Country: Uzbekistan

PROJECT DOCUMENT

Project Title:	**Sustainable natural resource use and forest management in key mountainous areas important for globally significant biodiversity**
Country Programme Outcome(s) and Output(s):	UNDP Global Strategic Plan Outcome 1: Growth is inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded UNDAF Outcome 6: By 2020, rural population benefit from sustainable management of natural resources and resilience to disasters and climate change. CPD Output 3. Sustainable natural resource/forest management supported in key areas important for globally significant biodiversity.
Executing Entity/ Implementing Partner:	State Committee on Nature Protection (SCNP)
Implementing Entity/Responsible Partners:	UNDP

Programme Period:	5 years
Atlas Award ID:	00080814
Project ID:	00090383
PIMS #	5438
Start date:	December 2016
End Date	December 2021
Management Arrangements:	NIM
PAC Meeting Date:	17 October 2016

Total budget	USD	31,509,863
GEF	USD	6 209,863
National Government	USD	25, 000, 000
UNDP	USD	300,000

Agreed by (Executing Entity/Implementing Partner): _____

Date/Month/Year

Agreed by (UNDP): _____ 12 MAY 2017

Date/Month/Year

Brief Description

Uzbekistan is home to the western-most outliers of the western Tian Shan (Chatkal, Pskem, Ugam and Kuramin ranges) and Pamir-Alai (Gissar, Turkestan and Zeravshan ranges) mountain systems. These mountains are home to the endangered snow leopard, and provide important habitat for its key prey species

The key drivers of environmental degradation of these mountain ecosystems include: (i) unsustainable, and poorly regulated, levels of livestock grazing in the montane forests, steppes and sub-alpine meadows; (ii) high levels of dependency of rural communities on fuelwood from montane forests for heating and cooking; and (iii) extensive poaching of wildlife, along with increasing incidences of retaliatory killing of natural predators. Underlying these pressures are social and economic issues including an increasing demand for agricultural and timber products, insecure land tenure, and low levels of capacities to conserve mountainous ecosystems.

The project objective is '*To enhance the conservation, and sustainable use, of natural resources in the biodiverse high altitude mountain ecosystems of Uzbekistan'*.

The project will be spatially contained to the snow leopard distribution range in Uzbekistan. The snow leopard distribution range comprises 3 discrete 'snow leopard landscapes', the *Ugam-Chatkal* snow leopard landscape in the western Tien Shan; and the *Gissar* and *Zaamin* snow leopard landscapes in the Pamir-Alai. Most of the project outputs and activities will be focused in two of these 'snow leopard landscapes': (i) the *Ugam-Chatkal snow leopard landscape*, located on the western spurs of the Chatkal, Pskem and Ugam Ranges in the Western Tien Shan; and (ii) the *Gissar snow leopard landscape* on the western slopes of the Gissar ridge in the Pamir Alai.

The project is structured into four components, with each component comprising a complementary suite of two to three outputs.

The first component will enhance the quality of information on key ecosystems, habitats and species of the high altitude mountains that are home to snow leopard and prey populations. Information collected under this component will be used to support sectoral land use planning and decision-making in these mountainous regions. Work under this component will be focused around two key areas of project support: (i) Improve the quality of environmental information for state cadastre in the snow leopard distribution range (Output 1.1); and (ii) Enhance the state of knowledge on snow leopard and prey populations (Output 1.2).

The second component will seek to expand, and build the management capacity of the core conservation zones and high conservation value forests located within the two targeted snow leopard landscapes. Outputs and activities in this component will be directed at securing the conservation security of the key snow leopard and prey migration corridors within the two snow leopard landscapes. Work under this component will be focused around three key areas of project support: (i) Strengthen the conservation tenure, and improve the management effectiveness, of the core conservation zones in Ugam-Chatkal National Park (Output 2.1); (ii) Extend, and improve the conservation security of, Gissar Strict Nature Reserve (Output 2.2); and (iii) Enhance community involvement in, and beneficiation from, the protected areas (Output 2.3).

The third component will seek to encourage more sustainable levels of use of the high altitude pastures and indigenous forests located within the two targeted snow leopard landscapes. Outputs and activities under this component will contribute to improving the ecological integrity and productivity of forest and grassland habitats in the snow leopard landscapes. Work under this component will be focused around two key areas of project support: (i) Incentivise the adoption of more sustainable pasture management practices (Output 3.1); and (ii) Reverse the trend of unsustainable forest use in, and degradation of, natural forests (Output 3.2).

The fourth component will promote improved cooperation and collaboration in the conservation of snow leopard and their ecosystems. It is envisaged that more integrated planning, stronger cooperative governance structures and improved institutional and individual capabilities of all partner agencies and institutions will improve the collective national capacity to conserve and sustainably use snow leopards, their prey and their ecosystems. Work under this component will be focused around two key areas of project support: (i) Improve inter-agency coordination in conservation, monitoring and enforcement (Output 4.1); and (ii) Strengthen the capacity for trans-boundary planning and management (Output 4.2).

The total cost of investment in the project is estimated at US$31,509,863 of which US$ 6,209,863 constitutes grant funding from GEF and US$25,300,000 comprises co-financing from national government and UNDP.

Table of Contents

ACRONYMS

APO	Annual Plan of Operation
APR	Annual Progress Report
APW	Annual Plan of Work
AWP	Annual Work Plan
CBD	Convention on Biological Diversity
CBO	Community Based Organisation
CIS	Commonwealth of Independent States
CITES	Convention on International Trade in Endangered Species
CMS	Convention on Migratory Species
CO	(UNDP) Country Office
COP	Conference of Parties
CPAP	Country Programme Action Plan
CPF	Country Programming Framework
EAP	Environmental Action Plan
EIMS	Environmental Information Management System
FAO	Food and Agriculture Organisation (of the United Nations)
FC	(Project) Field Coordinator
FFI	Fauna and Flora International
GDP	Gross Domestic Product
GEF	Global Environment Facility
GIS	Geographical Information System
GIZ	*Deutsche Gesellschaft für Internationale Zusammenarbeit*
GPS	Global Positioning System
GSLEP	Global Snow Leopard Ecosystem Protection (Programme)
GoU	Government of Uzbekistan
HDI	Human Development Index
IBA	Important Bird Area
IGPPP	Institute of the Gene Pool of Plants and Animals
IT	Information Technology
IUCN	International Union for the Conservation of Nature
LD	Land Degradation
LOA	Letter of Agreement
M&E	Monitoring and Evaluation
MAB	(UNESCO) Man and the Biosphere Programme
MAWR	Ministry of Agriculture and Water Resources
MDF	Main Department of Forestry

METT	Management Effectiveness Tracking Tool
MIST	(spatial) Management Information SysTem
NAPCD	National Action Plan to Combat Desertification
NBSAP	National Biodiversity Strategy and Action Plan
NGO	Non-Government Organisation
NIM	National Implementation
NP	National Park
NSLEP	National Snow Leopard Ecosystem Protection (Portfolio)
PA	Protected Area
PC	(National) Project Coordinator
PFA	Project Financial Assistant
PGM	Project Grants Manager
PIR	Project Implementation Report
PIU	Project Implementation Unit
PM	Project Manager
PPR	Project Progress Report
PUA	Pasture User Association
RBM	Results Based Management
RSC	Regional Service Centre
RTA	Regional Technical Adviser
SBAA	Standard Basic Assistance Agreement
SC	(Project) Steering Committee
SCNP	State Committee on Nature Protection (Goskompriroda)
SFM	Sustainable Forest Management
SLSS	Snow Leopard Survival Strategy
SMART	Spatial Monitoring and Reporting Tool
SNR	Strict Nature Reserve
SO	Strategic Objective
SP	Strategic Programme
TA	(International) Technical Advisor
TBWP	Total Budget and Work plan
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UZS	Uzbekistani Som
WB	World Bank
WCS	Wildlife Conservation Society
WHS	World Heritage Site
WWF	World Wide Fund for Nature

SECTION I: ELABORATION OF THE NARRATIVE

PART I: Situation Analysis

CONTEXT AND GLOBAL SIGNIFICANCE

Geographical context

1. The Republic of Uzbekistan is situated in central Asia between the Amu Darya and Syr Darya Rivers, the Aral Sea, and the slopes of the Tian Shan Mountains. It is bounded by Kazakhstan in the north and north-west, Kyrgyzstan and Tajikistan in the east and south-east, Turkmenistan in the south-west, and Afghanistan in the south. The republic includes the Karakalpakstan Autonomous Republic. With an area of 447,000 square kilometres, Uzbekistan stretches 1,425 kilometres from west to east and 930 kilometres from north to south (see Map 1 below).

Map 1: Physical map of Uzbekistan

2. The physical environment of Uzbekistan is diverse, ranging from the flat, desert topography that comprises almost 80% of the country's territory to mountain peaks in the east reaching about 4,500 metres above sea level. The south-eastern portion of Uzbekistan is characterized by the foothills of the Tian Shan mountains, which rise higher in neighbouring Kyrgyzstan and Tajikistan and form a natural border between Central Asia and China. The vast Kyzyl-Kum Desert, shared with southern Kazakhstan, dominates the northern lowland portion of Uzbekistan. The most fertile part of Uzbekistan - the Fergana Valley - is an area of about 21,440 square kilometres directly east of the Kyzyl-Kum and surrounded by mountain ranges to the north, south, and east. The western end of the valley is defined by the course of the Syr Darya, which runs

across the north-eastern sector of Uzbekistan from southern Kazakhstan into the Kyzyl-Kum. Although the Fergana Valley receives just 100 to 300 millimetres of rainfall per year, only small patches of desert remain in the centre and along ridges on the periphery of the valley (due to extensive irrigation systems).

3. Water resources supply is becoming an issue in some parts of Uzbekistan. The vast plains that occupy two-thirds of Uzbekistan's territory have little water, and there are few lakes. The two largest rivers feeding Uzbekistan are the Amu Darya and the Syr Darya, which originate in the mountains of Tajikistan and Kyrgyzstan, respectively. These rivers form the two main river basins of Central Asia; they are used primarily for irrigation, and several artificial canals have been built to expand the supply of arable land in the Fergana Valley and elsewhere. A shallow lake, Sarygamysh Lake, sits on the border with Turkmenistan.

4. An important feature of Uzbekistan's physical environment is the significant seismic activity that dominates much of the country. The mountain areas are especially prone to earthquakes.

5. Uzbekistan's climate is classified as continental, with hot summers and cool winters. Summer temperatures often surpass 40°C; winter temperatures average about −2°C, but may fall as low as −40°C. Most of the country is arid, with average annual rainfall amounting to between 100 and 200 millimetres and occurring mostly in winter and spring. Between July and September, there is little to no rainfall.

Biodiversity context

6. Uzbekistan is globally and regionally important due to its location between the European, Middle Eastern, and Asian biogeographical regions. Its varying landscapes of high mountain ranges, wide steppes, deserts, riparian wetlands, and the Aral Sea has resulted in a wide diversity of habitats.

7. Four distinct major biogeographical zones have been distinguished in Uzbekistan, according to their ecological conditions and composition of their flora and fauna: *lowland deserts*; *sub-montane semi-deserts*; *mountain ecosystems*; and *wetland and riparian ecosystems*. Deserts occupy the main part of Uzbekistan's lowlands, including the Kyzyl-Kum and Karakum Deserts, the Ustyurt Plateau, the Karshi Steppe, and the Fergana Valley. Four kinds of desert ecosystems are present in Uzbekistan: sand, clay, salt, and stony deserts. All these desert types are located 100-300 m above sea level, under similar climatic conditions. The sub-montane semi-deserts are located in the foothills, extending up to altitudes of 800-1,200 m. The width of the sub-montane semi-desert belt is between 30 km and 50km, and makes up two-thirds of mountain territories in Uzbekistan. The flora of the sub-montane semi-deserts typically comprises perennial grasses and annual plants. The mountain ecosystems of Uzbekistan include: deciduous forests, concentrated in the Western Tian Shan mountains at altitudes from 800 to 2,000m; juniper forests in the Pamir-Alai above 2000m; mountain steppes at altitudes up to 2,600 m; and sub-alpine and alpine meadows between 2,800 m and 3,700 m. Riparian and riverine ecosystems are linked mainly to the Amu Darya and the upper reaches of the Syr Darya Rivers and the downstream parts of the Zerafshan and Surkhandarya. Significant areas of tugai (riparian forest) have survived as narrow corridors in the Amudarya valley and delta and occasionally in other river valleys.

8. The flora of Uzbekistan is represented by at least 4,500 species of vascular plants belonging to 115 families and 650 genera. About 8% of the flora comprises endemic species, of which 10-12 % are considered relictual endemics[1]. The fauna of Uzbekistan has an ancient and complex evolutionary history. In addition to the endemic fauna, other species have historically migrated from the deserts and mountains of surrounding territories of Central Asia, and from India, China, and the grasslands of Kazakhstan, as well as from Siberia, southern Europe, and northern Africa. The fauna is represented by 14,900 invertebrate species (850 protozoa species, 61 species of annelids, 1179 species of roundworms, 533 species of flatworms, 223 mollusc species,

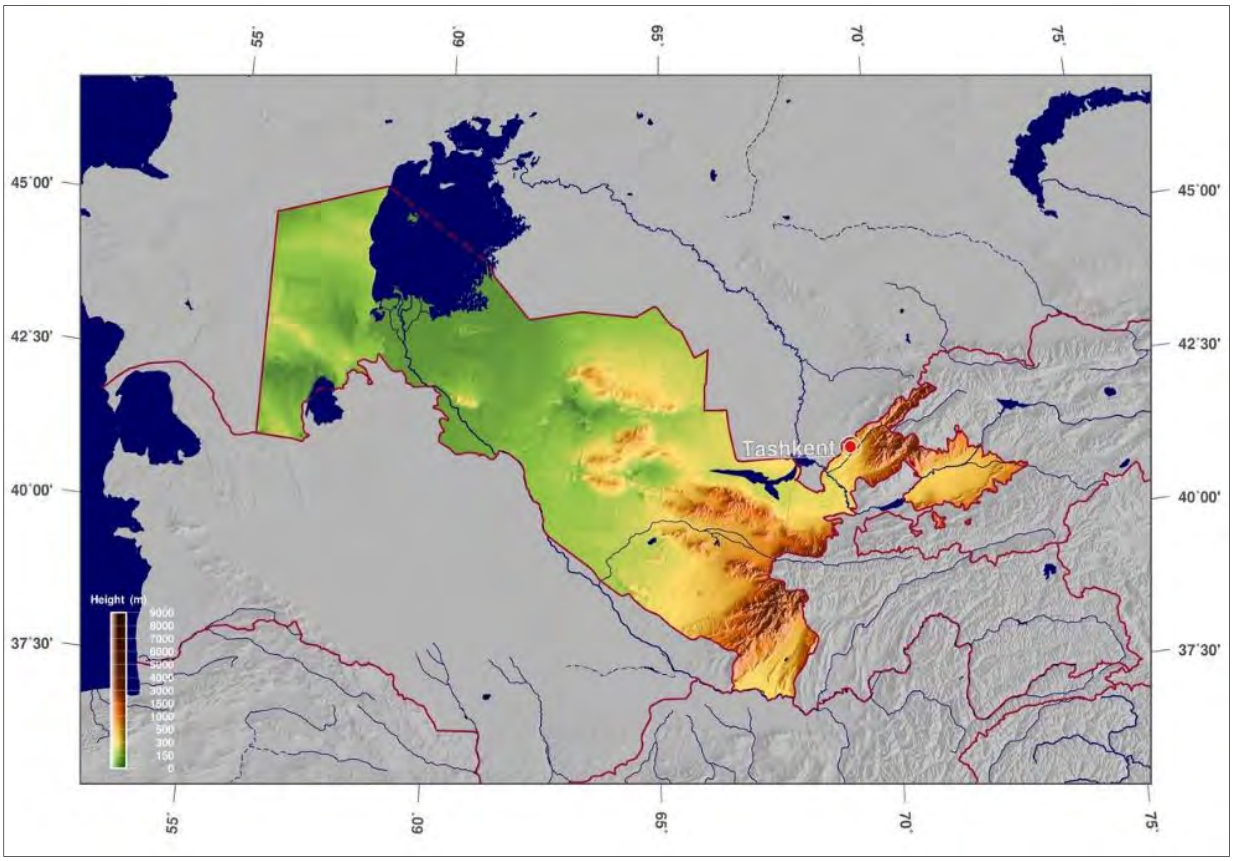
[1] Many of the endemic species in Uzbekistan include relict species that were preserved after the Tethys sea dried up and an arid climate developed across Central Asia. The mountains of the Pamir-Alai and the western Tian Shan are especially diverse in relictual endemics.

and 12,000 arthropod species) and 714 species of vertebrate animals (84 fish species; 3 amphibian species; 60 reptile species, of which 30 are endemic; 460 bird species, of which 8 are endemic; and 107 mammal species, of which 15 are endemic).

Mountain ecosystems of Uzebekistan

9. Uzbekistan is home to the western-most outliers of the western Tian Shan (Chatkal, Pskem, Ugam and Kuramin ranges) and Pamir-Alai (Gissar, Turkestan and Zeravshan ranges) system (see Map 2 below). The western Tian Shan lies north of the Fergana Valley. Several short, but high and steep ranges running south-west to north-east meet the southern sides of ranges running westward and north-westward. The highest peak is in the Chatkal range (4,503 metres), and the predominant elevations vary between 2,300 and 3,200 metres. To the south of the country, the western Tian Shan range meets the Pamir Alai. The Pamir Alai borders the Fergana Valley in the south, and extends chiefly east and west. Located on the border between Uzbekistan and Tajikistan, the highest peak is in the Gissar range (Khazret Sultan at 4,643 metres).

10. Collectively, these mountainous areas span an area of about 9,600,000 ha, and account for approximately 21% of the country's area.



Map 2: Shaded height and relief map of Uzbekistan, showing the location of the western Tian Shan and Pamir Alai mountains in Uzbekistan (source: Ginkco maps project)

11. In the foothills and plains at the base of the mountainous areas, montane semi-desert areas have usually developed. They are characterized by ephemeral vegetation growth that die out at the beginning of summer; and perennial drought-tolerant grasses and shrubs. The fauna includes reptiles such as Central Asian

tortoise, Turkestan gecko, takyr toad agama, desert monitor, and several lizard and snake species. The foothills and plains of the mountainous areas are heavily impacted by agricultural development activities.

12. The most common vegetation of the mountainous areas is the mountain steppe, which occurs at elevations between about 1,000 m and 2,600 m. Subalpine meadows of mixed grasses and cereals extend up to almost 3,000 m on the moist northern slopes, but on southern slopes they are usually replaced by mountain steppes. Short-grass alpine meadows may occur at altitudes up to 3,700 metres. At higher elevations, the level areas and gentle slopes are occupied by sparse and short vegetation, with mosses and lichens found in the areas of the glacial zone that are free of soil cover. The montane semi-desert areas, mountain steppe and sub-alpine meadows are subject to significant pressures from livestock grazing.

13. The montane forests and shrublands (covering an area of about 400,000ha) alternate with the steppes and alpine meadows. Montane forests are found principally on the northern slopes and range between elevations of about 1,500 and 3,000 metres. Juniper forests constitute the principal mountain forests in the western Tien Shan, the Turkestan Range and the south-western tip of the Gissar Mountains. Juniper trees are widespread on the northern slopes of Turkestan ridge, often forming - along with Festuca grasslands - a distinct vegetation belt at altitudes from 2,000 to 3,000 m. At higher altitudes, Turkestan juniper forms low, creeping thickets. Deciduous forests occupy small areas, alternating with steppe and meadow areas or bare rocks, and are concentrated in the western Tian- Shan mountains. They are located at altitudes from 800 m to 2,000 m and contain relict forests of walnut mixed with wild apple, apricot, plum, and other fruit tree species.

14. The mountainous areas are inhabited by a diverse mix of animals, including several bird species that are characteristic of Chinese and Himalayan faunas. Mammals include fox, wolf, stone marten, Tian Shan brown bear, snow leopard, Argali, Siberian Ibex and wild boar. Reptiles include Chernov's agama, Himalayan and Turkestan agamas, and the shield-headed snake.

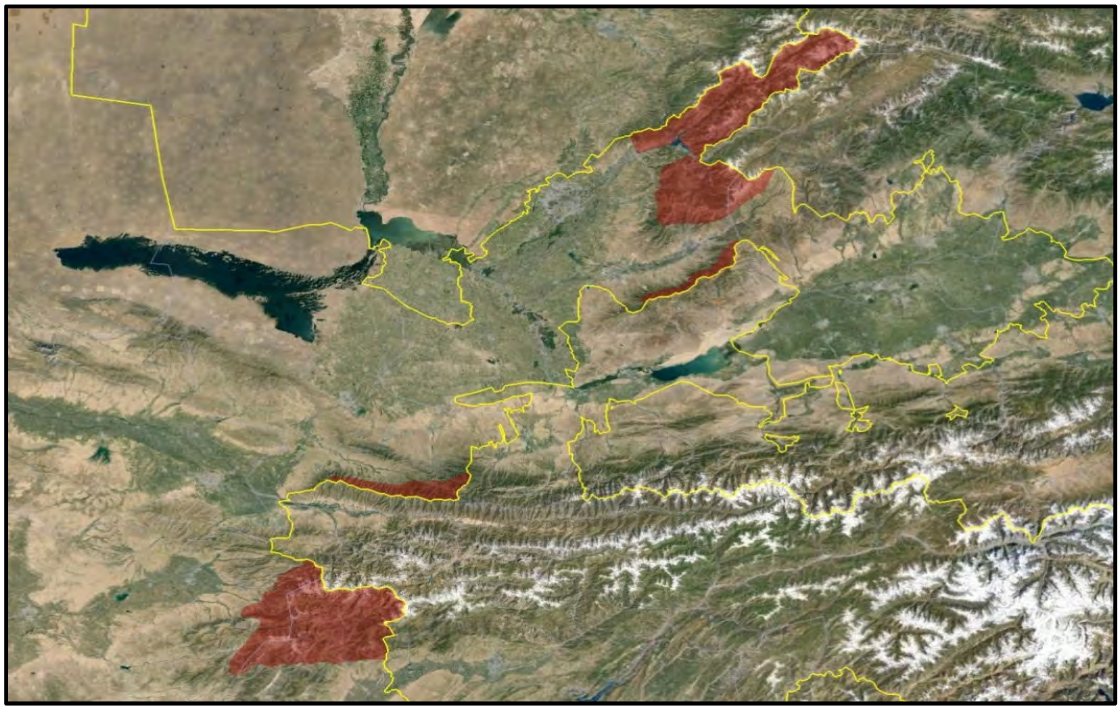
15. The mountainous areas of Uzbekistan are included in both the Mountains of Central Asia biodiversity hotspot - one of Conservation International's 34 global biodiversity hotspots – and the Middle Asian Montane Steppe and Woodlands ecoregion - one of WWFs Global 200 priority ecoregions for global conservation. The montane forests of these mountainous areas are home to fifteen nesting bird-of-prey species of conservation concern (10% of all National Red List bird species). In addition, the forests of western Tian Shan in Uzbekistan host wild relatives of commercially important fruit and nut species, including the Pistachio, Persian Walnut and Sievers Apples.

Snow leopard distribution in the high altitude mountain areas

16. The high altitude mountains – covering the western Tian Shan (Chatkal, Pskem and Ugam ranges) and Pamir-Alai (Gissar, Turkestan and Zeravshan ranges) system - are home to the endangered snow leopard and provide important habitat for its key prey species, the Argali and Siberian Ibex, as well as the locally endemic Menzbier's marmot.

17. The total potential habitat ('range') of the snow leopard in Uzbekistan is reported to be about 10,000 km² (see Map 4 below), representing ~5% of the total global snow leopard range. Thought to be locally extinct during the 1980's, recent research and monitoring efforts has confirmed a population of about 80-120 individual cats (2-3% of the global population) living in the alpine and sub-alpine zones above the tree line. Cat numbers may fluctuate by season as a result of transboundary migrations of snow leopard and their prey.

18. Snow leopard are known (from ranger sightings, camera traps, video traps and/or scat) to be present in the following mountain protected areas: Ugam Chatkal National Park; Chatkal Strict Nature Reserve; Gissar Strict Nature Reserve; Zaamin National Park; and Zaamin Strict Nature Reserve (~65% of the snow leopard range in Uzbekistan).



Map 3: Distribution of snow leopard (in red) in the western Tian Shan and Pamir Alai mountains in Uzbekistan

Socio-economic context

19. The Republic of Uzbekistan is a unitary, constitutional, presidential republic, comprising 12 provinces, 1 autonomous republic, and 1 capital city. The country's official language is Uzbek, spoken natively by approximately 85% of the population. Russian however remains in widespread use.

20. The population of Uzbekistan is estimated at 30.7 million (2014). Uzbeks constitute 81% of the population, followed by Russians (5.4%), Tajiks (4.0%), Kazakhs (3.0%), and others (6.5%). The population density varies significantly, with the population increasing to the east, centred around the fertile areas of the Amu Darya River and the Zeravshan River. About 50% of the population live in rural areas. The country is faced with a young and rapidly growing population - recent estimates suggest that about 34 percent of the population in Uzbekistan is under the age of 14.

21. Uzbekistan's HDI value for 2014 is 0.675—in the medium human development category—positioning the country at 114 out of 188 countries and territories (UNDP Human Development Report, 2015).

22. Uzbekistan's economy relies mainly on commodity production, including cotton, gold, uranium, and natural gas. The Gross Domestic Product (GDP) of the country was US$170.3 billion in 2014, with a GDP per capita of US$5,600. According to government sources, Uzbekistan's economy grew by 8.1% in the first half of 2015, the same rate as in the first 6 months of 2014. On the supply side, growth was driven by gains of 8.1% for industry and 13.1% for services. Higher production of construction materials and double-digit growth in light industry boosted total industrial output, while buoyant commercial bank lending and strong demand for information technology spurred growth in services.

Agricultural context

23. Responsible for more than 25% of total employment and 17% of GDP, agriculture is an important economic sector in Uzbekistan. Agriculture grew by 6.5% in 2015, slightly below the 6.9% recorded in 2014, despite unfavourable weather conditions. Cotton is Uzbekistan's main crop, and accounts for about 40% of the gross value of agricultural production. Cultivable land comprises about 4.4 million hectares, or about 10% of Uzbekistan's total area, which is shared between crops and cattle. Agriculture in Uzbekistan is critically dependent on water. Crop production and most of livestock production (with the exception of the karakul sheep grazing in the desert) is thus mainly confined to irrigated areas.

24. Agricultural transition in Uzbekistan, as in all CIS countries, is driven by a process of land reform, which involves the redistribution of land among producers and concomitant changes in farm structure. Agricultural land is allocated to agricultural producers by the state, but without any rights of transfer. Users pay for the use of state-owned land in the form of land tax and lease payments. There are three main categories of agricultural producers in Uzbekistan: (i) an agricultural production cooperative (*shirkat*) that operates as a collective; (ii) an individual farm ('peasant farm') that exists as a private legal entity (normally in the form of a private enterprise); and (iii) a private household plot (*dekhan*)[2].

25. The livestock sector in Uzbekistan is traditionally dominated by rural families, not large commercial farms. Peasant farms currently manage about 5% of livestock in Uzbekistan, while 95% is in household (*dekhan*) farms. Agricultural enterprises have no role in the livestock sector beyond livestock selection farms, experimental stations, and some specialized karakul sheep operations in the desert.

26. The overall share of the individual sector (i.e. *dekhan* farms and peasant farms combined) in livestock farming has reached 95% of cattle and 84% of small livestock (mostly sheep and goats). The average *dekhan* farm typically has 2-3 head of cattle and 6-7 head of small livestock. The continual increase in livestock herds across the country have not been matched by corresponding increases in the production of feed crops for animals. As a result, most *dekhan* farmers typically send their cows to graze in the open, on harvested fields, along the roads, and near waterways, remaining largely independent of both feed crop harvests and formal pastures. The area under feed crops per head is declining, and is currently less than 0.05 ha/head (<25% of 1980's levels).

27. Of the 19 million hectares of pasture land, desert pastures cover more than 80% of the country (generally supporting only sheep) with the remaining pastures (supporting cattle, sheep and goats) split between semi-desert (12%), mountain steppes (5%) and alpine pastures (2%). It is estimated that more than 16 million hectares of pasture land is subject to some form of soil degradation and desertification. Over the last decade, the productivity of pastures has consequently decreased by more than 23%.

Land tenure

28. The most important categories of land use in Uzbekistan are: (i) lands allocated for agriculture (crops and pastures) (46,1%); (ii) the lands of the 'forest fund' (21,7%), and (iii) 'reserved lands' (27,6%). In total, these land use categories account for more than 42 million ha (~95% of the state territory).

29. The Land Code (1998, as amended) is the principal legal foundation governing land policy and tenure in Uzbekistan.

30. According to the Land Code, all land belongs to the state. Therefore, individuals may only enjoy use rights identified with a particular land parcel, which cannot be transferred. A land parcel is a plot with fixed boundaries that is formed during the planning process.

[2] The main difference between the 'peasant farm' and *dekhan* is size: while *dekhan* farms are about 0.2 ha in size, an average peasant farm is around 15 ha. Another difference is that members of peasant farms are self-employed, while *dekhan* farms are run by families whose members typically also have a job in some agricultural or non-agricultural organization.

31. The highest form of land tenure established by the Land Code is *life-long inheritable possession* (e.g. land for private dwelling). This is followed by various forms of lesser rights affecting land, as follows: *permanent use*; *temporary use*, from three to ten years; *lease*, in the form of a temporary use right of between ten to fifty years; and *joint possession and use*.

32. The Civil Code (1995, as amended) provides for land to be held in some form of 'ownership'. Both private and state ownership are allowed in terms of the Code, and the right of ownership in plots of land '*shall arise in instances, in* (accordance with) *the procedure and upon the conditions provided for by legislation*'. Other forms of land tenure envisaged in the Code include: (i) the right of economic jurisdiction; (ii) the right of inheritable possession for life; (iii) the right of permanent possession and use of a land plot; and (iv) servitude rights.

33. The Civil Code further provides that agricultural enterprises shall be allocated land into 'permanent ownership'. Citizens and non-agricultural enterprises shall be allocated land in permanent or temporary use. Temporary use can be short term (up to three years) or long term (three to ten years). *Dekhan* farms shall be allocated land as lifetime inheritable possession. Citizens also have a right to receive a land plot in lifetime inheritable possession for establishing a private subsidiary plot or a *dekhan* farm; for construction, purchasing, or inheriting a house; or for producing traditional handicrafts.

34. The Civil Code also makes provision for agricultural land to be leased to citizens, local government bodies, or enterprises for a period of not less than ten years. Agricultural enterprises may lease land to workers or groups of workers on the enterprise. The lease shall be determined by agreement of the parties and fixed in a contract.

35. Under the Civil Code, the allocation of land plots for ownership is the responsibility of the Cabinet of Ministers and local self-government bodies.

36. In the majority of cases, when land is leased for farming it is accompanied by a *state order*[3] for cash crops - such as wheat and cotton. The state, represented by the branches of executive power in the regions (*viloyats*) and districts (*rayons*), can withdraw the land from its lease tenure if the tenant does not comply with the existing regulation (for instance, if the tenant does not plant, cultivate or produce crops).

Protected areas

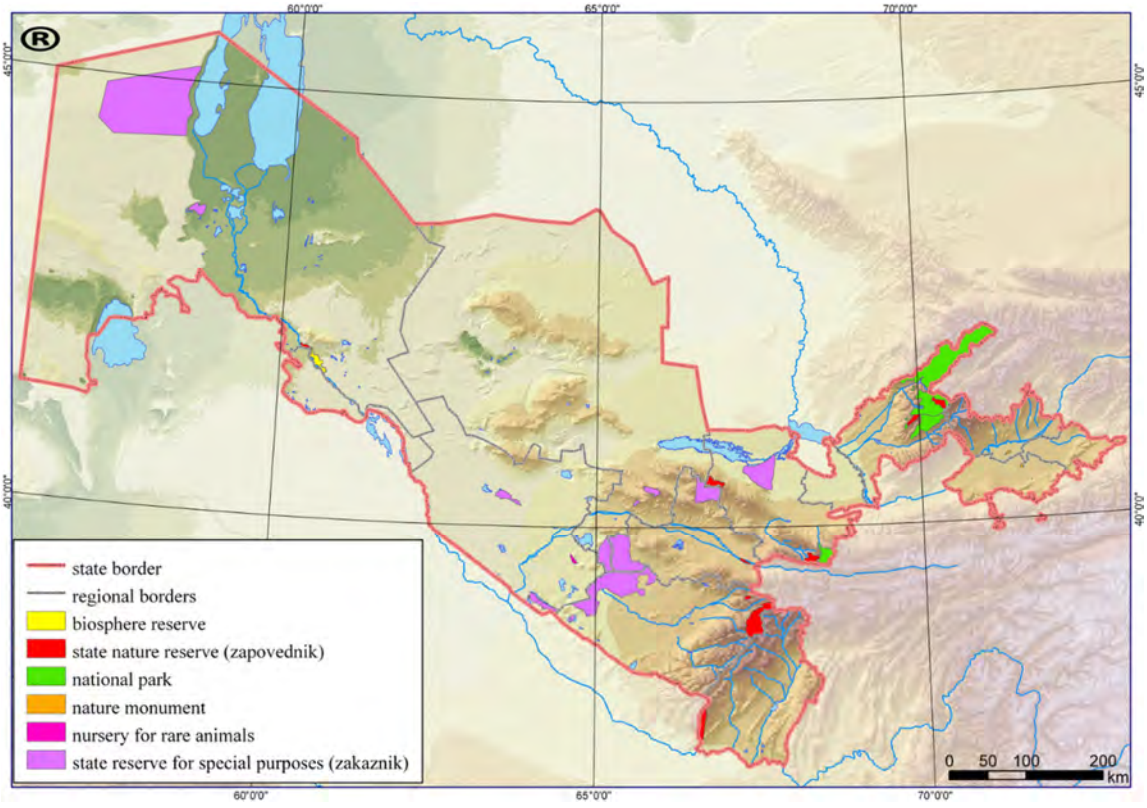
37. The Law on Protected Nature Areas (2004) makes provision for six categories of protected areas in Uzbekistan – Strict Nature Reserves (SNR)[4]; National Parks (NP); State Biosphere Reserves, Special Nature Reserves[5]; Natural Monuments; and Species Breeding Centres. The protected area system comprises eight Strict Nature Reserves (IUCN Category I), two National Parks (IUCN Category II), seven Natural Monuments (IUCN Category III) and twelve Special Nature Reserves (IUCN Category IV) and one State Biosphere Reserve (IUCN Category V/VI), covering a total area of 2,402,077 ha, which is approximately 5.4% of the territory of Uzbekistan (see map 4 below). Only the Strict Nature Reserves are currently being administered as *de jure* protected areas.

38. The protected area system does not currently adequately conserve the country's varied habitats and ecosystems. While the mountain ecosystems (montane forests and high mountains) are well represented (14%) in the PA system, the desert ecosystems (desert and foothill habitats) (3.5%) and floodplain forests (3%) are not adequately protected. The draft *State Programme for the Development of PA system in the Republic of Uzbekistan for 2014-2024* envisages the future expansion of the PA system - involving the

[3] A "state order" is the arrangement when the state provides most of the inputs for agriculture (such as land, water, fertilizers, machinery, etc) and in return the harvest must be sold to the state at the pre-determined price. Of the amount the state pays to the farmer for the harvest, the farmer should pay back the costs of the inputs to the state.
[4] Previously termed *zapovedniks*.
[5] Previously termed *zakazniks* or Habitat/ Species Management Areas

creation of new, and expansion of existing, PAs - to increase protected area coverage to a total area of 8,114,140 ha (~17% of the territory of Uzbekistan), a three-fold increase of the current coverage levels.

39. Lake Dengizkul (2001) and Aidar-Arnasai lake system (2008) are included into the list of the Wetlands of International Importance, under the Ramsar Convention. Of the 51 recognized International Bird Areas (IBA) in Uzbekistan, 17 (35,4%) completely or partially coincide with the boundaries of existing protected areas and 15 are located in the mountainous areas. The Chatkal Strict Nature Reserve is designated as a UNESCO MAB Biosphere Reserve and has also been included in the serial nomination for a transboundary (Uzbekistan, Kyrgyzstan, Kazakhstan) World Heritage Site, covering the mountains of the western Tian Shan mountains. A further five sites – Gissar mountains, Zaamin mountains Shakhimardan, Baisun district, and Sarmyshsai - have also been proposed by the Republic of Uzbekistan as prospective World Heritage Sites (WHS) for future WHS nominations.



Map 4: Distribution of IUCN Cat. I - VI Protected Areas in Uzbekistan

40. A number of different state institutions are responsible for the planning and operational management of protected areas, including: (i) the State Committee for Nature Protection (all special nature reserves and species breeding centres): (ii) Forestry Directorate (selected strict nature reserves, national parks and biosphere reserves): (iii) State Committee for Geology and Mineral Resources (one strict nature reserve); and (iv) regional (*khokim*) administrations (selected strict nature reserves, national parks and nature monuments).

Administrative and institutional context

41. The Parliament (*Oliy Majlis*) of the Republic of Uzbekistan consists of two Chambers: the Senate and the Legislative Chamber. The President is the head of state. The Cabinet of Ministers is the supreme executive power of the state. The Cabinet of Ministers include the Prime Minister, First Deputy Prime

Minister, Deputies of the Prime Minister, ministers, chairmen of state committees, heads of large state concerns and corporations, and the Chairman of Karakalpakstan' s government. The Cabinet of Ministers ensures the execution of laws and other decisions issued by the *Oliy Majlis* and decrees and orders of the President.

42. The system of public administration in Uzbekistan is comprised of two tiers, central and local[6].

43. At the **central level**, the following institutions are responsible for nature protection:

44. Information-Analytical Department for Agriculture and Water Resources, processing of agricultural products and consumer goods of the Cabinet of Ministers of Uzbekistan is the administration body within the Cabinet of Ministers. Its primary responsibility is to organize development of programmes on agriculture and rural development as well as systematic and comprehensive implementation of economic reforms in the field of agriculture, land use, and water resources sector.

45. Information-Analytical Department for Health, Ecology and Environmental protection of the Cabinet of Ministers of Uzbekistan is the administration body within the Cabinet of Ministers. Its primary responsibility is to organize development of programmes as well as implementation of reforms in health care system, social and environmental protection.

46. Committee on Agriculture, Water resources and Ecology of the Senate of *Oliy Majlis* performs mainly parliamentary functions such as lawmaking and control. This legislative function implies that the committee considers and draws conclusions on draft laws submitted by the Legislative Chamber of *Oliy Majlis*, drafts resolutions and other regulatory legal acts of the Senate in the areas of agriculture, water resources and ecology.

47. Committee on Agriculture and Water resources issues of the Legislative Chamber of *Oliy Majlis* is mainly responsible for drafting legislation in the areas of agriculture and water resources.

48. Committee on the issues of Ecology and Nature protection of the Legislative Chamber of Oliy Majlis is mainly responsible for drafting laws in the area of nature protection.

49. The State Committee for Nature Protection (*Goskompriroda*) is accountable to the Senate of *Oliy Majlis* of Uzbekistan. Its primary responsibility is to develop, regulate, and coordinate the implementation of, all environmental legislation and policies in the country. The *Goskompriroda* is the focal point for implementation of the CBD in Uzbekistan. It has a number of regional branches, one in each of the 12 regions of Uzbekistan as well branches in the city of Tashkent and the Republic of Karakalpakstan. The heads of the regional *Goskompriroda* are appointed by the Chairman of the national *Goskompriroda*, with the consent of the regional administration head. The regional *Goskompriroda*'s chairmen report directly to the Chairman of the national *Goskompriroda*.

50. Within the *Goskompriroda*, the State Biological Control Service (*Gosbiokontrol*) is directly responsible for developing, regulating, and coordinating the implementation of, national legislation and policies in the conservation of flora and fauna, and in the planning and management of protected areas. The *Gosbiokontrol* is also responsible for the operational management of one strict reserve (Gissar Strict Nature Reserve), three breeding centres, and twelve special nature reserves (*zakazniks*). The *Gosbiokontrol* is the CITES administrative authority in Uzbekistan.

51. Within the *Goskompriroda*, the Central Administration for Protection and Efficient Use of Land, Water, and Widespread Minerals and Waste Management (*Glavzemvodkontrol*) monitors and controls the

[6] There are however some governance issues between these two tiers of government - including double subordination of territorial departments and subdivisions of ministries both by local authorities and line ministries and duplication of functions of departments within local governments – that remain unresolved.

environmental impacts of pollution, mining and waste management. It is also responsible for maintaining information on the state cadastre of protected areas.

52. The Ministry of Agriculture and Water Resources (MAWR) coordinates the agricultural, water and forestry sectors in Uzbekistan.

53. Within the MAWR, the Main Department of Forestry (MDF) is the executive body responsible for the development and implementation of state forest policy, regulations and plans. The MDF is directly responsible for: the planning and management of forests and forest resources in the state 'Forest Fund' (~9 million ha[7]); the supervision of recreational and commercial hunting activities on state forest fund land; and the planning and management of protected areas located on state forest fund land. The MDF has six subordinated national institutions.

54. Within the MDF, the Department of Nature Reserves, National Parks and Hunting (*Glavohota*), is directly responsible for the administration of five strict nature reserves, one national park and one state biosphere reserve. *Glavohota* does not have regional branches, and manages its strict reserves through direct supervision of the protected area Directors.

55. Within the MDF, the Forest Inventory and Design Enterprise (*Uzgiprourmonloyiha*) are primarily responsible for: forest inventory and monitoring; development of forest management guidelines; and the preparation of 10-year forest management plans.

56. There are currently 72 forest business units under the MDF. The forest business units are operationally responsible for forest protection, restoration, conservation and management within their area of jurisdiction. The forest business units are also in charge of wildlife (including hunting and fisheries activities) on state forest fund land. The number of staff varies between forest business units, depending on the areal extent of the forest business unit. Personnel typically include foresters, professional support staff, administrative staff, forestry workers and forest guards.

57. The State Committee on Land Resources, Geodesy, Cartography and National Cadastre (*Goskomzemgeodezkadastr*) is responsible for coordinating the implementation of land use and land management legislation, regulations and programmes. The committee is also responsible for coordinating the surveying, mapping and maintenance of the national land cadastre database.

58. The Committee for State Border Protection of Uzbekistan's National Security Service is responsible for border security. The countries border stretches for 6,221 km, with 12 border crossing points. Border guards are also responsible for patrolling (notably to control smuggling and livestock theft) the mountainous buffer areas bordering Kyrgyzstan and Tajikistan.

59. The Academy of Sciences is an official sub-division of the Cabinet of Ministers of Uzbekistan. As the main scientific organization in the country, it coordinates research in all areas of science and technology. The Academy of Sciences, under the governance of the General Assembly (*Hayat*), consists of 28 research institutions and 4 State museums which are structured into three organizational groupings - physical and mathematical sciences and engineering; natural sciences; social sciences and humanities - and two Regional Departments (Karakalpak Department and Khorezm Mamun Academy). Currently, the Academy of Sciences of Uzbekistan comprises more than 4,793 scientific staff members, including over 2,200 scientific workers, 73 Academic Members, 281 PhD's and 745 post-graduates.

60. As part of the natural sciences grouping of the Academy of Sciences, the Institute of the Gene Pool of Plants and Animals (IGPPP) specifically undertakes research in the following key areas: plant and animal genetics; plant and animal systematics; plant and animal ecology; conservation of flora, fauna and habitats;

[7] Of which about 1.49 million ha (~30% comprise forest areas) is located in the mountainous regions of the country.

inventory and monitoring of plant and animal genes, populations, habitats and ecosystems; invasive species and agricultural pest control; aquatic ecology; and botanical gardens. The Institute comprises a Board Chairman, Deputy Board Chairman, Board Secretary, 11 PhD's and 7 post-graduates.

61. As part of the natural sciences grouping of the Academy of Sciences, the Scientific Production Center of Agriculture also undertakes basic and applied research in the forestry and livestock sectors.

62. At the **local level**, the Councils of the People's Deputies (the 'councils') and *khokims* (governors), appointed by the President, constitute the basis of the government in the regions, districts and towns. Local governments (*khokimiat*) are subdivided into regional (*viloyats*), district (*rayons*) and city administrations[8].

63. Relations between different levels of government are primarily regulated by the Constitution of Uzbekistan (1992) and the Law on Local Public Administration (1993). Inter-relations between central and local bodies are characterized by subordination, mutual cooperation and strict separation of functions and powers. In the system of organs of executive power, hierarchical centralization prevails. In the implementation of their administrative functions, the organs of local government are subordinated to higher ones (i.e. regional-district-city). The majority of management decisions are enacted, and public services are provided, by local governments according to the principle of vertical branch subordination (i.e. national ministry – principal branch department in a regional *khokimiat* – the respective office in district or city *khokimiat*). The *khokims* of regions, districts and cities are the highest officials of the respective regions, districts and cities. They act simultaneously as heads of representative and executive organs in their territories.

64. Nature protection – including: ownership and use of land, subsoil, water and other natural resources; use of fauna and flora; protection of the environment; ecological security; regulation of protected areas; protection of historic and cultural monuments; and scientific research – falls under the joint authority of central and local government institutions. Agricultural development – including: support of agricultural production; planning of the use of agricultural lands; and transfer of agricultural lands (with the exception of state land) however falls under the direct executive authority of local government. The land administration sections of the regional (*viloyat*) administrations, reporting directly to the *khokim*, are responsible for the administration of land cadastres, addressing land use conflicts and formulating long-term development strategies. Local government institutions also maintain information on the state of the environment within their respective territories (regional-district).

65. The Tashkent Regional Administration – comprising 15 districts – is directly responsible for the management of two important high altitude mountain protected areas, Ugam Chatkal National Park and the Chatkal Strict Nature Reserve (located within the Ugam-Chatkal National Park).

66. Local government in Uzbekistan is further supplemented by self-governing community organizations - mahallas[9] - in *auls* (villages)[10], *kishlaks* (rural settlements) and cities. The structure and functioning of these mahallas are primarily regulated by the Law on Community Self-Governments (1999).

Legislative and policy context

67. The Constitution of Uzbekistan (1992) is the supreme law of the country. Article 55 of the Constitution states that 'The land, its subsoil, water, flora and fauna and other natural resources are a national wealth and shall be sustainably used and protected by the state'.

[8] Tashkent however has a special status, as its local government operates independently of the regional authority.
[9] Refers to a community of people residing in a specific territory - mahallas may vary in size from 150 to 1,500 families. In cities, mahallas are generally established by the residents of a particular residential quarter or suburb.
[10] Localities with over two thousand inhabitants which are situated in the vicinity of industrial or construction enterprises, railway stations or other important 'objects'.

68. Uzbekistan has a reasonably well developed environmental legislative framework. The key laws and regulations relevant to this project are briefly summarised in Table 1 below:

Table 1: Key environmental, agricultural and rural land use planning laws and regulations in the Republic of Uzbekistan

Law/ regulation	Date of adoption	Description
Land tenure		
Code on Administrative Responsibility	1994 (as amended)	Defines the administrative roles, responsibilities and procedures for managing land tenure, land ownership and land use as well as regulates punishments for administrative vialotions.
Civil Code	1995 (Part 1) 1996 (Part 2)	Regulates property rights and other proprietary rights, rights of intellectual property, contractual and other obligations, as well as other proprietary and related personal non-property relations of citizens, business entities and the state.
Land Code	1998	Makes provision for the ownership, tenure, administration, sustainable use and rehabilitation of land and the natural resources associated with that land.
Livestock agriculture		
Law on *Dekhan* Farms	1998	Makes provision for the establishment of a 'dekhan farm' on state land. It sets forth the right of land-shareholders to transfer their land parcels to others, and to use their land-shares as collateral.
Law on Agricultural Cooperatives	1998	Makes provision for the establishment, functioning, reorganization and liquidation of agricultural cooperatives[11] (*shirkats*). It also regulates the rights and duties of these cooperatives.
Law on Peasant Farms	1998	Makes provision for the establishment, functioning, organization and liquidation of peasant farms. It regulates the rights and duties of peasant farms.
Law on State Land Cadastres	1998	Establishes the legal basis for: maintaining the state land cadastre; using cadastral data for economic development; safeguarding rights to parcels of land; and the sustainable use, restoration and protection of lands.
Resolution 'On measures to stimulate the increase of livestock at private subsidiary, *dekhkan* and farms'	2006	Identifies the state-funded measures required to incentivise an increase in the number of cattle and small livestock in private farms, and to improve livestock productivity.These incentives may include *inter alia*: entitlement of pastoralists to a state pension; fiscal incentives; access to veterinary services; improved access to micro-credit schemes; improved access to livestock feed; improving breeding programmes for livestock; and improved access to auctions of pedigreed cattle.
Resolution 'On additional measures to strengthen incentives to increase livestock at private subsidiary, *dekhkan* and farms and expansion of livestock production'	2008	
Environmental management		
Law on Nature Protection	1992	Provides the legal framework for the development of national legislation and policy in conservation and sustainable use of natural resources. The law requires the involvement of local communities and stakeholders in managing the country's natural resources.

[11] Agricultural cooperatives (shirkats) are allotted plots of agricultural land on condition of open-ended land use that can be transferred in life-long hereditary possession but cannot be purchased, sold, mortgaged, donated or exchanged.

Law on Water and Water Use	1993	Provides the legal framework for regulating water relations and the efficient use of water, and provides for the protection, improvement and access to water of individuals and institutions.
Law on the Protection and Use of Wildlife	1997	Regulates the protection, rehabilitation and sustainable use of animals. The law also stipulates the general rules governing hunting and fishing.
Law on the Protection and Use of Flora	1997	Regulates the protection, rehabilitation and sustainable use of plants.
Law on Forests	1999	Regulates the protection and sustainable use of forests, forest species and forest products. Identifies the procedures for: disposal of the state Forest Fund land[12]; categories of protection of forests; and inventory, monitoring and reporting on the state Forest Fund.
Law on Soil Protection	2002	Establishes the basic legal and institutional framework for the sustainable use of soils; soil conservation; the improvement of soil fertility; and the prevention of soil degradation
Law on Protected Areas	2004	Provides the legal basis for the planning and management of a network of protected areas. It makes provision for different categories of PAs in accordance with their management objectives. The law also provides for the establishment of special buffer zones around strict nature reserves.
Law on Ecological Expertise	2009	Regulates the application, administration, control and monitoring of Environmental Impact Assessments (EIAs) in order to mitigate the impacts of developments on the environment.
Law on Ecological Control	2013	Establishes the legal basis for the implementation of environmental controls. It defines the powers of state and government at all levels, including specially authorized state bodies or public administrations for environmental control. It also defines the level and extent of involvement of civil society in environmental protection.

69. A number of strategies and state programs on environmental protection and sustainable development have recently been adopted, as well as several sectoral documents that include environment-related provisions. The key programs relevant to this project, and currently under implementation, are briefly summarised in Table 2 below:

Table 2: Relevant active state programs in the Republic of Uzbekistan

State Program	***Implementation period***	***Description of the key elements of strategy/program***
Welfare Improvement Strategy	2013–15	Frames the strategy for government's public social programs which provides allowances and benefits to targeted groups of the poor, vulnerable groups, and those lacking services through local neighbourhood communities (*mahallas*).
National Environmental Action Programme (EAP)	2013-2017	The EAP identifies the national strategic priorities for: maintaining, restoring and enhancing environmental quality; improving sustainable use of natural resources; and mainstreaming environmental protection and sustainable use into other economic sectors. The state budget allocation for the implementation of the programme equates to ~US$400 million per annum.
State Programme for Forestry Development	2015-2018	Provides an implementation framework for forest planning; cultivation of commercial forest plantations (e.g. walnut, almond and pistachio); rehabilitation and afforestation of

[12] Mostly leases (up to 10 years) for use in crop agriculture and for pastures.

		degraded forests; and the protection and sustainable use of natural forests and forest products.
(Draft) Programme on creation and expansion of the network of protected areas (PA) in the Republic of Uzbekistan	2014-2023	Establishes protected area targets to indicate how much of each ecosystem needs to be included in the protected area system. Identifies which geographic areas are the highest priorities for protected area expansion to meet those targets. Provides detailed proposals and maps of land within these priority areas that should be explicitly targeted for protected areas expansion.
Program of Project Development of the Detailed Layout for the Cities and City Settlements with Population more than 20,000 Inhabitants	2015-2018	Provides for the systematic development of land use plans for the territories of cities and city settlements (over 20,000 inhabitants). It further provides for the improvement of town-planning regulations and rules. It defines the procedures for the development, coordination and approval of town-planning documentation. It enacts the establishment of different 'State Unitary Enterprises' (SUE) to develop and prepare the town planning documentation.

THREATS, ROOT CAUSES AND IMPACTS

70. The *Fifth National Report of the Republic of Uzbekistan on Conservation of Biodiversity* to the CBD (FNR, 2015) describes the major factors threatening the biodiversity of the country. Figure 1 below summarises the main threats and key causes of biodiversity loss in Uzbekistan, as reported in the FNR.

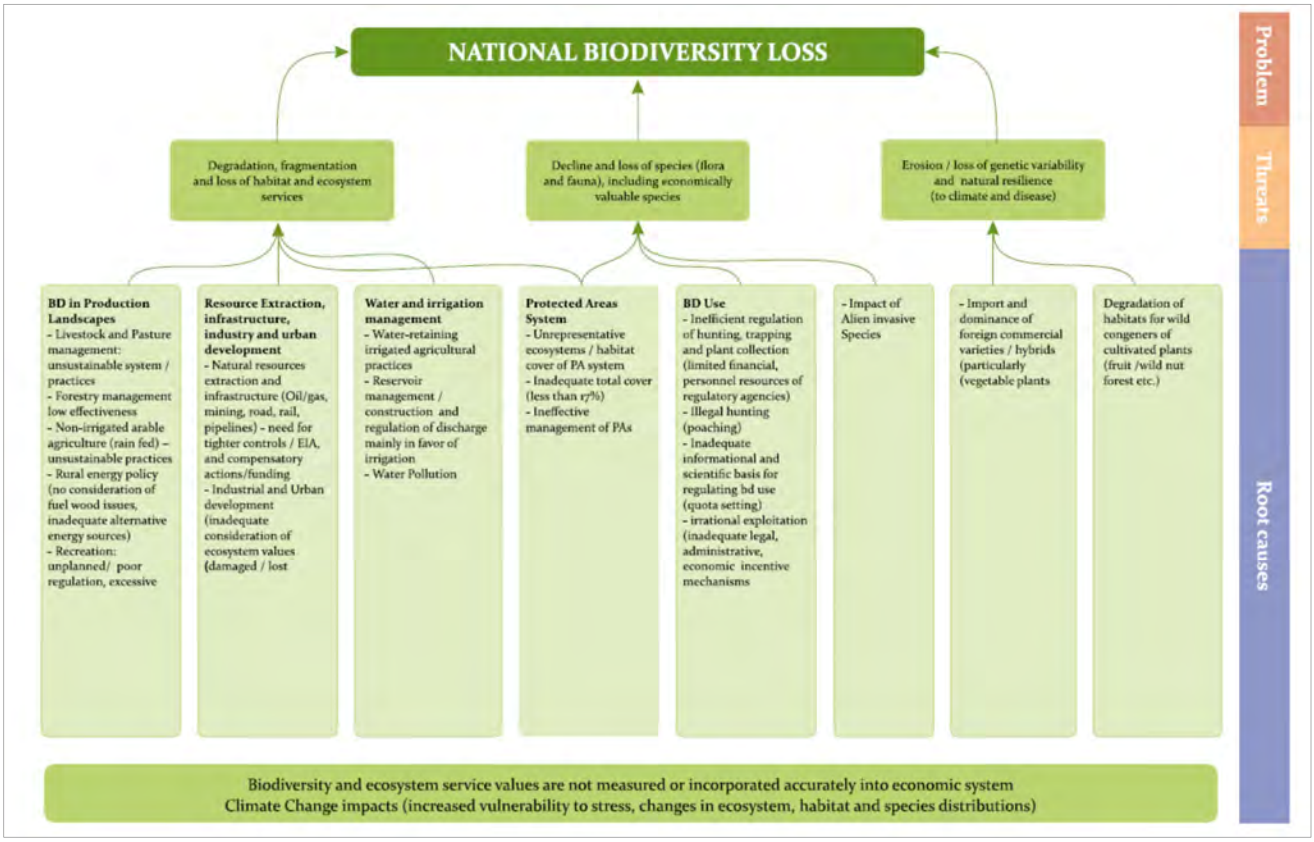


Figure 1: Main threats and key causes of biodiversity loss in Uzbekistan (FNR, 2015)

71. Over the course of the past 15 years, the mountainous landscapes of Uzbekistan have suffered from continued degradation of the grassland, forest and alpine habitats. The key drivers of environmental degradation of these mountain ecosystems, and their native wildlife (notably snow leopard and prey) include: (i) unsustainable, and poorly regulated, levels of livestock grazing in the montane forests, steppes and sub-alpine meadows; (ii) high levels of dependency of rural communities on fuelwood from montane forests for heating and cooking; and (iii) extensive poaching of wildlife, along with increasing incidences of retaliatory killing of natural predators.

Unsustainable levels of grazing in the mountainous areas

72. While land in valleys and mountain foothills has been ploughed for arable crops, the high mountainous steppe and alpine meadows of the Western Tian Shan and Pamir Alai mountains are some of the few remaining areas in the country which can be used as productive pastures for livestock. With growing human populations in the mountainous regions of the country, livestock herds are also growing. In many mountain pastures the numbers of livestock have now increased to the point that the carrying capacity of these pastures has been exceeded by a factor of two or more. The productivity of the mountain pastures has reportedly more than halved over the last 20 years.

73. The pressure on mountain pastures is further intensified by the abandonment of the traditional practice of moving livestock between summer and winter pastures; with communities increasingly letting cattle graze in the close vicinity of settlements throughout the year. As private households do not have secure pasture rights, they are often compelled to illegally use any available land. This problem is aggravated by poor livestock and fodder management practices. In areas near the settlements, all vegetation, including valuable medicinal plants, is typically being used as fodder for livestock.

74. The impacts of this overgrazing are manifest in a reduction in productivity, a loss of vegetation cover, increasing soil compaction, and an increase in the intensity and extent of soil erosion. Over 60% of pastures in the Western Tian-Shan and Pamir Alai mountain systems – most of which are proximate to human settlements - are now considered heavily eroded. Although only limited data are available, it is clear that every year significant amounts of fertile soil are being lost from mountainous regions. For example, in the mountainous Surkhob river basin (in the Boljuvan and Dangara districts), annual sediment runoff is estimated to be 6-8 tons/ha/year. An increase in gullying is also evident, as is the incidence of landslides. Secondary plant communities now occupy 80% of the pastures in the sub-alpine belt.

75. Grazing by livestock in montane forests is severely disturbing the undergrowth of these forests, and detrimentally affecting forage availability for wild ungulates. Over the course of the last 10 years, much of the degradation of the Juniper and wild fruit and nut forests has been connected to the fact that communities have increasingly allowed their cattle to graze in montane forests, with little or no controls in place. Recent data from the forests along the Pskem ridge in Western Tian Shan indicate the presence of at least 106,000 head of cattle. This level of uncontrolled grazing by livestock has been shown to: i) destroy the forest undergrowth; ii) compromise the natural regeneration of these forests (especially slow-growing Juniper forests); and iii) disturb native mammals and nesting birds. In mountainous areas close to settlements, there is reportedly no natural forest regeneration taking place in the forests heavily affected by livestock grazing.

High dependence of communities on montane forests for energy needs

76. Juniper forests have traditionally been cut and converted into charcoal. Over 80% of Juniper forests have subsequently been destroyed over the past 300 years, primarily by local communities to satisfy their energy needs. With increasing populations, the trend of unsustainable forest use in mountainous areas is on the rise. Juniper forests, which naturally have a very slow regeneration rate, are increasingly being replaced by grassy and shrub vegetation.

77. At present, the annual demand for wood (including firewood, charcoal, building materials and timber) in Uzbekistan is estimated at more than 10 million cubic metres. With no commercial harvesting of forests currently allowed in Uzbekistan, the total annual timber legally harvested from forests is only about 25,000 cubic metres (most of which is sold as firewood), leaving a significant national wood deficit.

78. While some of the demand (mostly for construction) is addressed by wood imports, this national wood deficit is placing the montane forests under increasing pressure from rural communities. The current extent and intensity of illegal wood harvesting - especially for household heating and cooking purposes - is seriously threatening biodiversity in the montane forests. The degradation of montane shrub and forests has been gaining pace recently, especially in Juniper forests, broad-leaved forests, shrub communities and the globally important fruit and nut forests of the Pamir Alai and Tian Shan mountains. Most of these forests are not being actively protected or managed, with local communities regularly harvesting them for fuelwood and household construction material.

79. The degradation of forests at the lower elevations of the mountainous regions has also been shown to closely correlate with the increased occurrence of mud-slides in these areas. In the past 5 years, mudslides have increasingly been noted to happen not only in spring and autumn, but also during the summer months. Mudslides are rendering damage to downstream ecosystems, destroying infrastructure, impairing water quality, and resulting in huge agricultural losses due to the lowering of soil productivity.

Extensive poaching, and retaliatory killing, of wildlife

80. Widespread poaching and the illegal hunting of wildlife for food, skins, income and medicinal purposes (in the case of marmots) is an ongoing threat to the biodiversity of mountainous ecosystems.

81. While there are government-established annual quotas in place for legally approved subsistence or sport hunting (primarily for ibex, boar and marmots), in many cases these quotas are being exceeded due to the poor administration and enforcement of these quotas. Many residents of remote mountain villages are often not even aware of the existence of government-issued hunting licenses and quotas, and generally have a poor understanding of wildlife legislation. They typically consider the natural mountain resources as a free source of food, income, or materials for heating, cooking and construction. With the fragile economic conditions prevailing in remote mountain villages, and the weak management and enforcement systems in place to control illegal hunting and poaching, local people are turning in greater numbers to the exploitation of wildlife[13].

82. Numbers of large native herbivores such as Tajik markhor, Bukharian urial and wild boar have dropped dramatically over the past century, as have marmot, badger, porcupine, and wolf, which are being over-hunted and placed at risk. Reliable data on reptiles, birds, and fish are not easy to obtain, but doubtless many species have been lost or are in danger of extinction (at least locally).

83. The competition for food with large and growing domestic livestock populations is further contributing to a reduction of wild prey numbers, which already live at relatively low densities due to the naturally low productivity of the habitat. With lower prey numbers, predators are increasingly resorting to killing domestic livestock. As people seek to increase their use of more of the higher altitude pastures for livestock grazing, and for longer periods of time, the threat of predators (including snow leopards, lynx, fox, wolves and bears) killing their livestock has grown, frequently leading to retaliatory killings of these predators. The poor construction of summer corrals further contributes to this problem, because as a rule they are easy to penetrate (i.e. low walls, no roof) by predators, but at the same time prevent livestock from

[13] While there is limited data and information available, the direct killing of snow leopards by poachers is not yet considered to be prevalent, with the most recent enforcement incident recorded as far back as 2008 (*Gosbiocontrol*).

escaping. In summer, the herds are often left unguarded in the daytime, or guarded by children, who can't always protect the animals.

Impacts of climate change

84. Uzbekistan is also highly vulnerable to the impacts of climate change. Average annual temperature has increased by 0.3°C since 1951 and in the next 50 years, average temperature is expected to increase in the range of 2–3°C. Based on two 30-year comparisons (1950-1980; 1978-2007), the number of winter days with lower than -20°C has declined by more than 50%. Uzbekistan is predicted to be vulnerable to extreme temperatures, heavy precipitation, mudflows, floods and avalanches in increasing frequency. Water shortages, along with water and soil salinity and erosion, are already serious issues in the country. The country had a water deficit of 2,000 m^3 in 2005 that is predicted to rise up to 7,000 m^3 by 2030 and 13,000 m^3 by 2050. Changes in the water cycle are predicted to further exacerbate precipitation, prolonged droughts, and extreme weather events.

85. A legacy of environmental mismanagement, under-investment in basic infrastructure, and limited institutional capacity is hampering the country's ability to cope with the projected impacts of climate change.

Underlying social, political and economic issues

86. Underlying these pressures are however social and economic factors, including an increasing demand for agricultural and timber products, insecure land tenure, and low levels of capacities to conserve mountainous ecosystems. Many of the communities living adjacent to these mountainous areas are in need of livelihood improvement. Low levels of income within these communities mean that there is a dependency on natural resources to meet food, fuel and shelter requirements. In the context of a growing population and growing threats from climate change, these issues are liable to result in increasing rates of overgrazing, deforestation, irreversible biodiversity loss and detrimental impacts to rural communities, particularly women.

LONG-TERM SOLUTION AND BARRIERS TO ACHIEVING THE SOLUTION

87. In order to reduce the pressures on, and threats to, the biodiversity of the western Tian-Shan and Pamir Alai mountain ecosystems of Uzbekistan, the long-term solution is to: (i) prevent the further fragmentation and degradation of the mountain landscapes; (ii) maintain and/or restore the quality of habitats within these mountain landscapes; (iii) increase native wildlife numbers (particularly snow leopard and prey) across the mountain landscapes to promote viable populations; (iv) facilitate a transformative shift to more sustainable levels of natural resource use in the montane steppes, meadows and forests; (v) reduce the impacts of predation and mortality of livestock, and decrease retaliatory killing of predators in mountainous areas; and (vi) improve the planning, administration, enforcement and monitoring capacities of institutions responsible for the conservation stewardship of these mountainous regions.

88. Although the *National Environmental Action Programme 2013-2017* (EAP) collectively identifies a suite of complementary national and local actions that would be required to effectively conserve mountain ecosystems in Uzbekistan, there are however a number of significant barriers to the country's ability to contribute to achieving the long-term solution described above. The key barriers are briefly outlined below:

Barrier 1: Poor integration of environmental information into land use planning in mountainous areas

89. Land use planning in mountain landscapes does not adequately integrate environmental information, or use ecosystem-based decision-support tools, to guide their development. Critical environmental data is often being left outside the land use planning processes due to lack of capacities and knowledge on how to objectively incorporate it into decision-making.

90. The basic environmental datasets used to guide land use planning in the mountain regions are often outdated (e.g. faunal and faunal population and distribution data) or even non-existent (e.g. spatial

distribution of key biodiversity areas). There is no assessment of the current state of soil, vegetation or wildlife being undertaken to support land use planning processes. There is also no classification of land according to its degree of degradation, nor are there any management regimes being developed for land use (including rehabilitation) on habitats under various forms of degradation. Areas of high conservation value are not being adequately identified, and guidelines developed for their conservation and sustainable use, as an integral part of land use planning processes.

91. As a result, much of the land use planning tends to be driven (in most cases) by short-term socio-economic goals, and give little consideration to the ecological integrity and sustainability of natural resources. Sectoral land use plans are thus not adequately accounting for the long term consequences of land erosion, loss in soil productivity, or loss of ecosystem services in the mountainous regions. This will likely have significant long-term social and economic costs.

92. Further, there is generally a weak monitoring and enforcement capacity, particularly in respect of illegal land use (e.g. livestock grazing in high conservation value forests), and low levels of conformance with the conditions of (forest and pasture) lease and use rights. Without proper monitoring and enforcement of lease and use right, offenders are often not penalized, regulatory processes are being undermined, and pastures and forest continue to be degraded and natural ecosystem functioning lost. Monitoring and enforcement of sectoral land use plans and land use rights requires closer dialogue between staff from the various state institutions involved in land use planning, permitting and environmental inspections. While local government institutions and forestry business units are responsible for the administration of pasture use within their area of jurisdiction, in practice there are no agricultural-pasture extension support staff within these institutions to fulfil this mandate.

<u>Barrier 2</u>: Limited resources for, and capabilities in, the expansion, planning and management of protected areas in the mountain ecosystems

93. While the IUCN Category I (Strict Nature Reserve), II (National Parks), III (Natural Monuments) and IV (Special Nature Reserves) protected areas in Uzbekistan should provide a safe haven for wildlife, and secure the preservation of their natural habitats, in practice the conservation status of a protected area does not always imply effective protection on the ground. In the mountainous areas of the country, only the Strict Nature Reserves are being adequately resourced (albeit modestly), and actively managed, to achieve conservation outcomes. However, even the Strict Nature Reserve budgets are barely sufficient to cover core staff salary costs. The remaining categories of protected areas (i.e. IUCN categories II, III and IV) are collectively suffering from inadequate human and financial resources, with conservation actions only being partially implemented - if at all - in these categories of protected areas. There is also poor and inconsistent enforcement of the existing laws and regulations in National Parks, Natural Monuments and Special Nature Reserves, leading to low levels of prosecution of illegal activities occurring in these protected areas.

94. The administration of protected areas in Uzbekistan is predominantly financed from state budget allocations. There is however a wide variation in the funding of protected areas, with protected areas administered by the Tashkent Regional Administration and the State Committee for Geology and Mineral Resources being considerably better resourced than those administered by the State Committee on Nature Protection and the Ministry of Agriculture and Water Resources (Directorate of Forestry). The budget allocation to a protected area often does not reflect its size, ease of management, level of threats or biodiversity significance, and is not linked to a coherent set of activities that are required for its effective management. Intermittent funding for capital expenditure makes little or no provision for the replacement of ageing infrastructure, equipment and vehicles in all protected areas. Where there are other regulated sources of income for protected areas[14], these opportunities are however not being developed (for a variety of

[14] For Strict Nature Reserves, funding can come from: the State Budget; the Fund for Nature Protection; revenues from scientific research, advertising, publishing and educational services; compensation and fines for illegal activities or damage caused to

reasons). The protected areas are thus dependent on periodic short- to medium-term funding and technical support from a range of development partners to supplement the shortcomings in their capital, operational and human resource budgets. Indications are that government budget allocations are, in the light of other more pressing demands on the national budget, not likely to increase over the medium-term to fill any financing gaps. Protected areas are generally considered a financial 'drain' on national, regional and district government resources, and there is a reluctance to allocate scarce funds to improve the planning and management of these protected areas. There is no compelling business case to motivate an increase in government funding of the protected area system, notably through investments in nature-based tourism infrastructure and facilities that could contribute to improving the long-term financial sustainability of protected areas.

95. There also appears to be a general lack of business, economic and finance skills and technologies to support a more business-oriented approach to the planning and management of protected areas. The financial management system tends towards compliance and adherence to procedure rather than cost and implementation efficiency, and rarely cultivates the requisite business management skills within the protected areas. Most protected areas are run by forestry, enforcement and administrative staff who have limited or no training in budgeting, strategic planning, financial management systems or cost-effective approaches to protected area operations. A more cohesive and standardised approach to the financing, planning and management of the protected area system is also being further compromised by the lack of coordination and cooperation between the different institutions, at different spheres of governance, responsible for individual protected areas.

96. Ranger staff salaries are very low, and there are limited financial (or other) incentives to retain staff and maintain their morale. The working conditions for ranger staff are relatively harsh, and the risk of injury while on patrol is not uncommon. Law enforcement efforts in protected areas are further hampered by the poor demarcation of protected area boundaries.

97. Many of the Strict Nature Reserves in mountain ecosystems are becoming biologically isolated - as a consequence of the conversion of forests, overgrazing and crop agriculture in the surrounding areas - effecting wildlife movement corridors, reducing potential dispersal areas of wildlife, compromising water yields from catchment areas, increasing the risk of erosion, and reducing the viability of wildlife population sizes. Large predators (including snow leopards) and ungulates naturally range widely through the mountain landscapes, and any effort aimed at securing their long-term survival needs to ensure that they are able to move safely across and between the formal protected areas. Preventing the further fragmentation of landscapes - in order to ensure connectivity corridors between strictly protected areas - as well as conserving and rehabilitating critical habitats is crucial for the sustainable conservation of these species. However, the size, remoteness, and harshness of high mountain territories make this particularly challenging. As human use of the high mountain landscapes increases and intensifies – driven by social and economic imperatives - unsustainable levels of use is further degrading the quality and productivity of habitats, making the safe movement of indigenous predators and ungulates increasingly difficult and less likely.

98. There are very low levels of awareness prevailing among communities living in adjacent villages about the real need to protect wildlife and wildlife movement corridors, and the means to do this. There are few examples of meaningful collaboration between the protected areas and adjacent communities in the protection of wildlife and key habitats. Limited efforts are being made to support the social and economic development of local communities living in and around protected areas, most of whom still rely on access to natural resources for part of their livelihood. There is a critical need for protected areas to move away from the approach where local communities largely experience conservation efforts through law enforcement

protected areas; proceeds from the sales of confiscated equipment and products; charitable contributions; and other funding sources. For National Parks (and other protected area categories which allow recreation and extractive uses), an additional source of funding is the revenue earned from the use of natural resources, tourism and recreation, including entry fees.

operations, to a more collaborative approach where financial and technical support provided to support the social and economic development of villages (such as nature-based tourism development, improved productivity of crops and pastures, development of community-based hunting packages and improved access to markets, etc.) is linked to specific pre-determined conservation outcomes (such as better control over poaching, more sustainable levels of fuelwood collection, reduction of livestock numbers in sensitive areas, adoption of non-destructive measures to control predators, etc.) in protected areas.

99. A number of protected areas are located close to, or along, mountain border areas, which are under the direct surveillance of the National Security Service (Committee for State Border Protection). While the presence of border troops will help reduce incidences of illegal grazing, poaching and logging by local communities, the environmental impacts of the ongoing military exercises, uncleared mines and border military installations in these areas are not well understood. There is a need to work more closely with border guards and national security officers to ensure that the biodiversity values of the national borders are being kept unspoiled.

***Barrier 3*: Unsustainable pasture and forest management practices in mountainous areas**

Pasture management

100. The available mountain pastures are coming under increasing grazing pressure, resulting in the incremental degradation and loss of productivity of these pastures as a result of overstocking and a reliance on the same mountain areas every season for grazing. While there are already well-established traditional (e.g. seasonal grazing systems, seasonal burns) and modern approaches (e.g. rotational grazing, supplementary feeding, stock number controls, rehabilitation of degraded areas) to address this challenge, there is no strategic approach to coordinate efforts to improve the management of pasture lands across the mountainous landscapes in Uzbekistan.

101. Traditional knowledge of sustainable livestock ranching systems is increasingly being lost in rural communities. The lack of implementation of sustainable pasture management practices is - in part - driven by inadequate knowledge, low technical skills and capabilities and limited resources (equipment, financing, infrastructure). While there are some agricultural subsidy and micro-credit schemes, these tend to be focused on crop agriculture and do not provide sufficient incentive for a shift towards more sustainable forms of pastoralism. There is virtually no technical or extension support provided by public agencies to local livestock farmers. There is thus a critical need to provide both technical and financial support to facilitate and incentivise the adoption of more sustainable pasture management approaches, including *inter alia*: improved stocking rates; selective seasonal grazing; effective rotational grazing systems; supplemental feeding; adaptation of natural fire regimes; improved veterinary services; and value-added infrastructure and equipment.

102. There is no rationalised law on pastures, with pasture and livestock issues addressed in a piecemeal manner across a number of different pieces of legislation. There is no clear public institution directly responsible for the strategic planning and operational oversight of pastoral farming. There is also limited cooperation between the MDF (through the forest business units), the regional and district administrations (the *de facto* institutions responsible for administering pasture land use) and the pasture use rights holders and pasture leaseholders in improving the management and rehabilitation of mountain pastures. While the regional and district administrations are responsible for the administrative oversight of pasture use (and other) within their areas of jurisdiction, in practice there are no agricultural extension staff within these local government administrations to fulfil this function.

103. There is limited understanding and knowledge of the current state of pastures in the mountain ecosystems, and hence no clear indication of the specific extent of the need for rehabilitation and restoration of montane grasslands and meadows. There is also no practical experience of the technical requirements for rehabilitating different grassland and meadow habitats, particularly in respect of increasing the productivity

of, and expanding availability of land for, pastures. There are currently no successful grassland rehabilitation projects in the region that could serve as demonstration projects for scaling up of efforts to rehabilitate degraded grasslands for pasture use. The role of fires in the regeneration of, and as a mechanism for rehabilitating, grasslands for pasture use is still largely unknown.

104. Farmers and herders have not yet established adequate mechanisms to effectively protect livestock from predation. Livestock are not adequately monitored by herders during the day, and the use of dogs to secure livestock is not always prevalent. The overnight corrals for livestock are often sub-standard and not predator-proof, creating opportunity for predation by snow leopard, bears, lynx and wolves. The efficacy of predator-proof collars for livestock has not yet been properly tested. Access to veterinary services and appropriate medication and vaccinations is also generally poor, further contributing to the loss of domestic livestock. There is no ready access to low-cost livestock insurance for pastoralists, leading to significant financial hardships for rural families when livestock are lost. Few households have access to formal financial services and *dekhan* farmers lack financing, especially in the rural mountainous areas. Livestock farmers increasingly rely on second-tier banks and microfinance companies - whose lending ability is constrained by small market share, limited deposit mobilization, a dearth of qualified staff, and governance issues – for funding support.

Forest management

105. While the Law on Forests conceptually provides for all the main elements of sustainable forest management, few of these are actually being implemented in practice because of a lack of technical knowledge, limited experience of forest staff and/or institutional resource (e.g. operational funding, equipment, infrastructure) constraints. There is a general trend of decreasing investment in the maintenance and replacement of equipment in the forest business units, with the bulk of the annual state budget allocations being committed to human resource costs (currently ~84% of the annual budget). The national inventory of forests (and state forest fund land) is not being regularly maintained due to resource constraints, while many of the 10-year forest plans are not being reviewed and updated in accordance with the requirements of the Law on Forests.

106. With the forestry business units under pressure to increase their income[15], the operational emphasis of these business units is shifting toward activities that can contribute to the financial sustainability of the MDF (including leasing land for pastures, sale of plants and food, provision of horticultural services, sale of medicinal plants and wood, and lease of land for household gardens), rather than the conservation of natural forests (and pastures and meadows on state forest fund land). The forest business units are thus not effectively preventing the illegal cutting of, and poaching in, forests or enforcing existing laws and regulations on state forest land.

107. There are few incentives for local communities to sustainably use state forest fund land for improving their livelihoods. The MDF typically only enter into short-term contracts (1 year) for the lease of state forest fund land, with the state deducting 50-70% of the income (in cash and in-kind) generated from the use of the leased land. The Law on Forests also only makes provision for the leasing of degraded state forest fund land, further reducing the viability of the productive use of forests. With the low risk of prosecution, rural communities are simply resorting to the illegal use of forests for their grazing and wood collection needs[16].

108. Current livestock farming practices are an important factor in the ongoing degradation and destruction of forests, but there are no measures in place (e.g. as part of the pasture management and/or forest management plans) to mitigate the effects of illegal and unsustainable levels of livestock grazing and

[15] Currently own income ('extra-budgetary' income) represents about 25% of the total budget of the DF.
[16] In 2014, there were 505 incidences of illegal logging/cutting of forests, and 230 incidences of illegal grazing and browzing, recorded on state forest fund land.

browsing in natural forests. Some wildlife species are linked to (e.g. Urial, Markhor and Chukar Partridge), or have a preference for (e.g. Bukhara deer) forest and shrub habitats, but the impacts of forest degradation on populations of these species is currently unclear.

109. No fuel wood is currently being imported into Uzbekistan, and the only legal domestic source of fuel wood (or indeed any wood) is sanitary cutting and forest clearing operations. There is however no official market for fuel wood, so potential buyers must approach the forest business units to buy wood or use 'unofficial' ways to procure it. Sanitary cutting and forest clearing operations yields a scant 25,000 m^3/annum (of which only16,000-18,000 m^3 is available as fuel wood), less than 0.1% of the projected annual demand for fuel wood. There is also limited adoption of affordable, more-efficient technologies (e.g. energy-efficient stoves) and fuels (e.g. gas, liquid fuels, bio-fuels) for heating and cooking in the rural communities immediately adjacent to, or living in the mountain landscapes.

110. There are few ecosystem-based forest rehabilitation and restoration efforts being tested and implemented in the country, with most state afforestation initiatives currently limited to the planting of fruit tree plantations. There is very limited planting and maintenance of 'woodlots' around villages to help address some of the high demand for fuel wood.

111. While forests are located within the local government jurisdiction, and may affect the planning and management of municipal services and local economic development, there is limited functional coordination between the forest business units, forest users and the regional and district administrations in the planning and management of forests, and the associated forest-grassland interface areas.

<u>Barrier 4</u>: Incomplete information and knowledge management systems for management decision-making and trans-boundary cooperation in mountain ecosystems

112. There is a significant lack of awareness and understanding of the plight of local wildlife (in particular, snow leopard and their prey species); the value of these wildlife and their natural habitats; and the local and regional consequences of the ongoing degradation of ecosystems. This is true at all levels of society within and outside the high mountain ranges, from local people to officials and from the private sector to the general public.

113. The challenge of conserving snow leopards is further exacerbated by the lack of adequate scientific information about many aspects of wildlife (notably snow leopard and prey) ecology and behaviour in Uzbekistan. This is in part due to the difficulties of studying them in their remote and rugged environment, but also because of limited funding, equipment and technical capacity within the responsible state institutions. The baseline information on the distribution, abundance, seasonality and recruitment rates of snow leopards and prey is wholly inadequate to guide objective planning and decision-making. The capacity to regularly monitor snow leopard and prey populations, understand the impacts on the integrity of their habitats, and assess the effectiveness of conservation interventions has not yet been established. While some excellent localised monitoring activities are being undertaken by a number of institutions and organisations, it is typically sporadic - often linked to donor-funded initiatives - and the data produced from these monitoring efforts is highly fragmented and in multiple formats. There are currently only a limited number of camera traps deployed, while there is infrequent use of radio collars or analysis of snow leopard scats. The size and distribution of snow leopard and prey are thus, at best, still a rough estimate. The current state of knowledge of snow leopards, their prey species and their ecosystems is not being properly collated or actively maintained and updated in a centralised database.

114. The snow leopard's range in Uzbekistan is immediately adjacent to the international borders of three other range countries – Kyrgyzstan, Kazakhstan and Tajikistan. There is a real need for knowledge-sharing between these range countries about biodiversity and cultural resources and an exchange of skills and experience, including cooperative research and information management. Poaching and illegal trade across range boundaries needs to be better controlled, including joint patrols and border inspections to stem illegal wildlife trafficking. Although there are many opportunities to collaborate with the adjacent range countries

to create trans-boundary landscapes or conservation areas, these opportunities remain largely unrealised. While there has been some progress in preparing a transboundary serial nomination for the *Western Tien-Shan* (linking protected areas across Kazakhstan, Kyrgyzstan and Uzbekistan), the initial efforts have stalled due to capacity and resource constraints. More recently, a FFI/CMS workshop (*Aspects of Transboundary Snow Leopard Conservation in Central Asia*) identified the 'western end of the Tien Shan system (consisting) of the Chatkal, Karzhantau, Ugam and Pskem ranges'[17] and the 'Gissar, Turkestan and Zeravshan ranges'[18] as two of eight 'priority trans-boundary landscapes'. However, the capacity of state institutions to support the planning and management of these trans-boundary landscapes is very limited.

115. The scientific and management institutions in Uzbekistan are often working in relative isolation from their counterparts from other home range countries as a result of the low levels of inter-governmental cooperation in snow leopard conservation. Where there is occasional collaboration it remains informal and largely opportunistic and *ad hoc*.

STAKEHOLDER ANALYSIS

116. During the project preparation stage, a stakeholder analysis was undertaken in order to identify key stakeholders and assess their prospective roles and responsibilities in the context of the proposed project (see also the profile of institutions in description of the *Institutional Context* above). The table below lists the key stakeholder organisations; provides a brief summary of the responsibilities of each of these stakeholder organisations (specifically as it applies to the conservation of mountain landscapes, habitats and wildlife - notably snow leopard); and broadly describes the anticipated role of each of the stakeholder organisations in supporting or facilitating the implementation of project activities:

Stakeholder	Roles and Responsibilities	Proposed involvement in the Project
National Government		
Information-Analytical Department for Agriculture and Water Resources, processing of agricultural products and consumer goods of the Cabinet of Ministers of Uzbekistan	The Department is responsible for organizing development of programmes on agriculture and rural development as well as systematic and comprehensive implementation of economic reforms in the field of agriculture, land use, and water resources sector.	The Department will provide guidance on matters relating to land use and land use planning.
Information-Analytical Department for Health, Ecology and Environmental protection of the Cabinet of Ministers of Uzbekistan	The Department is responsible for organizing development of programmes as well as implementation of reforms in health care system, social and environmental protection.	The Department will provide guidance on development of the Programme and Action Plan on Snow Leopard Conservation.
Committee on Agriculture, Water resources and Ecology of the Senate of Oliy Majlis	The Committee is responsible for drawing conclusions on draft laws submitted by the Legislative Chamber of Oliy Majlis, drafting resolutions and other regulatory legal acts of the Senate in the areas of agriculture, water resources and ecology.	The Committee will provide guidance on drafting the new Pasture Law, particularly in respect of the establishment of a 'pasture user association' (PUA) by local communities.
Committee on Agriculture and Water resources issues of the	The Committee is mainly responsible for drafting legislation in the areas of agriculture and water resources.	The Committee will provide guidance and continuous feedback on drafting the new Pasture Law, particularly in respect

[17] Traversing Kazakhstan, Kyrgyzstan and Uzbekistan (including Ugam-Chatkal National Park).
[18] Traversing Tajikistan, Kyrgyzstan and Uzbekistan (including Gissar and Zaamin Strict Nature Reserves).

Stakeholder	Roles and Responsibilities	Proposed involvement in the Project
Legislative Chamber of Oliy Majlis		of the establishment of a 'pasture user association' (PUA) by local communities.
Committee on the issues of Ecology and Nature protection of the Legislative Chamber of Oliy Majlis	The Committee is mainly responsible for drafting laws in the area of nature protection.	The Committee will be involved for strong advocacy and awareness raising activities on conservation of snow leopard and its prey, especially in the communities within the project domain.
Committee for Nature Protection (Goskompriroda)	The role of *Goskompriroda* is to: (i) regulate environmental management functions and activities; (ii) develop and coordinate the implementation of environmental policies; (iii) regulate the use and management of natural resources; and (iv) develop medium and long-term state programs for nature protection and sustainable use of natural resources.	*Goskompriroda* is the focal point for implementation of the CBD in Uzbekistan. It has also been identified as the lead executing agency of this project and will take overall responsibility for co-ordinating, monitoring progress and reporting on the project. *Goskompriroda* will chair the project Steering Committee. It will play a leading role in implementing the project outputs and activities through its central and regional administrations.
State Biological Control Service (Gosbiokontrol)	*Gosbiokontrol* is responsible for developing, regulating and coordinating the implementation of national legislation and policies in the conservation of flora and fauna.	*Gosbiokontrol* will be the key institution within *Goskompriroda* responsible for coordinating project activities to ensure the delivery of the agreed project outcomes. It may be independently represented on the project Steering Committee.
Ministry of Agriculture and Water Resources (MAWR)	The MAWR is responsible for the development and implementation of state policy relating to agriculture, water and forestry development.	The Ministry will be represented on the Steering Committee of the project to ensure the full alignment of project activities with national forest and pasture legislation, policies and programmes.
Main Department of Forestry (MDF)	The MDF is responsible for the planning and management of forests, the use of natural resources and the administration of protected areas situated on state forest fund land.	The MDF will play a leading institutional role in the implementation of project outputs and activities, primarily through the *Glavohota, Uzgiprourmonloyiha* and forestry business units located in mountainous areas. The MDF will be represented on the project Steering Committee.
Committee for Land Resources, Geodesy, Cartography and National Cadastre	The Committee is responsible for implementing land policy and manages the process of land reform and land-use planning.	The Committee will serve as a reference for, and provide guidance on matters relating to, land use and land use planning.
Committee for State Border Protection	Responsible for the security of border security and border control points.	The Committee will be represented on the Steering Committee of the project to ensure effective consultation relating to any project activities that may affect and/or involve national security issues along mountain border control areas.

Stakeholder	Roles and Responsibilities	Proposed involvement in the Project
The Academy of Sciences	As the main scientific organisation in the country, the Academy coordinates research in all areas of science and technology.	The Academy will provide scientific support and advisory services, through its research institutions, to the project outputs and activities. The Academy may be represented on the Steering Committee of the project.
Institute of the Gene Pool of Plants and Animals (IGPPP)	The IGPP undertakes research on plant and animal genes, species, populations, habitats and ecosystems.	The IGPP may be contracted to implement targeted project outputs and activities.
Regional and local government		
Regional government (viloyat)	The *viloyats* have overall responsibility for the economic and development activities within the region. They may regulate land use and supervise land use decision making. There are a number of regions within the project domain.	A representative *khokim* of the affected *viloyats* will sit in the project steering committee and will mediate two-way communication between national policy directives and local project activities and actions to ensure that there is good alignment between them.
District Government (rayon)	The *rayons* provides support for local economic activities and regulates land use and supervises land use decision making. There are a number of *rayons* within the project domain.	The *rayons* will play an important role in supporting the implementation of the project in selected mountain areas (in the project domain). They are likely to be direct beneficiaries of capacity development activities.
Local CBOs and NGOs		
Mahallas (in khishlaks and auls)	The *mahallas* are self-governing bodies set up to resolve issues of local interest and importance.	The *mahallas* will provide the mechanism for the ongoing consultation will local villages and rural settlements in the mountainous regions on project outputs and activities.
Local and national NGOs (e.g. Society for the protection of birds in Uzbekistan, Uzbekistan Zoological Society, Ecosan, Eco-movement)	The NGOs will provide specific communication and awareness support to ensure that the project is clearly understood and to encourage active involvement and participation in the project and its activities. NGOs may also be contracted to implement specific project activities.	
Local communities		
Rural communities in auls and kishlaks	Local residents in the targeted project areas will be actively engaged in the project, especially in relation to alternative livelihoods and improving sustainable land use practices. They are likely to be direct beneficiaries of project-funded activities and support services that are linked to community beneficiation. They will be consulted in the planning of all project activities affecting local communities, and may contribute to the implementation of activities likely to benefit individuals, villages and rural settlements.	
International Partners		
Secretariat of the Global Snow Leopard and Ecosystem Protection programme (in Bishkek, Kyrgyzstan)	These partners will participate in knowledge sharing and technology transfer exercises as well as communications on data collection and sharing, best practices for planning and priority-setting	
Panthera	Panthera support baseline surveys and research on snow leopard and prey populations.	May provide technical and scientific advice to the project. Panthera may also be contracted to implement specific project activities.

Stakeholder	Roles and Responsibilities	Proposed involvement in the Project
Development partners (e.g. German Government, World Bank, FAO)	Development partners supporting conservation projects and initiatives to improve the sustainable management of high mountain habitats in Uzbekistan will be important project partners. They will share, coordinate and collaborate with the project as and where relevant. They may be represented on the project Steering Committee.	

BASELINE ANALYSIS

117. Without the GEF investment in the proposed project, the 'business-as-usual scenario' for the conservation of high mountain ecosystems and their native wildlife (notably snow leopard and prey), is one where: (i) the ecological integrity of the montane steppe, forest and alpine meadows habitats further degrades as a consequence of increasingly unsustainable agricultural practices and high levels of wood harvesting and fuelwood collection; (ii) the low levels of monitoring, enforcement and prosecutions of illegal activities continue to undermine the effectiveness of localised conservation efforts across the mountainous areas; (iii) the numbers of indigenous medium-sized mountain ungulates continue to decrease as large domestic livestock populations use more of the higher altitude pastures, and for longer periods of time; and (iv) indigenous predators (including snow leopards), in the absence of their natural prey species, progressively resort to killing domestic livestock, leading to an increase in retaliatory killings by farmers.

118. Despite the challenges, the Government of Uzbekistan has - with support from development partner agencies and other stakeholder organisations – committed considerable resources, capacity and financing to address some of the barriers to the conservation of mountain ecosystems, and their native wildlife, in Uzbekistan. It is conservatively estimated that the current annual baseline funding (from all sources) available for the conservation of high mountain ecosystems, habitats and species equates to a total amount of approximately US$8-10 million per annum. The breakdown of this baseline funding is briefly decribed below:

119. The state budget allocation for all Strict Nature Reserves[19] in 2015 is estimated at approximately US$1.2 million, of which about 71.5% comprises staff costs (salaries and associated taxes), 27% recurrent operational costs and 1.5% infrastructure, equipment and capital costs. Assuming that the annual budget allocation for strict nature reserves will remain relatively constant (i.e. only adjusted for inflation) for the five-year period of project implementation (2016/17-2020/21), the government's national investment in Strict Nature Reserves equates to a conservative total of ~US$6 million. Additional self-generated revenues, from fines and penalties, for reinvestment in Strict Nature Reserves is estimated at ~US$21,000 per annum, and US$105,000 over the entire project period. It is projected that the baseline funding from state budget allocation and own income for the 3 strict nature reserves (Gissar, Chatkal and Zaamin) located in the Pamir Alai and western Tian Shan mountains will amount to approximately US$2.4 million for the duration of the project. This is supplemented by an annual funding commitment from the Tashkent Regional Administration of approximately US$0.2m per annum for the staff and operating costs of the Park Management Authority for Ugam-Chatkal NP.

120. Administered by the State Committee on Nature Protection, the Fund for Nature Protection is financed from 50% of the income from environmental compensation, fines and penalties, lotteries and other public and private voluntary contributions. Money is allocated via annual programmes which are prepared by the Board and approved by relevant regional and local government administrations and, ultimately, the Cabinet of Ministers. The Fund for Nature Protection finances the establishment and conservation of nature protection sites, the preservation and reproduction of fauna and flora, and the restoration of degraded nature

[19] The other categories of protected areas do not have comitted budget allocations for their planning and management, and are subsumed under the wider management costs of the responsible institutions.

protection sites. In principle, funds to carry out environmental protection and nature conservation activities (in line with the approved annual programme for the funds) can be disbursed to any private, public, state or non-governmental organisation or individual who is interested and capable of undertaking them.

121. While the research institutes within the Academy of Sciences Institute – such as the Institute of the Gene Pool of Plants and Animals (IGPPP) – receive a basic budget from Academy of Sciences for their human resource and running costs, this is wholly inadequate to fulfil their research mandates. The budget of these research institutes is thus supplemented by funding grants from the Fund for Nature Protection for undertaking research and monitoring work for the line ministries on a job-by-job contractual basis. Although it is difficult to extrapolate reliable budget data for research and monitoring work undertaken in the mountain ecosystems by these different research institutes, preliminary information indicates an average annual collective budget commitment from the Academy of Sciences and the Nature Protection Fund, of at least US$0.5m/annum.

122. The state budget allocation for the administration and management of the State Forest Fund in 2015 is estimated at approximately US$6 million, of which about 82% comprises staff costs (salaries and associated taxes), 16% recurrent operational costs and 2% infrastructure, equipment and capital costs. Assuming that about ~16.5% (i.e. 1.5 million ha of a total of 9 million ha) of state forest fund land is located in the mountainous areas, this equates to a state budget allocation of about US$1 million per annum, or approximately US$4.8 million for the duration of the project (excluding Gissar Strict Nature Reserve – see above). Additional self-generated revenues (income from lease fees, sales, services and fines) of the 26 forest business units located in mountain landscapes is estimated at US$2.63 million for 2015, of which about 20% is likely to be re-invested back into the improved management of natural habitats located on state forest fund land. This will project to a conservative estimate of additional income from the improved management of mountain habitats, over the full period of project implementation, of about US$2.65 million.

123. The annual value of state-funded measures required to incentivize an increase in the number of cattle and small livestock in private farms, and to improve livestock productivity in the mountain regions is conservatively estimated at US$1.1m/annum.

124. The table below summarizes the complementary baseline state funding investments - within the two snow leopard landscapes - by the different public institutions, for the projected five-year period of project implementation (2017-2021):

Name of Agency	Actual annual budget (USD*)	Projected 5-year budget (USD)
Committee for Nature Protection (Tashkent Province)	787 065	3 935 326
Committee for Nature Protection (Kashkadarya Province)	579 790	2 898 948
State Biological Control	2 111 805	10 559 023
Gissar SNR	194 674	973 369
Chatkal SNR	558 549	2 792 745
Forestry farms: Kamashi FF, Kashkadarya province	164 138	820 690
Forestry farms: Yakkabag FF, Kashkadarya province	223 793	1 118 966
Forestry farms, Uzun FF, Surkhandarya province	242 414	1 212 069
	TOTAL	**24 311 135**

125. Two thematic areas of the Food and Agriculture Organisation of the United Nations (FAO) *2014-2017 Country Programming Framework* (CPF) for Uzbekistan are relevant to the project: (i) improving livestock production, disease control, beekeeping and poultry production; and (ii) Sustainable natural

resource management (including development of the forestry sector, increased income-generating opportunities for rural populations, promoting sustainable land management, improving water resource use, and drought risk management). Within the framework of the CPF, FAO will specifically provide financial and technical support to an *Integrated Forest Land and Tree Resources Assessment* (US$ 430,000) for Uzbekistan during the period of project implementation.

126. The regional *Programme for sustainable use of natural resources in Central Asia* (until 2016) seeks to ensure that pastures, forests and wildlife resources are being more sustainably managed across the central Asian region (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan). Within the overarching framework of this regional programme, the *Sustainable pasture management in Central Asia* (until 2018) component seeks to introduce sustainable land use approaches (e.g. pasture rotation, increased grazing mobility) to reduce the extent and impact of overgrazing and degradation of pastures, especially in vicinity of villages. At this stage, no relevant projects are under implementation in Uzbekistan under the regional programme, or its respective components.

PART II: Strategy

PROJECT RATIONALE AND POLICY CONFORMITY

Fit with the GEF Focal Area Strategy and Strategic Programme

127. The project is consistent with the objectives of, and will contribute to the outcomes and outputs of, GEF's Biodiversity (BD), Land Degradation (LD) and Sustainable Forest Management (SFM) Focal Area Strategies.

128. For the *Biodiversity Focal Area*, the project will contribute to the expected outcomes and indicators of Program 2 of BD-1 as follows:

GEF-6 BIODIVERSITY RESULTS FRAMEWORK			
Objective	**Program**	**Outcome**	**Indicator (and project contribution to indicator)**
BD-1 Improve sustainability of protected area systems	**Program 2:** Nature's Last Stand: Expanding the reach of the global protected area estate	**Outcome 2.1**: Increase in area of terrestrial and marine ecosystems of global significance in new protected areas and increase in threatened species of global significance protected in new protected areas. **Outcome 2.2:** Improved management effectiveness of protected areas	**Indicator 2.1**: Area of terrestrial and marine ecosystems and number of threatened species. Project contribution to indicator: The extent of core conservation areas managed as IUCN category I or II protected areas within the Ugam-Chatkal and Gissar snow leopard landscapes is increased from a baseline of 116,710 ha to at least 237,700 ha **Indicator 2.2:** Protected area management effectiveness score. Project contribution to indicator: The METT score for Chatkal SNR, Ugam-Chatkal NP and Gissar SNR increases from a baseline of 46, 22 and 43 to greater than 60, 42 and 56 respectively.

129. For the *Land Degradation Focal Area*, the project will contribute to the expected outcomes and indicators of Program 4 of LD-3 as follows:

GEF-6 LAND DEGRADATION RESULTS FRAMEWORK			
Objective	**Program**	**Outcome**	**Indicator (and project contribution to indicator)**
LD-3 *Integrated Landscapes*: Reduce pressures on natural	**Program 4:** Scaling-up sustainable land management through the	**Outcome 3.2:** Integrated landscape management practices adopted by local	**Indicator 3.2:** Application of integrated natural resource

resources from competing land uses in the wider landscape	landscape approach	communities based on gender sensitive needs	management (INRM) practices in wider landscapes. Project contribution to indicator: At least 50,000 ha of high altitude pastures (from a baseline of <5,000 ha), and 16,000 ha of high altitude forests (from a baseline of < <2,000 ha) are under a more regulated and sustainable management regime.

For the *Sustainable Forest Management Focal Area*, the project will contribute to the expected outcomes and indicators of SFM-1 and SFM-2 as follows:

GEF-6 SUSTAINABLE FOREST MANAGEMENT RESULTS FRAMEWORK			
Objective	**Program**	**Outcome**	**Indicator (and project contribution to indicator)**
SFM-1 *Maintained Forest Resources*: Reduce the pressures on high conservation value forests by addressing the drivers of deforestation.	**N/A**	**Outcome 1:** Cross-sector policy and planning approaches at appropriate governance scales, avoid loss of high conservation value forests	**Indicator 1:** Area of high conservation value forest identified and maintained. Project contribution to indicator: 105,900 ha of biodiversity important forests within 3 key biodiversity areas identified and managed sustainably. (Under baseline scenario 5% of these would have been lost).
SFM-2 *Enhanced Forest Management*: Maintain flows of forest ecosystem services and improve resilience to climate change through SFM.	**N/A**	**Outcome 3:** Increased application of good management practices in all forests by relevant government, local community (both women and men) and private sector actors.	**Indicator 3:** Area of sustainably managed forest, stratified by forest management actors. Project contribution to indicator: At least 16,000 ha of forests across the snow leopard distribution area in Uzbekistan are under a sustainable management regime involving local communities. Under baseline scenario 5% of these would have been lost.

Rationale and summary of GEF Alternative

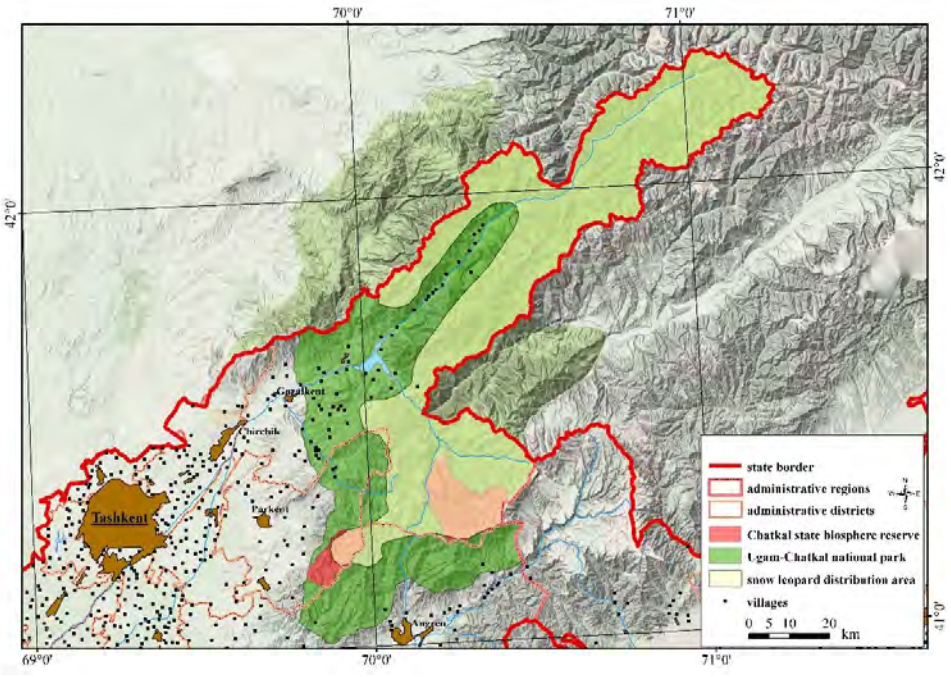
130. The Global Snow Leopard and Ecosystem Protection Program (GSLEP, 2013) provides the strategic context for this GEF-funded project. The Global Snow Leopard and Ecosystem Protection Program (GSLEP, 2013) – a collaborative programme between the governments of 12 snow leopard range countries and other partner organisations – provides the overarching implementation framework for improving the conservation status of snow leopards, wild prey, and their ecosystems across the entire snow leopard range. Within the overarching framework of this GSLEP, this project will support the Government of Uzbekistan in the implementation of the National Snow Leopard Ecosystem Protection (NSLEP) portfolio for Uzbekistan.

131. The 'alternative scenario' that the project seeks to contribute to is characterised by: (i) preventing the further fragmentation and degradation of snow leopard and prey landscapes in Uzbekistan including status of high conservation value forests in the targeted key biodiversity areas; (ii) maintaining and/or restoring the quality of key snow leopard and prey habitats within these landscapes; (iii) improving the conservation status of, and sustainability of pasture and forest use in these habitats; and (iv) reducing the direct threats to the survival of snow leopards and prey populations.

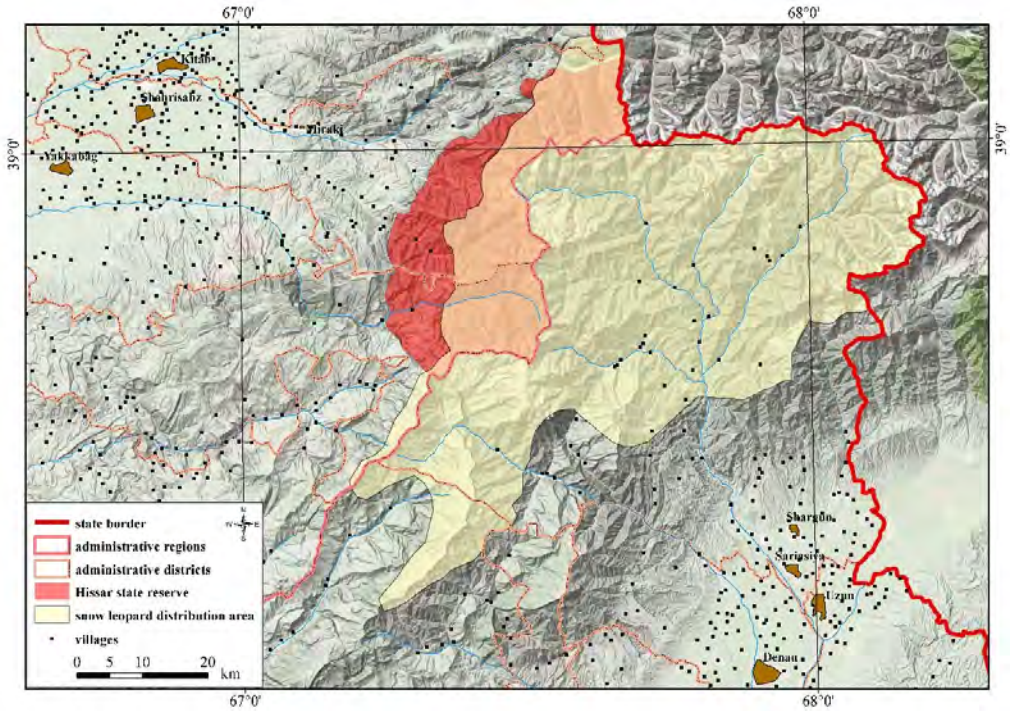
132. The project will be spatially contained to the snow leopard distribution range in Uzbekistan (see Map 4 above). The snow leopard distribution range comprises 3 discrete snow leopard 'landscapes' - *Ugam-Chatkal* snow leopard landscape in the western Tien Shan; and the *Gissar* and *Zaamin* snow leopard landscapes in the Pamir-Alai.

133. Most of the project outputs and activities will however be focused in only two of these 'snow leopard landscapes': (i) the *Ugam-Chatkal snow leopard landscape*, located on the western spurs of the Chatkal, Pskem and Ugam Ranges in the Western Tien Shan (see map 5 below); and (ii) the *Gissar snow leopard landscape* on the western slopes of the Gissar ridge in the Pamir Alai (see map 6 below).

134. The selection of the two snow leopard landscapes targeted for project support was premised on the following criteria: (i) they include a significant proportion of the snow leopard range in Uzbekistan; (ii) they include strict nature reserves where the presence of snow leopard have been recently documented; (iii) they include the natural dispersal and migration routes for snow leopard and their prey, with specific consideration of trans-boundary linkages to the north and north-east through the Tian Shan range and to the east through the Pamir range; (iv) they include sufficiently large and intact areas that will contribute to achieving wider trans-boundary conservation objectives for snow leopards, their prey and associated ecosystems; and (v) the mountain ecosystems, and their native wildlife, in these landscapes are under threat of degradation from unsustainable levels of natural resource use.



Map 5: Map of the Ugam-Chatkal snow leopard landscape (i.e. the snow leopard distribution area)



Map 6: Map of the Gissar snow leopard landscape (i.e. the snow leopard distribution area)

135. A profile of each of the two project-supported snow leopard landscapes is briefly summarised in Table 3 below:

Table 4: Summary of the key features of the two snow leopard landscapes

Snow leopard landscape	***Features***
1. Ugam-Chatkal (western Tien-Shan)	*Mountain ranges*: Ugam, Maidantal, Pskem and Chatkal *Extent:* 574,600 ha *Dominant habitats:* Forest and shrub vegetation cover over 57% of the area. There is also extensive grassland/pastures. *Administrative area*: Tashkent Region - Bostanlyk, Parkent and Ahanharan districts *Estimated number of snow leopard*: 20-25 *Primary snow leopard prey species*: Siberian Ibex, Siberian Roe Deer, long-tailed marmot, wild boar, Menzbier's marmot, tolai hare, red pika, chukar and Himalayan snow cock *Protected Areas*: Ugam-Chatkal National Park (existing) and Chatkal Strict Nature Reserve (existing)[20]. *Main economic activities*: Livestock farming, horticulture, silviculture, apple orchards and crop agriculture. *Main livestock species*: Cattle, sheep, goats and horses. An average family typically has 5-10 head of cattle and 10-30 head of sheep/goats.[21] *Main forest types:*Juniper forests and deciduous forests (relictual walnut and fruit forests) *Human population (est.)*: Approximately 13,007 households and 67,955 residents (living in the Ugam-Chatkal NP) *Key pressures and threats*: - Poaching (ibex, marmot); livestock overgrazing; crop farming; mining; fishing; harvesting of juniper; collection of fruit; border troop activities; and collection of medicinal plants.
2. Gissar (Pamir Alai)	*Mountain ranges*: Gissar *Extent:* 150,000 ha *Dominant habitat:* Extensive forests as well as alpine and sub-alpine meadows and steppe vegatation. *Administrative area*: Kashkadarya Region - Guzar, Kamashi, Dehkanabad, Kitab and Shahrizyabskogo districts; Surkhandarya Region - Saryasya district *Estimated number of snow leopard*: 50-60 *Primary snow leopard prey species*: Siberian Ibex, long-tailed marmot, wild boar, tolai hare, red pika, chukar and Himalayan snow cock *Protected Areas*: Gissar Strict Nature Reserve *Main economic activities*: Livestock farming, horticulture and crop agriculture. *Main livestock species*: Fat-tailed sheep and cattle. *Main forest types:* Juniper forests between altitudes of 1400 and 3000m, as well as almonds and pistachio trees *Human population (est.)*: 16 villages (5,675 households and 30,000 residents) *Key pressures and threats*: Livestock overgrazing; crop farming; firewood collection; hay collection; herb collection; border troop activities; and border minefields.

136. More detailed descriptions of the snow leopard landscapes (including information on the biodiversity, snow leopard and prey populations, land use planning, protected areas, state of livestock farming and forestry management) is contained in the specialist reports appended in Section IV, Part VI of the Project Document.

137. The project is structured into four components, with each component comprising a complementary suite of two to three outputs which will collectively contribute to realizing the targeted outcome for the component.

[20] Chatkal Strict Nature Reserve is located within the boundaries of the Ugam-Chatkal National Park and forms a 'core conservation zone' of the National Park.

[21] An established population of approximately 34,000 cattle, 42,000 small livestock and 2,500 horses has been recorded from the Ugam-Chatkal National Park. Livestock populations may however increase by 30% (up to approximately 100,000) during the summer months, with the migration of animals from the Parkent District.

138. The first component will enhance the quality of information on key ecosystems, habitats and species of the high altitude mountains that are home to snow leopard and prey populations. Information collected under this component will be used to support sectoral land use planning and decision-making in these mountainous regions. Work under this component will be focused around two key areas of project support: (i) Improve the quality of environmental information for state cadastre in the snow leopard distribution range (Output 1.1); and (ii) Enhance the state of knowledge on snow leopard and prey populations (Output 1.2).

139. The second component will seek to expand, and build the management capacity of, the core conservation zones located within the two targeted snow leopard landscapes. Outputs and activities in this component will be directed at securing the conservation security of the key snow leopard and prey migration corridors within the two snow leopard landscapes. Work under this component will be focused around three key areas of project support: (i) Strengthen the conservation tenure, and improve the management effectiveness, of the core conservation zones in Ugam-Chatkal National Park (Output 2.1); (ii) Extend, and improve the conservation security of, Gissar Strict Nature Reserve (Output 2.2); and (iii) Enhance community involvement in, and beneficiation from, the protected areas (Output 2.3).

140. The third component will seek to encourage more sustainable levels of use of the high altitude pastures and indigenous forests located within the two targeted snow leopard landscapes. Outputs and activities under this component will contribute to improving the ecological integrity and productivity of forest and grassland habitats in the snow leopard landscapes. Work under this component will be focused around two key areas of project support: (i) Incentivise the adoption of more sustainable pasture management practices (Output 3.1); and (ii) Reverse the trend of unsustainable forest use in, and degradation of, natural forests (Output 3.2).

141. The fourth component will promote improved cooperation and collaboration in the conservation of snow leopard and their ecosystems. It is envisaged that more integrated planning, stronger cooperative governance structures and improved institutional and individual capabilities of all partner agencies and institutions will improve the collective national capacity to conserve and sustainably use snow leopards, their prey and their ecosystems. Work under this component will be focused around two key areas of project support: (i) Improve inter-agency coordination in conservation, monitoring and enforcement (Output 4.1); and (ii) Strengthen the capacity for trans-boundary planning and management (Output 4.2).

142. The total cost of investment in the project is estimated at US$31,509,863, of which US$ 6,209,863 constitutes grant funding from GEF and US$25,300,000 comprises co-financing from national government and UNDP.

143. The anticipated long-term benefits of the GEF investment may be summarised as follows:

Business-as-usual	GEF alternative	Benefits
Snow leopard and prey populations		
- Extensive poaching by local communities of species (including Ibex and marmot) that naturally form the prey base of native predator species (including snow leopard) in mountainous areas continues; - Native predator species increasingly resort to predation of livestock and poultry; - Human-wildlife conflicts increase, leading to further	- Develop and implement an in-service wildlife enforcement program for staff of all the key responsible government agencies; - Procure key equipment for local field-based environmental (*Goskomprorida*) and forestry (Forestry Directorate) monitoring and enforcement staff. - Pilot the staffing, training and equipping of a corps of environmental inspectors; - Update and formally adopt the *Programme and Action Plan for*	The snow leopard population continues to grow, albeit modestly - increasing to more than 85 cats across the country - as fewer snow leopards are being trapped, hunted or poached; The population of key medium-sized ungulates that form the prey base of snow leopards continue to grow, with the Siberian Ibex population increasing from ~3,800 to more than 5,500 animals; The responsible government institutions are better capacitated and resourced to monitor wildlife crime:

Business-as-usual	GEF alternative	Benefits
retaliatory killings by farmers. - Enforcement of wildlife laws outside the strict nature reserves continues to be very weak or non-existent; and - Efforts to control poaching of, and illegal trade in, snow leopard and prey species between neighbouring countries remains uncoordinated and poorly controlled.	*Snow Leopard Conservation in Uzbekistan*; - Establish and maintain a cooperative governance structure to coordinate the efforts of partner institutions in the implementation of the *Programme and Action Plan*; - Establish and maintain working groups to facilitate trans-boundary collaboration in conserving wildlife and wildlife movement corridors; - Strengthen the capacity of border security officials to implement trans-boundary poaching and wildlife trade agreements.	- at least 150 personnel/annum participate in wildlife monitoring and enforcement training and skills development programs; and - at least 105 field-based wildlife enforcement staff in the Forestry Directorate and Goskomprorida, and 10 environmental inspectors are fully equipped - including uniforms, rations, GPS, communications, transport, etc. - and operational; An insurance scheme is established to compensate pastoralists for livestock losses from predation by wild animals: - at least 20 pastoralist households are partially or fully compensated for livestock losses from native predators; and The capacity for collaboration and coordination between international, national and local institutions in the conservation of snow leopard, their prey and their ecosystems is significantly improved: - at least two technical working groups addressing trans-boundary collaboration in the management of snow leopard and wildlife crime are under implementation; - the *Programme and Action Plan for Snow Leopard Conservation in Uzbekistan* is adequately resourced, and is under implementation; and - a cooperative governance structure for the programme and action plan is constituted and operational.
Protected areas		
- Most core conservation zones of protected areas are still too small to effectively conserve viable snow leopard and prey populations and are not configured to secure safe movement corridors for snow leopards and prey; - Sub-optimal levels of monitoring, enforcement and prosecution of illegal activities continues to compromise the management effectiveness of protected areas across the snow leopard range;	- Expand the extent of the core conservation areas in the Ugam-Chatkal and Gissar snow leopard landscapes; - Strengthen the medium-term and annual management planning and budgeting systems of Ugam-Chatkal National Park and the Gissar Strict Nature Reserve; - Improve the boundary demarcation of the core conservation zones in Ugam-Chatkal NP and of Gissar SNR; - Design and implement a smart patrol system for the core conservation zones of Ugam-Chatkal NP and Gissar SNR;	The extent of the core conservation areas in Ugam-Chatkal NP and Gissar SNR increases from a baseline of 116,710 ha to 237,700ha; The conservation values of at least 200,000 ha of snow leopard and prey habitats are secured, and effectively monitored and enforced in the core conservation areas of Ugam-Chatkal NP (Chatkal SNR and its wildlife corridor, Pskem and Akbulak) and Gissar SNR: - the average METT scores for Ugam-Chatkal NP, Chatkal SNR and Gissar SNR increases from 22, 46 and 43 to >42, 60 and 56 respectively; - at least 60% of the core conservation areas of Ugam-Chatkal NP, and 100%

Business-as-usual	GEF alternative	Benefits
- Outdated planning systems and conservative operational approaches fail to effectively address the emerging management challenges facing protected areas; - Funding for the administration of protected areas is not yet sufficient to address key management requirements; and - Limited meaningful and sustained collaboration between the protected areas and adjacent communities (most of whom still rely on access to natural resources for part of their livelihood) in the protection of snow leopard, their prey and key habitats.	- Establish and deploy a core of professionally trained and fully equipped rangers in the core conservation zones of Ugam-Chatkal NP and in Gissar SNR; - Establish and maintain a smart patrol database and data collection system in Ugam-Chatkal NP and in Gissar SNR; - Improve the park infrastructure (ranger outposts, central data center) and equipment (communications, transport) to support the implementation of the smart patrol system in the core conservation zones of Ugam-Chatkal NP and in Gissar SNR; - Raise awareness levels in communities living in Ugam-Chatkal NP and around Gissar SNR of the benefits of snow leopard and prey conservation; - Improve the extent and scale of economic involvement of communities in the conservation, monitoring and use of Ugam-Chatkal NP and in the management of Gissar SNR; - Pilot the establishment of nature-based tourism facilities and services in Ugam-Chatkal NP and/or the buffer zones of Gissar SNR; - Support the establishment and functioning of local management committees for Ugam-Chatkal NP and Gissar SNR.	of Gissar SNR, are fully covered by a smart patrol system; and - the number of illegal incidents recorded in the core conservation areas of Ugam-Chatkal NP and in Gissar SNR decreases to less that195/annum, from a baseline of more than 1,739/annum; The number of individuals from villages in Ugam-Chatkal and around Gissar SNR that: - financially benefit from the management of the protected areas increases from a baseline of less than 25 individuals/annum to more than 150 individuals/annum, of whom at least 80 are women; - have completed project funded skills training courses reaches 100 (of whom 60 are women); and; - are involved in the education and outreach programmes reaches >1,000/annum
Pastures and forests		
- Implementation of sustainable pasture and forest management practices is limited due to poor technical skills, limited knowledge and a severe lack of funding; - An upsurge in domestic livestock populations using higher altitude pastures (and forests), and for longer periods of time, leads to an increase in competition for forage with indigenous medium-sized mountain ungulates;	- Support the drafting of the new Law on Pastures; In the snow leopard landscapes: - Pilot the establishment and functioning of two PUAs in the high altitude pastures; - Prepare pasture management plans for the PUAs; - Provide technical and financial support to improve the health of livestock herds; - Provide technical and financial incentives to pastoralists to shift to alternative income-generating enterprises or to intensive livestock farming;	The extent of high altitude pastures under a more sustainable management regime in the Ugam-Chatkal and Gissar snow leopard landscapes increases from less than 5,000 ha to more than 50,000 ha: - the productivity of high altitude pastures increases from less than 0.4 t/ha of dry fodder mass to greater than 0.7 t/ha; - the % of unpalatable species in high altitude pastures decreases from greater than 40% to less than 30%; - at least 2 pasture management plans are under implementation by PUAs; - at least 90 households benefit from technical and grant funding support for

Business-as-usual	GEF alternative	Benefits
- The continued increase in livestock populations in high altitude areas leads to further killing of snow leopards (and other natural predators) by pastoralists to ensure protection of their livestock; - The ecological integrity of the natural alpine and sub-alpine habitats further degrades as a consequence of increasingly unsustainable pastoral practices and high levels of wood harvesting and fuelwood collection; and - An ongoing lack of awareness and understanding of the plight of the snow leopard (and other predators); the value of conserving snow leopards, prey, and habitat; and the local and regional consequences of the constant degradation of ecosystems.	- Restore and/or rehabilitate degraded high altitude pastures; - Establish local tree nurseries; - Provide technical and financial support to the establishment and maintenance of woodlots; - Provide financial and technical support to the establishment and maintenance of fruit and nut orchards and herb gardens; - Provide technical and financial support to the installation and maintenance of alternative energy and fuel technologies; - Restore and/or rehabilitate degraded high altitude forests; and - Strengthen the institutional and individual capacities to monitor and enforce pasture and forest use.	improving the health of their livestock herds; - At least 8 new intensive livestock farms are established; - At least 30 households are sufficiently incentivized to shift to alternative means of income-generation; - 5,000 ha of degraded pastures are under active rehabilitation; - Future secured for 105,900 ha of high conservation value forets within the target PAs, precluding 5% loss of these in the next 20 years. - The extent of high altitude forests under a sustainable management regime in the Ugam-Chatkal and Gissar snow leopard landscapes outside PAs increases from less than 2,000 ha to more than 16,000 ha; - an enabling policy and regulatory framework for the sustainable harvesting and use of forest products from high altitude forests is consultatively developed and enforced; - at least 100 ha of woodlots/plantation areas are planted in and around villages; - at least 25 households benefit from technical and grant funding support for establishing orchards and herb gardens - more than 100 households benefit from technical and grant funding support for the adoption of alternative fuel and energy technologies.
Knowledge management		
- Baseline information on the distribution, abundance, seasonality and recruitment rates of snow leopards and prey remains incomplete; - No national program in place to coordinate the monitoring of snow leopard and prey populations and habitats; - No formally adopted, and properly resourced, National Strategy and Action Plan on the Conservation of Snow Leopard in place; and - National scientific and management institutions continue to work in relative isolation from their counterparts from other home	- Develop, implement and maintain a national environmental information management system; - Design a snow leopard research and monitoring programme; - Host specialist training sessions for all researchers, scientists, academics, volunteers, students, NGO staff, government field staff, etc. on the implementation of the snow leopard research and monitoring programme; and - Increase the coverage of camera traps, video traps, aerial surveys, foot patrol counts and aerial photography for monitoring and reporting on snow leopard and/or medium-sized ungulate populations.	A strong scientific base for the conservation of snow leopard and their prey is established: - a national environmental information management system, is established and operational; - the national coverage (as a % of the total snow leopard range) of snow leopard and prey monitoring activities increases from a baseline of less than 5% for snow leopard, and 5% for snow leopard prey, to more than 75% and 50% respectively; and - at least 40 managers, scientists, researchers, technician, managers or academics are involved in international exchange programs, country visits and/or trans-boundary snow leopard monitoring and research projects.

Business-as-usual	GEF alternative	Benefits
range countries as a result of the low levels of inter-governmental cooperation in snow leopard conservation.		

PROJECT GOAL, OBJECTIVE, OUTCOMES AND OUTPUTS/ACTIVITIES

144. The project **objective** is: To enhance the conservation, and sustainable use, of natural resources in the biodiverse high altitude mountain ecosystems of Uzbekistan.

145. In order to achieve the project objective, and address the barriers (see Section 1, Part I), the project's intervention has been organised into four **components** (this is in line with the components presented at the PIF stage):

Component 1: Landscape level planning and management decision-making
Component 2: Strengthening key biodiversity areas
Component 3: Sustainable economic development incentives for communities
Component 4: Promoting cooperation and collaboration

146. The outputs and activities under each of the four components are described in more detail below.

COMPONENT 1: *Landscape level planning and management decision-making*

147. Work under this component will be spatially contained to the snow leopard distribution range - covering the high altitude mountains of the western Tian Shan (Chatkal, Pskem and Ugam ranges) and the Pamir-Alai (Gissar, Turkestan and Zeravshan ranges) systems - in Uzbekistan, (see Map 4 above).

148. The outputs and activities under this component are directed at improving the quality of information on the state of key ecosystems, habitats, species and natural resource use within the snow leopard distribution range.

149. The information generated from this component will be used to support sectoral and integrated land use planning initiatives in the mountain regions, and guide decision-making processes of the responsible central and local (*Khokimiat*) institutions on the sustainable management of natural resources. It will also provide the contextual information to support the implementation of project outputs and activities across components 2, 3 and 4.

150. The proposed suite of activities, and broad implementation arrangements, for each of the two outputs under this component are described in more detail below.

Output 1.1: Improve the quality of environmental information for state cadastre

151. Work under this output will support the collection and collation of key baseline information on the high altitude mountains of the snow leopard distribution range.

152. The specific activities to be undertaken in this output will include the following:

(i) Use existing sectoral plans, state cadaster information, existing spatial and non-spatial databases, aerial photography and ground-truthing to revise and update the distributional mapping of the different types of land uses (e.g. crop agriculture, plantations, livestock pastures, protected areas, villages, settlements, service infrastructure, mining, hunting concessions, etc.);
(ii) Use high resolution aerial photography, existing spatial and non-spatial databases and ground-truthing to collect and collate baseline environmental information on *inter alia*: habitats (e.g. forests, steppe), key species (e.g. keystone, rare and/or endemic species), ecosystem services (e.g. water catchments) and environmental threats, risks and/or hazards (e.g. invasive species, climate change effects, fire risks, erosion);

(iii) Conduct an ecosystem services and economic valuation of snow leopards and their mountain ecosystems, including the direct and indirect valuation of provisioning services (food, fibre, and water), regulatory services (climate regulation, water regulation, soil preservation), cultural services (cultural diversity, spiritual and religious values), and supporting services (soil production, soil retention);
(iv) Use remote sensing and aerial photography, ground-truthing, site-based measurements, site-based sampling and focused interviews to update existing information on the land tenure (use rights, lease agreements, forest use guidelines) and the current state - and underlying causes - of degradation of the high altitude montane forests[22];
(v) Use high resolution aerial photography, existing databases and ground-truthing (e.g. disc pasture meter) to collate the environmental (e.g. soil types, above-ground plant biomass, grass species composition and quality, disturbance levels) and land tenure (e.g. use rights, lease agreement, pasture use guidelines, territorial zoning) information for the high altitude pastures;
(vi) Use existing livestock information, census data and focused interviews with livestock farmers, forestry business units and local government officials to collate the baseline data on the distribution and extent of livestock farming (e.g. livestock numbers, livestock distribution, proprietary rights to livestock, distribution of camps, seasonal movements, etc.) in the high altitude pastures;
(vii) Use the baseline data from (iv) and (v) above to develop thematic maps (e.g. vulnerability and risks, estimates of standing biomass, forage quality, extent of degradation, distribution of winter and summer grazing, pasture infrastructure, etc.) in support of pasture planning and management for the high altitude pastures[23];
(viii) Use conservation assessment methodologies (e.g. Marxan) to identify the biodiversity 'hotspots'[24] and to prioritise the natural forests and grassland pasture areas requiring conservation and/or restoration and rehabilitation interventions; and
(ix) Integrate the key environmental information collected under this output into the database of state cadastre and maintain all geo-referenced data in the national environmental information database (see Output 1.2).

153. The Project Implementation Unit (PIU) will – in close consultation with *Goskompriroda*, the Forest Administration and Planning Department of the MDF, the Forestry Research Centre of the MDF and the Committee for Land Resources, Geodesy, Cartography and National Cadastre – coordinate the implementation of this output. The PIU will contract the services of a team of local experts to provide all the requisite professional, technical and scientific support to activities under this output. The PIU will make provision for the costs of field-based logistics (e.g. travel, accomodation, meals, communications) and the procurement of equipment (e.g. GPS units, disc pasture meters, field laboratory units) and photography (e.g. aerial photography, satellite imagery), as required. The PIU may further contract a state institution (e.g. Institute of the Gene Pool of Plants and Animals or *Gosbiokontrol*) to oversee the work of this team of local experts, provide data quality assurance, integrate relevant information into the state cadastre, and update and maintain the national environmental information management system (see Output 2.1 below) with data derived under this output.

Output 1.2: Enhance the state of knowledge on snow leopard and prey populations

154. This output will support the design and initial establishment of an environmental information management system (EIMS) for Uzbekistan. Within the overarching framework of this centralised EIMS,

[22] This information will be used to guide activities under Output 3.1
[23] This information will be used to guide activities under Output 3.2.
[24] This information will be used to identify the core conservation areas to be established, and areas targeted for PA expansion, under Component 2.

the project activities will then focus on supporting the development and implementation of a snow leopard (and prey) research and monitoring system. The snow leopard and prey monitoring techniques and tools adopted under this output will be technically guided by the *Snow Leopard Survival Strategy* (2014). Information on the population dynamics of snow leopard and prey will then be integrated into, and updated and maintained in, the EIMS.

155. It is envisaged that the monitoring information collated under this output will enable the Government of Uzbekistan to track and report on its progress in implementing the Programme and Action Plan for Snow Leopard Conservation in Uzbekistan[25] and its contribution to meeting the goals and objectives of the wider Global Snow Leopard and Ecosystem Protection Programme (GSLEP).

156. The specific activities to be undertaken in this output will include the following:

(i) Design[26] a national environmental information management system (EIMS) which can store, manage, verify, protect, retrieve and archive spatial and non-spatial environmental data for Uzbekistan;
(ii) Procure the requisite computer equipment (software, hardware and networking) for the EIMS;
(iii) Establish and staff a centralised facility (within *Goskomprorida*) to host and maintain the EIMS;
(iv) Source, validate and integrate all existing electronic (GIS data, spreadsheets, images, reports, etc.) environmental information (including the data collected in Output 1.1 above) into the EIMS;
(v) Design a snow leopard research and monitoring programme that will enable the standardised collection, collation, modelling and dissemination of information on *inter alia*: estimations of snow leopard and prey populations, determinations of snow leopard home ranges, identification of snow leopard and prey migration corridors, and ongoing assessments of the nature and scale of threats to snow leopard, prey and habitats;
(vi) Host a series of specialist training sessions for researchers, scientists, academics, forestry and environmental field staff, environmental inspectors, students, NGOs, etc. on *inter alia*: the EIMS design, procedures and standards for collecting and submitting information to the EIMS, the snow leopard monitoring and research programme, monitoring tools and techniques, statistical tools for extrapolation of population data, etc.;
(vii) Increase the coverage of camera and video traps (ensuring adequate sample size and capture probability), and linked database of individual cat photo identifications;
(viii) Increase the coverage of aerial surveys, aerial photography (using lightweight unmanned aerial vehicles) and foot patrol counts of medium-sized mountain ungulates across the snow leopard range;
(ix) Evaluate the cost-effectiveness of monitoring snow leopard populations using faecal DNA analysis.

157. The PIU will - in close consultation with *Goskompriroda* - coordinate the implementation of this output. The PIU will contract the services of an international environmental information systems design company to: (a) design the EIMS; (b) provide technical support in the installation and setup of the hardware, software and networking of the EIMS; (c) provide professional and technical support to the development of (or adoption of existing) graphic user interfaces for the EIMS; (d) provide training, mentoring and technical backstopping support to the appointed EIMS data manager; (e) provide technical support to the validation, transformation and integration of all existing electronic environmental datasets into the EIMS; and (f) host a series of in-service training sessions on the procedures and standards for collecting and submitting future information for integration into the EIMS. The PIU will also contract an international wildlife research and monitoring organisation or academic institution to: (a) develop a national snow leopard research and monitoring programme; (b) host a series of specialist training sessions on the standards and procedures for

[25] See Output 4.2 below.
[26] Including developing data standards and procedures and defining data flows

different monitoring tools and techniques; (c) provide technical support to the installation of the system of camera and video traps; (d) provide technical backstopping support to national institutions in the implementation of the snow leopard research and monitoring programme. *Goskomprorida* will – in collaboration with the Academy of Sciences and the MDF – lead the development and ongoing maintenance of the EIMS and snow leopard research and monitoring programme. The PIU will: procure all the hardware, software and networking for the EIMS; procure any additional equipment and furnishings required for the EIMS facility; and facilitate the contractual appointment of a data manager to administer and maintain the EIMS. The PIU will further assist the responsible state institutions (e.g. Institute of the Gene Pool of Plants and Animals, Ugam-Chatkal National Park, *Gosbiokontrol, Glavohota, Uzgiprourmonloyiha*), other international academic research institutions and/or local/international NGOs (e.g. Panthera ISLT, WCS) in the field collection of baseline and monitoring data by: (a) procuring the necessary equipment and materials; (b) funding the running costs (e.g. travel, accommodation, daily allowance, etc.) of the field-based monitoring staff; (c) contracting aerial survey (e.g. cost of fixed wing or helicopter flying hours, lease of aerial drones, etc.) services; and (d) contracting laboratory services for the faecal DNA analyses.

COMPONENT 2: *Strengthening key biodiversity areas*

158. Work under this component will be spatially focused on: (i) the existing (i.e. Chatkal SNR, comprising 2 geographically discrete sections - Maidantal and Bashkyzilsay) and proposed (Pskem, Akbulak and a wildlife corridor between the Maidantal and Bashkyzilsiy portions of Chatkal SNR) core conservation areas within the Ugam-Chatkal NP (in the Ugam-Chatkal snow leopard landscape - see Map 5 above); and (ii) the Gissar SNR and its proposed areas for expansion (buffer zone and Tupulang) within the Gissar snow leopard landscape (see Map 6 above).

159. The characteristics of the three existing protected areas – Ugam-Chatkal National Park and the Chatkal and Gissar SNRs - are briefly summarised in the table below[27]:

	Ugam-Chatkal snow leopard landscape		*Gissar snow leopard landscape*
	Ugam-Chatkal National Park	***Chatkal Strict Nature Reserve***	***Gissar Strict Nature Reserve***
Location	Located on the south-western end of the Chatkal Range (Ugam, Chatkal ridges and Pskov) in the western Tien-Shan Mountains at altitudes from 1,110m to 4,360m. It is situated in the Bostanlyk, Parkent and Akhangaran districts of the Tashkent region.	Located on the western spurs of the Chatkal Range in the western Tien Shan mountains at altitudes from 1,200m and to 3,800m. It is situated in the Akhangaran and Parkent districts of the Tashkent region. Note: the reserve is located within, and forms part of, the larger Ugam-Chatkal National Park	Located on the western slopes of the Gissar ridge in the Pamir-Alai mountains at altitudes from 1,750m to 4,415m. It is situated in the Yakkabag and Shahrisabz districts of the Kashkadarya region.
Date of establishment	Established in 1990.	Established in 1947.	Established in 1983.
Extent	The extent of the park is 668,350 ha (including Chatkal Strict Nature Reserve). Inlcuding 87,100 ha of	The extent of the reserve is 35,724ha. Inlcuding 6,600 ha of conservation important forests. The reserve comprises	The extent of the reserve is 80,986ha, including 12,200 ha of conservation important forests.

[27] More detailed information is presented in the specialist protected area report appended in Section IV, Part VI of the Project Document.

	conservation important forests)	2 isolated sections, Bashkyzilsay and Maidantal.	
Management authority	Tashkent Regional Khokimiat.	Tashkent Regional Khokimiat.	State Committee for Nature Protection.
Other protection status	None	(i) Part of the core area (totalling an area of 45,160ha) of the 57,360ha (including a buffer area of 12,200ha) *Mount Chatkal MAB Biosphere Reserve*. (ii) On the tentative list (submitted in 2008) for inclusion in the trans-boundary nomination of a serial World Heritage Site for the Mountains of the Western Tien Shan.	On the tentative list (submitted in 2008) for nomination as a World Heritage Site ('Gissar Mountains')

160. The outputs and activities under this component are directed at: (i) expanding the core conservation zones of Ugam-Chatkal NP and Gissar SNR to include areas of high conservation value forests and grasslands and preclude their degradation; (ii) enhancing the monitoring and enforcement capacity in these core conservation zones; and (iii) building mutually beneficial relationships between protected areas and adjacent rural communities.

161. Project support to enhancing the monitoring and enforcement capacity in the core conservation zones of the two snow leopard landscapes will concentrate on the development and implementation of a *smart patrol system*[28] for Gissar SNR and in the core conservation zones in Ugam-Chatkal NP. The smart patrol system will comprise the following basic elements: (i) a secure legal status and clearly demarcated boundaries; (ii) adequate numbers of patrol staff; (iii) suitably equipped ranger patrol staff; (iv) fully trained ranger patrol staff; (v) regular monitoring of ranger patrol performance; and (vi) full integration of patrol data into park/reserve planning and management. It is envisaged that the lessons learnt in the development of a smart patrol system for these protected areas will then guide the incremental future roll-out of smart patrol systems across other protected areas in Uzbekistan.

162. The proposed suite of activities, and broad implementation arrangements, for each of the three outputs under this component are described in more detail below.

Output 2.1: Strengthen the management effectiveness of the core conservation zones in Ugam-Chatkal National Park

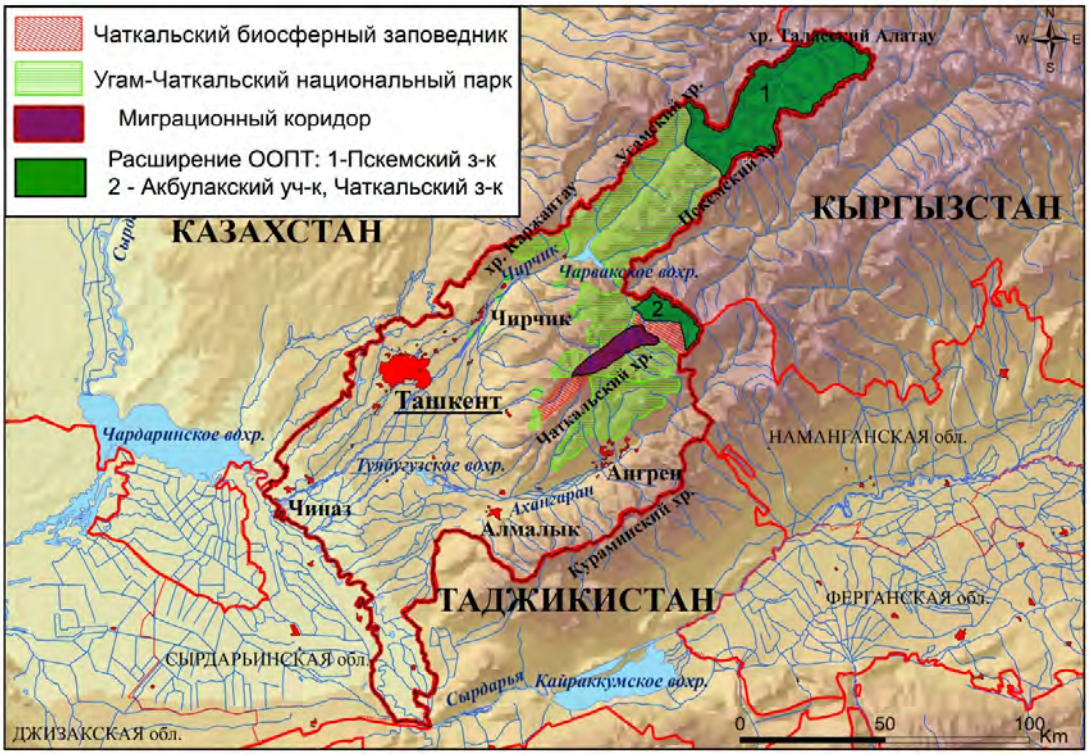
163. Work under this output will focus on: (i) preparing a zonation map, and integrated management plan, for Ugam-Chatkal NP with clearly identified areas of high conservation value forets and grasslands; (ii) improving the effectiveness of the governance and management arrangements for Ugam-Chatkal NP; and (iii) designing and implementing a smart patrol system in the core conservation zones of Ugam-Chatkal NP.

164. The specific activities to be undertaken in this output will include the following:

Zonation, governance and management planning (Ugam-Chatkal NP)

[28] The term 'smart patrol system' has been developed to reflect the integration of science and technology into field-based law enforcement and monitoring in protected areas.

(i) In consultation with affected stakeholders, prepare a zonation plan[29] for Ugam-Chatkal NP. It is envisaged that the designation of the 'core conservation zones' (i.e. areas strictly reserved for biodiversity conservation, corresponding (for forests) to the cateogory of High Conservation Value Forests as defined by Forest Stewardship Council) for Ugam-Chatkal NP would be expanded to include the existing Chatkal SNR, a wildlife corridor between Maidantal and Bashkyzilsiy portions of the Chatkal SNR, the upper reaches of the Pskem river, and the Akbulak catchment (see Map 7 below);



Map 7: Map of the proposed core conservation zones: Chatkal SNR in red hash; wildlife corridor in purple; Pskem in dark green [1]; and Akbulak in dark green [2]

(ii) Develop guidelines for the desired resource use and visitor experience conditions to be achieved for each use zone, and appropriate management activities needed to achieve those desired resource and visitor experience conditions;

(iii) Review and rationalize the governance of, and administrative arrangements for, Chatkal NP in order to improve management efficiencies[30]; and

[29] The purpose of zoning in the National Park will be to identify the types and levels of usage that are acceptable, based on the **sensitivity** and **resilience** of different areas in the park. Sensitive areas will be identified, and will include: areas where human access or disturbance will have a negative impact on biodiversity or heritage values; areas where physical disturbance or infrastructure development will result in higher short and long-term environmental impacts and/or higher construction and on-going maintenance costs; and areas where there is significant environmental risk to infrastructure. Park zonation will be developed by evaluating existing infrastructure and access, plus potential future infrastructure and access requirements, against the sensitivity maps to determine appropriate management and visitor-use zones. The park will then be demarcated into different functional areas (i.e. = 'use zones').

[30] There is currently limited coordination and cooperation between Chatkal SNR, Ugam-Chatkal NP management authority, state security service, the two forestry business units and the Bostanlyk, Parkent and Akhangaran districts in the planning and management of the park.

(iv) In consultation with affected stakeholders, prepare an Integrated Park Management Plan for Ugam-Chatkal NP[31]. This park management plan will incorporate the revised zonation scheme and the rationalised governance and management structures (see [i-iii] above), as well as aligning the existing management plan for Chatkal SNR and the 10-year forest plans for the two forestry business units so that the forests are managed in line with HCVF principles;

Patrol staff, equipment and supplies (core conservation zones)

(v) Contract additional ranger staff to supplement the existing patrol complement;
(vi) Procure additional high quality summer and winter staff uniforms and staff safety and camping equipment (including tents, sleeping bags, backpacks, water bottles, ice picks, first aid kit, utensils, weapons, binoculars, cameras, radios and torches) for all patrol ranger staff;
(vii) Supplement the daily patrol rations for patrol ranger staff;
(viii) Supplement the basic monthly insurance cover (injury and life) for patrol ranger staff; and
(ix) Procure essential transport for patrol and management staff, including two 4x4 vehicles, ranger horses (with tack) and one horse-drawn carriage.

Smart patrol information technology (core conservation zones)

(x) Design a smart patrol system and database that will enable the collection, collation and curation of the spatial and attribute data (including information on patrol effort, patrol coverage and intensity, poaching distribution and intensity, incident reports, key species distribution, etc.) to be collected by patrol ranger staff [32];
(xi) Procure and install (in the central smart patrol planning and data centre – see [xix] below) the hardware, software and networks required to maintain the patrol database;
(xii) Procure GPS-enabled data collection devices (e.g. cybertracker, mobile tablets, smartphones, etc.) for patrol ranger staff; and
(xiii) Develop an application for the GPS-enabled data collection devices to capture the spatial and attribute data collected by patrolling rangers.

Patrol staff training and performance assessment (core conservation zones)

(xiv) Design, develop and implement a comprehensive smart patrol ranger training program (including patrol planning, mapping, GPS technology, data collection, animal and plant identification, search and arrest, use of firearms, communications, first aid, physical strength, legislation, etc.) - comprising basic training (~2 weeks), advanced training (~2-4 days) and annual refresher training (1-2 days) courses - for all patrol and selected management staff;
(xv) Implement a 'train-the-trainer' project for nominated staff in *Goskompriroda* and the MDF who would be responsible for initiating the smart patrol training in other protected areas.
(xvi) Facilitate regular meetings and/or workshops between managers, patrol ranger staff, communities and other stakeholders in and around the park to discuss and analyse smart patrol data outputs, and collaboratively identify ways to address ongoing threats; and
(xvii) Document the lessons learnt from, and good practices in, the development and implementation of smart patrols to guide the future expansion of smart patrols to other protected areas.

Supporting infrastructure and equipment (core conservation zones)

(xviii) Wherever practicable, establish and maintain some form of boundary delineation – such as signage, stone cairns, concrete markers, woven wire fencing, etc. - in order to clearly demarcate the borders of the different 'core conservation zones';

[31] The management planning process will include consultation about resolution of boundary disputes (e.g. Chatkal SNR -Bashkizilsay site).
[32] Examples of existing patrol databases that could be adapted for this purpose are MIST (spatial Management Information SysTem) and SMART (Spatial Monitoring and Report Tool).

(xix) Upgrade (including the installation of bulk services such as power supply, water supply and waste disposal) and equip (including the procurement of furnishing, installations and supply of office equipment) an existing building (comprising at least an open plan office, basic kitchen and bathroom facilities) that could serve as a central smart patrol planning and data centre for the park;

(xx) Upgrade (including the provision of bulk services such as power supply, water supply and waste disposal) and equip (including the procurement of basic furnishing and installations) at least two patrol ranger outposts in Chatkal SNR; and

(xxi) Repair the access dirt road (7km) from the Nevich village to the field station (*Bash Kyzylsay*) in Chatkal SNR.

165. The Project Implementation Unit (PIU) will - in partnership with *Goskompriroda*, the Chatkal SNR, Ugam-Chatkal NP management authority and the two forestry business units - coordinate the implementation of this output.

166. The PIU will contract an international protected area management planning consultant to: coordinate zonation planning and mapping for the park; prepare the Integrated Park Management Plan; and make explicit recommendations on the rationalisation of the governance and management arrangements for Ugam-Chatkal NP. The PIU will contract the services of a team of local experts to provide the requisite professional, technical, scientific and stakeholder consultation support to the international protected area management planning consultant. The PIU will make provision for the costs of field-based logistics (e.g. travel, accommodation, meals, communications) and the procurement of photography (e.g. aerial photography, satellite imagery), as required.

167. The PIU will contract the services of an international service provider or NGO (e.g. WCS)[33] to: (a) provide strategic and technical guidance in the overall planning, development and implementation of the smart patrol system; (b) develop and support the implementation of the smart patrol training programme; (c) design and develop the patrol database; (d) identify the optimal data collection devices and software for the smart patrol system; (e) analyse smart patrol data outputs and facilitate regular report-back meetings; and (f) document the lessons learnt from, and good practices in, the development and implementation of smart patrols.

168. The PIU will support the Chatkal SNR, Ugam-Chatkal NP management authority and/or the two forestry business units in: (a) the selection and appointment of the additional ranger patrol staff; (b) the procurement of all staff uniforms, safety and camping equipment, GPS-enabled data collection devices, fuel supplies, rations and computer hardware, software and networking; and (c) supplementing the insurance cover for patrol rangers. The management staff of Chatkal SNR, Ugam-Chatkal NP management authority and/or the two forestry business units will be directly responsible for the daily administration of the smart patrol system, and the deployment of ranger patrol staff within their areas of operational jurisdiction.

169. The PIU will support the Chatkal SNR, Ugam-Chatkal NP management authority and/or the two forestry business units in procuring: (a) park vehicles (4x4 trucks and horse-drawn carriage); (b) materials and furnishings for the central smart patrol planning and data centre; (c) materials and furnishings for the patrol outposts; and (d) materials for the upgrading of the internal road in Chatkal SNR. The PIU will contract the services of local building contractors to: construct and install bulk services in the smart patrol planning and data centre and patrol outposts; and upgrade the road in Chatkal SNR. The PIU will contract short-term labour from local communities, and procure the materials required, to physically demarcate (e.g. stone cairns, concrete markers, fencing, signage, etc.) the boundaries of the core conservation zones. The management

[33] This service provider will be responsible for the smart patrol system in both Ugam-Chatkal NP and Gissar SNR.

staff of Chatkal SNR, Ugam-Chatkal NP management authority and/or the two forestry business units will be directly responsible for supervising all the on-ground works and labour deployed in the park.

Output 2.2: Extend, and improve the conservation security of, Gissar Strict Nature Reserve

170. Work under this output will focus on: (i) designing and implementing a smart patrol system in Gissar SNR; and (ii) rationalising the reserve boundaries to incorporate a multi-use buffer zone, and extend the core conservation area to include stretches of conservation important forets and grasslands into the upper reaches of the Tupulang river.

171. The specific activities to be undertaken in this output will include the following:

Patrol staff, equipment and supplies (Gissar SNR)

(i) Procure additional high quality winter uniforms and supplement the safety equipment (weapons, first aid kit, utensils, binoculars, cameras, ice-picks) and camping equipment (tents, sleeping bags, backpacks, water bottles, torches) for ranger patrol staff
(ii) Supplement the daily patrol rations for ranger patrol staff;
(iii) Supplement the basic monthly insurance cover (injury and life) for ranger patrol staff;
(iv) Procure essential transport for patrol and management staff, including 1 4x4 vehicle and saddles and bridles for ranger patrol horses; and
(v) Supplement fuel supplies for reserve patrol vehicles.

Smart patrol information technology (Gissar SNR)

(vi) Design a smart patrol system and database that will enable the collection, collation and curation of the spatial and attribute data (including information on patrol effort, patrol coverage and intensity, poaching distribution and intensity, incident reports, key species distribution, etc.) to be collected by ranger patrol staff [34];
(vii) Procure and install (in the central smart patrol planning and data centre – see [xv] below) the hardware, software and networks required to maintain the ranger patrol database;
(viii) Procure GPS-enabled data collection devices (e.g. cybertracker, mobile tablets, smartphones, etc.) for ranger patrol staff; and
(ix) Develop an application for the GPS-enabled data collection devices to capture the spatial and attribute data collected by patrolling rangers.

Patrol staff training and performance assessment (Gissar SNR)

(x) Design, develop and implement a comprehensive smart patrol training program (including patrol planning, mapping, GPS technology, data collection, animal and plant identification, search and arrest, use of firearms, communications, first aid, physical strength, legislation, etc.) - comprising basic training (~2 weeks), advanced training (~2-4 days) and annual refresher training (1-2 days) courses - for all ranger patrol and selected management staff;
(xi) Facilitate regular meetings and/or workshops between managers, ranger patrol staff, communities and other stakeholders in and around the reserve to discuss and analyse smart patrol data outputs, and collaboratively identify ways to address ongoing threats; and
(xii) Document the lessons learnt from, and good practices in, the development and implementation of smart patrols to guide the future expansion of smart patrols to other protected areas.

Supporting infrastructure and equipment (Gissar SNR)

[34] Examples of existing patrol databases that could be adapted for this purpose are MIST (spatial Management Information SysTem) and SMART (Spatial Monitoring and Reporting Tool).

(xiii) Install a communications network (including procuring or replacing cell phones, satellite phones, satellite transmitter dishes, base-radio stations, radio antennae, VHF/FM hand-held radios and/or VHF/FM vehicle radio units) for the reserve;
(xiv) Procure and install power supplies (including generators, solar cells, battery packs and inverters in four patrol ranger outposts in the reserve;
(xv) Upgrade (including the installation of bulk services such as power supply, water supply and waste disposal) and equip (including the procurement of furnishing, installations and supply of office equipment) an existing building (comprising at least an open plan office, basic kitchen and bathroom facilities) that could serve as a central smart patrol planning and data centre for the reserve;

Reserve boundaries (buffer area and upper reaches of Tupulang river)
(xvi) Complete the formal designation, and use zoning, of the proposed buffer area of Gissar SNR (see draft *Gissar Reserve Management Plan*, 2014), revisiting forest management regimes to be reconciled with principles of High Conservation Value Forest management;
(xvii) Assess the feasibility of expanding Gissar SNR (and its buffer zones) into the upper reaches of the Tupulang river in order to better secure the conservation integrity of the migration corridors for snow leopard and prey.
(xviii) Wherever practicable, establish and maintain some form of boundary delineation – such as signage, stone cairns, concrete markers, woven wire fencing, etc. - in order to clearly demarcate the borders of the reserve buffer area/s.

172. The Project Implementation Unit (PIU) will - in partnership with *Goskompriroda* and the Gissar SNR - coordinate the implementation of this output.

173. The PIU will contract the services of an international service provider or NGO (e.g. WCS)[35] to: (a) provide strategic and technical guidance in the overall planning, development and implementation of the smart patrol system; (b) develop and implement the smart patrol training programme; (c) design and develop the patrol database; (d) identify the optimal data collection devices and software for the smart patrol system; (e) analyse smart patrol data outputs and facilitate regular report-back meetings; and (f) document the lessons learnt from, and good practices in, the development and implementation of smart patrols.

174. The PIU will support the Gissar SNR in: (a) the procurement of all staff uniforms, safety and camping equipment, GPS-enabled data collection devices, fuel supplies, rations and computer hardware, software and networking; and (b) supplementing the insurance cover for patrol rangers. The management staff of the SNR will be directly responsible for the daily administration of the smart patrol system, and the deployment of ranger patrol staff within the reserve.

175. The PIU will support the Gissar SNR in procuring: (a) park vehicles (4x4 SUV); (b) materials and furnishings for the central smart patrol planning and data centre; (c) materials and furnishings for the patrol outposts; and (d) radio communications equipment. The PIU will contract the services of local building contractors to: construct and install bulk services in the smart patrol planning and data centre and patrol outposts; and install the radio communications infrastructure. The PIU will contract short-term labour from local communities, and procure the materials required, to physically demarcate (e.g. stone cairns, concrete markers, fencing, signage, etc.) the boundaries of the buffer zone/s. The management staff of Gissar SNR will be directly responsible for supervising all the on-ground works and labour deployed in the reserve.

176. The PIU will contract the services of a team of local to provide professional, technical, scientific and stakeholder consultation services in: (a) preparing the requisite documentation for the formal declaration of the buffer zone; (b) preparing a zonation map for the buffer zones/s; (c) revising and updating the reserve

[35] This service provider will be responsible for the smart patrol system in both Ugam-Chatkal NP and Gissar SNR.

management plan for formal adoption; and (d) assessing the feasibility of expanding the reserve into the upper reaches of the Tupulang river. The PIU will make provision for the costs of field-based logistics (e.g. travel, accommodation, meals, communications) and the procurement of photography (e.g. aerial photography, satellite imagery), as required. The *Goskompriroda* will facilitate the formal processes to enable the declaration of the buffer zone, declaration of revised boundaries to the reserve, and the adoption of the reserve management plan.

Output 2.3 Enhance community involvement in, and beneficiation from, protected areas

177. Work under this output will initially focus on raising the awareness in rural communities living in the snow leopard landscapes of the intrinsic value of the high altitude mountain ecosystems, habitats, flora and wildlife. Work under this output will then shift to developing opportunities that would enable these rural communities to benefit from the conservation and sustainable use of natural resources in the protected areas, including: employment; revenue-sharing agreements; service/supply agreements; capacity building; participation in hunting concessions; access/traversing rights; seasonal access to grazing; wood and medicinal plant collection; preferential contracting; and participation in management decision-making.

178. The specific activities to be undertaken in this output will include the following.

(i) Develop an education and outreach programme for Ugam-Chatkal NP (including Chatkal SNR) and Gissar SNR (including the buffer zone);
(ii) Contract, train and equip (i.e. uniforms and vehicles) 4 community liaison officers (2 for Gissar and 2 for Ugam-Chatkal) to implement the education and outreach programme, and to facilitate social development and economic development activities, in the surrounding rural villages;
(iii) Design and publish information and educational materials and media (posters, brochures, booklets, DVDs, etc.) for use in the education and outreach programme;
(iv) Develop and present informational and awareness-raising 'road shows' (i.e. using pre-packaged informational and educational materials) in targeted villages in Ugam-Chatkal NP, and in villages around Gissar SNR;
(v) Upgrade the information center (display materials, interactive exhibits, lighting, etc.) at, and provide guided walking tours through, the existing Chatkal museum facility in Parkent;
(vi) Provide short course skills training – including *inter alia* monitoring and enforcement, business development, construction, plumbing, electrical work, equipment maintenance, catering services, etc. - for community members;
(vii) Wherever practicable, facilitate the preferential appointment or procurement of contract staff, services and supplies (e.g. park staff, labour and sub-contractors for construction works, transport, accommodation, suppliers of rations for patrol staff, etc.) from the pre-trained community members in support of the implementation of project activities in protected areas;
(viii) Recruit a small corps (5-6 per snow leopard landscape) of environmental inspectors[36] (including their appointment, specialist training, volunteer uniforms, safety equipment) from the pre-trained community members to support the patrol rangers of Ugam-Chatkal NP, Chatkal SNR and Gissar SNR in implementing the smart patrol system;
(ix) Establish a local insurance scheme (for each snow leopard landscape) that makes provision for compensating pastoralists for the loss of livestock as a result of predation by native wildlife living in the protected areas (e.g. snow leopard, wolf, lynx, bear)[37]; and

[36] In terms of the 'Annex to the Resolution of the Cabinet of Ministers' № 287 *On public inspector of environmental control* that was effected on October 8, 2015.
[37] In which the burden of proof lies with the claimant. Project funds will be used to contract an independent arbiter to assess the legitimacy of any claims made, and determine the value of the loss.

(x) Assess economically viable opportunities for, and pilot the development, management and maintenance of, a tourism/recreational facility (and associated services) in Ugam-Chatkal NP and/or the buffer zone of Gissar SNR. A preliminary proposal (the viability of which will be more fully assessed during project implementation) is: (a) the establishment and maintenance of a summer 'gateway' entry point (entrance, signage, fee collection point) to the core conservation area of Pskem (i.e. beyond Tepar); (b) the construction and maintenance of shaded picnic areas (with parking, tables, chairs, grassed areas, children's play areas, water points, power points, waste disposal facilities, etc.) alongside the Pskem river; (c) the construction of a number of day walking trails of varying difficulty (1-4 hours duration) and points of interest (e.g. glaciers, high altitude lakes, cultural artefacts, etc.); (d) the establishment of a linked small tea garden/restaurant; (e) provision of safety, security and cleaning services; and (e) the marketing of the picnic areas and trails (and nearby attractions and accommodation options).

179. The Project Implementation Unit (PIU) will - in partnership with Goskompriroda, the affected *khokimiats* and different protected area institutions - coordinate the implementation of this output. The PIU will contract the services of an international environmental education institution to support the: (a) development of the environmental education and outreach programmes; (b) training of community liaison staff; (c) designing of information and educational materials and media for the information and awareness-raising 'road shows'; and (d) designing display materials and interactive exhibits for the museum. The PIU will also contract a national communications media company to collaborate with the international environmental education institution, and prepare all information and educational materials, media, displays and exhibits.

180. The PIU will support the relevant protected area institution in: (a) the selection and appointment of the community liaison staff; (b) procurement of all staff uniforms, equipment and transport for the community liaison staff; and (c) administering an insurance or compensation scheme for livestock loss from predation. The appointed community liaison staff will, with the support of the PIU and park/reserve management staff, be directly responsible for: (a) presenting the information and awareness-raising programmes in villages in and around the protected areas; (b) assisting villages in improving sustainable livelihoods; (c) procuring and implementing skills training programmes for community members; (d) facilitating the direct involvement of affected local communities in, and beneficiation from, the management and development of the park; and (e) processing complaints about livestock losses from predation by native species. The PIU will retain the services of an independent wildlife specialist to evaluate claims for livestock loss from predation.

181. The PIU will support *Goskompriroda* and the self-governing institutions to select, appoint and equip the corps of environmental inspectors. The Ugam-Chatkal park management authority and Chatkal SNR will then facilitate the training, and directly supervise the activities, of the environmental inspectors.

182. The PIU will contract an international company specialising in nature-based tourism development to work with local partners to: identify and assess the feasibility of a range of opportunities to establish nature-based tourism/recreation facilities and services in the protected areas; identify a viable site in a protected area to pilot an income-generating tourism/recreational development; prepare detailed designs, work plans and budgets for the development; and identify the optimal management and maintenance arrangements for the development. On the basis of the work plan and budget, the PIU will then appoint a building contractor to develop all the requisite infrastructure, prepare the landscaping and install all the bulk services for the facility and associated services. The responsible protected area institution will, with the support of the PIU, then be responsible for equipping, administering and maintaining the facilities and services.

Component 3: *Sustainable economic development incentives for communities*

183. Work under this component will be spatially focused on the high altitude forests and pastures located outside the strict nature reserves (SNRs) in the Ugam-Chatkal snow leopard landscape (see Map 5 above) and in the Gissar snow leopard landscape (see Map 6 above). Within these areas, project activities will be concentrated in targeted pastures and forests, and their associated villages[38].

184. The outputs and activities under this component are directed at encouraging more sustainable levels of use of the high altitude livestock pastures and indigenous forests.

185. For the targeted high altitude livestock pastures, work under this component will seek to improve the ecological integrity and productivity of these pastures by: (i) encouraging a more integrated and collaborative approach in the management of pastures; (ii) incentivising the adoption of more sustainable pasture management practices; (iii) facilitating a shift to alternative income-generating opportunities; (iv) restoring degraded pasture areas; (v) improving the health and well-being of livestock; and (vi) reducing the extent and intensity of illegal activities in pastures.

186. For the targeted high altitude forest areas, work under this component will seek to improve the ecological integrity of indigenous forests in the snow leopard range by: (i) developing supplementary local fuel and construction wood supplies; (ii) establishing local alternative sources of fruit, nuts and herbs; (iii) encouraging the adoption of more efficient fuel and energy technologies; (iv) reducing the extent and intensity of illegal activities in forests; and (v) community-based assisted regeneration of degraded natural forests.

187. The proposed suite of activities, and broad implementation arrangements, for each of the two outputs under this component are described in more detail below.

Output 3.1: Incentivize sustainable pasture management practices

188. Work under this output will focus on: (i) piloting the establishment and administration of multi-stakeholder pasture user associations (PUAs) in the snow leopard landscapes; (ii) developing pasture management plans for these PUAs; (iii) supporting the implementation of these livestock pasture management plans; (iv) incentivising the adoption of more sustainable pasture management practices by PUA members; (vi) encouraging a shift by pastoralists to alternative income-generating opportunities; and (v) rehabilitating and restoring the ecological functioning of heavily degraded grasslands.

189. The specific activities to be undertaken in this output will include the following:

Pasture management planning

(i) Support the drafting of the new Pasture Law for Uzbekistan, particularly in respect of making provision for the establishment of a 'pasture user association' (PUA) by local communities. These PUAs may have the authority to *inter alia*: (a) prepare, adopt and implement a community pasture management plan; (b) monitor the state of pastures; (c) review and approve pasture use lease agreements; (d) collect fees for pasture use; (e) settle disputes; and (h) manage revenues from pasture user fees (and other sources);

(ii) Pilot the establishment of a PUA in each of the two snow leopard landscapes (app. 50,000 ha of pastures). This may include: defining the boundaries of the area under the jurisdiction of the PUA; determining membership criteria for the PUA; drafting internal regulations and guidelines; and constituting a representative governance and management structure for the PUA;

(iii) Assist the PUAs to prepare a pasture management plan. The pasture management plan may include *inter alia*: a map of forage areas; a map of sensitive areas; regulations on pasture allocations; norms on carrying capacities for different pasture types; livestock and forage guidelines; infrastructure

[38] Based on the information derived from Output 1.1, these targeted forests and pastures – and their associated villages - will be more explictly identified during the project implementation phase.

(feed storage, water supply, corrals, etc.) development and management guidelines; predator management measures; monitoring standards for livestock and pasture yields; and measures for pasture rehabilitation;

(iv) Facilitate the alignment of the pasture management plans with the relevant 10-year management plans of the forestry business units and any issued (pasture) 'certificates of use', (pasture) 'lease agreements' and/or registration of livestock; and

(v) Assist members of the PUA to negotiate longer-term lease agreements with the MDF.

Grant funding for, and technical support to, the implementation of the pasture management plans

(vi) Provide technical and grant funding support[39] (through the PUAs) to assist in improving the health and well-being of free-ranging livestock. Technical and grant funding support to pastoralists may include *inter alia*; constructing basic infrastructure for livestock and herders (e.g. predator-proof enclosures, herder's cabins, water and feed storage facilities); procuring predator-proof technologies (e.g. electric fencing, predator proof collars, livestock guardian dogs); relocating livestock from heavily overgrazed pastures to under-utilised pastures; provision of veterinary support services; and import of supplementary fodder;

(vii) Provide technical and grant funding support to households impacted by the enforcement of stricter pasture management regimes. Technical and grant funding to households will focus on supporting: (a) the establishment of intensive livestock farms in and immediately around villages; and (b) the development of alternative local income-generating enterprises such as honey production, greenhouse agriculture, fodder crop agriculture, medicinal herb production and local handicraft production. It is envisaged that this support would then provide some form of compensation to pastoralists who lose an existing source of income from extensive livestock farming due to a reduction in livestock numbers, or a loss of access to pasture areas; and

(viii) Strengthen the capacities (training, skills development, equipment, transport) of the relevant PUA and forestry business units to monitor and enforce the regulations, norms and standards contained in the pasture management plan and the individual pasture lease agreements[40].

Restoration and rehabilitation of heavily degraded grasslands

(ix) In collaboration with the relevant PUA, identify and prioritise the selection of degraded high altitude grassland sites (collectively representing a total area of ~5,000ha) for active rehabilitation/ restoration;

(x) Review the national and regional best practices in grassland rehabilitation/restoration;

(xi) Develop a basic rehabilitation/restoration plan for each site. The restoration/rehabilitation plan will identify the optimal management approach, restoration/rehabilitation methodologies (e.g. grazing management, seeding, soil treatment, etc.) and maintenance measures to be implemented;

(xii) Erect and maintain livestock fencing (and gates), relocate livestock farming infrastructure (e.g. water points, sheds) and manage livestock numbers in order to control and manage the impact of grazing on the restoration/rehabilitation efforts; and

(xiii) Support the implementation and monitoring of the pasture rehabilitation/restoration plan in each site.

190. The Project Implementation Unit (PIU) will - in close consultation with the *Goskompriroda*, the MDF, the land committees of the affected *khokimiats* and the self-governing community organisations (*mahallas*) - coordinate the implementation of this output.

[39] Grant and technical funding support will be used to supplement and complement the existing pasture management capabilities and resources of pastoral and nomadic farmers and their supporting institutions (i.e. DF, khokimiats, agricultural banks, self-governing community organisations, NGOs and not-for-profit organisations) within the districts, and not replace it.

[40] The feasibility of also using of the corps of environmental inspectors - established under Output 2.3 - to support the PUA and forestry business units in monitoring pasture use will be assessed during the project implementation phase.

191. The PIU will contract the services of a team of local experts to provide the requisite professional, technical and scientific support to activities under this output, including: (a) developing pasture norms and standards; (b) assisting in the establishment of new PUAs; (c) supporting PUAs in pasture management planning; (d) assisting PUAs and PUA members to prepare applications for project grant support; (e) providing extension support services to PUA members; and (f) preparing grassland restoration/rehabilitation plans. The PIU will also contract an international pasture management planning business or NGO to provide professional and technical backstopping support to the team of local experts, and the relevant PUAs, in: (a) the development and implementation of pasture norms and standards; (b) drafting of pasture management plans; and (c) preparation of grassland restoration/ rehabilitation plans. The PUAs will, with the support of the national experts and international pasture management planning business: (a) facilitate access to information and data on pastures (including land tenure, numbers of livestock, seasonality of use, etc.); (b) participate in the development of norms and standards for pasture areas; (c) oversee the preparation of the pasture management plans; (d) facilitate access to grant funding for PUA members; and (e) implement the pasture restoration/rehabilitation plans in targeted pasture areas using local labour.

192. The PIU will establish and administer the financial and technical grant programme[41] support for PUAs and individual pastoralists in the implementation of more sustainable pasture management practices. The PIU will also procure the requisite materials, equipment and infrastructure required to implement the pasture restoration/ rehabilitation plans. Further, the PIU will assist the forestry business units and PUAs in procuring the requisite training services, skills development support, equipment and transport for their monitoring and enforcement staff.

Output 3.2: Encourage more sustainable levels of forest use with engagement of local communities

193. This output will focus on: (i) establishing and maintaining tree nurseries; (ii) supplementing local fuel and construction wood for local use; (iii) supporting the further establishment of food-producing fruit and nut orchards and medicinal herb gardens; (iv) promoting the adoption of alternative fuel and energy technologies; (v) reducing the extent and intensity of illegal activities in forests; and (vi) assisting with regeneration or degraded high altitude forests.

194. The specific activities to be undertaken in this output will include the following:

<u>Practical community based forest management activities (16,000 ha of forests):</u>

(i) Establish and maintain a network of local tree nurseries (native tree species, fast-growing plantation trees and commercial nut and fruit tree species) as a source of material for the natural forest restoration efforts, the establishment of woodlots or plantations, and the development of commercial fruit and nut orchards in and around targeted villages.

(ii) Provide technical and grant funding support to the establishment and maintenance of small plantations/woodlots in and around targeted villages. It is envisaged that these woodlots/plantations will incrementally reduce the harvesting pressure on natural high altitude forests for fuel and construction wood by communities living in the targeted villages;

(iii) Provide technical and grant funding support to the establishment of food-producing fruit and nut (pistachio/almond/walnut) orchards and herb gardens in and around targeted villages. It is envisaged that these orchards and herb gardens will incrementally reduce the harvesting pressure on natural high altitude forests for nuts, fruits and herbs by communities living in the targeted villages; and

(iv) Provide technical and grant funding support to the installation and maintenance of alternative energy and fuel technologies and systems, including: natural gas; wind turbines; solar panels;

[41] To be administered by a Project Grants Manager (see Project Implementation Arrangements) in conformance with the UNDP Guidance on Micro Capital Grants (2015).

generators; small hydro-electric power facilities; coal; biogas; liquid natural gas; and connection to the national electricity grid. It is envisaged that the adoption of these technologies and systems will incrementally reduce the pressure on natural high altitude forests for fuelwood by communities living in the targeted villages.

(v) In collaboration with the relevant forest business units, identify and prioritise the selection of 6-10 degraded high altitude forest patches (collectively representing a total area of ~1,000ha) to plan for their regeneration;

(vi) Review the national and regional best practices in community based forest management.

(vii) On the basis of this review, develop a basic forest management / regeneration plan for each identified forest patch. The plan will strive to realize the overall management objective for each forest and will identify the optimal species mix, soil treatments (e.g. tillage, fertilizer), management and regeneration methods (e.g. seeding, enrichment planting, terracing, etc.) and maintenance measures to be implemented;

(viii) Establish and maintain a system of firebreaks and electric fencing around each identified forest to reduce the impact of wildfire and illegal grazing on the restoration/rehabilitation efforts; and

(ix) Support the implementation and monitoring of the forest restoration/rehabilitation plan in each identified forest patch.

<u>Improved monitoring and enforcement</u>

(x) Consult with rural communities from the targeted villages on a range of measures (e.g. limits on the harvesting levels for different forest products, harvesting techniques for different forest products, seasonal closed seasons for harvesting, control of illegal grazing activities, construction of firebreaks, wildfire control, improved monitoring and enforcement, etc.) that could be implemented to improve the sustainability, and reduce the environmental impacts, of the harvesting of wood and other forest products from natural high altitude forests;

(xi) Improve the scientific basis for the determination of the sanitary cutting requirements for the high altitude forests; and

(xii) Strengthen the capacities (equipment, transport) of the relevant forestry business units to monitor and enforce the forest regulations, norms and standards[42] around the targeted villages.

195. The Project Implementation Unit (PIU) will - in close consultation with Goskompriroda, the MDF, the affected *khokimiats* and the self-governing community organisations (*mahallas*) - coordinate the implementation of this output. The PIU will contract the services of a team of local experts to provide the requisite professional, technical and scientific support to activities under this output, including: (a) iimproving the scientific basis for determining the harvesting levels for forest products and the sanitary cutting requirements in natural forests; (b) supporting the forestry business units in the design and establishment of the tree nurseries; (c) assisting rural communities in the targeted villages to prepare applications for project grant support; (e) providing agricultural and forestry extension support services to rural communities in the targeted villages; and (f) preparing forest management / regeneration plans.

196. The affected responsible forest business units will, with the support of the PIU and the relevant *khokimiat*: (a) facilitate the establishment and maintenance of the tree nurseries; (b) implement, monitor and enforce the forest legislation, forest regulations and forest use lease agreements; (c) consult with communities on measures to improve the sustainability of forest harvesting practises; and (d) implement the rehabilitation/restoration plans for targeted forests, using local labour.

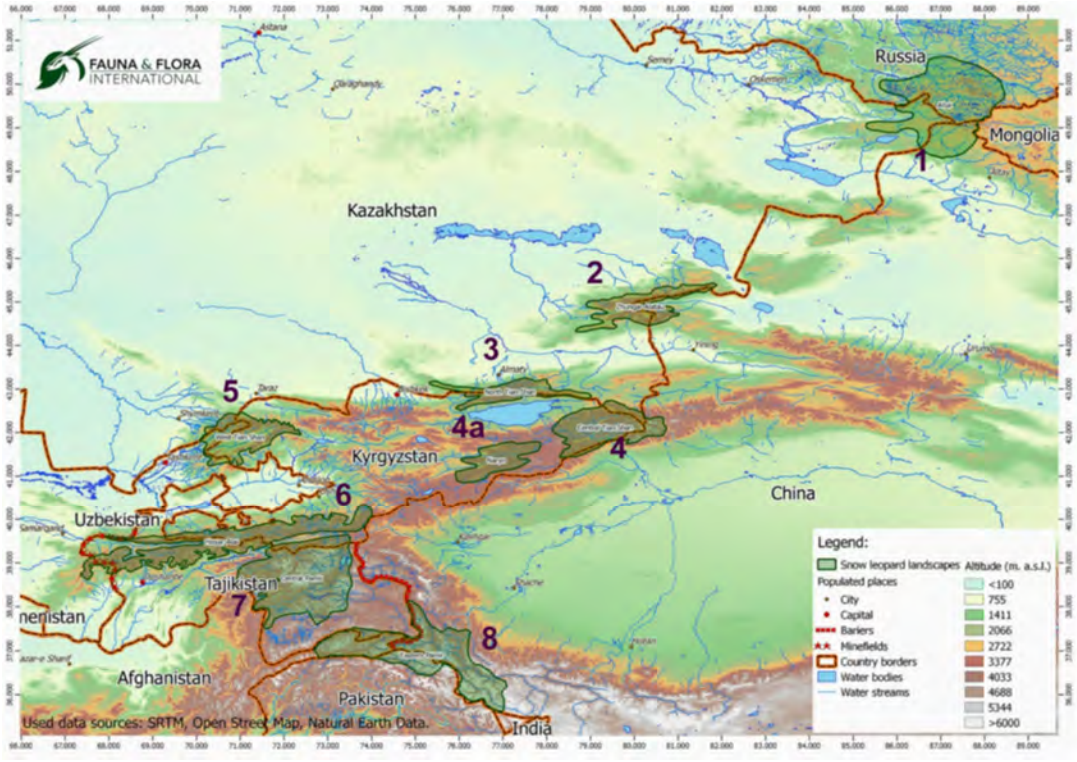
[42] The feasibility of also using of the corps of environmental inspectors - established under Output 2.3 - to support the forestry business units in monitoring forest use will be assessed during the project implementation phase.

197. The PIU will establish and administer the financial and technical grant programme[43] for activities that will reduce the threats to, and impacts on, natural forests. The PIU will also procure the requisite materials, goods, equipment and infrastructure required to: (a) set up and maintain the tree nurseries; (b) supplement the monitoring and enforcement capacity of the forest business units; and (c) implement the forest restoration/ rehabilitation plans. The PIU may further contract fuel and energy technology service providers to install and maintain any alternative fuel and energy technologies that are to be developed at the village-scale.

198. The self-governing structures in the targeted villages will, with the support of the PIU and forest business units, maintain an ongoing consultation with rural households to ensure their equitable beneficiation from project activities.

Component 4: *Promoting cooperation and collaboration*

199. Work under this component will be spatially focused on the national territory forming an integral part of the more expansive west Tian Shan and the Gissar Alai snow leopard trans-boundary landscapes (see areas **5** and **6** in Map 8 below).



Map 8: Transboundary landscapes identified at the FFI/CMS Workshop (Transboundary Snow Leopard Conservation in Central Asia, 2014).
Key: 1. Altai. 2. Zhongar Alatau. 3. North Tien Shan. 4. Central Tien Shan. 4a. Naryn. 5. West Tien Shan. 6. Gissar-Alai. 7. Central Pamir. 8. Eastern Pamir

[43] To be administered by a Project Grants Manager (see Project Implementation Arrangements) in conformance with the UNDP Guidance on Micro Capital Grants (2015).

200. The outputs and activities under this component are broadly directed at: (i) developing the Programme *and Action Plan for Snow Leopard Conservation* in Uzbekistan; (ii) coordinating the efforts of different partner institutions, organisations and individuals in the implementation of the programme and action plan; (iii) sourcing additional financing support for the implementation of the programme and action plan; and (iv) building the capacities of partner institutions, organisations and individuals to collaborate in the implementation and monitoring of the programme and action plan.

Output 4.1: Improve inter-agency coordination in conservation, monitoring and enforcement

201. This output will focus on improving the cooperation between different institutional partners and civil society in the implementation of a *Programme and Action Plan for Conservation of Snow Leopard in Uzbekistan*.

202. The specific activities to be undertaken in this output will include the following:

(i) Based on the improved state of knowledge of snow leopard, prey and their habitats (see Output 1.1 above), develop a *Programme and Action Plan for Conservation of Snow Leopard in Uzbekistan*[44] for formal adoption by the Government of Uzbekistan;
(ii) Assess the feasibility of a range of different mechanisms for financing the implementation of the *Programme and Action Plan*;
(iii) Implement a fund-raising strategy to supplement state funding for the implementation of the *Programme and Action Plan;*
(iv) Establish and maintain a cooperative governance structure under the stewardship of the *Goskompriroda* - to coordinate, monitor and report on the efforts of different partner institutions, organisations and individuals in the implementation of the *Programme and Action Plan*.

203. The Project Implementation Unit (PIU) will - in close consultation with the *Goskompriroda* - coordinate the implementation of this output. The PIU will contract the services of a team of local experts to provide the requisite professional, technical and scientific support to activities under this output, including: (a) the *Programme and Action Plan*; and (b) identifying financing requirements for the *Programme and Action Plan*; and (c) facilitating the establishment of the cooperative governance structure. The PIU will also contract the services of an international snow leopard conservation specialist or NGO to provide professional and technical backstopping support to the team of local experts, and to assist *Goskompriroda* to raise funding from donors (and other sources) for snow leopard and prey conservation initiatives.

204. The *Goskompriroda* will facilitate the establishment of, and fulfil the secretariat function for, the cooperative governance structure, while the PIU will finance the running costs of meetings (e.g. catering, facilitation, accommodation, transport, daily allowance).

Output 4.2: Strengthen the capacity for trans-boundary planning and management

205. This output will focus on strengthening the capacities (knowledge, training, networking, skills) of the responsible government agencies (e.g. MDF, *Goskompriroda*, Academy of Sciences, border security) to collaborate with counterparts in Tajikistan, Kyrgyzstan and Kazakhstan in: (a) securing migration corridors for key wildlife species; (b) combatting poaching of wildlife; and (c) reducing the illicit demand for illegal wildlife products. It will also support the active participation of scientists, researchers, academics, managers and key decision-makers in regional and international snow leopard meetings.

[44] The Programme and Action Plan will need to be integrated with, and closely aligned to, the current NSLEP for Uzbekistan.

206. The specific activities to be undertaken in this output will include the following:

(i) Establish joint working groups - one for the Gissar-Alai and one for the west Tien-Shan trans-boundary snow leopard landscapes - with counterparts in Tajikistan, Kyrgyzstan and Kazakhstan to facilitate transboundary collaboration in managing migrating snow leopard and prey populations across country borders
(ii) Design, develop materials for, and implement, an ongoing in-service wildlife monitoring and enforcement training and skills development programme for border security officials deployed in the snow leopard landscapes. The programme may include short (1-2 day) training and skills development courses in *inter alia*: wildlife identification and biology; wildlife and conservation legislation and regulations; international wildlife and habitat conservation agreements; monitoring of wildlife poaching; illegal trade in wildlife and other natural resources; etc.;
(iii) Organise visits to snow leopard range countries for key decision-makers, rangers, managers and researchers in order to share lessons learned, experiences in PA management, and community-based wildlife management; and
(iv) Facilitate the active participation of scientists, researchers and academics in regional/international snow leopard research and monitoring initiatives and involvement in GSLEP report-back meetings.

207. The Project Implementation Unit (PIU) will - in close consultation with the *Goskompriroda,* the MDF, Committee for State Border Protection - coordinate the implementation of this output. The PMU will contract the services of a national team of local experts from the Academy of Sciences, the Directorate of Forestry and/or *Goskompriroda* to: (a) design, develop and implement the in-service short-course wildlife monitoring and enforcement training programs for border security officials; and (b) constitute, and technically support the work of, the trans-boundary working groups. The PIU will provide financial, administrative and logistical support to: (a) the administration of the trans-boundary working group meetings (e.g. catering, facilitation, accommodation, transport, daily allowance); (b) the participation of professional, technical and management personnel in regional snow leopard report-back meetings (travel costs, daily allowance); and (c) involvement of professional, technical and management personnel in international exchange programs, country visits and trans-boundary leopard monitoring and research projects.

INDICATORS AND RISKS

208. The project indicators are detailed in the Strategic Results Framework in Section II of this Project Document.

209. Project risks and risk mitigation measures are described below.

IDENTIFIED RISKS AND CATEGORY	IMPACT	LIKELIHOOD	RISK ASSESSMENT	MITIGATION MEASURES
The state institutions directly responsible for the administration of protected areas, pastures and forests do not have adequate capacity, to plan, administer and enforce sustainable natural resource use in the snow leopard landscapes.	**HIGH**	**MODERATELY LIKELY**	**MEDIUM**	As a signatory to the 'Bishkek Declaration on the conservation of the Snow Leopard' (October, 2013), the Government of Uzbekistan (GoU) has resolved to '*commit resources for* (the) *implementation*' (of the Global Snow Leopard Ecosystem Protection Program). It has further committed to act to '*protect and recover snow leopard populations and their fragile habitats'*. This project has thus been developed to provide practical assistance to the GoU in meeting the 'political will' already represented in these (and other regional and global[45]) resolutions and commitments. The project will seek to significantly strengthen and expand the current capabilities of the key institutions[46] that are directly responsible for the planning and management of protected areas, natural habitats, pastures and forests across the snow leopard landscapes in Uzbekistan. More specifically, it will assist in building a professional corps of well-trained and properly equipped management, monitoring, enforcement, community liaison and pastoral extension services staff in the targeted protected area, *forest business units*, border security services, regional and local government institutions and self-governing community organisations. The PIU and SCNP will, during the course of project implementation, iteratively develop an institutional sustainability plan to ensure that the different project investments in building the capacity of the targeted institutions are maintained (and scaled-up, if feasible and affordable) beyond the term of the project. The project will also support the implementation of income-generating opportunities (e.g. income from pasture tax, recreational and tourism services and facilities, income from fines, fund-raising, etc.) to further augment the current budgets of the responsible institutions.

[45] Such as the Bonn Convention on the Conservation of Migratory Species of Wild Animals and the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

[46] This includes: departments, research centres, forestry business units and protected areas under the Directorate of Forestry; departments, institutes and protected areas under the SCNP; research centres and institutes under the Academy of Sciences; Border Security Service; Tashkent Regional Administration; and other *khokimiats*.

IDENTIFIED RISKS AND CATEGORY	IMPACT	LIKELIHOOD	RISK ASSESSMENT	MITIGATION MEASURES
Low levels of compliance with environmental legislation, and a reluctance to adopt more sustainable natural resource use practices, by communities leads to the further degradation of, and loss of productivity in, snow leopard and prey habitats.	**HIGH**	**MODERATELY LIKELY**	**MEDIUM**	The project has adopted a three-pronged approach to addressing this risk. In the first instance, while the widespread culture of impunity from environmental prosecution will not be fully reversed, the project will seek to improve the monitoring and enforcement capabilities across the snow leopard landscapes. The project will specifically: pilot the implementation of a smart patrol system in the core conservation areas of Ugam-Chatkal NP and Gissar SNR (Output 2.1 and 2.2); strengthen the monitoring and enforcement capacities (knowledge, training, skills, equipment and staff) in the forestry business units and *khokimiats* (Output 3.1 and 3.2); pilot the training, equipping and deployment of a corps of local environmental inspectors (Output 2.3); and build the capacity of border and customs officials to improve the detection of illegal wildlife trade (Output 3.2). In the second instance, the project will seek to incentivise an incremental shift to more sustainable land use (focused on grazing and forest use) practices. The project will specifically: facilitate the economic beneficiation (employment, contractual work, provision of services, income from hunting concessions, etc.) of communities living in the snow leopard landscapes in return for a reduction in illegal activities in the protected areas (Output 2.3); help village governments to plan, source funding for and implement alternative livelihoods (Output 2.3, 3.1 and 3.2); provide technical and financial grant support to pastoralists in return for a shift to more sustainable pasture management practices (Output 3.1); and provide small grants to assist rural communities and local governments to install alternative fuel and energy technologies in return for a reduction in harvesting of wood for fuel and energy needs from forests (Output 3.2). In the third instance, the project will seek to improve the awareness of rural communities living in the snow leopard range of the importance of conserving snow leopard, their prey and their habitats. The project will specifically: develop and implement an education and awareness programme around the protected areas (Output 2.3); strengthen the knowledge and awareness of sustainable pasture management in the PUAs (Output 3.1); strengthen the knowledge and awareness of sustainable forest management in local villages (Output 3.2); and conduct an ecosystem services and economic valuation of snow leopard and their mountain ecosystems (Output 1.1).

IDENTIFIED RISKS AND CATEGORY	IMPACT	LIKELIHOOD	RISK ASSESSMENT	MITIGATION MEASURES
Low levels of coordination and cooperation between public institutions, tenure holders, rights holders, land owners, NGOs/CBOs and natural resources users leads to conflicts over any changes in use rights in SPNAs and high altitude pastures and forests	**MODERATE**	**MODERATELY LIKELY**	**MEDIUM**	The project is building on almost a decade of cooperation with communities and local and regional authorities in the implementation of biodiversity conservation initiatives under the framework of a UNDP-GEF-SCNP partnership. This work suggests that a high level of engagement and local ownership among local stakeholders will be maintained in this project, with careful attention given to stakeholder consultation, participation and conflict resolution. The project will work closely with the administration of the targeted protected areas, *forest business units*, *khokimiats* and self-governing community organisations in ensuring the effective involvement of all affected stakeholders in the implementation of project activities. The project will specifically work through (and assist in establishing, where these have not yet been constituted) the coordinating structures of Park Management Committees and Pasture User Associations (PUAs) as an institutional mechanism to improve the communication, collaboration and cooperation between tenure holders, rights holders, natural resource users and the relevant state, regional and local administrations. The project will also strengthen the knowledge and skills base of protected area, pasture and forest users and managers in order to facilitate a more collaborative approach in the planning, implementation and enforcement of sustainable forest and pasture management practises. The project will further facilitate the establishment and maintenance of a cooperative structure to coordinate, monitor and report on the efforts of the different partner institutions, organizations and individuals in the implementation of *Programme and Action Plan for the Conservation of Snow Leopard*. A full stakeholder participation plan will be prepared as the project is further developed.
The increasing aridisation of high altitude habitats, as a result of the effects of climate change, results in more intensive and extensive grazing pressures on high altitude pastures, potentially leading to the local extirpation of snow	**MODERATE**	**UNLIKELY**	**LOW**	The effects of climate change are likely to exacerbate the effects of the existing threats to snow leopard, their prey and their habitats. They are however not likely (under current climate change scenarios) to result in the emergence of new, potentially catastrophic threats. The project has thus been developed to improve the capacity of the country to proactively and more effectively address the current matrix of threats in anticipation of a future increase in the extent and intensity of these threats as a result of changing climate. Snow leopards and their prey also have large home ranges and should – assuming safe access to

IDENTIFIED RISKS AND CATEGORY	IMPACT	LIKELIHOOD	RISK ASSESSMENT	MITIGATION MEASURES
leopard and medium-sized prey.				available habitats - be able to move in response to the projected effects and impacts of climate-change. The project has thus adopted a landscape-scale approach, with a strong emphasis on maintaining viable and secure movement corridors between formal protected areas both within the snow leopard landscapes of Uzbekistan and into adjacent protected areas in Kyrgyzstan, Tajikistan and Kazakhstan. More specifically, the project will support the establishment and maintenance of trans-boundary working groups to improve the conservation security of snow leopard and prey migration corridors between the countries (Output 4.2). The project will also support the finalisation of the *Programme and Action Plan for Snow Leopard Conservation in Uzbekistan* (Output 4.1). An integral part of the action plan will be the development of strategies and approaches to mitigate and adapt to the effects of climate change on snow leopard conservation. The project will further support the involvement of managers, scientists, researchers and academics in more rigorously monitoring the effects of climate change on snow leopard and prey and collaborating in regional initiatives to develop strategies to mitigate and manage these effects (Output 4.2).

COST-EFFECTIVENESS

210. The cost-effectiveness of the project is premised on the collective value of the coordinated efforts of the individual range countries to conserve snow leopard, their prey species and their natural habitats. Thus, within the overarching framework of the GSLEP, this project will specifically support the implementation of the NSLEP portfolio for Uzbekistan It will address a number of critical limitations in the capacities of stakeholder institutions, and in the incentives for rural communities, to effectively and cooperatively manage and conserve snow leopards, their wild prey, and their habitats across the snow leopard range in Uzbekistan.

211. All project outputs and activities have been spatially contained to the snow leopard distribution area in Uzbekistan, and more specifically to two pre-defined snow leopard landscapes (Ugam-Chatkal and Gissar), to ensure that the use of GEF resources is concentrated on conserving, and improving sustainable forest and pasture management in, the natural dispersal areas and migration routes of the snow leopard and their prey in Uzbekistan.

212. Costs incurred in project implementation will focus primarily on those additional actions required to provide key incremental assistance to the government, forest users, pastoralists, rural communities and partner institutions in undertaking strategic interventions to: improve the conservation tenure and conservation security of protected areas; improve the sustainable management of, and restore degraded, high altitude pastures; improve and restore the ecological integrity of high altitude forests; and improve the state of knowledge of snow leopards, their prey and their habitats.

213. To accomplish this, the project will seek to complement and build upon the current baseline activities already underway in the sector, such as: collection of baseline environmental data; motivation for the establishment of a buffer area in Gissar; installation of camera traps in Gissar; establishment of nurseries for nut and fruit tree species; establishment of herb gardens; development of woodlots and plantations; state support for development of alternative livelihoods in rural montane villages; and the drafting of a new Pasture Law.

214. Project resources will thus primarily be used to improve current efforts by the state and other partner institutions to plan and effectively manage protected areas, pastures, forests and knowledge systems, rather than incur the high costs of developing completely new tools, mechanisms and approaches.

215. Where new value-adding activities are being supported by the project (development of a smart patrol system for protected areas; development of nature-based tourism enterprises; establishment of Pasture User Associations) these will be conceptualised at the national level, but locally piloted (i.e. smart patrol system in the core conservation areas of Ugam-Chatkal NP and Gissar SNR; PUAs in the Gissar and Ugam-Chatkal snow leopard landscapes; and the establishment of a tourism and recreational facility in Ugam-Chatkal NP) in order to realise economies of scale.

216. Additional co-financing support for the introduction, scaling up and/or replication of viable conservation and sustainable management approaches will continue to be targeted by the project during the project implementation phase.

217. Wherever possible, the project will use the competencies and technical skills within both the mandated state institutions (e.g. departments, research centres, forestry business units and protected areas under the Directorate of Forestry; departments, institutes and protected areas under the SCNP; research centres and institutes under the Academy of Sciences; Border Security Service; Tashkent Regional Administration; and other *khokimiats*), NGOs (e.g. Panthera) and legitimate community-based structures (e.g. self-governing community organisations) to implement project activities.

COUNTRY OWNERSHIP: COUNTRY ELIGIBILITY AND COUNTRY DRIVENNESS

218. The Government of Uzbekistan acceded to the *United Nations Convention on Biological Diversity* (CBD) on the 19t^{h} of July, 1995. As a party to the CBD, Uzbekistan is committed to the implementation of the Strategic Plan for Biodiversity 2011-2020. This project will specifically contribute to meeting Aichi Target 12 of the CBD Strategic Plan ('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'). It will also contribute to meeting the following complementary Aichi targets: Target 3 (positive incentives for the conservation and sustainable use of biodiversity); Target 5 (the rate of loss, degradation and fragmentation of natural habitats is reduced); Target 11 (areas of particular importance for biodiversity are effectively conserved); and Target 19 (the knowledge of biodiversity is improved and shared).

219. The country's *Fifth National Report to the Convention on Biological Diversity* (2015) was prepared in accordance with Article 26 of the Convention and COP decision X/10 of the Convention. The report considers the fragmentation of ecosystems, and degradation of species' habitats, as the most serious threat to all wild species of flora and fauna of Uzbekistan. It specifically emphasises the need to prevent the further degradation and loss of natural habitats in the high altitude mountain ecosystems of the country in order to protected threatened species, including the snow leopard and key prey species (e.g. argali, Menzbier's marmot). The country is, in conformance with COP decision X/2 of the Convention, currently in the process of revising its *National Biodiversity Strategy and Action Plan* (NBSAP, 1998-2007).

220. The Government of Uzbekistan ratified the *United Nations Convention on Combating Desertification* (UNCCD) on October 31 1995. As a party to the UNCCD, Uzbekistan is committed to the implementation of the *Ten-year Strategic plan and Framework to Enhance the Implementation of the*

Convention (2008–2018). The project will specifically contribute to the indicators for Strategic Objectives 1, 2 and 3 (enhancing productivity and reducing vulnerability to climate change, climate vulnerability and drought) of the UNCCD Strategic Plan by: improving and diversifying livelihoods in rural communities through sustainable land management; improving land productivity and restoring ecosystem goods and services in mountain ecosystems; and building institutional and individual capacities for sustainable forest and pasture management. The country's *Third National Communication to the UNCCD* (2014) highlights the need to enhance energy efficiencies in rural households. It specifically encourages the promotion and dissemination of best practices in the adoption of more environmentally-friendly energy and fuel technologies and systems.

221. Uzbekistan acceded to the *United Nations Framework Convention on Climate Change* (UNFCCC) on the 14th of May, 1993 as a non-Annex I party, and ratified the *Kyoto Protocol* on the 20th of August, 1999. Uzbekistan does not have a focused and overarching climate change policy document to provide a strategic framework for national climate change adaptation and mitigation actions. Most measures have a sectoral emphasis, and are integrated with economic development strategies. As a non-Annex I party under the UNFCCC, Uzbekistan does not have obligations for annual reporting; the commitments are limited to measuring its GHG emissions and conducting vulnerability and mitigation studies.

222. Uzbekistan ratified the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) on the 25th of April, 1997, while the Bonn Convention on the Conservation of Migratory Species of Wild Animals entered into force in Uzbekistan on the 1st of September, 1998.

223. The Government of Uzbekistan is a party to *The Bishkek Declaration on the Conservation of Snow Leopards* (2012). Within the framework of the 'Bishkek Declaration', the *Global Snow Leopard & Ecosystem Protection Program* (GSLEP, 2013) seeks to bring together governments of snow leopard range countries to collectively recognize the threats to snow leopards, and commit to coordinated national and international action. The GSLEP's Goal is to identify and secure 20 snow leopard landscapes by the year 2020. The foundation of the process is a set of 12 *National Snow Leopard and Ecosystem Priorities* (NSLEP) developed by each range country government. This project will directly support the implementation of the priority actions contained in the NSLEP for Uzbekistan.

224. The *Snow Leopard Survival Strategy* (SLSS, 2014) has been developed in parallel with, and is complementary to, the GSLEP. While the GSLEP is organized around a policy-level and government-focused agenda, the SLSS is a more technical document targeting researchers, conservationists and wildlife or protected area managers in the government and public sectors. This project has adopted and fully integrated the technical approaches and best practises described in the SLSS into the design and development of project outputs and activities.

PROJECT CONSISTENCY WITH NATIONAL PRIORITIES/PLANS

225. The project addresses some of the priorities identified in the *National Action Program to Combat Desertification* (NAPCD, 2002), including: improvement of integrated land use planning; restoration of degraded pastures and forests; and development of economic mechanisms for ensuring more sustainable use of natural resources.

226. The project will support the implementation the National *Environmental Action Plan* (EAP, 2013-2017), notably in respect of two thematic areas: (i) 'improving the ecological condition of flora' (improved forest and grassland management capacities, restoration of degraded grasslands and forests and reforestation); and (ii) 'improving the ecological condition of fauna' (improving the habitats of migratory species, inventory of rare and threatened fauna; strengthening the protection of migratory wildlife).

227. The project will also contribute to implementing the priority activities identified in the *State Program on Development of Forestry in the Republic of Uzbekistan* (2015-2018), notably the suite of activities linked

to the conservation of existing forests, development of the forestry sector and regularization of state forest fund lands - including pastures – in support of rural development.

228. The spatial priorities for the rationalisation and expansion of protected areas in the project are fully consistent with those in the *Programme on creation and expansion of the network of protected areas in the Republic of Uzbekistan* (2015), including: the upper reaches of Pskem river; the wildlife corridor connecting the two sections of Chatkal SNR; Akbulak; and the upper reaches of the Tupulang river.

SUSTAINABILITY AND REPLICABILITY

229. Project **sustainability** will ultimately depend on ensuring the full ownership of the project outputs and activities by the responsible mandated public institutions and securing their long-term commitment (regulatory, policy, funding and resources) to scale-up and replicate best practices in snow leopard conservation, and sustainable forest and pasture management, beyond project completion.

230. Environmental sustainability will be enhanced in the project by: (a) preventing the further fragmentation of snow leopard and prey landscapes in Uzbekistan; (b) maintaining and/or restoring the quality of key snow leopard and prey habitats within these landscapes; (c) improving the conservation status, and sustainability of pasture and forest use, in these key snow leopard and prey habitats; and (d) reducing the direct threats to the survival of snow leopards and prey populations living in these key habitats. More specifically, the project will support the development and implementation of a smart patrol system in targeted protected areas and reduce the impacts on, and improve the sustainable management of, the high altitude livestock pastures and indigenous forests located on, or immediately adjacent to, the key snow leopard migration paths. The project will also seek to improve the awareness of rural communities living in the snow leopard range of the importance of conserving snow leopard, their prey and their habitats.

231. Institutional sustainability will be promoted in the project by strengthening and expanding the current capabilities of the key institutions that are directly responsible for the planning and management of protected areas, natural habitats, pastures and forests across the snow leopard range in Uzbekistan. It will assist in building a professional corps of well-trained, adequately resourced and properly equipped management, monitoring, enforcement, community and pastoral extension service personnel in targeted PAs, *forest business units*, border security areas, *khokimiats* and self-governing community organisations. The project will specifically: (i) establish and maintain a national environmental information management system; (ii) pilot the implementation of a smart patrol system in core conservation areas of the NP and SNRs; (iii) strengthen wildlife monitoring and enforcement capacities in the responsible state agencies; and (iv) build the capacity of border security officials to improve the detection of illegal wildlife trade. The PIU and SCNP will, during the course of project implementation, iteratively develop an institutional sustainability plan to ensure that the different project investments in building the capacity of the targeted institutions are maintained (and scaled-up, if feasible and affordable) beyond the term of the project.

232. Socio-economic sustainability will be enhanced in the project by improving the living conditions of rural communities. This will be achieved through the implementation of fiscal (and other incentives) that will seek to encourage an incremental shift to more sustainable land use (focused on grazing and forest use) practices. The project will specifically: (i) facilitate the economic beneficiation (from direct employment, contractual work, provision of services, income from hunting concessions, etc.) of communities living around targeted PAs in return for a reduction in illegal activities in the PAs; (ii) help rural communities to plan, source funding for and implement alternative livelihoods; (iii) provide technical and financial grant support to pastoralists in return for a shift to more sustainable pasture management practices; and (iv) provide small grants to assist rural communities and local governments to establish woodlots, plant fruit and nut orchards and install alternative fuel and energy technologies in return for a reduction in harvesting of wood for fuel and energy needs from forests. The project will primarily work through (and assist in establishing, where these have not yet been constituted) local governance structures - including Park Management Committees and Pasture User Associations - as means of improving the communication, collaboration and

cooperation between tenure holders, rights holders, natural resource users and the relevant state, regional and local administrations. The project will also support the identification and implementation of viable income-generating opportunities (e.g. income from hunting fees, income from pasture tax, specialist tourism services, income from fines, alternative livelihoods, etc.) to further augment the current budgets of the responsible institutions.

233. Each project output will include the documentation of lessons learnt from implementation of activities under the output, and a collation of the tools and templates (and any other materials) developed during implementation. The Project Manager will ensure the collation of all the project experiences and information. This knowledge database will then be made accessible to different stakeholder groups in order to support better future decision-making processes in snow leopard conservation and more consistent adoption of best practice.

234. **Replication** of good practices developed by the project will be achieved through the direct replication of selected project elements and practices and methods, as well as the scaling up of experiences. The following activities have preliminarily been identified as suitable for replication and/or scaling up: (i) implementation of smart patrol systems in PAs; (ii) demarcation of PA boundaries; (iii) formalizing and implementing co-management agreements with PA-adjacent village communities; (iv) rehabilitation and restoration of degraded high altitude pastures; and (v) new snow leopard and prey population monitoring technologies (e.g. aerial drones, faecal DNA analysis and radio collars). The lessons learnt in project implementation will be incorporated into the development of the *Programme and Action Plan for Snow Leopard Conservation in Uzbekistan.* The sharing of best practices and lessons learned in project implementation with other member countries of the GSLEP will be facilitated through regional GSLEP meetings and regular communications through the GSLEP Secretariat.

COORDINATION WITH OTHER RELATED INITIATIVES

235. This project is complementary to the regional (Kazakhstan, Kyrgyz Republic, Tajikistan and Uzbekistan) UNDP-GEF medium-sized project *Transboundary Cooperation for Snow Leopard and Ecosystem Conservation*. The implementation phase of the regional project (2015-2018) will overlap with the implementation phase of this project (2016-2020). This project will thus seek to adopt and operationalise, at the national level, the relevant tools and guidelines that will be developed under the regional project. The GSLEP Focal Point for Uzbekistan will be represented on the Project Board of both the regional project and this projects Steering Committee (SC) in order to strengthen the strategic linkages between the projects. The Project Manager of this project will also maintain a close working relationship with the Project Technical Committee (PTC) of the regional project in order to enhance the operational linkages between the projects. The implementation of Component 3 (Outputs 3.1 and 3.2) of this project will, in particular, benefit significantly from the effective coordination of efforts, and sharing of knowledge between the projects.

236. This project is a logical extension of the recently completed UNDP-GEF medium-sized project, *Strengthening Sustainability of the National Protected Area System by Focusing on Strictly Protected Areas*. Lessons learnt from the piloting of new management approaches in Surkhan Strict Nature Reserve under the earlier GEF project will guide the implementation of work under this project, particularly in the protected areas and their buffer zones within the snow leopard landscapes. The Master Plan for Protected Areas that was developed in that GEF project also provides the policy and strategic planning framework for this project's support to Gissar and Chatkal SNRs and Chatkal NP. Further, much of the expertise and skills developed under the earlier GEF project have been retained, and will be recruited (both in a project management and expert support role) to direct the implementation of this project and ensure continuity and consistency between the projects.

237. The project will meet on a regular basis with international development agencies (including the FAO, GIZ and/or Asian Development Bank) that are either funding or implementing complementary sustainable forest and pasture management initiatives in Uzbekistan, in order to identify and develop opportunities for

ongoing collaboration. A particular focus of discussions will be on harmonising the financial and technical support provided to rural communities in: implementing more sustainable pasture management practices; improving the management and sustainable use of forests; developing alternative income-generating opportunities; and adopting more environmentally-friendly fuel and energy technologies. The project will specifically seek to build on the substantial foundational work already being undertaken by these development agencies in setting up and maintaining participatory forest management committees, community-based conservancies and Pasture User Associations across the region.

238. The Project Grants Manager (PGM) in the PIU will work closely with the National Coordinator of the Global Environment Facility Small Grants Programme (SGP) in Uzbekistan (total of $1,095,048 for the period 2008-2018) to ensure that grant support to the targeted rural pasture and forest users under this project complements and supports the investments made by the SGP (e.g. the introduction of Biogas technology, planting of pistachios and introduction of solar greenhouses).

239. The project will seek to develop collaborative agreements with key NGO partners (notably Panthera) and international research institutions to support the implementation of selected project activities (e.g. snow leopard and prey surveys and monitoring, specialised training, public awareness-raising, forest and grassland restoration planning, smart patrol system development, etc.). The project will, within the framework of these collaborative agreement/s, then assist in reimbursing the costs of NGOs and research/academic institutions in the direct implementation of activities that fall directly within the ambit of the project outputs.

240. The project may, if considered feasible by the Government of Uzbekistan, support the establishment and administration of the National Environment Security Task Force (NEST), as envisaged by the *Regional Enforcement Strategy to Combat Illegal Wildlife Trade in Central Asia*. If established, this NEST will then nationally address and combat wildlife crime through a more coordinated, collaborative and strategic response. The PIU may also, during the project implementation phase, later facilitate linkages with the envisioned regional Snow Leopard and Wildlife Enforcement Network (SLAWEN) once it has been established.

PART III: Management Arrangements

PROJECT IMPLEMENTATION ARRANGEMENT

241. The project will be implemented over a period of five years.

242. The project will be nationally implemented (NIM) by the State Committee on Nature Protection (SCNP) in line with *Standard Basic Assistance Agreement* between the Government of Uzbekistan and the United Nations Development Program (UNDP), signed by the parties on 10 June 1993.

243. Following the programming guidelines for national implementation of UNDP supported projects, the SCNP will sign the Project Document with UNDP and will be accountable to UNDP for achievement of the project objective and outcomes, according to the approved work plan. The national executing entity - also referred to as the national"***Implementing Partner***" in UNDP terminology - is required to implement the project in compliance with UNDP rules and regulations, policies and procedures (including the NIM Guidelines). According to the UNDP POPP, an Implementing Partner is "the entity to which the Administrator has entrusted the implementation of UNDP assistance specified in a signed document along with the assumption of full responsibility and accountability for the effective use of UNDP resources and the delivery of outputs, as set forth in such document." By signing a project document, an implementing partner enters into an agreement with UNDP to manage the project and achieve the results defined in the relevant documents. In addition, an implementing partner may enter into agreements with other organizations or entities, known as **"*Responsible Parties*"**, which may carry out project activities and produce project outputs on behalf of the Implementing Partner. Responsible Parties are accountable directly to the Implementing Partner.

244. The UNDP will monitor the implementation of the project, review progress in the realization of the project outputs, and ensure the proper use of UNDP/GEF funds. Working in close cooperation with the SCNP, the UNDP Country Office (CO) will provide support services to the project - including procurement, contracting of service providers, human resources management, administration of project grant funding, and financial services - in accordance with a Letter of Agreement (LOA) for the provision of support services concluded between the SCNP and the UNDP. This will be paid from the UNDP TRAC funds. The UNDP CO will also ensure conformance with UNDP Programme and Operational Policies and Procedures and UNDP Results-Based Management (RBM) guidelines.

245. The SCNP as the Implementing Partner (IP) will retain overall responsibility for applying GEF and other inputs in order to reach the expected Outcomes/Outputs as defined in this project document. It will be responsible for the timely delivery of project inputs and outputs, and in this context, for the coordination of all other responsible parties, including other government agencies, regional and local government authorities. It will also be directly responsible for creating the enabling conditions for implementation of all project activities. The SCNP will work in close cooperation with the Directorate of Forestry and will coordinate all project activities at the local level, in close collaboration with the local government authorities in each of the targeted snow leopard landscapes.

246. The SCNP will designate a senior staff member to act as a National Project Coordinator (NPC). The NPC will provide the strategic oversight and guidance to project implementation and will chair the meetings of the Project Steering Committee[47].

247. The day-to-day administration of the project will be carried out by a full-time Project Manager (PM), with the administrative support of a Project Financial Assistant (PFA). Field-based technical support and

[47] The NPC will not be paid from the project funds, but will represent a Government in-kind contribution to the Project.

oversight will be provided by 3 Field Coordinators (FC), one for knowledge management (components 1 and 4), one for protected areas (component 2) and one for pastures and forests (component 3). The development and implementation of the small grants programmes under the project (Outputs 3.1 and 3.2) will be administered by a Project Grants Manager (PGM).

248. Collectively the PM, PFA, 3 FCs, and PGM will comprise the Project Implementation Unit (PIU). The PIU staff will be allocated office space in the premises of Goskompriroda in Tashkent. A project driver will be recruited to transport the PIU staff, as required.

249. The PM has the authority to administer the project on a day-to-day basis on behalf of the SCNP and UNDP, within the constraints lain down by the Project Steering Committee. The PM's prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost. The PM will liaise and work closely with all partner institutions to link the project with complementary national programs and initiatives. The PM is accountable to the NPC and UNDP for the quality, timeliness and effectiveness of the activities carried out, as well as for the use of funds. The PFA, FCs, PGM and a project driver will report to the PM and will provide professional, technical and administrative support to the PM, as required. The terms of reference for the PM, PFA, FCs and PGM are detailed in Section IV, Part I.

250. An international Technical Adviser (TA) will provide overall professional and technical backstopping to the Project. He/She will render professional and technical support to the PIU, SCNP, and other government counterparts. The TA will support the provision of the required professional and technical inputs, reviewing and preparing Terms of Reference (TORs) and reviewing the outputs of service providers, experts and other sub-contractors. He/She will report directly to the NPC and PM.

251. The PIU will be technically supported by contracted teams of national experts, international NGO's, international consultants and companies. The recruitment of specialist support services and procurement of any equipment and materials for the project will be done by the PM, in consultation with the PC, and in accordance with relevant recruitment and procurement rules and procedures. The terms of reference of the key individual national and international experts and consultants to be contracted by the project are detailed in Section IV, Part I.

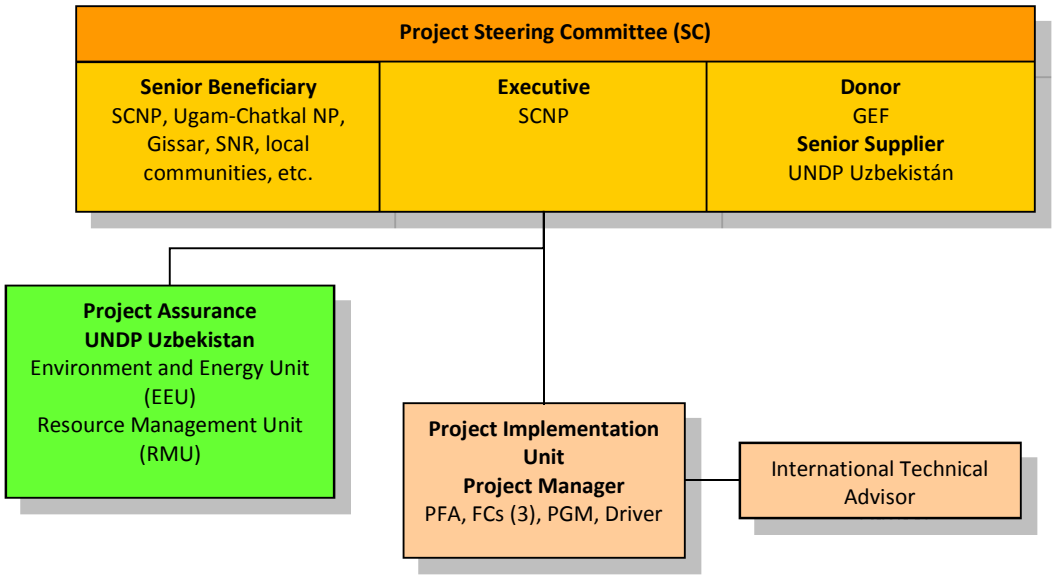
252. The SCNP, the Directorate of Forestry and the Academy of Sciences may also, in accordance with the AWP, directly implement some project activities, under the supervision of the PM and NPC.

253. A project Steering Committee (SC) will be constituted to serve as the executive decision making body for the project. While the final composition of the SC will be determined at the Project Inception Workshop (see Section I, Part IV), it may include representation from the SCNP, UNDP, Directorate of Forestry, State Security Services, Academy of Sciences, affected regional administrative authorities, NGOs and pasture user associations. The SC will ensure that the project remains on course to deliver the desired outcomes of the required quality. The SC will meet at least twice per annum (more often where required). The SC provides overall guidance and policy direction to the implementation of the project, and provides advice on appropriate strategies for project sustainability. The SC will play a critical role in project monitoring and evaluation by quality assuring the project processes and products. It will arbitrate on any conflicts within the project, or negotiate a solution to any problems with external bodies. It will also approve the appointment and responsibilities of the Project Manager and any delegation of its project assurance responsibilities.

254. The PM will produce an Annual Work Plan (AWP) to be approved by the SC at the beginning of each year. These plans will provide the basis for allocating resources to planned project activities. Once the SC approves the AWP, it will be signed by SCNP and UNDP and sent to the UNDP Regional Technical Advisor (RTA) at the GEF Regional Service Centre (RSC) in Istanbul for clearance. Once the AWP is cleared by the RSC, it will be sent to the UNDP/GEF Unit in New York for final approval and release of the funding. The PM will further produce quarterly operational reports, Annual Progress Reports (APR) and the Project

Implementation Review (PIR) report for review by the SC, or any other reports at the request of the SC. These reports will summarize the progress made by the project versus the expected results, explain any significant variances, detail the necessary adjustments and be the main reporting mechanism for monitoring project activities.

255. The management arrangements are summarized as follows:



FINANCIAL AND OTHER PROCEDURES

256. The financial arrangements and procedures for the project are governed by the UNDP rules and regulations for National Implementation Modality (NIM). All procurement and financial transactions will be governed by applicable UNDP regulations under NIM.

AUDIT CLAUSE

257. The Project audits will be conducted according to UNDP Financial Regulations and Rules and applicable Audit policies.

PART IV: Monitoring Framework and Evaluation

MONITORING AND REPORTING

258. The project will be monitored through the following Monitoring and Evaluation (M&E) activities.

Project start-up:

259. A Project Inception Workshop will be held within the first 2 months of project start with those with assigned roles in the project organization structure, the UNDP Country Office (CO) and, where appropriate/ feasible, regional technical policy and programme advisors as well as other stakeholders. The Inception Workshop is crucial to building ownership for the project results and to plan the first year annual work plan.

260. The Inception Workshop should address a number of key issues including:

a) Assist all partners to fully understand and take ownership of the project. Detail the roles, support services and complementary responsibilities of UNDP CO, SCNP and the UNDP-GEF Regional Service Centre (RSC) vis-à-vis the project team. Discuss the roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff will be discussed again, as needed.
b) Based on the Project Results Framework and the relevant GEF Tracking Tool, if appropriate, finalize the first Annual Work Plan (AWP). Review and agree on the indicators, targets and their means of verification, and re-check assumptions and risks.
c) Provide a detailed overview of reporting, monitoring and evaluation requirements. The Monitoring and Evaluation (M&E) work plan and budget should be agreed and scheduled.
d) Discuss financial reporting procedures and obligations, and arrangements for annual audit.
e) Plan and schedule project Steering Committee (SC) meetings. Roles and responsibilities of all project organization structures should be clarified and meetings planned. The first SC meeting should be held within the first 6 months following the inception workshop.

261. An Inception Workshop report is a key reference document and must be prepared and shared with participants to formalize various agreements and plans decided during the meeting.

Quarterly:

- Progress made shall be monitored in the UNDP Enhanced Results Based Management Platform.
- Based on the initial risk analysis submitted, the risk log shall be regularly updated in ATLAS. Risks become critical when the impact and probability are high.
- Based on the information recorded in ATLAS, a Project Progress Report (PPR) can be generated in the Executive Snapshot.
- Other ATLAS logs can be used to monitor issues, lessons learned etc. The use of these functions is a key indicator in the UNDP Executive Balanced Scorecard.

Annually:

262. Annual Project Review/Project Implementation Reports (APR/PIR): This key report is prepared to monitor progress made since project start and in particular for the previous reporting period. The APR/PIR combines both UNDP and GEF reporting requirements.

263. The APR/PIR includes, but is not limited to, reporting on the following:

- Progress made toward project objective and project outcomes - each with indicators, baseline data and end-of-project targets (cumulative)
- Project outputs delivered per project outcome (annual)
- Lesson learned/good practice
- AWP and other expenditure reports
- Risk and adaptive management
- ATLAS Quarterly Progress Reports (QPR)
- Portfolio level indicators (i.e. GEF focal area tracking tools) are used by most focal areas on an annual basis as well.

Periodic Monitoring through site visits:

264. UNDP CO and the UNDP-GEF RSC will conduct visits to project sites based on the agreed schedule in the project's Inception Report/Annual Work Plan to assess first hand project progress. Other members of the Steering Committee may also join these visits. A Field Visit Report/BTOR will be prepared by the UNDP CO and UNDP-GEF RSC and will be circulated no less than one month after the visit to the project team and Steering Committee members.

Mid-term of project cycle:

265. The project will undergo an independent Mid-Term Evaluation (MTE) at the mid-point of project implementation. The MTE will determine progress being made toward the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the MTE will be decided after consultation between the parties to the project document. The Terms of Reference for this MTE will be prepared by the UNDP CO, based on guidance from the UNDP-GEF RSC. The management response and the evaluation will be uploaded to UNDP corporate systems, in particular the UNDP Evaluation Resource Centre (ERC).

266. The relevant GEF Focal Area Tracking Tools will also be completed during the mid-term evaluation cycle.

End of Project:

267. An independent Final Evaluation will take place three months prior to the final Steering Committee meeting and will be undertaken in accordance with UNDP and GEF guidance. The final evaluation will focus on the delivery of the project's results as initially planned (and as corrected after the MTE, if any such correction took place). The final evaluation will look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental benefits/goals. The Terms of Reference for this evaluation will be prepared by the UNDP CO, based on guidance from the UNDP-GEF RSC.

268. The final evaluation should also provide recommendations for follow-up activities and requires a management response which should be uploaded to PIMS and to the UNDP ERC.

269. The relevant GEF Focal Area Tracking Tools will also be completed during the final evaluation.

270. During the last three months, the project team will prepare the Project Terminal Report. This comprehensive report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the project's results.

Learning and knowledge sharing:

271. Results from the project will be disseminated within and beyond the project through existing information sharing networks and forums.

272. The project will identify and participate - as relevant and appropriate - in scientific, policy-based and/or any other networks, which may be of benefit to project implementation though lessons learned. The project will identify, analyse, and share lessons learned that might be beneficial in the design and implementation of similar future projects.

273. Finally, there will be a two-way flow of information between this project and other projects of a similar focus.

Communications and visibility requirements

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

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

M&E work plan and budget

Type of M&E activity	Responsible Parties	Budget US$ *Excluding project team staff time*	Time frame
Inception Workshop and Report	▪ PM ▪ UNDP CO ▪ UNDP-GEF RSC	Indicative cost: 12,000	Within first two months of project start up
Measurement of Means of Verification of project results.	▪ PM will, with support from the UNDP-GEF RSC, oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members.	To be finalized in Inception Phase and Workshop.	Start, mid and end of project (during evaluation cycle) and annually when required.
Measurement of Means of Verification for Project Progress on *output and implementation*	▪ PM	Household surveys (inception, mid-term, final). Indicative cost: $5,000 per survey. Any additional surveys required will be determined as part of the preparation of the AWP.	Annually prior to APR/PIR and to the definition of annual work plans

Type of M&E activity	Responsible Parties	Budget US$ *Excluding project team staff time*	Time frame
APR/PIR	▪ PM ▪ UNDP CO ▪ UNDP RTA ▪ UNDP ERC	None	Annually
Periodic status/ progress reports	▪ PM	None	Quarterly
Mid-term Evaluation	▪ PM ▪ UNDP CO ▪ UNDP RSC ▪ External Consultants (i.e. evaluation team)	Indicative cost: 45,000	At the mid-point of project implementation.
Final Evaluation	▪ PM ▪ UNDP CO ▪ UNDP RSC ▪ External Consultants (i.e. evaluation team)	Indicative cost: 45,000	At least three months before the end of project implementation
Project Terminal Report	▪ PM ▪ UNDP CO ▪ local consultant	0	At least three months before the end of the project
Audit	▪ UNDP CO ▪ Project manager and team	Indicative cost: 2,000/annum (paid from UNDP TRAC funding)	Yearly
Visits to field sites	▪ UNDP CO ▪ UNDP RSC (as appropriate) ▪ Government representatives	0	Yearly
TOTAL indicative COST *Excluding project staff time and UNDP staff and travel expenses*		US$ 127,000	

Note: Costs included in this table are part and parcel of the UNDP Total Budget and Work Plan (TBWP) in the PRODOC, and not additional to it.

PART V: Legal Context

276. This Project Document shall - together with the UNDP Country Programme Document for 2016-2020 and the Uzbekistan – United Nations Development Assistance Framework for 2016-2020 - be the instrument referred to as such in Article I of the *Standard Basic Assistance Agreement* between the Government of Uzbekistan and the United Nations Development Program (signed by the parties on 10 June 1993).

277. Consistent with the Article III of the Standard Basic Assistance Agreement, the responsibility for the safety and security of the implementing partner and its personnel and property, and of UNDP's property in the implementing partner's custody, rests with the implementing partner

278. The implementing partner shall:

a. Put in place an appropriate security plan, and maintain the security plan, taking into account the security situation in the country where the project is being carried out; and
b. Assume all risks and liabilities related to the implementing partner's security, and the full implementation of the security plan.

279. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement.

280. The implementing partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

281. The UNDP authorized official can effect in writing the following types of revision to this Project Document, provided that he/she has verified the agreement thereto by the UNDP-GEF RSC and is assured that the other signatories to the Project Document have no objection to the proposed changes:

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

SECTION II: STRATEGIC RESULTS FRAMEWORK (SRF)

	Indicator	Baseline (2015)	Target (Mid-Term)	Target/s (End of Project)	Source of verification	Risks and Assumptions
Project Objective: *To enhance the conservation, and sustainable use, of natural resources in the biodiverse high altitude mountain ecosystems of Uzbekistan*	Extent (ha) of protected areas within the Ugam-Chatkal and Gissar snow leopard landscapes under a more secure, and effectively managed, monitoring and enforcement regime	116,710 ha	>240,000 ha	>549,000 ha	Annual reports of the State Biological Control Service of the State Committee on Nature Protection (SCNP) and the Ugam-Chatkal Park Management Authority	**Assumptions:** – The GoU remains committed to supporting efforts to: (i) increase the management effectiveness of protected areas; (ii) improving the ecological integrity and productivity of high altitude pastures and forests; and (iii) incentivising the incremental shift to alternative income-generating opportunities for rural mountain communities, in the snow leopard landscapes. **Risks:** – State institutions responsible for the administration of protected areas, pastures and forests do not have adequate capacity; – Low levels of compliance with environmental legislation, and a reluctance to adopt more sustainable natural resource use practices; – Low levels of coordination and cooperation between public
	Extent (ha) of high altitude mountain pasture areas within the Ugam-Chatkal and Gissar snow leopard landscapes under a more regulated and sustainable management regime	<5,000 ha	>20,000 ha	>50,000 ha	National land cadastre database. Environmental Information Management System (EIMS)	
	Improved conservation status of biodiversity important forests within targeted Protected Areas	0 ha	>45,000 ha	105,900 ha	Annual reports from the Forest Inventory and Design Enterprise (MDF); Forestry Business Units (MDF); and Ugam-Chatkal Park Management Authority	

	Indicator	Baseline (2015)	Target (Mid-Term)	Target/s (End of Project)	Source of verification	Risks and Assumptions
	Number of primary snow leopard prey populations[48] within the Ugam-Chatkal and Gissar snow leopard landscapes: Siberian Ibex (LC) Siberian roe deer (LC) Boar (LC) Menzbier's marmot (VU) Long-tailed marmot (LC)	Siberian Ibex: 3,800-4,000 Siberian roe deer: 250-300 Boar: >1,838 Menzbier's marmot: 4,300 Long-tailed marmot: 7,994	Siberian Ibex: >4,000 Siberian roe deer: >300 Boar: >1,950 Menzbier's marmot: 4,400 Long-tailed marmot: 8,100	Siberian Ibex: >5,500 Siberian roe deer: >400 Boar: >2,150 Menzbier's marmot: 4,500 Long-tailed marmot: 8,300	Annual species population counts from Chatkal SNR, Ugam-Chatkal NP and Gissar SNR. EIMS	institutions, tenure holders, rights holders, land owners, NGOs/CBOs and natural resources users; and – The increasing aridisation of high altitude habitats, as a result of the effects of climate change.
	Total snow leopard population within the snow leopard landscapes of Uzbekistan	~80	>80	>85	Project monitoring reports. EIMS	
	Number of women (as a proportion of the total) involved in, and directly benefiting from project investments in the conservation and sustainable use of high altitude montane habitats and species within the Ugam-Chatkal and Gissar snow leopard landscapes	NA	Involvement: >650 (>60%) Direct benefits: >2000 (>60%)	Involvement: >1500 (>60%) Direct benefits: >450 (>60%)	Project reports	
Component 1: *Landscape level planning and management*	**Outputs:** 1.1 Improve the quality of environmental information for state cadastre 1.2 Enhance the state of knowledge on snow leopard and prey populations					

[48] Population estimates collectively represent the species counts from Chatkal SNR, Ugam-Chatkal NP and Gissar SNR in the Ugam-Chatkal and Gissar snow leopard landscapes.

	Indicator	Baseline (2015)	Target (Mid-Term)	Target/s (End of Project)	Source of verification	Risks and Assumptions
decision-making	Coverage (as a % of the total area of 10,000 km^2) of comprehensive, up-to-date baseline environmental and land use information for the snow leopard distribution range	<15% (mostly limited to the footprints of Chatkal, Gissar and Zaamin SNRs)	>60%	>85%[49]	EIMS	**Assumptions:** – The border security services will facilitate controlled access for the ongoing collection of environmental baseline and snow leopard monitoring data; and – The SCNP will accept the responsibility for, and allocate resources to, the hosting, maintenance and updating of the EIMS. **Risks:** – State institutions responsible for the administration of protected areas, pastures and forests do not have adequate capacity; – Low levels of compliance with environmental legislation, and a reluctance to adopt more sustainable natural resource use practices; – Low levels of coordination and cooperation between public institutions, tenure holders, rights holders, land owners, NGOs/CBOs and natural resources users; and – The increasing aridisation of high altitude habitats, as a result of the effects of climate change.
	National coverage (as a % of the total snow leopard range) of snow leopard and prey monitoring activities	Snow leopard: <5% Prey: <5%	Snow leopard: >50% Prey: >30%	Snow leopard: >75% Prey: >50%	Project monitoring reports. EIMS	
	Percentage (%) of individual snow leopards with a dossier profiling some of its key features (age, sex, spot pattern, DNA, home range, etc.) under preparation.	0%	>10%	>25%	Project monitoring reports. EIMS	

[49] While a coverage of 100% will be targeted by the project, it is likely that access to some of the high security border areas may be severely restricted.

	Indicator	Baseline (2015)	Target (Mid-Term)	Target/s (End of Project)	Source of verification	Risks and Assumptions
Component 2: *Strengthening key biodiversity areas*	**Outputs:** 2.1 Strengthen the management effectiveness of the core conservation zones in Ugam-Chatkal National Park 2.2 Extend, and improve the conservation security of, Gissar Strict Nature Reserve 2.3 Enhance community involvement in, and beneficiation from, protected areas					
	Total extent (ha) of core conservation areas managed as IUCN Category I or Category II protected areas within the Ugam-Chatkal and Gissar snow leopard landscapes	116,710 ha	180,000 ha	237,700 ha	Annual reports of the State Biological Control Service of the SCNP and the Ugam-Chatkal Park Management Authority	**Assumptions:** – Stakeholders will constructively participate in the design, development and implementation of a smart patrol system in Ugam-Chatkal NP, Chatkal SNR and Gissar SNR; – The SCNP, forestry business units and Tashkent Regional Authority will make budget provisions for the continued employment of project-funded ranger staff, and the ongoing maintenance of new equipment and infrastructure procured by the project; and – The SCNP, forestry business units and Tashkent Regional Authority will commit to facilitating the involvement and beneficiation of local communities living in, and adjacent to, the NP and SNRs. **Risks:** – State institutions responsible for the administration of protected areas do not have adequate capacity;
	Total annual budget (US$/annum) allocation for the management of the protected areas within the Ugam-Chatkal and Gissar snow leopard landscapes.	<US$500,000 /annum	>750,000/annum	>US$1m/annum	Annual financial reports of the individual protected areas	
	METT scores for: Chatkal SNR Ugam-Chatkal NP (excluding Chatkal SNR) Gissar SNR	Chatkal SNR: 46 Ugam-Chatkal NP: 22 Gissar SNR: 43	Chatkal SNR: 52 Ugam-Chatkal NP: 35 Gissar SNR: 50	Chatkal SNR: >60 Ugam-Chatkal NP: >42 Gissar SNR: >56	Annual METT reporting	
	Number of active patrol rangers in the core conservation areas of Ugam-Chatkal NP (including Chatkal SNR) and Gissar SNR	Ugam-Chatkal: 39 Gissar: 35	Ugam-Chatkal: >45 Gissar: >38	Ugam-Chatkal: >55 Gissar: >40	Smart patrol system Annual reports of the individual protected areas	

	Indicator	Baseline (2015)	Target (Mid-Term)	Target/s (End of Project)	Source of verification	Risks and Assumptions
	Number of (i) poaching (of snow leopard and prey); and (ii) other illegal (encroachments for crops and grazing, wood harvesting) incidents recorded (and prosecuted) per annum by ranger patrol staff from the core conservation areas of Ugam-Chatkal NP (including Chatkal SNR) and Gissar SNR	(i) >289/annum (ii) >1,450/annum	(i) <100/annum (ii) <1000/annum	(i) <40/annum (ii) <155/annum	Smart patrol system Annual reports of the individual protected areas	– Low levels of compliance with environmental legislation; and – Low levels of coordination and cooperation between public institutions, tenure holders, rights holders, land owners, NGOs/CBOs and natural resources users.
	Number per annum of individuals (gender disaggregated) from villages in Ugam-Chatkal NP and around Gissar SNR involved in the project's education and outreach programme	N/A	>400/annum (>220 females)	>1,000/annum (>640 females)	Household survey reports Project reports Annual reports of the individual protected areas	
	Total number (of which are women) of individuals from targeted villages who have completed project funded skills training[50] courses.	NA	>40 (>25)	>100 (>60)	Project reports	

[50] Including skills development training programmes in *inter alia*: monitoring and enforcement; business development; construction; plumbing; electrical work; equipment maintenance; catering services; etc.

	Indicator	Baseline (2015)	Target (Mid-Term)	Target/s (End of Project)	Source of verification	Risks and Assumptions
	Number per annum (of which are women) of individuals from the targeted villages who financially benefit from[51] the management of the protected areas within the Ugam-Chatkal and Gissar snow leopard landscapes.	<25 (<4) per annum	>75 (>40) per annum	>150 (>80) per annum	Project reports Annual reports of the protected areas	
	Gross income (US$/annum) generated from tourism/ recreational facilities and services in protected areas within the Ugam-Chatkal and Gissar snow leopard landscapes	US$0	US$0	>US$10,000/annum	Annual financial reports of the individual protected areas	
Component 3: *Sustainable economic development incentives for communities*	**Outputs:** 3.1 Incentivize sustainable pasture management practices 3.2 Encourage more sustainable levels of forest use					
	Approved Law on Pastures (including article/s on the establishment and administration of Pasture User Associations)	No (no)	Yes (yes)	Yes (yes)	Government gazette	**Assumptions:** – The GoU will facilitate the process of preparing and adopting the Pasture Law; – The Academy of Sciences, MDF and/or SCNP will establish and maintain forest and pasture monitoring data within the snow leopard landscapes; – The MAWR, SCNP and local government institutions will
	Average productivity (dry fodder mass in tons/ha) of the high altitude pastures in the areas administered by Pasture User Associations (PUAs)	<0.4 t/ha	>0.5 t/ha	>0.7 t/ha	Permanent pasture monitoring plots Annual reports of PUAs	

[51] Direct financial benefits include: recruitment as permanent or temporary park/reserve staff; appointment as environmental inspectors; income from the delivery of services and supplies to the park/reserves; and/or compensation for loss of livestock from predation.

	Indicator	Baseline (2015)	Target (Mid-Term)	Target/s (End of Project)	Source of verification	Risks and Assumptions
	Average percentage (as an average of the total grass/forb/herb cover per hectare) of unpalatable species[52] within the high altitude pastures in the areas administered by PUAs	>40%	<36%	<30%	Permanent pasture monitoring plots Annual reports of PUAs	actively support the piloting of the PUAs in the snow leopard landscapes; – Communities living in the targeted villages are sufficiently capacitated and motivated to submit viable applications for grant funding support; and – State agencies, local government and self-governing community institutions - with the support of the PIU and PUAs - will actively monitor and enforce compliance with the grant conditions. **Risks:** – State institutions responsible for the administration of protected areas, pastures and forests do not have adequate capacity; – Low levels of compliance with environmental legislation, and a reluctance to adopt more sustainable natural resource use practices; – Low levels of coordination and cooperation between public institutions, tenure holders, rights
	Number of PUAs with approved pasture management plans under implementation in the high altitude pastures of the Ugam-Chatkal and Gissar snow leopard landscapes	0	1	2	Project reports Minutes of PUA meetings	
	Number of households (average of ~6 individuals/household) in the Ugam-Chatkal and Gissar snow leopard landscapes directly benefiting from project technical and grant funding support for: (a) improving the health and well-being of free-ranging livestock; (b) development of alternative local income-generating enterprises; and (c) establishment of intensive livestock farms.	NA NA NA	(a) >35 (b) >10 (c) >2	(a) >90 (b) >30 (c) >8[53]	Household survey reports Project grant agreements and performance reports Project reports	

[52] The increase in cover of unpalatable species is a direct consequence of the effects of unsustainable levels of grazing and forage collection, increased compaction and erosion and short fire regimes. Unpalatable species may include *Rosa ecae*, *Iris sogdiana, Hypericum scabrum, Astragalus lasiosemius, Acantholimon* sp ,. *Adonis turkestanica, Eremurus kaufmannii, Ligularia* sp., *Onobrychis echidna, Lagotis* sp.

[53] Covering an area of ~4,000ha

	Indicator	Baseline (2015)	Target (Mid-Term)	Target/s (End of Project)	Source of verification	Risks and Assumptions
	Extent (ha) of degraded high altitude pastures and forests of the Ugam-Chatkal and Gissar snow leopard landscapes under active rehabilitation or restoration	Pastures: 0 ha Forests: <100 ha	Pastures: 2,000 ha Forests under restoration: 400 ha Forests under sustainable management with communities: 8,000 ha	Pastures: 5,000 ha Forests under restoration: 1,000 ha Forests under sustainable management with communities: 15,000 ha	Annual reports of *forest business units* and Ugam-Chatkal Park Management Authority	holders, land owners, NGOs/CBOs and natural resources users; and – The increasing aridisation of high altitude habitats, as a result of the effects of climate change.
	Number of households (average of ~6 individuals/household) in the Ugam-Chatkal and Gissar snow leopard landscapes directly benefiting from project technical and grant funding support for: (a) establishment and maintenance of small plantations/woodlots; (b) establishment of food-producing fruit and nut orchards and herb gardens; and (c) installation and maintenance of alternative energy and fuel technologies and systems.	NA NA NA	(a) >2 (b) >10 (c) >45	(a) >5 (b) >25 (c) >100	Household survey reports Project reports	

	Indicator	Baseline (2015)	Target (Mid-Term)	Target/s (End of Project)	Source of verification	Risks and Assumptions
	Extent (as a percentage of the total area) of high altitude forests and pastures in the Ugam-Chatkal (excluding Chatkal SNR) and Gissar snow leopard landscapes (excluding Gissar SNR) that are considered 'significantly degraded'[54] as a result of a lack of control over illegal, and unsustainable levels of, use.	TBD (under Output 1.1)	<50%	<40%	EIMS Permanent pasture and forest monitoring plots	
Component 4: *Promoting cooperation and collaboration*	**Outputs:** 4.1 Improve inter-agency coordination in conservation, monitoring and enforcement 4.2 Strengthen the capacity for trans-boundary planning and management					
	Approved and implemented Programme and Action Plan for snow leopard conservation.	No (outdated, not approved, not implemented and not monitored)	Draft	Yes	Annual reports of the SCNP	**Assumptions:** – The SCNP and MAWR will integrate the national programme and action plan priorities into its state programmes; – The state of affairs between neighbouring snow leopard range countries remains stable or continues to improve; – The border security services actively participate in project-funded training and skills
	Number of meetings per annum of the: (i) Cooperative governance structure (programme and action plan); and (ii) Trans-boundary working groups	0 0	0 2 per working group	4 2 per working group	Minutes of meetings Project reports Annual reports of the SCNP	

[54] Although objective criteria for determining the state (intact- partial- significant- severe) of 'degradation' of pastures and forests will be determined in the implementation of Output 1.1, they may include: plant species composition, integrity of soils, plant cover, productivity, plant age distribution classes, faunal composition, etc.

	Indicator	Baseline (2015)	Target (Mid-Term)	Target/s (End of Project)	Source of verification	Risks and Assumptions
	Number of border security officials receiving in-service wildlife monitoring and enforcement training and skills development	0	>50	>150	Project reports	programmes and exchange programmes. **Risks:** – State institutions responsible for the administration of protected areas, pastures and forests do not have adequate capacity; – Low levels of compliance with environmental legislation, and a reluctance to adopt more sustainable natural resource use practices; and – Low levels of coordination and cooperation between public institutions, tenure holders, rights holders, land owners, NGOs/CBOs and natural resources users.
	Number of professional, technical and management personnel involved in international exchange programs, country visits and trans-boundary snow leopard monitoring and research projects	<5	>25	>40	Project reports	

SECTION III: TOTAL BUDGET AND WORKPLAN

Atlas Proposal (Award) ID:	00080814	**Atlas (Output) Project ID:**	00090383
Atlas Proposal (Award) Title:	Sustainable natural resource use and forest management in key mountainous areas important for globally significant biodiversity		
Atlas Business Unit	UZB10		
Atlas (Primary Output) Project Title	Sustainable natural resource use and forest management in key mountainous areas important for globally significant biodiversity		
UNDP-GEF PIMS No.	5438		
Implementing Partner	State Committee on Nature Protection (SCNP)		

GEF Outcome/ Atlas Activity	Resp. Party/ Impl. Agent	Fund ID	Donor Name	ATLAS Budget Code	ATLAS Budget Description	Amount YEAR 1 (USD)	Amount YEAR 2 (USD)	Amount YEAR 3 (USD)	Amount YEAR 4 (USD)	Amount YEAR 5 (USD)	TOTAL	Budget #
Component 1 Landscape level planning and management decision-making	NIM	62000	GEF-10003	71200	International Consultants	15 000	10 000	7 500	5 000	7 500	*45 000*	1
				71300	Local Consultants	35 000	35 000	17 000	10 000	5 000	*102 000*	2
				71400	Contractual Services - Individuals	23 250	23 250	24 500	24 500	23 500	*119 000*	3
				71600	Travel	32 000	32 000	28 000	26 000	13 300	*131 300*	4
				72100	Contractual Services - Companies	80 000	90 000	60 000	30 000	20 000	*280 000*	5
				72200	Equipment and furniture	35 000	75 000	60 000	20 000	9 400	*199 400*	6
				72400	Communic & Audio Visual Equip	500	500	500	500	500	*2 500*	7
				72800	Information Technology equip.	15 000	25 000	5 000	0	0	*45 000*	8
				74100	Professional Services	500	1 500	1 500	1 500	1 000	*6 000*	9
				74200	Audio visual & print production	15 000	15 000	8 000	4 000	4 000	*46 000*	10
				75700	Training, Workshops and Confer	1 500	3 000	9 000	2 500	0	*16 000*	11
	SUB-TOTAL COMPONENT 1 (GEF)					**252 750**	**310 250**	**221 000**	**124 000**	**84 200**	**992 200**	
					TOTAL COMPONENT 1	**252 750**	**310 250**	**221 000**	**124 000**	**84 200**	**992 200**	
Component 2 Strengthening key biodiversity areas	NIM	62000	GEF-10003	71200	International Consultants	35 000	24 000	25 000	12 000	9 000	*105 000*	12
				71300	Local Consultants	15 000	22 000	25 000	18 000	11 000	*91 000*	13
				71400	Contractual Services - Individuals	56 500	70 500	65 000	52 000	49 000	*293 000*	14
				71600	Travel	40 000	55 000	60 000	54 000	45 000	*254 000*	15
				72100	Contractual Services - Companies	115 800	169 000	208 000	236 700	173 500	*903 000*	16
				72200	Equipment and furniture	115 000	125 000	50 000	10 000	0	*300 000*	17
				72300	Materials and goods	35 000	84 000	64 000	48 000	34 000	*265 000*	18

				72400	Communic & Audio Visual Equip	28 000	36 000	4 500	4 500	4 500	*77 500*	19
				72600	Grants	2 500	7 500	8 000	9 000	8 000	*35 000*	20
				72800	Information Technology equip.	0	45 000	25 000	0	0	*70 000*	21
				75700	Training, Workshops and Confer	2 500	23 000	18 000	6 000	2 000	*51 500*	22
	SUB-TOTAL COMPONENT 2 (GEF)					**445 300**	**661 000**	**552 500**	**450 200**	**336 000**	**2 445 000**	
					TOTAL COMPONENT 2	**445 300**	**661 000**	**552 500**	**450 200**	**336 000**	**2 445 000**	
Component 3 Sustainable economic incentives for communities	NIM	62000	GEF-10003	71200	International Consultants	11 000	10 500	13 500	5 000	5 000	*45 000*	23
				71300	Local Consultants	35 000	45 000	25 000	15 000	11 000	*131 000*	24
				71400	Contractual Services - Individuals	43 500	52 500	47 000	45 000	41 000	*229 000*	25
				71600	Travel	32 000	38 000	42 000	40 000	35 500	*187 500*	26
				72100	Contractual Services - Companies	74 000	94 000	105 000	24 000	8 000	*305 000*	27
				72200	Equipment and furniture	64 400	105 000	128 000	38 000	24 000	*359 400*	28
				72300	Materials and goods	12 000	28 000	21 000	8 000	6 000	*75 000*	29
				72400	Communic & Audio Visual Equip	500	500	500	500	500	*2 500*	30
				72600	Grants	45 000	185 000	210 000	175 000	25 000	*640 000*	31
				74200	Audio visual & print production	0	2 500	3 500	2 200	0	*8 200*	32
				75700	Training, Workshops and Confer	12 000	10 000	4 000	3 500	2 500	*32 000*	33
	SUB-TOTAL COMPONENT 3 (GEF)					**329 400**	**571 000**	**599 500**	**356 200**	**158 500**	**2 014 600**	
					TOTAL COMPONENT 3	**329 400**	**571 000**	**599 500**	**356 200**	**158 500**	**2 014 600**	
Component 4 Promoting cooperation and collaboration	NIM	62000	GEF-10003	71200	International Consultants	15 000	10 000	7 500	5 000	7 500	*45 000*	34
				71300	Local Consultants	10 000	25 000	9 000	5 000	8 000	*57 000*	35
				71400	Contractual Services - Individuals	8 500	8 500	9 000	9 000	9 000	*44 000*	36
				71600	Travel	12 000	24 000	38 000	36 000	15 000	*125 000*	37
				72100	Contractual Services - Companies	15 000	44 000	36 000	12 000	3 000	*110 000*	38
				72200	Equipment and furniture	12 000	18 000	0	0	0	*30 000*	39
				72400	Communic & Audio Visual Equip	500	500	500	500	500	*2 500*	40
				74200	Audio visual & print production	3 000	8 000	6 000	1 355	0	*18 355*	41
				75700	Training, Workshops and Confer	3 000	8 000	7 000	7 000	5 500	*30 500*	42
	SUB-TOTAL COMPONENT 4 (GEF)					**79 000**	**146 000**	**113 000**	**75 855**	**48 500**	**462 355**	
					TOTAL COMPONENT 4	**79 000**	**146 000**	**113 000**	**75 855**	**48 500**	**462 355**	
Project Management	NIM	62000	GEF-10003	71400	Contractual Services - Individuals	38 000	38 000	39 000	39 000	38 000	*192 000*	43
				71600	Travel	3 000	3 500	4 000	4 000	3 500	*18 000*	44
				72400	Communic & Audio Visual Equip	3 000	3 000	3 000	3 000	3 000	*15 000*	45
				72800	Information Technology equip.	27 908	12 000	9 000	10 300	8 500	*67 708*	46

				74500	Miscellaneous expenses	500	1 500	0	500	500	*3 000*	47
	SUB-TOTAL PROJECT MANAGEMENT (GEF)					**72 408**	**58 000**	**55 000**	**56 800**	**53 500**	**295 708**	
	NIM	04000	UNDP-TRAC	71400	Contractual Services - Individuals	9 000	9 500	10 000	10 000	9 500	*48 000*	48
				72200	Equipment and furniture	32 000	12 000	1 000	0	0	*45 000*	49
				72500	Supplies	2 000	2 000	2 000	2 000	2 000	*10 000*	50
				74100	Professional Services	500	2 500	5 000	15 000	19 000	*42 000*	51
				73500	Reimbursement costs	1 000	1 000	1 000	1 000	1 000	*5 000*	52
				74598	Direct Project Cost	35 000	35 000	35 000	25 000	20 000	*150 000*	53
	SUB-TOTAL PROJECT MANAGEMENT (UNDP)					**79 500**	**62 000**	**54 000**	**53 000**	**51 500**	**300 000**	
	TOTAL PROJECT MANAGEMENT					**151 908**	**120 000**	**109 000**	**109 800**	**105 000**	**595 708**	
TOTAL PROJECT						**1 258 358**	**1 808 250**	**1 595 000**	**1 116 055**	**732 200**	**6 509 863**	

Summary of Funds:	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**TOTAL**
GEF	1 178 858	1 746 250	1 541 000	1 063 055	680 700	**6 209 863**
UNDP-TRAC	79 500	62 000	54 000	53 000	51 500	**300 000**
State Committee on Nature Protection (SCNP)	5 000 000	7 000 000	7 000 000	3 000 000	3 000 000	**25 000 000**
TOTAL	**6 258 358**	**8 808 250**	**8 595 000**	**4 116 055**	**3 732 200**	**31 509 863**

Budget #	**Budget notes**[55]
1	Pro rata (25%) costs of contracting the services of an: (i) international mid-term evaluation consultant (M&E); (ii) international final evaluation consultant (M&E); and (iii) international Technical Advisor (Component 1).[56]
2	Contractual appointment of a team of local experts to provide professional, technical and scientific support to activities under Output 1.1. Pro rata (25%) costs of contracting the services of a local mid-term evaluation consultant and a local final evaluation consultant (M&E).[57]
3	Contractual appointment of a data manager to administer, maintain and update the EIMS system (Output 1.2). Pro rata (25%) costs of contractual appointment of a Field Coordinator: Knowledge Management (Component 1).[58]

[55] Please consult the output-based budget (annexed as a separate file to the PRODOC) for a more detailed breakdown of the budget for each output, the M&E costs and the project management costs.
[56] Please refer to SECTION IV, PART I (OTHER CONSULTANTS/ CONTRACTED INDIVIDUALS table) for the indicative costs of all contracted international consultants.
[57] Please refer to SECTION IV, PART I (OTHER CONSULTANTS/ CONTRACTED INDIVIDUALS table) for the indicative costs of all contracted national experts and consultants.
[58] Please refer to SECTION IV, PART I for the indicative costs of all contracted Project Implementation Unit staff (PM, 3 FCs, AFA, PGM and driver) and the international Technical Advisor.

4	Travel costs (including daily allowance, fuel, vehicle repair and maintenance costs, other vehicle costs, including car wash, accomodation) of field-based researchers, scientists, academics, volunteers, students, NGO staff and government field staff in the collection of environmental information (Output 1.1) ($48k). Travel costs (including daily allowance, fuel, vehicle costs, accomodation) of field-based researchers, scientists, academics, volunteers, students, NGO staff and government field staff in the collection of snow leopard and prey baseline and monitoring data (Output 1.2) ($55.8k). Pro rata (25%) costs of travel and DSA for inception meeting (M&E). Pro rata (25%) of local travel costs and DSA of M&E consultants (M&E). Travel costs (DSA, car hire, car subsidy, fuel, etc.) of the international Technical Advisor, Project Manager and Field Coordinator (Protected Areas) to support implementation of Component 1.
5	Memorandum of Agreement (MoA) with a state institution to oversee the work of the team of local experts, provide data quality assurance, integrate relevant information into the state cadastre, and update and maintain the national environmental information management system (Output 1.1) ($55k). Contractual appointment of: (i) an information systems design company to design, develop and maintain a national environmental information management system (EIMS) (Output 1.2) ($115k); and (ii) an international wildlife research and monitoring organisation or institution to develop, and support the implementation of, a national snow leopard research and monitoring programme (Output 2.1) ($65k). Hourly flying costs (fixed-wing or helicopter hire + pilot) for aerial counts of medium-sized ungulates (15 hours @US$3000/hr) (Output 1.2).
6	Procurement of: (i) field data (plants, animals, climate, soils) collection equipment (including GPS units disc pasture meters, field laboratory unit, digital cameras, field presses, collection bags and automated weather stations) (Output 1.1) ($45k); and (ii) furnishing, installations and office equipment for the central EIMS facility (Output 1.2) ($34.4k). Pro rata (23%) costs of the procurement of office furniture, vehicles and equipment for the PIU (Component 1).
7	Cell phone contracts and call costs of the Field Coordinator (Knowledge Management) in supporting implementation of outputs under Component 1
8	Procurement of all hardware, software, database and networking requirements for the central EIMS facility (Output 1.2) ($45k)
9	Laboratory costs for fecal DNA analyses (75 samples @US$80/sample) (Output 1.2)
10	Procurement of geo-referenced digital aerial photography and satellite imagery for snow leopard landscapes (Output 1.1) ($30k). Costs of printing and publishing a state of knowledge report (including maps) for the snow leopard landscapes (Output 1.1) ($16k)
11	Costs of hosting (venue, catering, equipment hire, informational materials, DSA, etc.) specialist training sessions for researchers, scientists, academics, forestry staff, protected area field staff, environmental inspectors, students and NGOs on the snow leopard and prey monitoring procedures and standards (Output 1.2) (3 training courses @ $5k/course). Pro rata (25%) costs of translation and meeting costs for inception meeting (M&E).
12	Contractual appointment of an international protected area planning consultant to coordinate the zonation planning and mapping, prepare the park management plan and make recommendations on the optimal governance and management arrangements for the park (Output 2.1). Pro rata (25%) costs of contracting the services of an international mid-term evaluation consultant and international final evaluation consultant (M&E). Pro rata (25%) costs of contractual appointment of an international Technical Advisor (Component 2)
13	Contractual appointment of a team of local experts to provide professional, technical and scientific support to the international protected area planning consultant, including consultation, zonation planning, zonation mapping and preparing the park management plan (Output 2.1). Contractual appointment of a team of local experts to facilitate the proclamation of the buffer zone, assess the feasibility of expanding the SNR into the upper reaches of the Tupulang river and update and revise the SNR management plan (Output 2.2). Contractual appointment (on retainer) of a wildlife specialist to independently assess and verify claims for livestock losses (Output 2.3). Pro rata (25%) costs of contracting the services of a local mid-term evaluation consultant and local final evaluation consultant (M&E).
14	Recruitment and appointment of additional rangers in the core conservation zones of Ugam Chatkal NP (Output 2.1) and the buffer area of Gissar SNR (Output 2.2) @US$3000 cost-to-company/annum/ranger on a 50:50 cost sharing agreement with the Park Management Authority and SNR respectively ($36k). Appointment of short-term contract labour from local communities to physically demarcate the boundaries of the core conservation zones and buffer areas, upgrade the smart patrol centres, upgrade ranger outposts and maintain gravel access road in the core conservation zones of Ugam-Chatkal NP (Output 2.1) ($20k) and Gissar SNR (Output 2.2) ($20k). Recruitment and appointment of 4 community liaison officers in Ugam-Chatkal NP and Chatkal

	SNR (@US$3000 cost-to-company/annum/ranger for 3 years on a cost sharing agreement with the Park Management Authority and SNR respectively) (Output 2.3) ($39k). Pro rata (50%) costs of contractual appointment of a Field Coordinator: Protected Areas (@$400/wk for 110 wks) (Component 2).
15	Travel costs (including daily allowance, fuel, vehicle repair and maintenance costs, other vehicle costs, including car wash, accomodation) of national and international experts and government field staff in the zonation mapping and management planning (Output 2.1 and 2.2) ($25k). Travel costs (rental, maintenance and fuel costs) associated with the design and development of the smart patrol system in the core conservation zones and SNRs (Outputs 2.1, 2.2 and 2.3) ($15k). Fuel and maintenance costs of park vehicles (on a 50:50 cost-sharing agreement with the Park Management Authority and SNRs) (Output 2.1, 2.2 and Output 2.3) ($90k). Running costs (including daily allowance and transport) of 10-12 environmental inspectors (Output 2.3) ($96k). Pro rata (25%) costs of travel and DSA for inception meeting (M&E). Pro rata (25%) of local travel costs and DSA of M&E consultants (M&E). Travel costs (DSA, car hire, car subsidy, fuel, etc.) of the international Technical Advisor, Project Manager and Field Coordinator (Protected Areas) to support implementation of Component 2.
16	Contractual appointment of: (i) an international service provider or NGO to provide strategic and technical guidance in the overall planning, development and implementation of the smart patrol system (Outputs 2.1 and 2.2) ($208k); (ii) an insurance company to provide basic cover for death and disability for field staff (@ $25-30 per person per year) and community liaison staff (Outputs 2.1, 2.2 and 2.3) ($15k); (iii) local building contractors to renovate and install bulk services in the: (a) smart patrol planning and data centres; and (b) patrol outposts (Output 2.1 and 2.2) ($120k); (iv) a road maintenance contractor to upgrade the gravel road (7km) to the Nevich Field Station (Output 2.1) ($25k); (v) a surveying company or institution to survey the cadastral boundaries of the buffer areas, physically locate and demarcate the boundary corner beacons and prepare survey diagrams for the state land cadastre and land use register (Output 2.2) ($35k); (vi) an environmental education and outreach institution to develop educational and outreach programs, train community outreach staff and design information and education materials, media and exhibits (Output 2.3) ($65k); (vii) a national media and communications company to print, publish, produce and/or construct all information and educational materials, media, displays and exhibits (Output 2.3) ($70k); (viii) specialised training service providers to deliver the different training and skills development courses for pre-selected community members (Output 2.3) ($25k); (ix) an international tourism planning company identify a feasible nature-based tourism/recreational facility and services and prepare detailed designs, work plans and budgets for its development (Output 2.3) ($80k); and (x) a national buidling contractor to develop all the tourism/recreational infrastructure, prepare the landscaping and install all the bulk services (Output 2.3) ($260k).
17	Procurement of: (i) essential transport for patrol, community liaison and management staff in the core conservation zones of Ugam Chatkal NP and Gissar SNR (including 4x4 vehicles @US$40,000, a horse-drawn carriage, horses and donkeys) (Output 2.1, 2,2 and Output 2.3); and (ii) furnishing, installations, power supply technology (generators, solar cells, battery packs, inverters) and office equipment for the smart patrol planning data centre and ranger outposts (Output 2.1 and 2.2) ($80k). Pro rata (25%) costs of the procurement of office furniture, vehicles and equipment for the PIU (Component 2).
18	Procurement of: (i) summer and winter staff uniforms (replaced annually); safety and camping equipment (including tents, sleeping bags, backpacks, water bottles, ice picks, first aid kit, utensils, weapons, binoculars, cameras and torches) and daily rations (@US$2/day per patrolling ranger) for ranger and community liaison staff in the core conservation zones and SNRs (Outputs 2.1, 2.2 and 2.3)) ($165k); (ii) tack, supplementary feed and veterinary supplies/services for horses and donkeys used in the smart patrol system (on a 50:50 cost-sharing agreement with the Park Management Authority and SNRs) (Output 2.1, 2.2 and 2.3) ($30k); and (iii) materials required, to physically demarcate (e.g. stone cairns, concrete markers, fencing, etc.) the boundaries of the core conservation zones, and erect signage (Output 2.1 and 2.2) ($70k).
19	Procurement (and installation), leasing and/or running costs of communications technology (i.e. cellphones, satellite phone or VHF/FM radio communications) for Gissar (Output 2.2) ($75k). Cell phone contracts and call costs of the Field Coordinator (Protected Areas) in supporting implementation of outputs under Component 2.
20	Establishment and administration of a compensation scheme to provide grants to villagers affected by livestock losses from predation (Output 2.3)
21	Procurement of: hardware, software and networking for the smart patrol data centre; and GPS-enabled data collection devices for patrol rangers (Output 2.1 and 2.2) ($70k).

22	Costs of hosting (venue, catering, equipment hire, informational materials, DSA, etc.) basic training, advanced training, annual refresher training and train-the-trainer courses for rangers and community liaison staff in the core conservation zones and SNRs (Outputs 2.1, 2.2 and 2.3) ($50k). Pro rata (25%) costs of translation and meeting costs for inception meeting (M&E).
23	Pro rata (25%) costs of contracting the services of (i) an international mid-term evaluation consultant (M&E); (ii) and international final evaluation consultant (M&E); and (ii) an international Technical Advisor (Component 3).
24	Contractual appointment of a team of local experts to provide professional, technical and scientific support to: (i) activities under Output 3.1 (providing technical inputs into the Pasture Law; developing pasture norms and standards; assisting in the establishment of new PUAs; supporting PUAs in pasture management planning; assisting PUAs and PUA members to prepare applications for project grant support; providing extension support service to PUA members and preparing grassland restoration/rehabilitation plans); and (ii) activities under Output 3.2 (improving the scientific basis for the determination of the harvesting levels for different forest products and sanitary cutting requirements; designing and establishing tree nurseries; assisting rural communities to prepare applications for grant funding support; providing agricultural and forestry extension support services to communities; and preparing basic rehabilitation/restoration plan for targeted forests). Pro rata (25%) costs of contracting the services of a local mid-term evaluation consultant and local final evaluation consultant (M&E).
25	Appointment of short-term contract labour from local communities to: (i) implement the pasture restoration/rehabilitation plans (Output 3.1) ($28k); and (ii) implement the forest restoration/rehabilitation plans (Output 3.2) ($25k). Pro rata (50%) costs of contractual appointment of a Field Coordinator: Pastures and Forests (@$400/wk for 110 wks) (Component 3). Contractual appointment of a Project Grants Manager to administer project grants for sustainable pasture and forest management (Outputs 3.1 and 3.2).
26	Travel costs (vehicle rental, fuel, vehicle repair and maintenance costs, other vehicle costs, including car wash, daily allowances, accomodation, etc.) associated with the: (i) preparation of pasture management plans; and restoration and rehabilitation of degraded pastures (Output 3.1) ($20k); and (ii) operational forest management; forest enforcement; and restoration and rehabilitation of degraded pastures (Output 3.2) ($50k). Fuel and maintenance costs of forestry patrol staff vehicles (on a 50:50 cost-sharing agreement with the forestry business unit) (Output 3.1 and 3.2) ($90k). Pro rata (25%) costs of travel and DSA for inception meeting (M&E). Pro rata (25%) of local travel costs and DSA of M&E consultants (M&E). Travel costs (DSA, car hire, car subsidy, fuel, etc.) of the international Technical Advisor, Project Manager and Field Coordinator (Pastures and Forests) to support implementation of Component 3.
27	Contractual appointment of: (i) an international pasture management planning business or NGO to provide technical support to the team of local experts, and the relevant PUUs(providing technical inputs into the drafting of the Pasture Law; development and implementation of pasture norms and standards; drafting of pasture management plans; and preparation of grassland restoration/rehabilitation plans) (Output 3.1) ($65k); (ii) training service providers to provide specialist training (sustainable pasture management, pasture legislation and regulations, administration of pasture use lease agreements, etc.) to forestry patrol staff (Output 3.1) ($30k); (iii) training service providers to provide specialist training (sustainable forest management, forest legislation and regulations, administration of forest use lease agreements, etc.) to forestry patrol staff (Output 3.2) ($30k) and (iv) energy companies to install fuel and/or energy connections at the local village-scale (Output 3.2) ($180k).
28	Procurement/leasing of: (i) equipment (including: tractors; farm utensils; irrigation systems; transport for livestock; fencing; etc.) to support the rehabilitation/restoration of degraded pastures (Output 3.1) ($65k); (ii) transport (horses, motorcycles and two 4x4 vehicles) for patrol staff in forestry busines units (Output 3.1 and 3.2) ($180k); (iii) equipment required to establish tree nurseries (spray irrigation, cultivator tractor attachment, subsoiler tractor attachment, planters, sprayers, etc.) (Output 3.2) ($49.4); (iv) equipment (including: safety equipment, backpack irrigation, utensils, chainsaws, etc.) to support the rehabilitation/restoration of degraded forests (Output 3.2) ($35k). Pro rata (25%) costs of the procurement of office furniture, vehicles and equipment for the PIU (Component 3).
29	Procurement of: (i) materials and goods (e.g. grass seed stock, electric fencing materials, fertilizer, fodder, gabions, etc.) to support the rehabilitation/restoration of degraded pastures (Output 3.1) ($22k); (ii) materials and goods for tree nurseries (seeds, fencing materials, fertilizer, pruning

	shears, root stock, etc.) (Output 3.2) ($49.4k); and (iii) materials and goods (e.g. forest seed and seedling stock, fencing materials, fertilizer, gabions, etc.) to support the rehabilitation/restoration of degraded forests (Output 3.2) ($28k).
30	Cell phone contracts and call costs of the Field Coordinator (Pastures and Forests) in supporting implementation of outputs under Component 3
31	Technical and grant funding support to PUAs and individual pastoralists to improve the health and well-being of livestock, establish intensive livestock farms and develop alternative income-generating enterprises (Output 3.1) ($395k). Technical and grant funding support for assisting rural communities and local governments to establish/install and maintain: woodlots or plantations; fruit and nut orchards; herb gardens; and household-based alternative fuel and energy supply (Output 3.2) ($245k).
32	Costs of printing and publishing: pasture management plans and associated maps (Output 3.1)
33	Costs of hosting local meetings and consultations of/with: (i) PUAs (including venue, catering, printing, etc.) (Output 3.1) ($20k); and (ii) affected forest user groups (including venue, catering, printing, etc.) (Output 3.2) ($10k). Pro rata (25%) costs of translation and meeting costs for inception meeting (M&E).
34	Pro rata (25%) costs of contracting the services of an international mid-term evaluation consultant and international final evaluation consultant (M&E). Pro rata (25%) costs of contractual appointment of an international Technical Advisor (@$3000/wk for 40 wks) (Component 4).
35	Contractual appointment of a small team of local experts to: (i) develop the national snow leopard programme and action plan (identify the financing requirements for the programme and action plan; raise funding for the programme and action plan; and facilitate the establishment of the cooperative governance structure) (Output 4.1); and (ii) design, develop and implement an in-service short-course wildlife monitoring and enforcement training program for border officials and support the work of the trans-boundary groups (Output 4.2). Pro rata (25%) costs of contracting the services of a local mid-term evaluation consultant and local final evaluation consultant (M&E).
36	Pro rata (25%) costs of contractual appointment of a Field Coordinator: Knowledge Management (Component 4).
37	Travel costs (flights, car hire, daily allowance, accomodation, etc.) of managers, academics and researchers participating in regional report-back meetings, transboundary working group meetings and/or international exchange programmes (Output 4.2) ($98k). Pro rata (25%) costs of travel and DSA for inception meeting (M&E). Pro rata (25%) of local travel costs and DSA of M&E consultants (M&E). Travel costs (DSA, car hire, car subsidy, fuel, etc.) of the international Technical Advisor, Project Manager and Field Coordinator (Pastures and Forests) to support implementation of Component 4.
38	Contractual appointment of: (i) an international snow leopard conservation NGO to provide professional and technical backstopping support to the team of local experts in the implementation of activities under Output 4.1; and (ii) an international NGO to assist the team of national experts to design, develop and implement an in-service short-course wildlife monitoring and enforcement training program (Output 4.2) ($45k).
39	Pro rata (25%) costs of the procurement of office furniture, vehicles and equipment for the PIU (Component 4).
40	Cell phone contracts and call costs of the Field Coordinator (Knowledge Management) in supporting implementation of outputs under Component 4.
41	Printing and publishing costs of: (i) the National Snow Leopard Programme and Action Plan (Output 4.1) ($5.3k); and (ii) training media, course materials, web-based training media, etc. for the in-service wildlife monitoring and enforcement training and skills development programme (Output 4.2) ($13k).
42	Costs of hosting: (i) the cooperative governance structure meetings (e.g. catering, facilitation, accommodation, transport, daily allowance) (Output 4.1) ($15k); and (ii) wildlife and monitoring and enforcement training (Output 4.2) ($14k). Pro rata (25%) costs of translation and meeting costs for inception meeting (M&E).
43	Contractual appointment of full-time Project Manager and Project Financial Assistant (PM).
44	Local (within Tashkent) travel costs of PM, PAA and PFA (PM)
45	Internet, cell phone and landline contracts and call costs for PM, PAA and PFA (PM)
46	Costs of procuring laptops, software licenses, portable hard drive, router, printers, 3G cards, data projector and ISP contract for the PIU staff (PM)
47	Miscellaneous expenses. Including bank charges

48	Contractual appointment of a project driver for the PIU (PM).
49	Procurement of a 4x4 SUV vehicle to be shared by the Project Manager and Grants Manager (PM).
50	Procurement of office supplies for the PIU (PM).
51	Annual financial audit of project expenses (M&E) ($10k). Preparation of regular project newletter, layout and printing of project publications, project display materials and development and maintenance of project website (PM).
52	Miscellaneous expenses, including bank charges
53	Reimbursement of costs incurred by UNDP in support of activities: UNDP financial, procurement, human resources management and administration support services to project implementation

SECTION IV: ADDITIONAL INFORMATION

PART I: Terms of Reference for project staff

PROJECT MANAGER

Background

The Project Manager will be locally recruited, based on an open competitive process. Generally, he/she will be responsible for meeting government obligations under the project, under the national implementation modality (NIM). He/she will be responsible for the overall management of the project, including the mobilization of all project inputs, supervision over project staff, consultants and sub-contractors. The Project Manager will report to the PC for all of the project's substantive operational issues. The Project Manager will report on a periodic basis to the Steering Committee (SC) on the overall project progress and future project planning. The incumbent will perform a liaison role with the Government, UNDP, implementing partners, NGOs and other stakeholders, and maintain close collaboration with any donor agencies supporting project activities.

Duties and Responsibilities

- Supervise and coordinate the production of project outputs, as per the project document;
- Mobilize all project inputs in accordance with procedures for nationally implemented projects;
- Coordinate the recruitment and selection of project personnel;
- Supervise and coordinate the work of all project staff, consultants and sub-contractors;
- Prepare and revise project work and financial plans;
- Liaise with UNDP, relevant government agencies, and all project partners, including donor organizations and NGOs for effective coordination of all project activities;
- Oversee and ensure timely submission of the Inception Report, Combined Project Implementation Review/Annual Project Report (PIR/APR), Technical reports, quarterly financial reports, and other reports as may be required by UNDP, GEF, SCNP and other oversight agencies;
- Disseminate project reports and respond to queries from concerned stakeholders;
- Report progress of project to the SC, and ensure the fulfilment of SC directives;
- Oversee the exchange and sharing of experiences and lessons learned with relevant community based integrated conservation and development projects nationally and internationally;
- Ensure the timely and effective implementation of all components of the project;
- Assist relevant government agencies and project partners - including donor organizations and NGOs - with development of essential skills through training workshops and on the job training thereby upgrading their institutional capabilities;
- Carry out regular, announced and unannounced inspections of all sites and project-funded activities.

Qualifications and experience

- A post-graduate university degree in natural resource management (or equivalent) and/or business management;
- At least 10 years of relevant experience in conservation, forestry, wildlife and/or pasture planning and management;
- At least 5 years of project management experience;

- Working experience in international projects, or within international organisations, is highly desirable;
- Working experience with the project stakeholder institutions and agencies is desired;
- Ability to effectively coordinate a large, multi-stakeholder project;
- Ability to administer budgets, train and work effectively with counterpart staff at all levels and with all groups involved in the project;
- Strong writing, presentation and reporting skills;
- Strong computer skills;
- Excellent written communication skills; and
- A good working knowledge of Uzbek (and/or Russian) and English is a requirement.

FIELD COORDINATOR (3 POSTS)

Protected Area (Component 2)/ Pastures and Forests (Component 3)/ Knowledge Management (Components 1 and 4)

Background

A Field Coordinator for Component 1 and 4 (Knowledge Management), Component 2 (Protected Areas) and Component 3 (Pastures and Forests) will be locally recruited, based on an open competitive process. The Field Coordinators will be responsible for coordinating the direct implementation of all field-based project activities in the targeted areas of the planning domain, including the supervision over any field-based project staff, contracted consultants'/service providers and sub-contractors. The three Field Coordinators will report to the Project Manager for all of the project's substantive and administrative issues. Generally, the Field Coordinators will be responsible for assisting the field staff of the responsible state institutions in meeting their field-based obligations under each component. The incumbents will perform a liaison role with the relevant local authorities, self-governing community structures, user groups, tenure holders, NGOs, research institutions, academic institutions and all other key stakeholders, and maintain close collaboration with any complementary local initiatives and programs. The Field Coordinators will assist the Project Manager in reporting, on a periodic basis, to the Steering Committee (SC).

Duties and Responsibilities

- Supervise and coordinate the work of all field-based project staff, consultants and sub-contractors;
- Prepare and revise project work and financial plans;
- Liaise with all relevant field-based government agencies, and all project partners, including donor organizations and NGOs for effective coordination of all project activities;
- Facilitate technical backstopping to field-based subcontractors and training activities supported by the Project;
- Provide inputs into the Combined Project Implementation Review/Annual Project Report (PIR/APR), Technical reports, quarterly financial reports, and other reports as may be required by the PM;
- Report progress of project to the PM;
- Document all field-based experiences and lessons learned;
- Ensure the timely and cost-effective implementation of all outputs under the component;
- Assist relevant government agencies and project partners - including donor organizations and NGOs - with development of essential skills through training workshops and on the job training thereby upgrading their institutional capabilities;
- Coordinate and assist expert teams and academic institutions with the initiation and implementation of any field studies and monitoring components of the component; and

- Carry out regular, announced and unannounced inspections of all project sites.

Qualifications

- A post-graduate university degree in: conservation management, or equivalent (FC PAs); forestry and/or agricultural management, or equivalent (FC Forests and Pastures); and environmental/wildlife management or equivalent (FC Knowledge Management);
- At least 5 years of experience in conservation management (FC PAs); forest and/or pasture management (FC Forests and Pastures); and environmental information management and monitoring (FC Knowledge Management);
- Working experience with the project local stakeholder institutions and agencies is highly desired;
- Ability to effectively coordinate a diverse range of local stakeholders;
- Demonstrable ability to maintain effective communications with different stakeholders, and arrange stakeholder meetings and/or workshops;
- Ability to administer budgets, train and work effectively with counterpart staff at all levels and with all local groups involved in the project;
- Strong drafting, presentation and reporting skills;
- Strong computer skills, in particular mastery of all applications of the MS Office package and knowledge of GIS software;
- Excellent written and oral communication skills; and
- A good working knowledge of Uzbek is a requirement, while knowledge of English and/or Russian will be an advantage.

PROJECT GRANTS MANAGER

Background

The Project Grants Manager will be locally recruited based on an open competitive process. He/she will be responsible for the administration, management and monitoring of the small grants programme (under Outputs 3.1 and 3.2) within the project. The Project Grants Manager will report to the Project Manager. Generally, the Project Grants Manager will be responsible for supporting the Project Manager in meeting government obligations under the project, under the national implementation modality (NIM).

Duties and Responsibilities

- Develop administrative and financial guidelines, procedures and templates for the grants programme;
- Prepare informational material for farmers, seed producers and food processors/retailers seeking financial and technical support under the grants programme;
- Work with the FCs, state organisations, local government, self-governing community organisations and PUAs to ensure that individual applications for support align with the project objective and outcomes;
- Evaluate and review applications for grants, authorise grants, draft grant agreements with selected grantees and monitor grant compliance;
- Review financial and performance reports of grants;
- Maintain a detailed record of grant agreements issued and disbursements to grantees;
- Maintain proper auditable documentation with adequate detail about the processed grants; and
- Work with external auditors to prepare grant audit.

Qualifications

- An undergraduate degree in environmental, forestry or agricultural economics or similar;
- At least 5 years of experience in the administration of environmental/agricultural grants and subsidies;
- Working experience in similar development partner funded projects and/or with agricultural micro-loan organisations, is highly desirable;
- Working experience with the key project local stakeholder institutions and agencies;
- Ability to effectively coordinate a diverse range of local stakeholders;
- Demonstrable ability to maintain effective communications with different stakeholders groups;
- Ability to administer budgets and work effectively with counterpart staff at all levels and with all local groups involved in the project;
- Strong drafting, presentation and reporting skills;
- Strong computer skills, in particular mastery of all applications of the MS Office package;
- Excellent written and oral communication skills; and
- A good working knowledge of Uzbek is a requirement, while knowledge of English and Russian will be an advantage.

ADMINISTRATIVE AND FINANCIAL ASSISTANT

Background

The project Administrative and Financial Assistant will be locally recruited based on an open competitive process. He/she will be responsible for the overall financial management of the project. The project Administrative and Financial Assistant will report to the Project Manager. Generally, the project Administrative and Financial Assistant will be responsible for supporting the Project Manager in meeting government obligations under the project, under the national implementation modality (NIM).

Duties and Responsibilities

- Monitor project budgets and financial expenditures;
- Assist in all procurement and recruitment processes;
- Advise all project counterparts on applicable financial procedures and ensures their proper implementation;
- Contribute to the preparation and implementation of progress and financial reports;
- Support the preparations of project work-plans, budgets and operational and financial planning processes;
- Assist in the preparation of payments requests for operational expenses, salaries, insurance, etc. against project budgets and work plans;
- Work closely with financial counterparts in the UNDP CO on payment requests;
- Follow-up on timely disbursements by the UNDP CO;
- Maintain data on co-financing commitments to the project;
- Coordinate the annual financial audit of the project;
- Contribute to the preparation and implementation of progress reports;
- Maintain project correspondence and communication;
- Receive, screen and distribute correspondence and attach necessary background information;
- Assist in logistical organization of meetings, training and workshops;

- Prepare agendas and arrange field visits, appointments and meetings both internal and external related to the project activities and write minutes from the meetings;
- Maintain a project filing system;
- Maintain records over project equipment inventory; and
- Perform other duties as required.

Qualifications and experience

- A post-school qualification (diploma, or equivalent), preferably in bookkeeping (or equivalent);
- At least 5 years of relevant financial management experience;
- Work experience in UNDP-GEF projects is highly desirable;
- Demonstrable ability to administer project budgets, and track financial expenditure;
- Demonstrable ability to maintain effective communications with different stakeholders, and arrange stakeholder meetings and/or workshops;
- Excellent computer skills, in particular mastery of all applications of the MS Office package;
- Excellent written communication skills; and
- A good working knowledge of Uzbek is a requirement, while knowledge of English and/or Russian will be an advantage.

INTERNATIONAL TECHNICAL ADVISER

Background

The International Technical Adviser (TA) will be responsible for providing overall technical backstopping to the Project. He/She will render technical support to the National Project Coordinator, Project Manager and other government counterparts. The TA will support the provision of the required technical inputs, reviewing and preparing Terms of Reference and reviewing the outputs of consultants and other sub-contractors. He/She will report directly to the National Project Coordinator.

Duties and Responsibilities

- Provide technical support to the National Project Coordinator, Project Manager and other government counterparts in the areas of project management and planning, management of site activities, monitoring, and impact assessment;
- Support the Project Manager in preparing Terms of Reference for consultants and sub-contractors, and assist in the selection and recruitment process;
- Support the Project Manager in coordinating the work of all consultants and sub-contractors, ensuring the timely delivery of expected outputs, and ensuring an effective synergy among the various sub-contracted activities;
- Assist the National Project Coordinator and Project Manager in the preparation of the Combined Project Implementation Review/Annual Project Report (PIR/APR), inception report, technical reports, quarterly financial reports for submission to UNDP, the GEF, other donors and Government Departments, as required;
- Assist the National Project Coordinator and Project Manager in mobilizing staff and consultants in the conduct of a mid-term project evaluation, and in undertaking revisions in the implementation program and strategy based on evaluation results;
- Assist the National Project Coordinator and Project Manager in liaison work with project partners, donor organizations, NGOs and other groups to ensure effective coordination of project activities;

- Support the Project Manager in documenting lessons from project implementation and make recommendations to the Steering Committee for more effective implementation and coordination of project activities; and
- Perform other tasks as may be requested by the National Project Coordinator and Project Manager.

Qualifications

- University education (MSc or PhD), with specific expertise in the area of environmental and/or conservation planning and management;
- At least 15 years of professional experience in protected area/conservation planning and management;
- Demonstrable experience in implementing equivalent GEF or other multilateral donor-funded projects;
- Be an effective negotiator with excellent oral and presentation skills;
- A good working knowledge of international best practice in protected area planning and management is desirable;
- Excellent writing skills; and
- A good working knowledge of English and Russian is a requirement, while knowledge of Uzbek will be an advantage

OTHER CONSULTANTS/ CONTRACTED INDIVIDUALS

Position Titles	*Indicative $/person/ week*	*Estimated person weeks*	*Tasks to be performed*	*Qualifications and Experience*
Local				
Local expert team - environmental information field collection (6-8 experts)	500	200	Provide professional, technical and scientific support to activities under Output 1.1, including: map current land uses and land tenure; collect baseline environmental information; ecosystem services and economic valuation; assess the state of pastures and forests, and underlying causes of degradation; and identify 'biodiversity hotspots.	Bachelor's degree natural resource/environmental management/forest sciences, rural development or a related field. At least 7 years of experience in developing practical solutions in the area of environmental management in Uzbekistan.
Local expert team – Ugam-Chatkal NP planning (2–4 experts)	500	70	Provide professional, technical and scientific support to the international protected area planning consultant (see below), including: consultation with local communities, local government and state agencies; zonation planning; zonation mapping; and preparing the park management plan (Output 2.1).	Bachelor's degree natural resource/environmental management/biology sciences, or a related field. At least 7 years of experience in developing practical solutions in the area of PA management in Uzbekistan.
Local expert team – Gissar SNR planning (2-3 experts)	500	70	Provide professional, technical and scientific support in: facilitating the proclamation of the buffer zone of Gissar SNR; assessing the feasibility of expanding the Gissar SNR into the upper reaches of the Tupulang river; and updating and revising the	Bachelor's degree natural resource/environmental management/biology sciences, or a related field. At least 7 years of experience in developing practical solutions in the

Position Titles	*Indicative $/person/ week*	*Estimated person weeks*	*Tasks to be performed*	*Qualifications and Experience*
			Gissar SNR management plan (Output 2.2).	area of PA management in Uzbekistan.
Wildlife specialist	500	40	Retainer contract - Assess and verify individual compensation claims for livestock losses from predation by natural predators (Output 2.3); Assist with development of a compensation scheme for livestock loss from predation by natural predators.	Bachelor's degree natural resource/environmental management/biology sciences, or a related field. At least 7 years of experience in developing practical solutions in the area of wildlife management in Uzbekistan.
Local expert team - sustainable pasture management (4-5 experts)	500	130	Provide professional, technical and scientific support to activities under Output 3.1, including: providing technical inputs into the Pasture Law; developing pasture norms and standards; assisting in the establishment of new PUAs; supporting PUAs in pasture management planning; assisting PUAs and PUA members to prepare applications for project grant support; providing extension support service to PUA members; and preparing grassland restoration/rehabilitation plans.	Bachelor's degree natural resource/environmental management/sciences, rural development or a related field. At least 7 years of experience in developing practical solutions in the area of sustainable grassland/pasture management in Uzbekistan.
Local expert team - sustainable forest management (4-5 experts)	500	130	Provide professional, technical and scientific support to activities under Output 3.2, including: improving the scientific basis for the determination of the harvesting levels for different forest products and sanitary cutting requirements; designing and establishing tree nurseries; assisting rural communities to prepare applications for grant funding support; providing agricultural and forestry extension support services to communities; and preparing basic rehabilitation/restoration plan for targeted forests.	Bachelor's degree natural resource/environmental management/forest sciences, rural development or a related field. At least 7 years of experience in developing practical solutions in the area of forest management in Uzbekistan.
Local expert team – snow leopard programme and action plan (2 experts)	500	50	Develop the snow leopard programme and action plan. Identify the financing requirements for the programme and action plan and raise funding. Facilitate the establishment of a cooperative governance structure to coordinate implementation of the programme and action plan (Output 4.1)	Bachelor's degree natural resource/environmental management/biology sciences, or a related field. At least 7 years of experience in developing practical solutions in the area of wildlife management in Uzbekistan.

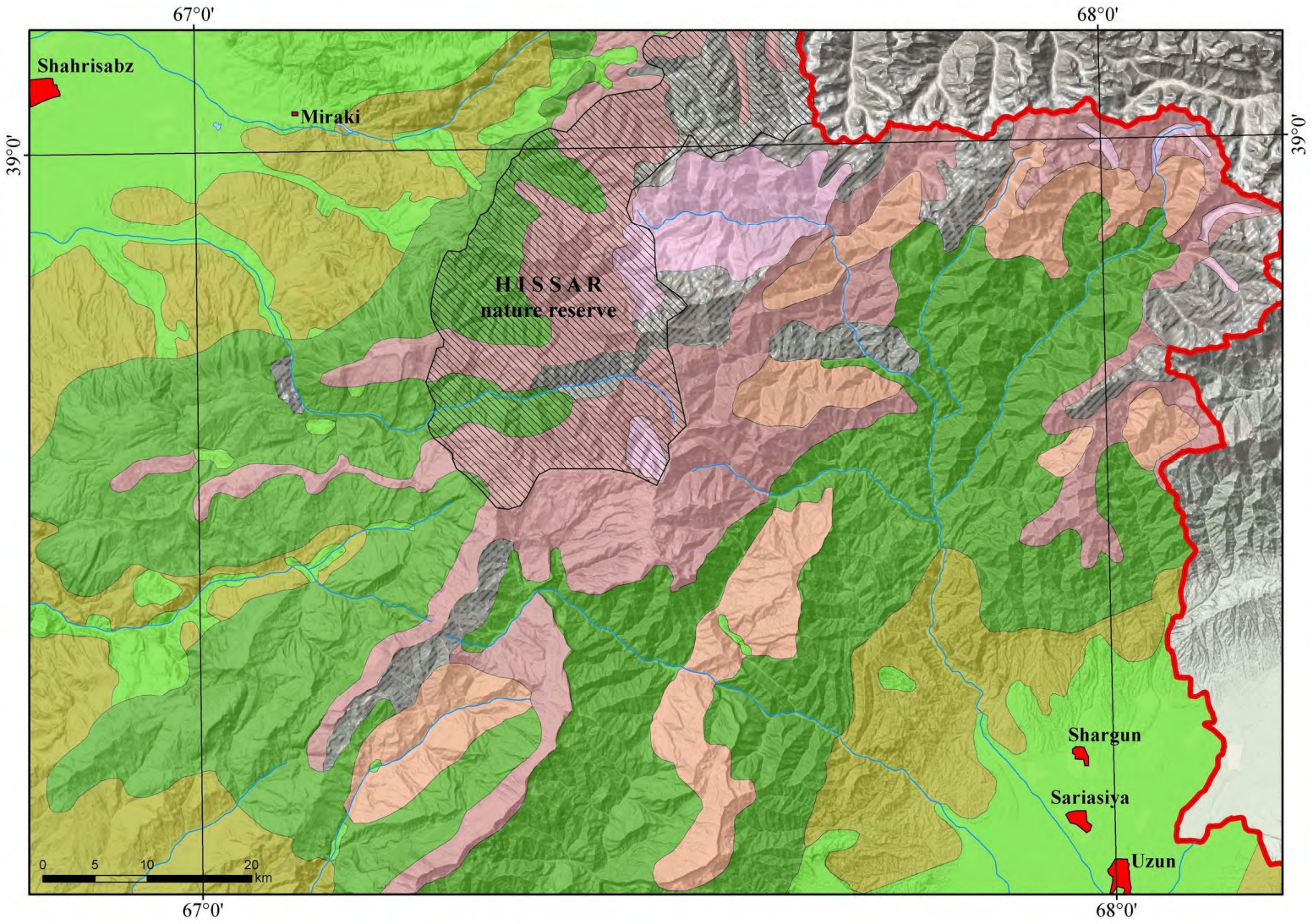
Position Titles	*Indicative $/person/ week*	*Estimated person weeks*	*Tasks to be performed*	*Qualifications and Experience*
Local expert team – wildlife monitoring and enforcement training (2-4 experts)	500	60	Design, develop and implement an in-service short-course wildlife monitoring and enforcement training program for border officials. Support the work of the trans-boundary groups (Output 4.2);	Bachelor's degree natural resource/environmental management/biology sciences, or a related field. At least 7 years of experience in developing practical solutions in the area of wildlife management in Uzbekistan.
Evaluation experts for mid-term (1) and final (1) evaluation	500	12	*M&E* The standard UNDP/GEF project evaluation TOR will be used. This will include: supporting the mid-term and the final evaluations; assisting the international evaluation consultant in order to assess the project progress, achievement of results and impacts; supporting the drafting of the evaluation report and discussing it with the project team, government and UNDP; and as necessary, participating in discussions to extract lessons for UNDP and GEF.	Bachelor's degree in biology, environmental science, natural resources management, or a closely related field. Sound knowledge of sustainable rural development, land management, in particular mountane zones and capacity development is critical. Work experience in relevant areas for at least 7 years with prior proven experience in GEF projects related to natural resources conservation.
International				
International protected area planning specialist	3000	20	Coordinate the zonation planning and mapping of the Ugam-Chatkal NP, prepare the Ugam Chatkal NP park management plan and make recommendations on the optimal governance and management arrangements for the park (Output 2.1).	Post graduate qualification in Environmental Management, Conservation, Biological Sciences and/or Geographical Sciences. At least 10 years of on the ground experience in leading the management planning processes for protected areas together with direct experience in management planning processes.
Evaluation experts for mid-term (1) and final (1) evaluation	3000	20	*M&E* The standard UNDP/GEF project evaluation TOR will be used. This will include: leading the mid-term and the final evaluations; working with the local evaluation consultant in order to assess the project progress, achievement of results and impacts; developing the draft evaluation report and discussing it	Master degree in biology, environmental science, natural resources management, or a closely related field. Sound knowledge of sustainable rural development, land management, in particular mountane zones and

Position Titles	*Indicative $/person/ week*	*Estimated person weeks*	*Tasks to be performed*	*Qualifications and Experience*
			with the project team, government and UNDP; and as necessary, participating in discussions to extract lessons for UNDP and GEF.	capacity development is critical. Work experience in relevant areas for at least 10 years with prior proven experience in evaluating GEF projects related to natural resources conservation.

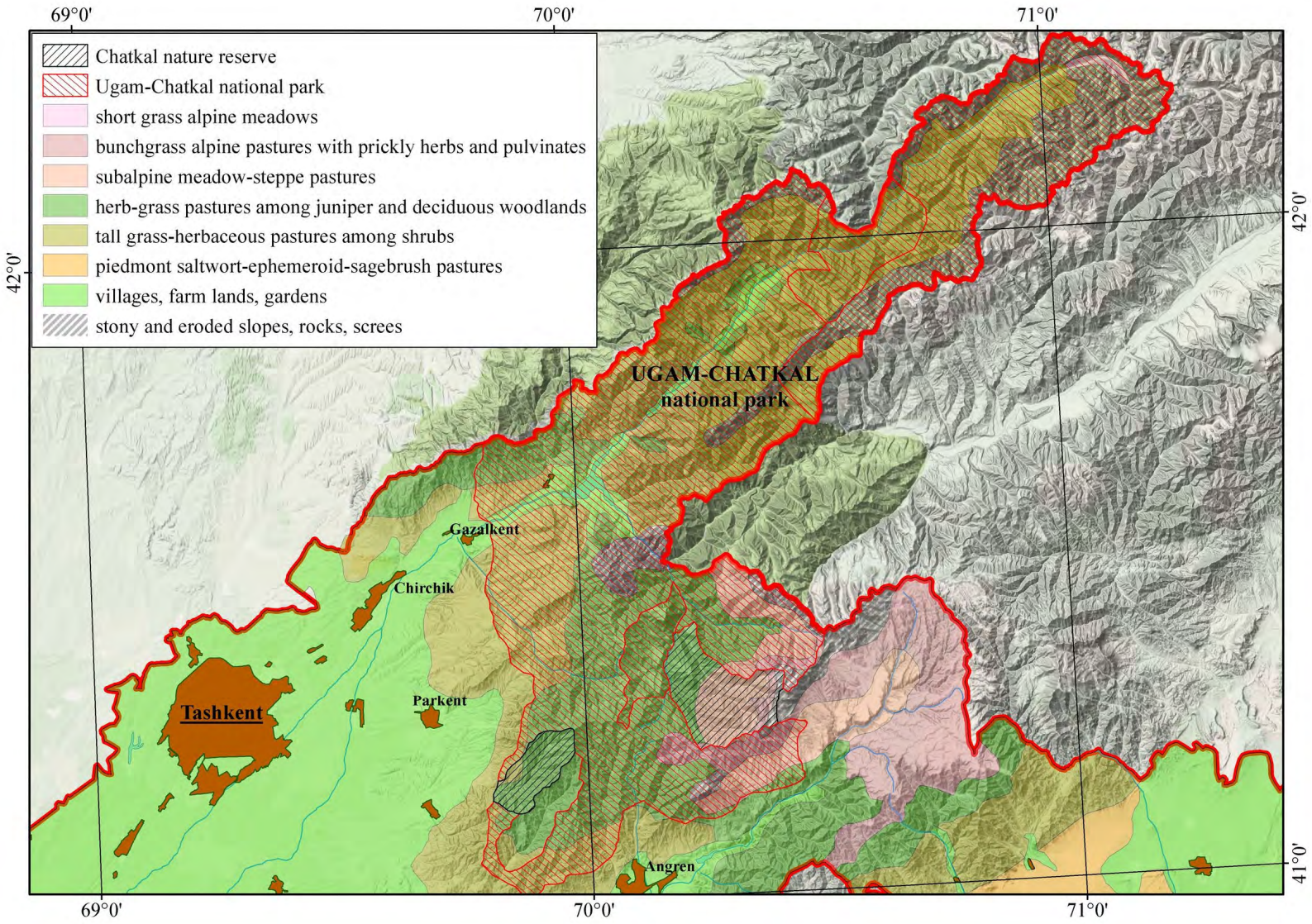
Complete and more thorough ToRs for these positions will be developed by the Project Manager, once recruited.

PART II: Project maps

Map A: Distribution of the pasture areas within the Gissar Snow Leopard Landscape



Map B: Distribution of the pasture areas within the Chatkal Snow Leopard Landscape



PART III: Stakeholder Involvement Plan and Coordination with other Related Initiatives

1. Stakeholder identification

During the project preparation stage, a stakeholder analysis was undertaken in order to identify key stakeholders, assess their interests in the project and defines their roles and responsibilities in project implementation. The table below describes the major categories of stakeholders identified, and the level of involvement envisaged in the project:

Stakeholder	Roles and Responsibilities	Proposed involvement in the Project
National Government		
Information-Analytical Department for Agriculture and Water Resources, processing of agricultural products and consumer goods of the Cabinet of Ministers of Uzbekistan	The Department is responsible for organizing development of programmes on agriculture and rural development as well as systematic and comprehensive implementation of economic reforms in the field of agriculture, land use, and water resources sector.	The Department will provide guidance on matters relating to land use and land use planning.
Information-Analytical Department for Health, Ecology and Environmental protection of the Cabinet of Ministers of Uzbekistan	The Department is responsible for organizing development of programmes as well as implementation of reforms in health care system, social and environmental protection.	The Department will provide guidance on development of the Programme and Action Plan on Snow Leopard Conservation.
Committee on Agriculture, Water resources and Ecology of the Senate of Oliy Majlis	The Committee is responsible for drawing conclusions on draft laws submitted by the Legislative Chamber of Oliy Majlis, drafting resolutions and other regulatory legal acts of the Senate in the areas of agriculture, water resources and ecology.	The Committee will provide guidance on drafting the new Pasture Law, particularly in respect of the establishment of a 'pasture user association' (PUA) by local communities.
Committee on Agriculture and Water resources issues of the Legislative Chamber of Oliy Majlis	The Committee is mainly responsible for drafting legislation in the areas of agriculture and water resources.	The Committee will provide guidance and continuous feedback on drafting the new Pasture Law, particularly in respect of the establishment of a 'pasture user association' (PUA) by local communities.
Committee on the issues of Ecology and Nature protection of the Legislative Chamber of Oliy Majlis	The Committee is mainly responsible for drafting laws in the area of nature protection.	The Committee will be involved for strong advocacy and awareness raising activities on conservation of snow leopard and its prey, especially in the communities within the project domain.
Committee for Nature Protection (Goskompriroda)	The role of *Goskompriroda* is to: (i) regulate environmental management functions and activities; (ii) develop and coordinate the implementation of environmental policies; (iii) regulate the use and management of natural resources; and (iv) develop medium and long-term state programs for nature protection and sustainable use of natural resources.	*Goskompriroda* is the focal point for implementation of the CBD in Uzbekistan. It has also been identified as the lead executing agency of this project and will take overall responsibility for co-ordinating, monitoring progress and reporting on the project. *Goskompriroda* will chair the project Steering Committee. It will play a leading role in implementing the project outputs and

Stakeholder	Roles and Responsibilities	Proposed involvement in the Project
		activities through its central and regional administrations.
State Biological Control Service (Gosbiokontrol)	*Gosbiokontrol* is responsible for developing, regulating and coordinating the implementation of national legislation and policies in the conservation of flora and fauna.	*Gosbiokontrol* will be the key institution within *Goskompriroda* responsible for coordinating project activities to ensure the delivery of the agreed project outcomes. It may be independently represented on the project Steering Committee.
Ministry of Agriculture and Water Resources (MAWR)	The MAWR is responsible for the development and implementation of state policy relating to agriculture, water and forestry development.	The Ministry will be represented on the Steering Committee of the project to ensure the full alignment of project activities with national forest and pasture legislation, policies and programmes.
Main Department of Forestry (MDF)	The MDF is responsible for the planning and management of forests, the use of natural resources and the administration of protected areas situated on state forest fund land.	The MDF will play a leading institutional role in the implementation of project outputs and activities, primarily through the *Glavohota, Uzgiprourmonloyiha* and forestry business units located in mountainous areas. The MDF will be represented on the project Steering Committee.
Committee for Land Resources, Geodesy, Cartography and National Cadastre	The Committee is responsible for implementing land policy and manages the process of land reform and land-use planning.	The Committee will serve as a reference for, and provide guidance on matters relating to, land use and land use planning.
Committee for State Border Protection	Responsible for the security of border security and border control points.	The Committee will be represented on the Steering Committee of the project to ensure effective consultation relating to any project activities that may affect and/or involve national security issues along mountain border control areas.
The Academy of Sciences	As the main scientific organisation in the country, the Academy coordinates research in all areas of science and technology.	The Academy will provide scientific support and advisory services, through its research institutions, to the project outputs and activities. The Academy may be represented on the Steering Committee of the project.
Institute of the Gene Pool of Plants and Animals (IGPPP)	The IGPP undertakes research on plant and animal genes, species, populations, habitats and ecosystems.	The IGPP may be contracted to implement targeted project outputs and activities.
Regional and local government		
Regional government (viloyat)	The *viloyats* have overall responsibility for the economic and development activities within the region. They may regulate land use and supervise land use decision making. There are a number of regions within the project domain.	A representative *khokim* of the affected *viloyats* will sit in the project steering committee and will mediate two-way communication between national policy directives and local project activities and actions to ensure that there is good alignment between them.

Stakeholder	Roles and Responsibilities	Proposed involvement in the Project
District Government (rayon)	The *rayons* provides support for local economic activities and regulates land use and supervises land use decision making. There are a number of *rayons* within the project domain.	The *rayons* will play an important role in supporting the implementation of the project in selected mountain areas (in the project domain). They are likely to be direct beneficiaries of capacity development activities.
Local CBOs and NGOs		
Mahallas (in khishlaks and auls)	The *mahallas* are self-governing bodies set up to resolve issues of local interest and importance.	The *mahallas* will provide the mechanism for the ongoing consultation will local villages and rural settlements in the mountainous regions on project outputs and activities.
Local and national NGOs (e.g. Society for the protection of birds in Uzbekistan, Uzbekistan Zoological Society, Ecosan, Eco-movement)	The NGOs will provide specific communication and awareness support to ensure that the project is clearly understood and to encourage active involvement and participation in the project and its activities. NGOs may also be contracted to implement specific project activities.	
Local communities		
Rural communities in auls and kishlaks	Local residents in the targeted project areas will be actively engaged in the project, especially in relation to alternative livelihoods and improving sustainable land use practices. They are likely to be direct beneficiaries of project-funded activities and support services that are linked to community beneficiation. They will be consulted in the planning of all project activities affecting local communities, and may contribute to the implementation of activities likely to benefit individuals, villages and rural settlements.	
International Partners		
Secretariat of the Global Snow Leopard and Ecosystem Protection programme (in Bishkek, Kyrgyzstan)	These partners will participate in knowledge sharing and technology transfer exercises as well as communications on data collection and sharing, best practices for planning and priority-setting	
Panthera	Panthera support baseline surveys and research on snow leopard and prey populations.	May provide technical and scientific advice to the project. Panthera may also be contracted to implement specific project activities.
Development partners (e.g. German Government, World Bank, FAO)	Development partners supporting conservation projects and initiatives to improve the sustainable management of high mountain habitats in Uzbekistan will be important project partners. They will share, coordinate and collaborate with the project as and where relevant. They may be represented on the project Steering Committee.	

The SCNP will be the main institution responsible for different aspects of project implementation. The SCNP will work in close cooperation with the Directorate of Forestry and will coordinate all project activities at the local level, in close collaboration with the local government authorities in each of the targeted snow leopard landscapes.

2. Information dissemination, consultation, and similar activities that took place during the PPG

Throughout the project's development, close contact was maintained with stakeholders at the national and local levels. All affected national and local government institutions were directly involved in project development, as were key donor agencies. Numerous consultations occurred with all of the above stakeholders to discuss different aspects of project design. This included:

- A series of bilateral discussions with national public institutions and multilateral agencies – notably the SCNP, Directorate of Forestry Agency, Academy of Sciences and UNDP – to solicit information on the

current project baseline, consult on proposed project interventions and confirm the political, administrative, operational and financial commitment of project partners (including securing co-financing commitments);

- A series of consultative field visits and meetings with the relevant responsible institutions in the project's target areas, particularly in the Ugam-Chatkal and Gissar snow leopard landscapes. These field visits and meetings sought to assess the local challenges *in situ*, and consultatively identify prospective solutions;
- Consultative consolidated workshop with representatives of all key national and international organizations and NGOs to present the detailed project outputs, activities, budgets and implementation arrangements to all stakeholders, including all key government agencies and institutions (e.g. SCNP, Ministry of Agriculture and Water, Forestry Directorate, Ugam-Chatkal National Park Management Authority, Chatkal SNR management, Border Security Services, Academy of Sciences and regional government institutions), development partners (UNDP, World Bank) and other civil society partners (e.g. Uzbek Tourism);
- Iterative circulation of the project documentation for review and comments.

3. Approach to stakeholder participation

The projects approach to stakeholder involvement and participation during project implementation is premised on the principles outlined in the table below.

Principle	Stakeholder participation will:
Value Adding	be an essential means of adding value to the project
Inclusivity	include all relevant stakeholders
Accessibility and Access	be accessible and promote access to the process
Transparency	be based on transparency and fair access to information; main provisions of the project's plans and results will be published in local mass-media
Fairness	ensure that all stakeholders are treated in a fair and unbiased way
Accountability	be based on a commitment to accountability by all stakeholders
Constructive	Seek to manage conflict and promote the public interest
Redressing	Seek to redress inequity and injustice
Capacitating	Seek to develop the capacity of all stakeholders
Needs Based	be based on the needs of all stakeholders
Flexible	be flexibly designed and implemented
Rational and Coordinated	be rationally planned and coordinated, and not be ad hoc
Excellence	be subject to ongoing reflection and improvement

4. Stakeholder involvement plan

The project's design incorporates several features to ensure ongoing and effective stakeholder participation in the project's implementation. The mechanisms to facilitate involvement and active participation of different stakeholder in project implementation will comprise a number of different elements:

(i) Project inception workshop to enable stakeholder awareness of the start of project implementation

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

The inception workshop will address a number of key issues including: assist all partners to fully understand and take ownership of the project; detail the roles, support services and complementary responsibilities of the SCNP, MAWR, MDF, Academy of Sciences, local government institutions, NGOs and development

partners *vis à vis* the implementation of project outputs and activities; and discuss the roles, functions, and responsibilities within the project structure, including reporting and communication lines, and conflict resolution mechanisms.

The Workshop will also be a forum to: review the project budget; finalize the first annual work plan as well as review and agree on the indicators, targets and their means of verification, and recheck assumptions and risks; provide a detailed overview of reporting, monitoring and evaluation (M&E) requirements; and plan and schedule project meetings for the Steering Committee.

(ii) Constitution of Steering Committee to ensure representation of stakeholder interests in project

A Steering Committee (SC) will be constituted to ensure broad representation of all key interests throughout the project's implementation. The representation, and broad terms of reference, of the SC are further described in Section I, Part III (Management Arrangements) of the Project Document.

(iii) Establishment of a Project Management team to oversee stakeholder engagement processes during project

The Project Management Unit (PMU) - comprising a Project Manager (PM), project Administrative and Financial Assistant (AFA), and three Field Coordinators (protected areas, pastures and forests and knowledge management) - will take direct operational and administrative responsibility for facilitating stakeholder involvement and ensuring increased local ownership of the project and its results. The PM and AFA will be located in Tashkent to ensure coordination among key stakeholder organizations at the national level during the project period, while the Field Coordinators may be located in or close to the projects targeted regions within the planning domain to ensure closer working relationships with operational field staff of the partner institutions and with the local stakeholders and communities. An international Technical Adviser (TA) will provide professional and technical backstopping to the PMU.

(iv) Project communications to facilitate ongoing awareness of project

The project will develop, implement and maintain a communications strategy to ensure that all stakeholders are informed on an ongoing basis about the project's objectives; the projects activities; overall project progress; and the opportunities for involvement in various aspects of the project's implementation. This strategy will ensure the use of communication techniques and approaches that appropriate to the local contexts such as appropriate languages and other skills that enhance communication effectiveness. The project will develop and maintain a web-based platform for sharing and disseminating information on sustainable pasture and forest planning and management practices across the project planning domain.

(v) Stakeholder consultation and participation in project implementation

A comprehensive stakeholder consultation and participation process will be developed and implemented for each of the following outputs/activities:

- Output 2.1 - zoning and management planning for Ugam-Chatkal NP
- Output 2.2 – management planning for Gissar SNR and expansion of Gissar SNR (buffer area and upper reaches of Tupulang river)
- Output 2.3 – establish environmental inspectorate corps; feasibility assessments of tourism and/or recreational facility and services in protected areas
- Output 3.1 – establish pasture user associations; prepare and implement local pasture management plans; technical and grant funding support to pastoralists (intensive livestock farming, improving survival rates of livestock, alternative income-generating enterprises); rehabilitation of degraded high altitude pastures

- Output 3.2 – forest restoration and rehabilitation; technical and financial grants for woodlots/plantations, alternative energy and fuel technologies and systems, fruit and nut orchards, and medicinal herb gardens
- Output 4.1 – preparation of National Programme and Action Plan for snow leopard conservation; development of a cooperative governance structure to coordinate the implementation of the National Action Plan

A participatory approach will be adopted to facilitate the continued involvement of local stakeholders including the vulnerable and marginalized members of the community (including women) and institutions (such as the *mahallas*) in the implementation of the project activities within the targeted villages and jamoats. Wherever possible, opportunities will be created to train and employ local residents from villages proximate to sites targeted for project intervention (e.g. sites targeted for construction and maintenance work; sites targeted for restoration/rehabilitation of degraded forests and pastures; sites targeted for sustainable pasture and forest management; sites targeted for environmental inspector corps; sites targeted for tourism and recreation investments; etc.).

(vi) Formal structures to facilitate stakeholder involvement in project activities

The project will also actively seek to establish formalized structures to ensure the ongoing participation of local and institutional stakeholders in project activities. More specifically it will support the establishment of local Pasture User Associations and Park/Reserve Management committees as an institutional mechanism to improve the communication, collaboration and cooperation between tenure holders, rights holders, natural resource users and the relevant national, regional and local administrations.

(vii) Capacity building

All project activities are strategically focused on building the capacity - at the systemic, institutional and individual level - in order to ensure sustainability of initial project investments. Significant GEF resources are directed at building the capacities of *inter alia*: forest business units; district-based SCNP offices; local pasture and forest tenure and rights holders; khokimiat (viloyat and rayon) planning and enforcement staff; PUA committee members; snow leopard and prey researchers; and protected area staff. Wherever possible, the project will also seek to build the capacity of local communities (e.g. local community groups and vulnerable and marginalized segments) to enable them to actively participate in project activities. The project will, wherever possible, use the services and facilities of existing local training and skills development institutions.

4. Coordination with other related initiatives

This project is complementary to the regional (Kazakhstan, Kyrgyz Republic, Tajikistan and Uzbekistan) UNDP-GEF medium-sized project Transboundary Cooperation for Snow Leopard and Ecosystem Conservation. The implementation phase of the regional project (2015-2018) will overlap with the implementation phase of this project (2016-2020). This project will thus seek to adopt and operationalise, at the national level, the relevant tools and guidelines that will be developed under the regional project. The GSLEP Focal Point for Uzbekistan will be represented on the Project Board of both the regional project and this projects Steering Committee (SC) committee in order to strengthen the strategic linkages between the projects. The Project Manager of this project will also maintain a close working relationship with the Project Technical Committee (PTC) of the regional project in order to enhance the operational linkages between the projects. The implementation of Component 3 (Outputs 3.1 and 3.2) of this project will, in particular, benefit significantly from the effective coordination of efforts, and sharing of knowledge between the projects.

This project is a logical extension of the recently completed UNDP-GEF medium-sized project, Strengthening Sustainability of the National Protected Area System by Focusing on Strictly Protected Areas. UNDP-GEF. Lessons learnt from the piloting of new management approaches in Surkhan Strict Nature Reserve under the earlier GEF project will guide the implementation of work under this project, particularly in the protected areas and their buffer zones within the snow leopard landscapes. The Master Plan for Protected Areas that was developed in that GEF project also provides the policy and strategic planning framework for this project's support to Gissar and Chatkal SNRs and Chatkal NP. Further, much of the expertise and skills developed under the earlier GEF project have been retained, and will be recruited (both in a project management and expert support role) to direct the implementation of this project and ensure continuity and consistency between the projects.

The project will liaise on a regular basis with international development agencies (including the FAO, GIZ and/or Asian Development Bank) that are either funding or implementing complementary sustainable forest and pasture management initiatives in Uzbekistan, in order to identify and develop opportunities for ongoing collaboration. A particular focus of discussions will be on harmonising the financial and technical support provided to rural communities in: implementing more sustainable pasture management practices; improving the management and sustainable use of forests; developing alternative income-generating opportunities; and adopting more environmentally-friendly fuel and energy technologies. The project will specifically seek to build on the substantial foundational work already being undertaken by these development agencies in setting up and maintaining participatory forest management committees, community-based conservancies and Pasture User Associations across the region.

The Project Grants Manager (PGM) in the PIU will work closely with the National Coordinator of the Global Environment Facility Small Grants Programme (SGP) in Uzbekistan (total of $1,095,048 for the period 2008-2018) to ensure that grant support to the targeted rural pasture and forest users under this project complements and supports the investments made by the SGP (e.g. the introduction of Biogas technology, planting of pistachios and introduction of solar greenhouses).

The project will seek to develop collaborative agreements with key NGO partners (notably Panthera) and international research institutions to support the implementation of selected project activities (e.g. snow leopard and prey surveys and monitoring, specialised training, public awareness-raising, forest and grassland restoration planning, smart patrol system development, etc.). The project will, within the framework of these collaborative agreement/s, then assist in reimbursing the costs of NGOs and research/academic institutions in the direct implementation of activities that fall directly within the ambit of the project outputs.

The project may, if considered feasible by the Government of Uzbekistan, support the establishment and administration of the National Environment Security Task Force (NEST), as envisaged by the Regional Enforcement Strategy to Combat Illegal Wildlife Trade in Central Asia. If established, this NEST will then nationally address and combat wildlife crime through a more coordinated, collaborative and strategic response. The PIU may also, during the project implementation phase, later facilitate linkages with the envisioned regional Snow Leopard and Wildlife Enforcement Network (SLAWEN) once it has been established.

PART IV: Letters of co-financing commitment

Name of Co-financier	*Date*	*Amounts mentioned in letters*	*Amounts considered as project co-financing (in USD)*
United Nations Development Programme	13 June, 2016	Three hundred thousand USD	300,000
State Committee for Nature Protection (Government)	22 June, 2016	Twenty-five million USD	25,000,000
		Total	**25,300,000**

PART V: GEF-UNDP Scorecards

[Refer to separate files for individual scorecards]

Scorecard
1. Land Degradation Focal Area - Portfolio Monitoring and Tracking Tool (PMAT) for GEF 6 Projects
2. Biodiversity Focal Area – BD Tracking Tool (Programs 1 and 2) for GEF 6 Projects
3. Sustainable Forest Management Focal Area – SFM Tracking Tool for GEF 6 Projects

PART VI: UNDP Social and Environmental Screening Template (SEST)

[Refer to separate files for the SEST]

PART VII: Technical Reports and Information

[Refer to separate files for individual reports]

Name of report	Name of expert	Report content
1. Report on the proposed boundaries of the projects planning domain and the status, distribution and abundance of snow leopard and its main prey, and their current threats	Mariya Gritsina	Definition of the exact boundaries of the projects planning domain; profile of the current knowledge on the biology, distribution and abundance of snow leopard, and their natural prey species, in the project domain; and profile of the current state of threats, root causes and barriers to conservation of snow leopards and their prey in the project domain.
2. Report on protected areas located in the project planning domain	Elena Bykova	Profile of the national protected area system; financial scorecard for the protected area system; profile of the individual protected areas located in the project planning domain; threats, root causes and barriers to effective management of protected areas in the project planning domain; current and proposed conservation initiatives in the protected areas in the planning domain; and map of the areas targeted for expansion, consolidation or establishment of new protected areas across the planning domain.
3. Report on forests located in the project planning domain (conservation status, threats, and forest management system)	Khojimurod Talipov	Identifying, mapping and prioritizing the high conservation value forests in the project domain; identifying and mapping the key forest areas overlapping the home ranges of snow leopards, and the distribution of their prey; threats, root cause and barriers to sustainable forest management in the planning domain; and profile of the current status of forest management (including institutional, policy, regulatory, biodiversity values, levels of harvesting, income and expenditure for management, conservation initiatives, etc.) in the project planning domain.
4. Report on the legal basis of pasture management, the current status of pastures and their use in snow leopard and its prey species area	Natalia Beshko	Profile of the legal, legislative, regulatory, policy, planning and institutional framework for pasture management in Uzbekistan; and profile of the current state of pastoral activities across the project planning domain (including institutional roles and responsibilities, governance arrangements, socio-economic status of farmers, income and expenditures by farming type, types of livestock, current supporting initiatives, etc.).
5. Report on the current status of pasture and forest management, and an assessment of the potential of economic incentives for implementing sustainable pasture and forest practices and alternative livelihood programs	Abdukholik Mukhtorov	Profile of the current sustainable pasture and forest management initiatives currently underway across the project planning domain; assessment of the feasibility of incentivizing the adoption of more sustainable pasture and forest management practices and/or other environmentally-friendly alternative livelihood opportunities in the planning domain; and requirements (legal, institutional, implementation arrangements, eligibility criteria, etc.) for a micro-credit or similar grant scheme to support the implementation of sustainable pasture and forest management activities and/or a targeted alternative livelihoods program.

6. Report on recommendations for improving the conservation status of snow leopard and their prey in the planning domain	Mariya Gritsina	Summary of recommendations, including: improvement of legislation (SL Programme and Action Plan); mitigation of human wildlife conflict; improvement of anti-poaching efforts; improvement of research potential; education & public awareness; and increasing project sustainability.
7. Report on recommendations for: rationalization and expansion of existing protected areas; improvement of their management and governance; and establishment of transboundary protected areas.	Eugeniy Chernogaev	Description of proposed project outputs and activities to: support the expansion, rationalization and/or establishment of new protected areas in the planning domain; improve the planning, management and governance of the existing protected areas; and support the establishment of a transboundary area between Uzbekistan and Tajikistan for joint management of the Tupalang area.
8. Report on the costing of possible project activities for sustainable forest management	Khojimurod Talipov	Description and costing of the activities required to: improve the state of forests of high conservation value; and improve the sustainable use and management of forests Identification of baselines and targets for project indicators.
9. Report on the costing of possible project activities for: development of alternative sources of incomes; alternative energy; improvement of the productivity of pastures and forests; capacity building of protected areas; and improvement of the knowledge of, and attitude to, protected areas.	Abdukholik Mukhtorov	Costing of the key activities required to develop and implement sustainable pasture and forest management activities and/or targeted alternative livelihoods program under the full project.

Part VIII: MONITORING PLAN

Project Manager collects results data according to the following monitoring plan

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible data collection	Means of verification	Risks and Assumptions
Project Objective: *To enhance the conservation, and sustainable use, of natural resources in the biodiverse high altitude mountain ecosystems of Uzbekistan*	Extent (ha) of protected areas within the Ugam-Chatkal and Gissar snow leopard landscapes under a more secure, and effectively managed, monitoring and enforcement regime		Meetings, monitoring visits	Annually Reported in DO tab of the GEF PIR	PM and/or PIU	Annual reports of the State Biological Control Service of the State Committee on Nature Protection (SCNP) and the Ugam-Chatkal Park Management Authority	**Assumptions:** – The GoU remains committed to supporting efforts to: (i) increase the management effectiveness of protected areas; (ii) improving the ecological integrity and productivity of high altitude pastures and forests; and (iii) incentivising the incremental shift to alternative income-generating opportunities for rural mountain communities, in the snow leopard landscapes. **Risks:** – State institutions responsible for the administration of protected areas, pastures and forests do not have adequate capacity;
	Extent (ha) of high altitude mountain pasture areas within the Ugam-Chatkal and Gissar snow leopard landscapes under a more regulated and sustainable management regime		Meetings, monitoring visits, Environmental Information Management System (EIMS) data collection	Reported in DO tab of the GEF PIR	PM and/or PIU	National land cadastre database. Environmental Information Management System (EIMS)	
	Improved conservation status of biodiversity important forests within targeted Protected Areas		Meetings, monitoring visits	Annually	PM and/or PIU	Annual reports from the Forest Inventory and Design Enterprise (MDF); Forestry Business Units (MDF); and Ugam-Chatkal Park Management Authority	

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible data collection	Means of verification	Risks and Assumptions
	Number of primary snow leopard prey populations[59] within the Ugam-Chatkal and Gissar snow leopard landscapes: Siberian Ibex (LC) Siberian roe deer (LC) Boar (LC) Menzbier's marmot (VU) Long-tailed marmot (LC)		Images/data from the camera traps, Environmental Information Management System (EIMS) data collection	Annually Reported in DO tab of the GEF PIR	PM and/or PIU	Annual species population counts from Chatkal SNR, Ugam-Chatkal NP and Gissar SNR. EIMS	– Low levels of compliance with environmental legislation, and a reluctance to adopt more sustainable natural resource use practices; – Low levels of coordination and cooperation between public institutions, tenure holders, rights holders, land owners, NGOs/CBOs and natural resources users; and – The increasing aridisation of high altitude habitats, as a result of the effects of climate change.
	Total snow leopard population within the snow leopard landscapes of Uzbekistan		Monitoring visits, Environmental Information Management System (EIMS) data collection	Annually	PM and/or PIU	Project monitoring reports. EIMS	
	Number of women (as a proportion of the total) involved in, and directly benefiting from project investments in the conservation and sustainable use of high altitude montane habitats and species within the Ugam-Chatkal and Gissar snow leopard landscapes		Meetings, workshops, trainings, activity report	Annually Reported in DO tab of the GEF PIR	PM and/or PIU	Project reports	

[59] Population estimates collectively represent the species counts from Chatkal SNR, Ugam-Chatkal NP and Gissar SNR in the Ugam-Chatkal and Gissar snow leopard landscapes.

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible data collection	Means of verification	Risks and Assumptions
Component 1: *Landscape level planning and management decision-making* **Outputs:** 1.3 Improve the quality of environmental information for state cadastre 1.4 Enhance the state of knowledge on snow leopard and prey populations	Coverage (as a % of the total area of 10,000 km^2) of comprehensive, up-to-date baseline environmental and land use information for the snow leopard distribution range		Monitoring visits, Environmental Information Management System (EIMS) data collection	Annually Reported in DO tab of the GEF PIR	PM and/or PIU	EIMS	**Assumptions:** – The border security services will facilitate controlled access for the ongoing collection of environmental baseline and snow leopard monitoring data; and – The SCNP will accept the responsibility for, and allocate resources to, the hosting, maintenance and updating of the EIMS. **Risks:** – State institutions responsible for the administration of protected areas, pastures and forests do not have adequate capacity; – Low levels of compliance with environmental legislation, and a reluctance to adopt more sustainable natural resource use practices; – Low levels of coordination and cooperation between public institutions, tenure holders, rights holders, land owners, NGOs/CBOs and natural resources users; and – The increasing aridisation of high altitude habitats, as a result of the effects of climate change.
	National coverage (as a % of the total snow leopard range) of snow leopard and prey monitoring activities		Monitoring visits, Environmental Information Management System (EIMS) data collection	Annually	PM and/or PIU	Project monitoring reports. EIMS	
	Percentage (%) of individual snow leopards with a dossier profiling some of its key features (age, sex, spot pattern, DNA, home range, etc.) under preparation.		Monitoring visits, Environmental Information Management System (EIMS) data collection	Annually Reported in DO tab of the GEF PIR	PM and/or PIU	Project monitoring reports. EIMS	

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible data collection	Means of verification	Risks and Assumptions
Component 2: *Strengthening key biodiversity areas* **Outputs:** 2.4 Strengthen the management effectiveness of the core conservation zones in Ugam-Chatkal National Park 2.5 Extend, and improve the conservation security of, Gissar Strict	Total extent (ha) of core conservation areas managed as IUCN Category I or Category II protected areas within the Ugam-Chatkal and Gissar snow leopard landscapes		Meetings, monitoring visits	Annually Reported in DO tab of the GEF PIR	PM and/or PIU	Annual reports of the State Biological Control Service of the SCNP and the Ugam-Chatkal Park Management Authority	**Assumptions:** – Stakeholders will constructively participate in the design, development and implementation of a smart patrol system in Ugam-Chatkal NP, Chatkal SNR and Gissar SNR; – The SCNP, forestry business units and Tashkent Regional Authority will make budget provisions for the continued employment of project-funded ranger staff, and the ongoing maintenance of new equipment and infrastructure procured by the project; and – The SCNP, forestry business units and Tashkent Regional Authority will commit to facilitating the involvement and beneficiation of local communities living in, and adjacent to, the NP and SNRs. **Risks:** – State institutions responsible for the administration of protected areas do not have adequate capacity;
	Total annual budget (US$/annum) allocation for the management of the protected areas within the Ugam-Chatkal and Gissar snow leopard landscapes.		Meetings, monitoring visits	Annually	PM and/or PIU	Annual financial reports of the individual protected areas	
	METT scores for: Chatkal SNR Ugam-Chatkal NP (excluding Chatkal SNR) Gissar SNR		Meetings, METT data collection	Annually Reported in DO tab of the GEF PIR	PM and/or PIU	Annual METT reporting	
	Number of active patrol rangers in the core conservation areas of Ugam-Chatkal NP (including Chatkal SNR) and Gissar SNR		Meetings, monitoring visits	Annually Reported in DO tab of the GEF PIR	PM and/or PIU	Smart patrol system Annual reports of the individual protected areas	

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible data collection	Means of verification	Risks and Assumptions
Nature Reserve **2.6** Enhance community involvement in, and beneficiation from, protected areas	Number of (i) poaching (of snow leopard and prey); and (ii) other illegal (encroachments for crops and grazing, wood harvesting) incidents recorded (and prosecuted) per annum by ranger patrol staff from the core conservation areas of Ugam-Chatkal NP (including Chatkal SNR) and Gissar SNR		Meetings, monitoring visits	Annually Reported in DO tab of the GEF PIR	PM and/or PIU	Smart patrol system Annual reports of the individual protected areas	– Low levels of compliance with environmental legislation; and – Low levels of coordination and cooperation between public institutions, tenure holders, rights holders, land owners, NGOs/CBOs and natural resources users.
	Number per annum of individuals (gender disaggregated) from villages in Ugam-Chatkal NP and around Gissar SNR involved in the project's education and outreach programme		Meetings, monitoring visits, household surveys	Annually	PM and/or PIU	Household survey reports Project reports Annual reports of the individual protected areas	
	Total number (of which are women) of individuals from targeted villages who have completed project funded skills training[60] courses.		Meetings, monitoring visits, workshops, trainings.	Annually Reported in DO tab of the GEF PIR	PM and/or PIU	Project reports	

[60] Including skills development training programmes in *inter alia*: monitoring and enforcement; business development; construction; plumbing; electrical work; equipment maintenance; catering services; etc.

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible data collection	Means of verification	Risks and Assumptions
	Number per annum (of which are women) of individuals from the targeted villages who financially benefit from[61] the management of the protected areas within the Ugam-Chatkal and Gissar snow leopard landscapes.		Meetings, monitoring visits	Annually Reported in DO tab of the GEF PIR	PM and/or PIU	Project reports Annual reports of the protected areas	
	Gross income (US$/annum) generated from tourism/ recreational facilities and services in protected areas within the Ugam-Chatkal and Gissar snow leopard landscapes		Meetings, monitoring visits	Annually	PM and/or PIU	Annual financial reports of the individual protected areas	
Component 3: *Sustainable economic development incentives for communities* **Outputs:** 3.3 Incentivize sustainable pasture	Approved Law on Pastures (including article/s on the establishment and administration of Pasture User Associations)		Meetings, primary and secondary data collection	Annually Reported in DO tab of the GEF PIR	PM and/or PIU	Government gazette	**Assumptions:** – The GoU will facilitate the process of preparing and adopting the Pasture Law; – The Academy of Sciences, MDF and/or SCNP will establish and maintain forest and pasture monitoring data within the snow leopard landscapes; – The MAWR, SCNP and local government institutions will actively support the piloting of
	Average productivity (dry fodder mass in tons/ha) of the high altitude pastures in the areas administered by Pasture User Associations (PUAs)		Meetings, monitoring visits	Annually	PM and/or PIU	Permanent pasture monitoring plots Annual reports of PUAs	

[61] Direct financial benefits include: recruitment as permanent or temporary park/reserve staff; appointment as environmental inspectors; income from the delivery of services and supplies to the park/reserves; and/or compensation for loss of livestock from predation.

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible data collection	Means of verification	Risks and Assumptions
management practices 3.4 Encourage more sustainable levels of forest use	Average percentage (as an average of the total grass/forb/herb cover per hectare) of unpalatable species[62] within the high altitude pastures in the areas administered by PUAs		Meetings, monitoring visits	Annually Reported in DO tab of the GEF PIR	PM and/or PIU	Permanent pasture monitoring plots Annual reports of PUAs	the PUAs in the snow leopard landscapes; – Communities living in the targeted villages are sufficiently capacitated and motivated to submit viable applications for grant funding support; and – State agencies, local government and self-governing community institutions - with the support of the PIU and PUAs - will actively monitor and enforce compliance with the grant conditions. **Risks:** – State institutions responsible for the administration of protected areas, pastures and forests do not have adequate capacity; – Low levels of compliance with environmental legislation, and a reluctance to adopt more sustainable natural resource use practices; – Low levels of coordination and cooperation between public institutions, tenure holders, rights holders, land owners, NGOs/CBOs and natural resources users; and
	Number of PUAs with approved pasture management plans under implementation in the high altitude pastures of the Ugam-Chatkal and Gissar snow leopard landscapes		Meetings, monitoring visits	Annually Reported in DO tab of the GEF PIR	PM and/or PIU	Project reports Minutes of PUA meetings	
	Number of households (average of ~6 individuals/household) in the Ugam-Chatkal and Gissar snow leopard landscapes directly benefiting from project technical and grant funding support for: (a) improving the health and well-being of free-ranging livestock; (b) development of alternative local income-generating enterprises; and (c) establishment of intensive livestock farms.		Household survey, meetings, monitoring visits	Annually	PM and/or PIU	Household survey reports Project grant agreements and performance reports Project reports	

[62] The increase in cover of unpalatable species is a direct consequence of the effects of unsustainable levels of grazing and forage collection, increased compaction and erosion and short fire regimes. Unpalatable species may include *Rosa ecae*, *Iris sogdiana, Hypericum scabrum, Astragalus lasiosemius, Acantholimon* sp ,. *Adonis turkestanica, Eremurus kaufmannii, Ligularia* sp., *Onobrychis echidna, Lagotis* sp..

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible data collection	Means of verification	Risks and Assumptions
	Extent (ha) of degraded high altitude pastures and forests of the Ugam-Chatkal and Gissar snow leopard landscapes under active rehabilitation or restoration		Meetings, monitoring visits	Annually Reported in DO tab of the GEF PIR	PM and/or PIU	Annual reports of *forest business units* and Ugam-Chatkal Park Management Authority	– The increasing aridisation of high altitude habitats, as a result of the effects of climate change.
	Number of households (average of ~6 individuals/household) in the Ugam-Chatkal and Gissar snow leopard landscapes directly benefiting from project technical and grant funding support for: (a) establishment and maintenance of small plantations/woodlots; (b) establishment of food-producing fruit and nut orchards and herb gardens; and (c) installation and maintenance of alternative energy and fuel technologies and systems.		Household survey, meetings, monitoring visits	Annually Reported in DO tab of the GEF PIR	PM and/or PIU	Household survey reports Project reports	
	Extent (as a percentage of the total area) of high altitude forests and pastures in the Ugam-Chatkal (excluding Chatkal SNR) and Gissar snow leopard landscapes (excluding Gissar SNR) that are considered		Meetings, monitoring visits	Annually	PM and/or PIU	EIMS Permanent pasture and forest monitoring plots	

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible data collection	Means of verification	Risks and Assumptions
	'significantly degraded'[63] as a result of a lack of control over illegal, and unsustainable levels of, use.						
Component 4: *Promoting cooperation and collaboration* **Outputs:** 4.1 Improve inter-agency coordination in conservation, monitoring and	Approved and implemented Programme and Action Plan for snow leopard conservation.		Meetings	Annually	PM and/or PIU	Annual reports of the SCNP	**Assumptions:** – The SCNP and MAWR will integrate the national strategy and action plan priorities into its state programmes; – The state of affairs between neighbouring snow leopard range countries remains stable or continues to improve; – The border security services actively participate in project-funded training and skills programmes and exchange programmes. **Risks:**
	Number of meetings per annum of the: (i) Cooperative governance structure (programme and action plan); and (ii) Trans-boundary working groups		Meetings	Annually	PM and/or PIU	Minutes of meetings Project reports Annual reports of the SCNP	
	Number of border security officials receiving in-service wildlife monitoring and enforcement training and skills development		Meetings, monitoring visits	Annually	PM and/or PIU	Project reports	

[63] Although objective criteria for determining the state (intact- partial- significant- severe) of 'degradation' of pastures and forests will be determined in the implementation of Output 1.1, they may include: plant species composition, integrity of soils, plant cover, productivity, plant age distribution classes, faunal composition, etc.

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible data collection	Means of verification	Risks and Assumptions
enforcement 4.2 Strengthen the capacity for trans-boundary planning and management	Number of professional, technical and management personnel involved in international exchange programs, country visits and trans-boundary snow leopard monitoring and research projects		Meetings	Annually Reported in DO tab of the GEF PIR	PM and/or PIU	Project reports	– State institutions responsible for the administration of protected areas, pastures and forests do not have adequate capacity; – Low levels of compliance with environmental legislation, and a reluctance to adopt more sustainable natural resource use practices; and – Low levels of coordination and cooperation between public institutions, tenure holders, rights holders, land owners, NGOs/CBOs and natural resources users.
Mid-term GEF Tracking Tool (if FSP project only)	N/A	N/A	Standard GEF Tracking Tool available at www.thegef.org Baseline GEF Tracking Tool included in Annex.	After 2nd PIR submitted to GEF	PM and/or PIU, UNDP CO	Completed GEF Tracking Tool	N/A
Terminal GEF Tracking Tool	N/A	N/A	Standard GEF Tracking Tool available at www.thegef.org Baseline GEF Tracking Tool included in Annex.	After final PIR submitted to GEF	PM and/or PIU, UNDP CO	Completed GEF Tracking Tool	N/A

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible data collection	Means of verification	Risks and Assumptions
Mid-term Review (if FSP project only)	N/A	N/A	To be outlined in MTR inception report	Submitted to GEF same year as 3rd PIR	*Independent evaluator*	Completed MTR	N/A
Environmental and Social risks and management plans, as relevant.	N/A	N/A	Updated SESP and management plans	Annually	Project Manager UNDP CO	Updated SESP	N/A

SIGNATURE PAGE

Country: Uzbekistan

(To be completed after GEF CEO Endorsement)