



PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND: GEF Trust Fund

PART I: PROJECT INFORMATION

Project Title:	Conservation and sustainable use of Pamir Alay and Tian Shan ecosystems for Snow Leopard protection and sustainable community livelihoods		
Country(ies):	Tajikistan	GEF Project ID:	6949
GEF Agency(ies):	UNDP	GEF Agency Project ID:	5437
Other Executing Partner(s):	National Biodiversity and Biosafety Center	Submission Date:	August 25, 2014
GEF Focal Area (s):	Multi-focal area	Project Duration (Months):	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:	Global Snow Leopard and Ecosystem Conservation Program	Agency fee (\$)	\$397,230

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	1,455,933	6,650,000
SFM-1	GEFTF	529,957	2,400,000
SFM-2	GEFTF	523,833	1,650,000
SFM-3	GEFTF	340,000	1,650,000
BD-1 Program 2	GEFTF	880,000	4,300,000
BD-4 Program 9	GEFTF	451,647	2,350,000
Total Project Cost		4,181,370	19,000,000

B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: To demonstrate viability of landscape approach to conservation of internationally important biodiversity, land and forest resources in Tian Shan and Pamir Alay Mountain Ecosystems in harmony with sustainable development of local communities

Project Component	Financing Type	Project Outcomes ¹	Trust Fund	(in \$)	
				GEF Project Financing	Co-financing
Component 1. Conservation of and sustainable management of Key Biodiversity Areas within landscape		<p>Outcome 1.1 Increased representation of endangered <i>Snow Leopard</i> habitat, and that of other vulnerable / threatened species in the ecological network and avoided loss of 15,000 ha of <i>High Conservation Value Forests</i> through official designation</p> <p>1.1.1 National Ecological Network expanded by >600,000 ha and its financial sustainability ensured in areas critical for Snow Leopard in transboundary Pamir-Alay and Tian Shan forest and alpine meadow mountain landscape:</p> <p>1.1.2 Upgrading the Aktash reserve (IUCN VI) to Boboy Ob Strict Reserve (IUCN I).</p> <p>Outcome 1.2 Capacities of foresters, PA staff, and communities enhanced at Tajik National Park, Zorkul, Romit, Dashtidzum Strict Reserves, and Shirken and Sarkhosok reserves, with specific focus for restoration of degraded forests within protected areas</p> <p>1.2.1 Management and business plans for 6 areas critical for SL are under implementation, based on improved land and forest zoning arrangements;</p>	GEFTF	1,719,957	4,080,000

¹ Details of outcomes and outputs are described further in the text. Ecological indicators of incremental values are described in the section on Global Benefits.

		<p>1.2.2 Strengthened patrolling, and law enforcement systems;</p> <p>1.2.3 Local PA Management Boards (with local communities) operationalized;</p> <p>1.2.4 Programs on biotechnology, research and public awareness on SL ecology.</p> <p>1.2.5 Community-focused restoration of app. 5,000 ha of degraded mountain forests in key biodiversity areas in Tajik National Park</p>			
<p><i>Component II.</i> Ecosystem resilience and habitat connectivity in wider landscape outside protected areas</p>	INV	<p>Outcome 2.1 Integrated land, forest and pasture management plans put for select administrative districts in Turkestan, Gissar, and Zaravshan districts, leading to minimized threats and disturbance at breeding and foraging sites for SL outside PAs at an area over 0.7 mln ha, conservation and good management for important forest habitat</p> <p>2.1.1 Based on geo-botanic studies, economic and ecosystem service assessment, territorial plans of the selected districts are updated, reconciling economic needs with sustainable natural resource use principles;</p> <p>2.1.2 Assisted regeneration of 30,000 ha of pastures: pasture management regimes designed and implemented jointly with communities, using GIS mapping of feeding grounds and migrating routes (and timing) of SL and defining boundaries of pastures, grazing timing, cattle densities.</p> <p>2.1.3 Migration corridors between relevant PAs at high-risk zones of SL identified and designated; buffer zones where summer pasture management and forest use are harmonized with SL movements are defined and enforced; species management plans drafted and are under implementation; land and forest use regimes in them are regulated accordingly.</p> <p>2.1.4 Targeted forest restoration of 6,000 ha of degraded forests important for SL migration in Zaravshan, Ramm and Turkestan ridge areas</p> <p>2.1.5 Alternative livelihoods program for local communities jointly with local micro-crediting institutions: sustainable management of wild nut forests, apiculture, organic farming, medicinal plant processing, and community-based ecotourism.</p>	GEFTF	1,830,300	12,450,000
<p><i>Component III.</i> Support to international cooperation</p>	TA	<p>Outcome 3.1 By 2020 Tajikistan adopts international standards for monitoring, research and law enforcement in SL conservation and is engaged in at least one cross-border SL conservation agreement</p> <p>Targeted support for joint management of Tupalang area (with Uzbekistan): transboundary Tupalang commission and working group, joint conservation and forest monitoring program designed and under implementation:</p> <p>3.1.1 System for research and long-term monitoring of threats to and status of key species and ecosystems in Pamir Alay Tian Shan put in place applying internationally certified quality standards (GIS-based) [in coordination with global UNDP-GEF project on SL].</p> <p>3.1.2 Vocational training for 85 staff from the new and existing PAs, to ensure that they can effectively fulfill management objectives. Curriculum coordinated with relevant activities of the Global UNDP-GEF project on SL.</p> <p>3.1.3 Targeted support to participation of Tajikistan in the Global GSLCP process.</p>	GEFTF	432,000	2,300,000

		3.1.4 National Management Plan for Conservation of SL with budget, roles and responsibilities, taking stock of and learning from the results of the GEF project. Based on a digital map of SL habitat in Tajikistan, with annotated recommendations for land use regimes in key areas of importance for SL. Amended policies on hunting of Siberian Ibex and Marco Polo Sheep.			
			Subtotal	3,982,257	18,830,000
			Project management cost	199,113	170,000
			Total project costs	4,181,370	19,000,000

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	National Biodiversity and Biosafety Center	Grants	2,500,000
		In-kind	200,000
Recipient Government	Committee of Environmental Protection under the Government of the Republic of Tajikistan	Grants	2,100,000
		In-kind	200,000
Recipient Government	Ministry of Economic Development and Trade	Grants	3,000,000
Recipient Government	Agency of Forestry under the Government of the Republic of Tajikistan	Grants	2,000,000
GEF Agency	UNDP Tajikistan	Grants	6,000,000
CSO	Panthera	Grants	500,000
Private Sector	Microcrediting Fund	Grants	1,500,000
Other	Local khakomats and dzaomats (local authorities)	Grants	1,000,000
Total Co-financing			19,000,000

D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY (IES), COUNTRY(IES), AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country/Regional/Global	Focal Area	Programming of funds	(in \$)		
					GEF Project Financing (a)	Agency Fee (b)	Total (c)=a+b
UNDP	GEF	Tajikistan		SFM	1,393,790	132,410	1,526,200
UNDP	GEF	Tajikistan	Biodiversity		1,331,647	126,506	1,458,153
UNDP	GEF	Tajikistan	Land Degradation		1,455,933	138,314	1,594,247
Total GEF resources					4,181,370	397,230	4,578,600

E. PROJECT PREPARATION GRANT (PPG)

Is Project Preparation Grant requested? Yes

PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE 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	Tajikistan		SFM	40,000	3,800	43,800
UNDP	GEFTF	Tajikistan	Biodiversity		38,217	3,630	41,847
UNDP	GEFTF	Tajikistan	Land Degradation		41,783	3,970	45,753
Total PPG Amount					120,000	11,400	131,400

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	0.6 mln ha
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	0.7 mln 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)	2.6 mln 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)

PART II: PROJECT JUSTIFICATION

PROJECT OVERVIEW

A.1. PROJECT DESCRIPTION

A.1.1 The global environmental problems, root causes and barriers that need to be addressed

The Tian Shan and Pamir Alay mountains of Tajikistan provide for exceptional biodiversity: over 23,000 species of flora and fauna, including 1,900 endemics, spanning over 12 ecosystem classes. They constitute a major element in the range of the IUCN-listed threatened large mammals such as Snow Leopard (*Uncia uncia*) (hereinafter – SL), Urial (*Ovis vignei*) and Markhor (*Capra falconeri*); as well as Siberian Ibex (*Capra sibirica*), Marco Polo Sheep (*Ovis ammon Polii*) and Bactrian Deer (*Cervus elaphus bactrianus*). Tajikistan is the center of the SL range: the SL habitat in the country covers 8,570,000 ha. Before 1980s, Tajikistan had over 1,000 individuals of the SL; the current population is assessed to be around 200-300 individuals.

Loss of natural alpine and sub-alpine meadow ecosystems to pastures is one of the main threats to SL. Every year the area of summer pastures increases. As the population density is high and the total area of alpine meadows is limited, this quickly results in overgrazing, 2.5 times over the carrying capacity of the ecosystems. The livestock tracks increasingly clash with migration plans of SL and ungulates. The high mountainous meadows of Pamir Alay are especially important; they border on Afghanistan, Uzbekistan and Kyrgyzstan, where SL migrates, and hence their condition defines migration success. Since these areas are used by local people, they cannot be in full included in the protected area estate. There are numerous narrow strips of forest and meadow ecosystems all across Pamir Alay and Tian Shan that are key for migration for SL, where PA creation is not feasible, and where corridors or land use planning should otherwise be regulated for coexistence of SL with people.

The SL-farmer conflicts are quite frequent, resulting in SLs being killed. Presently, by unofficial estimates, at least 10 individuals are killed per year by local people in livestock corrals. By the assessment of Panthera NGO, between the 1920 and 1960s hunting and trapping of SLs for their pelts also became popular in Central Asia. Panthera notes that further exacerbating the status of SLs in the Pamir in Tajikistan was the devastating civil war that broke out in 1992; a massive famine pushed people in the mountains to intensive hunting of ibex and argali, leaving SLs without their main prey. The unsustainable hunting of the ungulates which are the prey of SL, is presently still listed as one of the key threats to SL.

Forests are scattered across the landscape. They are important buffer zones and migration corridors for the SL: app. 30,000 ha of birch forests at Sarez Lake are located straight in the habitat of the SL and its prey species; 12,000 ha of mesophilic wild nut forests in Sari Hosor, Dashtidzum and Childukataron areas are part of important migration corridors of SL; 100,000 ha of the Juniper forest in the vicinity of Peter the First and Karateginsky ranges serve as important migration corridors for the ungulates, the key prey of SL; Juniper and small-leafed forests of Gissar Zaravshan are the buffer zone and migration corridor of the SL. Juniper forests are good regulators of water run-off, preventing soil erosion, they are also an important carbon sink. Since forests cover only 3% of the country (410,000 ha in total), their conservation and sustainable management is especially important. Forest degradation contributes to the vulnerability of the SL and its prey species. Uncontrolled collection of wild nuts is a growing threat. Local communities widely cut Juniper and birch forest for energy use. Given the slow regeneration rate of Juniper forests, such overextraction of keystone species has in some areas brought the system to a tipping point at which it undergoes a regime shift to a less productive state in which trees are replaced by grassy and shrub vegetation. A further threat comes from the fact that communities allow cattle in an uncontrolled way to graze in the Juniper and wild nut forests. This further undermines the already slow natural regeneration rates of these forests and causes disturbance to wildlife.

Barrier 1. Key Biodiversity Areas within SL landscape are out of effective protection.

The PA management is one of the key baseline elements for this project (described below). The PA estate covers less than 50% of the range of the SL. The high-mountain range in Pamir Alay is especially important to be protected. Many of the existing PAs (Zorkul, Romit, Dashtidzum) are too small in size; they were created for protection of *Urial* and broad-leaf and Tugai forest protection, and their management regimes and zoning do not cover SL migration trajectories correctly and in full and often do not reflect the actual state of threats of SL, *Urial* and other prey species.

Recently, the largest SL PA (the Tajik National Park), was transected by an international highway (to the border with China, Pakistan and Afghanistan), right across the center of SL range, resulting in degradation of forest and alpine ecosystems. There was no compensation activity (thousands of hectares of forests are in need of restoration) and no mitigation to the disrupted migration routes of SL. Borders of many PAs are not clearly demarcated, leading to abuse of resources (overgrazing and forest logging). There are currently no corridors that are needed for effective protection of such species as SL.

None of the PAs have updated their business and management plan (except for Dashtidzum) in the past 10 years. The existing concept of management planning is based on the Soviet-time ideology and does not correspond to the present-day reality. The total budget of US\$ 400,000 is not sufficient for a relatively large PA system. Business approaches (tourism, sustainable hunting, local crafts, catering, etc), that would allow additional revenue generation are not common. Mechanisms for sharing of responsibility and benefits local communities have not been tested. The enforcement and technical surveillance capacities for conservation of such signature species as SL, are weak. Patrolling for wildlife crime is practically absent, except for Zorkul reserve and along the state border areas. Vehicles, communication and training for protected area units, are missing to properly curb illegal trophy hunting and poaching in SL prey species. Transboundary cooperation in Protected Area management is reduced to ad hoc contacts between selected scientists.

Barrier 2. Unsustainable land and forest use in wider landscape.

Forest and meadow ecosystems in the wider landscape, outside PAs, are extensively used in the local economy. District land use-plans are not reconciled with SL ecology. Use of over 100,000 ha of forests and 300,000 ha of alpine and sub-alpine meadows in economy in Western Tian Shan and Pamir Alay does not account for conservation principles. Over the past 20 years the practice of pasture rotation has largely been abandoned; communities have increasingly relied on the same areas for grazing every season, which has brought about vegetation degradation, loss of organic matter in soil, and hindered natural regeneration of alpine, subalpine and Juniper forest ecosystems. Farther areas are suitable for grazing but lack of small bridges across mountainous rivers and lack of watering points bars communities from their use. Movement of livestock in those pastures that continue to be used by communities often clashes in time with

migration of SL and drives the human-cat conflict. Forest cuts by local communities for energy, and construction, in the past 10 years grew by 3 times, exceeding the natural regeneration rates and resulting in fragmentation. Most forests have not been zoned properly along the migration corridors of SL and no special requirements for their regimes have been enforced. Community involvement in forest regeneration (for a combination of conservation and community benefits – to supply the necessary timber and fire wood and enable construction of small bridges needed for proper management of outlying pastures and other small facilities) has not been tried. The UNFCCC National Communication notes that the forest stands continue to shrink under the anthropogenic threats, by about 2.7% per year, and that current restoration activities under the baseline programs are not sufficient for regeneration.

Barrier 3. Poor uptake of best international policies for SL conservation and management of its habitat.

Tajik scientists are largely decoupled from leading international SL research centers. There is very limited cooperation with Uzbekistan, for example, in the Shakhristan/Tupaland transboundary area which is the southernmost boundary of the range of the species. Furthermore, there is no research on diseases, state of forest and alpine ecosystems, and other environmental factors affecting the population of the SL and its key prey species. The enforcement of law (in cases such as corral trapping or sale of pelts or patrolling along migration routes) is basically absent, due to technical lack of capacities of inspectors and due to systemic issue of lack of coordination between state authorities (such as those in charge of PA management) and local self-governments. According to *Law on Hunting*, *Law on Wildlife* and *Law on Nature Protection* hunting or otherwise killing of SL are illegal. Yet, according to NGO reports, 5-7 individuals of SL are being killed annually by local people presumably in protection of their livestock. Also, current hunting policies allow for hunting in Marco Polo Sheep, Urial, and Siberian Ibex; annually about 250 individuals of these species are being killed legally or illegally; this harvest is too high given the undermined food base of the SL. The new (lower) hunting norms should be adopted in law and properly enforced.

A.1.2 The baseline scenario and associated baseline projects

The *Global SL and Ecosystem Conservation Program* (GSLECP) is the main international baseline program which this project directly builds upon. 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 protected area system of Tajikistan covers 3.1 mln ha and is managed by the State Forest Agency under the Government of Tajikistan. The Tajik National Park (>2 mln ha) was created specifically for the protection of SL. It is a Key Biodiversity Area, and UNESO World Heritage Site. The annual budget of the *Program for the Development of Protected Areas (2005-2015)* is around USD 500,000. All financing for PAs comes from the state budget. Over 40% of the funding is allocated to support protected area staff; the remainder supports basic PA infrastructure, and limited research activities. In the next 7 years, app. USD 2 mln is expected to be spent by the Government for Tajik National Park and other protected areas in Pamir Alay which are within the range of the SL, for PA staff salaries, basic infrastructure and equipment, public awareness and environmental education. This protected areas work does not systematically address the issues of habitat, range and connectivity for key threatened species, including SL.

The *State Forestry Program* (2006-2015) cofinanced by the Government of Tajikistan (USD 6 mln) and German Government (USD 20) is developing instruments for forest restoration and increased carbon sequestration. The program is managed by the State Agency on Forestry. UNDP is complementing this initiative with a project *Restoration and Sustainable Management of Alluvial Forests in Gorno-Badakhshan Region*, which focuses on forest monitoring and restoration as well as agroforestry. The scope of the baseline forest programs has not included work on High Conservation Value Forest designation to protect valuable biodiversity, and wild-fruit forest conservation work is limited.

The program *Micro-crediting for sustainable economic growth* managed by the Government of Tajikistan is estimated to amount to over USD 120 mln annually. This financing is made available by banks and micro-crediting institutions to farmers and community organization for small businesses and agricultural support. Several banks have collaborated with UNDP and World Bank on sustainable development microcrediting products, although the areas targeted by this project have not been the primary target so far. Local microcrediting offices are present in the target area; UNDP will, during the PPG stage, identify the most appropriate private sector partner for the implementation of the alternative livelihoods support component.

The Government of Tajikistan is in early stages of developing a *National Livestock Management Support Program*, which will include activities to support sustainable high mountain pasture management. This project will contribute to this Program by providing models for sustainable pasture management. Pasture management and sustainable livestock

management have been components of a number of projects within the context of the *Central Asian Countries Initiative for Land Management* (CACILM). In Tajikistan, the Committee for Environmental Protection has been overseeing its implementation. CACILM is multi-country initiative, which itself does not have a regular budget as of 2014, but acts as a unifying cooperation framework, informing national projects (including those funded by GEF). CACILM recognizes importance of integrated natural resource planning and use and therefore this project is going to be yet another concrete element of practical implementation of this regional initiative, in the particular context of Tajikistan. The links have not been made between pasture and livestock management and impacts on ungulate habitat and predator movement, and human wildlife conflict has not been systematically addressed.

These initiatives are significant insofar as they provide basic support for natural resource use and sustainable economic development in the range of SL. They do not, however, take a landscape approach to linking the objectives of PA and species management with those of enhancing the social and ecological sustainability of economic activities in production landscapes. The summary of the scenarios is provided in the section on Incremental Cost Reasoning.

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

The alternative scenario builds on a landscape approach, understanding that not only Key Biodiversity Areas, but also buffer zones, corridors and sustainable forest and pasture management in wider landscape are key to the survival of SL, and its prey species, as well as to sustainable local community development. The three components proposed by this project address the corresponding three barriers.

Component I will improve the ecological representativity and management effectiveness of Key Biodiversity Areas in the range of SL in the eastern part of Pamir Alay Mountains and Western and Central Tian Shan. Tentatively, the new PAs will be Shakristan Strict Reserve (160,000 ha) on the border with Uzbekistan, and (2) a series of micro-reserves (core area IUCN I + regulated land use zones; total area 500,000 ha) in the areas of Zaravshan Iskanderul river basin, Kulikalon, Shirkent Barrier, Gissar Range, Karatag river basin, and Varzob. The PPG will also consider the feasibility of including additional territories, such as the Romitskoye Canyon, Peter I Range, Alay and Vakhsky Ranges, as well as Yakhsu River basin, which are all important for SL. The project will put in place feasibility studies, border demarcation, patrolling plans and capacities, conservation and regulated land use zones, business plans and mechanisms for additional revenue generation. About 15,000 ha of Juniper forest important for SL migration, (scattered across the landscape; potential sites include Artash reserve, Sari Hosor, Hovaling, and Childukhtaron) are expected to be designated as High Conservation Value Forests: logging practices and frequencies will be revised; volume, timing and mode of forest resource collection by local communities will be harmonized with SL migration; assisted regeneration programs will be developed where required; forest monitoring systems strengthened; forest patrolling and protection systems developed, drawing where appropriate on collaboration with local communities.

In the existing PAs within SL range (Tajik National Park, Aktash, Zorkul, Romit, Dashtidzum Strict Reserves, and Shirken and Sarihosor reserves) greater emphasis will be placed on business planning, and local community PA boards. In Aktash Reserve, a plan for its upgrade to a Boboy Ob Strict Reserve, will be drawn and put under implementation, considering the value of this area for SL. Management plans will be revised; research on SL and public awareness programs in these PAs will be supported. The surveillance and enforcement systems will be strengthened by establishing and equipping patrolling groups with technical means. A program on biotechnology, research and public awareness will be put in place. 5,000 ha of degraded Juniper forests in Tajik National Park, in the areas of SL migration, will be restored using local genetic material and involving local communities in the restoration as appropriate. Foresters and community groups will be trained to maintain the HCVF and restored forests to observe the natural forest regeneration rates and BD conservation principles.

Component II deals with integrated land, forest and pasture management in wider productive landscapes, in Turkestan, Zaravshan, and Gissar districts around the KBAs identified in Component I. The following activities are envisaged: (i) identification of functional zones in dzamoats considering natural ecosystem types based on collection and processing of primary data on natural characteristics (ecosystems, vegetation, distribution of key species), natural and anthropogenic processes (erosion, degradation, etc.), socio-economic data (population, settlements, current land use practices, etc.); (ii) identification and spatial assignment of appropriate land use types using participatory planning methods that consider the needs of stakeholders, local knowledge and development priorities of target dzamoats; (iii) identification of existing and potential conflicts among different land-users, and between land-users and ecosystems, and development of measures to mitigate or eliminate such potential or existing conflicts, with proposed measures being agreed with stakeholders; (iv) development of a GIS-based land use concept and its dissemination to relevant

government bodies; the planning document will contain recommendations (including GIS-based maps) for different types of land use given development priorities of dzamoats and ecosystems' potential.

The project will support improvement and sustainable use of pastures. An inventory of livestock and pasture use will be conducted. Based on the condition of pastures and their carrying capacity, pasture rotation and management plans will be developed. The plans will outline the condition of pasture resources and necessary rehabilitation actions (tentatively 30,000 ha). The project will further enable the use of outlying pastures, by stimulating livestock mobility (micro-bridges and equipped mountain trails).

Migration corridors will be designed and their regime established so that SL migration does not overlap with the timing and manner of transhumance. Special passes for the SL will be envisaged in areas of crossing with roads and other infrastructural barriers. The corridors will be designed jointly with communities and Ministry of Agriculture.

In Sari Khosor, Dashtidzum, Hovaling, Muminabsad (important for SL migration where the pressure on the forests is exceptionally high), for app 10,000 ha of wild nut forests harvesting regimes will be revised to enable limited resource collection and positive natural regeneration rates. Targeted restoration will be undertaken (in total app.6,000 ha). Agreements with communities will be signed for forest use and replanting. Regimes (places and timing) of harvesting of timber and non-timber products will be reconciled with the timing and routes of SL migration. Cattle migration across the forests will be excluded (in agreement with communities). Environmental inspectors and foresters will be trained in the management of the adjusted forest use regimes.

The implementation of alternative livelihoods activities will draw from the experience of previous UNDP micro-crediting programs on sustainable rural development. The project will partner with a local micro-crediting organization identified at PPG. The project will support sustainable wild nut forest management, pasture management, apiculture, organic farming, and sustainable collection of medicinal plants, ecotourism and other alternative economic activities of local communities. Approximately 15% of communities in and around the targeted PAs will be supported. The feasibility of increasing the incomes of local communities from biodiversity-compatible activities by approximately 10-15% is estimated to be realistic based on UNDP experience.

Component III will support the engagement of Tajikistan in the international cooperation in SL conservation, monitoring and law enforcement. The results of the project will be collated into National Plan for the Conservation of SL, which will also incorporate models from other countries. The project will cover the knowledge gap in SL distribution and will, jointly with the Global UNDP-GEF project on SL, design a detailed map and database of SL distribution in Tajikistan, alongside with recommendations for land use activities in the Key Biodiversity Areas. The project will amend the policies on the hunting of the key prey species of SL so that its food base can be secured in the long-term. The experience of the project will be incorporated in the vocational training system for environment inspectors, PA managers, communities and foresters, on SL ecology, economic planning reconciled with it, enforcement against wildlife crime (this module will also be designed in conjunction with the Global UNDP-GEF project on SL). Further, the project will address the gap in research and monitoring and will put place a robust national system (based on international standards promulgated by the UNDP-GEF Global Project) to enable reliable monitoring of SL and its prey species in Pamir Alay and Tian Shan. Targeted support will be provided for the transboundary cooperation with Uzbekistan on the Tupalang Area (support to a joint working group and joint conservation planning and monitoring), as well as to participation of Tajikistan in the Global SL and Ecosystem Conservation Program. The opportunities for cooperation with Uzbekistan, as well as with Kyrgyzstan (on potential creation of Pamir-Alay transboundary PA) will be further considered during the PPG.

A.1.4&5. Incremental cost reasoning and global environmental benefits

Summary of baseline scenario	Summary of GEF scenario	Increment
<p>The PA system leaves out over 50% of the range of SL in Pamir Alay and Tian Shan No management / business plans at PAs and limited funding for species conservation ; Limited research, mapping only ad-hoc monitoring of SL and its prey species Construction of roads,</p>	<p style="text-align: center;">Biodiversity</p> <p>Expanded and financially sustainable ecological network (at least 600,000 ha) in Pamir Alay and Tian Shan offers improved threatened species representation of SL and its prey species. Business and management planning concept widely used, Compliance of economic resource-users with biodiversity standards is monitored and enforced in and around the newly</p>	<p>Increase in the ecological network of Tajikistan: by 2016 an additional of 600,000 ha (<i>see Description of Component I for details</i>) ensuring increased (by 15%) PA coverage of the range of IUCN threatened SL and its prey species in Tian Shan and Pamir Alay.</p>

<p>communication lines and other economic infrastructure disrupts migration routes of SL and is prey species without compensation activities</p> <p>No engagement of communities in protected area management</p> <p>Populations of threatened mammals present in Pamir Alay and Tian Shan landscape, SL (<i>Uncia uncia</i>), Urial, et. are likely to fall.</p> <p>Hunting of SL prey species exceeds sustainable limits and undermines its food base.</p>	<p>established and existing PAs, as well as in buffer zones and migration corridors. Under-represented biodiversity is studied and monitored on a systematic basis. Communities are engaged in ecologically compatible activities around PAs.</p> <p>Micro credits offered alternative livelihoods, benefitting over 1,000 recipients in the 7-10 years immediately after the project.</p> <p>Regulations on hunting corrected to ensure sustainable food base for the SL. PA managers, foresters and communities trained in land use compatible with SL ecology, as well as in wildlife crime prevention.</p>	<p>Threat and disturbance reduction (landscape area 0.7 mln ha): app.15% reduction in illicit Juniper and fruit forest cuts; 20% reduction in SL kills by herders; 17% reduction in poaching (these and further indicators will be finalized based on PPG research, both for baseline and target values)</p> <p>Financial sustainability and management effectiveness of the existing and newly established PAs in Central Tian Shan is increased by 25% over the baseline (measured by METT).</p> <p>Up-to-date data on SL and expanded international cooperation in SL conservation, research and monitoring,</p> <p>Contribution to implementation of 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"> - Overgrazed pastures exceeding carrying capacity by 2.5 times resulting in erosion, vegetation loss and water deficiencies. - Pasture rotation absent; - No use of outlying pastures due to absence of advanced of livestock trails, bridges and watering points - Infringement of grazing onto protected areas - Limited support for communities in Pamir Alay and Tian Shan focusing on agriculture and no opportunities for ecosystem-friendly alternative livelihoods 	<ul style="list-style-type: none"> - Integrated land use planning in select Pamir Alay and Tian Shan dzamoats, juxtaposing economic use maps with ecosystem condition and biodiversity distribution maps, - Incentives for reducing pressures on pastures stimulated through micro-credit - Rehabilitation and sustainable management of 30,000 ha: pasture planning with engagement of local communities; rotational grazing, investments in repair and maintenance of pasture infrastructure (bridges, wells) allows greater flock mobility; regeneration of the natural pasture covers using natural pasture seeds. - Improved vegetation covers and reduced erosion in areas of investment 	<p>Competitive pressures between land uses in mountain steppe/pasture landscapes reduced in 0.7 mln ha of productive lands :</p> <ul style="list-style-type: none"> - Decrease in grazing pressure and improved condition of mountain steppe ecosystems, - Improved vegetation cover, fodder productivity and pasture regeneration, - Innovative financing for SLM and biodiversity increased by 20 percent in targeted districts - Increased organic carbon content in soil by 470,250 tCO₂-eq/10y (based on FAO Exact model)
Sustainable Forest Management		
<ul style="list-style-type: none"> - Excessive forest logging by local communities, - Uncontrolled collection of non-timber products in wild nut forests resulting in their degradation, - Infringement of agricultural and mining activities on Juniper forests, - Livestock grazing in forests destroying undergrowth and clashing with migration routes of SL and its prey species, - High Conservation Value Forests not classified; 	<ul style="list-style-type: none"> - Identification and good management practices in <i>High Conservation Value Forests</i> with involvement of communities; - Adjustment of volume, timing and mode of harvesting of timber and non-timber resources in Juniper and wild nut forests, in line with ecosystem carrying capacity principles and SL migration; - Reforestation of degraded forests; - Adjusting agroforestry for avoiding livestock grazing in SL important forests - Training of foresters and communities in 	<ul style="list-style-type: none"> - 15,000 ha of HCVF identified and designated and 10,000 ha of wild nut forests put under good management ensuring stability of ecosystem functions including provision of wildlife habitat and avoided GHG emissions of 27,496 tCO₂-eq/y. - 11,000 ha of degraded forests restored, ensuring sequestration of 186,554 tCO₂-eq/y (based on Tier-1 FAO Exact model).

<ul style="list-style-type: none"> - Degraded forest areas in Key Biodiversity Areas not restored; - Weak capacities of foresters and poor collaboration with local communities. 	forest management planning and enforcement of the HCVF standards	
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A.1.6 Innovativeness, sustainability and potential for scaling up

Innovativeness: The landscape approach of the project is an innovation for the region: PA efforts alone could be jeopardized by adverse land use practices in the vicinity of PAs. To improve the impact and cost-effectiveness of PAs the project will also invest in integrated land use planning and sustainable pasture and forest use outside PAs. This will involve setting up buffer zones, corridors, as well as innovative infrastructural micro-investment to enable non-clashing and comfortable wildlife and livestock mobility (e.g. through use of special bridges, tunnels; enabling outlying pasture use through watering points, etc.). The integrated BD+SLM+SFM approach will ensure that PAs can be more effective in conserving target species thus making financial investments in PAs more beneficial, but at the same time this produces important benefits for land resilience, improvement of soil qualities and forest cover. Identification and designation of High Conservation Value Forests and designing special regimes with communities on forest restoration and agroforestry is another innovation for Tajikistan. Engagement of the private sector (tentative discussions held with Dzamoat Resource Centers and Imdodi Hutal and Rushdi Zaravshon microcrediting organizations) for the operation of the micro-credit facility for sustainable livelihoods will be innovative as it will create a new micro-crediting product focusing on biodiversity-compatible activities, as described in the text above.

Sustainability, replication and dissemination: The operational and financial sustainability of the expanded ecological network in Pamir Alay and Tian Shan upon withdrawal of GEF investment will be ensured by commitment of Government to allocate core financing for PAs needed for their optimal management after the project ends. The integration of resource use restrictions into land-use plans will put legal permanence to incorporation of the biodiversity principles in the economic activities in the targeted dzamoats of Tian Shan and Pamir Alay. The engagement of Tajikistan in the international GSLECP, namely by joining the international standards in the monitoring and research of SL, as well as by participating in high level negotiations on the future policy and land use improvements aiming at conservation of this species, will ensure the longevity of the results in the areas of monitoring, research, mapping and policy making. The lessons of the project will be incorporated in the National SL Action Plan. Close collaboration with other participating countries of the GSLECP will make it possible to easily share results of the project across borders, and at the same time to absorb lessons and models that would prove viable in similar contexts in other countries.

A.2. STAKEHOLDERS. WILL PROJECT DESIGN INCLUDE THE PARTICIPATION OF RELEVANT STAKEHOLDERS FROM CIVIL SOCIETY AND/OR INDIGENOUS PEOPLE? YES

Stakeholder	Role
Government agencies	
National Biodiversity and Biosafety Center	The Agency is the focal point institution of the implementation of the Convention on Biological Diversity in Tajikistan. It is the key implementing partner of the project, responsible for its coordination across Governments, and with local communities and private sector stakeholders.
Environmental Protection Committee Under the Government of the Republic of Tajikistan	Endures ownership, dissemination and sustainability of the project results. Will coordinate development and discussion on the new policies on hunting and land use, biodiversity monitoring, vocational training, international cooperation.
State Forest Agency	A key partner for the implementation of the <i>High Conservation Value Forest</i> concept, for changes in the land use regime of high conservation value forests, reforestation with community engagement and forest monitoring.
Ministry of Agriculture	The Ministry is a key partner in the development and implementation of the pasture management plans at target areas. It is also be engaged in drafting and discussing the buffer zone and corridors, as well as other elements of biodiversity and SLM-compatible land use in the targeted districts. Its local offices are key for coordinating the activities with local authorities. It also ensures coordination of the project with its baseline activities in the area of rural development and pasture management.
State Land Use Agency	The Agency is responsible for land use zoning and hence plans an important role in formalizing the amendments to land and forest use proposed under Component II. It will also play a role in topography surveys and mapping, for the ecological network, as well

Stakeholder	Role
	as for conservation, buffer zone and corridor planning in the wider landscape under Component II.
Non-government organizations and communities	
Local communities in the targeted dzamoats	Active users of ecosystem services and beneficiaries of project results in Component II. Will also be engaged in the management boards of protected areas under Component I.
Province (Khutmat) and District (dzamoat) administrations	The local administrations are critical providers of community engagement in the project. They will have an important role to play in basically all project activities: planning and establishment of the ecological network, land use changes, planning and establishment of the buffer zone and corridors, innovative pasture management, alternative livelihoods support program.
Non-government organizations	
Panthera	The organization has presence in Tajikistan, implementing activities directly targeting communities (use of protected livestock enclosures), as well as monitoring and research of SL. It will be a partner of a number of activities in the project, further to be stipulated at the project preparation stage.
Research expertise	
Academy of Science of Tajikistan	Various institutions of the Academy of Science will be engaged in activities connected to the monitoring and research of SL, as well as in estimating status, threats and planning for sustainable use of forest and non-forest ecosystems in high mountains.
Private sector	
Dzamoat Resources Centers and microcredit institutions (e.g. Imdodi Hutal and Rushdi Zaravshon microcrediting organizations)	These are grass root organizations established specifically with the purpose of assisting local communities in gaining access to resources and projects in the area of sustainable development. They serve as an interface between central government agencies, local administrations, micro financiers, and people on the ground. In the project the offices of the Dzamoat Centers are going to cooperate with corresponding microcrediting institutions (based on PPG feasibility analysis), to host and run the alternative livelihoods support program. They Dzamoat Centers are well placed to implement this role, since they have capacities and experience in working both with the supply and the demand side of the micro-crediting market. They will be useful in helping communities gain access to the Alternative Livelihoods Program, to advice during implementation, monitor and enforce the management of the financing by communities.

A.3 GENDER CONSIDERATIONS. ARE GENDER CONSIDERATIONS TAKEN INTO ACCOUNT? YES

The project covers the geographic region with estimated population of nearly 1,000,000 people, where women constitute 60%. Women are expected to benefit from the new financial scheme resulting in increased income of rural households. Tajikistan has great experience in advancing micro-financing, and by statistics, over 50% of the credit recipients have been women. The GEF project will support this trend when deploying its alternative livelihoods micro-crediting facility in Component II. The promotion of community-based, ecological tourism services will have spin-off benefits for women. About 70% of people servicing tourists are women, who are therefore more dependent on the development of ecotourism. It is expected that the number of women involved in the development of ecotourism in the target area will increase on average by about 40 households. The project will use participatory approaches in planning income-generating activities for communities, and as part of this, the project will clarify gender roles and vulnerabilities associated with a gender-differentiated approach. The project will promote the participation of women in the decision-making process by ensuring the participation of women in the local PA Board. Due to the better integration of women into the new social organizations, their opinions will be better reflected in the short and long-term decision-making for the sustainable management of protected areas. Finally, to ensure equal opportunity for employment, UNDP will encourage qualified women applicants for positions under the project as per UNDP rules and regulations.

A.4 RISKS

Risk	Level	Mitigation
Continued exacerbation of the threats connected to the undermining of the food base of SL in the target areas	M	Without the project, this threat is material as a result of systemic issues outlined above in the barriers section. As a response, the project will design an improved policy aiming at reducing the hunting pressure on prey species of SL, and will also work to separate livestock transhumance from SL and its prey migration. The feasibility of successfully implementing these activities is believed to be high, and therefore, the risk of the food base disruption will be minimized.

Risk	Level	Mitigation
Communities might not buy in to the new approaches in planning and managing the use of pastures as they might perceive the risk of losing income, at least temporarily (due to perceived reduction in stocking density)	M	Sustainable pasture management plan will presuppose such scenarios where amount of cattle does not necessarily need to decrease, therefore loss of income would not actually happen. The project will design measure to enable comfortable access to more distant pastures and start proper pasture rotation (necessary activities and budget had been factored in under Component II). This will decrease the density (and hence the pressure on grassland and forest ecosystems) without reduction in cattle numbers. Communities will be broadly consulted during the design and testing of this approach.
Difficulties in starting up alternative livelihoods program based on micro-credit	M	Over the course of the past 10 years, UNDP has implemented sustainable development micro-crediting programs in other rural areas in the countries, with high success. Strong cooperation ties exist with a number of private sector institutions, as well as with local Dzamoat Centers. The operational difficulties would not bar the activity, since it will be based on these existing institutional, financial and operational mechanisms of Dzamoat Centers and/or other microcrediting partners and local administrations.
Disease or climate change have an adverse impact on population of SL	L	According to current scenarios, changes in the species compositions in most ecosystems of Tajikistan are not expected to 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 and endemic vegetation 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.

A.5. COORDINATION

The project is coordinated with the global UNDP-GEF project *Transboundary Cooperation for SL 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 SL 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, has been designed, to enable Tajikistan's participation in the international cooperation on SL conservation.

The project compliments the World Bank GEF project on *Community Agriculture and Watershed Management*. The project is focused on water management and mainstream agricultural issues; it supplies communities with extension services, with seeds and trees for planting and stimulates the private sector engagement in the agricultural services on local level. This project does not focus on biodiversity or ecosystem values as such, and therefore does not overlap with the proposal, however, the two teams will coordinate their activities as long as they touch upon basic infrastructure support, forest or pasture restoration and alternative livelihoods.

Another World Bank GEF project focuses on *Sustainable land management* in high mountains of Pamir and Pamir Alay, which partially coincides with the geographic scope of this proposal. The two projects will coordinate in the exchange of lessons and approaches to sustainable use of pastures and forests at the community level. At the same time, the priorities targeted by the WB GEF project are mainly those related to the Land Degradation issues, while this project handles land use issues primarily through the prism of coexistence of humans and Wildlife. The two approaches would complement each other; and furthermore, this UNDP GEF proposal will focus on other areas (in Tian Shan) which the WB GEF project does not cover.

UNDP GEF is completing the project on *Sustainable management of agrobiodiversity*. The project aims primarily at improvement of the policies, legislation and institutional capacities for the agrobiodiversity management. Some of the policies and recommendations under that project relate to the use of genetically important wild Pistachio forests. This new proposal will take those recommendations to implementation in some of the High Conservation Value forest areas that would be identified at the project design stage, within the SL range.

DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1 IS THE PROJECT CONSISTENT WITH THE NATIONAL STRATEGIES AND PLANS OR REPORTS AND ASSESSEMENTS UNDER RELEVANT CONVENTIONS? YES.

The project is an extension of the *Recommendations on Preservation of SLs and Their High Mountain Ecosystems* that were adopted at the international meeting on conservation of SLs held in Bishkek on December 3, 2012. The proposal is consistent with the recommendations of the Global SL Survival Strategy and has been a direct response to the request of the Government of Tajikistan for assistance in the implementation of this document and tailoring its implementation to the national context of Tajikistan. The entire set of recommendations has been reflected in the project document, and they all have been adapted to the situation in Tajikistan. By implementing these activities it is possible to create conditions for preservation and increase of SL population in Tian Shan and Pamir Alay ranges.

The project is closely related to the *National Biodiversity Strategy and Action Plan of Tajikistan (2014-2020)* since it develops improved policies for use of natural resources, forest conservation, expands protected areas and raises the engagement of communities in their management, all of which are the NBSAP priorities. The expansion of the ecological network proposed by Component I of the project is in line with the National Plan for the implementation of the Program of Work on Protected areas of the Convention on Biological Diversity: it covers the key ecological gaps identified under the POWPA work plan, integrates PAs into wider landscape and involves communities in conservation efforts. The need for conservation of the SL and other biodiversity of Pamir Alay and Tian Shan is prominent in Tajikistan's 5th National Report to CBD. It also demonstrates an integrated approach to the creation of new PAs for under-represented ecosystems, covering a number of topics, ranging from technical aspects (capacity building of existing and new protected areas, harmonization of PA, management planning, development and implementation of a comprehensive monitoring system for biodiversity and ecosystems) to socio-economic dimensions (support for alternative income-generating activities for local communities such as ecotourism, and apiculture, to integration of PAs with biodiversity conservation and sustainable land use in adjacent areas.

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(S) AND GEF AGENCY(IES)


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. Khayrullo Ibodzoba	Chairman, GEF OFP	Committee on Environmental Protection under Government of Republic of Tajikistan	July 10, 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, Agency name	Signature	Date	Project Contact Person	Telephone	Email Address
Adriana Dinu, UNDP-GEF Executive Coordinator and Director a.i.		August 25, 2014	Maxim Vergeichik Regional Technical Advisor	+ 421 259 337 152	Maxim.vergeichik@undp.org

C. Additional GEF Project Agency Certification (*Applicable Only to newly accredited GEF Project Agencies*)

For newly accredited GEF Project Agencies, please download and fill up the required **GEF Project Agency Certification of Ceiling Information Template** to be attached as an annex to the PIF.