



**REQUEST FOR CEO ENDORSEMENT**  
**PROJECT TYPE: Medium-sized Project**  
**TYPE OF TRUST FUND: GEF Trust Fund**

**PART I: PROJECT IDENTIFICATION**

<b>Project Title:</b>	Improving the coverage and management effectiveness of PAs in the Central Tian Shan Mountains		
<b>Country:</b>	Kyrgyzstan	<b>GEF Project ID:</b>	4844
<b>GEF Agency:</b>	UNDP	<b>GEF Agency Project ID:</b>	4934
<b>Other Executing Partners:</b>	State Agency for Environment Protection and Forestry	<b>Submission Date:</b>	March 21, 2013
<b>GEF Focal Area (s):</b>	Biodiversity	<b>Project Duration:</b>	48 months
<b>Name of parent program: For SFM/REDD+ <input checked="" type="checkbox"/></b>	N/A	<b>Agency Fee:</b>	USD 95,000

**A. FOCAL AREA STRATEGY FRAMEWORK:**

Focal Area Objectives	FA Outcomes	FA Outputs	Trust fund	GEF Grant (\$)	Co-financing (\$)
BD-1	Outcome 1.1 Improved management effectiveness of existing and new protected areas	Output 2 New protected areas (number) and coverage (hectares) of unprotected threatened species (number)	GEFTF	855,000	4,470,000
Project management cost			GEFTF	95,000	496,666
<b>Total project costs</b>				<b>950,000</b>	<b>4,966,666</b>

**B. PROJECT FRAMEWORK:**

**Project Objective:** To improve the coverage and effectiveness of protected areas in the Central Tian Shan Mountains so as to expand threatened species representation in the national system

Project Component	Grant type	Expected Outcomes	Expected Outputs	Trust fund	Financing from relevant TF, (\$)	Indicative co-financing, (\$)
1. Threatened species representation is improved by increasing coverage and management effectiveness of PAs in Central Tian Shan	TA	<p>Improved representation of habitats of threatened species of Central Tian Shan in the national PA system by 2016:</p> <ul style="list-style-type: none"> <li>- National PA coverage up from 6.03% to c.7%</li> <li>- Representation of endangered snow leopard habitat and that of other vulnerable, threatened, and endangered species in the PA system in Central Tian Shan up from c. 20% to 48%</li> </ul> <p>Improvement in the capacities of PA staff and in overall management effectiveness of Khan Tengri National Park and Sarychat-Ertash Nature Reserve (METT score increase by 25%)</p> <p>A 30% reduction in poaching and illegal logging at targeted PAs</p> <p>Enhanced conservation status of Central Tian Shan ecosystems ensures stability of threatened and indicator species (see Global Benefits table under B.2 for species list)</p>	<p>1.1. Establishment of a new national park covering 187,000 hectares in Khan Tengri region: PA boundaries delineated; PA infrastructure, equipment, and human resources put in place capable to manage the PA.</p> <p>1.2. Patrolling, enforcement and surveillance systems strengthened:</p> <p>1.2.1. at the Sarychat-Ertash Nature Reserve (existing PA) through establishment of joint anti-poaching teams between Park authorities and local communities (horse-mounted rangers groups);</p> <p>1.2.2. at Khan Tengri PA (new PA) through creation of a Local Management Board and joint ranger groups to enforce anti-poaching, fire prevention, resource use regulations, control over species and habitat management activities.</p> <p>1.3 Vocational training for staff from the new and existing PA to ensure that they can effectively fulfill management objectives. This will be undertaken in collaboration with WWF. The first series of training workshops will focus on PAs from Tian Shan with subsequent extension to other PAs (hosted and co-financed by WWF)</p> <p>1.4 METT introduced at the 2 PAs in Central Tian Shan and from year 3 accepted by State Agency for Environment Protection and Forestry as a widespread tool for gauging the effectiveness of and reporting on PA functions and management of PAs in the rest of the country.</p>	GEFTF	350,000	1,745,000

Project Component	Grant type	Expected Outcomes	Expected Outputs	Trust fund	Financing from relevant TF, (\$)	Indicative co-financing, (\$)
2. Habitat connectivity, sustainability and effectiveness of PAs in Central Tian Shan are enhanced by regulating land use in buffer zones, wildlife corridors and other intervening landscapes	Inv.	<p>Reconciliation of economic activities with conservation in sensitive buffer areas and corridors ensuring safe passage of snow leopard and ungulates over c. 200,000 hectares</p> <p>Reduced threats and disturbance at nesting/ breeding and foraging sites for snow leopard, ungulates and threatened birds-of-prey outside PAs</p> <p>Increase in incomes of local communities from biodiversity-compatible activities (c. 10-15% rise in income compared to baseline; this is average increase reported by households under past and current UNDP poverty reduction programs, measured before and after UNDP interventions through socio-economic studies.)</p>	<p>2.1 Amendments to the Law on Protected Areas to legally define the procedures for the establishment, operation and enforcement of PA buffer zones and wildlife corridors taking into account local community needs and land use rights.</p> <p>2.2 Identification and designation of buffer zones for the new PA at Khan Tengri and wildlife corridors between Khan Tengri and Sarychat-Ertash NR where land use is to be regulated.</p> <p>2.3 Conservation management objectives of the PAs, buffer zones and corridors to be better aligned with territorial land use plans of 5 adjoining rural districts, with modifications being made to the latter as needed. Based on a biophysical and socio-economic resource mapping to understand the potential of the various eco zones, modifications to land use plans could include activities such as upgrade of the status of high value forests adjacent to Khan Tengri PA, restoration and maintenance of access roads to raise the mobility of livestock and balance livestock grazing pressure in mountain ecosystems, rehabilitation of degraded rangelands through improved local pasture management plans, and introduction of regulated timing, places and methods of hunting.</p> <p>2.4 Based on extensive consultation with local communities, agreements are reached with local land users on modified patterns of resource use, and a system is in place for enforcement of new regulations with the engagement of district environmental inspectors. Enforcement of regulations is monitored and reported using METT (qq.21-25 dealing with wider landscape integration of PAs.)</p> <p>2.5 Alternative livelihoods program for local communities designed and launched to support apiculture, yak breeding, and community-based ecotourism. Support will be provided through the operational micro-credit mechanism of the Area Based Development program of UNDP (which is one of the baseline programs, further described in the text). Support will be provided to approximately 20% of rural communities in and around target PAs.</p> <p>2.6 Training workshops conducted for local authorities from other districts spanning the Tian Shan Mountains on how to account for biodiversity conservation considerations in spatial planning and on enforcement of regulations, using the experience of the Khan Tengri and Sarychat-Ertash PAs. (hosted by President's Management Academy)</p>	GEFTF	505,000	2,725,000
Project management cost				GEFTF	95,000	496,666
<b>Total project costs</b>					<b>950,000</b>	<b>4,966,666</b>

\* Details on baseline and target indicators for project outcomes are provided in the project results framework in [Annex A](#); Status of implementation of PPG and use of funds is in [Annex C](#) and detailed budget is in [Annex D](#).

### C. SOURCES OF CONFIRMED CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME, (\$)

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
National government	State Agency for Environment Protection and Forestry	Grant	800,000
National government	State Agency for Environment Protection and Forestry	In-kind	800,000
National government	General Directorate of the Issyk-Kul Biosphere Reserve	Grant	350,000
National government	Republican Nature Protection and Forestry Development Fund	Grant	916,666
NGO	WWF	Grant	250,000
Multilateral agency	UNDP	Grant	1,600,000
Bilateral agency	USAID	Grant	250,000
<b>Total Co-financing</b>			<b>4,966,666</b>

### D. GEF RESOURCES REQUESTED BY AGENCY, FOCAL AREAS AND COUNTRY (in USD): Not applicable.

### E. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS

Component	Estimated person weeks	Grant amount (\$)	Co-financing (\$)	Project total (\$)
Local consultants *	758	237,360	100,000	337,360
International consultants*	44	108,000		108,000
<b>Total</b>	<b>802</b>	<b>345,360</b>	<b>100,000</b>	<b>445,360</b>

\* Details on consultants supported by GEF resources are in [Annex B](#)

### F. PROJECT MANAGEMENT COST

Cost items	Estimated person weeks	Grant amount (\$)	Co-financing (\$)	Project total (\$)
Local consultants *	208	67,600	496,666 <sup>1</sup>	564,266
Office facilities, equipment, vehicles and communications*		10,360		10,360
Travel		13,040		13,040
Others: Independent audit		4,000		4,000
<b>Total</b>	<b>208</b>	<b>95,000</b>	<b>496,666</b>	<b>591,666</b>

\* Details on management costs supported by GEF resources are in [Annex B](#)

### G. DOES THE PROJECT INCLUDE A NON-GRANT INSTRUMENT? No.

### H. DESCRIBE THE BUDGETED M&E PLAN

The project team and the UNDP Country Office (UNDP-CO) supported by the UNDP-GEF Regional Coordination Unit in Bratislava will be responsible for project monitoring and evaluation conducted in accordance with established UNDP and GEF procedures. The [Project Results Framework in Annex A](#) provides performance and impact indicators for project implementation, along with their corresponding means of verification. The Biodiversity METT will also be used to monitor progress (see [Annex E](#) for details). The METT has been completed in the required excel format and is being submitted with this CEO Approval request. The summary M&E budget table is presented below. For a detailed description of the monitoring and evaluation plan, please refer to the M&E section of the UNDP Project Document submitted along with the CEO Endorsement Request.

**Table 1. Project Monitoring and Evaluation Plan and Budget**

Type of M&E activity	Responsible Parties	Budget (USD)	Time frame
Inception Workshop (IW)	Project Coordinator, MNREP, UNDP-CO, UNDP-GEF	4,000	Within first two months of project start up
Inception Report	Project Team, Project Board, UNDP CO	None	Immediately following IW
Tracking of logframe indicators at objective level	Project Coordinator and Project Technical Advisor	None	Start, mid and end of project

<sup>1</sup> Government and local research expert staff time

Type of M&E activity	Responsible Parties	Budget (USD)	Time frame	
Tracking of logframe indicators at outcome level	Project Coordinator and Project Technical Advisor		Annually prior to APR/PIR and to the definition of annual work plans	
PIR	Project Team, Project Board, UNDP-GEF	None	Annually	
Project Board Meetings	Project Coordinator	None	Following IW and annually thereafter	
Technical and periodic status reports	Project team	None	Frequency to be determined by Project team and UNDP-CO	
Mid-term External Evaluation	Project team, Project Board, UNDP-GEF RCU, External Consultants (Evaluation Team)	National evaluators International evaluators	3,000 30,000	At the mid-point of project implementation
Final External Evaluation	Project team, Project Board, UNDP-GEF RCU, External Consultants (Evaluation Team)	National evaluators International evaluators	3,000 30,000	At the end of project implementation
Terminal Report	Project team, Project Board, External Consultant	None	At least one month before the end of the project	
Audit	UNDP-CO, Project Team	4,000	Yearly	
Visits to field sites	UNDP-CO, UNDP-GEF RCU, Government representatives	UNDP staff travel costs to be charged to IA fees	None	UNDP Staff travel at least yearly; government representatives as needed
TOTAL COST (Excluding project and UNDP staff time costs)			74,000	

## **PART II: PROJECT JUSTIFICATION**

### **A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:**

#### **A.1. THE GEF FOCAL AREA STRATEGIES:**

The proposed project advances GEF's Biodiversity Objective 1, which is to "Improve Sustainability of Protected Area Systems" (BD1). Within this objective, the project focuses specifically on "expanding threatened species representation" by supporting the creation and effective management of new protected areas that extends the coverage of threatened species in the national protected area system and improves the coverage of their spatial range. Outcome 1 is designed to increase the coverage of protected areas in the Central Tian Shan, which harbors several globally vulnerable, threatened, and endangered species including the snow leopard. At present, less than 20% of the range of the snow leopard in Central Tian Shan is under protection and the project will increase this coverage by establishing a new protected area (PA), Khan Tengri, spanning 187,000 hectares raising the share to 48% (see Section B.2 for details). Outcome 2 focuses on improving the connectivity between the new PA and the existing Sarychat-Ertash PA in Central Tian Shan through designation and effective management of buffer zones and wildlife corridors, which, in turn, will enhance the sustainability and effectiveness of PAs through better regulation of land and natural resource use around PAs. Local communities will be supported in biodiversity-compatible income generation to enable them to observe the modified patterns of land use. Livelihoods support will be provided in partnership with the local Development Fund in Toguz Bulak village administration (Issyk Kul). (Local Development Funds were piloted by UNDP's Democratic Governance Programme starting in 2005.) The GEF investment will strengthen the national PA system overall, by adding into it high-value areas of Central Tian Shan, which have suffered from lack of protection or suboptimal management due to national resource constraints. The project will increase the overall national PA coverage from 6.03 to approximately 7%. By focusing on PA connectivity, the project addresses Decision X/31 of the CBD COP-10 in Nagoya, which requires countries to promote the application of the ecosystem approach that integrates protected areas into broader land and/or seascapes for effective conservation of biological diversity.

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

##### **Project consistency with national strategies and plans:**

This project has been identified as a priority initiative under the national GEF-5 portfolio planning exercise completed in December 2011. It has been endorsed officially by the cross-sectoral working group of the GEF planning process on 30 November, 2011. The project focuses on the highland areas of the Central Tian Shan, and thus conforms to the National Environmental Report (approved by the Government Resolution effective as of 07.08.2012), which confirms that the high mountains are islands of biological wealth amid relatively poor plains and that protected areas play a key role in maintaining biodiversity. It is in line with Kyrgyzstan's National Mid-Term Development Plan that emphasizes the importance of protected areas, especially in mountain regions.

The project's effort to create the Khan Tengri Natural Park on 187 square hectares is fully in line with the government's 5-year "Program for Transition to Sustainable Development of the Kyrgyz Republic for 2013-2017", that explicitly recognizes the need to establish this PA under the section on "Conservation and sustainable use of natural resources in changing climate modality".

The project is closely linked to the Action Plan on implementation of the "National Strategy for Preservation of the Snow Leopard in the Kyrgyz Republic for 2013-2023", specifically on the following items under the National Strategy: II) Improving the institutional base; III) Study of snow leopards, its habitat and the food bases; IV) Training employees of public bodies and PAs; and V) Environmental education and increasing of awareness among local population.

Currently, the Kyrgyz Republic is working on developing an NBSAP. Creation of PAs in snow leopard habitats is one of the key activities envisioned by the process. Furthermore, the experts who participated in elaboration of this project document are also involved in NBSAP development, particularly as related to the following sections: PAs and monitoring and improvement of legislation in biodiversity and PAs. Thus, this GEF project will contribute at the policy level to formulation of PA policies and standards that would be subsequently shared with the team working on the NBSAP so that these can be duly incorporated into national legislation. In addition, information exchange between the two teams will be put in place by the UNDP office in Bishkek.

#### Project consistency with reports and assessments under international conventions and exercises:

Project outputs 1.1 and 1.2 are in line with national biodiversity conservation priorities, which are defined in the fourth National Report to the CBD. The need to preserve biodiversity of the Tian Shan is an important aspect in the country report to the CBD. The report identifies the expansion of protected areas to 8% of national territory as a national priority for transitioning to sustainable development. The project advances Goals A.1 (creation of protected areas), and A.6 (restoration and maintenance of critical landscapes and species) of the 2002 National Biodiversity Strategy and Action Plan. The project will assist Kyrgyzstan in implementing relevant aspects of the CBD Program of Work on Protected Areas. The need for conservation of the biodiversity of Tian Shan is prominent in the country's report under most goals of the CBD Program of Work on Protected Areas. It also demonstrates an integrated approach to the creation of new PAs for under-represented ecosystems, covering a number of topics, ranging from technical aspects (capacity building of existing and new protected areas, harmonization of PA, management planning, development and implementation of a comprehensive monitoring system for biodiversity and ecosystems) to socio-economic dimensions (support for alternative income-generating activities for local communities such as ecotourism, and yak breeding) to integration of PAs with biodiversity conservation and sustainable land use in adjacent areas. All these actions meet strategic objectives A, B, C, and D, and related targets for conservation and sustainable use of biodiversity that were accepted at Aichi, Japan in 2011.

Also worth noting is that the project is consistent with the "Recommendations on preservation of snow leopards and their high mountain ecosystems" that were adopted at the international meeting on conservation of snow leopards held in Bishkek on December 3, 2012. Overall, the project proposal is consistent with the recommendations of the Global Snow Leopard Survival Strategy. The entire set of recommendations has been reflected in the project document, and they all have been adapted to the situation in Kyrgyzstan. It is obvious that, by implementing these activities it is possible to create conditions for preservation and increase of snow leopard population in Central Tian Shan.

## **B. PROJECT OVERVIEW**

### **B.1. DESCRIBE THE BASELINE PROJECT AND THE PROBLEM THAT IT SEEKS TO ADDRESS:**

**Background:** Kyrgyzstan is a landlocked country situated in the center of Eurasia and spanning an area of 199,900 square kilometers<sup>2</sup>. It is bordered by Kazakhstan to the north, China to the east and southeast, Tajikistan to the southwest and Uzbekistan to the west. Altitudes range from 132 to 7,439 meters above sea level, with the mountain system of the Tian Shan (merging into the Pamir-Alay in the south-west) accounting for approximately 90% of the country's area.<sup>3</sup> The Tian Shan's highest peaks are found in Central Tian Shan where the country's territory meets Kazakhstan and China. The highest peak is Pobeda (7,439m), which is also the highest point in the country. The second highest peak, Khan Tengri (6,995m), is located a short distance to the north. In terms of administrative boundaries, the Central Tian Shan falls within the Issyk Kul province<sup>4</sup>. The Tian Shan Mountains in Kyrgyzstan are

<sup>2</sup> Atlas of Kyrgyz SSR, Nature conditions and recourses – State Administration of Geodesy and Cartography.– 0.1.–1987

<sup>3</sup> Kyrgyz Republic Biodiversity Strategy and Action Plan, Ministry of Environmental Protection, Bishkek, November 1998

<sup>4</sup> The country is divided into 7 provinces (*Batken, Chuy, Jalal-Abad, Naryn, Osh, Talas, and Issyk Kul*) and 2 independent cities/ *shaars* (Bishkek, Osh).

generally described in several segments as follows: Northern Tian Shan (Chyi valley and Kungei Alatau), Central Tian Shan (Syrts of Issyk Kul province), Inner Tian Shan (Naryn province), and West and South-west Tian Shan (Osh and Jalal Abad provinces).

Kyrgyzstan acts as a natural barrier between flora and fauna of Kazakhstan, Uzbekistan, and China, which are different biogeographic provinces. On the other hand, the Tian Shan and Alay ranges act as a bridge connecting fauna and flora of the Himalayas and Hindu Kush across Pamir with biota of Siberia, and across Dzungar Ala-Tau and Altay with biota of Mongolia. These two factors result in an extreme and unique combination of different fauna and flora elements, and underpin the significance of the biodiversity of Kyrgyzstan and the need for its conservation in the regional context<sup>5</sup>.

The country exhibits a rich diversity of natural resources – species, ecosystems, and landforms. Covering only 0.13% of the globe's surface, Kyrgyzstan is home to about 1% of all known species. Several rare and endangered species of flora and fauna have been included in the Red Book of the Kyrgyz Republic<sup>6</sup> -- 53 species of birds, 26 mammals, 2 amphibians, 8 reptiles, 7 species of fish, 18 arthropods, and 89 higher plant species. Many species of animals such as dhole (*Cuon alpinus*), otter (*Lutra lutra*), goitered gazelle (*Gazella subgutturosa*), great bustard (*Otis tarda* L.), and imperial eagle (*Aquila heliaca*) are practically not being registered any more. The wild pomegranate (*Punica granatum*) is critically endangered. Rare species such as the grey monitor lizard (*Varanus griseus*), ibisbill (*Ibidorhyncha struthersii*), marbled polecat (*Vormella peregusna negans*), snow leopard (*Uncia uncia*), and the Tian Shan brown bear (*Ursus arctos isabellinus*) remain in an extremely dangerous situation. Species such as the snow leopard, menzbir marmot, red wolf, goitered gazelle, and bar-headed goose are recorded in the national Red Book<sup>7</sup>.

The compound high altitude relief of Kyrgyzstan situated in the southern part of the temperate zone creates favorable conditions for existence of all main types of natural ecosystems, ranging from deserts to high altitude mountainous tundra. There are 20 classes of ecosystems. The diversity of ecosystems, however, is unevenly distributed within the country, being more richly represented in the Western Tian Shan and Central Tian Shan biogeographical regions, each having 16 out of 20 classes of ecosystems, or 72.7% of their whole diversity<sup>8</sup>. The rich diversity of plant and animal wealth can be attributed to the high mountainous systems of Tian Shan and Pamir-Alay that reach up to 7 000 kilometers above sea level and accumulate moisture from the upper reaches of the atmosphere. High mountains are islands of biological diversity among monotonous plains.

**Biodiversity significance of Central Tian Shan:** Central Tian Shan belongs to the Global 200 Ecoregions list, and has a number of Important Bird Areas (IBAs). Forests cover just 5.62% of the country, with most of it in the Tian Shan Mountains. The relict Shrenk's spruce forests (*Picea schrenkiana*) are endemic and have global significance as these are among the world's last massifs of virgin coniferous forests. Central Tian Shan's mountain forest catchments provide water resources for almost one third of the country and millions of hectares in neighboring countries and it is sometimes referred to as a natural water tower for Central Asia.

The Tian Shan Mountains provide ideal habitat for the endangered snow leopard (*Uncia uncia*). Snow leopards are usually found between 3,000 and 5,400 meters above sea level where the environment is harsh and forbidding, the climate is cold and dry, and the mountain slopes sparsely vegetated with grasses and small shrubs, providing good cover and clear views to help them sneak up on their prey. The area is also home to ungulates that are the prey of the snow leopard such as the argali (*Ovis ammon*; IUCN status: near threatened), ibex (*Capra ibex*), and Tian Shan maral (*Cervus elaphus*).

In terms of avifauna, Central Tian Shan is home to the ibisbill (*Ibidorhyncha struthersii*; noted as a rare species whose situation is extremely dangerous in the 4th National Report to the CBD), saker falcon (*Falco cherrug*; IUCN status: vulnerable), Himalayan griffon (*Gyps himalayensis*), Eurasian griffon (*Gyps fulvus*; listed as near threatened in national Red Book), cinereous vulture (*Aegypius monachus*; IUCN status: near threatened), golden eagle (*Aquila chrysaetos*; listed as near threatened in national Red Book), great spotted woodpecker (*Dendrocopos major*; listed as near threatened in national Red Book), demoiselle crane (*Anthropoides virgo*; listed as near threatened in national Red Book), steppe eagle (*Aquila nipalensis*; listed as near threatened in national Red Book), imperial eagle (*Aquila heliaca*; IUCN status: vulnerable; CITES Appendix I) and short-toed eagle (*Circaetus gallicus*; listed as vulnerable in national Red Book). The preservation of these species will contribute to the implementation of the strategic plan on biodiversity for 2011-2020, adopted by the UN in October 2010 in Aichi, Japan, specifically the achievement of strategic goal B (targets for the conservation and sustainable use of biodiversity), strategic goal C (reduce the direct pressures on biodiversity and promote sustainable use), and improving the status of biodiversity by safeguarding ecosystems, species and genetic diversity.

Central Tian Shan has 31 endemic non-vertebrate species, including the largest representative of Holarctic species viz., Merzbacher's Apollo Butterfly (*Parnassius Apollo merzbacheri*; listed LR in national Red Book), and chalepoxenus-leonomyrma (*Leptothorax*

<sup>5</sup> Shukurov E.D., Balbakova F.N. SPNAs of Kyrgyzstan and conservation of biodiversity of Tien Shan-Alai mountain construction. // Materials of ecological conferences and workshops. Bishkek, 2002. p. 43-41.

<sup>6</sup> Resolution of the Government of the KR «On approval of the list of rare and endangered species of flora and fauna to include into the Red book of the Kyrgyz Republic» as of April 28, 2005, N 170

<sup>7</sup> Red Book of the Kyrgyz Republic, Bishkek, 2007

<sup>8</sup> Fourth National Report on Conservation of Biodiversity of the Kyrgyz Republic, Bishkek, 2008

*longipilosus*). There are 11 endemic vascular plant species including the edelweiss-like pyrethrum (*Pyrethrum leontopodium*; listed as vulnerable in the national Red Book). The impressive total species diversity of Tian Shan, together with abundance of endemics and high altitudinal variations define high rate of species turnover across habitats (high  $\beta$ -diversity).

**Threats:** The high mountain ecosystem of Central Tian Shan, however, continues to face increasing threats. The shrinking area of relict spruce forests in Central Tian Shan (dominated by endemic *Picea schrenkiana*) is a major issue, having already shrunk by 50% in the past 50 years. Weak protection and unjustifiably high volumes of sanitary cuts lead to harvesting of mature and over-mature spruce stands. Harvesting of over-mature trees, which is legally permitted in unprotected areas, removes ecologically important trees, destroys surrounding vegetation as a result of extensive construction of drive-up roads, deprives the ecosystem of its naturalness and impairs its resilience to anthropogenic and natural stress, such as the increasing climate aridization observed in Central Asia. Natural regeneration and reforestation volumes are much below the rates of forest degradation.

The other major threat to the mountain ecosystem of Central Tian Shan is from biodiversity-incompatible activities of local communities. Snow leopard (*Uncia uncia*) habitat in Central Tian Shan is subject to extensive, uncontrolled agro-pastoral land use and trophy hunting areas, with the latter gaining in popularity in the last few years. Vast grasslands, which are habitats of snow leopard and its prey, are used as pastures (areas of Karkyra, Chymydy Say, Sary Djaz, etc.). The progressively growing livestock number will inevitably lead to extensive unregulated use of mountainous grasslands for livestock grazing is a disturbance to wild ungulates such as argali and ibex. Competition with livestock for forage is one of the most widespread causes of ungulate decline. Reduced populations of ungulates, in turn, result in a decline in populations of snow leopards and birds-of-prey. A reduction of the wild prey base because of wide spread poaching is also significant in many parts of the snow leopard range (argali and ibex are threatened by poaching). Trophy hunting for snow leopards' natural prey is also a factor of concern. Trophy hunting companies are allocated territory for a number of years during which snow leopards are disturbed and they leave the area where frequent hunting is taking place.

Mining is an emerging threat. The biodiversity working group of the 2011 National Environmental Report noted that there is an alarming trend of mining companies (especially gold mining) lobbying for de-classification of existing PAs and opposing new PAs in Tian Shan in an attempt to get land for expansion of mining activities. As an example, there have recently been moves to de-classify up to 40,000 ha in one of the existing PAs, although the Land Register still has not issued the necessary re-classification approvals. This process is un-participatory and presents a significant potential threat to large mammals and other wildlife of Tian Shan, unless the PA system is strengthened.

**Protected Area System:** To conserve the nation's biological wealth, the government has established a system of Specially Protected Nature Areas (SPNA) that consists of 86 PAs covering 6.03% of the country<sup>9</sup>. This includes three categories of PAs (strict reserves, national parks and regulated reserves), all of which are under the direct or indirect responsibility of the State Agency for Environment Protection and Forestry. Of these three categories, the most important for nature conservation are the first two, which have administrative offices within or near the PAs, as well as rangers ('inspectors') patrolling within the PAs. One of the key weaknesses of the system of SPNAs is that it does not provide adequate coverage for the spatial range of threatened species, most notably the snow leopard and argali. The government has established a number of protected areas in the Tian Shan Mountains. However, coverage is uneven across various sections. Most of the emphasis has been placed on the northern and western Tian Shan heretofore. There are 5 PAs covering over 15% of northern Tian Shan, 10 PAs in western Tian Shan covering over 18%, and only 1 PA in Central Tian Shan covering less than 11.4%. This is a major gap in terms of protection of several threatened/ flagship species. The one PA that provides protection to snow leopard habitat in the Central Tian Shan is the Sarychat-Ertash State Nature Reserve that extends over 149,117.9 hectares (including the buffer zone). This, however, is less than 20% of the snow leopard range and the range of its migrating prey in the Central Tian Shan. Further, only 8.3% of the endemic Shrenk's spruce forest in Central Tian Shan is currently protected, compared to over 12% for broadleaf forests and alpine-nival ecosystems. Due to the poor coverage of PAs in Central Tian Shan, habitats of a substantial number of threatened mammals, birds and flora are not well protected.

**Baseline programs:** The key baseline program related to PAs has been estimated at USD 5,917,000 over the four-year duration of the proposed project, which represents the national investment in the PA system as a whole. This financing comes from the state budget, special Republican Fund for Nature Protection (RFNP), and Local Funds for Nature Protection (LFNP). Over 80% of the funding is allocated to support protected area staff (including forest guard and patrolling); the remainder supports basic PA infrastructure, and limited research activities. The baseline funding for protected areas in Central Tian Shan amounts to approximately USD 0.8 million over the four-year duration of the project, which covers salaries, basic infrastructure, as well as limited nature tourism. Additionally, research programs on rare and endemic species will be financed by the General Directorate of the Issyk-Kul Biosphere Reserve in the amount of USD 0.35 million over the course of the project. Further, approximately USD 0.8 million will, over the course of the project, be allocated for conservation and reproduction of the endemic Shrenk spruce, support to forest guard services and patrolling.

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<sup>9</sup> State Agency on Environment Protection and Forestry

Financing of awareness raising and public relations at PAs in Central Tian Shan will amount to approximately USD 0.4 million over the project duration.

In terms of socio-economic development programs, an important initiative in the baseline scenario are the local Development Funds established under the guidance of UNDP's Democratic Governance program. These local Development Funds are an important means for providing financing to local people for welfare-enhancing activities. The funds have an established governance structure geared to local needs and conditions (see Annex 4 of UNDP Project Document) for more details on the operation of these funds). The local Development Fund in Toguz Bulak village administration (Issyk Kul) is going to be a critical partner for the project's work on micro credits for biodiversity-friendly alternative livelihoods.

These initiatives in the baseline scenario are significant insofar as they provide basic support for at least one PA in the Central Tian Shan and a framework for socio-economic development for local communities. However, the territorial coverage of protected areas and buffer zones remains inadequate from a conservation perspective and local communities continue to pursue biodiversity-incompatible livelihoods that undermine conservation efforts.

**Table 2. Baseline State Programs**

Title, description, implementing agency, total value (USD) of the baseline program	Elements and budgets of the program which form part of the baseline project for GEF, and problems they address
<p>Country Development Mid-term Program for 2013-17 (CDP), specifically Chapter 9.3 devoted to environmental security Objective 356 of CDP – Strengthening of protected areas and restoration of forest ecosystems of the Kyrgyz Republic – is to provide regular support for the existing system of protected areas. Objective 355 is to expand the PA system in under-represented habitats by increasing the coverage of protected areas to include these ecosystems, as well as to develop a strategy for biodiversity conservation.</p> <p>The creation of a system of PAs for the whole country has acquired importance since 2007, when the WWF-developed Econet scheme was approved at the national level by the State Agency on Environmental Protection and Forestry (SAEPF)<sup>10</sup>, and at the regional level by the Interstate Commission on Sustainable Development (CSD)<sup>11</sup> as a basis for development of the PA network (i.e., the core of Econet) and a system of sustainable land and resource use (i.e., ecological networks, ecological corridors and buffer zones).</p> <p>The budget for PAs is estimated at about 5,917,000 USD over four years of the proposed project, which represents the national investment in the PA system as a whole. This includes provision of regular payroll costs, utilities and basic infrastructure costs of protected areas.</p>	<p>Baseline element 1: Support to the PA system funded by the State budget, a special State Environmental Fund (SEF), and local Environmental Funds (LEF).</p> <p>More than 80% of the funds are allocated to support the staff of PAs (including forest protection and patrol). The remaining 20% supports basic infrastructure at PAs, and a small research component. Funding for PAs in Central Tian Shan is estimated at approximately USD 0.8 million over the four year duration of the project, which covers the salaries of staff of PAs, development of basic infrastructure, and the development of ecological tourism. In addition, research programs on rare and endemic species will be funded from the General Directorate of the Issyk-Kul biosphere reserves in the amount of 0.35 million dollars during the project.</p> <p>The environmental security section of the CDP will cover the basic start-up costs of new PAs in the under-represented habitat of the snow leopard, including relict fir forests. However, it lacks the resources for technical equipment, zoning, business planning, staff training, integration of PAs at the landscape level, improving management of Natural Protected Areas, and regulating activities in the buffer zone and migration corridors. None of these elements can be realized without GEF funding.</p>
<p>National Forest Program for the period up to 2015, implemented by the State Agency for Environmental Protection and Forestry under the Government of the Kyrgyz Republic (total funding USD 5 million)</p> <p>This sets out the national framework for the forest sector. The purpose of the program is a gradual increase of forest cover through reforestation and afforestation.</p> <p>The National Forest Policy is based on the "Forest, Man, State" principle, which is aimed at creating sustainable forest management and ensuring the transition from forest use to effectively managing forests in order to preserve and increase the national wealth. The State strategy for the development of the forest sector has the following three objectives: (1) Creating a sustainable forestry sector; (2) involving people and communities in joint forest management; and (3) enhancing the role of the state in the development of the forest industry.</p>	<p>Baseline element 2: USD 1 million funded by SAEPF for the development of the forestry sector in Issyk-Kul oblast including conservation of relict spruce forests, for the period up to 2015</p> <p>In addition, approximately USD 0.8 million from the State Environmental Fund will be allocated to the development of the Issyk-Kul forest guards and patrols. Kyrgyzstan has mountainous forests with roughly 35-40% of the population living in or near woodland areas and depending on forests for their daily livelihood<sup>12</sup>. Today, the forest sector of Kyrgyzstan, is encountering challenges of preserving the forest and its biodiversity in a situation where forest resources in these settlements are confronted with problems of poverty, unemployment, high population density, lack of fuels, and high cost of energy. Given these difficulties, there is a need for forest management activities to be developed in ways that ensure no violation of ecosystems integrity, and with an emphasis on provision of ecosystem services. Further, the territory of relict spruce forests needs to be preserved. These aspects are unlikely to be covered in the baseline.</p>
<p>UNDP's Democratic Governance programme in Kyrgyzstan initiated the process of establishing Local Development Funds</p>	<p>Baseline element 3: Local Development Fund in Toguz Bulak village administration in Issyk Kul, which is located 30 kilometers away from the</p>

<sup>10</sup>Protocol of the session of the Consultative Council on sustainable development under SAEPF №3 effective 03.06.2006. Order of SAEPF Director №156 effective 06.07.2006

<sup>11</sup>Resolution of Inter-state Commission on sustainable development (RICSD) №3 effective November 16, 2007

<sup>12</sup>"National report on conditions of environment on the period 2006-2011" prepared by SAEPF with UNDP support, approved by government of Kyrgyzstan 12.08.2012 by Government Act # 553



Title, description, implementing agency, total value (USD) of the baseline program	Elements and budgets of the program which form part of the baseline project for GEF, and problems they address
<p>(LDFs) in pilot municipalities over the period 2003-2005. 19 LDFs were established with grant funding from the Arab Gulf Fund (USD 150 000) and with cofinancing from villagers. The residents were taught the basics of sustainable development and self-financing through a series of training sessions. As a result, the local people have established Development Funds, where the founders are residents. The funds are legally registered as an NGO (non-governmental, non-profit organization) with a registered Charter. The Board of Governors includes representatives of all <i>zhaamats</i> (community group), a director, an accountant, and an audit committee, with everyone being selected from local residents. The Commission that oversees the selection of projects for funding is comprised of the most respected members from NGOs. Representatives of youth and women's groups are also included in the Commission.</p>	<p>town of Karakol (regional center) and is 230 kilometers from the project area Through co-financing villagers collected about USD 5,000 and received grant support from UNDP for USD 10,000. In the initial phase of the fund, there were some difficulties, such as insolvency of the borrower and thus difficulties in repaying the debt. Loans were then repaid by zhaamat members that supported the application and the member who is the recipient. This contributed to a more careful analysis of applications received at the zhaamat level. Thus, the fund accumulated about USD 30,000. Initially, projects funded by the development fund were aimed at improving the welfare of individual applicants (agriculture, cattle breeding). At present, the Board of Governors has decided to give priority to projects that have a social component, such as creation of businesses and creating new work places for local communities. Some projects include the production of construction materials, building of a public bath, and the creation of agro-veterinary services. This can serve as a mechanism to provide local financing for alternative sustainable livelihoods that reduce pressures on biodiversity in the Central Tian Shan. GEF and WWF support to the project will be critical to mobilizing this mechanism to further biodiversity conservation objectives.</p>

**Long-term solution and barriers:** The long-term solution needs to take a more strategic, landscape-based approach to protected area expansion and management in the Central Tian Shan landscape. A larger share of high mountain habitats in the Central Tian Shan that are critical for the survival of globally threatened species (snow leopard, argali, corncrake, and *Chalepoxenus-leonomyrma*) needs to be brought under effective protection through well-managed strict conservation areas surrounded by buffer zones and connected by wildlife corridors where land use is regulated in ways that balance conservation and socio-economic needs. The solution relies on three key elements. The first of these deals with expansion of core conservation areas so that a greater spatial range of flagship species and area of relict forest ecosystems is under strict protection. Secondly, the solution depends on a high degree of integration of these protected areas with buffer zones, wildlife corridors and other areas of the broader landscape. Thirdly, the solution depends on capacity building within institutions and communities. The key barriers to the long-term solution are described below.

**Barrier 1:** The lone protected area in the Central Tian Shan, Sarychat-Ertash, only covers a fraction of critical habitats. It covers less than 20% of the habitat of the snow leopard and leaves out large swaths of relict, endemic Shrenk's spruce forests. The unprotected blocks of the remaining relict spruce forest of Central Tian Shan are home to the largest populations of the snow leopard, argali, Barbary falcon, many other vulnerable and threatened mammal and bird species, 31 endemic invertebrates and a number of rare plants. Absence of formal protection for the relict spruce forest results in their abuse and ultimate degradation. In addition, the alpine grassland ecosystems between the spruce forest blocks are not protected. These are important for the survival of under-protected global species, since they are important for wildlife passage and as forage areas. These areas are key for the stability of argali (*Ovis ammon*) and Tian Shan maral (*Cervus elaphus*), which – apart from their IUCN importance – are important prey of the snow leopard. Therefore, to achieve effective protection of these species, the blocks of relict spruce forest in Tian Shan need to be protected together with alpine grassland ecosystems. Yet, over 60% of these ecosystems in Tian Shan are currently unprotected. Even within the existing PA, management effectiveness is sub-optimal, enforcement and surveillance capacities are weak, and there is no engagement of local communities in them. The mentality of the PA professionals at various levels, from the State Agency to rangers, is largely dominated by the Soviet protected area school of thought, which promotes strict resource protection, and exclusion of communities from conservation areas and PA planning and management. A concept of “collaborative forest management” was introduced in law in 2011, defining procedures and modalities for planning the use of forest resources (as well as resources of non-forest ecosystems adjacent to forests) to obtain benefits for communities from protection and use of forest resources. Although this was put in law, this practice has not been tested in reality. In forest protected areas, communities have not been part of decision making bodies and have not had a chance to discuss regulations of activities, and ultimately implementing these jointly with PAs. An emphasis on engaging communities and providing them with alternative resource uses has not been part of their professional training, and this conservatism has contributed to hostility of communities towards PAs. This in turn could explain the relatively low share of PAs designated so far, and why moves to increase PA coverage have been slow.

**Barrier 2:** The existing PA is not aligned with land use planning in the wider landscape for effective habitat conservation. Corridors providing for wildlife passage to key habitats outside the protected area are lacking and buffer zones are not effectively managed to restrict biodiversity-incompatible uses. The status of locally migrating mammals depends on a landscape-level approach to conservation, combining strict conservation in the breeding/ nesting areas with sustainable use in the wildlife passage/ forage areas. The discussion on amending the Law on Protected Areas to account for buffer zones and corridors has only recently commenced in Kyrgyzstan. For example, the design of several PAs and conservation activities at existing PAs in Tian Shan focus on selective

biotopes (e.g. spruce forests only), without limiting economic activities in the adjacent alpine grassland ecosystems on which mammals depend for passage. The snow leopard requires a large range as it migrates locally with the changing seasons, movements of argali and ibex, and during the propagation season. In addition, the new generation of snow leopards needs vast, empty areas of habitat. Because of such fragmentation in the conservation approach within the Tian Shan landscape, conservation of snow leopard and associated threatened migrating ungulates (argali) has been ineffective, both from PA cost-effectiveness perspective, as well as from the perspective of ungulate population sustainability. In yet another example, while monotonous relict spruce forest blocks over 200 ha have been recognized in national PA policies as “core conservation areas” requiring strict protection, many small scattered forest patches of up to 200 ha each continue to be used with no control over sanitary felling and harvest of over-mature spruce trees. This approach pays no heed to the fact that large mammals such as the snow leopard require large-scale intact habitat areas. Land and natural resource use in such small forest parcels located in the buffer areas need to be restricted. The land-use plans of neighboring districts include forestry, grazing, and hunting activities that come into conflict with the ecological needs of threatened species in Central Tian Shan. Local communities do not have support for biodiversity-friendly alternatives to poaching, removal of forests and uncontrolled pasture use. Furthermore, while land-users near PAs in Central Tian Shan depend on the use of PA resources, they are neither fully aware of nor have been able to capitalize on the value of biodiversity and ecosystems for the local economy.

## **B. 2 INCREMENTAL COST REASONING: DESCRIBE THE INCREMENTAL ACTIVITIES REQUESTING GEF FINANCING AND THE ASSOCIATED GLOBAL ENVIRONMENTAL BENEFITS:**

The Government of Kyrgyzstan is requesting GEF incremental assistance to remove these barriers to the above-described long-term solution to conservation of mountain habitats in the Central Tian Shan that are critical to the survival of globally threatened species. The objective of the project is to enhance the sustainability of protected areas in globally important ecosystems of Central Tian Shan by expanding their coverage and management effectiveness, better integrating them with land use in the wider landscape through an emphasis on well-managed buffer zones and wildlife corridors, and supporting biodiversity-compatible livelihoods in PAs.

### **Outcome 1: Threatened species representation is improved by increasing coverage and management effectiveness of PAs in Central Tian Shan**

Outcome 1 aims to improve the coverage and effectiveness of the PA system in Central Tian Shan so that better protection can be provided to threatened species (snow leopard) and relict, endemic Shrenk’s spruce forests. Figure 1 below depicts the area of influence of this outcome.

#### *Output 1.1: Establishment of a new protected area in Khan Tengri region*

A new PA will be established in the Khan Tengri area spanning 187,000 hectares. It will be approximately 25-30 km from the existing Sarychat-Ertash PA. Technical assistance and financial support will be provided for designing the PA (including assessment of conservation priorities e.g. identification of threatened areas, zoning, wildlife movement patterns), management planning (e.g., development of threat-reduction activities), and development and implementation of a biological system of monitoring and reporting.

According to the Law on PAs in Kyrgyzstan, there are six categories of PAs as follows. Zapovedniks are strict nature reserves that only allow for protection and research (IUCN Category I). Natural Parks have less restrictive management regimes and are protected and managed for ecosystem protection and recreation (IUCN Category II). Natural Monuments include things such as waterfalls, rocks, etc. (IUCN Category III). Zakazniks are special protected areas for conservation of species, for example forestry zakaznik, zoological, botanical zakaznik (IUCN Category IV). Dendroparks, botanical gardens, and such are IUCN Category V. The final category is a Biosphere Territory, which is IUCN Category VI. The Khan Tengri PA will be established as a Natural Park (IUCN Category II). UNDP, through its work under the Environment Protection for Sustainable Development Programme, will complement GEF resources under this output by supporting a preliminary survey and discussions on the national policy level to establish the new PA as well as further biodiversity enabling framework improvement promoting biodiversity friendly pasture management plans.

The following steps will need to be followed to establish the new PA: (i) consultation with the population living in and around the area where the PA is planned to be established to avoid conflict of interest (minutes of meeting approving the initiative); (ii) approval from local self-governance body; (iii) preparation of PA design documents by SAEPF with the support of the project; (iv) review of all documents at the district level, and preparation of map and documents on the transfer of land by the District Registration Service (since the territory of the planned PA falls under the jurisdiction of the forest service and local governments, there is no conflict with private land ownership); (v) approval of documents by the oblast administration; (vi) approval of documents by SAEPF at the inter-ministerial council, and preparation of draft government decree on establishing of the PA; and (vii) publishing of official decree in the official gazette.

The PA will have a management unit consisting of a director, deputy director on science issues, accountant, a head of ranger service, public relations specialist, and human resource specialist. Once the PA is established, a Management Plan will be prepared based on baseline monitoring of the PA territory. The project will provide support to the administration of PA for developing the Management Plan. The Management Plan will be approved by SAEPF.

The biological system of monitoring and reporting will identify and track the main indicators and flagship species, their habitat in the PA, and migration patterns. The system will be developed based on baseline monitoring which will start immediately after establishment of the PA, and will help with identification of the number of target indicator species, their habitat, and possibly identification of other new species that have not yet been recorded. The monitoring system will focus on two main areas: (i) monitoring of plant life (productivity of landscapes, diversity, dissemination, possible new species, and assessment of impact of natural and anthropogenic processes); and (ii) monitoring of animals and birds (identification of main habitats of animals and birds in the territory of the Natural Park, their migration, density, conditions, disease, and threats).

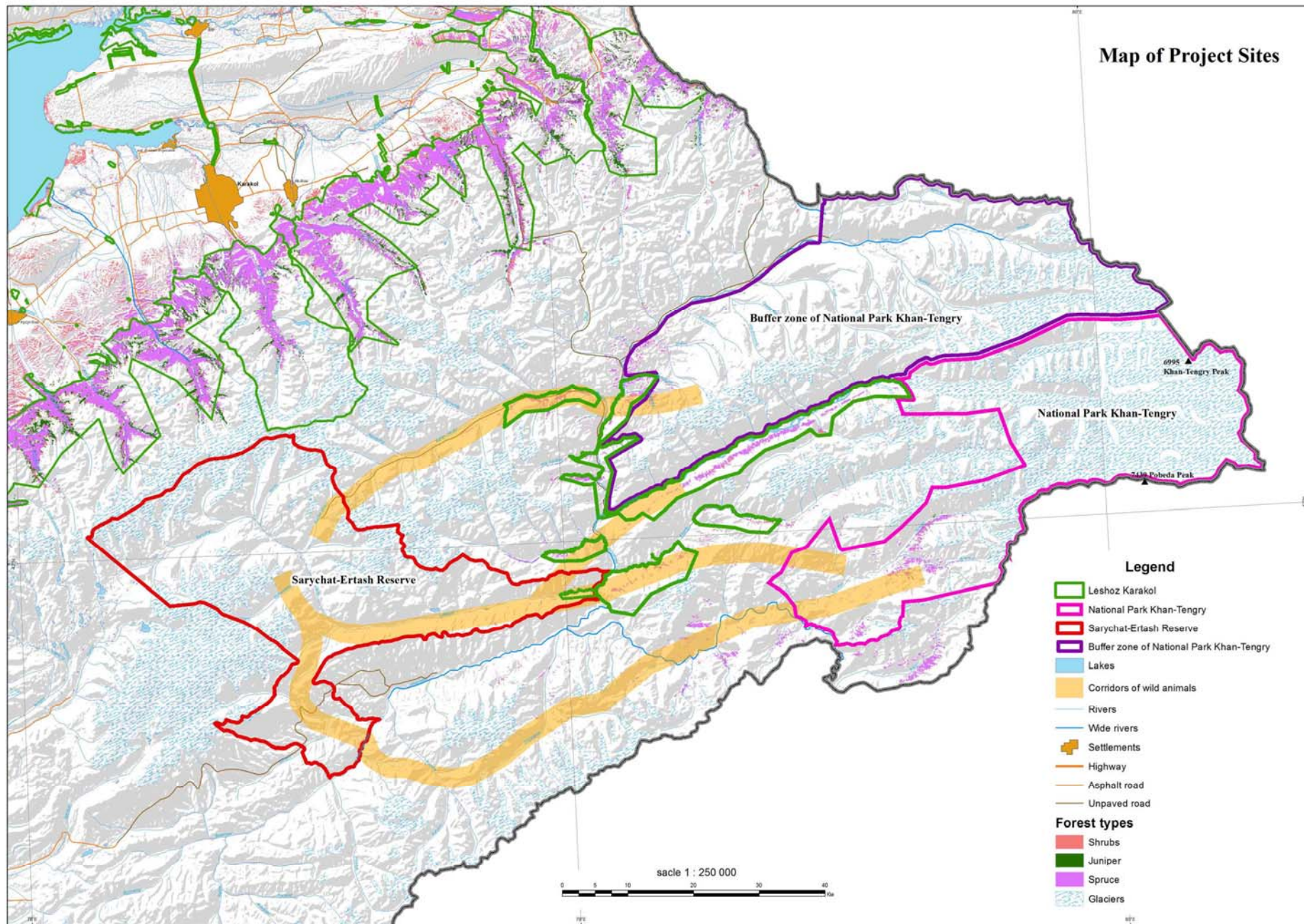
The biological monitoring system will be developed through the support of the project. Project experts will implement monitoring jointly with the staff of the Natural Park and staff of the Biosphere Reserve Issyk Kul, and in the process impart knowledge and share experience in this field. After project completion, staff of the Natural Park and Biosphere Reserve Issyk Kul will carry out monitoring.

In addition, greater emphasis will be placed on local community involvement in PA management by providing a forum for stakeholder participation through a local PA board. While there are no examples of formal PA co-management in Kyrgyzstan, the practice of collaborative forest management has been introduced in productive forestry in 2011. Procedures and modalities are in place promoting mutual benefits in terms of protection and sustainable use of resources and this experience is promising for enhancing community participation in PA management under this component, and in management of buffer zones and corridors under component 2.

As this is the first local PA board to be established in Kyrgyzstan, the project will pilot it for the Khan Tengri PA. If the experience is successful, the government will consider extending the experience to other PAs in Kyrgyzstan. The Law on PAs allows inclusion of the local population, NGOs, etc., in the management board of a PA. However, due to the lack of initiative from the population as well as PA management authorities, this aspect of the law has not been put into practice. There is, therefore, a need for mobilization efforts among the local population and PA management units. Successful establishment of a PA board that includes local people and NGOs will enhance possibilities for integration of the PA into local socio-economic development plans.

**FIGURE 1: MAP OF PROJECT SITES**

(Note: Leshoz Karakol is the local Karakol forest service units)



*Output 1.2: Patrolling, enforcement, and surveillance systems strengthened*

The surveillance and enforcement systems at the new PA (Khan Tengri) and existing PA (Sarychat-Ertash) will be strengthened by establishing and equipping patrolling groups with means for surveillance, interception, and prosecution to ensure adequate enforcement. At Sarychat-Ertash, this will be achieved through the establishment of joint anti-poaching teams between PA authorities and local communities (horse-mounted rangers groups). At Khan Tengri, this will be achieved through the local PA board whose main role will be to make decisions on further development of the PA as well as improve cooperation with local self-governance bodies on sustainable development and the formation of joint ranger groups to enforce anti-poaching, fire prevention, resource use regulations, monitoring of species, and monitoring of habitat management activities. WWF cofinancing will complement the project's work on anti-poaching measures.

Within South-South cooperation initiative two study tours will be planned to Russia or Kazakhstan to share experience in protection of snow leopard (Altai region). This will include representatives from both the administration of reserves to share experience with PA management, and from rangers and local activists to share experience in monitoring, protection, and cooperation with the local population.

The project will also improve the equipment available at the Sarychat Ertash and Khan Tengri PAs for patrolling, enforcement, and surveillance. This will include items such as uniforms for rangers for four seasons, tents, sleeping bags, backpacks, binoculars, trap-cameras, gear for collection of samples, GPS, horses with all necessary saddles, photo camera, video camera, computers and other office equipment, GIS software, and scale for weighing biomass to measure landscape productivity.

*Output 1.3: Vocational training for PA staff to ensure that they can effectively fulfill management objectives*

This will be undertaken in collaboration with WWF. The first series of training workshops will focus on PAs from Tian Shan with subsequent extension to other PAs (hosted and co-financed by WWF). The capacities of PA staff at the new and existing PA will be developed so that they can effectively fulfill management objectives. Building on the experience of other GEF-funded projects in Kyrgyzstan and international best practices, a training programme for PA staff will be specifically designed covering all aspects of PA operations specific to mountain ecosystems, ensuring rangers and other field staff has necessary competencies for planning, administration, conflict resolution, and enforcement. For example, training on enforcement is likely to include the following topics: monitoring, control and surveillance; basic methods of monitoring snow leopard and their food base; basic duties and obligations of rangers; sharing of monitoring, control and surveillance requirements with buffer zones communities. Each training module is expected to be spread over 2 days.

Under this output, using UNDP cofinancing, training will also be provided to local communities and authorities to develop their capacity to participate in protected area management. The role of local communities and authorities in biodiversity-friendly local development will be explained, as well as the potential influence and impact they can make through the decision-making process. Training will incorporate lessons on community engagement learnt from the completed UNDP/GEF projects in the Central Asia region (for example, UNDP/GEF projects on conservation of agro-biodiversity and wetlands conservation in Kazakhstan).

*Output 1.4: METT introduced as a widespread tool for gauging the effectiveness of PAs*

The METT will be used as a tool for gauging the effectiveness of PA functions at both the newly established and existing PA in Central Tian Shan. This will then be used as a springboard for widespread application of the tool at all PAs in the country through the formal adoption of it by SAEPF.

Application of the METT in the Khan Tengri PA will demonstrate the usefulness of this tool. SAEPF will issue an order requiring the use of this tool by all PAs in Kyrgyzstan. This will be accompanied by a workshop involving all PA management units, at which information on the METT will be disseminated, and training provided on how to complete the METT and use it for conducting assessments. This will be carried out jointly with WWF using its experience in a PA in Central Tian Shan.

**Outcome 2: Habitat connectivity, sustainability, and effectiveness of PAs in Central Tian Shan are enhanced by regulating land use in buffer zones, wildlife corridors and other intervening landscapes**

Outcome 2 targets the second barrier to realizing a strategic, landscape-based approach to protected area expansion and management in the Central Tian Shan landscape namely the lack of continuity and congruence between conservation actions within the confines of a PA and activities occurring adjacent to PAs. It will increase the sustainability of the PAs by enhancing the conservation-friendliness of intervening landscape areas.

*Output 2.1: Amendments to the Law on Protected Areas that define procedures for the establishment, operation, and enforcement of PA buffer zones and wildlife corridors*

The current Law on Specially Protected Natural Areas (SPNA) defines buffer zones and wildlife corridors, but is not clear on how establishment of buffer zones and wildlife corridors is to be initiated, who is responsible for managing these areas, and how they are to be managed. Buffer zones should be permanent but wildlife corridors can be seasonal, and can traverse land owned by other land users, for example hunting companies or forest service lands. However, the law is not clear on these issues.

Amendments will therefore be proposed to the Law on SPNAs, with appropriate consideration being given to the interests of land users. The legally binding land and resource use regimes that apply to protected areas namely, regulation of resource use through quotas and exemptions that enable protection and restoration measures (especially in the usage of subsoil resources and pastures, use of forest and hunting resources, and medicinal and plant material) will be extended to buffer zones and wildlife corridors.

Amendments to legislation need to be underpinned by extensive consultations with different government bodies. Therefore, a series of workshops (with cofinancing from WWF) will be conducted at the national and local level to build constructive dialogue between different interest groups, determine the points of intersection, and assess the capacity of all parties to expand their partnership and integrate the amended law across sectors. The main sectoral interest groups that will be included in the dialogue are mining, hunting, border security, and tourism. UNDP will complement GEF resources by supporting biodiversity policy and legal reform activities through its efforts under Environment Protection for Sustainable Development Programme and the Poverty and Environment Initiative (PEI).

*Output 2.2: Identification and designation of buffer zones for the new PA at Khan Tengri and wildlife corridors between Khan Tengri and Sarychat-Ertash NR*

Following amendments to the Law on SPNAs, buffer zones and corridors will be identified and designated around the new and existing PAs, ensuring connectivity between the two. Land use in these areas will be regulated as per the amended law. The figure above indicates the potential extent of the buffer zone for Khan Tengri that is expected to be endorsed following amendments to the law. The corridor is expected to be approximately 25-30 kilometers long and 5-7 kilometers wide, and will link the two PAs in Central Tien Shan.

Key steps for identification and legal establishment of the buffer zone and corridor will include: (i) defining the conservation objectives of the buffer zone and corridor; (ii) identifying criteria that the buffer zone and corridor must satisfy; (iii) assessing various options for linking priority areas for conservation with key landscape-scale ecological processes against these criteria; (iv) defining the buffer zone and corridor; (v) drafting and adopting a normative legal act for the buffer zone and corridor; and (vi) developing a financial sustainability assessment and strategy for landscape-level management efforts, including the potential for community-based eco-tourism, etc. The information needs for this output (maps, gap analysis, monitoring of target species for protection) will be met by the ecological monitoring system that is to be established under Output 1.1.

A consultative process will be followed throughout. This will include an inception workshop to discuss the overall vision of the project and to discuss planned activities within the area. This will be followed by more focused planning workshops with stakeholders and decision makers at the oblast and rayon levels, including with land use planning agencies. Targeted workshops and meetings (with cofinancing from WWF) will also be held with local level stakeholders and focus groups (farmers, hunting area managers, board of elders, local self-governance bodies, NGOs, women's groups, etc.) for information sharing, asset and land use mapping, participative zoning, etc.

At the conclusion of this process, a buffer zone and formal wildlife corridor will be ready for operation. The corridor will be approved by SAEPP and managed by Khan Tengri Natural Park Administration.

*Output 2.3: Conservation management objectives of the PAs, buffer zones, and corridors aligned with territorial land use plans of five adjoining rural districts*

At present, resource use in the buffer zones and corridors conflicts with conservation needs. Through this component, conservation management objectives of the PAs, buffer zones and corridors will be better aligned with territorial land use plans of 5 adjoining rural districts, with modifications being made to the latter as needed. This will require a biophysical and socio-economic resource mapping to define the potential of the various eco zones and ensure that this is reflected in territorial land use plans under implementation. The status of high value forests will be upgraded to avoid logging and ensure that the forest is used in line with biodiversity conservation principles.

The total landscape area under conservation management will reach approximately 200,000 hectares, which includes the area of the five adjoining rural districts in the buffer zones of the two protected areas and the area of the corridor connecting the two PAs (approximately 25-30 km long). The target districts are as follows: Santash aiyl okmotu (6 865 ha), Taldy Suu aiyl okmotu (5 591

ha), Typ aiyl okmotu (11 417 ha), Chon Tach aiyl okmotu (2 373 ha), Min Bulak aiyl okmotu (2 415 ha). In addition, pastures located in the following gorges – Mongu Tor, Kuzgun, Chegara Sai, Jaiyk, Chon Kaindy, and Turuk will also be targeted.

During the PPG, discussions were held with representatives from the land registration service and rural district administrations. These are the local entities responsible for territorial planning. Discussions centered on the fact that pastures are not being used fully due to the remoteness of the region and the lack of regular road transport. Only in the last 3 to 4 years have some shepherds started to move to these remote pastures for the grazing season. There was agreement on establishing some regulations in the mentioned areas. The project will build on these discussions to ensure that pasture use is appropriately regulated and reflected in territorial plans

The following activities on territorial landscape level planning are envisaged in the Typ, and Ak Suu rayons of the Sary Jaz and Enilchek target areas, respectively: (i) identification of functional zones in pilot rayons considering natural ecosystem types based on collection and processing of primary data on natural characteristics (ecosystems, vegetation, distribution of key species), natural and anthropogenic processes (erosion, degradation, etc.), socio-economic data (population, settlements, current land use practices, etc.)<sup>13</sup>; (ii) identification and spatial assignment of appropriate land use types using participatory planning methods that consider the needs of stakeholders, local knowledge and development priorities of target rayons; (iii) identification of existing and potential conflicts among different land-users, and between land-users and ecosystems, and development of measures to mitigate or eliminate such potential or existing conflicts, with proposed measures being agreed with stakeholders; (iv) development of a GIS-based land use concept<sup>14</sup> and its dissemination to relevant government bodies; the planning document will contain recommendations (including GIS-based maps) for different types of land use given development priorities of rayons and ecosystems' potential<sup>15</sup>; (v) land-use planning results will be communicated to relevant oblast and rayon administrations and integrated into the management plans of the PAs in target areas; this activity will be linked and coordinated with activities under Output 1.1 related to development of PA management plans; (vi) environmental and social impacts will be assessed, and lessons learned summarized to inform the next cycle of territorial planning; (vii) capacity building of local government institutions and authorities, non-government organizations, PA staff, and other landscape actors in landscape planning and management to sustain the project's results in the long run; the Project will organize workshops, seminars and exchange tours to share experiences with best practice existing in Kyrgyzstan in landscape management and planning as well as rehabilitation of pastures in Suusamyr valley (UNDP/GEF on-going pasture project), the project will assist in drafting instructions related to territorial landscape level planning for pasture using purpose; (ix) finally, the project will summarize results of the pilot territorial planning exercise and will produce a "how-to" guide for replication purposes.

UNDP, under its activities related to operationalizing good governance for social justice, will complement GEF resources in the target region through its efforts to build capacity for local development planning and integrating environmental protection and conservation and sustainable use of biodiversity.

*Output 2.4: Agreements with local land users on modified patterns of resource use, and a system is in place for enforcement of new regulations*

Since the proposed buffer zones and wildlife corridor can overlap with territories being used by other land user such as shepherds, trophy hunting companies, tourism companies, and mining companies, the project will undertake extensive consultations with these land users. Based on these consultations, agreements will be reached with land users on modified resource use in the buffer zones and corridor focused on sustainable economic activities, such as managed hunting areas, regulated grazing, and ecotourism. Only activities that do not have a negative impact on biodiversity will be allowed in the buffer zone and migration corridor. All such activities will be regulated to cause no disturbance to wildlife during the migration and reproductive seasons.

Regulation of grazing activity will include restoration and maintenance of access roads to raise the mobility of livestock and balance livestock grazing pressure in mountain ecosystems, and rehabilitation of degraded rangelands over 50,000 ha through improved local pasture management plans. An inventory of cattle and pasture use will be conducted in the project area. Based on the condition of pastures and their carrying capacity, a pasture management plan will be developed. The plan will outline the condition of pasture resources and necessary rehabilitation actions such as time period when grazing is permitted and actions to rehabilitate pasture biodiversity. The plan will be harmonized with regulations to be put in place for buffer zones and the wildlife corridor. In addition, targeted riparian forest restoration and habitat improvement will be undertaken as necessary with co-financing from UNDP to complement the GEF activities.

<sup>13</sup> This data will be used for GIS modeling under activity (iv).

<sup>14</sup> The GIS-based land use concept will include landscape (natural & cultural), soil, wildlife, biome maps. Each map will include categories of importance (high-, medium- and low-value) along with sensitivity analysis. The land use concept will balance development priorities (economic & social) with conservation objectives in the area given the current status of ecosystems (habitat & species status, degree of degradation and sensitivity, available ecosystem services).

<sup>15</sup> The land use concept will provide the framework for determining sustainable natural resources use practices that are relevant for the designated regime of each functional zone and these will be demonstrated in target rayons (Output 2.2 and Output 3.2)

The project will undertake efforts to disseminate information on the modified resource use patterns (such as seasonal restrictions on activities, delineation of zones that are completely closed to any type of activity) to the different land users, as well as the importance of observing these regulations.

In terms of support with enforcing regulations, the project will assist with identification of the main habitats of target species, their migration routes, and seasons. It will identify what type of regulation needs to be established. The PA administration will bring this for discussion at the local PA Board. Following agreement on regulation, the PA administration will be responsible for enforcing the regulations. UNDP's efforts to strengthen the capacity of oblast Advisory Committees in conflict monitoring and early response with application of the "Do No Harm" principle will complement GEF activities under this output. The emergence of conflicts when it comes to rational use of pasturelands adjacent to PAs is a common problem in the region. Therefore, UNDP's support to conflict prevention will bolster GEF efforts to ensure biodiversity-friendly patterns of land use are observed in PA buffer zones and the connecting corridor.

*Output 2.5: Alternative livelihoods program for local communities designed and launched*

According to the Law on SPNAs, sustainable resource use is permitted within Natural Parks (which is the status of the proposed Khan Tengri PA), except in the core zone of the PA. To relieve pressures from local communities, alternative livelihoods to be promoted by the project include sustainable community based eco-tourism development and yak breeding for generating food and non-food items. Ecotourism offers an opportunity for local communities to obtain economic benefits given that the Central Tian Shan area contains some of the highest peaks and is famous for mountain tourism. The Kyrgyz Community Based Tourism Association (KCBTA) has had great success in organizing community-based ecotourism in other parts of the country, and the project will work with KCBTA to tailor its experience to Central Tian Shan. (See Annex 4 of UNDP Project Document for the feasibility analysis for the alternative livelihoods scheme).

Implementation of alternative livelihoods activities will be based on the experience of other donor organizations within the country and adapted to the conditions in the project area. To support approximately 20% of communities in and around the target PAs with sustainable, alternative livelihoods, the project will use the experience and approach of the operational micro-credit mechanism established by UNDP's Democratic Governance Program in different villages in the project area. UNDP has reports of feasibility of similar small-business support programs under its poverty reduction programs in other parts of the country. The feasibility of increasing the incomes of local communities from biodiversity-compatible activities by approximately 10-15% is realistic; this assessment is based on reports of households collected by similar initiatives, measured before and after UNDP interventions. WWF cofinancing will complement GEF resources to realize these alternative income generation activities among local communities.

*Output 2.6: Training workshops for local authorities from other districts spanning the Tian Shan Mountains on how to account for biodiversity conservation considerations in territorial planning and on enforcement of regulations, using the experience of the Khan Tengri and Sarychat-Ertash PAs*

The experience with aligning management of PAs, buffer zones and corridors with district-level territorial planning will be disseminated throughout the region by means of a training course for local authorities on how to account for biodiversity in spatial planning as well as on enforcement of regulations.

The training program will focus on increasing the awareness and understanding of the importance of biodiversity conservation among local authorities, and introducing methodologies for integrating biodiversity conservation interests into development planning. Best practices from the UNDP/GEF project in the Suusamyр valley on integrating pasture management and wildlife corridors will be used to inform the training modules.

The training program will be hosted by the President's Management Academy that holds special programs for annual training of representatives from local governments. This has proven to be a good forum for building basic knowledge at the local governance level. Staff from the President's Management Academy and international experts will develop and impart training. The project will support the development of the training modules, which will then be included in the curriculum of the Management Academy. The target audience will be representatives from village-level self-governance bodies, State Registration Service, and district administration.

Incremental cost reasoning and accruing global environmental benefits. The project will add incremental value to the baseline programs relevant for the protected area system in Central Tian Shan, thereby generating biodiversity benefits that are presented in the table below:



Situation resulting from baseline	Alternative to be put in place by the project	Global benefits
<p>With current funding priorities under the baseline Country Development Mid-term Program, funding will be sufficient to cover only basic support to existing PAs, but insufficient to expand protection to under-represented species and ecosystems. There will be no integration of PAs in the wider landscape in Central Tian Shan. There will be no financial support for communities living near the PAs in Central Tian Shan to establish biodiversity-friendly businesses.</p> <p>About 20% of the currently unprotected alpine steppe ecosystems and 35% of the relict spruce forest ecosystems in Central Tian Shan are predicted to degrade in the next 10 years caused by uncontrolled arable farming, excessive grazing, poaching and unregulated logging.</p> <p>Populations of threatened mammals present in the Tian Shan landscape, Snow leopard (<i>Uncia uncia</i>), Argali (<i>Ovis ammon</i>), Tian Shan Maral (<i>Cervus elaphus</i>), Eurasian lynx (<i>Linx linx</i>), as well as birds such as Barbary Falcon (<i>Falco pelegrinoides</i>) and Corncrake (<i>Crex crex</i>), are likely to fall.</p> <p>Endemic vegetation communities, especially the threatened endemic Shrenk's Spruce forests (<i>Picea schrenkiana</i>), might lose up to 30% of their current coverage, resulting from unabated economic activities in the surrounding landscapes.</p>	<p>PA system in Central Tian Shan offers improved threatened species representation notably by improving habitat coverage of snow leopard and other endangered species. At least 187,000 ha of under-represented relict spruce forests and habitat of under-represented globally threatened species put under protection by 2016, with PA management units fully capacitated for effective management.</p> <p>Compliance of economic resource-users with biodiversity standards is monitored and enforced in and around the newly established and existing PAs.</p> <p>Species and habitat integrity within PAs is protected from negative surrounding influence through buffer zones and corridors, where economic activities are adjusted.</p> <p>Under-represented biodiversity is studied and monitored on a systematic basis.</p> <p>Communities are engaged in ecologically compatible activities around PAs.</p> <p>Building on the local Development Fund model of the Toguz Bulak village administration (Issyk Kul), micro credits are offered to establish alternative livelihoods that are beneficial to biodiversity in Issyk-Kul region. At least 50 households in rural areas are expected to benefit. This will serve as a lasting financial support mechanism for funding alternative livelihoods and could benefit over 1,000 recipients in the 7-10 years immediately after the project.</p>	<p>Increase in the PA system of Kyrgyzstan: by 2016 an additional 187,000 ha added to it (increase from 1.26 million ha to 1.43 million ha).</p> <p>The model for establishment of new PAs, buffer zones and corridors developed by the project will be incorporated in the government's baseline Country Development Mid-term Program (specifically, the objective related to strengthening of protected areas and restoration of forest ecosystems of the Kyrgyz Republic), thereby paving the way to further increase the national PA coverage up to 9% by 2020.</p> <p>There is increased PA coverage of the range of endangered snow leopards in Central Tian Shan.</p> <p>METT is introduced as a tool to monitor PA effectiveness and linked with improved biodiversity monitoring program at PAs in Central Tian Shan.</p> <p>Management effectiveness of the existing and newly established PAs in Central Tian Shan is increased by 25% over the baseline (measured by METT).</p> <p>There is better protection of globally threatened species listed in IUCN Red Data List - Snow leopard (<i>Uncia uncia</i>), Argali (<i>Ovis ammon</i>), Corncrake (<i>Crex crex</i>) Chalepoxenus-leonomyrma (<i>Leptothorax longipilosus</i>)</p> <p>Better protection of species listed in national Red Data Book – Barbary Falcon (<i>Falco pelegrinoides</i>), vulnerable endemic invertebrates such as Merzbacher's Apollo Butterfly (<i>Parnassius Apollo merzbacher</i>), Eurasian linx (<i>Linx linx</i>), Pallas cat (<i>Otocolobus manul</i>), Brown Bear (<i>Ursus arctos isabellinus</i>), Beech marten (<i>Martes martes foina</i>), Ibisbill (<i>Ibidorhyncha struthersii</i>), Saker Falcon (<i>Falco cherrug</i>), Himalayan griffon (<i>Gyps himalayensis</i>), Eurasian Griffon (<i>Gyps fulvus</i>), Cinereous Vulture (<i>Aegypius monachus</i>), Golden Eagle (<i>Aquila chrysaetos</i>), Great Spotted Woodpecker (<i>Dendrocopos major</i>), Demoiselle-Crane (<i>Anthropoides virgo</i>), as well as CITES species such as Steppe Eagle (<i>Aquila nipalensis</i>), Eastern imperial Eagle (<i>Aquila heliaca Savigny</i>), and Short-toed Eagle (<i>Circaetus gallicus</i>).</p> <p>The project results contribute to CBD PoWPA (expansion of PAs, integration of PAs in wider landscapes, and community engagement schemes).</p>

**Sustainability:** The operational and financial sustainability of the PAs in Central Tian Shan upon withdrawal of GEF investment will be ensured by commitment of Government to allocate core financing for PAs needed for their optimal management after the project ends. Furthermore, the integration of resource use restrictions into land-use plans will put permanence to biodiversity compatible resource use patterns in the buffer zones and corridors in Central Tian Shan.

**B.3. SOCIOECONOMIC BENEFITS TO BE DELIVERED BY THE PROJECT AT NATIONAL AND LOCAL LEVELS, INCLUDING GENDER DIMENSIONS, AND HOW THESE WILL SUPPORT THE ACHIEVEMENT OF GLOBAL ENVIRONMENTAL BENEFITS:**

**Local/ community benefits:** The project includes extensive engagement of local communities and land users. The project will establish an enabling environment for alternative income generating activities, such as yak breeding and ecological tourism, which complement the overall goal of PA establishment. Community leaders as well as local residents (livestock breeders, farmers, and hunters) will receive training in these alternative livelihoods as well as micro credits (Output 2.5). In terms of ecological tourism, the new nature park that is to be established by the project will serve as an additional magnet for ecological tourism by providing better conditions for the development of the ecotourism sector through the burgeoning of related services such as accommodation, food, guides, development of folklore, national sports, as well as souvenirs. According to the World Tourism Organization, each tourist visiting the area could potentially generate earnings for at least seven people. The area of the planned park is already quite popular among tourists interested in extreme sports because there are world famous peaks – the Pobeda Peak (7,439 m) and Khan Tengri Peak (6,995 m) that are visited annually by more than 300 tourists for ascent and high altitude tourism. Another attraction for tourists is the mountain lake of Merzbacher that is of glacial origin. The annual filling of the lake followed by bursting of the natural ice dam is a unique spectacle. The development of community-based eco-tourism in Central Tian Shan will generate benefits for at least 50 households (accommodation, food, grooms, guides, porters, souvenirs, folklore), which is quite a high level of employment in

Central Tian Shan. In addition to the development of community-based ecotourism, the project will also focus on an activity that is traditional for this area, namely yak breeding. As is well known, yaks are half-wild animals, not competing with wild ungulates, and the main purpose for their breeding is for meat. In addition, yaks do not require considerable financial investments and are good for production of ecologically clean meat, which has a good demand in the market. The expected increase in the incomes of local communities from biodiversity-compatible activities has been estimated at approximately 10-15% over the baseline.

Furthermore, local communities will be included in the planning process of PA establishment and in participatory PA management through a local PA Board, and this will serve as the basis for local sustainable development (Outputs 1.1, 1.2). Through the local PA Board, local communities will be able to coordinate community access to and sustainable use of resources within the boundaries of protected areas. Agreements on permitted activities will be clearly reflected in the management plans of protected areas. The project will cooperate with the GEF small grants program to engage community-based organizations to support the biodiversity friendly local initiatives for implementation of such sustainable use. The new PA will also create new job opportunities for experienced local community members that are intimately aware of local natural conditions (including former poachers) to guard and monitor biodiversity.

**Gender benefits:** The GEF project will support ecological tourism services development (accommodation, catering, and souvenirs trade). The promotion of community-based, ecological tourism services will have spin-off benefits for women who process wool into traditional Kyrgyz carpets and felt products; process milk into Kyrgyz cream, butter, cheese and kymyz (smoked horse milk); produce honey; prepare national cuisine, and such. All these income-generating activities are still the forte of rural women who will directly benefit from the support the project will provide to such activities. About 70% of people servicing tourists are women, who are therefore more dependent on the development of ecotourism. It is expected that the number of women involved in the development of ecotourism in the target area will increase on average by about 50 households. The project will use participatory approaches in planning income-generating activities for communities, and as part of this, the project will clarify gender roles and vulnerabilities associated with a gender-differentiated approach. The project will promote the participation of women in the decision-making process by ensuring the participation of women in the local PA Board. Due to the better integration of women into the new social organizations, their opinions will be better reflected in the short and long-term decision-making for the sustainable management of protected areas. Finally, to ensure equal opportunity for employment, UNDP will encourage qualified women applicants for positions under the project as per UNDP rules and regulations.

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

Risks/ Assumptions	Level	Mitigation measures
Different land users (trophy hunters, mining companies, and poachers) are not supportive of the decision to set aside area for a new SPNA and observe restricted resource use regimes in buffer zones and wildlife corridor.	M	The review of national legislation with a view to introduce the concepts of buffer zones and corridors is already underway, and this provides the starting basis for addressing this risk. Furthermore, in the preparation of the project, the State Agency for Environment Protection and Forestry and WWF have discussed the allocation of land for the new protected area with local stakeholders, agricultural, forestry and hunting authorities, as well as with the Land Cadaster, and there is initial consensus for the establishment of the new PA, conditional upon GEF support at the PPG and project implementation stages. Under Component I, a new protected area will be established without relocation of local residents and with their full participation in the discussion of resource use regimes. With respect to buffer zones and corridors, the policy and regulatory basis for their designation will be finalized through Output 2.1, followed by extensive consultations with local administrations and communities regarding new regimes for pasture management and hunting, other resource use restrictions, as well as economic alternatives to be rendered through Output 2.5. Upon consensus, corresponding changes to land-use plans will be effected and registered in the Land Cadaster. The project does not envisage re-classification of lands between categories (i.e. to reclassify forestland as agricultural, or vice versa), and hence it will not require approval from the Cabinet of Ministers which could jeopardize the project or substantially delay it.
Factors such as disease or climate change have an adverse impact on population of snow leopard	L	According to dominating scenarios, changes in the species compositions in most ecosystems of Kyrgyzstan will not be catastrophic. In the mountains, the rise in temperature is expected to be mitigated by elevated humidity and relief conditions. Mammals with a large home range, endemic vegetation (including the relict spruce forest) are most vulnerable to predicted aridization of climate and shift in ecological zones, but will be able to adapt if they have space for movement. This is one of the key reasons that the project has chosen to emphasize landscape-level actions together with protected area expansion. The project will enable the emergence of a supportive matrix of land uses, including the ecological corridors to connect protected areas. In addition, this approach will limit climate change risk by providing pathways along macro-climatic and upland-lowland gradients to enable species movement in a context of potentially shifting ecological zones.
Government co financing for the project is not provided in a timely manner for implementing the project	L	Government financial commitments to conservation of unique ecosystems of the Central Tian Shan through basic support to Khan Tengri and Sarychat Ertash PAs have been budgeted for and confirmed through cofinancing letters.

Risks/ Assumptions	Level	Mitigation measures
strategy in Central Tian Shan		
Communities are resistant to the opportunity to collaborate on management of PAs through local management boards	L	Under Output 1.3, the project will provide training to local communities and authorities to develop their capacity to participate in protected area management. The role of local communities and authorities in biodiversity-friendly local development will be explained, as well as the potential influence and impact they can make through the decision-making process. Training will incorporate lessons on community engagement learnt from the completed UNDP/GEF projects in the Central Asia region (for example, UNDP/GEF projects on conservation of agro-biodiversity and wetlands conservation in Kazakhstan).
Political will to improve current legislation in a way that does not compromise its effectiveness is lacking	M	To help mitigate this risk, the project will work through NGOs and the local PA Board to disseminate the importance of buffer zones and corridors. Wider promotion of this message will also be undertaken through mass media. Project staff and government counterparts will also be in dialogue with decision makers and members of parliament.
Conservation and other sectors are not able to work together on land use/ management approaches that do not harm biodiversity	H	High-level representatives from relevant sectoral authorities at the national and local levels responsible for development of the area will be actively involved in project implementation through participation in the Project Board and in guiding the project's awareness raising campaigns. A dialogue will also be maintained with members of parliament to ensure that the importance of a landscape level approach to conservation and development in the Central Tian Shan is well understood. Site visits to project areas will be encouraged. Other promotional materials will be shared at relevant forums (conferences, workshops) to highlight project successes whenever the opportunities arise.
Government is not prepared to act to eradicate corruption in ranks, and ensure that transparent enforcement procedures are adopted and applied vis-à-vis illegal hunting	L	The President has undertaken a plan to eradicate corruption that provides a good framework for the project to prosecute illegal hunting. A mechanism for implementation of this plan is under development and will be provided to respective government bodies, along with its wide promotion in the mass media. Project staff and government counterparts will also maintain a dialogue with members of parliament on the issue of effective enforcement of hunting laws.
Support from legislative arm and courts for prosecuting illegal hunting is lacking	L	The project will launch a wide awareness raising campaign on the prosecution process with the involvement of NGOs and the local PA Board. Negotiations will also be undertaken with decision makers to help ensure that legislative support is forthcoming.
Micro credit for biodiversity-friendly livelihoods faces no start-up difficulties	M	Investment funds managed by district administrations have existed in Kyrgyzstan for some time. However, introducing biodiversity-friendly businesses through this mechanism is recognized to be a novel approach with some degree of associated risk. The operational difficulties would not bar the activity, since it will be based on the existing institutional, financial, and operational mechanism of local Development Funds that was piloted by UNDP's Democratic Governance programme in Kyrgyzstan starting in 2005. Specifically the project will base its micro-credit scheme on the Development Fund in Toguz Bulak village administration (Issyk Kul) which is 230 kilometers from the project area. This is a functioning and successful local fund that provides micro-credits to local people for various welfare-improvement purposes. Based on discussions during the PPG this fund provides the most promising option in terms of building and modeling its micro credit activities on an existing mechanism. Furthermore, during PPG discussions the Development Fund in Toguz Bulak village administration has expressed its readiness to host a similar introduction to communities in the project area. Since the project will propose a set of businesses not widely tested by investment and business incubator programs before, there is some risk and uncertainty on whether there is going to be enough of a demand for this type of support, and in case of weak demand, whether it can be stimulated by extension support and hand-holding from UNDP. Based on a review of feasible alternative livelihoods activities undertaken during the PPG, it was determined that community based eco-tourism development and yak breeding provide the most promise and potential (see Annex 4 of UNDP Project Document for a more detailed explanation). As regards capitalization of the fund, this is considered low-risk, since the baseline funds in question are allocated by district level authorities as part of routine budget planning (Issyk-Kul Province Development Fund), and WWF will provide cofinancing to add to this fund. These funds from cofinanciers are forthcoming based on the understanding that the GEF will provide incremental resources to cover support functions such as marketing, outreach, and compliance monitoring.
Hunters not willing to shift to alternative livelihoods	L	The project will strengthen patrolling and prosecution for illegal hunting and this is expected to spur more people to search for alternative income-generating activities. The micro credit mechanism supported by the project will provide them an opportunity to make this shift. In addition, local people will be supported with training programmes on alternative livelihoods so that they can utilize their experience in these activities.

**B.5. KEY STAKEHOLDERS INVOLVED IN THE PROJECT, INCLUDING PRIVATE SECTOR, CIVIL SOCIETY ORGANIZATIONS, LOCAL AND INDIGENOUS COMMUNITIES, AND THEIR RESPECTIVE ROLES, AS APPLICABLE:**

Stakeholder	Role
Government agencies	

Stakeholder	Role
State Agency on Environment Protection and Forestry (SAEPF)	Main implementation partner assuring improvement of national policy and legislation on biodiversity conservation; organization of new PA; as well as managerial and financial sustainability of the national PA system; all PAs are accountable to SAEPF (Outputs 1.1-1.4).
General Directorate of Biosphere Reserve Issyk Kul	The entire Issyk Kul province forms part of the Biosphere Reserve Issyk Kul, and the planned PA Khan Tengri is located in this area. Therefore, the project will build close collaboration with the administration of the Biosphere Reserve on all activities related to establishing and monitoring of PAs in the region (Outputs 1.1,1.2,1.3,1.4, 2.1,2.2,2.3,2.6)
State Registration Service of the Kyrgyz Republic (SRS)	SRS will coordinate and control the registration of land property rights in the vicinity of the project site. Within its mandate, it is responsible for the following: 1) regulating of land relations (state registration deed, land cadaster) in the new PA , corridors and buffer zone (Output 2.2); and 2) topography survey and mapping of the PA to prepare state registration deed for land users (ibid)
State Agency on Regional Development, Investments, and Construction	Integration of biodiversity conservation and sustainable land management issues into local development plans and their further implementation (Output 2.3)
Province and District administrations	Support to the establishment of the new PA and integration of biodiversity conservation into corresponding development strategies and plans (Outputs 1.1 and 2.3)
<b>Local communities</b>	
Local Self Governance Bodies	These bodies are responsible for the elaboration and implementation of local communities' development strategies including local environment issues. They will be among the main project implementing partners at the local level in buffer zones and corridors in the vicinity of PAs (Output 1.2, Outputs 2.3, 2.4, 2.5)
Associations of Pasture and Water Users	They are the users of ecosystem services regulating access of local communities to natural resources and sustainable use of biodiversity and they will provide inputs to the development of the landscape level management plan for Tian Shan that defines buffer zones and conservation-friendly uses in sensitive areas, as well as play a role in the development and implementation of alternative sustainable livelihoods (Outputs 2.3, 2.4, 2.5)
Communities of the PA buffer zones	Active users of ecosystem services and to be involved in PA management and sustainable use practices to be promoted by the project (Outputs 1.2, 2.3, 2.4, 2.5).
<b>Non-government organizations</b>	
Biom, Ecological Movement Aleine	These organizations have been involved in the development of approaches to sustainable use of biodiversity for local development and the establishment of private bio reserves. They will play an important role in the implementation of the concept of public participation in biodiversity conservation (Output 1.2, 2.3, 2.4)
Association of Forest and Land Users of Kyrgyzstan	Integration of sustainable natural resource management to local development plans, improvement of the legal framework for biodiversity conservation, environmental education in schools, and replication of best practices in biodiversity conservation, awareness raising and community mobilization for biodiversity conservation in PA buffer zones and corridors (Outputs 1.2, 2.3, 2.4).
<b>Research expertise</b>	
Two institutes of the National Science Academy of the Kyrgyz Republic: Biology and Soils Institute; Forest Research Institute	Based on their experience and expertise, these institutes will play a role in elaboration of the scientific grounds for biodiversity monitoring, improving participation in biodiversity inventory, development of biodiversity sustainable use norms, identification of the areas under strong pressure, PA management effectiveness assessment (Outputs 1.1, 1.3).
<b>Private sector</b>	
Hunting tour operators	They are active users of the fauna and are to be involved in the development and implementation of sustainable hunting practices, conservation-friendly alternative income-generating opportunities promoted by the project, and will provide inputs and perspectives on local community user rights in developing amendments to the PA law on defining buffer zones and permitted uses (Outputs 2.1, 2.5).
Kyrgyz community based tourism association (KCBTA)	To be involved in training of local communities to develop ecological tourism facilities and infrastructure as well as marketing of such community-based tours (Output 2.5).

## B.6. EXPLAIN HOW COST-EFFECTIVENESS IS REFLECTED IN THE PROJECT DESIGN:

The objective of the project is to improve the coverage and effectiveness of protected areas in the Central Tian Shan Mountains to expand threatened species representation in the national system. To realize this objective in the most cost-effective manner, project design has been shaped by the following principles:

- **Diversified strategy that does not focus on PAs alone:** Focusing on PAs alone is not an effective strategy to afford protection to the endangered snow leopard over its range. Project efforts to establish a new PA at Khan Tengri and improve effectiveness of the existing Sarychat Ertash PA could be jeopardized by adverse land use practices in the vicinity of PAs. Therefore, to improve the impact and cost-effectiveness of PAs the project will also invest efforts in defining buffer zones, connecting corridors, and promoting sustainable land use in these areas. This comprehensive approach will ensure that PAs can be more effective in conserving target species thus making financial investments in PAs more beneficial.

- Deploying strategic performance assessment tools to guide resource allocation: The project will ensure that the allocation of scarce resources across PAs is based on strategic PA management assessment tools (METT), so that resources are allocated where they are needed the most and help realize cost efficiencies.
- Building on an existing micro credit facility: The project will piggyback on existing experience with issuing micro credits through the local Development Fund of Toguz Bulak village in Issyk-Kul province. This local Development Fund provides financing to local people for welfare-enhancing activities. The fund has an established governance structure geared to local needs and conditions (see Annex 4 of UNDP Project Document for more details on the operation of these funds). The project will thus be able to avoid additional costs associated with designing the operational delivery mechanism.

#### **B.7. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:**

The GEF project will be in line with and will build on the Central Asia Econet, under which an ecosystem gaps analysis was conducted, and the natural habitats and range of rare and endangered species was studied, among other things. A map of Kyrgyzstan's network of PAs has also been developed at 1:500,000 and 1:100,000 scales. GIS data from this exercise has been shared with all stakeholders. The scheme for the Kyrgyzstan Econet has been adopted at the national level by the State Agency for Environment Protection and Forestry (SAEPF)<sup>16</sup>, and at the regional level by the Resolution of the Inter State Committee on Sustainable Development as a basis for extension of the country's PA system ("Econet cores") and for sustainable land management ("Econet corridors and buffer zones")<sup>17</sup>. Econet development has been also integrated into the Regional Environment Protection Action Plan (REPAP) as the main component to assure biodiversity conservation.<sup>18</sup> These activities provide an important foundation for the proposed project and close links will be maintained with the several local NGOs and CBOs that have been involved in this exercise.

The ongoing GEF-funded project on conservation of the piscifauna of Issyk-Kul Lake while located in the same geographic region has a different substantive focus from the proposed project inasmuch as it is focusing on challenges and opportunities for a biodiversity-friendly fisheries management regime on the Issyk-Kul Lake. However, in terms of the modalities it is using to engage local communities in conservation decision-making, there are important collaboration opportunities. The two project teams will, therefore, participate in each other's Project Boards under the guidance of the UNDP Country Office.

The other complementary programme to this project is UNDP's Area Based Development (ABD) Programme. On the ground, UNDP's local development efforts are realized through its ABD Offices. There is already at least one office established in the north of the country and that is in Naryn Province in Inner Tian Shan. This region is adjacent to the Issyk-Kul Province. The activities of the Naryn Area Based Development Programme will therefore support and complement this GEF project as necessary.

The other significant initiative with which the proposed project will maintain close contact is the Central Asian Countries Initiative for Land Management (CACILM), which is a partnership dedicated to combating land degradation and improving rural livelihoods. Kyrgyzstan is part of this initiative together with the other Central Asian countries. While CACILM is focused primarily on desertification and sustainable land management issues, it is also developing recommendations on sustainable use of natural resources and maintenance of ecosystem integrity in mountain ecosystems, which is of particular relevance to the proposed project. The proposed project will use the CACILM platform for dissemination of knowledge and replication of the project strategy outside the immediate project areas within Kyrgyzstan and beyond to other Central Asian countries.

The proposed project will also coordinate with a Government of Kyrgyzstan project that is receiving technical support from JICA and has successfully promoted decentralized joint forest management. Under this project, a stakeholder decision-making platform has been established for management of productive forests. The project will draw on lessons learnt to transfer such experiences and practices to increasing stakeholder involvement in management of the PAs, buffer zones, and corridors in Central Tian Shan.

In terms of coordination with past and ongoing, small-scale, conservation and sustainable use activities at the community level, the many years of experience of the GEF-SGP in Kyrgyzstan will be tapped to increase the effectiveness of alternative sustainable livelihoods to be supported by the proposed project. The National GEF-SGP Coordinator will be invited to participate in the Project Board. Similarly, coordination will be maintained with the Snow Leopard Trust (SLT) that supports activities aimed at reducing poverty and improving standards of living in mountainous communities, while at the same time protecting local ecosystems within snow leopard habitat. Their experiences and lessons will be considered and replicated where possible. Past community-based conservation initiatives of SLT in the project area will be revived, and local expertise developed under those initiatives will be tapped during project implementation.

<sup>16</sup> Minutes of the Sustainable Development of the SAEPF meeting №3 as of 03.06.2006, SAEPF Service Note №156 as of 06.07.2006

<sup>17</sup> Resolution of the ISCED №3 as of 16.11.2007

<sup>18</sup> WWF (2006), ECONET Life net of Central Asia, Moscos, <http://www.wwf.ru/resources/publ/book/179> <http://www.wwf.ru/resources/publ/book/eng/179>

## **C. GEF AGENCY INFORMATION**

Biodiversity conservation and expansion of PAs in particular is one of the key programming pillars of UNDP. In the Europe and CIS region, UNDP is implementing over 35 GEF-funded biodiversity conservation projects through its network of 22 Country Offices. Under the protected area theme, UNDP-GEF activities are seeking to strengthen the management effectiveness of PA systems, improve PA governance, improve PA finance, and integrate PA management into national and territorial development. UNDP-Kyrgyzstan has been playing a key role among all UN agencies and international organizations contributing to transformational changes in biodiversity conservation. It has been successfully managing a portfolio of technical assistance and capacity building initiatives in the areas of biodiversity conservation, prevention of land degradation, and watershed management, with environmental projects representing more than 60% of its portfolio. In the context of biodiversity conservation and PA expansion and management, in recent years, UNDP-Kyrgyzstan has played an instrumental role in the following: (i) analysis of the state of biodiversity conservation efforts and PA systems in the country in 2006 and in 2009, as part of the preparation of the National Reports to the UNCBD, which, in turn, helped the government define its baseline programming in biodiversity conservation; (ii) improvement of the Law on “Protected Areas”, and the Law on “Sustainable development of ecological and economic system of Issyk Kul” that establishes an enabling framework for biodiversity conservation and empowering statute for this biosphere territory; and (iii) establishment of the special biodiversity-friendly fishery regime in the Issyk-Kul Lake reducing invasive species pressure through artificial propagation of endemics. In addition to its efforts in biodiversity conservation, UNDP Kyrgyzstan’s work in related natural resource management fields also bolsters its ability to realize cross-focal area synergies. It has extensive experience in sustainable management of mountain rangelands with particular consideration given to wildlife habitats. It is also a lead country office for the regional CACILM project that promotes an ecosystem approach to sustainable land management. Integrated Water Resource Management is another focus of UNDP support to the government with support being given to create and operationalize River Basin Councils. This experience with community-wide decision-making mechanisms lends itself to replication in the context of PA and landscape management. Similarly, its work on payments for ecosystem services within the regional Central Asia Climate Risks Management Programme, and its work with UNEP under the Poverty Environment Initiative to highlight the link between poverty alleviation and ecosystem services will strengthen community engagement activities proposed under the project both in PA management and sustainable natural resource use in the vicinity of PAs. Finally, the local development fund of Toguz Bulak village established by Democratic Governance programme of UNDP will serve as a model for the project’s micro credit activities.

### **C.1. CONFIRMED CO-FINANCING AMOUNT THE GEF AGENCY BRINGS TO THE PROJECT:**

UNDP has brokered US\$ 4,966,666 (up from the estimated US\$ 4.2 million at the PIF stage) for this project from multiple sources, which has been confirmed during project preparation and is reflected in supporting cofinancing letters. This includes a US\$ 1.6 million allocation by UNDP to the project.

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

The project is congruent with the United Nations Development Assistance Framework for Kyrgyzstan (2012-2016) insofar as it will contribute specifically to the UNDAF target – “by 2016 sustainable management of energy, environment and natural resources practices are operationalized”. The project will also contribute to Outcome 6 of UNDP’s Country Programme Action Plan under which UNDP will “integrate principles of environmental sustainability and ecosystem approach into national, sectoral and local development plans involving governmental agencies, private sector, NGOs/ CBOs, and farmers with special attention to sustainable financing tools and mechanisms that can increase government spending for biodiversity conservation, as well as to pilot models for land use planning and management and landscape conservation”. UNDP- Kyrgyzstan has a permanent unit of eight staff members successfully managing a portfolio of technical assistance and capacity building initiatives in the areas of biodiversity conservation, prevention of land degradation, and climate change (plus support from operations and senior management). This team is supported by the UNDP/ GEF Regional Coordination Unit in Bratislava composed of 14 technical advisers (most of them Russian speaking) and support staff assisting with M&E and delivery oversight, among other tasks.

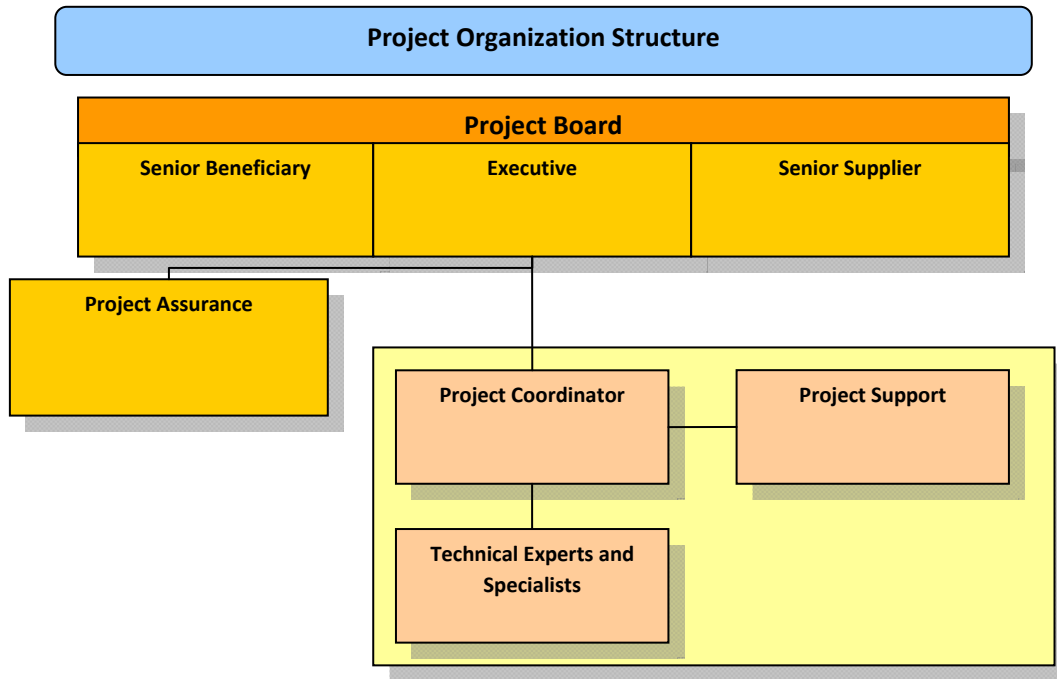
## **PART III: INSTITUTIONAL COORDINATION AND SUPPORT**

### **A. INSTITUTIONAL COORDINATION**

Because only one GEF Agency is involved (UNDP), this section on the responsibility and role of each Agency for project activities, is not relevant.

### **B. PROJECT IMPLEMENTATION ARRANGEMENTS**

The project will be executed by the SAEPF. The project organization structure (summarized in the figure below) will consist of a Project Board, Project Assurance, and a Project Implementation Unit (PIU). Roles and responsibilities are described below.



**Project Board:** The Project Board (PB) will be responsible for making management decisions for the project, in particular when guidance is required by the Project Coordinator. It will play a critical role in project monitoring and evaluations by assuring the quality of these processes and associated products, and by using evaluations for improving performance, accountability and learning. The Project Board will ensure that required resources are committed. It will also arbitrate on any conflicts within the project and negotiate solutions to any problems with external bodies. In addition, it will approve the appointment and responsibilities of the Project Coordinator and any delegation of its Project Assurance responsibilities. Based on the approved Annual Work Plan, the Project Board can also consider and approve the quarterly plans and approve any essential deviations from the original plans. The project will be subject to Project Board meetings at least twice every year. The first such meeting will be held within the first 6 months of the start of full implementation. At the initial stage of project implementation, the PB may, if deemed advantageous, wish to meet more frequently to build common understanding and to ensure that the project is initiated properly.

To ensure UNDP’s ultimate accountability for project results, Project Board decisions will be made in accordance with standards that shall ensure management for development results, best value for money, fairness, integrity, transparency, and effective international competition. In case consensus cannot be reached within the Board, the final decision will rest with the UNDP Project Coordinator.

Members of the Project Board will consist of key national government and non-government agencies, and appropriate local level representatives. UNDP will also be represented on the Project Board, which will be balanced in terms of gender. Potential members of the Project Board will be reviewed and recommended for approval during the Project Appraisal Committee (PAC) meeting. The Project Board will contain three distinct roles:

- **Executive Role:** This individual will represent the project “owners” and will chair the group. It is expected that SAEPF will appoint a senior official to this role who will ensure full government support of the project.
- **Senior Supplier Role:** This requires the representation of the interests of the funding parties for specific cost sharing projects and/or technical expertise to the project. The Senior Supplier’s primary function within the Board will be to provide guidance regarding the technical feasibility of the project. This role will rest with UNDP-Kyrgyzstan represented by the Resident Representative.
- **Senior Beneficiary Role:** This role requires representing the interests of those who will ultimately benefit from the project. The Senior Beneficiary’s primary function within the Board will be to ensure the realization of project results from the perspective of project beneficiaries. This role will rest with the other institutions (key national governmental and non-governmental agencies, and appropriate local level representatives) represented on the Project Board, who are stakeholders in the project.

**Project Assurance:** The Project Assurance role supports the Project Board Executive by carrying out objective and independent project oversight and monitoring functions. The Project Assurance role will rest with UNDP Kyrgyzstan’s Environment Focal Point.

A Project Management Unit (PMU) will be established comprising permanent staff including a national Project Coordinator (PC) and Project Assistant. The PMU will assist SAEPF in performing its role as implementing partner. The Project Coordinator has the authority to run the project on a day-to-day basis on behalf of the Implementing Partner within the constraints laid down by the Board. The Project Coordinator's prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost. The PC will be recruited in accordance with UNDP regulations and will be based in Issyk Kul (Cholpon Ata or Karakol towns). S/he will report to the UNDP Focal Point on Energy and Environment. The PC will be responsible for overall project coordination and implementation, consolidation of work plans and project papers, preparation of quarterly progress reports, reporting to the project supervisory bodies, and supervising the work of the project experts and other project staff. Under the direct supervision of the PC, the Project Assistant will be responsible for administrative and financial issues, and will get support from the UNDP-CO administrative and finance unit.

The PMU, following UNDP procedures on implementation of NIM projects, will identify national experts and consultants, and international experts as appropriate to undertake technical work. The national and international companies may also be involved in project implementation. These consultants and companies will be hired under standard prevailing UNDP procedures on implementation of NIM projects. The PC, Technical Advisor, and project experts will spend a large portion of their time in the field, and the PC will be ultimately responsible for liaison with communities engaged in the project. The UNDP Country Office will provide specific support services for project realization through the Administrative and Finance Unit as required.

Audit Arrangements: The Audit will be conducted in accordance with the established UNDP procedures set out in the Programming and Finance manuals by the legally recognized auditor.

**PART IV: EXPLAIN THE ALIGNMENT OF PROJECT DESIGN WITH THE ORIGINAL PIF:**

The project design is aligned with the approved PIF. The project document expands the project rationale, proposed project strategy, stakeholder roles, and the expected global environmental benefits. In terms of financing, there is no change compared to the approved PIF in the resources being requested from the GEF. However, the cofinancing raised for the project has increased to US\$ 4,966,666 from the estimated US\$ 4.2 million at the PIF stage.


**PART V: APPROVAL/ ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT AND GEF AGENCY**

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

(Please attach the [Operational Focal Point endorsement letter\(s\)](#) with this template).

NAME	POSITION	MINISTRY	DATE (MM/DD/YYYY)
Baianbek Kadyrov	Head, GEF OFP	State Agency for Environment Protection and Forestry	12/05/2011

**B. GEF AGENCY CERTIFICATION**

This request is prepared in accordance with GEF policies and procedures and meets the GEF criteria for project identification and preparation.					
Agency Coordinator	Signature	Date	Project Contact	Telephone	Email Address
Adrian Dinu, Officer-in-Charge and Deputy Executive Coordinator, UNDP - GEF		March 21, 2013	Maxim Vergeichik, RTA, EBD	+ 421905633046	maxim.vergeichik@undp.org



## ANNEX A: PROJECT RESULTS FRAMEWORK

PROJECT STRATEGY	OBJECTIVELY VERIFIABLE INDICATORS				
	Indicator	Baseline	Target	Sources of verification	Assumptions
Goal:	To conserve the globally significant biodiversity of Central Tian Shan				
Objective: To improve the coverage and effectiveness of protected areas in the Central Tian Shan Mountains so as to expand threatened species representation in the national system	Territorial coverage of SPNAs in Central Tian Shan Mountains which provide habitat for the endangered snow leopard	149,119.9 ha (Existing Sarychat Ertash reserve area)	Up to 336,119.9 ha by project end	Land records of the State Registration Service of the Kyrgyz Republic	Different land users (trophy hunters, mining companies, and poachers) are supportive of the decision to set aside area for a new SPNA and observe restricted resource use regimes in buffer zones and wildlife corridor. The strategy of wider stakeholder consultations will be applied to mitigate the risk.
	Population size of snow leopard ( <i>Uncia Uncia</i> ) in Central Tian Shan shows an increasing trend	Low numbers of snow leopard (unable to quantify)	By project end, target area offers permanent habitat for 5 females with cubs	Monitoring records and data analyses of snow leopard populations and their prey	No other factors such as disease or climate change have an adverse impact on population of snow leopard
Outcome 1: Threatened species representation is improved by increasing coverage and management effectiveness of PAs in Central Tian Shan	Enhanced management effectiveness of target PAs (as measured by METT)	Sarychat Ertash: 54% Khan Tengri: 3%	Sarychat Ertash: 75% by project end Khan Tengri: 28% by project end	METT scorecard	Government co financing for the project is provided in a timely manner for implementing the project strategy in Central Tian Shan
	Reduction in poaching and illegal logging at target PAs (annual) per unit of patrolling effort, compared with year of initial patrolling	Illegal logging violations: 50 Poaching violations: 70 Total violations: 120	Reduction by 30%	Reports of PA administrative units and SAEPF	Communities embrace the opportunity to collaborate on management of PAs through local management boards
Outcome 2: Habitat connectivity, sustainability and effectiveness of PAs in Central Tian Shan are enhanced by regulating land use in buffer zones, wildlife corridors and other intervening landscapes	Law on SPNAs provides clear guidance on establishment, management, and responsible party for PA buffer zones and wildlife corridors	Current law is unclear	Legislation improved through amendments by project end	Project Board meeting minutes, formally endorsed and government-adopted documents	Political will to improve current legislation in a way that does not compromise its effectiveness
	Area over which territorial land use planning is fully aligned with requirements for regulated resource use stipulated in the management plans of PA buffer zones and corridors	0 ha	200 000 ha	Land use planning records of Typ and Ak Suu rayon administrations	Conservation and other sectors are able to work together on land use/ management approaches that do not harm biodiversity
	Better management of hunting in buffers and corridors as reflected in percent of trophy hunting that is controlled and monitored	Only 30% of trophy hunting is legal because hunters are uncontrolled and unmonitored	90% of trophy hunting is legally licensed	Database of licenses, Reports from Hunting Inspection, Independent assessment	Government prepared to act to eradicate corruption in ranks, and transparent enforcement procedures adopted and applied
	Prosecution of illegal hunting in buffers and corridors	Only 10% of incidents of illegal hunting successfully prosecuted	At least 50% of incidents of illegal hunting successfully prosecuted from Year 4 onwards	Records of prosecutions	Support from legislative arm and courts

PROJECT STRATEGY	OBJECTIVELY VERIFIABLE INDICATORS				
	Indicator	Baseline	Target	Sources of verification	Assumptions
	Increase in share of incomes of local communities from biodiversity-compatible alternative livelihood activities	More than 60% of income comes from hunting	By project end, at least 60 % of income comes from sustainable livelihoods promoted by the project	Independent survey, local records of businesses and employment	Micro credit for biodiversity-friendly livelihoods faces no start-up difficulties
	Reduced hunting effort directly attributable to changes in livelihoods among hunters	500 persons hunting in the area	150 (reduced by 1/3) persons hunting by project end	SPNA Management statistics, Reports of rangers	Hunters willing to shift to alternative livelihoods

## ANNEX B: CONSULTANTS TO BE HIRED FOR THE PROJECT USING GEF RESOURCES

Position Titles	\$/ person week	Estimated person weeks over 4 years	Tasks to be performed
For Project Management (national consultants only)			
Project Coordinator (PC)	500	62.4	<ul style="list-style-type: none"> <li>Supervise overall implementation of the project for its total duration, ensure project performance in accordance with the approved project document</li> <li>Responsible for the day-to-day management and administration of project activities, staff, consultants, disbursements, etc. and for ensuring that requirements are met in a timely fashion</li> <li>Supervise the Administrative and Finance Assistant</li> <li>Be answerable to the UNDP Country Office while at the same time in close collaboration and cooperation with the Project Director on the Executing Agency</li> <li>Coordinate project work with UNDP Environment chairperson</li> </ul>
Project Administrative and Finance Assistant	250	145.6	<ul style="list-style-type: none"> <li>Provide operational support to project implementation as well as to management</li> <li>Collect data and other information on project activities (e.g. maintenance) and file and update records in prescribed format for subsequent use</li> <li>Arrange for the recording and processing of government requests for assistance</li> <li>Assist in monitoring project activities by reviewing a variety of records including correspondence, reports, activities, project inputs, budget, financial expenditures in accordance with UNDP requirements</li> <li>Prepare and file correspondence and materials relevant to the above</li> <li>Assist in translation and organization of preparation of Terms of Reference for national and international experts</li> <li>Assist in the organization and logistical preparation for workshops, seminars, visiting missions, field trips, etc.</li> <li>Assist PC on financial and administrative matters</li> </ul>
For Technical Assistance (national and international consultants)			
Local		784	
Technical Advisor	500	145.6	<ul style="list-style-type: none"> <li>Lead the process of development of policy in protected area field as well as development of Management Plan for Central Tian Shan SPNA</li> <li>Analyze results attained by the project, take into account the success and project experiences of previous projects, improve key stakeholders' awareness about project strategy and activities</li> <li>Ensure coordination of the project activities with other relevant activities and initiatives of the Government and other partners</li> <li>Review terms of reference and work closely with the team composed of national and international experts</li> <li>Provide technical assistance to the population of buffer zones of KH Tengri National Park in developing sustainable livelihoods</li> <li>Support technical experts to identify additional alternative livelihood opportunities.</li> <li>Identify specialized expertise to design the most cost-effective strategy for the protection of the flagship species</li> <li>Provide expert advisory services in the field of conservation of Central Tian Shan biodiversity especially target species such as Snow Leopard, etc.</li> <li>Regularly provide information on project progress on the portal <a href="http://www.caresd.net">www.caresd.net</a> for the benefit of all stakeholders</li> </ul>
Capacity Building Assistant	250	62.4	<ul style="list-style-type: none"> <li>Assist the project experts in maintaining close contacts with the Government, Executing Agency, donors and other counterparts through direct contacts, collection and summarizing of information, proposals, incoming and outgoing documents, drafting letters, and organizing meetings under the supervision of PC</li> <li>Contribute to the preparation of status and progress reports by collecting information, preparing tables and drafting selected sections of it; prepare</li> </ul>

Position Titles	\$/ person week	Estimated person weeks over 4 years	Tasks to be performed
			background material to be used in discussions and briefing sessions
			<ul style="list-style-type: none"> <li>Assist in identification of additional funding opportunities from development co-operation and/ or other sources and in preparation of draft documents to secure this funding</li> </ul>
			<ul style="list-style-type: none"> <li>Prepare unofficial translations and act as interpreter if necessary</li> </ul>
Expert group on development of Management Plan for newly established PA and biodiversity monitoring system (7-9 national specialists)	300	323	<ul style="list-style-type: none"> <li>Preparation of justification for establishment of Khan Tengri National Park and develop the Management Plan</li> <li>Analysis of the leading international experience in managing PAs and recommendations on applying it to the project context, with assistance from the international expert</li> <li>Review of the existing Protected Areas policy legislation, monitoring, control and surveillance procedures, and development of recommendation for their improvement</li> <li>Arranging for the stakeholder consultations on the draft policies/laws</li> <li>Facilitation of stakeholder consultations/workshops, chairing meetings to lobby for the adoption and endorsement of developed improvements in legislation by the Government</li> <li>Design and implementation of the biological and ecological monitoring system during the life of the project</li> </ul>
Expert group on development of training modules for staff of Specially Protected Natural Areas (2 experts)	200	16	<ul style="list-style-type: none"> <li>Working out the training development and implementation schedule, to be approved by PC, and facilitate/manage its implementation</li> <li>Develop a specific module for a 2 day training for responsible agencies in "Module 1: Monitoring, Control and Surveillance"</li> <li>Develop a specific module for a 2-day training on "Module 2: Basic methods of monitoring Snow Leopard and their food base"</li> <li>Develop a specific module for a 2-day training on "Module 3: Basic requirements and obligations for Rangers"</li> <li>Develop a specific module for a 2-day training on "Module 4: Sharing Monitoring, Control and Surveillance requirements with buffer zone communities"</li> <li>Develop and conduct training of trainers (TOT) on the selected topics</li> <li>Testing the developed module on TOT and update it in accordance with the comments obtained during the first set of training</li> <li>Further develop the capacities of trainers to conduct training on developed modules</li> </ul>
Training facilitators (2 trainers) for seminars and workshops	100	41	<ul style="list-style-type: none"> <li>Participating in the training of trainers (TOT)</li> <li>Conduct the training courses (Modules 1 through 4) for different groups of stakeholders</li> </ul>
Expert group on awareness raising	300	70	<ul style="list-style-type: none"> <li>Develop initial guidelines on target groups and types of awareness-raising materials</li> <li>Facilitate consultations/workshops with government and NGOs, to review the target group and products</li> <li>Finalize and produce the materials</li> <li>Implementation of awareness raising campaign, media presentations and distribution of publications</li> <li>Reaching agreements with media representatives (TV, Radio and Newspapers) on the promotion of sustainable livelihood in and around SPNA of Central Tian Shan</li> </ul>
Expert group (2 experts) on the alternative income generating activities to support sustainable management of natural resources in and around SPNAs	200	40	<ul style="list-style-type: none"> <li>Review of activities of local population around SPNA and available funding sources to support various needs and activities of the communities</li> <li>Presentation of the findings on sustainable livelihood opportunities that support a transition away from activities that threaten biodiversity toward activities in support of the SPNA Management Plan</li> <li>Work with other local experts and international consultants to develop the alternative income and employment opportunities as well as identify incentives for alternative income and employment generation</li> <li>Conducting a SWOT analysis of alternative livelihoods opportunities</li> <li>Presentation of the draft Alternative Livelihoods Programme to all stakeholders</li> </ul>

Position Titles	\$/ person week	Estimated person weeks over 4 years	Tasks to be performed
Expert group on improving SPNA legislation	250	40	<ul style="list-style-type: none"> <li>Assess gaps in existing SPNA legislation</li> </ul>
			<ul style="list-style-type: none"> <li>Review experience from other Central Asian countries</li> </ul>
			<ul style="list-style-type: none"> <li>Develop draft recommendations on amendments to legislation</li> </ul>
			<ul style="list-style-type: none"> <li>Identify key groups with whom consultation on amendments is necessary and lead these discussions</li> </ul>
			<ul style="list-style-type: none"> <li>Incorporate the results of consultations into a finalized set of recommendations</li> </ul>
National project evaluation consultants	300	20	<ul style="list-style-type: none"> <li>The role of the national project evaluation consultant will be to participate, alongside with 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. The project evaluation specialists will develop draft evaluation report, discuss it with the project team, government, and UNDP, and as necessary participate in discussions to realign the project timetable/logical framework at the mid-term stage. The standard UNDP/GEF project evaluation TOR will be used.</li> </ul>
<b>International</b>		<b>44</b>	<ul style="list-style-type: none"> <li></li> </ul>
International consultants for mid-term evaluation	3000	10	<ul style="list-style-type: none"> <li>The main objective of the mid-term international evaluation team will be to determine progress being made towards the achievement of outcomes and will identify course correction to strengthen the chances for the delivery of the expected results. The team will test and confirm the key hypotheses underlying the project, reassess risks and assumptions, 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. 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.</li> </ul>
International consultants for final evaluations	3000	10	<ul style="list-style-type: none"> <li>The main task of the final evaluation team will be - in accordance with UNDP and GEF guidance - to focus on the delivery of the project's results as initially planned (and as corrected after the mid-term evaluation, if any such correction took place). The final evaluation will look at impact and sustainability of 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, and the report will feature management response to the issues raised.</li> </ul>
International Advisor for development of legislation, policy and Management Plan for SPNA	2000	24	<ul style="list-style-type: none"> <li>Technical guidance to the national team, through the whole period of elaboration of the Management Plan, and ensuring that legislation, policy and planning is undertaken using a participatory approach</li> </ul>
			<ul style="list-style-type: none"> <li>Provide guidance to hired trainers rolling-out training to SPNA staff, local communities, local government and decision-makers; and co-facilitating the training</li> </ul>
			<ul style="list-style-type: none"> <li>Arrange and conduct the field survey and prepare guidelines for conservation of flagship species in Central Tian Shan</li> </ul>
			<ul style="list-style-type: none"> <li>Facilitate the stakeholder workshop for discussion and review of the draft Management Plan; make improvements based on feedback from stakeholders</li> </ul>
			<ul style="list-style-type: none"> <li>Support the initial start-up process for the implementation of the Management Plan</li> </ul>

**ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS**

**A. Explain if the PPG objective has been achieved through the PPG activities undertaken:**

The objectives of the PPG have been fully realized. An international consultant and counterpart national consultants were recruited in the second half of 2012 to implement the PPG. A work plan was collaboratively developed by the UNDP, the consultants and a focal team from the SEAPF to guide and direct the work to be undertaken during the preparatory phase. The PPG delivered all studies, which made it possible to finalize the MSP request.

**B. Describe findings that might affect the project design or any concerns on project implementation, if any:**

No concerns arose during the PPG on project implementation, other than potential risks that have been identified in section G above. Risk mitigation measures have been included in project design.

**C. Provide detailed funding amount of the PPG activities and their implementation status in the table below:**

PPG	Implementation Status	GEF Amount (\$)				Co-financing (\$)
		Amount Approved	Amount Spent To-date	Amount Committed	Uncommitted Amount*	
<b>Component 1.</b> Detailed assessment of policy and regulatory settings of the project	Completed	5,000	5,000	0,00	0	221,000
<b>Component 2.</b> Assessment of the capacity of different agencies to support the implementation of project activities.	Completed	10,000	10,000	0,00	0	
<b>Component 3.</b> Specifics of on-the-ground actions	Completed	14,000	2,078.95	11,921.05	0	
<b>Component 4.</b> Feasibility analysis and budget.	Completed	21,000	0	21,000	0	
<b>Total</b>		50,000	17,078.95	32,921.05		221,000

\* Uncommitted amount should be returned to the GEF Trust Fund. Please indicate expected date of refund transaction to Trustee

**ANNEX D: TOTAL BUDGET AND WORK PLAN (UNDP ATLAS FORMAT)**

GEF Outcome/Atlas Activity	Responsible Party	Fund ID	Donor Name	Atlas Budgetary Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Total (USD)	Budget Note:
<b>Outcome 1:</b> Threatened species representation is improved by increasing coverage and management effectiveness of PAs in Central Tian Shan	UNDP	62000	GEF	71300	Local Consultants	44,000	28,000	28,000	26,000	126,000	1
				72145	Training and Education Services	3,200	24,000	20,000		47,200	2
				71610	Travel	1,000	1,000	1,000	1,000	4,000	3
				74500	Misc.	2,000	2,000	2,000	2,000	8,000	4
				75700	Training, Workshops and Conferences	4,000				4,000	5
				72200	Equipment	36,000	70,000	39,300		145,300	6
				74200	Audio, video and print production costs	1,500	4,000	4,000	6,000	15,500	7
					<b>Total Outcome 1</b>	<b>91,700</b>	<b>129,000</b>	<b>94,300</b>	<b>35,000</b>	<b>350,000</b>	
<b>Outcome 2:</b> Habitat connectivity, sustainability and effectiveness of PAs in Central Tian Shan are enhanced by regulating land use in buffer zones, wildlife corridors and other intervening landscapes	UNDP	62000	GEF	71200	International Consultants	48,000	30,000		30,000	108,000	8
				72600	Micro-capital grants	10,000	30,000	30,000	30,000	100,000	9
				71300	Local Consultants	31,840	28,840	25,840	24,840	111,360	10
				72215	Transportation equipment	15,000				15,000	11
				71610	Travel	1,500	2,000	2,000	1,500	7,000	12
				72200	Equipment	10,000	59,400	50,000	11,660	131,060	13
				74500	Misc.	3,000	3,000	2,000	2,000	10,000	14
				74200	Audio, video and print production costs	3,000	2,000	1,000	1,000	7,000	15
	<b>Total Outcome 2</b>	<b>122,340</b>	<b>163,240</b>	<b>118,420</b>	<b>101,000</b>	<b>505,000</b>					
<b>PROJECT MANAGEMENT</b>	UNDP	62000	GEF	71300	Local Consultants	16,900	16,900	16,900	16,900	67,600	17
				71610	Travel	3,260	3,260	3,260	3,260	13,040	18
				72205	Equipment	1,200				1,200	19
				74500	Misc.	1,000	1,120	1,120	1,120	4,360	20
				73105	Rent	1,200	1,200	1,200	1,200	4,800	21
				72100	Contractual services			4,000		4,000	22
					<b>Total Management</b>	<b>23,560</b>	<b>22,480</b>	<b>26,480</b>	<b>22,480</b>	<b>95,000</b>	
				<b>PROJECT TOTAL</b>	<b>237,600</b>	<b>314,720</b>	<b>239,200</b>	<b>158,480</b>	<b>950,000</b>		

<b>Budget Note:</b>	<b>Explanation</b>
1	Group of 7 different local specialists (350 person-weeks) that will elaborate the Management Plan for the new PA and be responsible for the design and implementation of the biological monitoring system; group of experts/NGOs (70 person-weeks) on awareness raising
2	Development of the training modules (2 persons, 16 person-weeks) totaling USD 3,200; trainers (2 persons, 40 person-weeks ) totaling USD 4,000; strengthening of capacity of staff of PAs of Central Tian Shan through a study tour to PA which has good experience in the same field totaling USD 40 000
3	Travel of local consultants for biological monitoring
4	Insurance, bank charges, other miscellaneous expenses
5	Project inception workshop and meetings
6	Cost of laboratory, surveillance and monitoring equipment and software for the implementation of the biological monitoring system
7	Printing of public awareness material on results of Outcome 1, flagship species, promotion of newly established and existing PA
8	This includes 10 person-weeks of international consultants for mid-term evaluation (USD 30,000) and final evaluation (USD 30,000), and 24 person-weeks of international advisor for development of legislation, policy and Management Plan for SPNA (USD 48,000)
9	Support of the micro credit facility for alternative livelihoods
10	This includes: 20 person-weeks of national project evaluation consultants (USD 6,000), 40 person-weeks of national experts on the alternative income generating activities and pasture management development (USD 8,000), 40 person-weeks of national experts on improving legislation (USD 10,000), approximately 146 person-weeks of national Technical Advisor (USD 72,800), and approx. 62 person-weeks of national Capacity Building Assistant (USD 15,600)
11	Due to the fact that the project area is large and remote and regular transportation is not available, this budget line covers the cost of transportation equipment that will be used for implementation of the biological monitoring and alternative livelihood programs
12	Fuel costs, DSA, etc related to travel of local consultants to implement activities related to the alternative livelihood programs
13	Computers, a notebook, printer, GPS device etc. to support the newly established and existing PA
14	Contingency costs: translation of documents, purchase and subscription for peer-reviewed publications in support of the proposal, visa costs, and unexpected change in the communication costs.
15	Printing of public awareness materials on results of Outcome 2, on alternative livelihoods program, and micro credit facility.
16	Training and education programme for implementation of alternative livelihood program
17	This includes: approx. 62 person -weeks of project coordinator (USD 31,200), and approx. 146 person-weeks of project administrative assistant (USD 36,400)
18	Management-related travel to/from project sites for the project management team to enable hands-on management
19	Laptop for project management unit
20	Payment for communications (telephone and internet access)
21	Payments for electricity and office heating service
22	Cost of independent audit



## ANNEX E: MANAGEMENT EFFECTIVENESS TRACKING TOOL

The METT has been completed for all target PAs of the project (see table below) and is submitted separately along with this document in the required excel format.

	METT scores ( as % of maximum possible score)	
	Baseline	Target
Existing PAs where management is to be strengthened		
Sarychat Ertash State Nature Reserve	54	75
New PAs to be established with effective management capacities		
Khan Tengri Natural Park	3	28