



GEF-6 PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND: GEF Trust Fund

PART I: PROJECT INFORMATION

Project Title:	Sustainable natural resource and forest management in key mountainous areas important for globally significant biodiversity		
Country:	Uzbekistan	GEF Project ID:	8031
GEF Agency:	UNDP	GEF Agency Project ID:	5438
Other Executing Partner(s):	State Committee on Nature Protection	Submission Date:	March 26, 2015
GEF Focal Area (s):	Multi-focal area	Project Duration (mths):	60
Integrated approach pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/> Corporate Program: SGP <input type="checkbox"/>		
Name of parent program:	CACILM, Global Snow Leopard and Ecosystem Conservation Program		Agency fee (\$): 589,937

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(\$)
BD-1 Program 2	GEFTF	1,469,000	8,300,000
LD-3 Program 4	GEFTF	2,670,909	8,500,000
SFM-1	GEFTF	1,019,000	4,100,000
SFM-2	GEFTF	1,050,954	3,100,000
Total Project Cost		6,209,863	24,000,000

B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: To promote landscape approach to conservation and sustainable use of land and forest resources in mountainous ecosystems important for globally important biodiversity while supporting sustainable local development						
Project Component	Financing Type	Project Outcomes ¹	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Co-financing
<i>Component 1</i> Landscape level planning and management decision-making for Pamir Alay and Tian Shan mountain landscape	TA	<i>Outcome 1.1:</i> Enhanced mechanisms for cross-sector integrated planning of sustainable natural resources management at district level to improve vegetation and forest cover, decrease LD and preserve habitat of BD	1.1.1: Up-to-date inventory, classification and map of all types of lands in Pamir Alay and Tian Shan (>9 mln ha), with proposed optimal (economy-environment) land use arrangements for hot-spot areas (areas of multiple demands of conflict between environmental and economic priorities) 1.1.2: Detailed community-level integrated land use plans in districts with highest biodiversity and most of the LD and forest degradation problems, total area 70,000 ha ha) have been elaborated by district authorities, communities and local stakeholders, and are being effectively applied 1.1.3: Central Government, communities and other district level stakeholders receive training in the development and implementation of integrated land use planning and have knowledge/ experience necessary to continue the application of integrated land use planning	GEF TF	430,100	1,000,000

¹ For the impact indicators of the GEF increment under each Outcome please refer to Table A.1.4 in the text.

Project Objective: To promote landscape approach to conservation and sustainable use of land and forest resources in mountainous ecosystems important for globally important biodiversity while supporting sustainable local development						
Project Component	Financing Type	Project Outcomes ¹	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Co-financing
			in the long term.			
Component 2. Strengthening key biodiversity areas within Pamir Alay and Tian Shan landscape	INV	<p><i>Outcome 2.1</i> Improved protection of internationally important species (Egyptian Vulture, Black Vulture, Snow Leopard, Argali, Siberian Ibex, <i>Marmota menzbieri</i>, Pistachio) and integrity and connectivity of their habitat within official Protected Area System</p> <p><i>Outcome 2.2</i> Strengthened management effectiveness and sustainability of key existing protected areas (as measured by the METT, baseline and target to be established at PPG)</p>	<p>2.1.1 Protected Area System expanded by 225,000 ha in transboundary landscape of Western Tian Shan and Pamir Alay² (justification of geographic scope provided further in the text):</p> <ul style="list-style-type: none"> PA zoning defined, boundaries delineated; Forest management regimes within the new PAs (23,000 ha) revised for compatibility with biodiversity and SLM principles; PA infrastructure, equipment, and human resources put in place capable to manage the PAs; <p>2.1.2 Migration corridor between isolated Bashkizylsay and Maidantal sites of the Chatkal reserve identified and designated; species management plans drafted and under implementation; land and forest use regime in them regulated accordingly</p> <p>2.2.1 Management and business plans for existing PAs supporting globally threatened biodiversity (Chatkal, Gissar, Zaamin and Ugamchatkal, 718,140 ha) are in place and under implementation, including zoning arrangements; patrolling, enforcement and surveillance systems of existing PAs strengthened; local PA Management Boards (joint with local communities) operationalized to plan activities on Snow Leopard (SL) conservation and non-deterioration of its habitat</p> <p>2.2.2 Vocational training for 150 PA inspectors, managers, central Government, and forestry staff on PA financial planning, SFM, revenue generation, Snow Leopard conservation and monitoring, to ensure that they can effectively fulfill management objectives aiming at higher overall sustainability of the PA system.</p>	GEFT F	2,004,055	9,400,000

² The justification of geographic scope is provided further in the text.

Project Objective: To promote landscape approach to conservation and sustainable use of land and forest resources in mountainous ecosystems important for globally important biodiversity while supporting sustainable local development						
Project Component	Financing Type	Project Outcomes ¹	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Co-financing
<i>Component 3.</i> Sustainable economic development incentives for communities to reverse environmental degradation in Tian Shan and Pamir Alay Landscape	INV	<p><i>Outcome 3.1</i> Reduced degradation of mountain forests at an area of 29,500 ha around Chatkal, Gissar, Zaamin and Ugamchatkal areas through shifting from unsustainable to sustainable forest management practices</p> <p><i>Outcome 3.2.</i> Reduced degradation of mountainous pastures in wider landscape at 300,000 ha</p> <p>Degradation reduction baseline and target values will be identified in PMAT and SFM Tracking Tools during the PPG stage.</p>	<p>3.1.1 Incentive-based collaborative forest partnerships³ between authorities and local communities defining 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).</p> <p>3.2.1 Incentive-based community pasture management plans⁴ designed based on geobotanic studies, economic and ecosystem service assessment in collaboration between Communities, Local Administrations and PAs (where relevant). Sustainable pasture management regimes designed and implemented (timing, mode, geography, density of grazing, options of stable keeping livestock systems and procurement of fodder.).</p>	GEFT F	1,950,000	10,457,143
<i>Component 4.</i> Promoting regional and global cooperation in combating poaching, advancing monitoring and research on key species, setting the scene for up-scaling	TA	<p><i>Outcome 4.1</i> By 2020 Uzbekistan adopts international standards for anti-poaching, monitoring, research and law enforcement in Snow Leopard (SL) conservation and is engaged in at least one cross-border SL conservation agreement</p>	<p>4.1.1 Targeted support for joint management of Tupalang area (with Tajikistan)</p> <p>4.1.2 Community based wildlife management and awareness raising and training campaigns at community level,</p> <p>4.1.3 System for long-term regular monitoring of Snow Leopard in Uzbekistan put in place applying internationally certified quality standards (GIS-based).</p> <p>Efficient crime information exchange and law enforcement system: MIST/SMART model for information exchange for border guard and police units</p> <p>- Program on training sniffer dogs</p>	GEFT F	1,530,000	2,000,000

³ Please see the main text for details.

⁴ Please see the main text for details.

Project Objective: To promote landscape approach to conservation and sustainable use of land and forest resources in mountainous ecosystems important for globally important biodiversity while supporting sustainable local development					
Project Component	Financing Type	Project Outcomes ¹	Project Outputs	Trust Fund	(in \$)
					GEF Project Financing Co-financing
			- 80 border guard, foresters, customs, and police officers trained in identification and prosecution of wildlife crime 4.1.3 Targeted support provided to participation of Uzbekistan in the Global GSLCP process.		
Subtotal					5,914,155 22,857,143
Project management cost					295,708 1,142,857
Total project costs					6,209,863 24,000,000

C. INDICATIVE SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND TYPE IF AVAILABLE, (\$)

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
Recipient Government	State Committee for Nature Protection	Grants	15,300,000
		In-kind	700,000
Recipient Government	Republican Nature Protection Fund	In-kind	5,000,000
GEF Agency	UNDP	Grants	300,000
CSO	Panthera	Grants	500,000
Recipient Government	Forestry Department of the Ministry of Agriculture and Water Resources	Grants	2,200,000
Total Co-financing			24,000,000

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	Uzbekistan		SFM	2,069,954	196,646	2,266,600
UNDP	GEF	Uzbekistan	Biodiversity		1,469,000	139,555	1,608,555
UNDP	GEF	Uzbekistan	Land Degradation		2,670,909	253,736	2,924,645
Total GEF resources					6,209,863	589,937	6,799,800

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

GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in \$)		
					PPG (a)	Agency Fee (b)	Total c = a + b
UNDP	GEFTF	Uzbekistan		SFM	53,333	5,067	58,400
UNDP	GEFTF	Uzbekistan	Biodiversity		37,849	3,596	41,445
UNDP	GEFTF	Uzbekistan	Land Degradation		68,817	6,538	75,355
Total PPG Amount					160,000	15,200	175,200

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	982,640 ha

2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	329,500 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 freshwater basins;	(Enter number of freshwater basins)
	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	(Enter percent of fisheries, by volume)
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO _{2e} mitigated (include both direct and indirect)	1,594,845 tCO ₂ -eq/10y (total: sequestered+avoided in soil and above ground biomass)***
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)

* The project creates new and strengthens PAs at a total area of 943,140 (which includes designation of 23,000 ha of forests important for biodiversity within them) and in Component II (Output 2.1.1) introduces models of community partnership in the forest buffer zones at 29,500 ha. The direct conservation effect therefore is 982,640 ha.

** Through Component II the project will ensure adoption of SLM practices at 300,000 ha of pastures outside PAs. The forests under collaborative community forest use partnership (Output 2.1.1: 29,500 ha) are further added.

*** The carbon benefits includes benefits from improved forest management at 23,000 ha (Component 1), avoided the loss of forests (resulting from Output 2.1.1); and improved status of grasslands at 300,000 ha (Outcome 2.2.). The calculations are based on the FAO Exact model. Detailed calculations spreadsheets are available on request.

A. PROJECT OVERVIEW

A.1. PROJECT DESCRIPTION

A.1.1 Global environmental problems, root causes and drivers of environmental degradation

Summary of environmental values of the grassland and forest mountainous ecosystems

Uzbekistan hosts the western-most outliers of the Western Tian Shan and Pamir Alay mountains. These mountain systems span across about 9,600,000 ha and account for approximately 21% of the country's area. The Tian Shan and Alay ranges act as a bridge connecting fauna and flora of the Himalayas and Hindu Kush across Pamir with biota of Siberia, and across Dzungar Ala-Tau and Altay with biota of Mongolia. Western Tian Shan is one of the World's 200 Ecoregions as defined by WWF. The mountainous forests of Uzbekistan are home to 15 nesting bird-of-prey species of conservation concern (10% of all National Red List bird species), including the Egyptian Vulture (EN), Black Vulture (NT), Bearded Vulture (NT), Black Stork, Griffon Vulture, Black Kite, Golden Eagle, Booted Eagle. Mountains of Uzbekistan shelter some of the genetically important wild fruit-and-nut forests. The forests of Western Tian Shan of Uzbekistan host wild relatives of fruit and nut species including Pistachio, as well as IUCN-listed Persian Walnut (*Juglans regia*) and Sievers Apples. The mountainous ecosystems are home of the Snow Leopard (*Uncia uncia*) and provide ideal habitat for the endangered Snow Leopard and its key prey Argali (NT) and Siberian Ibex (*Capra sibirica*, LC). The Uzbekistan's part of Western Tian Shan and Pamir Alay is home to region's endemic IUCN-VU marmot species *Marmota menzbieri* which occurs only in Western Tian. The *Ovis ammon karelini* subspecies of Argali is found here. IUCN listed *Vormela peregusna* and *Vipera (pelias) renardi (ursinii) tienshanica* is found here. The impressive

total species diversity of Tian Shan and Pamir Alay, together with abundance of endemics and high altitudinal variations define high rate of species turnover across habitats (high β -diversity).

There are over 300,000 ha of mountainous forests in Uzbekistan altogether. Juniper (*Juniperus seravshanica*, *J. semiglobosa*, *J. turkestanica*), wild fruit and forests, rare Hawthorn and Mountain Tugai forests are all found here. Juniper forests constitute 70% of all forests. Forests here do not form massifs rather are mixed with meadows and shrubs. Most of them are found in the valleys and lower and middle altitude ranges. In the middle and upper ranges they are interspersed with alpine meadows and high altitude pastures; in the lower ranges forests border on mountainous steppes and savannas. The Tugai forest and shrub ecosystems have the highest number of species and highest level of biodiversity. Forests play an important role in water regulation and soil protection in the mountains. They are critically important for the protection of productive land from mud-slides. The birch and poplar forests as well as *Myricaria* shrub communities at higher altitudes (above 3,000 m) serve as buffers for grassland ecosystems which are home of Snow Leopard. All mountainous forests are important for the above-mentioned threatened birds-of-prey.

The symbol of Uzbekistan's mountainous areas biodiversity is the Snow Leopard. In Uzbekistan Snow leopards' range is 1.4 mln hectares. A hundred years ago, the Snow Leopard used to extensively populate Zeravshansky mountain range and Western Tian Shan and Pamir Alay mountains in Uzbekistan. However, by 1980 its presence in Uzbekistan fell to the extent that it came to be believed to be lost. Yet, the latest research confirmed presence of 80-120 individuals, over the range of 1,000,000 – 1,400,000 hectares in Western Tian Shan (Ugam, Pskem, Chatkal ranges) and Pamir Alay (Zeravshan, Turkestan, Gissar ranges). Given that Uzbekistan is the periphery of the range of SL (where it is most vulnerable), it is important to remove threats to Snow Leopard in high altitude grasslands and forests.

The mountainous landscapes of Uzbekistan represent inseparable mosaics of forest, grassland and water ecosystems, that together function and deliver ecosystem services for local communities, unless disturbed. Over the course of the past 15 years, the mountainous landscapes of Uzbekistan have suffered from continued degradation of grasslands and forests.

Key drivers of environmental degradation which are the focus of the project

Unsustainable grazing pressure

The increasing population in the Western Tian Shan and Pamir Alay mountains depends to a large extent on extensive grazing. Over 300,000 ha of mountain alpine meadows are used as pastures by local communities in Western Tian Shan and Pamir Alay. While land in valleys and mountain foothills has been plowed for arable crops, high mountainous alpine meadows have remained basically the only areas which communities could use as pastures. Because the population density is increasing and the total area of alpine meadows is low, this quickly results in over 2 times exceeding of the carrying capacity on grassland vegetation and soil, and high disturbance for biodiversity. According to reports of the GEF Small Grants Program and local environmental NGOs, in highly grazed areas competition with livestock for forage is one of the most widespread causes of the decline of the populations of birds-of-prey and ungulate species. Reduced populations of ungulates, in turn, bring about a decline in the populations of snow leopards.

Apart from the disturbance for biodiversity, overgrazing produces land degradation consequences (erosion, loss of vegetation cover and soil productivity). The overgrazing of mountainous grasslands is currently at its highest level: over 60% of pastures in Western Tian and Pamir Alay, those closest to human settlements, are eroded and the quality of pastures has declined by 4 times compared to the 1980s levels. The pressure on pastures is intensified by the declining practice of moving livestock between summer and winter pastures; communities increasingly let cattle graze in close vicinity of settlements, which provokes severe vegetation degradation, soil decomposition, wind and water erosion. Overgrazing is a second after forest loss, contributor to the mud-slide problem: according to Government reports, in these areas, mud-slides annually wash away 525 tons of organic matter per ha, affecting water quality, crop quality downstream, fertility of natural pastures and hay-fields.

According to Ivan Maltsev (2014), the current unsustainable trend of cattle grazing is responsible for over 90% of the overall anthropogenic load on the mountain ecosystems, in many cases with irreversible consequences. By his forecast, the current trend can turn these grasslands into deserts already in the next 4 years.

Unregulated use of forests for cattle grazing

The second threat concerns the forest ecosystems which adjoin the grasslands and play a critical role in maiming the overall resilience of high mountain landscape of Uzbekistan. In the course of the past 10 years, much of the degradation of the Juniper and wild fruit and nut forests has been connected to the fact that communities have allowed their cattle in an uncontrolled way to graze. In the forests immediately adjoining the Chatkal reserve, environmental inspectors, using

photo-traps, have year after year recorded numerous cases of grazing of cows and sometimes horses, either by individual animals or groups of 2-4 cows. The cattle belong to private farmers living in the neighboring villages 3-4 km from the border of the reserve. In 2012 10 such cases were recorded, in 2011 14 cases, etc. Based on the most recent data by Ivan Maltsev (2014), the forests along the Pskem ridge in Western Tian Shan are grazed irregularly by over 106,000 individuals of livestock (primarily cows), coming up from the Fergana valley as well as the private livestock of local people from Pskem region (Karabulak, Pskem and other villages). The cattle destroys the undergrowth, further undermines the slow natural regeneration rates of these forests (especially Juniper forests), and causes disturbance to mammals and nesting birds. The resulting deforestation provokes mudslides activities and soil erosion. In areas close to settlements, and in immediate vicinity of many of the protected areas in Western Tian Shan, natural forest regeneration has almost dropped to zero.

High dependence of communities on forests for energy needs

Degradation of shrub and forest ecosystems has been gaining pace recently, especially in the Juniper, broad leaved and shrub ecosystems and parcels of genetically important fruit and nut forests in Pamir Alay and Tian Shan, primarily because these forests are not protected and local communities widely cut them for energy use. Juniper forests have traditionally been cut and converted into charcoal. Over 80% of Juniper forests have been destroyed over the past 300 years, primarily by local communities to satisfy their energy needs, and the trend of unsustainable forest use is on the rise. This brings about negative successions, whereby Juniper forests (which naturally have a very slow regeneration rate) were replaced by grassy and shrub vegetation. The degradation of forests lower latitudes has been proven to be connected to the increased occurrence of mud-slides. In the past 5 years, mudslides have increasingly been noted to happen not only in springs and autumns but also in the summer. Mudslides render damage to downstream ecosystems, destroy infrastructure, impair water quality, and deliver huge agricultural losses as they lower the productivity of soil.

Poaching

Direct killing of Snow Leopards by poachers is currently believed to be very uncommon. In the past, snow leopards were hunted for the skin highly prized for its beauty and warmth, and as a status trophy. Killing a snow leopard was considered prestigious and demonstrated the hunter's skills. In the Soviet times, red-listing and hunting bans were introduced. This diminished by failed to completely prevent hunting incidents. The recent international engagement in the protection of Snow Leopard has further reduced this activity. The international demand for the derivatives of Snow Leopard has recently been reported to be much lower than in the Soviet times. At the same time, there is very limited data and statistics of direct illegal poaching on Snow Leopard. One known report of a skin on sale for 1,000 USD in Burichmulla village was recorded in 2004 (Nuridzhanov, pers. comm.). The last case of capturing a poacher with a Snow Leopard skin was in 2008 (Gosbiocontrol data).

At the same time, **retaliation kills** of snow leopards perpetrated by local residents after predation events have been corroborated by questionnaire data. There is a widespread belief among local communities that snow leopards greatly impact the domestic animal population. In reality, this is greatly exaggerated, and snow leopards attack domestic livestock only occasionally. Poor construction of summer corrals contributes to this problem, because as a rule they are easy to penetrate (low walls, no roof), but at the same time prevent livestock from escaping. In summer, the herds are often left unguarded in the daytime, or guarded by children, who can't always protect the animals. In the winter snow leopards may penetrate pens through roofs covered with reeds.

Decreases in prey, mainly **wild ungulates**, represents perhaps even more significant threat to the snow leopards. There are Government-established annual norms of legal hunting on ungulates, but in many cases these norms are exceeded for either subsistence or sport hunting. The target species for this type of hunt are ungulates (primarily ibex and boar) and marmots. Government-enacted security measures such as limiting travel and tourism in mountain border regions, and the ban on rifle possession by civilians, are intended to stabilize or increase wild ungulate numbers. However, low quality of life in the remote mountain villages and loose law enforcement in cases of illegal hunting, result in increased poaching by local residents, hunting for food and skins, and also for medicinal properties in the case of marmots. Local residents are not interested in the preservation of prey species. Residents of remote villages frequently possess very limited understanding of environmental laws, don't know about hunting licenses, and poorly understand the objectives of biodiversity conservation. Wildlife is perceived as anyone's free, unlimited resource. People are not concerned with its sustainable use because they have short-term goals.

A.1.2 Baseline scenario and associated baseline projects

A National Forestry Plan was developed in 2009, the first stage of which plans to make an inventory of forestry resources existing in the country. Based on the results of the inventory the second stage of the plan includes revision of

institutional, financial and policy instruments necessary for sustainable management of forest resources. There is clearly therefore an increasing government awareness of the economic, food security and environmental significance of forest use, and a commitment to addressing this. The plan is managed by the Forestry Department of the Ministry of Agriculture and Water Resources of the Republic of Uzbekistan (annual budget 7.8 mln USD).

The other important baseline element of this project is the six-year *National Strategy and Action Plan for the Conservation of Snow Leopard in Uzbekistan, 2014 – 2020* (current budget approximately \$300,000). The key objective is to prevent the decline of the Snow Leopard population in the country. The plan defines the following critical areas for intervention: (1) strengthening existing Protected Areas, (2) curbing illegal crime, (3) research on human-wildlife conflict, (4) engagement of local communities in SL conservation, (5) transboundary cooperation, as well as monitoring and, PR. While the priorities have been clearly defined, funding to implement the Strategy has remained very small, and this project responds to the Government of Uzbekistan's appeal to the international community for support in its implementation.

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 funded project, but rather a broad program providing a framework for cooperation, it unites Governments, UN Agencies, NGOs and Researchers 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 investment of the country into sustainable land management activities amount annually to about 660 mln USD. This includes *primarily* irrigated and rain-fed crop agriculture support, and soil fertility improvement techniques. While important in terms of linkages to the legislative process in the agricultural sector, its primary focus is on arable land. The country has a dense network of micro-crediting associations and local banks giving microcredit for agriculture. The proposed project complements this baseline program with initiatives focusing on sustainable use of rangelands. For the alternative livelihoods program, the project will implement a feasibility assessment at the PPG stage and select the most appropriate operator to work with.

These initiatives in the baseline scenario are significant insofar as they provide basic support in the Western Tian Shan and Pamir Alay and a framework for socio-economic development for local communities. However, the territorial coverage of protected areas and buffer zones remains inadequate from a conservation perspective and local communities continue to pursue biodiversity-incompatible livelihoods that undermine conservation efforts. The summary of the scenarios with and without the GEF investment is provided in a table in the section on Incremental Cost Reasoning.

Planned Government spending on *Protected Areas* has been estimated at over USD 4,000,000 over the four-year duration of the proposed project, which represents the national investment in the PA system as a whole. This financing for PAs comes from the state budget. Over 75% of the funding is allocated to support protected area staff; the remainder supports basic PA infrastructure, and limited research activities. The baseline funding for protected areas in Western Tian Shan and Pamir Alay amounts to approximately USD 1.2 million over the four-year duration of the project, which covers salaries, basic infrastructure, as well as limited nature tourism. Financing of the awareness raising and public relations at PAs in Western Tian Shan will amount to approximately USD 0.6 million over the project duration.

The current protected area system of Uzbekistan consists of 22 PAs covering 4.9% of the country. This includes a biosphere reserve, nine strict reserves (where no economic activities are allowed), two national parks (which have strict conservation zones as well as zones with limited agricultural, touristic and resource harvesting activities), and nine regulated reserves (often without administration units; a wider menu of economic activities is allowed compared to national parks). PAs fall under the jurisdiction of the State Committee for Nature Protection of the Republic of Uzbekistan. Four out of nine strict reserves (Chatkal, Gissar, Zaamin and Kitab) and two national parks are located in the Western Tian Shan and Pamir Altay mountainous habitat of Snow Leopard. The UNDP-GEF project Strengthening Sustainability of National Protected Areas System created a "Program of creation and expansion of network of protected natural areas in Republic of Uzbekistan for the period of 2014-2023" which is currently being integrated into the NBSAP, and developed key policies underpinning the institutional streamlining and financial sustainability of the PA system.

The abovementioned UNDP-GEF project created a single template and system for management and business planning for protected areas, but due to its small size (MSP), it managed to cover the policy gaps for the PA system without testing how the system works in practice. The Final Evaluation acknowledged that "given that it remained an MSP, the project developed strategies or plans but did not implement them". The capacity of the PA system remains low,

enforcement and technical surveillance capacities for conservation of such signature species as Snow Leopard, are still weak. Furthermore, one of the key weaknesses of the current PA system is that the size of the existing sites is too small to provide adequate coverage for the spatial range of threatened species, most notably the snow leopard and Ibex. An optimal size of a well protected area for Snow Leopard and its prey (i.e. a core area with buffers and corridors with limited economic use) in the mountains of Uzbekistan should be around 200,000 ha; while currently the area of the largest strict reserve (Gissar) is 80,986 ha. While the PA system in Western Tian Shan and Pamir Alay formally covers 65% of the Snow Leopard range, effective protection with minimum threats is enabled only in the strict reserves; this is approximately just 20% of the SL range. National parks make up a further 45% of the range and indeed have larger areas; however, the zoning arrangements and land use regimes in the economic zones do not match well the requirements of SL and its prey. The separation of the management zone from the core zone in several national parks has not been done properly. The management regime in the zones often does not reflect the actual state of biodiversity and threats. In some reserves (e.g. Chatkal) the core areas are disconnected and this fragmentation creates high disturbance for Snow Leopard and its prey. Where the buffer zone starts and where it ends is indiscernible, leading to multiple abuse of land (overgrazing, forest logging). There are currently no corridors that are needed for effective protection of such species as Snow Leopard. Chatkal and Gissar reserves, Ugam-Chatkal National Park are annually losing area due to infringement of cattle and resulting high rates of vegetation loss. Since most of the PAs are located along the state border, a large border guard contingent is present in most of the PAs, yet there has been little coordination or training for them in how to minimize disturbance of Snow Leopard and its prey during regular service and military trainings. Transboundary cooperation in Protected Area management with Tajikistan is reduced to ad hoc contacts between selected scientists. The plan for the establishment of the Tupalang protected area needs to be coordinated with Tajikistan, given that this landscape is transboundary. It requires joint monitoring, research and joint conservation planning. Given that this is a new PA, the capacities for this transboundary work are yet to be created.

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

Long-term solution: The long-term solution rests in a holistic landscape approach to sustainable management of forest and grassland resources in mountainous landscapes in co-existence of biodiversity with local development, as well as sustainable management of land and forest resources to balance the BD with the LD and SFM objectives at this macro-level. The three components proposed by this project have been designed to handle the drivers of degradation within the available GEF and co-financing framework.

Component I aims to set the scene for landscape level planning and decision making. In order to undertake effective planning and make valid decisions on reversing the drivers of degradation, it is first necessary to know what land resources and potentials exist, and what current use is. The project will, as a first step, develop an overall inventory and map of all lands in Pamir Alay and Tian Shan, identify areas where the current economic demands come to conflict with environmental values and develop integrated environmental and economic studies resulting in proposal of changes to land use. The project will then work with communities in districts with highest biodiversity values and most of the LD and forest degradation problems to develop integrated land use plans. These area (tentative, pending feasibility study at PPG) are: Pskem ridge: Chorolma river (5000 ha); Oigang river, left stream (20,000 ha); Chatkal ridge: Akbulak river (25,000 ha), Kyzyl-Nura and Karakush mountains region (15,000 ha); Gissar ridge: Estern Igrisu river (5,000 ha); the total area is 70,000 ha. The Integrated Land Use and Forestry Planning (ILUP) will serve as a mechanism for making comprehensive decisions about the use of land and natural resources. It sets the coordinated management direction for future uses of land and resources and allows for the evaluation of the success of management activities over time. The development and initial implementation of the integrated land and forest use management plans will involve, in brief: identification of the best integrated land use options based on multiple criteria (economic, social and environmental) and the wider Oblast/national planning context; identification of the districts long term planning goal and mid-term objectives; and development of practical plan of actions (including responsibilities, timing, indicators of progress, financing). These plans will consider PA management, buffer zones and corridors, changing regimes of pasture and forest use and will incorporate the best practices being replicated in the districts as part of efforts to reverse the environmental degradation identified in the first part of this document. In order to ensure that the integrated land use planning is a locally driven process, and that these plans have full ownership by all the district level stakeholders, the project will first undertake a process of building understanding about the benefits such planning can bring and the best means and approaches for carrying it out. In particular this will involve the introduction of participatory approaches new to local district authorities that will better ensure full participation of key stakeholders and public. These include bottom-up land use planning processes that directly involve actual land users in the process of defining, within the realistic context of the district and the national planning environment, mid to long term land use options and objectives and ensure that their inputs, agreement and role in implementation is clearly defined and transparent.

The project will build the capacities of Central Government, regional, district stakeholders and communities through regional workshops dedicated to removal of threats in pastures and forests and integrated land and pasture management. The workshops will also be attended and supported by key national actors from GKZ. The guidelines and replication materials will be fed into the long term technical and vocational training reforms which form a key aspect of the project capacity building efforts (to be elaborated in further detail at the PPG stage). Conservatively, the project aims to directly build the awareness and practical capacity of over 100 key stakeholders from other districts and the provincial (oblast), enabling them to be involved in the design and implementation of integrated land use plans and sustainable land and forest management practices.

Component II is focusing on areas of highest biodiversity value. Based on the results of the first Outcome which will provide the inventory and map of the whole landscape, Component II focuses on strengthening the management effectiveness of areas within the landscape that are critical to be preserved as habitat of globally important species. This component will help to improve the coverage and effectiveness of protection of IUCN species in Western Tian Shan and Pamir Alay (birds of prey and primarily Snow Leopard and its prey species), as well as genetically important wild fruit and nut forests. Two new National Parks have been proposed, *Pskem* and *Tupalang*⁵, to be confirmed at the PPG stage. Both sites are known to be important for the birds-of-prey and SL. Technical assistance and financial support will be provided for designing the PAs (including assessment of status of forest and grassland ecosystems, conservation priorities e.g. identification of threatened areas, zoning, wildlife movement patterns), management planning (e.g., development of threat-reduction activities), revising forest use regimes, and development and implementation of a biological system of monitoring and reporting. At least 23,000 ha of forests are expected to be assigned a conservation category as part of PA designation, releasing the logging and disturbance pressure on forests. Once the PAs are established, management plans will be prepared based on baseline monitoring of the PA territory. The project will provide support to the administration of PA for developing the Management Plan. The Management Plan will be approved by Government.

In the 4 existing PAs (*Chatkal*, *Gissar*, *Zaamin* and *Ugamchatkal*)⁶, which are most important for the SL, greater emphasis will be placed on local community involvement by providing a forum for stakeholder participation through a local PA boards. Procedures and modalities will be put in place promoting mutual benefits in terms of protection and sustainable use of resources and this experience is promising for enhancing community participation in PA management under this component, and in management of buffer zones and corridors under component 2. The project will also support revision of management plans and research and monitoring of Snow Leopard.

The surveillance and enforcement systems in the existing PAs will be strengthened by establishing and equipping patrol groups with means for surveillance, interception, and prosecution, in order to ensure adequate enforcement. This will be achieved through the local PA board whose main role will be to make decisions on further development of the PA as well as improve cooperation with local self-governance bodies on sustainable development and the formation of joint ranger groups to enforce anti-poaching, resource use regulations, and monitoring of species.

Vocational training for the foresters and PA staff will be developed so that they can effectively fulfill management objectives. Building on the experience of some other countries participating in the GSLECP and international best practices, a training program for PA staff will be specifically designed covering all aspects of PA operations specific to mountain ecosystems, ensuring rangers and other field staff have the necessary competencies for planning, administration, conflict resolution, and enforcement. For example, training on enforcement is likely to include the following topics: monitoring, control and surveillance; basic methods of monitoring snow leopard and their food base; basic duties and obligations of rangers; sharing of monitoring, control and surveillance requirements with buffer zone communities.

Common to most Central Asian countries within the Snow Leopard range, corridors providing for wildlife passage to key habitats outside the protected area are lacking and buffer zones of national parks where they exist are not effectively managed to restrict biodiversity-incompatible uses. The status of locally migrating mammals depends on a landscape-level approach to conservation, combining strict conservation in the breeding/ nesting areas with sustainable use in the wildlife passage/ forage areas. A migration corridor between isolated Bashkizylsay and Maidantal sites of the Chatkal reserve will be identified and designated. The corridor is expected to be approximately 25-30 kilometers long and 5-7 kilometers wide, and will link the two parts of the reserve. Key steps for identification and legal establishment of the corridor will include: (i) defining the conservation objectives of the corridor; (ii) identifying criteria that the corridor must satisfy; (iii) assessing various land use options within the corridor; since the proposed buffer zones and wildlife corridor can overlap with territories being used by other land user such as shepherds, trophy

⁵ Exact boundaries and location will be confirmed at the PPG stage.

⁶ The selection of the existing PAs will be confirmed at the PPG stage, with corresponding feasibility studies and more detailed activity plans.

hunting companies, tourism companies, and mining companies, the project will undertake extensive consultations with these land users. Based on these consultations, agreements will be reached with land users on modified resource use in the buffer zones and corridor focused on sustainable economic activities, such as managed hunting areas, regulated grazing, and ecotourism. Only activities that do not have a negative impact on biodiversity and land and forest integrity will be allowed in the buffer zone and migration corridor. (iv) defining the boundaries; (v) drafting and adopting a normative legal act; and (vi) developing a financial sustainability assessment and strategy for landscape-level management efforts, including the potential for community-based eco-tourism, etc. The information needs for this output (maps, gap analysis, monitoring of target species for protection) will be met by Component I. A consultative process will be followed throughout. This will include an inception workshop to discuss the overall vision of the project and to discuss planned activities within the area. This will be followed by more focused planning workshops with stakeholders and decision makers at the oblast and rayon levels, including with land use planning agencies. Targeted workshops and meetings will also be held with local level stakeholders and focus groups (farmers, hunting area managers, board of elders, local self-governance bodies, NGOs, women's groups, etc.). At the conclusion of this process, a formal wildlife corridor will be ready for operation. The corridor will be approved by State Committee on Nature Conservation and managed by Chatkal Administration.

Expansion of the protected areas estate and improved management of the existing protected areas will make sure that areas critical for biodiversity are excluded from threats described in the “drivers of degradation section”.

All sites targeted by the project meet at least one of the Key Biodiversity Area criteria as defined by IUCN. They fall within either Gissaro-Alay WWF Global 200 Ecoregion (code PA0808

<https://www.worldwildlife.org/ecoregions/pa0808>) or the Western Tian Shan and Alay (code

PA0801 <https://www.worldwildlife.org/ecoregions/pa0801>). The table below provides further details on the site level:

PA	National Status	IUCN category	International Status	UNESCO WH	IBA	KBA Criteria
Chatkal	Strictly protected rerserve	Ia	Biosphere Reserve	UNESCO World Heritage submission under preparation	UZ026; UZ028.	A1 B1 B2 D1 D2 D3
Pskem (new proposed PA)	Strictly protected rerserve	Ia			UZ024	A1 B2 C
Ugam Chatkal	National Park with multiple zones	II			UZ024, UZ025	A1 B2 C
Gissar	Strictly protected reserve	Ia			UZ042	A1 B2 C
Zaamin	National Park with multiple zones	II			Under preparation	A1
Tupalang (newly proposed)	To be defined in the course of the project, most likely National Park	t.b.d. most likely II			Under preparation	A1

Component III is focusing on creating incentives for communities to shifting their current destructive modes of using forests and grasslands towards more sustainable options. This Outcome will be working in key grassland and forest hot-spot (conflict) areas inventorized in Component I. Within any landscape, there are two main types of areas – those critically important for environmental conservation and those which will continue to be used in economy. While

Component II tackles the key conservation areas with the landscape, Component III focuses on areas which will continue to stay in economic use.

As can be seen from the description of the drivers of degradation, the two main types of ecosystems suffering from degradation are forests and grasslands. The two Outcomes of this third Component respectively address the threats in forests and in grasslands.

The key to sustainable use of forests is in finding ways to manage the issues of unsustainable grazing in the forests and use of forests by communities for energy needs. The Small Grants Program of the GEF has 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 proposed by the project relies on a written agreement (contract) between the Government (Forestry Administration or Protected Area Administration) and local communities. By this agreement, the communities will be committed to sustainably manage a certain area of *Juniper*, wild fruit and nut forests (including disallowing cattle into the forest and strictly adhering to pre-scribed norms of removal of fire-wood) in compensation for regulated collection of certain volume of wild fruit and nuts and/or cultivating a certain area of land in the same catchment area but 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 irrigated land downstream or from regulated collection of fruit and nuts allowed by Government. The project will 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 sustainable nut and fruit harvesting and crop cultivation. 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). 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 will (1) promote community fuel wood planning and distribution accompanied by collaborative planning to meet fuel wood needs from either natural forest or planted forest; (2) promote biogas energy production. In collaboration with the GEF Small Grants Program, the project will help upscale the proliferation of the biogas production technologies in rural areas⁷. 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.

Tentatively, the project area for this Outcome has been pre-selected around Chatkal, Gissar, Zaamin and Ugamchatkal areas, and the total area of forests that can benefit by avoiding degradation exceeds 45,000 ha. The selection of the area is subject to a PPG feasibility analysis and might also be corrected as a result of Outcome I. The idea is that each agreement covers a certain small water catchment – an area from top of the mountain all the way down to the valley, where all ecosystems are closely interconnected (from high altitude grasslands, through forests, down to cropland areas and water streams in lowest altitudes). It has been demonstrated by the Small Grants Program that in such systems disruption of ecosystems up in grasslands and forest latitudes results not only in biodiversity loss, but in such land degradation phenomena as mudslides, erosion, etc. If successful, the mechanism can be well applied to the whole of 300,000 ha of high mountain forests, as well as to economic forests outside the scope of this project in Uzbekistan and Central Asia.

Under the second Outcome, the project will support communities in shifting towards sustainable use of mountainous pastures at 300,000 ha. As a starting point, an inventory of cattle and pasture use will be conducted in the project area. Based on the condition of pastures and their carrying capacity, pasture management plans will be developed jointly with communities. The plans will outline the condition of pasture resources and the most optimal density and timing of grazing for each pasture. The project will assist in pasture rotation planning so that communities can distribute cattle evenly throughout the area and with minimal overload on the soil and vegetation of grassland ecosystems. Long term

⁷ The GEF Small Grants Program has proven experience with piloting biogas boiler in rural forest areas, which this project is aiming to upscale. In the context of the Uzbekistan mountain forests, one cubic meter of biogas produces the same heating effect as 1.6 cubic meters of firewood. A rural household can operate a stand-alone biogas boiler producing from 2 up to 30 cubic meters of biogas per day (15 on average). Within a 6 month heating season, an average household running a biogas boiler can save 6 mature *Juniper* trees per year. This has extremely high replication effect both for Tian Shan and other areas in Uzbekistan. More detailed calculations of the economic and ecological parameters of this activity will be analyzed at the PPG stage. This will also be accompanied by analysis of other energy efficiency measures that can further release the pressure on forests, such as house insulation, energy efficient cooking and heating stoves.

pasture user rights for local populations will be promoted, alongside with collaborative pasture use such as pasture use commissions. Where cattle density is going to substantially exceed the carrying capacity (and thus farmers may face high foregone income if their herd density was reduced), the project will seek to incentivize farmers through offering an alternative of a stable livestock breeding system. The project will assist in the design of such systems, including assistance in decision-making about the switch from small to large cattle, associated technologies, procurement of fodder or incentives for own fodder production. Based on multiple pilot projects of the Small Grants Program the income from stable breeding systems can be several times higher than free grazing, provided that the initial business planning has been well prepared. The project will also carefully monitor the implementation of the sustainable pasture management regimes by farmers and work with the extension services to provide timely and effective advice to farmers on biodiversity and LD-friendly pasture management, and will develop an exit strategy to make sure the experience is integrated in pasture management throughout the rest of the landscape. By initial assessment, the project can reach out to over 40 farmers at 300,000 ha, aiming to reorient them towards such cattle management models (either sustainable free grazing based on rotation or stable breeding) which will help raise their income by at least 10%. Further development of this Outcome will be subject to a feasibility study at the PPG stage.

Component 4 will build the capacities of the Government, research and NGOs to adopt and implement new approaches to Snow Leopard anti-poaching, research and monitoring, as well as to support participation of Uzbekistan in the Global Snow Leopard and Ecosystem Conservation Program. Anti-poaching activities related to management of the prey species populations (likely mostly ibex) through for example development of “pride in Snow Leopard conservation” mentality among the rural communities and support of community-based wildlife management will be considered (pending a feasibility study at PPG)⁸. Further, the project will also organize a set of activities to improve the enforcement capacities of the protected area staff, border guard, customs and internal police officers with respect to wildlife crime. It will also promote technologies such as photo-traps. The project will further put in place a system for crime prevention and surveillance, including a possibility of using sniffer dogs. The biological system of monitoring and reporting will be put in place in Western Tian Shan, to identify and track the main indicators and flagship species, their habitat in the PA, and migration patterns. The project will also support a joint commission and joint scientific working group for the Tupalang area, which is bordering with Tajikistan.

A.1.4 Incremental cost reasoning and global environmental benefits

The project will add incremental value to the baseline programs relevant for the protected area system and land and forest use in Western Tian Shan and Pamir Alay in Uzbekistan, thereby generating the global environmental benefits presented in the table:

State of ecosystems under baseline	Summary of GEF scenario	Increment
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⁸ The PPG will consider feasibility for introducing a community-based wildlife management scheme in the targeted landscape as a means to stabilize populations of ungulates and marmots and avoid retaliation killings of the Snow Leopard. The aim of this approach is to offer revenue derived from tourist hunting to local people and their families, so that in exchange the communities refrain from poaching. Visiting hunters pay more for a trophy than the local poacher gets from just selling the meat, and the meat is mostly left with the communities anyway, as the foreign hunter only takes the trophy. Such schemes create local jobs for guides and camp staff. As a result, less game is killed, and wildlife populations grow. The PPG will consider the experience of Pakistan, Tajikistan as well as other countries (such as the Campfire Program in Zimbabwe) and if proved feasible will design corresponding activities to be implemented at the full stage of the project.

Biodiversity		
<p>Only basic support to existing PAs is available but insufficient to expand protection to Snow Leopard in Western Tian Shan and Pamir Alay. Pskem Reserve not fully operational. No integration of PAs in the wider landscape.</p> <p>About 17% of the currently unprotected alpine steppe ecosystems and 25% of the Juniper and wild fruit and nut forest ecosystems in Western Tian Shan in Uzbekistan are predicted to degrade in the next 10 years caused by uncontrolled arable farming, excessive grazing, poaching and unregulated logging.</p> <p>Populations of threatened birds-of-prey, mammals present in the Tian Shan landscape, Snow leopard (<i>Uncia uncia</i>), Sievers Apple forest (<i>Malus sieversii</i>, IUCN VU), Persian Walnut (<i>Juglans regia</i>), as well as Argali (<i>Ovis ammon</i>), as well as <i>Marmota menzbieri</i> and birds such as Barbary Falcon (<i>Falco pelegrinoides</i>), are likely to fall.</p>	<p>PA system in Western Tian Shan offers improved threatened species representation notably by improving habitat coverage of birds-of-prey, snow leopard and other endangered species. PA management units fully capacitated for effective management.</p> <p>Enhanced capacities of internal police, border guards and customs in identification and prosecution of wildlife crime,</p> <p>Compliance of economic resource-users with biodiversity standards is monitored and enforced in and around the newly established and existing PAs.</p>	<p>Increase in the PA system of Uzbekistan: by 2018 an additional 238,000 ha including area of Tupalang reserve (195,000 ha), Akbulak site (30,000) and migration corridor in Chatkal reserve (13,000 ha) added to it.</p> <p>Stability of populations of Snow Leopard, Argali, Egyptian Vulture (<i>baseline and target values will be accurately defined at PPG</i>).</p> <p>There is increased PA coverage of the range of endangered Snow Leopards in Western Tian Shan and Pamir Alay.</p> <p>International best practices in wildlife crime surveillance and Snow Leopard monitoring</p> <p>Management effectiveness of the existing (718,140 ha) and newly established PAs in Central Tian Shan is increased by 25% over the baseline (measured by METT).</p> <p>Removal of threats and better protection of globally threatened species listed in IUCN Red Data List - Snow leopard (<i>Uncia uncia</i>), Argali (<i>Ovis ammon</i>), and genetically important wild fruit and nut forests.</p> <p>The project results contribute to CBD PoWPA (expansion of PAs, integration of PAs in wider landscapes, and community engagement schemes).</p>
Sustainable Land Management		
<ul style="list-style-type: none"> - Mudslides frequency high not only in spring and autumn but also during summer - Overgrazed pastures: exceeding carrying capacity by 2 times resulting in increased erosion, mudslides, worsening of water quality and crop quality. - Infringement of cattle on forests - Absence of advanced practices on pasture management reconciled with wildlife requirements, - Poor agricultural land management near protected areas 	<ul style="list-style-type: none"> - Management of forests in higher altitudes ensure lower mud-slide occurrence - Shift sustainable pasture management in mountainous areas promoted through carefully planned rotational grazing and stable livestock systems and efficient fodder production; hay farming in support of intensive pastures established on appropriate lands to remove loads on natural meadows and fodders during the winter period; regeneration of the natural pasture covers using natural pasture seeds where needed. - Incentives for reducing pressures on pastures stimulated through micro-credit (<i>Activity 2.3.1</i>) 	<p>Competitive pressures between land uses in mountain steppe/pasture and forest landscapes reduced at 300,000 ha of productive lands:</p> <ul style="list-style-type: none"> - Decrease in mud-slide occurrence - Decrease in grazing pressure and improved condition of mountain meadow ecosystems, - Reduced infringement on Juniper forests, - Reduced human-wildlife conflict, - Improved vegetation cover, fodder productivity and pasture regeneration, - Improved pastoral livestock breeding system (baseline to

		<p>be determined at preparation stage)</p> <ul style="list-style-type: none"> - Increased incidence of SLM approaches applied by small-scale holders leading to soil and vegetation quality improvements - Innovative financing for SLM and biodiversity increased by 20 percent in targeted districts - Increased organic carbon content in agricultural soil by 470,250 tCO₂-eq/10y (<i>based on FAO Exact model</i>)
<p align="center">Sustainable Forest Management</p> <p>The Tian Shan and Pamir Alay mountains span over 9.6 mln hectares. The total area of forest within the landscape is just about 300,000 hectares. However, these forests are closely integrated into the landscape and play a critical role as habitat of biodiversity (birds of prey), genetic reserves (wild fruit and nuts) shelter for prey of flagship species such as Snow Leopard. It has been also demonstrated in the text the role that forests play in the maintaining the land integrity and the scale of Land Degradation problems that is triggered when these forests are used unsustainably. The project will have a positive impact on the condition of 52,500 ha of these forests. Namely, under Component I the project will, as part of the integrated land use planning, review and revise land use plans so that threats to forests are removed and further forest loss (caused by unsustainable grazing and excessive fire wood removal) is avoided within the larger landscape of Pamir Alay and Tian Shan. This is in line with the first program of the SFM-1 <i>Integrated land use planning to reduce pressure on high conservation value forests</i>. Under Component II, 23,000 ha of conservation-important forests will be moved under protection ensuring stability of globally threatened species on the one hand and reduction in land degradation phenomena (such as landslides) on the other hand. Under Component III, the project is working in economic landscape forests, aiming to improve ecosystem resilience within water catchments (where forest use is closely integrated with water use, cropland use, state of biodiversity and state of wild fruit and nut forests) and maintain the flows of mountain forest ecosystem services (such as land slide control, erosion control, water supply and biodiversity protection). It does so through an incentive mechanism described in detail in the main text, through a public-private partnership model implemented in a landscape which has at last 29,500 ha of important forests. This is in essence a type of a payment-for-ecosystem transaction, directly in line with programs (a) (PES) and (b) (local community capacity development) of SFM-2 <i>Enhanced Forest Management: Maintain flow of forest ecosystem services and improve resilience to climate change through SFM</i>. As such, many of the biodiversity benefits and the land degradation benefits described in the preceding lines in this table are connected to the forest activities of the project. Additional, forest specific analysis of the baseline, alternative and increment is provided below.</p>		
<p>Continued degradation of Juniper and genetically important walnut-fruit forests in Western Tian Shan in Uzbekistan resulting from:</p> <ul style="list-style-type: none"> - Illegal logging in forests in valuable ecosystems, - Grazing in forests - Unsustainable cuttings for fire-wood - Forest lands grabbing for agriculture - Unsustainable harvesting of non-timber forest products 	<p>Sustainable forest management practices:</p> <ul style="list-style-type: none"> - Management actions prescribed as part of the Integrated land use planing under Component I for the total of 9.6 mln ha which includes 300,000 ha of forests - Conservation forests designated in 23,000 ha of Juniper and genetically important wild fruit and nut forests under Component II (Protected Areas) - Incentive-based community forest management at 29,500 ha in the vicinity of buffer zones of PAs, - Reducing wood collecting and grazing pressures on forests, assisted regeneration, and provision of alternatives to communities (fire wood plantations biogas plants) insuring avoided loss of at least 4,500 ha of forests 	<ul style="list-style-type: none"> - 23,000 hoof forests included in the Protected Area estate ensuring prevention of their further degradation - 29,500 ha in wider landscape put under good management (collaboration with communities) insuring stability of their ecosystem functions, such as genetic reserves, habitat of biodiversity and avoided GHG emissions of 107,959 tCO₂-eq/y. (<i>based on Tier-1 FAO Exact model</i>).

A.1.5 Innovation, sustainability and potential for scaling up

Innovation: Through Component III, the project introduces innovative incentive based managed of forests and grasslands. It strives to address the very causes of degradation by shifting economic use of forests and pastures towards more sustainable ways, doing it through a public-private partnership. The project is also innovative for the country in that it focuses on Snow Leopard protection. Recently snow leopard presence was reconfirmed with camera trap photos. At the same time, the project is not solely focusing on Snow Leopard, nor on just declaring protected areas, rather combines BD, SLM and SFM to focus both on PAs – as cornerstones of a landscape, - as well as land outside of these, which is critical for the PAs on the one hand, critical for large cats such as SL on the other, and thirdly important for people given its high economic use. The innovation of the project is to combine PAs with wider landscape management thus making financial investments in PAs more beneficial, but at the same time this produces important benefits for land resilience, improvement of soil quality and vegetation cover.

Sustainability: The operational and financial sustainability of the PAs in Western Tian Shan as well as the sustainable pasture management and SFM practices upon withdrawal of GEF investment will be ensured by commitment of Government to allocate core financing for PAs and SFM from baseline projects sufficient for the optimal management of ecosystems after the project ends. The alternative livelihoods support program will be based on the partnership with an existing micro-credit operator (based on UNDP experience) and ensure that it lives beyond the project life.

Replication and dissemination of the project results will be ensured through embedding the project results into the Government baseline programs. The replication of the experience ensured by Component III will be enabled by embedding the Snow Leopard conservation into the law enforcement system, as well extensive trainings, and support to participation of Uzbekistan in the Global Snow Leopard and Ecosystems Conservation Program. The project will support the development of an exit strategy, which will cover all aspects handled by the project.

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:

Stakeholder	Role
Government agencies	
State Committee for the Nature Protection of Uzbekistan and the State Inspection for the Protection of Wildlife and Plants (Gosbiokontrol)	Main implementation partner, ensuring organization of new PA; overseeing sustainable land and forest management, as well as managerial and financial sustainability of the national PA system.
Ministry of Agriculture and Water Resources of Uzbekistan	Key partner in the development and implementation of the pasture management plans at target areas.
State Border Protection Committee of Uzbekistan	Controls wildlife poaching and smuggling (output 3.1.2)
State Customs Committee of Uzbekistan	Controls wildlife poaching and smuggling (output 3.1.2)
Ministry of Internal Affairs of the Republic of Uzbekistan	Control wildlife poaching and smuggling (output 3.1.2)
Province and District administrations	Support to the establishment of the new PAs and integration of biodiversity conservation into corresponding development strategies and plans
Community based organizations (CBOs) and local communities	
Local Self Governance Bodies as representatives of communities	These bodies are essentially Community Based organizations responsible for the elaboration and implementation of local communities' development strategies. They will be among the main project implementing partners at the local level in integrated land use planning (Component I), corridors (Component II) and key representatives of communities in the Component III which deals with establishment of forest and grassland use incentive mechanisms. These are truly community grass root organizations in Uzbekistan who have also been the target audience of most of the Small Grants Program projects in this country. The experience of SGM of collaboration with local self governance bodies will be used as a basis for development many of the project activities, and will be further formalized at the PPG stage.
Associations of Pasture and Water Users	These are the second important community representative grassroots organizations uniting all water and pasture users and regulating access to natural resources. The associations will play an important role in the design and oversight over the implementation on the incentive based forest and grassland activities envisaged in Component III. They will also provide inputs to the development of corridor in Component II.

Stakeholder	Role
Communities of the PA buffer zones	Active users of ecosystem services and to be involved in incentive mechanisms and PA management.
Non-government organizations	
International Snow Leopard Trust	They are working solely to protect the endangered snow leopard and its habitat in 12 countries of Central Asia and could be useful for exchange of best practice on SL conservation
Panthera	They conduct study and conservation world's largest wild cats including snow leopard. They could co-fund research of SL for best understanding its behavior and habitats needs.
Snow Leopard Conservancy	This non-government organization works with local people on SL conservation. Could provide their experience on creating alternative-income projects, work with local herding populations is to protect livestock by building predator-proof corrals and providing conservation education and training for children, conducts research incl. camera trapping and GPS-satellite collars to study movements and corridor analysis to find areas to target for conservation efforts.
The Secretariats of international conventions (e.g. UNEP-CMS,) and their working groups	CMS is international convention provides a global platform for the conservation and sustainable use of migratory animals and their habitats. It leads initiative Large Mammals in Central Asia incl. SL to promote science-based and internationally coordinated conservation measures across Range States.
Research institutions	
Academy of Sciences of the Republic of Uzbekistan and its specialized institutes	Based on their experience and expertise, Academy of Sciences will play a role in elaboration of the scientific grounds for biodiversity monitoring, improving participation in biodiversity inventory, development of biodiversity sustainable use norms, identification of the areas under strong pressure, PA management effectiveness assessment.
Private sector	
Uzbekturizm national company	Might be involved in training of local communities to develop ecological tourism facilities and infrastructure as well as marketing of such community-based tours (Output 2.5).

A.3 Gender considerations⁹

The project covers the geographic region with estimated population of nearly 2,000,000 people, where women constitute 50.3%. Women's health is suffering a lot from their involvement in the fire wood gathering. The project's incentive based forest management is planning to release this pressure by engaging women in less physically demanding activities. The capacity building activities and the promotion of incentive based grassland and forest management in Component III will see to it that at least half of the participating audience are women. Participation of women in the Protected Area councils on equal terms with men will also be promoted, as well as in the workshops and meetings dedicated to the development of integrated land use plans under Component I. It is expected that the number of women involved in such activities in the target areas will increase on average by about 60 households. Finally, to ensure equal opportunity for employment, UNDP will encourage qualified women applicants for positions under the project as per UNDP rules and regulations.

A.3 RISKS

⁹ Gender benefits of the project and women involvement in the context of this project will be elaborated in further details during the PPG stage.

Risk	Level	Mitigation
Disease or climate change have an adverse impact on population of Snow Leopard	L	According to current scenarios, changes in the species compositions in most ecosystems of Uzbekistan will not be catastrophic. In the mountains, the rise in temperature is expected to be mitigated by elevated humidity and relief conditions. Mammals with a large home range, endemic vegetation (including forest) are most vulnerable to predicted aridization of climate and shift in ecological zones, but will be able to adapt if they have space for movement. This is one of the key reasons that the project has chosen to emphasize landscape-level actions together with protected area expansion. The project will enable the emergence of a supportive matrix of land uses, including the ecological corridors to connect protected areas. In addition, this approach will limit climate change risk by providing pathways along macro-climatic and upland-lowland gradients to enable species movement in a context of potentially shifting ecological zones.
Difficulties in starting up alternative livelihoods program based on micro-credit	M	The project will cooperate with the most efficient local micro-crediting operator, based on the outcomes of the PPG. Thus, the operational difficulties will not bar the activity, since it will be based on the existing institutional, financial and operational mechanisms an existing operator. The capitalization issue is considered to be low-risk, since the baseline funds in question will be available from the micro crediting partner.
Resistance from communities to the opportunity to collaborate on management of forests and/or protected areas through collaborative agreements.	M	Experience in setting up collaborative management arrangements is available under the former Tugai project of UNDP-GEF. The project will also partner with another UNDP-GEF project, SLM in non-irrigated lands, to jointly overcome this barrier. The methodology of ILUPs (integrated land use planning), piloted by that SLM project would be used. Further to this, the project is going to provide extensive support to local communities and training to local stakeholders to develop their capacity to participate in collaborative protected area management as well as other project activities which target community engagement.

A.5. COORDINATION

The project is a logical extension of the Government strategy and actions on protected areas, which was supported with GEF funding, implemented by UNDP. UNDP-GEF has just completed an MSP focusing on *Protected Area Sustainability*. Given limited funding, that project addressed some of the key policies and developed a Master Plan for Protected Areas that is currently being integrated in the NBSAP, but did not have sufficient funds and timing for practical implementation of business planning and community engagement approach at the site level – the two elements which are key to PA sustainability in Uzbekistan. This project addresses this practical need through Component I.

The project directly addresses the overgrazing, grassland and forest vegetation loss, and mudslide problems which are high on the agenda of the CACLIM program, and therefore is one of its natural implementation pathways.

UNDP is currently implementing a GEF project *Reducing pressures on natural resources from competing land use in non-irrigated arid mountain, semi-desert and desert landscapes of Uzbekistan*. This project focuses solely on the sustainable land management aspects of rain fed agricultural areas, primarily in Karakul and Zaamin districts, introducing a concept of Integrated Land Use Plans (ILUP). There is no geographic overlap, and the SLM project is not focusing on SL habitat or protected areas, yet the ILUP approach might become useful in the implementation of the pasture management activities proposed in Component II. The UNDP Country office will ensure coordination of the two projects.

The project is coordinated with the global UNDP-GEF project *Transboundary Cooperation for Snow Leopard and Ecosystem Conservation*. This Global project designs tools, methods and guidelines for identification of SL landscapes; enhances enforcement capacities of local protection agencies through training; puts in place unified mapping and monitoring protocols; supports cross-country coordination and dialogue and private sector engagement. While the funding of this global MSP is sufficient to cover the international costs, each country in the range which focuses on Snow Leopard conservation, will transpose the international standards into its national context and also allocate national resources to participate in those international forums and mechanisms as envisaged in the global project. Component III of this project, therefore, had been designed, to enable Uzbekistan's participation in this important international cooperation.

In the course of the project preparation multiple consultations were held with partnership organizations which currently implement or plan to implement related projects. Thus, the FAO in Uzbekistan is planing a complex project related to sustainable use of forests, including mountainous forests. The Government and UNDP project will hold consultations at the PPG stage to ensure no replication and additionality. Consultations have also been held with the German GIZ and

key NGOs (Panthera); this PIF includes no overlap and takes into accounts the observations received from the partners so far, and will coordinate closely the development of the substantial focus at the preparatory stage.

B. 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 and has been a direct response to the request of the Government of Uzbekistan for assistance in the implementation of this Strategy. The entire set of recommendations has been reflected in the project document, and they all have been adapted to the situation in Uzbekistan. It is obvious that, by implementing these activities it is possible to create conditions for preservation and increase of Snow Leopard population in Western Tian Shan. The project is closely linked to the Action Plan on implementation of the “National Strategy for Snow Leopard in Uzbekistan for 2014-2020”.

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 three components. The project will be implemented within the framework of the Central Asian Countries Initiative for Land Management (CACILM), which supports the implementation of UNCCD in Central Asia.

Uzbekistan has *National Forestry Plan*, which emphasizes the need to preserve genetically important forest and re-orientate and better integrate the forestry sector into rural community livelihoods; the SFM activities of the project and introduction of forest community management in Component II speak to these priorities.

Currently, Uzbekistan is working on developing its *National Biodiversity Strategy and Action Plan (NBSAP)*. A Master Plan for the Protected Area System had been developed with UNDP-GEF support and is going to be approved as part of the NBSAP process. Creation of protected areas in the Snow Leopard habitat is one of the key gaps identified by the PA Master Plan and NBSAP. The project will assist Uzbekistan in implementing relevant aspects of the CBD Program of Work on Protected Areas. The project assists the country in the implementation of CMS and CITES conventions, which both cover Snow Leopard and to which both Uzbekistan is a party.

The project directly supports the achievement of Aichi Targets 5, 11, and 12:

- 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
Dr. Sergey Maygkov	GEF Operational Focal Point, Deputy Director, NIGMI of Uzhydromet	Center for Hydro-meteorological Services under the Cabinet of Ministers of the Republic of Uzbekistan	Dec 12, 2014

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.					
Agency Coordinator, name	Signature	Date	Project Contact Person	Telephone	Email Address

Adrianna Dinu, UNDP-GEF Executive Coordinator		March 26, 2015	Maxim Vergeichik Regional Technical Advisor	+ 421 259 337 152	Maxim.vergeichik@und p.org
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