



# PROJECT IDENTIFICATION FORM (PIF)

**PROJECT TYPE: Full-sized Project**

**TYPE OF TRUST FUND: GEF Trust Fund**

## PART I: PROJECT INFORMATION

<b>Project Title:</b>	Conservation and sustainable management of key globally important ecosystems for multiple benefits		
<b>Country:</b>	Kazakhstan	<b>GEF Project ID:</b>	9193
<b>GEF Agency:</b>	UNDP	<b>GEF Agency Project ID:</b>	5696
<b>Other Executing Partner(s):</b>	Forestry and Wildlife Committee of the Ministry of Agriculture	<b>Submission Date:</b>	April 22, 2016
<b>GEF Focal Area (s):</b>	Multi-focal area	<b>Project Duration (mths):</b>	60
<b>Integrated approach pilot</b>	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/> <input type="checkbox"/>		Corporate Program: SGP <input type="checkbox"/>
<b>Name of parent program:</b>		<b>Agency fee</b>	<b>US\$ 766,572</b>

## A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES:

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Trust Fund	(in \$)	
		GEF Project Financing	Co-financing
LD-3 Program 4	GEFTF	1,793,151	5,200,000
BD-1 Program 2	GEFTF	3,586,301	12,500,000
SFM-1	GEFTF	1,719,726	4,200,000
SFM-2	GEFTF	970,000	2,100,000
<b>Total Project Cost</b>		<b>8,069,178</b>	<b>24,000,000</b>

## B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: Improve conservation status and management of key forest and associated grassland, riparian and arid ecosystems important for conservation of biodiversity, land resources and provision of livelihoods for local communities						
Project Component	Type	Project Outcomes <sup>1</sup>	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Co-financing
Component 1 Improved representation on globally important forest biodiversity and better integration of forest PAs in wider landscape	INV	<b>Outcome 1.1</b> Prevented loss of conservation important forest and associated non-forest ecosystems and their biodiversity: - New protected areas established at 1,890,763 ha and their baseline (initial) METT score reaches at least 30% by the end of the project - 812,000 ha of conservation important forests put under effective management (Output 1.1.2) - Increase of mountain forests and grasslands, Tugai, and Saxaul ecosystems in PA system from 5.75% to 7%	<b>Output 1.1.1.</b> Ecosystems with globally important biodiversity and valuable SLM functions (Saxaul, Tugai, and Mountain forests and grasslands) put under effective protection: - PAs established, with zoning arrangements, management and business plans for financial sustainability  <b>Output 1.1.2.</b> Forest management plans within the PAs (total area 812,000 ha) designed and put under effective implementation following the standards of managing of High Conservation Value Forests <sup>2</sup> and testing community co-management	GEFTF	3,334,932	13,590,000

<sup>1</sup> Selection/confirmation of indicator species for project sites will be done at the PPG stage. Details of outcomes and outputs are described further in the text. Ecological indicators of incremental values (for biodiversity, sustainable land and sustainable forest management) are described in the section on Global Benefits, and will be further refined at the PPG stage.

<sup>2</sup> As per HCVF standards of the Forest Stewardship Council.

		<ul style="list-style-type: none"> <li>- Non-decline of populations of <i>Snow leopard</i>, <i>Argali</i>, <i>Goitered Gazelle</i> and other indicator species (see Annex 1) within the expanded PA estate (baseline and target population values subject to PPG studies)</li> <li>- 4 mln hectares of area outside PA, heavily exposed to land and forest degradation receive updated land and forest management plans which are under implementation by the end of the project. (Output 1.1.3)</li> </ul>	<p>model designed under Component II (further details are in the text subject to detailed planning at the PPG stage).</p> <p><i>Output 1.1.3.</i> Integrated land and forest management plans developed and are under implementation at six administrative districts surrounding the newly established PAs (area of districts is app. 4 mln ha) in land areas heavily exposed to land and forest degradation:</p> <ul style="list-style-type: none"> <li>• Full biodiversity, soil and landscape diversity inventories, biodiversity-important forests identified and mapped, forest management plans updated with inclusion of biodiversity and soil conservation requirements;</li> <li>• Areas of potential conflict between biodiversity, SLM and production activities identified;</li> <li>• Species and habitat maintenance plans for buffer areas and corridors developed;</li> <li>• Land and forest management plans finalized, adopted by communities and Government, and set for implementation / enforcement.</li> </ul> <p><i>Please see main text for further elaboration on this output.</i></p> <p><i>Output 1.1.4</i> Community based sustainable hunting scheme piloted in at least one district (subject to feasibility assessment at PPG).</p>			
Component II. Enabling environment for sustainable management of conservation-important forest ecosystems	INV	Outcome 2.1. Integrated Economic and Environmental Valuation of ecosystem services and SFM criteria and indicators embedded in decision making in natural resource management.	<p><i>Output 2.1.1</i> Methodology and guidance for the integrated economic and environmental valuation of mountain forests and grasslands, Tugai and Saxaul forest ecosystems, are in place and integrated in national budget planning. Based on Targeted Scenario analysis<sup>3</sup>.</p> <p><i>Output 2.1.2</i> The Results of the TSA are integrated in forest management</p>	GEFTF	2,850,000	7,340,000

<sup>3</sup> [http://www.undp.org/content/undp/en/home/librarypage/environment-energy/environmental\\_finance/targeted-scenario-analysis.html](http://www.undp.org/content/undp/en/home/librarypage/environment-energy/environmental_finance/targeted-scenario-analysis.html)

in wider landscape		<p>plans of 3 types of conservation important ecosystems (mountain forests and grasslands, Tugai, and Saxaul).</p> <p><i>Output 2.1.3</i> TSA is integrated into capacity development and professional training courses.</p> <p><i>Output 2.1.4</i> Based on results of TSA, SFM and SLM principles, criteria, &amp; indicators for each key ecosystem type in Kazakhstan are designed, based on</p> <ul style="list-style-type: none"> <li>• task forces for key types of conservation-important ecosystems in Kazakhstan;</li> <li>• Data collection and analysis system, methodological, and technical standards, standards on monitoring of conservation-important ecosystems.</li> </ul> <p><i>Output 2.1.5</i> Tourism loads and hunting practices and policies reviewed to release pressure on species and allow for sustainable community-based hunting (subject to feasibility analysis at PPG).</p> <p><i>Output 2.2.2.</i> Enabling environment for community engagement into forest and grassland ecosystem restoration and sustainable management through:</p> <ul style="list-style-type: none"> <li>- Participatory consultations between communities, private sector and state on: reforming land tenure, improved pasture management, assessing demand for developing timber and non-timber forest product markets, achieving equitable revenue sharing; forest and husbandry subsidies, taxation and revenue collection systems, resulting in reformulation / adoption of new policies and removal of institutional barriers that restrain or discourage private sector and community engagement in SLM and SFM,</li> <li>- Ensuring relevant training and skills development and research for the forestry</li> </ul>			
		<p><i>Outcome 2.2.</i> A share of community / private investments in forest and grassland ecosystem restoration and sustainable management (grasslands, Tugai and Saxaul forests) and reduced impact logging practices rise by 15% (exact absolute baseline and target values will be set at PPG)</p> <p>Maintained flow of ecosystem services at 80,000 ha of economic forests (primarily through Output 2.2.3)</p>			

			sector professionals and local communities. <i>Output 2.2.3. Incentive-based Forest Ecosystem Management Partnership</i> implemented in 3 districts neighboring to PAs (area of 80,000 ha) <sup>4</sup> between authorities and local communities defining the principles of community forest management and sustainable forest resource use regimes (limitations of cattle grazing in forests important for prevention of lands slides, forest terracing in mud slide prone areas; timing, mode and limits of timber and non-timber forest resource withdrawal, medicinal plant collection protocols and limits, forest patrolling, species-focussed forest management activities, change of timing of vehicle and human passage, promotion of mosaic reforestation, involvement of communities in sustainable Saxaul forest management). Communities and foresters trained in maintaining and enforcing the protection regimes at these areas, and assistance delivered to trigger the implementation and monitoring of the scheme (see further details in the text).			
<i>Component III</i> International cooperation and knowledge management	TA	<i>Outcome 3.1</i> Increased capacities of Kazakhstan to monitor its wildlife, ensure law enforcement and share knowledge. - Capacities and awareness of at least 100 staff of law enforcement authorities, transport police and customs services raised ( measured by UNDP Capacity Scorecard) to handle in trafficking and trade crime in sub-regional context - Snow Leopard monitoring system improved <sup>5</sup> - Knowledge of importance of biodiversity rich forests shared across the country and beyond	<i>Output 3.1.1.</i> Enhanced enforcement capacities of wildlife protection agencies through: (i) improved effectiveness of monitoring, apprehending, and prosecution of illegal activities; (ii) training materials developed and rolled out for wildlife protection agencies. <i>Output 3.1.3.</i> System for long-term regular monitoring of Snow Leopard in Kazakhstan put in place applying internationally certified quality standards (GIS-based). <i>Output 3.1.4</i> A set of activities (in line with STAP comments) on knowledge management and sharing.	GEFTF	1,500,000	2,500,000
Subtotal					7,684,932	23,430,000
Project management cost					384,246	570,000
<b>Total project costs</b>					<b>8,069,178</b>	<b>24,000,000</b>

#### C. INDICATIVE SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND TYPE IF AVAILABLE, (\$) <sup>6</sup>

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
Recipient Government		Grant	21,600,000

<sup>4</sup> Please see the main text for details.

<sup>5</sup> Details to be designed at the PPG stage jointly with relevant international partners.

<sup>6</sup> See Annex 2 for initial outline of the source of Government cofinancing.

	Forestry and Wildlife Committee of the Ministry of Agriculture	In-kind	1,000,000
GEF Agency	UNDP	Grant	200,000
CSO	EcoAltai	Grant	300,000
CSO	AVALON	t.b.c.	200,000
CSO	ASBK	t.b.c.	300,000
CSO	NABU	t.b.c.	400,000
<b>Total Co-financing</b>			<b>24,000,000</b>

**D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY (IES), FOCAL AREA(S), COUNTRY(IES), AND PROGRAMMING OF FUNDS**

GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Program ming of funds	(in \$)		
					GEF Project Financing (a)	Agency Fee (b)	Total c=a+b
UNDP	GEF	Kazakhstan		SFM	2,689,726	255,524	<b>2,945,250</b>
UNDP	GEF	Kazakhstan	Biodiversity		3,586,301	340,699	<b>3,927,000</b>
UNDP	GEF	Kazakhstan	Land Degradation		1,793,151	170,349	<b>1,963,500</b>
<b>Total GEF resources</b>					<b>8,069,178</b>	<b>766,572</b>	<b>8,835,750</b>

**E. PROJECT PREPARATION GRANT (PPG)**

Is Project Preparation Grant requested? Yes ☒

**PPG AMOUNT REQUESTED BY AGENCY(IES), FOCAL AREA(S), COUNTRY(IES) AND PROGRAMMING OF FUNDS**

Project Preparation Grant amount requested: <b>\$150,000</b>					PPG Agency Fee: <b>\$ 14,250</b>		
GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in \$)		
					PPG (a)	Agency Fee (b)	Total c=a+b
UNDP	GEFTF	Kazakhstan		SFM	50,000	4750	54,750
UNDP	GEFTF	Kazakhstan	Biodiversity		66,667	6333	73,000
UNDP	GEFTF	Kazakhstan	Land Degradation		33,333	3167	36,500
<b>Total PPG Amount</b>					<b>150,000</b>	<b>14,250</b>	<b>164,250</b>

**F. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS**

Corporate Results	Replenishment Targets	Project Targets
1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	1,890,763ha
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	4,000,000 ha
3. Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services	Water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 <i>freshwater</i> basins;	(Enter number of <i>freshwater</i> basins)
	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	(Enter percent of <i>fisheries</i> , by volume)
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO <sub>2e</sub> mitigated (include both direct and indirect)	392,480 tCO <sub>2</sub> -eq /10 years
5. Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global concern	Disposal of 80,000 tons of POPs (PCB, obsolete pesticides)	(Enter number of tons)
	Reduction of 1000 tons of Mercury	(Enter number of tons)
	Phase-out of 303.44 tons of ODP (HCFC)	(Enter number of tons)

6. Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and sub-national policy, planning financial and legal frameworks	Development and sectoral planning frameworks integrate measurable targets drawn from the MEAs in at least 10 countries	(Enter number of countries)
	Functional environmental information systems are established to support decision-making in at least 10 countries	(Enter number of countries)

## **PART II: PROJECT JUSTIFICATION**

### **A.1. PROJECT DESCRIPTION**

The project is focusing on critical forest and woodland ecosystems of Kazakhstan. It does not intend to focus on a geographic area or one species. The project focus stems from the “systemic” approach (vs. site-based) and the Key Biodiversity Areas (KBA) philosophy advocated by the GEF 6 Biodiversity Strategy, and has been designed in line with Program 2 of the GEF Biodiversity Focal Area, as well as with corresponding focal area strategies of the Land Degradation and Sustainable Forest Management Focal Areas. The project concentrates on addressing the suite of key root-causes of degradation common to all important forest and woodlands, namely: gaps in the representation of the protected area system with respect to coverage of habitat of globally important species; under-estimated valuation of ecosystem services which does not allow to make right decisions on sustainable resource use; and disengagement of local communities from ecosystem management and restoration. Considering significant level of forest and pasture ecosystem degradation not only within just the Altai or Tian Shan mountains but equally also in the riparian and saxaul forests, considering that the issues of detachment of communities from forest use are similar in all three types of ecosystems, considering that the issues of unsustainable use of forest and non-timber resources are common in all important forests, considering that all forests are falling under the jurisdiction of the Committee of Forestry and Hunting (and therefore the institutional solution base also allows to work on them effectively), considering the total funding (GEF + co-financing), proponents believe the proposed focus to be ecologically justified, cost effective, institutionally wise and doable within the context of Kazakhstan. The project is coordinated and complementary to the current and planned activities of the World Bank, GIZ and other stakeholders working on relevant programs in Kazakhstan.

#### **A.1.1 Global environmental problems, root causes and barriers that need to be addressed**

The Republic of Kazakhstan is the largest land-locked country (271,730,000 ha) in Central Asia. It is considered to be the most biodiversity-rich country in the Central Asian region, ranging from deserts and semi desert ecosystems of Balkhash, to wetlands to the Altai-Sayan Mountains and grasslands. Three ecosystems types have special value for biodiversity, land integrity and local livelihoods<sup>7</sup>:

- Mountain forest and grasslands ecosystems of Altai, Saur, Dzungaria and Tien Shan harbor over 80% of all national Red List Species of Kazakhstan, their total area being about 4.5 mln ha. They fall under the jurisdiction of the State Forestry and Wildlife Committee of the Ministry of Agriculture. These are located primarily in the South Eastern and Eastern parts of the country. Dominating tree species here are spruce, pine, cedar, fir, larch, as well as birch and asp. In upper altitudes forests intermingle with grasslands. The relict Tien Shan Spruce (*Picea schrenkiana*) is endemic and has global significance as these are among the world’s last massifs of virgin coniferous forests. Kazakhstan Mountains, including 5 critically endangered (*Berberis karkaralensis*, CR; *Calligonum triste*, CR; *Lonicera karataviensis*, CR; *Populus berkarensis*, CR; *Sibiraea tianschanika* (Red list of Kazakhstan and Kyrgyzstan) and 8 endangered The ecosystem is an important habitat for the endemic Red-backed mouse (*Clethrionomys glareolus*), and for IUCN Red Listed Altai Weasel (*Mustela altaica*), Pallas's Cat (*Otocolobus manul*), Pine Marten (*Martes martes*). Mountainous areas are inhabited by 255 species of birds, or 65.6% of the total nesting species in Kazakhstan. But most importantly, these mountains contain the endangered Snow Leopard (*Panthera uncia*).
- Saxaul forest and desert ecosystems of the Balkhash Lake region are important source of livelihoods for rural communities in arid areas. Saxaul (*haloxylon sp.*) is a natural woody shrub with extensive root system, rich in carbon and key to stabilization of sand dunes and maintaining desert biodiversity. In the Balkhash Lake area, Saxaul shrubs cover around 962,021 ha. Dominating Saxaul species include *Haloxylon aphyllum*, *Haloxylon persicum*, as well as *Calligonum arborescens*, *Tamarix ramosissima*, *Tamarix gallica*, *Halimodendron*

<sup>7</sup> The description of biodiversity values has been verified by leading national scientists following comments from GEF Council received in April 2016.

*halodendron*, *Ammodendron bifolium*, and *Alhagi pseudalhagi*. Saxaul and tamarix forests are the only source of timber and wood fuel in arid and semi-arid regions. Rural communities allow their cattle to graze in these forests, often in uncontrolled way. These ecosystems play a key role in regulation of microclimate (soil and air humidity in arid areas), prevention of soil erosion and their loss immediately paves the way to desertification. In terms of biodiversity, they are home to over 100 species of fauna, including rare and threatened species, such as Goitered Gazelle (*Gazella subgutturosa*, VU), Horsfield's Tortoise (*Testudo horsfieldii*, VU), and European green toad (*Bufotes viridis*, LC), Golden jackal (*Canis aureus*, LC), Wolf (*Canis lupus*, LC). There are over 60 bird species, including Long-legged buzzard (*Buteo rufinus*, LC), Short-toed eagle (*Circus gallicus*, LC), Houbara bustard (*Chlamydotis undulata*, VU). The area is critical for the conservation of an endemic subspecies of the Pander's ground jay (*Podoces panderi*, LC), 100% of the population of which has its home here (in the interfluvium of the Ile and Karatal rivers). There are several Important Bird Area covering the Saxaul forests of the Balkhash Lake region. The Saxaul Forests of the Balkhash Lake district fall under the jurisdiction of two state nature-conservation enterprises under the Forestry and Wildlife Committee of the Ministry of Agriculture.

- Tugai/riparian forests and river deltas are found only in Central Asia. This is a unique type of forests, defined by the water balance of the rivers they depend on, by their seasonal flooding and the local microclimate over the floodplains. These forests grow in highly moist soils and dry air conditions, have high transpiration rates, are resistant to droughts and salinity. Tugai forests grow along rivers in the southern part of the country, in narrow (up to 3 km wide) strips and are closely related to the river delta vegetation. The most important of these are the Tugai ecosystems along the Syr Daria, Charyn, and Ile rivers. These rivers ecosystems are transboundary and hence the integrity of the riparian ecosystems defines their health not only in Kazakhstan but in the neighboring countries. The dominating species include endemic Turanga Poplar (*Populus diversifolia*), Nasarow Willow (*Salix turanica*). The Tugai ecosystems of the Charyn River host 17 relict and rare species including *Fraxinus sogdiana*, NT; *Berberis iliensis*, VU; *Armeniaca vulgaris*, EN. The Tugais of the Syr Daria, Charyn and Ile have over 20 Important Bird Areas and several Ramsar sites (Ili River Delta and South Lake Balkhash and Lesser Aral Sea and Delta of the Syr Darya River). They host 43 bird species including Shikra (*Accipiter badius*, LC), Yellow-Eyed Stock Dove (*Columba eversmanni* VU), Booted Eagle (*Hieraaetus pennatus*, LC), Eastern Imperial Eagle (*Aquila heliaca*, VU), White-tailed Eagle (*Haliaeetus albicilla*, LC), as well as three globally important plant species: *Fraxinus Sogdiana* (NT), endemic *Berberis iliensis* and wild apricot (*Armeniaca vulgaris*, EN). Tugai floodplain ecosystems play a key role in the regulation of the water balance of key rivers of Kazakhstan. They regulate groundwater table balance, soil moisture and salinity and thus prevent soil degradation. They are important in regulating the seasonal river flooding preventing catastrophic flood events, which protects numerous rural settlements along the rivers. They provide ideal conditions for fishing and climate-resilient agriculture within the floodplains, which is crucial in arid and semi-arid areas of Kazakhstan. There are approx. 200,000 hectares of such ecosystems in Kazakhstan.

### **Drivers of and root-causes of degradation<sup>8</sup>.**

Land use conversion remains one of the threats to all three types of conservation important ecosystems. The underlying root-cause of this is the fact that Kazakhstan continues to develop its tourism infrastructure and expand the grazing areas for increased livestock without properly valuating the ecosystem functions and making economic decisions without proper understanding of the long term degradation threats and real values of healthy ecosystems. Overgrazing is one of the main problems in the mountainous grasslands. It brings about soil degradation but importantly also leads to habitat fragmentation in mountain areas. The root cause of overgrazing in the context of Kazakhstan is the fact that local communities plan pasture use, rotation, stock size and feeding without understanding of long term impacts on soil and vegetation, but also because of lack of alternatives to the current over-grazing practices.

With respect to protected areas, the total size of the protected areas estate is currently too small and protection is lacking in the surrounding economic landscapes of each of the three sub-types of the forest and woodland ecosystems.

---

<sup>8</sup> This section provides an initial outlook on the key threats and underlying problems. The proponents appreciate the comment of GEF Council on need for higher accuracy and STAP comment on the need to construct a proper root cause analysis at the PPG stage. In line with comments from STAP and GEF Council, additional factual information will also be collected at the PPG stage to corroborate the evidence of threats, clearly stipulate root causes and refine proposed project activities.

Tourism in PAs is also developing quite rapidly and requires regulation and standardization of loads. There are attempts to use lands of PAs to build unregulated touristic infrastructure that increases many fold the disturbance factor dramatically reduces the conservation value of protected areas in Tian Shan and Altay. Once such example is degazettement of 1,000 ha from the Ile-Ala-Tau National Park (candidate for UNESCO WH list) for construction of ski infrastructure and housing within the state tourism development program. Construction of industrial and housing infrastructure in the foothill zones (important for SL migration) all along the Northern Tian Shan range has brought about severe degradation of upper vegetation (Juniper forest, shrubs and natural grasslands), as well as visible land degradation effects, such as soil cracks, landslides, mudslides and soil erosion. Almost all biodiversity important forests suffer from encroachment of livestock into forests, and unsustainable logging practices by local communities, which do not take into account habitat requirements of species populating these forests.

During 1992-2002 major logging areas were handed over to small private timber enterprises that routinely violated forestry regulations in their operations. In pursuit of quick short-term profits, these companies cut coniferous trees in easily accessible sites. According to FHC estimates, in 2002 illegal logging accounted for 28,000 ha of forest loss.

In the past 20 years, the area of mountain forest has shrunk due to a combination of fires and illicit logging by local communities. Degraded areas are overgrown by shrubs and deciduous species. The shrinking area of relict spruce forests in Altai and Tian Shan (dominated by endemic *Picea schrenkiana*) is a major issue. Weak protection leads 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.

In 2003, the government imposed a moratorium on clear-felling in coniferous and *Saxaul* forests until 2018 to allow for ecosystem regeneration. Illegal cutting, however, remains a threat to all three types of ecosystems targeted by this project, and are a major source of carbon loss. Over the course of the past 10 years, the timber volume of *Saxaul* forests, for example shrunk by 250,000 cubic meters through illegal logging. Forestry legislation permits the 'cutting down of all trees in forest areas affected by fire for sanitary purposes'. The opportunity to obtain a permit to completely log burned areas (where the underbush has been burned but trees left intact) has led to widespread arson. Also, forest PAs provide local people with firewood through the issuance of vouchers for collecting firewood from specially zoned harvest areas, often some distance from the villages. Given the expense of collecting fuelwood from these areas, villagers engage in illegal collection of firewood from the forests close to the villages. These areas are becoming degraded.

One of the main drivers of the degradation of Tugai ecosystems is lack of know-how on their management and regeneration. Tugai forests depend on the flow regimes of the rivers with which they are associated (Charyn, Ile, Syr Daria). In the past decades, intensive use of river channels (for hydropower or water uptake for irrigation) caused changes in the flow through and seasonal flooding regimes and this results in the degradation of Tugais. The hydrological changes in rivers and ground water tables lead to deterioration of the seed spreading process of key tree species in the Tugai ecosystems, and instead favor the introduction of alien species such as *Ulmus pumila* which displace native species. The decline in the population of species with spread the seeds of Tugai forest tree species is yet another cause of degradation.

The root of the competing and often unsustainable forest uses lies in the fact that forest values are currently assessed only from the point of view of the value of timber contained in them and does not include assessment of their environmental functions. A highly central system of forest management fails to engage collaboration of local entrepreneurs and local communities and thus provides no incentives at the local level for maintaining long-term integrity of conservation important forests and their regeneration. When valued just from the point of view of their timber resources, forests do not seem to contribute much to the GDP of the country. Missing to account for the non-timber values of forests and the role they play in maintaining healthy ecosystems in the face of climate change is the direct cause of lack of incentives for forest regeneration, restoration, and engagement of private sector and local communities in sustainable forest management. The use of *Saxaul* forests by local communities at the moment is illegal in many cases, while schemes available from international communities on developing *Saxaul* forest management and regeneration with involvement of communities have not been tried.

For the project regions the last inventory for *Saxaul* forest was in 1994, for floodplain forests – in 1994, and for the mountain forests – 2013-2014. Since most of these ecosystems fall under the Committee on Forestry, they key

parameters which was inventorized was the forest productivity, distribution of trees, their height, number of alive and dead trees per unit. Inventory of soil, vegetation and biodiversity as such had not been done for the areas in question. There is no procedure for regular inventories apart from the cadastral estimations done by hunting companies with the strong focus on hunting species. Some limited data on individual species is available from ad hoc researchers or NGO projects, e.g. data on bird populations from NGOs working on IBAs, or data collected at the time when areas were described under Ramsar Convention. At the moment there is no complete picture for any of the areas proposed under Component I of the project, and hence the project, when working towards finalizing the feasibility studies to establish protected area under Component I will need to collate all available data and undertake up-to-date inventories on threats and status of key species, the summary of which is given in Annex I.

The flagship species of the Altai mountain ecosystems is the Snow Leopard. In 1920-1950s Snow Leopard was quite common in Kazakhstan and in the beginning of 1980s the population reached 180-200 individuals<sup>9</sup>. The latest approximate estimations of the population showed 80-100 animals with the habitat area in Kazakhstan app. 5,000,000 ha. Based on the distribution patterns there are 5 distinct groups of Snow Leopard in Kazakhstan: West Tian-Shan (10), Northern Tian-Shan (35-45), Zhungar (20-25), Saur-Tarbagatai (5), and South Altay (10-15). In the past years, no census of SL was conducted, which is – though may seem as a minor issue – is important for understanding the status of the population and developing effective conservation activities.

Biodiversity rich mountain ecosystems in Kazakhstan remain most attractive for commercial hunting and poaching. Almost all snow leopard prey species are heavily hunted in Kazakhstan, which is one of the key factors defining fluctuations in population numbers. For example, as reported by the hunting management agency in the East Kazakhstan, the population of ibex (*Capra ibex*) has fallen from 212 animals in 2006 to 52 animals in 2009. The problem stems from no capacities and no information tools on prey populations. The monitoring of huntable species in the Snow Leopard range is not based on reliable data at a landscape level: One individual animal can be recorded and reported several times, and this data will be used to define the hunting quotas. There is a need therefore, to adjust the existing legal hunting loads and the system which defines them, but at the same time to look for models of engaging communities in sustainable commercial hunting that can bring positive benefits to wildlife and communities at the same time. There is unofficial information that about 10 skins of the Snow Leopard are processed annually in taxidermy centers of Almaty. Poaching is mainly caused by high prices and growing demand at the illegal markets on the one hand, and poor anti-poaching measures and trafficking control in the region. It is obvious that big fines do not work in isolation and would need to be complemented by engaging communities in sustainable hunting schemes.

**The Protected Area system.** To protect its globally significant biodiversity, Kazakhstan has established a system of protected areas covering 22,121,641 ha (8.1% of the total area of country)<sup>10</sup>. At the moment, PA system coverage includes 8.6% of all mountain ecosystems. Some of the ecosystems which have globally important species remain outside the PA system notably the forest-steppe pine-and-deciduous forest and grassland ecosystems in the central and northern part of the country (with less than 2.5% included in PAs), as well as unique riparian (Tugai) forest and floodplain ecosystems (have 0% representation country-wide), which support a number of endemic and threatened species (as mentioned in para 3). The current estate does not fully cover the habitat of the Snow Leopard population groups. Only 30-35% of its range in Kazakhstan is protected within the PA network, which bars effective protection from degazettement and poaching. Huge areas that provide a natural bridge and genetic interactions between the Tian-Shan, Zhungar and Altai population groups of SL stay outside of the existing protected areas network. There is a need to expand the PA estate to address gaps in bio-geographical coverage. There is an accompanying need to nest the management of protected areas in territorial planning and development programmes. A major weakness with the PA system is that its management is disconnected from the management of surrounding landscapes. This is problematic, as many threats can only be addressed at the landscape level, and many ecologically important areas critical in terms of maintaining functional connectivity between PAs lie outside PA boundaries. Moreover, development programmes are not accommodating PAs within their planning and implementation frameworks. This means amongst other things that contra-conservation decisions are being taken on the siting of roads, drainage facilities and other infrastructure. Protected areas, especially in the central part of the country, suffer from unsustainable livestock and forest practices emanating from neighboring unprotected forests. Major national parks in the central part of the country lack buffer zones or corridors. The integration of protected areas into the management of surrounding landscapes have not been tackled by development assistance programs so far, as these have largely focused on strictly protected areas (Altai-

---

<sup>9</sup> Fedosenko, 1982.

<sup>10</sup> According to the official list of protected areas from the government of Kazakhstan.

Sayan and Tian-Shan) where land uses in the surrounding production landscapes have had only a limited impact on the integrity of the PAs themselves.

The PA management and business planning capacity remains poor. In addition, there is a gap in the research and monitoring methods for IUCN species. The PA units responsible for organizing patrols to prevent illegal activities use outdated patrol planning system inherited from the Soviet period when the number of rangers, horses, and vehicles was significantly higher and they could effectively cover the area. This has changed now and the skills and technical capacities of the inspectors and rangers to identify and prevent present day illegal wildlife activities (geographically more dispersed and more difficult to detect and prosecute) are not adequate. There is a need for new approaches in spatial planning of patrolling operations and making advantage of software models and new equipment. The zoning arrangements and land use regimes in the economic zones do not match well the requirements of SL and its prey species. The management plans for most PAs are outdated and lack provisions for ecosystem valuation, engagement with private sector and communities for sustainable activities and regulated tourism and natural resource use. The management regime in the zones often does not reflect the actually state of biodiversity and threats.

#### **A.1.2 Baseline scenario and associated baseline projects<sup>11</sup>**

The Government of Kazakhstan is committed both to enhancing protection of natural forests to reduce emissions from forest degradation, and safeguard biodiversity, as well as to expanding forest cover. To demonstrate its commitment in this regard, the country has imposed a moratorium on clear felling—to allow key reforms to be instituted in the forest sector to improve the sustainability of forest management.

Kazakhstan took a landmark decision to transition to a green economy model, announced through the country's 2050 Strategy (December 2012) and further detailed in the government's **Green Economy Concept** (adopted in May 2013). It proposes a set of sustainable-development initiatives in six key areas: water, agriculture, energy using sectors, energy production, air pollution and waste, together with a chapter on ecosystems and human resource development. This overall direction provides a framework for the project to advance sustainable forest management, SLM and PA system expansion. The latest adoption of the National Biodiversity Strategy and Action Plan (NBSAP) is a direct contribution to implementation of the biodiversity, sustainable land and forest management principles outlined in the Green Economy Concept. It also mentions the need to mainstream biodiversity into agriculture, forestry, hunting, fishery, tourism, and energy efficiency. Despite financial difficulties, sustainable natural ecosystem conservation remains one of the key directions in the Green Economy Concept approved by the Government of RK in May 2013. The project team will insure cross-ministerial cooperation, as has always been the case under GEF projects. The proponents understand that implementation of all principles of NBSAP calls for effective inter-ministerial coordination and cooperation and allows to reduce the burden of loss of biodiversity, and this principle will be translated into the project partnership strategy to be developed at the PPG stage. The project is closely watching the political developments in the country and will provide the latest information on each and every relevant program at the time of its submission.

The **Forest Code** establishes the framework for the protection, restoration and use of forests. Among other improvements, the Forest Code improves the enforcement framework governing forest management. Kazakhstan has set a national target to increase the area under forests to 5.1% by 2020, with about 3.8 million ha of land to be planted. **The 2014-2018 Forestry Development Sub-Program** of the Strategic Plan of the Ministry of Agriculture stipulates allocation of budgetary resources (over US\$ 113.4), for forest regeneration, creation and maintenance of protected areas, as well as for promotion of community forest ownership. However, there are non-practical mechanisms in place so far to launch community and private management of forests. With respect to biodiversity management, the government adopted a **strategy for Protected Areas System Expansion until 2030**, which seeks to expand PA coverage by 3% of the territory, up from 8.12% currently. The budget of the program is US\$ 143.5 mln. A new Protected Areas Law regulates PA planning, creation and management of protected areas. Despite financial difficulties, the Government does invest in protected area management and expansion at rates and in volumes higher than average for Central Asia. This indicates sufficiency of Government funding which can be used as cofinancing to this project, as presented in Annex 2.

The **Global Snow Leopard and Ecosystem Conservation Program** (GSLECP) is an important international baseline program which this project directly builds upon. Although this is not a financing project, rather a

---

<sup>11</sup> This section will be updated to provide the most actual state of related Government programs at the time when the full size project package is going to be submitted.

conventional framework, it unites Governments, UN Agencies, NGOs and Researches of the SL range in the effort to conserve this species, as postulated by the International Agreement on SL signed in Bishkek in 2013.

The tentative cofinancign plan for the project is provided in Annex 2 and will be confirmed at the PPG stage.

### **A.1.3 Proposed alternative scenario, with description of expected outcomes and components**

If the afore-mentioned threats are to be addressed, a three-prong approach would be required that would (1) address the biogeographic representation gaps in the forest Protected Area estate and set a model of implementing management plans for High Conservation Value forests, (2) set the basis for full valuation of forest ecosystem services and engage communities in realizing these services to support conservation and sustainable use of natural resources in wider landscape, and (3) support international cooperation for law enforcement, monitoring and knowledge management in the area of wildlife conservation, management and monitoring. This project has been designed to incrementally achieve these goals, while generating multiple benefits (in biodiversity, sustainable land management, and sustainable forest management).

*Component I* is addressing the gap in the representation of mountain forest and grassland, Tugai forest and floodplain and Saxaul woodland and desert ecosystems within the Protected Area estate of Kazakhstan. It is aiming to increase the total share of these ecosystems in the PA estate and also create new protected areas and integrate them into wider landscape planning, engaging local communities. To this aim, the project will concentrate on setting up Protected Areas as follows:

- Mountain forests and grasslands (Snow Leopard Habitat, app. 882,028 ha):
  - o South-West Slope of Zhetysu Ala-Tau – 651,581 ha
  - o Saur range – 39,000 ha
  - o Kyrgyz range – 6,819 ha
  - o Tarbagatai – 184,627 ha
- Saxaul ecosystems of Balkhash Lake region with the total area 962,021 ha.
- Tugai/Riparian forest and floodplains in Syr Darya (20,600 ha), Charyn (5,014 ha) and Ile (21,100 ha) river basins

Ecosystems with globally important biodiversity and valuable SLM functions will be described and protected area will be formally established (either new or expanding the existing protected areas; the areas in hectares above indicated the approximate area of new/expanded PAs, to be confirmed at the PPG stage.). For the areas confirmed at the PPG stage, the project will develop the legal articles for the gazettelement of new PAs, including their zoning arrangements, management regimes, operational and business plans containing clearly defined ecosystem management goals and actions for each PA.

Special emphasis will be given to forest mangemetn planning within the newly established PAs. Under Output 1.1.2, the project will design and operationalize forest management plans to meet the standards of *High Conservation Value* forest management as guided by the Forest Stewardship Council. Forest zoning, inventory principles, logging regimes, regimes for collection of non-timber forest resources, will be modified to ensure maximum protection of biodiversity and soil integrity. Separate attention will be given to the preservation of non-forest areas neighboring on forests, as these are critical in the overall landscape (such as riparian ecosystems and their interaction with Tugai forests or grasslands ecosystems and special rules on cattle management at grasslands within mountain forest PAs). Engagement of communities in co-management, assisted regeneration (where relevant) as well as sustainable commercial activities such as collection of non-timber forest resources, or sustainable hunting will be pursued, subject to feasibility analysis at the PPG stage. The total area of 812,000 ha of conservation important forests is expected to benefit from these activities.

As one of the ways of involving communities in wildlife management at PAs, community based sustainable hunting scheme will be sought to be piloted in at least one district. This will be based on careful study of best international experience, during the PPG stage.

#### ***Adherence to Key Biodiversity Area/IBA/Ramsar site criteria:***

Targeted areas	IBA Codes	Ramsar site codes
Mountain forests and grasslands (Snow Leopard Habitat): <ul style="list-style-type: none"> <li>o South-West Slope of Zhetysu Ala-Tau</li> </ul>	Kz 068, Kz 069, Kz 071, Kz 072, Kz 073, Kz 074, Kz 075, Kz 076, Kz 077 Kz 078, Kz 079, Kz 098, Kz 099, Kz 100, Kz 102 ( <a href="http://database.acbk.kz/iba_view.php">http://database.acbk.kz/iba_view.php</a> )	

<ul style="list-style-type: none"> <li>○ Saur range</li> <li>○ Kyrgyz range</li> <li>○ Tarbagatai</li> </ul>		
Tugai/Riparian ecosystems in Syrdarya, Charyn and Ile river basins	Kz 044, Kz 090, Kz 091, Kz 092, Kz 093, Kz 094, Kz 095, Kz 096, Kz 103	Ili River Delta and South Lake Balkhash,  Lesser Aral Sea and Delta of the Syrdarya River
Saxaul ecosystems in Balkhash Lake region		Ili River Delta and South Lake Balkhash,

While creation of PAs is important to improve the coverage of the under-represented ecosystems and species, it is equally important to integrate the PAs in the wider landscape to ensure that competing interests of land users are reconciled. This will be done through integrated landscape-level management plans covering administrative districts surrounding the new PAs (the total area of land use planning will be app. 4 mln. ha). The project does not intend to create a new separate system of inventory or monitoring, it intends to revise/amend the methodology and adding extra variables to the national forest inventories so that it can provide description of biodiversity in comprehensive terms, which is the essence of the first bullet under Output 1.1.2 (Full biodiversity, soil and landscape diversity inventories). Under the modified inventory approach, the forestry inspectors will be obliged to take stock of the habitats and characteristics of the landscape as potential bases for stratification and making decisions on resource use. At the PPG stage the project will look at the potential of remote sensing and spectral analysis of satellite images. GIS biodiversity database and map layers (economic uses, soil condition, species distribution and threats) will be produced for each district. Next, areas of potential conflict between biodiversity and production activities will be identified. Based on this, species and habitat maintenance plans will be designed as well as proposals for buffer areas and corridors developed. The land use plans in those districts where grasslands/pastures dominate will be designed with direct engagement of ecologists on the one hand and communities on the other. Once the updated land use plans are in place, and specific conditions for pasture use (areas, rotation, fertilization, cattle density, fodder, etc), community pasture management schemes will be agreed formally within the project and launched. Experience from previous and parallel GEF projects from other ecosystems where cattle management was involved (semi deserts or wetlands) as well as experience from other Central Asia countries will be studied in depth, and detailed actions plans for these activities are going to be developed at the PPG stage. Ultimately, the district territorial plans will be finalized following agreement with land and nature users / local communities, and practices implemented to reduce threats to biodiversity, land and forests: i.e. regulation of cattle grazing regimes (timing and intensity) in grasslands neighboring on forest tracts (important for removal of potential conflicts with Snow Leopard); regulation of fuel wood collection, rehabilitation of degraded riparian forests<sup>12</sup>, managing areas adjacent to roads to facilitate natural re-growth; species conservation measures and agroforestry. The PPG stage will produce a preliminary overview of such hot-spot areas within each administrative district and outline tentative modifications to the land use and forest use regimes in the, that will further be worked on at the full stage of the project.

*Component II* will create enabling environment for sustainable management of conservation-important forest ecosystems. It will address one of the key the root-causes of ecosystem degradation, which is the inadequate valuation of natural resources in national economy. Methodology and guidance will be designed for the integrated economic and environmental resource valuation, allowing to put quantitative and monetary accounting for functions that ecosystems play in sustaining ecological and economic functions and ultimately support to local livelihoods and national economy. Standards of valuation will be designed and approved at the national level, alongside with protocols for data collection and management; methods application instructions will be put in place for those governmental agencies and professionals who are going to be involved in full resource valuation. The project plans to employ UNDP Targeted Scenario Analysis ([http://www.undp.org/content/undp/en/home/librarypage/environment-energy/environmental\\_finance/targeted-scenario-analysis.html](http://www.undp.org/content/undp/en/home/librarypage/environment-energy/environmental_finance/targeted-scenario-analysis.html)). This tool is designed to help the Government and communities decide on the best model of forest / ecosystem use in each of the targeted ecosystems. The targeted scenario analysis incorporate ecological as well as economic values, and once it is conducted, decisions will be made by either community or Government (depending on who has the jurisdiction over the area in question) on modifying the forest use plan so that it fits the results of the targeted scenario analysis. A properly conducted Targeted Scenario

<sup>12</sup> Experience of UNDP GEF Small Grants program and Tugai ecosystems in Uzbekistan will be carefully studied and community-based restoration plans developed at the PPG stage.

analysis will bring the most sustainable decision, which in term is the way to ensure that forests in question are managed sustainably in the long run. Once results are obtained and valuation is complete, it will be integrated in the national economic statistics and policies that regulate Environmental Impact Assessment. More importantly, they will guide allocation of resources and design of new incentives/subsidies by the Forestry and Wildlife Committee and Ministry of Agriculture. A curriculum on the valuation will be designed and integrated in vocational training system for the protected area and forestry sector professionals. An agreement with one of the leading government training academies will be reached to start a series of professional training courses for the relevant governmental officials, professionals, and environmental consultancies. Using the valuation outcomes as a basis, three special task forces will be set to design vision and action plans for each of the three conservation important forest ecosystems types in Kazakhstan, deciding on best models to be applied for each type taking into account their values. The task forces will also define data collection and analysis system that are to be applied when developing ecosystem management plans; institutional, methodological, and technical standards for ecosystem management; as well as standards and protocols for their monitoring. The details of the Targeted Scenario Analysis can be found on the link above, and a detailed plan of conducting it and building its results into updated forest use plans was going to be constructed at the PPG stage

The other block of activities in Component II is targeting the issue of high degree of centralization in ecosystem management and non-involvement of communities and private sector in management of ecosystems. The PPG will analyze which legislative and regulatory instruments need to be modified or put in place to create the enabling environment for wider engagement of local communities and private investments into ecosystem restoration and management. This component will also look into the adjusting the data collection system and the principles of setting up the legal hunting quotas, and at the same time review the legal basis for involving communities in sustainable hunting or forest management (e.g. Saxaul) schemes. The project team will focus on working with relevant executive and parliamentary Government stakeholders to insure design and adoption of positive policies and regulations that will help remove barriers that restrain or discourage private sector and community engagement in SLM, PA management and SFM activities. The project will facilitate communications between Governments entities and community groups and private sector companies with respect to key issue that may arise in the process of developing policies and models for community/private sector engagement, such as on reforming land tenure, pasture management, access to fodder for cattle, access to fire-wood, demand for developing timber and non-timber markets with engagement of communities, achieving equitable revenue sharing, taxation and revenue collection systems. The vocational training system designed under the previous block of activities on ecosystem valuation will also include topics of community engagement and private sector roles/opportunities, and relevant stakeholders will receive training and skills development in this area.

As a practical output, an Incentive-based Forest Ecosystem Management Partnership will be developed and implemented in 3 districts (with at least 80,000 ha of important forests) representing three various types of forest ecosystems, to demonstrate and test the community management and/or co-management arrangements. As an example of a particular threat that can be targeted by the Partnership, the threat of cattle encroachment and unregulated firewood collection can be used. The key to sustainable use of mountain forests is in finding ways to manage the issues of unsustainable grazing in the forests and use of forests by communities for energy needs. There have been several projects in Kazakhstan and neighboring countries (including those funded through GEF Small Grants Program) which demonstrated on a pilot level that cessation of the infringement of cattle on forests and removal of timber in excessive volumes for energy triggers quick forest natural regeneration no further assistance to forest re-growth is necessary. The incentives mechanism could rely on a written agreement (contract) between the Government and local communities, by which communities could be committed to sustainably manage a certain area forest (including disallowing cattle into the forest and strictly adhering to pre-scribed norms of removal of fire-wood) in compensation for other benefits rendered by Government, which may include provision of fodder, or allowing collection of certain non-timber forest resources in neighboring protected areas, or for cultivating a certain area of land in the same catchment area downstream where farmer can profitably implement crop farming. Under this scheme, the forgone income of farmers from reduced cattle density will be offset by the profit from the productive land or other benefits provided by Government. The project would assist the community groups in each case to design these compensation schemes, negotiate the agreements, develop standards and plans for sustainable forest management (including cattle management and fire-wood gathering), as well as for the types and volumes of benefits received from Government in return. Depending on the situations and locations, the public-private agreements may also include engagement of communities (on a paid basis or again in exchange for land or other sustainable resource collection) in forest terracing at steep slopes (to control / reduce / avoid economic damage from moving sands, gullying, land/mud slides, degradation of water catchment zones in lower altitudes). Similar model, but taking into

account the ecosystems specifics could be designed also in the Tugai and Saxaul forests. The project will develop the system of advice to farmers, monitoring of the implementation, as well as an exit-strategy to ensure that the mechanism continues after the project. In order to satisfy the firewood demand and release the pressure on natural forests, the project would also consider promoting community fuel wood planning and distribution accompanied by collaborative planning to meet fuel wood needs from either natural forest or planted forest. All collaborative forest agreements will stipulate timber and non-timber harvesting volumes and methods and will be enforced and foresters and community groups will be trained to observe them.

*Component III* has been designed to assist Kazakhstan in addressing some of the issues with access to international experience in the areas of law enforcement, and wildlife monitoring, but also in line with STAP comments to ensure that the project's knowledge is documented and shared within the country and across the borders. Further, the project will work with leading international institutions to conduct training and actually roll out the system on the ground in the transboundary areas. The project will put in place a long term SL monitoring system covering systemically all 4 groupings of SL, based on the single SL population dynamics and threat model. To this end, the project will benefit from the global UNDP-GEF Medium-Sized Project on conservation of Snow Leopard. A detailed set of activities for this Component will be developed at the PPG stage, taking into account the advice received from STAP.

#### **A.1.4 Incremental cost reasoning and global environmental benefits**

Summary of baseline scenario	Summary of GEF scenario Biodiversity	Increment
<ul style="list-style-type: none"> <li>- Outdated PA management plans, no business planning paradigm within the PA management planning process.</li> <li>- Under-represented Tugai and Saxaul ecosystems in the PA estate</li> <li>- Snow Leopard habitat coverage by PA estate is 30-35 %. While forest conservation remains Government priority, the mosaic (forest grassland) areas important for the passage and feeding of the SL in three landscapes (Tian-Shan, Zhungar, and Altay) will not get sufficient protection.</li> <li>- Wildlife data collection from stakeholders (PA, hunting areas, community members) remains dispersed, uncoordinated, and thus, inaccurate, unreliable, and misinterpreted.</li> <li>- Suboptimal patrolling practices. Patrol planning is not based on spatial analysis of threats, risks, and monitoring data and does not use common information management system. There is no technical capacity within the valuable landscapes to implement efficient patrolling and law enforcement.</li> <li>- While green economy promoted as a national development concept, the use of payment for ecosystem service transactions is unfamiliar in practice; no science-based guidance</li> </ul>	<ul style="list-style-type: none"> <li>- Up to date PA estate with modern management and business plans engagement communities and private sector with benefits for ecosystems and local development</li> <li>- Increasing the representation of Tugai, Saxaul ecosystems</li> <li>- Increasing representation of Snow Leopard habitat within the PA estate ensuring protection not only for forests but also grassland areas among the forests important for SL ecology.</li> <li>- Landscape plans of administrative districts targeted by the project are in line with ecological requirements..</li> <li>- Ecosystem services valued and partnerships with private sector and communities tested at conservation-important forests</li> </ul>	<ul style="list-style-type: none"> <li>- New protected areas at Key Biodiversity Areas, as follows: <ul style="list-style-type: none"> <li>o Mountain forests and grasslands (Snow Leopard Habitat, app. 882,028 ha): <ul style="list-style-type: none"> <li>▪ South-West Slope of Zhetysu Ala-Tau – 651,581 ha</li> <li>▪ Saur range – 39,000 ha</li> <li>▪ Kyrgyz range – 6,819 ha</li> <li>▪ Tarbagatai – 184,627 ha</li> </ul> </li> <li>o Saxaul shrub and desert ecosystems in Balkhash Lake region with the total area app. 962,021 ha.</li> <li>o Tugai/Riparian forest and floodplain ecosystems in Syrdarya (20,600 ha), Ile (21,100 ha), and Charyn (5,014 ha) river basins</li> </ul> </li> <li>- For Snow Leopard, this includes most important northern cross-bridge habitats of the Snow Leopard that will enable populations mixing and viability in transboundary context.</li> <li>- Removal of threats (habitat fragmentation, disturbance, poaching – by 12% targets pending PPG studies and survey tools developed at PPG), and better protection of globally threatened species listed in IUCN Red Data List: Snow leopard, Argali, Goitered Gazelle<sup>13</sup>. Improved capacities of stage agencies for anti-poaching and anti-trafficking performance (as measured by UNDP Capacity Scorecard: baseline and targets to be set at PPG).</li> <li>- Illegal trade in SL products strictly controlled using best international surveillance, information and enforcement approaches</li> <li>- The project results contribute to CBD PoWPA (expansion of PAs, integration of PAs in wider landscapes, and community engagement schemes) and Aichi Targets</li> </ul>

<sup>13</sup> Baseline and target population values/indicators for IUCN threatened species (to be used as indicator species) will be defined at the PPG stage.

Summary of baseline scenario	Summary of GEF scenario	Increment
on ES quantification and economic valuation.	<ul style="list-style-type: none"> <li>- Revised hunting and tourism policies remove disturbance and hunting pressure on SL and its prey.</li> <li>- Improved capacities of research institutions, PAs and hunters will enable a long term data flow from Kazakhstan</li> </ul>	
<b>Sustainable Land Management</b>		
<ul style="list-style-type: none"> <li>- Mountainous pastures in the habitat of Snow Leopard overgrazed exceeding carrying capacity by 1.5 times resulting in increased erosion, mudslides, and worsening of water quality.</li> <li>- Land use planning (large infrastructure placement, tourism overloads, hunting practices) follows the short-term economic imperative threatening the resilience of soil and vegetation stability in the long term, which not only undermined the ecology of Snow Leopard but jeopardizes local development in the long term.</li> </ul>	<ul style="list-style-type: none"> <li>- Integrated land use plans developed and launched in 4 mountainous regions</li> <li>- Shift to sustainable pasture management in mountainous areas promoted: rotational grazing; pasture watering to stimulate grasses for vigorous growth and healthy root systems through pasture watering water supply points</li> </ul>	<p>Competitive pressures between land uses in mountain steppe/pasture and forest landscapes reduced at 4 mln ha:</p> <ul style="list-style-type: none"> <li>- Decrease in grazing pressure and improved condition of mountain meadow ecosystems<sup>14</sup>,</li> <li>- Reduced infringement of cattle on forests,</li> <li>- Reduced human-wildlife conflict,</li> <li>- Improved vegetation cover, fodder productivity and pasture regeneration,</li> <li>- Increased incidence of SLM approaches applied by small-scale holders leading to soil and vegetation quality improvements</li> </ul>
<b>Sustainable forest management</b>		
<p>Within each of the 3 ecosystems targeted by the project (Tugai, Saxaul, Altai mountains), forests play a key role and cover significant areas (indicated in Section A.1.1 in PIF). At the same time, the unique nature of these ecosystems is that forest biotopes closely interact with non-forest biotopes (e.g. in the case of Tugai there is close relationship between forests and the water regimes of river channels and floodplain meadows; in the case of Saxaul – between pasture land and forests; in the case of Altai mountain – between forests and alpine grasslands). Conservation and sustainable management activities, therefore, may not focused solely either on BD, or LD or forestry; rather a set of similar interventions designed by the project (i.e. the Protected area establishment, the territorial land use planning and implementation, the support to incentives for communities in sustainable forest and land management, etc.) target the ecosystems as a whole and synergistically produce biodiversity, SLM and SFM benefits.</p>		

<sup>14</sup> Baseline and target values for the LD indicators will be defined at the PPG stage.

Summary of baseline scenario	Summary of GEF scenario	Increment
<ul style="list-style-type: none"> <li>- Highly centralized forest planning and management</li> <li>- No incentives for engagement of local communities and private sector in SFM</li> <li>- Share of private sector/local community engagement in forest regeneration, forest management, agroforestry, is close to zero.</li> <li>- Forest values are assessed exclusively from the perspective of timber value</li> <li>- Forest management plans make no provisions for the special management / conservation needs of Mountain, Saxaul and Tugai forests</li> <li>- No management standards in place and no training of forestry professionals in the area of valuation and sustaining of ecosystem functions of conservation important forests</li> <li>- Outdated and ineffective methods for assisted regeneration of certain forests types with low regeneration capacity (e.g. Tian Shan Spruce)</li> <li>- Continued loss of valuable mountain, Saxaul and Tugai forest ecosystems</li> <li>- Low share of forests in the Protected Area estate</li> </ul>	<ul style="list-style-type: none"> <li>- Policies, regulations and practical experience in place for decentralization of forest management and engagement of private sector and communities in SFM</li> <li>- Forest valuation in national economic statistics and forest budget planning takes into account the ecosystem functions of conservation important forests</li> <li>- Forest management planning routine incorporates assessment of non-timber forest values and forestry professionals are trained to apply it</li> <li>- Improved forest monitoring and research enables faster regeneration of conservation important forests with low natural regeneration rates (Spruce forests)</li> <li>- Halted loss of Saxaul, Tugai and mountain forests at target areas</li> <li>- Increased representation of forests in the protected area estate</li> </ul>	<p>SFM-1: Maintaining positive status and reduced pressure on conservation-important forests at 812,000 ha (700,000 ha of Saxaul forests; 42,000 Tugai forests; 70,000 Mountain forests) applying HC VF standards (through Output 1.1.2, details of the activity described in the main text, subject to finalization at the PPG stage).</p> <ul style="list-style-type: none"> <li>- SFM-2: Maintained flow of forest ecosystem services and improved resilience to climate change at 80,000 ha of forests outside protected areas through Forest Ecosystem Partnership (Output 2.2.3), as well as other outputs of Component II.</li> <li>- Integrated Economic and Environmental Valuation of Forests and SFM criteria and indicators embedded in national forest investment policies and subsidies in the forestry sector.</li> <li>- Share of investment of the private sector and communities in SFM is at least 12% by year 5 of the project at the target areas</li> <li>- Increase of forests in Protected Area system from 5.75% to 7%</li> <li>- Protected Area system is expanded by inclusion of 1.9 mln ha of conservation important forests (see BD values tab below)</li> <li>- Reduced soil erosion under 0.96 mln ha under Saxaul forests in Balkhash Lake region (see LD values tab below for other LD values)</li> <li>- Carbon benefits (initial assessment): Removal of above-ground biomass through logging and other threats described above, under baseline scenario translates into emission of 4.4 tCO<sub>2</sub>-eq/ha (mean coefficient for the three forest types targeted by the project provided by national experts). Under the baseline scenario, based on past trends in project areas, in the most conservative case, at least 1% of the forests targeted under Component I (812,000 ha) and Component II (80,000 ha), will be lost to threats annually, which translates to emissions of 39,248 tCO<sub>2</sub>-eq/y. Thus, implementing activities under Components I and II, in a 10 year perspective (used for LULUCF projects; linear progression assumed), the project will help avoid emissions of 392,480 tCO<sub>2</sub>-eq. The below-ground biomass and litter also degraded, but are excluded from calculation for conservatism. Also the effect of fires is further excluded as this is not the main threat targeted by the project. A more precise calculation will be carried out at the PPG stage.</li> </ul>

#### **A.1.6 Innovation, sustainability and potential for scaling up**

**Innovation:** Through the Incentive-based Ecosystem Management Partnership this project is promoting engagement of communities and particularly the private sector in sustainable management and restoration of ecosystems important for their biodiversity and land integrity functions. Furthermore, this project is the first in the region which promotes full valuation of mountain, Tugai and Saxaul ecosystem services, and integration of the ecological values into the economic land use decision making. Another innovative element of the project is the adoption of the international standards for Snow Leopard research, monitoring, surveillance and law enforcement. A single standardized approach that would be compatible with research, monitoring and surveillance standards in the neighboring countries will

enable a full picture on the status of Snow Leopard and quick and effective action taken to remove or avoid threats to it, paving the way to the stability of the species, not only in Kazakhstan but throughout its range. The project will pilot a landscape approach to PA management in Kazakhstan. This addresses a major weakness in the management of the PA system: the dislocation between PA management at the site level and territorial planning and development programs in areas adjacent to the sites causing habitat fragmentation and disturbance to species.

**Sustainability** The implementation of the regulatory and policy activities piloted under Component II will be carried out beyond the project with funding from the Forestry and Wildlife Committee, as the SLM and SFM practices will by then be built into the routine system of management planning for mountain, Tugai and Saxaul ecosystems. The expanded PA estate (Component I), with updated management and business plans, will be fully supported by state PA budget after project closure; the business plans will expand the budget income from non-government sources that thus make PAs less dependent on Government financing (this element will be measured through the METT, section on budget management, of the targeted PAs; baseline and target values will be developed at the project preparation stage). The post-project implementation of the adjusted 4 land use plans (Outcome 1.2) will be vested with the responsibility of local authorities and relevant communities, who will receive the training support and technical assistance through the project.

**Replication and dissemination** of the project results will be ensured by the vocational training activities incorporated in Component I. Component III will further contribute to replication and dissemination of project results, by resolving the threats to SL in a wider context (i.e. throughout the whole range of the SL in Kazakhstan and in the transboundary context) through an efficient law enforcement system, as well extensive trainings, and adoption of international standards in SL monitoring, research and patrolling. The replication of the Incentive-based Ecosystem Management Partnership tested under Component II will be assisted through the amended policies and regulations that remove barriers to wider engagement of communities and private sector in ecosystem management. A replication strategy will be elaborated by the project in the last year of operation, to ensure the wide and efficient coverage of the potential beneficiaries. The strategy will detail actions targeted at the audience outside the immediate project scope with the focus on those who hold the power to influence the decision making processes and those who have the interest to scale up the results, but are limited in power in decision-making.

**A.2. STAKEHOLDERS. IDENTIFY KEY STAKEHOLDERS (INCLUDING CIVIL SOCIETY ORGANIZATIONS, INDIGENOUS PEOPLE, GENDER GROUPS, AND OTHERS AS RELEVANT) AND DESCRIBE HOW THEY WILL BE ENGAGED IN PROJECT PREPARATION<sup>15</sup>:**

Stakeholder	Role
Government agencies	
Forestry and Wildlife Committee (FWC) of the Ministry of Agriculture	It is the key government institution responsible for SFM, regulating biodiversity, including the establishment and management of protected areas, hunting areas and forests. It oversees and seeks state funding for the establishment/ expansion of PAs, including negotiations with local authorities and stakeholders, through its regional offices, preparation and justification of the relevant budgets. FWC ensures conservation and recovery of the threatened and endangered species and that efficient information management system is in place. FWC will initiate and lobby all policy amendments within the ministries and the Parliament.
Committee of Water Resources	This Committee and its regional branches are responsible for management of water resources to meet the needs of water users of different sectors of the economy in a sustainable way. The Committee and its branches will contribute to development of landscape-level planning frameworks.
Ministry of Agriculture	Develops and implements state policy and programs in agriculture sector. The Ministry will contribute to development of landscape-level management plans and implementation of sustainable use alternatives in rangeland and agricultural productive landscapes.

<sup>15</sup> Note: there are no indigenous peoples in Kazakhstan.

Ministry of Energy	Inherited the mandate of the Ministry of Environment after it was abolished. Current role of the Ministry of Energy is to develop state policies and programs on environmental conservation and sustainable development, and coordinate with the Secretariat of the CBD. One of the key players in development of planning frameworks that focus on the economic potentials (rather than the constraints) of safeguarding and maintaining ecosystem services in the districts. Ensure that its monitoring and data collection systems under its Environmental Information Center are harmonized with the decision support systems developed by the project. MEP and its Oblast branches are responsible for Environmental impact assessments, which are needed for any of the planned activities related to conservation or use of nature resources.
Ministry of National Economy Ministry on Investments and Development Ministry of Finance	These three ministries will be engaged in economic valuation of the ecosystem services, development of the PES schemes, drafting the relevant policies and regulations.
Local communities and local administrations	
Land Management Committee (oblast and rayon-level branches)	At a national is responsible for development and implementation of state policy and programs on land use planning and land management, geodesies and cartography. Oblast branches are responsible for key decisions related to zoning and allocation of land use permits for agriculture, mining, etc at oblast level. One of the key players in development of planning frameworks that focus on the economic potentials (rather than the constraints) of safeguarding and maintaining ecosystem services in the districts.
Administrative Units of 15 existing PAs and 4 new PAs	These are the key beneficiaries of activities on protected area expansion and strengthening management effectiveness. Coordinate negotiations with oblast/ rayon administrations and other relevant government agencies regarding zoning arrangements and the creation of buffer zones and corridors, as well as adaptive landscape management to ensure that the PA is managed in tandem with the management of production activities occurring in the larger landscape.
Oblast Akimats	Grant official endorsement of land use projects for PAs of local importance. Allocate land for planned PAs. Disseminate the project's lessons learned related to landscape-level planning and management and advocate for replication of this ecosystem approach throughout Oblast. Assist in community mobilization and awareness activities.
Rayon akimats	Lead the development and implementation of the landscape-level management plans by providing coordinating inputs of all stakeholders
Non-government organizations	
There is a number of NGOs that are already engaged in conservation actions in the selected regions. The tentative list may include: Association for the Conservation of Biodiversity of Kazakhstan, Eco-Altay, Biosphere, Eco-Museum, Green Salvation, Snow Leopard Fund, Avalon. All these NGOs will be engaged in variety of activities relevant for their field of expertise.	
Research institutions	
Institute of Zoology	Is already implementing a camera trapping project, but still no data and publications are available. The institute will not only provide expertise related to biodiversity in Kazakhstan, but will also be a beneficiary of the project through improved capacity in using new tools of data processing like biostatistics and population/habitat modeling.
Institute of Geography	Has vast experience in producing data maps for landscape planning and management. So considering the vast and complicated areas of four landscapes of the project, this institute will contribute to this work.
Institute of Botany	Will be engaged in surveys and research on habitat status to be integrated into the SL habitat management plans and establishment of new PAs. Will also be involved in the landscape planning activities.
Forestry Institute and Kazlesproekt (State project design institute under CFH)	Will contribute their research, experience and expertise for training and site visits related to monitoring of the habitat and introduction of new information management systems.
State enterprise "Science & Production Center on Land Resources Management"	Will support project activities related to implementation of demonstration projects on sustainable land and pasture management, and monitoring land degradation
Kazakh Research Institute of Livestock Breeding and Fodder Production	Will support project activities related to implementation of demonstration projects on sustainable land and pasture management, and monitoring land degradation
Private sector	

Local industries and entrepreneurs	Will participate in consultations and provide inputs to the development of the landscape-level management plans for further implementation.
Hunting and Fishery Managers	Will contribute to the development and implementation of the landscape-level management plans as being key repositories of ecological information on biodiversity, land resources, wildlife, and habitats. Will ensure that monitoring and data collection and processing systems are harmonized with the decision support system. Will engage patrolling rangers of existing hunting areas for introduction of the new spatial monitoring and reporting tool.
Rural consumer cooperatives and communities	Will be actively engaged in the development of income-generation activities (through Public Councils) at the PAs and corridors that are a focus of the project, as well as in sustainable use demonstrations at project territories.

### A.3 Gender considerations<sup>16</sup>

The project areas are densely populated: about 1 mln people live here relying on forest, grassland, Saxaul and Tugai resources. Women are heavily involved in firewood collection and processing, and livestock activities, sustaining large families. At the same time, women have strong voice in mobilizing communities for innovative activities, sharing information and are more open to new knowledge and practices related to natural resource use. The experience of the GEF Small Grants Program confirmed that they are willing to engage in co-management of forests and improved pasture management, as they are motivated to take any opportunity to improve the well-being of their families. The project will build on the knowledge and experience of the SGP in this area, ensuring that women benefit from engagement in project activities, specifically the capacity building and training on sustainable forest management, and that they equally participate and contribute substantially to forestry and PA policy making. Project activities will be designed to ensure equal representation of women as key beneficiaries. This will be of particular relevance to measures to manage fuel wood harvest to meet domestic energy needs. Activities related to advancement of community and private sector engagement will create new job opportunities for women (at least 100 such jobs are expected to be created), mostly in administrative and accounting positions. The project, at the design stage will develop special surveys and gender indicators, which will enable quick and correct quantification of gender benefits resulting from implementation of the project activities. The surveys will investigate the following criteria:

- Vulnerability of women in the context of deficiencies of vital natural resources and natural resources consumption rights;
- Access to land resources by individuals, marginal groups and households;
- Estimation of productive capital owned/used by women and related impacts on economic rights and income;
- Educational level, access to information and new technologies;
- Rights and opportunities of women to participate in management bodies in relation to Protected Areas, public forests, water users and land users associations etc.

For completing the survey the project will use UNDP based gender analysis tools, common qualitative methods for data collection and analysis, such as on-site observations, questionnaires/interview, key informant interview, and focused group discussions followed by descriptive statistical analysis.

### A.4 RISKS

Risk	Level	Mitigation
Changes in government policy priorities related to sustainable forestry development	Medium	Despite its modest forest resources compared to other countries in Europe and Asia, forestry has a long tradition in Kazakhstan. Forestry continues to be high on the government agenda, particularly due to several government policies including State Forest Planting Program «Jasyl El» and the 2003 Forest Code.
The timeframe and budget are too tight for achieving the outcomes as it may take long time to go through all official procedures required to amend legislation. Similar risk is applicable for measuring the impact indicators of	Medium	The full project document will realistically define the transition impact indicators that are capable to assess the progress within and <b>beyond</b> the project period. The project will ensure that the action required to achieve the final targets are included into the plans of appropriate stakeholders and the needed funding is available. Thus, as a mitigation strategy for this risk, the monitoring and evaluation period may not coincide with the project period and go beyond it.

<sup>16</sup> Gender benefits of the project and women involvement in the context of this project will be elaborated in further details during the PPG stage.

<b>Risk</b>	<b>Level</b>	<b>Mitigation</b>
the actions related to species and habitats status/changes due to abilities of natural systems to recover.		
Biodiversity science and conservation community continue to ignore/underestimate the participatory approaches in planning the landscapes and continue to use formal social surveys as a key tool for community engagement.	M	The project will develop and distribute high quality case studies demonstrating the benefits and differences between conventional and participatory approaches for community engagement activities. And will propose relevant amendments to policies and land use plans, feasibility studies and other planning tools currently used for infrastructural and development projects.
Data deficiencies to complete the ecosystem services quantification and economic valuation research may undermine the quality of the final products related to species and habitats modeling.	M	The project will engage high quality international expertise in species and habitats management and will follow the advice especially in relation to methodological tools. The project will avoid completing fundamental scientific research, but will rather focus on specific threats, risks, and solutions within the landscapes.

## **A.5. COORDINATION**

The project will complement the activities of a number of active projects that are being implemented within the same geographic locations and are striving to address the biodiversity related risks. These projects include NABU project that is being carried out on the ground by a number of NGOs and experts and is mainly focused on Snow Leopard camera trapping and improving capacity of about 3 PAs to develop recreational activities in a biodiversity friendly way. Considering the limited resources of this project and conventional approaches it uses to address the barriers, new GEF project will extend the interventions to the landscape of Northern Tian Shan and will use the data on the species and habitats to develop the population and habitats models of this landscape. The project will add value by doing more work on engagement of variety of stakeholders into the landscape management to align the conservation and land use goals. Another smaller initiative that will feed in mainly the camera traps data is a USAID project implemented by ACBK in the same region. There is some research on the Snow Leopard and the prey is being done by the Instituted of Zoology through the funding from the Ministry of Science and Education. There is no accessible data on this project yet accept that they were trying to embrace all three SL population groups (Northern Tian Shan, Western Tian Shan, and Zhungar). In Altay region local NGOs are quite actively cooperate with PAs to improve transboundary cooperation with Katun Reserve in Russia and monitoring SL population within the camera trapping project. These initiatives are funded by the smaller international donors and are carried out on the ground by PAs, “EcoAltay” NGO, Snow Leopard Conservation Fund, and “Neosphere” NGO. The new project will complement to these activities and will expand the measures within the landscape outside the protected areas.

UNDP has a number of active projects within its ‘Biodiversity’ and ‘Land Degradation’ portfolio. Although most of the projects are geographically focused on dry lands ecosystems, there is a number of crosscutting issues that will be mutually beneficiary for the new project and active once. Such projects include development of the biodiversity information management system for PAs, which is mainly an online tool that can be used to monitor and report scientific data within the PAs. This tool was piloted within 3 PAs mainly covering dry lands, steppe, and wetlands ecosystems. The new project will assess the applicability of this tool and adapt if needed for the mountains ecosystems as well as train the PAs staff in analysis methods and tools to be able not only to report the data, but also to recommend the management actions. Another project that is very much complimentary with the new one is the Improvement of the Wildlife Management Policies”. This project is doing a very detailed review of the current policies on wildlife management and what revisions are required to improve the performance of hunting areas and to encourage their transition to biodiversity-friendly management practices. The new project will add value through developing incentives for hunting companies to contribute to conservation actions within the landscape, and will offer comprehensive tools to harmonise the patrolling and monitoring activities with the PAs.

There are two active projects that are targeting the fundamental research and some practical implications of financial tools in biodiversity conservation and sustainable land management (BIOFIN, Financial tools for implementation of Rio Conventions). Considering the global and some to extent theoretical focus of these two projects, the new GEF

project will provide a test ground for the findings and theoretical products within the most important biodiversity areas in Kazakhstan.

The project builds on initial dialog with the World Bank, as it embarks on the development of the Terms of Reference (as of mid-2015) for the *second phase of the World Bank forestry program in Kazakhstan*. The consultations between UNDP and World Bank at the regional and country levels, also involving Forestry and Wildlife Committee as the key Government partner, defined a holistic approach in assisting the Government with improving the forestry sector, using incremental GEF assistance. It has been agreed that UNDP and World Bank GEF projects will be designed in parallel and will complement each other. The UNDP project is addressing some of the forest sector issues for which UNDP traditionally has had comparative advantage and highest success as GEF agency, namely identification, protection and management of conservation important forests, including work on designation and effective management of protected areas, territorial management planning, supporting public private partnerships, and advancement of activities dedicated to conservation of the Snow Leopard. Geographically this covers the areas of Saxaul ecosystems in Balkhash Lake region, Tugai/Riparian forest and floodplains in in Syrdarya, Ile, and Charyn river basins, as well as a selection of mountain forest-and-grassland mosaics which primarily represent habitat of the Snow Leopard. The World Bank is planning to focus on issues related more to climate change mitigation / increased carbon sequestration, including improved fire management, improved silvicultural and forest restoration practices in Eastern Kazakhstan, Pavlodar and Akmola regions, forest partnership development, and environmental amelioration in Kyzylorda region, including creation of a new forest protected area (Aral Reserve) in Dry Aral Seabed. Already at this early stage, the two projects clearly complement each other as they address different geographic areas, different thematic foci, but together they constitute a coherent approach to assisting the Government of Kazakhstan in improving the effectiveness of its forest sector. The Government Agency for both projects is the same (Forestry and Wildlife Committee of the Ministry of Agriculture), and it will ensure full ownership and coordination between the UNDP and World Bank projects.

This project will also coordinate efforts with the *Forest and Biodiversity Governance Including Environmental Monitoring (FLERMONECA)* implemented by GIZ in 5 Central Asian countries, including Kazakhstan. The specific objective of this initiative is to enhance regional cooperation and partnership with Europe in the fields of forest and biodiversity governance, including environmental monitoring, through supporting the sustainable use and management of natural resources in Central Asia, by tackling issues such as 1) forest law enforcement and governance in Central Asia, that is provide support to promote the legal and sustainable forest management and utilization practices that strengthen the rule of law, tackle the growing problem of illegal forest activities and enhances local livelihoods; 2) ecological restoration and biodiversity conservation in Central Asia will promote an active dialogue between the EU and Central Asia; demonstrate and disseminate ecosystem-based management approaches on regional, sub-regional and sub-national levels, support conservation and restoration of biological diversity in the region; and 3) environmental monitoring in Central Asia intends to improve the environmental monitoring, reporting and data sharing in the Central Asian countries and in the region as a whole, and will contribute to strengthening links and partnerships between the respective Central Asian and EU institutions. Considering that FLERMONECA initiative is not bound to any specific geographic areas or forest types and is more focused on the problems that are valid for all CA countries, the proposed project will utilize the produced results valid for Kazakhstan and targeted forest areas. UNDP maintains good regular consultations with GIZ and already participates in regional meetings and workshops that are being organized by this regional initiative and the new project may compliment significantly to the SFM approach that will be ground-truthed by the UNDP GEF project. In the course of the PPG the project proponents will get in touch with GIZ, Panthera and other institutions with relevant experience, aiming to develop effective activities for sustainable hunting, Saxaul forest management and Snow Leopard Conservation.

Trans-boundary cooperation for conservation of mountain forest biodiversity is already happening in some sporadic manner in Northern Tian-Shan (NABU and ACBK), while in Altay it proceeds in a more coordinated and targeted manner. The trans-boundary UNESCO nomination of Western Tian-Shan has been recently submitted. The “Alatay” Trans-boundary Biosphere Reserve was endorsed and UNESCO nomination is in the process of preparation with the support from the Man and Biosphere Committee. This project will contribute to setting trans-boundary conservation goals, management mechanisms, and planning joint actions by partners who currently focus only on their individual projects.

The project is further coordinated with the Snow Leopard camera trapping initiative in Almaty Reserve implemented by Kazakh National University in cooperation with British Experts from Cumbria University.

Kazakhstan benefited from a GEF project Conservation and Sustainable Use of the Biodiversity of the Kazakhstan Sector of the Altai-Sayan Ecoregion, implemented in 2007-2011. The project had a wide conservation focus, but it indeed benefited the Snow Leopard in the following way: It added or expanded protected areas in Snow Leopard habitat:

- Ontustyk Altay Zakaznik 197,623 ha – new PA
- ecological corridor of 379,800 ha connecting key SL habitats in Altay Sayan mountains
- Markakol Zapovednik expanded by 27,931 ha

In these PAs the project set up Snow Leopard monitoring systems (camera traps), equipped and trained protected area personnel for monitoring of threats and persecution of crime related to Snow Leopard and its prey. It also did an anti-poaching campaign and public awareness raising.

The current project focuses on different geographic areas of Snow Leopard habitat in Kazakhstan. Under Output 1.1.1 it creates protected capacities in site that have not been the focus of international assistance so far. In addition, learning from the past experience of protected area projects, the current project takes on a landscape approach, whereby on top of creating new protected areas, territorial plans of districts adjacent to PAs will also be revised (Output 1.1.2). Together with implementation of incentive-based community resource management scheme (Outcome 2.3) this addresses the threats to Snow Leopard that are emanating from outside the protected areas, which is a new approach that had not been addressed by any GEF work in the area so far. The links to the past Altay Sayan initiative in Kazakhstan will be clarified in further detail at the PPG stage.

In the implementation of the activities related to Snow Leopard conservation and management the project will build on the experience of parallel Global Snow Leopard project of the GEF, and will maintain exchange of information and experience with the national GEF Snow Leopard Projects funded by GEF in other countries of Central Asia<sup>17</sup>.

#### **A.6. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH NATIONAL STRATEGIES AND PLANS OR REPORTS AND ASSESSMENTS UNDER RELEVANT CONVENTIONS**

The project is an extension of 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 recommendations have been reflected in the project document, and they all have been adapted to the situation in Kazakhstan. By implementing these activities it will be possible to create conditions for preservation and increase of Snow Leopard population.

The project addresses some of the priorities of the National Action Program to Combat Desertification (NAPCD, 2002). The NAPCD envisions improvement of land planning, restoration of degraded rangelands and hayfields, restoring forests and developing economic mechanisms for ensuring more sustainable use of natural resources. The project addresses these priorities through various activities in the second component.

Being a party to the UN Convention on Biodiversity Conservation, Kazakhstan is taking actions to align the national biodiversity conservation planning with the latest resolutions of COP and regularly reports to the Secretariat through the National Biodiversity Communications. In 2013-2014 UNDP-GEF provided support to the Government to initiate a broad, open and participatory process of strategic planning for the next program cycle of the Government. As a result of this process the Forestry and Wildlife Committee has approved a Concept for Biodiversity Conservation and Sustainable Use (Concept) for the period 2015- 2022 supported with the detailed Action Plan.

The project stems from the baseline fact that Government of Kazakhstan has a national plan to proceed with expanding its protected areas system as confirmed by the Government Resolution #449, 15 October 2015 signed by the Prime Minister of the Republic of Kazakhstan. The GEF funding would allow for the expanded PA system to improve its efficiency and better integrate communities. With GEF support in the past projects, the Government expanded its PA estate in wetland, steppe and desert ecosystems, whereby not only the management of those newly created PAs has improved, but also those projects had positive repercussions in the form of raising the central government understanding and skills in the area of PA management and providing alternative financial schemes for

---

<sup>17</sup> While the focus of the project is on conservation of three types of important forest ecosystems, one of them is mountain forests and associated grasslands, which are home of Snow Leopard. Part of the project activities are oriented towards conservation and sustainable management of Snow Leopard's landscape.

engagement of communities in sustainable resource management at the boundaries or within the PAs. The proposed project fully complies with the national Biodiversity Concept and will enable its implementation.

The project directly supports the achievement of Aichi Target 12: By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained, and, through the landscape approach, it substantially contributes to the following Targets:

- Target 5: By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.
- Target 11: By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.
- Target 15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.


### **PART III: 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
Mr. T.Akhsambijev	Vice Minister, GEF OFP	Ministry of Energy	10 July 2015

#### **B. GEF AGENCY CERTIFICATION**

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for project identification and preparation under GEF-6.					
Agency Coordinator, name	Signature	Date	Project Contact Person	Telephone	Email Address
Adrianna Dinu UNDP-GEF Executive Coordinator		April 22, 2016	Maxim Vergeichik Regional Technical Advisor	+ 421 259 337 152	Maxim.vergeichik@undp.org

## Annex 1<sup>18</sup>

Preliminary list of indicators species to be used to measure the ecosystems' status and dynamics. In addition to listing the key IUCN species, the list includes non-threatened species which are easily monitored and also serve as indicators of the overall health of ecosystems. The list is subject to review and confirmation of baseline and target population values will be done at the PPG stage.

	<b>Floodplain forest</b>	<b>Saxaul Forest</b>	<b>Altai and Tien Shan Mountain Forests</b>
<b>Mammals</b>	Roedeer ( <i>Capreolus capreolus</i> ); Wild boar ( <i>Sus scrofa</i> ); Tolai hare ( <i>Lepus tolai</i> );  Badger ( <i>Meles meles</i> ); Eared hedgehog ( <i>Hemiechinus auritus</i> ).	<a href="#">Goitered gazelle</a> ( <i>Gazella subgutturosa</i> ); <a href="#">Great gerbil</a> ( <i>Rhombomys opimus</i> ); Tolai hare ( <i>Lepus tolai</i> ); <a href="#">Long-clawed ground squirrel</a> ( <i>Spermophilopsi leptodactylus</i> ); <a href="#">Lichtenstein's jerboa</a> ( <i>Jaculus lichtensteini</i> ).	Snow Leopard ( <i>Panthera Uncia</i> ) <a href="#">Ibex</a> ( <i>Capra sibirica</i> ); <a href="#">Common red fox</a> ( <i>Vulpes vulpes</i> ); <a href="#">Red deer</a> ( <i>Cervus elaphus</i> ); Roedeer ( <i>Capreolus capreolus</i> ); <a href="#">Brown bear</a> ( <i>Ursus arctos</i> ); Altai Squirrel ( <i>Sciurus vulgaris altaicus</i> ).
<b>Plants</b>	<i>Salix alba</i> ; <i>Salix songorica</i> ; <i>Salix wilhelmsiana</i> ; <i>Populus diversifolia</i> ; <i>Populus pruinosa</i> ; <i>Elaeagnus oxycarpa</i> ; <i>Tamarix ramosissima</i> .	<i>Haloxylon persicum</i> ; <i>Haloxylon aphyllum</i> ; <i>Arthrophytum balchaschense</i> ; <i>Salsola nitraria</i> ; <i>Tamarix ramosissima</i> .	<i>Lárix sibírca</i> ; <i>Pentaphylloides fruticosa</i> ; <i>Picea obovata</i> ; <i>Epilobium angustifolium</i> ; <i>Rósa laxa</i> . <i>Primus armeniaca</i> ; <i>Malus</i> ; <i>Rosa canina</i> ;
<b>Birds</b>	<a href="#">Azure tit</a> ( <i>Parus cyanus</i> ); <a href="#">Eastern stock dove</a> ( <i>Columba eversmanni</i> ); Yellow-Eyed Stock Dove ( <i>Columba eversmanni</i> ); <a href="#">White-winged woodpecker</a> ( <i>Dendrocopos leucopterus</i> ); <a href="#">Eastern turtle dove</a> ( <i>Streptopelia orientalis</i> ); <a href="#">Nightingale</a> ( <i>Oriental turtle dove</i> ) ( <i>Streptopelia orientalis</i> ); <a href="#">Nightingale</a> ( <i>Luscinia megarhynchos</i> ).	<a href="#">Desert finch</a> ( <i>Rhodospiza obsoleta</i> ); Turkestan Shrike ( <i>Lanius phoenicuroides</i> ); Desert Wheatear ( <i>Oenanthe deserti</i> ); <a href="#">Black-bellied sandgrouse</a> ( <i>Pterocles orientalis</i> ); <a href="#">Red-headed bunting</a> ( <i>Emberiza bruniceps</i> ).	<a href="#">Black kite</a> ( <i>Milvus migrans</i> ); <a href="#">Eastern turtle dove</a> ( <i>Streptopelia orientalis</i> ); <a href="#">Gray partridge</a> ( <i>Perdix perdix</i> ); <a href="#">Eastern turtle dove</a> ( <i>Streptopelia orientalis</i> ); <a href="#">Oriental turtle dove</a> ( <i>Streptopelia orientalis</i> ); <a href="#">Chaffinch</a> ( <i>Fringilla coelebs</i> ); <a href="#">Common rosefinch</a> ( <i>Carpodacus erythrurus</i> ).

<sup>18</sup> Developed and verified by a group of highly qualified scientists (ornithologist, V. Kovshar, Phd., mammologist, K. Plakhov, Phd., Florist, Dr. B. Sultanova and Florist, Academician N. Ogar.) and conservation specialists, using the latest data available in Kazakhstan. This will be refined at the PPG stage with inputs from other partners.

## Annex 2. Initial description of the Government part of the the cofinancing for the project

Two programs, (1) The Forestry Development Sub-Program of the Strategic Plan of the Ministry of Agriculture and (2) presently developed national long term forest sector development programme – 2030, are intended to replace the “ZHASYL DAMU” program which was completed in 2014. In particular, the first programme has passed through a technical and scientific council of the Committee of Forestry and Wildlife of the Ministry of Agriculture and is subject to be further officially submitted to the consideration of the Parliament of Kazakhstan in 2016. It is expected that the Parliament will enact it by the middle of 2016. The Forestry Development Sub-Program of the Strategic Plan of the Ministry of Agriculture stipulates allocation of budgetary resources exceeding US\$ 113.4 for forest and protected areas system. This is confirmed by the Government Resolution #449, 15 October 2015 issued by the Prime Minister of the Republic of Kazakhstan. While this is the key program related to the project, there is a number of other related ongoing inter-ministerial programs expected to be implemented between 2017 and 2022 with total amount of KZT 8,1 bln (USD 24 mln) directly related to supporting the forest and protected area systems in the targeted ecosystems. Possible co-financing from other partners and NGOs is certainly going to be pursued at the PPG stage, should the PIF be approved. A conservative estimate which sums only Government and local stakeholder initial co-funding for this project, is presented in annex table below.

	Budget line	Amount, thousand USD						Total:
		2017	2018	2019	2020	2021	2022	
Strategic Plan of Ministry of Agriculture of RK approved by Resolution of Government of RK (period of realization 2017-2022)								
1	Establishment of Tarbagatai National Park		529,4	582,2	582,2	582,2	291,1	2567,1
2	Nature conservation activities of Zhungar Alatau National Park	403,8	836,9	851,4	851,4	851,4	425,7	4220,6
3	Nature conservation activities of “Kolsai kolderi” National Park	273,5	550,5	553,8	553,8	553,8	276,9	2762,3
4	Nature conservation activities of Almaty Reserve	119,3	240,08	241,6	241,6	241,6	120,8	1204,98
5	Nature conservation activities of Charyn National park	149,8	301,3	303,1	303,1	303,1	151,5	1511,9
6	Aviation forest protection	7461,5	14923,1	14923,1	14923,1	14923,1	7461,5	74615,4
TOTAL:		8407,9	17381,28	17455,2	17455,2	17455,2	8727,5	86882,28
Local budget of the Akimat of Almaty region								
7	Nature conservation activities of Taldykorgan forest protection institution	119,8	244,1	245,5	248,5	250	125,7	1233,6

8	Nature conservation activities of Kaskelen forest protection institution	69,2	141,1	144,3	144,9	146,4	73,9	719,8
9	Nature conservation activities of Bakanas forest protection institution	111,5	226,0	229,3	230,8	232,2	116,8	1146,6
10	Pasture improvement in Kerbulak, Uygur and Balkhash regions of Almaty oblast	284,0	568	568	568	-	-	1988
<b>TOTAL:</b>		<b>584,5</b>	<b>1179,2</b>	<b>1187,1</b>	<b>1192,2</b>	<b>628,6</b>	<b>316,4</b>	<b>5088</b>
<b>GRAND TOTAL:</b>		<b>8992,4</b>	<b>18560,48</b>	<b>18642,3</b>	<b>18647,4</b>	<b>18083,8</b>	<b>9043,9</b>	<b>91970,28</b>