities; (c) establishment of governance and management structure with clear rules, roles and responsibilities for site co-management; (d) establishment of sustainable use threshold and emplacement of a monitoring system; (e) PA managers with technical assistance in managing relationships between the NR authority and communities; (f) development of training programmes on collaborative management and participatory approaches for NR managers <u>Output 3.2 Establishment of community-based monitoring and adaptive resource management system</u> : The specialist will provide support: (a) establishment of an ecological monitoring system and a selection of data to be monitored for climate resilience; (b) provision of training of PA field staff and community co-managers on data collection, record keeping and reporting; (c) development of guidelines for monitoring data collection; (d) development of small scale management infrastructure such as fly camps for patrolling; (e) identification of management oriented research needs and technical support for commissioning such research activities. <u>Output 3.3 Eco-compensation scheme pilot</u> : The specialist will provide technical assistance to: (a) development of direct systematic linkage between the grassland eco-compensation funds and other possible funds and strengthening of SNNR management effectiveness in a sustainable manner; (b) revitalisation of traditional knowledge on grassland management; (c) deployment of eco-compensation schemes to motivate adoption of suitable sustainable use level thresholds and on-going

Position/Service Titles	\$/person week	Estimated person weeks	Tasks to be performed
			participation in PA activities within target communities.

PART VII: Stakeholder Involvement Plan

STAKEHOLDER IDENTIFICATION

During the project preparation stage, a stakeholder analysis was undertaken in order to identify key stakeholders, assess their interests in the project, and to define their roles and responsibilities in project implementation. Tables 10 and 11 below describe the major categories of stakeholders identified and the level of involvement envisaged in the project.

INFORMATION DISSEMINATION, CONSULTATION, AND SIMILAR ACTIVITIES THAT TOOK PLACE DURING THE PPG

Throughout the project's development, close contact was maintained with all stakeholders at the provincial level. All affected government institutions were directly involved in project development, as were research and academic institutions and NGO's. Numerous consultations occurred with stakeholders to discuss different aspects of project design. These consultations included: bilateral discussions; visits to pilot sites; workshop presentations; and electronic communications. A working group, with representation of key provincial stakeholders, was constituted by QFD to oversee the project implementation phase. The project activities were presented to stakeholders at a working group meeting for review and discussions, and a revised draft project document was presented to a follow-up working group meeting for approval and endorsement.

APPROACH TO STAKEHOLDER PARTICIPATION

The project's approach to stakeholder involvement and participation is premised on the principles outlined in the table below.

Table 10: Stakeholder participation principles

Principle	Stakeholder participation will:
Value Adding	Be an essential means of adding value to the project
Inclusivity	Include all relevant stakeholders
Accessibility	Be accessible and promote involvement in decision-making process
Transparency	Be based on transparency and fair access to information; main provisions of the project's plans and results will be published in local mass-media
Honesty	Ensure that all stakeholders are treated with respect in a fair and unbiased way
Accountability	Be based on a commitment to accountability by all stakeholders
Constructive	Seek to manage conflict positively and to promote the public interest
Addressing	Seek to redress inequity and injustice
Empowering	Seek to develop the capacity of all stakeholders
Needs Based	Be based on the perceived and real needs of all stakeholders
Flexible	Be flexibly designed and implemented
Rational and Coordinated	Be rationally planned and coordinated, and not on an <i>ad hoc</i> basis
Openness	Be subject to on-going reflection and improvement

project will focus stakeholder engagement at two levels of intervention: (i) working with national and local public institutions and agencies in order to strengthen their capacity to consolidate, expand and effectively manage the PAN and to align project activities with government's strategic priorities; and (ii) working directly with civil society organisations, formal and informal resource users (rights holders), private landowners and individuals to mitigate impacts and optimise benefits of project activities.

STAKEHOLDER INVOLVEMENT PLAN

Following stakeholders have been identified and will be full involved in the project implementation.

Table 11: Key stakeholders and roles and responsibilities in the project

Ta	Roles and Responsibilities
Qinghai Governor's Office	Leadership and coordination for implementation of the project
Qinghai Province Development and Reform Commission	Coordination and implementation of Qinghai's Development Plan, restoration of Yushu town and surrounding area (post-earthquake) and Sanjiangyuan Ecological Conservation Programme
Qinghai Bureau of Finance	Financial responsibility for the project, including compilation and submission of budget requests
Qinghai Forest Department	Day-to-day operational execution of the project Management of nature reserves, wetlands and wildlife
Qinghai Environmental Protection Bureau	Coordination of environmental issues, pollution, and CBD implementation and reporting
Management bureaus of major NNRs (Sanjiangyuan, Kekexili, Qinghai Lake)	Protection and management of NNR, visitor control and environmental education/awareness
Qinghai Forest Inventory & Planning Institute	Studies and planning within the forestry sector
Qinghai Bureau of Agriculture / Department of Animal Husbandry	Responsible for grassland utilization, health and management of domestic livestock, pest control programmes, also management of aquatic products (including fisheries)
Qinghai Department of Land and Resources	Supervision and promotion of exploration and the development of Qinghai's mineral resources (department can lead to environmental damage, can even prevent the establishment of NRs in mineral-rich areas of the province, e.g. in the Qaidam Basin).
Qinghai Meteorological Bureau	Monitoring of climatic factors, models of climate change, effects on vegetation, etc.
Qinghai Water Resource Department	Water security (quantity, seasonality and quality) with particular interest in safeguarding the catchments areas of the Yellow, Yangtze and Mekong rivers
Qinghai Environmental Monitoring Center	Monitoring of environmental conditions in the province
Qinghai Fishery Environmental Monitoring Center	Monitoring of aquatic resources in rivers and lakes
Northwest Plateau Institute of Biology, CAS	Multi-disciplinary studies of Tibetan plateau ecosystems, including Qinghai Lake, Sanjiangyuan and Kekexili areas
Qinghai Academy of Social Sciences	Multi-disciplinary studies in socio-economic development, policy analysis, culture
Academic institutions (e.g., universities)	Sub-contracted research, specialist training workshops, post-graduate courses and programmes
Local target communities / project partners	Traditional management of grassland/rangeland, wetland and forest ecosystems Co-management and environmental monitoring in several parts of NRs
Other local communities	Traditional management of grassland/rangeland, wetland and forest ecosystems Not formal partners in co-management, but communities with institutions from which the project can learn (e.g., forms of community governance, traditional use of biodiversity, pastoralism, etc.)
NGOs in Qinghai Province (e.g., SGREPA, Local Group Perspectives)	Concerns for the environment, biodiversity, and/or the welfare of local communities
Other NGOs (e.g., Shan Shui, WWF, FFI, Green Cross, TNC, etc.)	Concerns for the environment, biodiversity, and/or the welfare of local communities

Table 8: A preliminary list of responsibilities of organizations and social communities related to the project

Government organs (provincial)	Policy	Planning	Laws and regulations	Research	Promotion	Training	Implemented project	Monitoring and evaluation
Qinghai Forestry Department								
Development and Reform Commission								
Department of Land Resources								
Department of Agriculture and Husbandry								
Department of Water Resources								
Department of Finance								
Department of Science and Technology								
Bureau of Environmental Protection								
Bureau of Weather								
Publicity Affairs Office, the People's Government of Qinghai								
Qinghai TV station								
Qinghai-based Universities								
Scientific research organ								
Qinghai Study Institute, CAS Northwest Plateau Institute of Geography, CAS								
Qinghai Alpine Geography Study Institute								
Non-governmental organization								
Qinghai-based NGOs: Snowland Great Rivers Environment Protection Association (SGREPA), Plateau Perspectives								
National/international NGOs with experience in the target area: Shan Shui, FFI, WCS, WWF, etc.								
Community								
Community representation in demo areas								



Major responsibilities



Secondary responsibility



Not responsible

project proposes a mechanism to achieve broad-based stakeholder involvement in the project preparation and implementation process. Stakeholder participation will include the following three components:

Project Steering Committee (PSC):

Project Coordination Unit (PCU):

Local Committees (LC) at site level:

Invited members of PSC, PMO and LC

Provincial Leader Group = Steering Committee UNDP to attend project meetings	Project Coordination Unit (PCU)	Local Committees (LC) (based in selected pilot area)
Participating provincial agencies: P, QFD, QDF, EPB, Department of Water Resources, SNNR bureau, Project Team, invited technical experts	Qinghai Forestry Department NPD, Project Manager, ITA, Project Assistant, contracted technical staff, etc.	Local community leaders NR Bureau staff Contracted NGO staff Township Government

Long-term stakeholder participation

The project will provide the following opportunities for long-term participation of all stakeholders, with a special emphasis on the active participation of local communities:

Decision-making – through the establishment of the Project Steering Committee. The establishment of the structure will follow a participatory and transparent process involving the confirmation of all project stakeholders; conducting one-to-one consultations with all stakeholders; development of Terms of Reference and ground-rules; inception meeting to agree on the constitution of the Committee.

Capacity building – at systemic, institutional and individual level – is one of the key strategic interventions of the project and will target stakeholders that have the potential to be involved in brokering, implementing and/or monitoring management agreements related to activities in the project area and the reserves. The project will target especially organizations operating at the community level to enable them to actively participate in brokering and implementing management agreements.

Communication - will include the participatory development of an integrated communication strategy.

The communication strategy will be based on the following key principles:

- Providing information to all stakeholders;
- Promoting dialogue between all stakeholders;
- Promoting access to information.

Initially, the project will be launched by a well-publicized multi-stakeholder inception workshop. This workshop will provide an opportunity to provide all stakeholders with updated information on the project as well as a basis for further consultation during the project's implementation to refine and confirm the work plan.

The project's design incorporates several features to ensure on-going and effective stakeholder participation in the project's implementation. Mechanisms to facilitate involvement and active participation of different stakeholder in project implementation will comprise a number of different components:

Project inception workshop

The project will be launched by a multi-stakeholder workshop. This workshop will provide an opportunity to provide all stakeholders with the needed information on the project, the work plan, and will establish a basis for further consultation as the project's implementation commences.

Institution of Project Steering Committee

The Project Steering Committee's constituency will be constituted to ensure broad representation of all key interests throughout the project implementation. The representation, and broad terms of reference, of the PSC are described in the Management Arrangements in Part III of the Project Document.

Establishment of the Project Coordinating Unit

The Project Management Unit will take direct operational responsibility for facilitating stakeholder involvement and ensuring increased ownership of the project and its results. The PCU will be located in the Qinghai Bureau of Forestry in Xining to ensure coordination among stakeholder organizations at the provincial level during the project period.

Establishment of local working groups

At the activity level, local or specialist working groups (e.g., legal review team, database and monitoring team, BSAP development team, community involvement team) will be established, as required, to facilitate the active participation of affected institutions, organisations and individuals in the implementation of the respective project activities. Different stakeholder groups may take the lead in each of the working groups, depending on their respective mandates.

Project communications

The project will develop, implement and maintain a communications strategy to ensure that all stakeholders are informed on an on-going basis about the project's objectives; the project's activities; overall project progress; and the opportunities for stakeholders' involvement in various aspects of the project's implementation.

Implementation arrangements

Number of project activities have specifically been designed to directly involve local stakeholders in the implementation of, and benefit from, the project activities. These include: the creation or development of new opportunities for sustainable livelihood options and natural resource uses for local communities, stemming from the feasibility assessment studies and co-management models.

Formalising cooperative governance structures

The project will actively seek to formalise cooperative governance structures at the level of PAs or their sub-units, to ensure on-going participation of stakeholders in the planning and management of individual NRs.

Capacity building

Project activities are strategically focused on building capacity – at systemic, institutional and individual levels – of the key national stakeholders to ensure sustainability of initial project investments. The project will also seek to raise the public awareness of the values of the natural diversity of the province and the value and importance of ecosystem services derived from effective habitat conservation.

root causes and *barriers* matrix

PHYSICAL IMPACTS	ROOT CAUSES	MANAGEMENT CHALLENGE/E
<p><i>Degradation of flora/turf:</i></p> <p>Degradation caused by over-grazing and hoof erosion</p> <p>Loss of palatable species and spread of non-palatable species</p> <p>Reduced insulation afforded by herb layer leads to higher ground temperatures, summer low pressure and widespread climate effects</p> <p><i>Degradation of fauna:</i></p> <p>Construction of rare carnivores (snow leopard, wolf, foxes) that molest livestock</p> <p>Disturbance to animals at key breeding and nesting areas (e.g. black cranes, bar-headed geese)</p> <p>Loss of keystone and associated collateral species as a result of pest (pika) eradication schemes</p> <p>Disruption of wildlife (rare gazelles) and interruption of natural migration routes by erection of animal fences</p> <p>Increase in spread of diseases between domestic and wild animals</p> <p>Competition for food between domestic and wild animals</p> <p>Construction of rare carnivores that create conflicts with herdsman (snow leopard, bears, wolves)</p> <p><i>Climate change:</i></p> <p>Degradation helps accelerate climate change</p>	<p><i>Degradation of flora/turf:</i></p> <ul style="list-style-type: none"> Overall lack of awareness about causes and effects in plateau ecology or the direct relationship between ecosystem health, climate change, water catchment services and sustained human welfare Pursuit of fast economic development rather than ecologically sound sustainable development Weak legislative framework for PA protection and environmental protection Weak enforcement of environmental protection and wildlife protection laws Poor capacity of NR staff, range supervisory agencies Lack of long-term considerations about consequences of degradation vis-a-vis climate change, mitigation strategies and adaptation strategies <p><i>Degradation of fauna:</i></p> <ul style="list-style-type: none"> Reduced wild prey populations and increased captive herds leads to carnivores increasingly attacking domestic animals Poor understanding of the keystone role of pika and other burrowing mammals Lack of eco-compensation payments for more protective habitat use Weak law enforcement <p>Design of fences used could be less damaging to wildlife</p> <p><i>Climate change:</i></p> <ul style="list-style-type: none"> Loss of insulating herb layer and reflective ice leads to accelerating absorption of heat into ground surface leading to reduced fog, dew, rain, increased evaporation, lowered summer barometric pressures which in turn lead to exaggerated monsoon effects of floods, cyclones and droughts far beyond the plateau 	<ul style="list-style-type: none"> Need much greater levels of participation of local communities in planning processes Changes in land use resulting from such as loss of pastoral patterns of use Need to resist or find alternate livelihoods and stocking levels in response to economic pressures Avoid further introduction of damaging species (Kashmir goat (eats plant roots) as a result of economic pressures) Perverse incentives such as subsidized inputs and control programmes must be reversed Need to incorporate research results on the impact of pika in grassland ecology into present government plans Need to revise nature reserve zoning to better match real life situation Seek help and influence of religious leaders in controlling land use and behavior Great need to mainstream conservation into socio-economic development plans Urgent need to raise economic standards

PHYSICAL IMPACTS	ROOT CAUSES	MANAGEMENT CHALLENGE/E
<p>ffects which are twice as fast on the plateau as the rest of China</p> <p><i>Reduced ecosystem services:</i></p> <p>duced water catchment function and lowering river and lake levels</p> <p>Increased flood events and erosion of topsoil</p>	<p><i>Reduced ecosystem services:</i></p> <ul style="list-style-type: none"> • Raised temperature, decreased turf depth, loss of aeration of pika and rodent burrows all lead to reduced water catchment and water retention function 	
<p>Uncontrolled poaching, unsustainable fishing of lakes leads to loss of key species (wild horse, wild camels, saiga extinct; Przewalski's gazelle, snow leopard (critical), chiru endangered.</p> <p>Uncontrolled collecting of medicinal plants (especially caterpillar fungus) reduces key populations and causes long-lasting and grading damage to habitat</p>	<ul style="list-style-type: none"> • PA zones unclear in field • PA regulations are poorly known and weakly enforced • Low level of protection staff and capacity • Limited involvement of local communities (only in pilot co-management areas) • Economic pressures and incentives created by high prices and demand • Smuggling of rare materials to India (chiru wool) and other parts of China (furs, horns, medicines) 	<ul style="list-style-type: none"> • There needs to be much greater supervision and local bans on different types of products • There needs to be tightening up of procedures and inter-province smuggling • There is a need to spread greater awareness among harvesters of the concept of maximizing the benefits of low impact harvesting methods
<p>Habitat damage conducive to spread of IAS</p> <p>Soil erosion and nutrient losses on steep slopes</p> <p>Loss of potential habitat for native species</p> <p>Pollution of natural habitats as a result of mining operations</p>	<ul style="list-style-type: none"> • Lack of awareness of the extreme fragility of high altitude vegetation and soils • Lack of awareness of the slow timeframe of natural healing of land scars • Lack of awareness that land scars serve as sources of continued erosion and dust storms • Lack of application of engineering procedures to limit damage to turf, restore ground cover after engineering works, avoid blocking water channels etc. • Lack of awareness that roads, dykes, fences, embankments all create barriers for free movement of wildlife • Lack of coordination between different engineering projects (e.g. 3 parallel ditches cut for 3 different cables) 	<ul style="list-style-type: none"> • Coordination between different departments needs to be strengthened • Need to strengthen respect for environmental regulations by other sectors, private contractors • Need more thorough use of EIA in engineering projects, and EIA must address function needs. • Overall awareness of importance of ecosystem functions needs to be strengthened
<p>Melting of glaciers and permafrost lead to short-term increased in water flow in some areas with increased erosion and siltation of habitat but long-term shortages of vital water</p>	<ul style="list-style-type: none"> • Global carbon footprint too high • Wasteful uses of energy and slow rate of bringing clean energy sources online 	<ul style="list-style-type: none"> • Biodiversity is not adequately managed in responses to climate change crisis. Mitigation and assist in adaptation

PHYSICAL IMPACTS	ROOT CAUSES	MANAGEMENT CHALLENGE/E
<p>supplies</p> <p>Raised temperatures lead to higher rates of water evaporation, drought, salination and erratic weather patterns</p> <p>Vertical stratification of natural vegetation zones forces alpine species higher up mountains (where habitat area is smaller and altitude becomes a problem) and allows forests to invade plateau grasslands</p> <p>Dynamic changes allow IAS to invade the plateau</p>	<ul style="list-style-type: none"> • Overgrazing and habitat degradation on plateau contribute to accelerating climate change • Eradication of burrowing animals leads to raised heat absorption on plateau • Lack of connectivity between major PAs will restrict natural adaptation through habitat shifts, made worse by maze of animal fences 	<ul style="list-style-type: none"> • Planning, zoning and maintenance linking PAs, needs to revised in light of future change. • Awareness needs to be raised concerning connectivity between biodiversity conservation • Awareness needs to be raised about the impact of animals in improving drainage and reducing temperatures as a mitigation strategy for climate change
<p>Decrease in quality of watershed and associated water quantity and quality</p> <p>Increased threats to the integrity of localized populations of endemic fauna and flora in underprotected ecosystems – deserts, salt marshes and eastern forests</p>	<ul style="list-style-type: none"> • No systematic planning of PA system undertaken • No specific policy for PA establishment to preserve representative system of ecosystems and species • Lack of mainstreaming of biodiversity issues into broader planning processes • Low awareness • Low budgets for conservation action 	<ul style="list-style-type: none"> • Need to create routine processes and institutional planning bodies for adequate conservation of biodiversity and ecosystem services • Inclusion of biodiversity targets within National Development Plan • Inclusion of biodiversity targets within regional ecological development plans • Development and approval of protected areas management plans • Strengthening legal framework for biodiversity conservation, needs are included in all relevant plans and establishment of privately managed protected areas

Name of reviewers completing tracking tool and completion dates

	Name	Title	Agency
CEO Endorsement Sept 2010	Li Diqiang	Prof. consultant	Beijing University
Project Mid-term			
Final Evaluation/project completion			

*The PIF for the project was included in the November 2009 Work Programme. However, the first application of the tool is being carried out at project CEO Endorsement.

Project coverage in hectares

Targets and Timeframe	Foreseen at project start (ha)	Achievement at Mid-term Evaluation of Project (ha)	Achievement at Final Evaluation of Project (ha)
Total Extent in hectares of protected areas targeted by the project by WWF ecoregion			
Central Tibetan Plateau alpine steppe	5,818,000		
North Tibetan Plateau-Kunlun Mountains alpine desert	2,357,000		
Nujiang-Lancang Gorge alpine conifer and mixed forest	126,000		
Quaidam basim semi-desert	3,971,000		
Qilian Mts subalpine meadow	834,400		
Southeast Tibet shrublands and meadow	4,413,000		
Tibetan Plateau alpine shrublands and meadows	6,600,000		
Western Himalayan alpine shrub and meadows	152,600		
Plateau lakes (not WWF ecoregion)	776,500		
Total	25,048,500		

Development Scorecard – Qinghai Provincial Forest Department

Compiled by: Lee Yande

Staged Indicators	Rating	Score	Comments	Next Steps
Environment				
Organizational responsibilities for environmental management are not clearly defined	0	2	Though all the organization has different responsibilities, local community not sure about the specific responsibilities from different authority. The cooperation and the community should be enhanced with different government agencies.	<ol style="list-style-type: none"> 1. According to the different agency's responsibilities, the public awareness education should be enhanced. 2. Strengthen the cooperation and community between different agencies. 3. To enhance the effective management, develop the regulations and policies.
Organizational responsibilities for environmental management are identified	1			
Priority and legitimacy of all lead organizations responsible for environmental management are partially recognized by stakeholders	2			
Priority and legitimacy of all lead organizations responsible for environmental management recognized by stakeholders	3			
Co-management mechanisms are in place	0	1	The forms of co-management is simple, the flexibility and operation should be improved as well as the scale should be enlarged.	<p>To explore and demonstrate different ways of co-management according to different community situation.</p> <p>To enhance the communication with different stakeholders, to obtain the different comments and suggestion especially from the community.</p> <p>To extend the successful experiences and achievements to other areas.</p>
Co-management mechanisms are in place and operational	1			
Co-management mechanisms are formally established through agreements, MOUs, etc.	2			
Comprehensive co-management mechanisms are formally established and are operational/functional	3			
Identification of stakeholders and their participation/involvement in decision-making is poor	0	1	In the past decades, all the planning were conducted dominantly by the government authorities, and lacks of the cooperation with different government sectors.	<ol style="list-style-type: none"> 1. To introduce new planning method like participate methodology 2. To establish effective communication mechanism with different government agencies and the community contribute to planning.
Stakeholders are identified but their participation in decision-making is limited	1			
Stakeholders are identified and regular consultations mechanisms are established	2			
Stakeholders are identified and they actively contribute to established	3			

Staged Indicators	Rating	Score	Comments	Next Steps
participative decision-making processes				
access and use information and knowledge				
Stakeholders are not aware about global environmental issues and their related possible solutions (MEAs)	0	2	Dues to the strict limitation of existing working mechanism with in different agencies, the way to participate the integrated planning is limited for the stakeholders.	To establish the leading group at the provincial, prefecture and county levels. To enhance the communicate with different stakeholders making sure they can involve in the process of project.
Stakeholders are aware about global environmental issues but not about the possible solutions (MEAs)	1			
Stakeholders are aware about global environmental issues and the possible solutions but do not know how to participate	2			
Stakeholders are aware about global environmental issues and are actively participating in the implementation of related solutions	3			
Environmental information needs are not identified and the information management infrastructure is inadequate	0	1	Strengthen information management infrastructure construction, establish the platform to share the information and data with in different agencies.	To make a detailed information management plan and establish the information-sharing mechanism with different agencies.
Environmental information needs are identified but the information management infrastructure is inadequate	1			
Environmental information is partially available and shared among stakeholders but is not covering all focal areas and/or the information management infrastructure to manage and give information access to the public is limited	2			
Comprehensive environmental information is available and shared through an adequate information management infrastructure	3			
Environmental education programmes are in place	0	1	The forms and activities is simple, little opportunity for community to attend such activities.	To put the environmental education as one of key priorities, to make a detailed activities plan using new way and forms which are easy for community to learn.
Environmental education programmes are partially developed and partially completed	1			
Environmental education programmes are fully developed but partially completed	2			
Comprehensive environmental education programmes exist and are being completed	3			
Linkage exist between environmental policy development and science/research strategies and programmes	0		Enhance the research on environment policy and science to contribute to the	To organise some relevant agencies to conduct special research focusing on certain field.
Research needs for environmental policy development are identified but are	1			

Staged Indicators	Rating	Score	Comments	Next Steps
Translated into relevant research strategies and programmes		2	decision-making.	
Relevant research strategies and programmes for environmental policy development exist but the research information is not responding fully to the research needs	2			
Relevant research results are available for environmental policy development	3			
Traditional knowledge is ignored and not taken into account into relevant participative decision-making processes	0	1	In the past , most of environmental protection project ignored the contribution of traditional knowledge on environment protection activities.	To collect the local traditional knowledge and disseminate some typical cases of environmental protection.
Traditional knowledge is identified and recognized as important but is not collected and used in relevant participative decision-making processes	1			
Traditional knowledge is collected but is not used systematically into relevant participative decision-making processes	2			
Traditional knowledge is collected, used and shared for effective participative decision-making processes	3			
Environmental policy and legislation development				
Environmental planning and strategy development process is not initiated and does not produce adequate environmental plans and strategies	0	2	Dues to shortage of fund, poor technology and obsolete policy which makes the project low production.	To try for more funding channels and enhance the development of project and implementation.
Environmental planning and strategy development process does produce adequate environmental plans and strategies but there are not implemented/used	1			
Adequate environmental plans and strategies are produced but there are only partially implemented because of funding constraints and/or other problems	2			
Environmental planning and strategy development process is well initiated by the lead environmental organizations and produces the required environmental plans and strategies; which are being implemented	3			
Environmental policy and regulatory frameworks are insufficient; they do not provide an enabling environment	0	1	To enhance the capacity of relevant environmental policies and laws and update the exist policies and laws.	To review the exist policy and laws and emend some regulations.
Relevant environmental policies and laws exist but few are implemented/enforced	1			
Adequate environmental policy and legislation frameworks exist but there are problems in implementing and enforcing them	2			
Adequate policy and legislation frameworks are implemented and provide an enabling environment; a compliance and enforcement mechanism is	3			

Staged Indicators	Rating	Score	Comments	Next Steps
Completed and functions				
Availability of environmental information for decision-making is lacking	0	1	Enhance the collection, analysis and management of different information	Development of full and accurate information collection planning, and information compiling
Environmental information exists but it is not sufficient to support environmental decision-making processes	1			
Important environmental information is made available to environmental decision-makers but the process to update this information is not functioning properly	2			
Local and administrative decision-makers obtain and use updated environmental information to make environmental decisions	3			

Implementation and implementation

Environmental organizations don't have adequate resources for their programmes and projects and the requirements have not been assessed	0	0	Enhance collection, analysis and evaluation of information	Providing capacity building opportunities to relevant departments, and evaluating the needs of resources
Resource requirements are known but are not being addressed	1			
Funding sources for these resource requirements are partially identified and the resource requirements are partially addressed	2			
Adequate resources are mobilized and available for the functioning of the lead environmental organizations	3			
Necessary required skills and technology are not available and the needs are not identified	0	1	Strengthen the training of technique and technology to provide service to project	To conduct trainings based-on investigation and analysis needs of technique and technology.
Required skills and technologies needs are identified as well as their resources	1			
Required skills and technologies are obtained but their access depend on funding sources	2			
Required skills and technologies are available and there is a national-based mechanism for updating the required skills and for upgrading the technologies	3			

Monitor and evaluate

Regular project monitoring is being done without an adequate monitoring framework detailing what and how to monitor the particular project or programme	0		Strengthen the monitoring and evaluation of the programme and project to serve for the project	Development a detailed monitoring plan, put monitoring as an important link in engineering and project implementation.
Adequate resourced monitoring framework is in place but project	1			

Staged Indicators	Rating	Score	Comments	Next Steps
Monitoring is irregularly conducted		0	Implementation.	
Regular participative monitoring of results is being conducted but this information is only partially used by the project/programme implementation	2			
Monitoring information is produced timely and accurately and is used by the implementation team to learn and possibly to change the course of action	3			
Weak or ineffective evaluations are being conducted without an adequate evaluation plan; including the necessary resources	0	0	Development of a detailed work plan to strengthen evaluation on engineering and project and appoint special staff to management it.	To conduct capacity building on staff who will develop project planning to enhance significance of evaluation link
Adequate evaluation plan is in place but evaluation activities are irregularly conducted	1			
Evaluations are being conducted as per an adequate evaluation plan but the evaluation results are only partially used by the project/programme implementation team	2			
Effective evaluations are conducted timely and accurately and are used by the implementation team and the Agencies and GEF Staff to correct the course of action if needed and to learn for further planning activities	3			
TOTAL SCORE		16 (35.5%)		

