PROJECT BRIEF

1. Identifiers:
Project Number: 1685
Project Name: Regional Biodiversity Conservation in the Altai-Sayan Mountain Ecoregion
Duration: 5 years
Implementing Agency: UNDP
Executing Agency: Ministry of Natural Resources of the Russian Federation
Requesting Country or Countries: Russian Federation
Eligibility: Russia ratified the Convention on Biological Diversity on 5 April 1995
GEF Focal Area(s): Biodiversity
GEF Programming Framework: OP4 – Mountain Ecosystems (cross-cutting Forest Ecosystems)
Strategic Priority: BD1- Catalyzing Sustainability of Protected Area Systems

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2. Summary The Altai-Sayan Ecoregion (ASE) is an enormous area (1,065,000 km^2) situated in the center of Eurasia. The Ecoregion is international, with 62% of its area in Russia, 29% in Mongolia, 5 % in Kazakhstan, and 4% in China. In the Russian portion, the Ecoregion overlaps six distinct administrative boundaries, encompassing portions of Krasnoyarsky and Altaisky krai, the Tuva, Altai and Khakasiya Republics, and Kemerovskaya oblast'. It is characterized by a mix of mountain ecosystems, comprised of tundra, forest, steppe and desert biomes, with the latter two being dominant in Mongolia and China. The globally significant biodiversity values of the Ecoregion were confirmed in 1998 with the designation of a World Heritage Site encompassing five natural areas in the Altai Republic, and more recently in 2003, with the designation of another World Heritage Site - Uvs-Nuur - in the Tuva Republic. The global significance of the Altai-Sayan Ecoregion is further confirmed by its listing as one of the world's 200 priority ecoregions in the WWF Living Planet Campaign.

Diverse and intensifying pressures, however, are increasingly threatening the ASE's biodiversity. These include cumulative threats arising from biodiversity-insensitive and weakly regulated natural resource development; uncoordinated planning among administrative regions and countries; organized poaching of rare and endangered species; increasing overexploitation of natural resources by local communities beyond sustainable levels; deficiencies in the management of existing PAs; low levels of biodiversity awareness among stakeholders; legislative, regulatory and institutional gaps and deficiencies, particularly as these relate to transboundary management; and other factors. In a continued "baseline" scenario, the ASE's biodiversity will continue to deteriorate in the face of growing threats, thereby significantly diminishing its global values. Pre-emptive and corrective actions are urgently required now to avoid the default scenario and secure the ASE's global benefits.

This project was originally designed to attain parallel and complementary biodiversity conservation objectives in the portion of the Ecoregion that lies within the Russian Federation and eastern Kazakhstan. The differential pace of project development in the two countries, however, precluded the joint preparation of a single project. Currently, the Russian Federation's contribution to the project is ready to move into implementation, with the Kazakhstan Medium-Size Project proposal nearing completion. At the same time, a complementary full-fledged UNDP/GEF project has recently been finalized and approved by Mongolia. These three GEF-supported projects all together create a comprehensive programme framework targeting conservation of biodiversity throughout the larger part of the Altai-Sayan Ecoregion and allow for piloting transboundary conservation instruments. To ensure effective coordination between the projects, several mechanisms have been deployed, including the creation of a Regional Steering Committee with representatives from the

Russian Federation, Kazakhstan and Mongolia, and the signing of a framework document on cooperation between the countries' Executing Agencies and UNDP Country Offices.

Given the regional nature of the project, it will adopt a bio-regional management approach to biodiversity conservation. This approach emphasizes the pre-eminence of ecological patterns and processes over and above those of political and administrative boundaries, as environmental management solely within political and administrative boundaries will not provide for effective biodiversity conservation at this scale. Using this approach, over a period of five years, the project will improve the current development framework of this Ecoregion by strengthening national capacity to prepare and implement a set of integrated actions that collectively will avoid the default scenario and secure global biodiversity benefits. To this end, project outputs will include: strengthening and expansion of the existing protected area system, including the designation of transboundary PAs and the creation of an integrated network of PAs (Econet); increased levels of biodiversity awareness and advocacy among all stakeholders; the conservation of selected rare and endangered species in the ASE; improvement of information on the region's biodiversity, including traditional environmental knowledge, and the integration of that information into decision-making; strengthening of legislation, compliance mechanisms and institutional capacity in planning and management of land and resource uses through the incorporation of biodiversity conservation values; the development of sustainable and biodiversity friendly alternative livelihoods for local populations and the establishment of a financing mechanism to support these livelihoods; the direct involvement of local populations in the conservation of biodiversity; and strengthening of transboundary cooperation in biodiversity conservation initiatives among states, as well as regional governments and administrations in the region.

The project proposed here is the first phase of a longer term project. In this phase, the focus will be on safeguarding identified key territories for biodiversity in the Altai-Sayan Ecoregion, stabilizing the currently deteriorating situation, and building institutional capacity to provide for biodiversity conservation and sustainable development over the long-term. The second phase of this project will work in other high priority areas and demonstrate additional biodiversity-friendly options critical to the successful, long-term, effective and integrated management of the ASE, building upon best practices and lessons learned during this first phase. The rationale for the second phase is to scale up and replicate the demonstration projects of this first phase project, pending first phase evaluation and identification of lessons and best practices. This will also involve the identification and establishment of appropriate mechanisms to secure the long-term commitment of financial resources, with key inputs expected from the private sector. It is expected that the GEF would be a partner in this second phase as considerable further investments will be required.

3. Costs and Financing

GEF:		
	Full Project	US$ 3,515,000
	PDF B	US$ 350,000
	GEF sub-total	US$ **3,865,000**
Co-financing:		
	PDF B	US$ 500,000
	Regional budgets:	US$ 5,830,000
	WWF	US$ 1,200,000
	Sayan-Ring	US$ 4,630,000
	Co-financing sub-total	US$ 12,160 000

Total Project Cost: **US$ 16,025,000**

4. Associated Financing (Million US$)

5. Operational Focal Point Endorsement (see Annex 2B):

Kirill Yankov, Deputy Minister of Natural Resources, endorsement letter dated 30th of May, 2003.

6. Implementating Agency Contacts:

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LIST OF ACRONYMS

AASPA	Association of Altai-Sayan Protected Areas
APR	Annual Project Report
ASE	Altai-Sayan Ecoregion
AWP	Annual Work Plan
CBD	Convention on Biological Diversity
CITES	Convention on the International Trade in Endangered Species
CPO	Country Programme Outline
GEF	Global Environment Facility
GTZ	German Agency for Technical Cooperation
GUPR	Regional Departments of the Ministry of Natural Resources
IUCN	World Conservation Union
IW	Inception Workshop
NBCS	National Biodiversity Conservation Strategy
NSEDS	National Socio-Economic Development Strategy
M&E	Monitoring and Evaluation
MNR	Ministry of Natural Resources
NGO	Non-governmental Organization
NTFP	Non-timber Forest Products
PAs	Protected Areas
PDF-B	Project Development Facility, Block B (GEF)
PIR	Annual Project Implementation Review
PSC	Project Steering Committee
RSC	Regional Steering Committee
TEK	Traditional Environmental Knowledge
UNDP	United Nations Development Programme
UNDP-CO	UNDP Country Office in Russia
UNESCO	United Nations Educational, Scientific and Cultural Organization
WB	The World Bank
WHS	World Heritage Site
WWF	World Wide Fund for Nature

1. COUNTRY OWNERSHIP

a) Country Eligibility

Russia ratified the Convention on Biological Diversity on 5 April 1995, and Russia is eligible for technical assistance from UNDP.

b) Country Driven-ness

1 b i. National reports/communications to Conventions

The project will assist the Government of Russia to meet its obligations under the following international conventions signed and ratified by Russia:

- Convention on Biological Diversity (CBD)
- Convention on the International Trade in Endangered Species (CITES)
- Ramsar Convention on Wetlands of International Importance
- Convention on the Conservation of Natural and Cultural Heritage
- Convention on the Conservation of Migratory Species of Wild Animals (SMS-Bonn)
- United Nations Convention to Combat Desertification

The ecosystem-based approach to biodiversity conservation applied by the project is in line with the spirit of many international agreements, such as CBD and Conservation of Migratory Species of Wild Animals (CMS-Bonn), and is built upon the outcomes of the World Summit on Sustainable Development, in particular with regard to promotion of sustainable mountain development and conservation of mountain ecosystems.

1 b ii. National or sector development plans

Russia's **National Biodiversity Conservation Strategy** (NBCS) lists the Altai-Sayan Mountains as a priority mountain ecoregion for biodiversity conservation due to its high biological and landscape diversity, endemism, rich historical and ethno-cultural heritage, and unique traditions of sustainable natural resource use. The NBCS also emphasizes the need for further strengthening of the protected area system in the Altai-Sayan Mountains with the special focus on the territories of traditional natural resource use and ethno-cultural protected areas. It gives special attention to transboundary biodiversity conservation and underlines the necessity of establishing new protected areas on the border with Kazakhstan, China, and Mongolia.

This project will apply every one of the seven key tools of biodiversity conservation adopted by **NBCS**: introduction of socio-economic mechanisms for biodiversity conservation, legislative initiatives, sustainable resource management, environmental awareness and education, research and technical support, and biodiversity monitoring. Specifically, the NBCS stresses the need to integrate biodiversity conservation objectives into other sectoral and economic development programmes and to promote formation of broader partnerships in support of biodiversity conservation, which will be given special attention within the framework of this project.

The project will directly support several objectives of Russia's **National Socio-Economic Development Strategy** (NSEDS), the main national policy document providing for governmental long-term development priorities. In particular, the project will contribute to the achievement of the following **NSEDS** goals:

(i) ensure sustainable rural development through promotion of alternative livelihood opportunities for rural population and introduction of environmentally-friendly land use and management practices;

(ii) promote ecologically-balanced development through strengthening and modernization of protected areas system, wider use of EIA, and introduction of economic instruments for environmental protection;

(iii) improve the socio-economic situation of the less-developed regions and among the indigenous people of the North. NSEDS identifies the Tuva and Altai Republics as the least-developed regions in Russia which require special assistance to help them overcome poverty and cope with pressing social needs.

The Ministry of Natural Resources recently released the "**vision and strategy for Russia's protected areas"** system, taking stock of the status and effectiveness of the current protected areas system. They outline the fundamental directions needed in Government policy for the development of their protected areas through 2015. Of particular note is the emphasis on short-term challenges that can be overcome as well as those that will require long-term approaches to ensure sustainability in maintaining and improving the effectiveness of protected areas. The current project provides opportunities to address several of the issues raised and supports the current strategy outlined by the Ministry, which includes:

- The development of a geographic network to maintain and expand the area of existing zapovedniks in Russia by creating biosphere polygons, including for Katunsky.
- Establishing new zapovedniks and expanding existing ones through clarifications for the development of buffer zones, biosphere polygons and special land use regimes, including tracts of land that fall within the boundaries of national parks but have not been withdrawn from economic use
- Developing a network of transboundary reserves that incorporate:
  - Ubsunurskaya Kotlovina Biosphere Zapovednik (Republic of Tuva) and a Mongolian nature reserve located in the basin of Lake Uvs Nuur
  - Katunsky Biosphere Zapovednik (Republic of Altai) and a neighboring national park in Kazakhstan
  - Sailyugemsky Zapovednik (to be created in the Republic of Altai) in a three-sided transboundary reserve with analogous areas in Mongolia and China.
- Priorities for monitoring quantitative and qualitative changes in the level of biodiversity of ecosystems, preserving rare and endangered species and ecosystem approaches to restore the natural regenerative qualities of landscapes.
- Having protected areas work in close partnership with educational institutions, regional and local governments the media and most importantly with local populations, especially in the fields of education and tourism.
- Enabling regulated tourism and recreation and developing mechanisms to monitor and control environmental excursion activities and education tourism with the goal of keeping natural communities and sites from harm.
- Improving human resource capacity through strengthening cooperation between federal ranger services and interior offices at the administrative and local levels and developing programmes to raise the qualifications of protected area staff as well as certification of employees of companies and organizations that work in ecotourism and environmental education.
- Dissemination through increased cooperation between zapovedniks, national parks and regional nature protection agencies and increased environmental education outreach.

1 b iii. Recommendations of appropriate regional intergovernmental meetings or - agreements.

The Altai-Sayan Millennium Initiative was adopted by eight regions of Russia, four aimags of Mongolia, and by Kazakhstan at the International Conference in October 1999 in Belokurikha, Russia. This project is designed to further the overall objectives of the Initiative and its specific recommendations, including the need to adopt an ecoregion-based conservation approach and recognise the link between conservation and social and economic development.

c) Endorsement

The project has been endorsed by the GEF Operational Focal Point in a letter dated 30th of May, 2003 – see Annex 2 B.

2. PROGRAM & POLICY CONFORMITY

a) Program Designation & Conformity

This project is eligible under *Operational Programme 4 – Mountain Ecosystems*. Specifically, it satisfies the GEF criteria by being country driven; securing global biodiversity benefits; involving multiple stakeholders in its implementation; securing co-financing to achieve the sustainable development baseline; and, incorporating measures for ensuring long-term institutional and financial sustainability.

This project supports BD *Strategic Priority 1: Catalyzing the Sustainability of Protected Areas*. The key objective of this project is to conserve the globally significant biodiversity of the Altai-Sayan Ecoregion through the expansion, consolidation, and operationalization of an effective PA system in the Russian portion of the ASE in close coordination with similar efforts in other countries of the ASE.

The project will explore innovative economic instruments and financial mechanisms aimed at easing the financial burden of PA administration on the state budget, and identify and develop the most promising – e.g., user fees, certification - for trial in key areas. The project will support policy reform and / or incentives to catalyze engagement of the private sector to attain improved financial sustainability of PAs and sustainable use of biodiversity in buffer zones and corridors. At the same time, the project will build capacity for long-term sustainability with a series of activities and investments aimed at developing institutional, managerial and financial sustainability from both private and public sources. The project will apply internationally recognized standards to PA management with the aim of building institutional capacities and will ensure minimum skill levels across project sites.

The project will promote the participation of local communities and indigenous groups in the design, implementation, management and monitoring of local initiatives to promote biodiversity conservation and sustainable use through indigenous community conservation areas, as well as Biosphere Reserves, and corridors. This project will also promote broad stakeholder participation and co-management between government and local communities for PAs.

b) Project Design

2 b i. Project context

Environmental Context:

The Altai-Sayan Ecoregion is an enormous area (1,065,000 km^2) situated in the center of Eurasia. The width of the region is more than 1,600 km in the west-east direction and 1,300 km from north to south. The ASE is transboundary, with 62% of its area situated in Russia, 29 % in Mongolia, 5 % in Kazakhstan, and 4% in China. It is characterized by a mix of ecosystems, including alpine tundra, forest, steppe and desert, with the latter two biomes more dominant in Mongolia and China. This project will focus mainly on the unique biota of the predominantly mountain tundra and forest biomes found in Russia. (Please see map of eco-region in Annex 2E).

The ASE includes a number of major mountain ranges: the Altai, Salair, Kuznetsky Alatau, Western Sayan, Eastern Sayan and Tannu-Ola. The ranges are separated by large depressions: Kuznetsk, Minusinsk, Tuva, and the Great Lakes Basin Depression on the Mongolian border. The Altai Mountains extend through the Russia-Kazakhstan border in the northwest to the Chinese-Mongolian border in the southwest. Siberia's highest peak, Mt. Belukha (4,506 m) is found in the Katun ridge of the Altai Mountains and is the source of the Katun river, the major headwaters of the fifth longest river in the world, the Ob'. The Western and Eastern Sayan Mountains extend toward the east from the Altai Mountains nearly to the southern tip of Lake Baikal.

The Altai-Sayan Mountains serve as a watershed between the Arctic Ocean, Pacific Ocean and internal-drainage areas of Mongolia. It is also the headwaters of one of the ten largest rivers in the world, Russia's Yenisei River. Glaciers are an important source of freshwater in the ASE. The largest mountain glaciers (over 12 km^2) are found in the Altai Mountains, and over one hundred cirque and hanging glaciers are found in the Eastern Sayan Mountains.

The Altai-Sayan Ecoregion is a globally unique and significant region. It remains one of the least disturbed and transformed large forest and steppe natural areas in the world, which still presents an outstanding opportunity to conserve globally significant biodiversity. The global significance of the Ecoregion has been recognized through the designation of two UNESCO World Heritage Sites on the territory of Ecoregion. The first one, "Golden Mountains of Altai" encompasses five natural areas in the Altai Republic. These sites are: Altaisky and Katunsky zapovedniks (strict nature reserves – IUCN Category I), the Ukok Plateau, Lake Teletskoye and its buffer zone, and Mount Belukha, the highest peak in Siberia. In 2003 another part of the Altai-Sayan Ecoregion was inscribed in the UNESCO list as "Uvs-Nuur" Natural World Heritage Site. It is a transboundary area situated on the borders between Mongolia and Russia, around the closed salt lake system of Uvs Nuur. The site is made up of twelve protected areas representing the major biomes of eastern Eurasia - on the Russian side they are represented by several clusters of the Uvs-Nuur Biosphere Zapovednik. Due to its unique geophysical and biological characteristics, the Uvs-Nuur basin has been chosen as an International Geosphere-Biosphere Programme (IGBP) site for monitoring global warming. The Altai-Sayan Ecoregion is also one of the world's 200 priority ecoregions included in the WWF Living Planet Campaign.

While the climate is continental, characterized by cold harsh winters and hot summers in the valleys between the mountain ridges, there is considerable variation in micro-climatic conditions within the region. Precipitation ranges from 100 – 2000 mm annually, with most of it falling on the western slopes of mountain ranges and least in the valleys in the rain shadow. The combination of

topographic and climatic variation has resulted in the prevalence of high biodiversity and endemism throughout the Ecoregion.

Forests occupy approximately one half of the area, with boreal species prevalent in the higher elevations and deciduous species found in the foothills and lower elevations. Steppes occupy 24% of the area, being found primarily in the valleys and on southern slopes. Alpine tundra occupies 16% of the area, alpine and sub-alpine meadows account for 6% of the area, and desert biomes are found in only 4% of the ASE's area.

The Ecoregion is situated at the juncture of the Central-Asiatic and Siberian faunistic provinces, a factor that also contributes to its high levels of biodiversity. The fauna is represented by 680 species, including 143 mammal species, 425 bird species, 77 fish species and 8 species of amphibians. Of these, 39 species are endemic, including *Tetraogallus altaicus, Anthus spinoletta blakistoni, Crocidura sibirica, Castor fiber tuvinicus* and others. Table 1 presents a list of rare and endangered species according to the Russian regional Red Data Books.

Table 1: Number of Rare and Endangered Species

Group	Total number in ASE	Rare and endangered species (as per regional Red Data Books)	Endemics
Plants (vascular)	3726	700	317
Mammals	143	57	16
Birds	425	202	17
Reptiles	25	7	1
Amphibians	8	5	-
Fishes	77	17	5

The snow leopard (*Uncia uncia)* and the Altai mountain sheep or Argali, the world's largest wild sheep, (*Ovis ammon ammon* L.) are two high profile species that still maintain a foothold in the region but are coming under increasing threat due to a variety of factors, including poaching and competition for forage with livestock. Snow leopards can be found exclusively in the highlands of Central Asia. The Gorno-Altai and Southwestern Sayan/ Tuva territories are the principal areas of snow leopard habitat in Russia. Within these boundaries is the northernmost limit of the cat's range. At the present time, only part of its habitat falls under the theoretical protection in the state protected nature reserves-- specifically in the Altaiskiy and Katunskiy Zapovedniks. The main paths of disbursement of snow leopards (ecological corridors) lie outside the existing protected territories. This area is a habitat crossroad where the borders of Russia, Kazakhstan, Mongolia & China meet. It falls within the Ukok Plateau in the Argut River basin, an area which was designated a World Heritage Site in 1998. Experts estimate the Russian population of Snow leopard at 120-150 individuals. The largest micro population of 15 cats is found in the Sayano-Shushensky Biosphere Reserve, which is the key snow leopard habitat within the Western Sayan range. Increasing grazing pressure by the livestock also disturbs natural habitat of the snow leopard. The Argali sheep is highly threatened with its population only found in the Altai-Sayan Ecoregion. The Argali inhabits highland pastures of the Tuva Republic and the southern part of Altai mountain range close to Mongolian border. Today, the population of argali is estimated at 600-650 individuals. These two species are often viewed as indicators of the ASE's overall ecosystemic health, and the conservation of these two high altitude species is inextricably linked with the conservation of the entire high altitude component of the Ecoregion.

The flora is represented by 3,726 species of vascular plants, of which 700 are either rare or threatened and 317 are endemics. Some of these include *Sibiraea altaiensis*, *Stelleropsis altaica*, and *Dendranthema sinuatum*. Many of the endemics, such as the steppe peony *(Paeonia hybrida*) and yellow mallow *(Alcea froloviana)* are found in only a few restricted locales. The ASE contains the world's largest unbroken stretches of Siberian Pine *Pinus sibirica* and the so-called "black taiga" mainly populated by endemic Siberian fir (*Abies sibirica*) forests with relict and endemic vascular plants.

Project sites

As part of a broader strategy (see section 2.b.iii, below), the project will undertake demonstration actions in six selected project sites (Table 2, annex 2Ei – Map of project sites): (1) – Tigirekskaya, (2) - Central Altai, (3) – Teletskaya, (4) – Gornaya Shoriya, (5) – Western Sayan (Zapadnyie Sayany), (6) - Todjinsko-Sengilenskaya. A detailed description of each project site is presented below in Table 2.

These project sites represent different types of landscapes as well as the most biologically significant habitat in the Ecoregion. While, broadly speaking, there are some common factors among project sites, each one possesses unique characteristics and is faced with a diverse array of threats. The six project sites thus encompass a representative sampling of the conditions found in the ecoregion and will allow for the demonstration of an array of different practices and approaches. The sites were chosen on the basis of the following considerations:

- Each one of the sites harbors different, representative, globally significant biomes, species assemblages, and landscapes of the Altai-Sayan Mountain Ecoregion: 1) alpine tundra 2) sub-alpine meadows 3) boreal coniferous and temperate deciduous forests; 4) freshwater lake ecosystems; 5) deserts.
- To maximize the demonstration value and replicability of the project's results, the participation of different institutional and social bodies, as well as implementation of a variety of management practices and regimes, was a priority consideration.
- Two project sites (Central Altai and Teletskaya) were listed by UNESCO under the "Golden Mountains of Altai Natural World Heritage Site" designation in 1998.
- Between them, the sites incorporate 9 nature sanctuaries, 4 reserves, 3 biosphere reserves and 2 nature parks covering IUCN classifications I, IV and V
- The sites include transboundary areas and varying socio-economic spheres in the ecoregion.

The following is a description of the target sites.

Table 2: Description of the project sites

Project site	Description	Protected species and landscapes
Tigirekskaya (1)	Existing PAs: • State Nature Reserve Tigireksky (IUCN category I); • Gilevsky, Chinetinsky and Charyshsky sanctuaries (IUCN category IV). Project site covers Charyshsky, Zmeinogorsky, Krasnoschekovsky and Kurjisky municipalities of Altai Krai and	Unique landscape and biological diversity of mountains and highlands of Western Altai, flood plain associations of the river of Aley, highland lakes. Montane taiga, unique stands of cedar pine. Rare plant species: Osmorhiza aristata, Asarum europaeum, Daphne mesereum, Campanula latifolia, Polistichum braunii, P. lonchitis, Rhodiola rosea, Rhaponticum carthamoides, etc. Rare animal species: blue nightingale Luscinia cyane, Tarsiger cyanurus, black stork, spotted eagle Aquila clanga, black vulture, etc. Migration corridors of roe and seasonal passes of brown bear.

	is located on the border with Altai Republic of Russia and Kazakhstan	Unique nature and historic complexes: the waterfalls of Gumboldt, Egersky on the Inya River, Shangina and Kolyvansky on Korgon river, Chertov Most (Devil's Bridge) site, etc.
Central Altai (2)	Existing PA: • State Biosphere Reserve Katunsky (IUCN I); • Kosh-Agachsky sanctuary (IUCN IV); • Regional Nature-park "Uch-Enmeg" (IUCN V) • Regional Nature park "Argut" • Regional Nature-Economy park "Chuy-Oozy" (IUCN V) • Regional Nature Park "Belukha" (IUCN V) It is situated on the border with Kazakhstan, Mongolia and China.	Nature complexes of the Central Altai: Belukha Mountain and Ukok Quiet Zone (UNESCO World Heritage Site), Chike-Taman pass, Tekeliu waterfall, Kucherlinskoe and Akkemskoe Lakes, Bol'shoy Yalomansky spring, etc. Rare animals: snow leopard, Altai mountain sheep argali, manul *Felis manul*, Altai snowcock, saker falcon, fisk hawk, golden eagle *Aquila chrysaetus*, steppe harrier *Circus macrourus*, *Carpodacus rubicilla*, peregrine falcon *Falco peregrinus*, black vulture *Aegypius monachus*, steppe eagle *Aquila rapax*, long-legged buzzard *Buteo hemilasius*, great snipe, gray crane *Grus grus*, demoiselle crane *Anthropoides virgo*, pearl finch *Leucosticte brandti*, etc.
Teletskaya (3)	Existing PAs: • State Nature Reserve Altaisky; • State Nature Reserve Khakassky: cluster Khol-Bogaz; Lake of Ulukh-Kol'; Kamyziakskaya steppe; Oglakhty, Maly Abakan, Zaimka Lykovykh (Lykovs' Place); • State Biosphere Reserve Uvs-Nuur Depression: biosphere polygons Kara-Khol' All three: IUCN category I Project site is located on the borders between Tuva, Khakasiya and Altai Republics	**Altai Republic:** Significant water source and diverse landscapes, from low mountain taiga to alpine highlands in north- and south-eastern Altai. Lake Teletskoye – part of the **UNESCO World Heritage** site "Golden Mountains of Altai" Rare plant species: *Erythronium sibiricum, Tulotis fuscescens, Isoetes lacustris, Astragalus tschuensis, Delphinium ukokense, Potentilla kryloviana, Arnica iljinii, Rhodiola algida*, etc. Rare animals: snow leopard *Uncia uncia*, caribou deer *Rangifer tarandus*, Altai mountain sheep argali *Ovis ammon ammon*, vespertilionid bat *Murina leucogaster*, saker falcon *Falco cherrug*, Altai snowcock *Tetraogallus altaicus*, etc. **Khakasiya Republic:** Larch stands of park type, birch forests and steppe bush brushwoods are habitats of rare and endemic plant species; thin sod and meadow-type steppe. Rare animal species: saker falcon, the eagle *Aquila heliaca*, steppe eagle, golden eagle, demoiselle crane, fish hawk, and more rarely observed black stork, very rare white-tailed eagle, black vulture, and snow leopard. Sometimes muskdeer, Siberian stag and sable can be seen. Altai mountain sheep argali and Siberian ibex penetrate the territory sometimes. Population of avocets largest in Middle Siberia has been registered at the lake of Ulukh-Kol'. Bird migration rest sites. **Tuva Republic:** Unique landscapes, archaeological sites. Rare and endangered species of animals: snow leopard, argali, wild caribou deer, Mongolian marmot *Marmota sibirica*, (more than 70 rare animal and plant species in total). Migrating birds mass at concentration sites.
Gornaya Shoriya (4)	Existing PAs: • National Nature Park	Unique nature landscapes of Mountainous Shorya of high conservation level. Large typical areas of mountain taiga dominated by cedar pine and fir with numerous relic

	Shorsky; • Lipovyj Ostrov (Lime tree island) sanctuary Areas of traditional nature use of Shortsy people. Project site is located in the south of Kemerovo oblast (Tashtagol'sky municipality)	species present in grass covering. A large stand of Siberian lime with an association of tertiary flora relict species like Asarum europaeum, Galium odoratum, Alfredia cernua, Festuca altissima, O. gigantea, Sanicula europaea, etc. More than 20 rare and endangered species have been registered within the park area, including Erythronium sibiricum, Cypripedium macranthon, C. calceolus, Rhodiola rosea, etc. Game animals (primarily sable) and their habitats. Bird species like black stork, golden eagle, peregrine falcon, fish hawk are included in the Red Book of Russian Federation
Western Sayany (5)	Existing PAs: • Sayano-Shushensky State Biosphere Reserve (IUCN I); • Kebezhsky sanctuary (IUCN IV); • Bol'shaya (large) Pashkina sanctuary; • Shushensky Bor (pine stand) Federal Nature park; • Eerbeksky Sanctuary; • Taiga Sanctuary. The project site is located on the border between Krasnoyarsk krai and Tuva Republic.	**Krasnoyarsk krai:** Especially valuable associations of montane taiga with relict, rare and endangered species. Unique highly productive stands of cedar pine and associated rare and relict animal and plant species. Rare animal species: snow leopard, Siberian ibex, caribou deer, golden eagle, peregrine falcon, saker falcon, white-tailed eagle Haliaeetus albicilla, black stork, fish hawk and other animal species. Migration corridors and sites of roe mass fawning. The only place of group nesting of taiga bean goose Anser fabalis. Unique wetlands. Different plant species: Bupleurum martjanovii, Dendranthema sinuatum, Erythronium sibiricum, Fritillaria dagana, Neottianthe cucullata, *etc*. **Tuva Republic:** Habitats of game animal species: Siberian stag, roe, muskdeer, boar Sus scrofa. Ungulate winter concentration and fawning sites. Natural associations of the Eerbek River basin. Visits of snow leopard female with two cubs were registered twice in 1987 and 1990 in the area of the sanctuary.
Todjinsko-Sengilenskaya (6)	Existing PAs: • State nature reserve of Azas; • Ush-Beldirsky sanctuary Project site is located within the following municipalities in Tuva Republic: eastern part of Todzhinsky municipality, Kaa-Khemsky, Kyzylsky and Erzinsky municipalities	Montane taiga, tundra and alpine landscapes. Rare animal species: shrew *Sorex minutissimus*, bats Myotis *brandti and Plecotus auritus*, vole *Alticola macrotis*, wild dog *Cuon alpinus*, Asian beaver Castor fiber (a Tuvinian subspecies) and snow leopard. Birds: spoonbill *Platalea leucorodia*, black stork, montane goose, fish hawk, golden eagle, saker falcon and white-tailed eagle. Reptiles: whip snake *Elaphe dione*. Fish: Sayan lake whitefish *Coregonus lavaretus sajanensis* and Sayan large-toothed grayling *Thymallus* arcticus dentatus (Tuva endemic subspecies), taimen *Hucho taimen*.

Administrative context:

The Russian part of the Altai-Sayan Ecoregion is divided administratively into six regions, or subjects of federation. They are Krasnoyarsky and Altaisky krai, Republics of Tuva, Altai and Khakasiya, and Kemerovskaya oblast'. Two more administrative regions of Russia – Republic of Buryatia and Irkutsk Oblast – partially overlap with the eastern part of the Altai-Sayan Ecoregion; however, no project sites were identified in those regions. According to national legislation, republics have higher status than other administrative regions. For instance, they may introduce a second official language, set up their own system of regional government, independently participate in international agreements, etc. Each of the six regions also has its own administrative-territorial

division, made up of local municipalities. Local self-government is carried out within the borders of administrative-territorial units; it is independent of the federal and regional governments.

Socio-economic Context:
The population of the Altai-Sayan Ecoregion is about 5 million people. It is comprised of a majority of Russians and a mix of other ethnic groups, including several groups of indigenous peoples. Most of the population is concentrated in big industrial centers and towns, which are 31 in total, with average population density 1500-2000 individuals/km^2. The largest urban centers are Krasnoyarsk, Novokuznetsk, and Kemerovo. Rural population equals 27%. The average rural population density is 2.4 individuals/km^2. The rural territories of the Tuva Republic and Altai Republic are the least densely populated, averaging 1 individual/km^2. The population is widely dispersed among villages and small settlements throughout the region. However, human settlements are distributed in a rather non-uniform manner, being concentrated in depressions between mountain ranges and in the valleys of major rivers. As in other parts of the Russian Federation, the demographic trends demonstrate a reduction in birth rates and an increase in death rates. With the exception of the Tuva Republic, the population is slowly decreasing throughout the region.

Official unemployment figures range from 1.4% in Altaisky Krai to 11.6% in the Tuva Republic. In certain indigenous villages, unemployment rates reach 95%. Average salaried income in the Ecoregion varies from 1,095 rubles per month (US$ 35) in the Tuva Republic to 2,203 rubles per month (US$ 71) in the Kemerovo oblast. Moreover, the income gap between the rural and urban population is very high in the Ecoregion. For example, the rural population in the Altai Republic has two times less income (sometimes even lower) than the people living in the region's urban areas.

Indigenous people: The Altai-Sayan Ecoregion is not only unique because of its diverse biological resources, but also for its varied ethnic and cultural heritage. There are several indigenous groups that live in the Ecoregion possessing traditional knowledge regarding natural resource management. Indigenous peoples number approximately 350,000. The Khakasian, Tuva, and Altai have relatively large populations in the region. The Tuva comprise the largest indigenous group in the ASE, and with a population of 208,600 in 2000, they represent the majority of the population of the Tuva Republic. In contrast, there are only 50,000 (25% of total population) Altai in the Republic of Altai, and 63,000 (11%) Khakasians in the Republic of Khakasia. The Telengite, Tubalar, Kumandine, Chelkan, and the Altai ethnic "cluster" of Shortsy, Teleut, Todzha Tuva, and others are smaller in number but contribute to the rich cultural diversity of the Ecoregion. Approximately 46,000 people belong to this "cluster", accounting for less than 1 % of the total population of their regions.

In general, social and economic conditions of indigenous people are worse than the average in the ASE with unemployment among indigenous peoples being 1.5 to 2 times the average in the region. In some settlements it reaches 95%. Under the dire economic conditions in the region, and in the absence of alternative sources of livelihood, many have turned to the unsustainable exploitation of natural resources. This has taken the form of subsistence gathering and hunting as well as participation in black market exchanges for valuable resources, most notably furs (sable and mink), but also economically valuable nuts and berries. This set of circumstances has also had a negative effect on cultural traditions.

The Altai-Sayan Ecoregion is mostly rural. Mining, agriculture, forestry, and hunting are the mainstays of the rural economy. However, the Ecoregion is surrounded by major Siberian industrial areas, such as the Kemerovo coal basin, the Krasnoyarsk aluminum and metallurgy centers, etc. Livestock production is a very important element of the rural economy and sheep, goats, cattle, yaks and horses are crucial. A number of places are used as seasonal settlements by herders. Maral deer, whose antlers are considered to have aphrodisiac properties, and camels, are bred on a few farms. In

remote areas, the horse is the main means of transport. Agriculture is also an important economic activity. The area (in particular, the Altai kray) ranks highest in Russia in terms of per capita grain, meat and milk production. Most of the population is engaged in subsistence agriculture and only limited amounts of products are traded as commercial goods. Only 6.9% of total agriculture products were traded in 2001.

Like many other parts of the Russian Federation, the Altai-Sayan Ecoregion has not been spared the effects of the country's recent economic downturn and the associated social hardships experienced during the past decade. In fact, the Altai-Sayan region is worse off than the Russian Federation average in terms of availability of social infrastructure, life expectancy, income, employment and other indicators. The Republics of Altai and Tuva, adjacent to Mongolia, Kazakhstan and China, are among the poorest administrative regions of the Russian Federation, and are heavily subsidized by the federal government. Marginal areas situated close to political borders are the poorest, representing a well-known phenomenon of "double marginalization" of mountain territories. For instance, the Tuva Republic ranks the lowest in Russia according to its Human Development Index (0,633) on a par with such countries as Nicaragua or Honduras. The depressed socio-economic conditions in turn have translated into greater pressure applied on the region's natural resources.

Cultural and Historical Context:
The Altai-Sayan Ecoregion is often viewed as a "cradle of civilization" - it is from here the Turkish people originated and spread to the West thousands of years ago. It is therefore extremely rich in various archeological and historical monuments, such as stone and cave paintings, antique burial mounds, menhirs and steles. One of the oldest sites, the Malaya Siya site in Khakassia, dates back to 35,000 BC. A global sensation of the mid 90s was the discovery of several Pazyryk (VI-III century BC) and Ukok Plateau burial complexes preserved in permafrost in the Altai Mountains. Genetic studies proved that genotypes of the bodies unearthed there of a warrior and a woman, the so-called "Scythian princess", are European, close to a modern northern people, the Selkups. This finding is of particular importance for understanding and reconstruction of the ethnic and cultural genesis of human populations in Western Siberia and the whole of Eurasia.

Although some precious sites were submerged by artificial lakes or were otherwise destroyed or damaged over the centuries, the historical heritage is relatively well preserved in the region. In those parts of the Altai-Sayan Ecoregion, which were at the center of rich cultures in the past, historical monuments are integrated into the natural landscape in a way that forms a harmonic, inseparable unity. The presence of such cultural sites and their need for protection must be taken into account by the ASE's conservation initiatives. Religious diversity is also one of the important characteristics of the Altai-Sayan Ecoregion. Representatives of three world religions, Christianity, Islam, and Buddhism, and the spiritual beliefs of indigenous tribes have coexisted in the Ecoregion for hundreds of years.

Legal and Policy Context:
The legal and policy context for environmental protection is determined by Russia's Constitution, adopted in 1992. Article 72 of the Constitution provides for shared responsibility of the federal and regional authorities in the following areas:

- natural resource use; environmental protection and ecological safety; management of nature protected areas;
- development of forest, water and land use legislation, legislation on underground resources and environmental protection.

In the ASE, there is a large volume of legislation comprised of federal, as well as derived legislation of the six subjects of the Russian Federation. In turn, the regional level legislation is varied in terms

of its comprehensiveness, deficiencies, and implementation, among other factors. Thus, the existing extensive legislative and regulatory framework for environmental management, resource development and nature conservation is based on numerous federal laws and corresponding laws of the Russian Federation's subjects. Federal laws provide the basis for the development of federal regulations, and also regulatory documents of specific agencies charged with their implementation. They also provide for the development of regional level legislation, provided that it is consistent with the parent federal legislation

In the past year, a number of federal codes and pieces of legislation were adopted that require the re-assessment of existing regional legislation to ensure its consistency with the federal. These include: Land Code; Tax Code; Budget Law; the law *On Environmental Protection*, the law *On Territories of Traditional Natural Resource Use by Indigenous Minority Peoples of the North, Siberia and Far East of the Russian Federation*, and others. The Government of Russia is currently working on the development of new draft laws "On Underground Resources", Forest and Water Codes and a draft law "On Strictly Protected Areas". Moreover, a Presidential Commission is currently working towards a set of recommendations concerning the assignment of jurisdiction and authority among the federal, regional and local government levels. This situation is being resolved but in the meantime, it is unlikely that there will be any change in regional legislation until uncertainties are clarified at the federal level.

Institutional Context:
Currently, there is an array of federal, regional, and municipal institutions responsible for biodiversity and natural resource use in the Ecoregion. Main federal bodies include:

- Ministry of Natural Resources (broad range of roles and responsibilities regarding control, use and protection of biodiversity, including implementation of CBD and other relevant international treaties);
- Ministry of Economic Development and Trade (development and introduction of economic mechanisms in favor of sustainable use of natural resources and biodiversity conservation; promotion of indigenous people's traditional natural resource management practices; tourism development);
- Ministry of Agriculture (management of hunting reserves);
- Federal Fisheries Committee (management of fish resources);
- Federal Border Service (biological resource protection in border zones);
- Federal Custom Service (control over transportation of biodiversity resources, including CITES species, across Russian borders);
- Ministry of Interior (environmental crimes, i.e., poaching outside PAs), etc.

Some of these are mirrored at the regional level by regional departments. For example, all six subjects of the Russian Federation in the region have regional organs of the Ministry of Natural Resources - Department of Natural Resources Management and Protection of Environment (GUPR).

At the regional level, executive and legislative organs within their organizational structures can establish separate bodies with a special mandate in those areas where according to the Constitution the federal level shares authority with the regional level. For instance, the Protected Areas Directorate, established under the Krasnoyarsk krai Administration, is responsible for management of natural protected areas at the regional level. Another example is the Committee on Ecology and Natural Resource Use under the Legislative Council of the Khakasiya Republic. The Committee's primary goal is development of an appropriate regional legislative base to promote environmental protection and sustainable natural resource exploitation in the Khakasiya Republic.

The municipal level in general in Russia and in the ASE in particular is still fairly under-developed. Capacities of local governments to manage and use biological resources are quite limited due to uncertainties about division of authority between federal, regional and local levels, financial constraints, and lack of knowledge and skills in this area at the local level. However, reform of local self-governance now under implementation by the Russian Government, creates opportunities for deeper involvement of local municipal authorities in natural resource management, and lays the basis for broader community participation in this process.

NGOs:
A growing number of regional, local and international NGOs and community-based organizations are participating in conservation related initiatives in the ASE. The number of NGOs has increased in recent years, representing a variety of groups located in all six subjects of the Russian Federation. Currently, there are approximately 25 regional NGOs concerned with protected areas, biodiversity conservation, biodiversity monitoring, sustainable forestry and forest certification, ecotourism, and biodiversity awareness raising. Membership in the NGOs is varied, from several individuals to considerably greater numbers. While the amount of financing available to NGOs is relatively small, at less than US$ 200,000 per year for all of them, they are active, growing and becoming more influential in the ASE.

2 b ii. PROGRAMMATIC BASELINE FOR PROJECT ACTIVITIES

BASELINE SITUATION / THREATS

Although the Altai-Sayan Ecoregion's significant number of protected areas provides an important backbone for conservation of important species and habitats, their efficacy is challenged by budgetary constraints, weak management and enforcement capacities, and PA-centered approaches to species and habitat conservation, among other factors. The current PA "system" also does not adequately cover all areas of high biological diversity requiring protection. While this was not considered to be significantly problematic in the past, given the ASE's relative remoteness, it is expected that the area's enormous resources will draw growing numbers of investors from both the public and private sectors. This investment, if done in a business-as-usual manner, will increasingly pose threats to the Ecoregion's biodiversity beyond those currently existing. The majority of identified threats - illegal hunting, uncontrolled tourism, overgrazing, forest cutting, mining and infrastructure development - take place throughout the ASE in greater or lesser intensities, and the current overall effect on biodiversity tends to be relatively low. These activities can be seriously harmful to long-term conservation of the ASE's biodiversity when they occur in buffer zones of existing PAs, in currently unprotected areas with high biodiversity indices and in areas where new PAs are proposed for establishment. The situation is more complicated in the case of newly established regional PAs, as some of them exist only on paper. Their legal status and boundaries are often not clearly defined, and local populations and the general public are almost unaware of their existence. The result is that a number of the activities that pose threats to biodiversity are being observed directly within the borders of some protected areas (see Table 3 for site specific threats in project areas and Annexes 2 E ii – vi for maps of threats).

The following is a summary of the principal existing and foreseeable threats – in relative order of importance - to the ASE's biodiversity and an extrapolation of the "business as usual scenario".

Poaching and Illegal Trade in Endangered Species:
Poaching and the illegal trade in rare and endangered species is a very serious regional and transboundary issue that is observed at all project sites, both within and outside protected areas, because the existing PA system does not adequately protect key habitat, including migratory routes

of rare and endangered species. Due to dire economic conditions and weakened management and control systems, local people have turned in greater numbers to poaching to meet subsistence needs as well as for economic gain. This is resulting in the rapid decrease of rare species populations, which can result in genetic isolation and ultimately population inviability. For instance, it is estimated that 15 to 20 individuals (approximately 10% of the known Russian population) of Snow leopard may be illegally killed each year.

It is estimated that 70 percent of endangered species trade to Europe from Asia now passes through Central Asia. There is a demand for snow leopards' bones as a substitute for tiger bones in traditional Chinese medicine. Response to these growing threats - the capacity to control and eliminate these illegal activities - is extremely weak in the region. For example, in the Republic of Tuva, there are no inspectors responsible for patrolling areas that are prime habitat for snow leopard, Argali sheep and other rare species. This project does not purport to be able to completely remove this threat as the root causes are complex and deeply rooted in the poverty and underdevelopment of specific sectors in "supply" countries and the large-scale use of traditional medicine in "demand" countries. It aims to alleviate it over the short-term by providing specific incentives to local people to avoid poaching i.e., strengthening enforcement capacity and providing economic alternatives to local populations to decrease their participation in these activities as a way of supporting themselves and their families.

The WWF-Russia Programme Office and WWF Netherlands have worked with authorities in the Russian, Kazakhstan and Mongolian Altai-Sayan Ecoregion to develop a US$ 1.2 million initiative to play a key supportive role in conserving the Altai-Sayan Mountain Ecoregion. The objective of this initiative is to carry out species conservation programs for the snow leopard and Argali sheep populations of the Altai-Sayan Ecoregion, create a network of protected areas (Econet), establish an ecological monitoring network for the region, and build up the necessary social, legal and economic conditions for long-term sustainable development.

The WWF initiative will co-finance the full project proposed here, in particular, with activities related to conservation of ASE "flagship" species and development of an Econet system. Local authorities have noted the need to create better anti-poaching mechanisms to protect endangered species. Based on the agreement signed in August 1998 by the authorities of the Republics of Altai, Khakasia, and Tuva aimed at strengthening inter-regional environmental cooperation, WWF will support the elaboration of a rationalized regional interagency system for patrolling in the three Republics. It will analyze current patrolling practices, develop an alternative model to optimize utilization of resources, assist in the drafting of needed legal documents, and promote the adoption of modified patrolling structures. Experience gained in addressing this threat will be used to design further activities in an ongoing program to find durable solutions to this problem.

Uncontrolled tourism:

This is a rapidly growing threat, mainly in the Altai Republic, and if not carefully addressed would also represent a lost opportunity to link economic development directly with biodiversity conservation. The recreational value of the Altai Republic has recently been re-discovered by many Russian tourists (residents of neighboring industrially developed Siberian regions – Novosibirsk, Tomsk and Kemerovo oblasts, and Altaisky krai). The numbers of tourists visiting the Altai Republic during the short summer period has increased dramatically in the last three years. According to the Ministry of Tourism of the Altai Republic, in 2002, 450,000 people visited the Republic, two times more than its entire population (200,000 people). The majority of Russian tourists camp along the Katun River and near Lake Teletskoye (part of the UNESCO World Heritage Site). This unorganized and uncontrolled tourism is resulting in growing significant habitat disturbance, increased frequency of forest fires, accumulation of garbage and waste on the banks of

rivers and lakes, and uncontrolled development of accommodations and other tourism infrastructures. These threats are particularly prevalent in areas of high biodiversity value and especially those that are being proposed as future protected areas. More specifically these are unprotected areas around Teletskoye Lake and the Ukok Plateau, and territories of the recently established regional nature parks of Katun, Uch-Enmek and Mountain Belukha (Project sites 2 and 3).

Tourism impacts are not as significant in other parts of the region due to their relative remoteness and near absence of appropriate infrastructure. However, other project sites in the Khakasiya Republic, Krasnoyarsky krai and Kemerovo oblast have also begun to face similar problems associated with growing tourism, namely areas surrounding the Federal Nature Parks of Shorsky and Shushensky Bor, and Khakassky and Sayano-Shushensky State Reserves (Project sites 3, 4, 5). Efforts are now underway to develop tourism activities inside protected areas and their buffer zones (where it is allowed by legislation) in order to raise additional revenue for under-financed PA budgets. But due to current deficient capacities and absence of adequate infrastructure, these efforts may only accelerate pressures on biodiversity in the PAs. It is therefore very important to lay the ground for sustainable tourism development in the future and promote partnerships between major stakeholders, such as tourist business, local population and nature protection authorities, for the organization and management of tourist activities. As living standards of the population of adjacent industrially developed regions rise, the pressures from unplanned and uncontrolled tourism are likely to continue to increase, thereby exerting greater threats to biodiversity in key areas. Infrastructure ensuring sustainable biodiversity-friendly tourism development has not been created. Development of tourism and organization of tourist activities in the region is actually uncontrolled by local and regional administrative bodies. Local communities and PA management teams remain for the most part uninvolved in tourism development.

Tourist activities, including hiking, whitewater rafting, biking and camping, are organized by international and national tourist agencies, which have little linkage with protected area management teams or local communities in the region. There are now several pilot initiatives underway in this area. For instance, the "Sayan Ring" tourist company, the largest tourist operator in the Western Sayan region is currently implementing a large-scale tourism development project in the Sayan Mountains (Tuva and Khakasiya Republics, and Krasnoyarsky krai). The goal of the project is to develop a number of commercially viable tourism products meeting growing demands in natural and cultural tourism from both independent and organized travelers. For this purpose, the Sayan-Ring established a network of local enterprises (currently more than 50) involved or willing to be involved in tourism business, including home-stays, small scale accommodations, camping sites (including yurt camps), catering and provision of guides and other recreational services. Substantial investments (about US$ 7 million) will be made in building tourism infrastructure along the so-called "Sayan Ring" tourist route, creating employment opportunities for local residents, and supporting development of local tourism products (e.g. handicrafts, traditional cuisine enterprises, folklore, cultural, and archaeological exhibitions, etc.).

This initiative is also working closely with three protected areas (Sayano-Shushensky Nature Reserve, Khakassky Nature Reserve and Uvsunurskaya Kotlovika Nature Reserve – all located in project site 5 "Western Sayan") in order to use the PAs' natural and human resource potential in provision of tourism services. For this purpose the Sayan-Ring private tourist company will help to build necessary tourism infrastructure in the territories adjacent to PAs and will coordinate its programme with PA authorities.

Regional authorities place high priority on the development of tourism as a sustainable development option for the region's economy, especially for depressed rural areas. The administration of

Kranoyarsky krai has recently joined the above-partnership officially, committing to allocate more than US$ 2 million over the period of 6 years to support development of small and medium-scale tourism enterprises and job creation among the rural population of the Sayan Ring area. On a pilot basis, the project will support activities within the framework of the Sayan Ring partnership, in particular with respect to strengthening PA capacities for tourism management (see Activity 1.5) and helping local communities to benefit from tourism (see Activity 6.1). To this end the project will also seek to disseminate best practices and knowledge from demonstration projects to other areas in the ASE (see activity 6. 4).

In the Altai Republic, the Government, with support from a local UNDP/Capacity 21 project, developed a Tourism Development Program for 2002-2006. It is targeted towards priority development in the following directions: creation of a system of regional nature parks as a tool for conservation of the environment; demarcation of different territorial zones, local community involvement in the development of tourist activities and infrastructure; development of "green tourism". The project will help regional and municipal authorities to assess the potential for tourism development in the region and implement the Tourism Development Program in the sense of creation of a biodiversity-friendly infrastructure. To achieve this goal, zoning of the most vulnerable territories will be made, development of territories will be substantiated from technical and economic viewpoints, and plans for tourism will be realized, based on technical and economic analysis and seminars with stakeholders. Pilot projects in this field will be funded building on the results of UNDP/Capacity 21 project in this area, i.e. establishment of the ethno-cultural nature park "Uch-Enmek" and the center of traditional crafts in the Onguday municipality of the Altai Republic.

Overgrazing by Livestock:

Grazing management in Russia is still poorly developed. There have never been any specific regulations developed providing for the maximum allowable number of livestock for various ecosystems. Traditional systems in the Altai relied upon seasonal migrations of herders with their livestock, which, coupled with low human population density, ensured sustainable use of pastures. In the Soviet era, however, nomadic herders were forced to break with traditional lifestyles and settle in communities, a factor leading to both under-exploitation of some former pastures and dramatic overgrazing of others. On Soviet collective farms one of the most important success indicators was the number of livestock, with no regard to carrying capacities of pastures or real meat production. This practice resulted in the growth of the number of livestock accompanied by a lowering of the average weight per unit (animal). While this did not result in an overall decrease in meat production, it did lead to a significant deterioration of pastures due to the increase in animals.

Overgrazing was also caused by severe limits on the number of private livestock set by the authorities in the Soviet period. In traditional livestock breeding communities this led to hiding private livestock and thus to an underestimation of pressures on pastures. Both practices are now being transformed into more rational ones, although many traditional pastoral management practices have been lost.

Currently, overgrazing by livestock (excessive feeding and trampling by cattle) is one of the major threats in the Tuva and Khakasiya Republics, and potentially in the Altai Republic. In the Tuva and Khakasiya Republics the remaining herds are no longer moved between pastures. Despite a significant decrease in the number of cattle in the last 5-6 years, this non-traditional sedentary grazing practice has led to a rapid increase in overgrazing, erosion and loss of productivity. In the Tuva Republic, PDF B research estimates 10% (325,200 ha) of grasslands in the project sites are degraded, and yet another 50% are exposed to erosion in the areas surrounding PAs (State Nature Reserves "Uvs-Nuur Depression" and "Azas"). The health of the region's grasslands is vital for agriculture and maintaining the region's traditional pastoral lifestyle. And yet overgrazing by sheep,

goats, cattle, yaks and horses has resulted in rapid changes in species composition and allowed inedible and poisonous plants to dominate once productive grasslands. Ultimately, reduced pasture health in the greater landscape places greater pressure on pastures within protected areas, threatening wild species in competition for forage with domestic species.

In the Altai Republic this threat is not particularly acute. However, the increase of herd numbers is part of the republic's current economic development strategy. Should this occur, important wild species would compete with cattle for limited forage. This threat may become especially intense around PAs, in particular the Altaisky State Nature Reserve, and Uch-Enmek and Chuy-Oozy regional nature parks.

Pastoral nomadism is now relatively uncommon. Reliance upon domestic livestock is the norm, although methods of raising livestock are more fodder intensive. The same basic challenges arising from the transition in property rights exists throughout Russia as it does in all other countries in the region. Without targeted assistance from the project, overgrazing is likely to continue.

Deforestation:
Forest fires present a serious and increasing threat to biodiversity with the number of fires averaging over 1,100 annually on a territory of 0.5 million ha over the past fifty years, a more than two-fold increase over the previous fifty years. This threat is particularly significant in the Republics of Altai, Tuva and Khakasia. In Tuva, for example, practically all forests are thought to have been subjected to fire. There are numerous reasons for this increase in fire frequency, including the presence of more people in the forests, carelessness with fire, purposeful burning of forests in order to obtain a license for "salvage" cutting, and the spread of fire from burning for agricultural land clearing.

Commercial logging is not an important industry in the area at present, with logging operations confined primarily to the northern part of the Altai-Sayan Ecoregion Although they do not directly affect PA territory, these limited operations have already led to habitat degradation and fragmentation in buffer areas and potential protected areas. While the forests of the Ecoregion's southern part have remained largely intact on account of their inaccessibility to date, there is now a rapidly increasing demand for this high quality wood, primarily from China. The past two years have witnessed discussions with the Chinese concerning forestry concessions in the Republics of Tuva and Altai. The building of roads for mining will increase accessibility to these forests. According to a WWF estimate, around 13% of timber is harvested illegally in Russia. The extent of illegal cutting strongly depends on market dynamics and the level of management. An important enabler of illegal logging is the existence of roads, as the current economic situation does not permit the construction of new forest roads. As a result, practically all readily accessible forests are over-exploited. This situation will continue in a business-as-usual scenario.

Mining: It is estimated that the region possesses approximately 200 mineral deposits that are exploited or may become so in the next 25 years. The locations of 72 of these coincide with buffer zones of existing PAs and locations of proposed new PAs, occupying 2% of their territory. In the case of further mineral deposit development this figure may rise to 6% by 2025. This threat is particularly serious in areas possessing both high biodiversity values and mineral deposits, which currently hold no special protection status, such as, for instance, the Ukok Plateau, and may therefore be exploited in the future in the business-as-usual scenario. This threat is particularly acute in the northern part of the Altai-Sayan Ecoregion, in Kemerovo oblast (coal, ore, bauxite, lead and zinc deposits), Khakasiya Republic, and neighboring areas of the Krasnoyarsky krai (coal, ore and gold deposits).

Mining has increased dramatically over the past few years at an annual rate of over 20 percent, with

gold as the mineral exploited most recently. The utilization of traditional domestic technology, including the use of banned mercury, has resulted in the poisoning of fish in freshwater streams by hundreds of small-scale gold mines. With plans for the development of infrastructure such as roads and a railway, mining and its direct and indirect impacts on biodiversity will increase in the future.

Given the number of identified mineral deposits in the Ecoregion and the growing rate of their exploitation, there is an urgent need to mainstream biodiversity considerations into decisions concerning the further development of mining activity in the region. In a business-as-usual scenario, there is no assurance that this will occur. The project, therefore, will support a range of activities (see Activity 5.3) through which biodiversity conservation will be factored into land use decisions.

Resource development and transport:
Natural resource exploitation also brings with it the building of new infrastructure to transport resources to market. Roads have been built or are planned through the region, opening up areas to logging, hunting and other development, potentially exacerbating the threats to biodiversity. A road from Kazakhstan to Russia is being constructed through the western Altai zapovednik (Tigireksky). Access to this remote area poses a very serious threat to one of Russia's most remote virgin forest ecosystems. Another road is going to connect, in 2004, the area of Teletskoye Lake (the unprotected part) with the industrially developed Kemerovo oblast', thus opening access to even larger numbers of tourists, as well as facilitating transportation of wood and mineral resources from the Altai Republic. The development of hydroelectric power plants poses another threat to biodiversity in the region. Several dam proposals exist, but they have not been realized due to lack of investor interest. Although local NGOs have prevented a couple of biodiversity-damaging proposals, the situation is still fluid due to the lack of a long-term sustainable development and conservation strategy for the ASE region as a whole.

BASELINE SITUATION/ROOT CAUSES

The root causes of the threats identified during the PDF B stage are summarized below. Results of the threat/root causes analysis are summarized in Annex 2 A ii.

1) The protected area system, as currently constituted and operated, is ineffective in conserving biodiversity of the ASE
The Federal Law on Protected Nature Areas establishes four categories of PAs: 1) State Nature Reserves (*zapovedniks*), including UNESCO biosphere reserves - IUCN category I; 2) national parks and sanctuaries (*zakazniks*) - IUCN category II or IV; 3) natural monuments – IUCN category III; and 4) regional nature and ethnic parks – IUCN category V. Currently, there are 288 protected areas of various categories in the Russian Federation portion of the Ecoregion. These comprise 6.3 million ha. or approximately 10% of the ASE's territory. While the total number and area of the protected areas is impressive, their management is weak. Overall, protected areas face financial, staff and technological limitations. Prior uncoordinated establishment and management, as well as lack of habitat connectivity compromise their ecological functionality. The WWF through its Ecological Networks programme (Econet) has conducted an analysis of ecological corridors as part of a system to link adjacent fragments of biologically important landscapes to core protected areas. Their design calls for the establishment of 123 protected areas or restricted land use regimes to cover 12.7 million hectares, which in addition to existing protected areas will represent 23% of the ecoregion.

Currently there still remain many areas of high biodiversity value in the region, including in transboundary locations that are not currently protected but are threatened to varying degrees. For instance, several parts of the UNESCO World Natural Heritage site "Golden Mountains of Altai",

i.e. Teletskoye Lake and the Ukok Plateau, still lack protection status, though they represent globally significant biodiversity values.

In this regard, the governments of Kazakhstan, Mongolia, Russia and China are now in the process of establishing a transboundary biosphere reserve "Central Altai" around the Ukok Plateau. The Altai Republic has also recently approved its regional "Econet" strategy, which provides for establishment of a number of regional protected areas, including the regional nature park "Golden Lake Teletskoye" to protect the lake's unique ecosystem and control the growing tourism industry in this area. Plans to establish new protected areas exist also in other regions: Altaisky krai intends to establish a regional PA to protect its remaining relict pine forests, Kemerovo oblast' plans to create a network of regional PAs, including areas of traditional natural resource use by the indigenous Shortsy people. In the Tuva Republic there is an urgent need to establish new protected areas and/or extend existing ones to allow for protection of the Snow leopard's territorial roaming routes, including those on the border with Mongolia.

PAs are divided into two groups, federal and regional PAs, depending on their management authority.

Federal PAs: Federal protected areas comprise Federal Nature Reserves (zapovedniks) and National Parks. The Ministry of Natural Resources (Directorate of Strictly Protected Nature Areas and Biodiversity Conservation) manages them through its regional departments (GUPR) in the different subjects of the Russian Federation. There are nine zapovedniks (IUCN Category I) and two national parks (IUCN Category II) in the Ecoregion.

A very significant decrease in financial resources from federal government to the protected areas has seriously hampered the effectiveness of their management. Staff numbers have decreased and programmes have had to be terminated. Enforcement capacity has been markedly reduced. The effects of this massive under-financing, representing nearly a 90% reduction from former levels and which has been continuing for a number of years, are pervasive and extremely serious. As a result, infrastructure in the protected areas is crumbling, essential operations such as enforcement and research have had to be drastically curtailed or eliminated, qualified expertise is leaving, and it is increasingly difficult to attract and retain new personnel. The sum total of these pressures is that the protected areas are extremely hard pressed to effectively fulfill their most basic mandated obligations.

Regional PAs: Regional Protected Areas include the regional nature parks, zakazniks or resource management reserves, natural monuments, sanctuaries, arboreta and botanical gardens, and other types of public parks and gardens. They are managed and financed by the regional governments. Altai Republic was the first in the Ecoregion to adopt the Law on Regional Protected Areas and to introduce the concept of regional Nature Park, which, according to IUCN terminology, can be interpreted as protected landscape. As well as aiming at other traditional management objectives of protected areas, it is oriented to maintaining traditional ways of life and nature use practices, and thus to promoting integration of rural development and nature conservation. Currently, there are five regional nature parks in the Altai Republic, and there are plans to establish three new areas. Since most of the PAs are relatively new (the oldest one, Belukha Nature Park, was established in 1998) they depend on scarce deficit budgeting of the Altai Republic. Their management, technical and financial capacities remain extremely low, even compared with federal PAs.

With limited capacity and little support provided by the government the PAs currently depend on outside funding, mostly from WWF and other donor organizations. WWF will continue implementation of the project "Ensuring Long Term Conservation of the Altai-Sayan Ecoregion",

aimed at the introduction of a system of protected areas in the Ecoregion, called an ecological network or "Econet". This initiative will also include a review of existing national and regional legal legislation on protected areas and biodiversity to determine if new legislation should be drafted to create the Econet. Three of the six regions of the ASE have already officially endorsed their regional "Econets". They are: Republic of Altai, Altaisky krai, and Kemerovo oblast.

Low awareness or understanding of the values, legal restrictions or potential benefits of PAs by local communities:
Most PAs in the Altai-Sayan Ecoregion were established with minimal involvement of local people. There is very little cooperation between local communities and PA administrations, which means that PAs suffer the adverse effects of overgrazing, poaching and uncontrolled extractive activities. Rangers with poor equipment and little salary have little incentive to enforce laws and regulations at the cost of being a social outcast in a remote rural area. Moreover, people living in or around PAs may be aware of the existence of protected areas, but often know little or nothing about their meaning and significance let alone the benefits that PA can provide for their livelihoods. With this perspective, local stakeholders continue the exploitation of natural resources such as grazing, forest cutting, hunting and collection of NTFP with little appreciation of carrying capacity and sustainable off-take limits.

The UNDP Local Agenda 21 Programme cooperated with the management of three regional nature parks (Uch-Enmek, Chuy-Ozy, and Argut) in Altai Republic to promote participatory approaches to PA management. The project worked with local government, park management, local NGOs and business to develop a concept of collaborative management of nature parks among all users and stakeholder groups. Some pilot initiatives were launched to demonstrate practically how local people could be involved in PA activities, for instance, establishment of a handicrafts production center, construction of tourist facilities, and others.

2) Institutions at all levels lack specific capacities to plan, regulate and manage land and resource use in a biodiversity supportive manner at an ecosystem scale

Deficiencies in legislation, institutions and lack of management and enforcement capacity:
Institutional and legislative deficiencies are limiting the effectiveness of planning, management and use of land and natural resources, including biodiversity. For example, there is a deficiency of regional level legislation for the management and control of hunting and wildlife use. There are also instances of incongruence between federal and regional legislation. Similarly, there is a lack of clarity concerning the distribution of jurisdiction and authority over natural resources. Likewise, there is a lack of coordination between authorities responsible for natural resources, as well as a lack of collaboration among various stakeholders in the region. Ultimately, there are also deficiencies in the actual implementation of existing legislation. Perhaps the greatest deficiency is the lack of certainty arising from the unstable nature of the resource planning and management system at present.

Many laws and policies are outdated and in some instances have not kept pace with the changes in institutional structure. For example, there are contradictory laws that grant joint jurisdiction to the forest service and agricultural agencies. The result of this has been that cattle are brought in by one agency to feed on seedlings planted by another.

Regional land and resource use allocation conducted without balancing biodiversity conservation with economic development interests:
Historically, regional land and resource use allocation has been driven by economic development considerations in the absence of biodiversity conservation requirements. There is no tradition of

land use planning for long-term sustainable development. The development and adoption of a regional land use plan and other environmental management tools that mainstream biodiversity conservation needs into sectoral policy and plans are of paramount importance. The major industries concerned are mining, road construction, tourism, and commercial logging. At the moment, all decisions regarding natural resource use, including exploitation of mineral deposits and road construction, are taken by regional administrations (sometimes subject to approval of the federal government, in cases of national importance). It is then the responsibility of the MNR and its regional departments, the GUPRs, to ensure that these activities do not harm the environment, in particular biodiversity. However, there are a number of institutional barriers that prevent incorporation of biodiversity conservation goals into decision-making processes in Russia in general, and in particular in the ASE. Some of them, namely, low awareness of biodiversity values among regional authorities, absence of readily useful biodiversity information for decision-making, lack of coordination with nature protection agencies in the course of formulation and implementation of sectoral policies and plans, weak economic incentives and low use of environmental management tools, are possible to address at the regional level. Efforts in this direction have been limited so far, and this project thus presents an opportunity to develop and test practical solutions.

Lack of up-to-date and sufficient information on the ASE's biodiversity:
Currently, some essential biodiversity and resource use information is outdated, missing or not readily useful for decision-making. In the absence of up-to-date information, it is hard to tell if over-exploitation of species is occurring. Currently, there is also an absence of a comprehensive multi-level biodiversity-monitoring programme that is ecoregional in scale. Without such a monitoring programme, land and resource allocation and management decisions may not be based upon the most relevant information. Similarly, natural resource data are not shared among agencies, which inevitably leads to management inefficiencies. Likewise, databases and other elements of data management are rudimentary and do not enhance decision-making. Access to information and its quick distribution to decision-makers are also areas requiring improvement. The required expertise to implement these improvements in information management is available within government agencies, research institutes and the NGO community, although some training in new techniques and modern technologies better suited to effective database design and management is needed.

In a "business as usual scenario" ASE-based research institutes would continue to gather biodiversity and natural resource data as their limited funds permit. Some additional species inventories would be conducted and further research on selected species would be undertaken. Key gaps in biodiversity information, however, would remain. Monitoring capacity, effort, and thus relevance of monitoring results to decision-making would progressively decrease, and whatever results remained would not be up-to-date, comprehensive, or necessarily relevant, thereby compromising the value of the information to decision-makers. Some international NGOs would continue working with Russian experts in ongoing studies of selected high profile species.

Inadequate forest management capacity:
Forests in the Russian Federation are federal property and are managed by the Ministry of Natural Resources and its regional branches. The Forest Code (1997) provides the framework for forest management. Many new regulations have already been introduced since that time, for example, forest leasing (up to 49 years), forest auctions, and a new system of forest fee distribution. An important fact, however, is that the Forest Code no longer forbids timber extraction in threatened and endangered species habitats, and does not provide details on the requirement for environmental impact assessments. Another major constraint concerns the poor refunding of money from regional budgets for forest cultivation and reforestation. Forestry Services are poorly financed and try to maximize harvests through thinning and sanitary cuts. As a result, the best trees will continue to be

removed and forest quality will decline further.

Russian legislation recognizes the protective value of forests, including water protection belts and other categories (overall around 30 categories of protection). Forests in Russia are subdivided into three groups by their functions. The mountain regions of the Altai–Sayan are dominated by Group I forests. Clear-cutting is prohibited in Group I forests as existing logging equipment is too heavy and not suitable for thinning operations and selective logging. Most logging (sanitary, thinning) is done by forestry services. Very few companies proceed with commercial logging. Forest Stewardship Council (FSC) certification of forest management was done in 2000 in the Altai Krai on an area of 30,000 ha. Local communities traditionally and historically have supported the ban on clear-cutting, with illegal logging often meeting with violent protests. However, economic difficulties have forced people, even in urban areas, to use wood for heating and cooking, leaving forests close to major cities and towns under severe pressure.

The federal budget does not adequately finance fire prevention and pest outbreak prevention measures. While forest fires and pest outbreaks are natural phenomena in taiga forests, weak fire fighting capacity and pest prevention, together with increased human-induced fires will contribute to the destruction of increasingly large forested areas. Within the above context, there is a lack of capacity to sustainably manage forest resources, and the expectation is that development will be pursued at the cost of biodiversity loss and degradation of critical ecosystems and their attendant species. To protect globally significant biodiversity, the project will build national capacities so that forest management can be biodiversity-friendly and sustainable.

Inadequate mechanisms and capacity for required cross-boundary management of biodiversity values:
There are several international agreements and initiatives in the area of environmental protection and biodiversity conservation involving all four countries of the Altai-Sayan Ecoregion: Russia, Mongolia, Kazakhstan, and China. In 1998, in Urumqi, China the Altai Mountain Declaration was signed, prioritizing establishment of transboundary PAs and implementation of joint biodiversity programmes, promotion of ecologically and culturally responsible and economically competitive land use systems, development of environmentally sound energy and transport/communication infrastructure in the ASE, and sustainable transboundary tourism development based on local community involvement. Later, in 1999, the Altai-Sayan Millenium Initiative was launched by eight regions of Russia, four aimags of Mongolia, and by Kazakhstan. It adopts an Ecoregion-based approach to biodiversity conservation and calls for international support for the conservation of Altai-Sayan global ecosystem and biodiversity values.

Following the adoption of the Altai Declaration, the countries of the Ecoregion with support from the German Government (through BfN and GTZ) initiated a project on the establishment of a transboundary biosphere reserve in the Altai Mountains on the border between Russia, China, Kazakhstan and Mongolia. In November 2002 the working group comprising German and national experts started preparation of a study to determine the feasibility of establishment of the reserve. The Russian Academy of Sciences is the key national partner and the leading institution in conducting the study.

In the course of PDF B implementation, the three UNDP COs in Russia, Mongolia, and Kazakhstan facilitated establishment of the UNDP/GEF and WWF Regional Steering Committee (RSC) to coordinate the three countries' efforts in preparation and further implementation of the UNDP/GEF and WWF projects in the Ecoregion. During the PDF B, meetings of the RSC were held in Spring 2002 in Russia, Winter 2003 in Kazakhstan, and in Fall 2003 in Mongolia following the approval and launch of the Mongolia Full-Sized GEF Project. The latter RSC meeting also included

representatives of the GTZ transboundary project in the Altai Mountains thus providing for closer cooperation between various donors in the ecoregion.

Yet another important transboundary initiative was launched in 2002 under auspices of the regional legislative councils of the two Russian regions (Altaisky krai and Altai Republic), as well as the legislative councils of Mongolia, Kazakhstan and China. It is called "Altai - Our Common House" and it is aimed to bolster transboundary cooperation with particular emphasis placed on sustainable natural resource use in the Ecoregion. During the first stage, analysis of transboundary cooperation was undertaken and an action plan is now being finalized. The plan includes activities to build capacities of the participating countries for effective transboundary cooperation, institutional and legislative strengthening, and measures to promote and facilitate information and knowledge exchange in the Ecoregion. The "Altai - Our Common House" is anticipated to provide the most viable and sustainable framework for transboundary cooperation in the Ecoregion, because it is endorsed by regional authorities in all four countries, is financed directly from state budgets, and is open to cooperation with science, NGOs and other stakeholders.

Although many declarations and initiatives on the development of international regional economic and environmental collaboration do exist, these initiatives have not reached a practical level of implementation. There is thus a need to put in place practical mechanisms for collaborative transboundary management of biodiversity at all levels, including cooperation between border municipalities, protected areas, and natural resource management authorities. Without these mechanisms, it will prove impossible to effectively manage biodiversity at the scale at which it has to be in order to be sustained over the long-term.

3) Key stakeholders and decision makers possess low levels of awareness of the value of biodiversity and demonstrate little support for its conservation and sustainable use.

In spite of a considerable heightening of public environmental consciousness over the past decade, there is still a general lack of awareness of resource depletion and biodiversity conservation issues among primary stakeholders. The negative effects of excessive resource extraction or the opportunities for economic development presented by sustainable use of biological diversity are largely unexamined and undiscussed in regional and local fora and media.

The NGO community, however, has been particularly active in attempting to remedy this situation. The region possesses many knowledgeable and dedicated individuals in the research community and in NGOs, as well as concerned journalists, whose abilities need to be applied to further raise awareness of biodiversity issues in general, and of the link between biodiversity conservation and sustainable development. Likewise, the inclusion of environmental education focusing on biodiversity in school curricula would be of invaluable assistance in this regard.

Several regions in the ASE (Kemerovo oblast, Khakasiya Republic and Altaisky krai) implement regional targeted programmes on environmental advocacy and education aimed at increasing the general level of environmental awareness among the public with a special emphasis on children and youth. For instance, Kemerovo oblast administration supports development and introduction of a system of environmental education, including elaboration of teaching methodology and school curricula.

There are a number of factors limiting positive impact of biodiversity and environmental awareness activities conducted by educational institutions and NGOs. The main factor is that current efforts in this field do not target directly primary stakeholder groups, i.e. decision-makers, nature use authorities, the private sector, and tourists. In this regard, there is a need to design and implement special awareness programmes tailored to the needs of each group. Overall efficiency of

environmental advocacy and awareness raising efforts is hampered by the lack of qualified teachers and trainers in the Ecoregion, and absence of coordination and information exchange between the regions of the ASE.

4) Local stakeholders are unaware of sustainable economic alternatives to current practices that degrade biodiversity and may not have the technical, financial or organizational capacities to adopt them effectively

Under current economic conditions, and given the general weak enforcement in PAs and buffer zones, poaching is a growing threat to biodiversity. So is the unsustainable exploitation of natural resources, including NTFPs. Alternative livelihood options that can support sustainable development by reducing poaching and other pressures on biodiversity are basically non-existent. Stakeholders with an interest in pursuing sustainable resource use options cannot do so in the absence of financial incentives for resource conservation, and enabling mechanisms such as public-private partnerships or community grants. Conditions and mechanisms must be created to foster the development of sustainable alternative livelihoods to significantly reduce the currently increasing pressure on biodiversity and to provide a basis for sustainable community development into the future.

Lack of capacities and mechanisms to promote community-based tourism:
Regional governments consider tourism development as one of the main opportunities to enhance the socio-economic situation of the rural population. However, local people remain largely uninvolved in growing tourism activities due to the low level of awareness regarding the opportunities that it provides, absence of relevant skills and knowledge to be involved in provision of basic tourism services, and lack of enabling mechanisms and information to start up small-scale tourism operations.

Acknowledging importance of tourism development in the region, the Government of the Altai Republic, supported by UNDP, prepared and approved the Programme of Tourism Development in the Altai Republic for 2002-2006. It emphasizes the need for broader public involvement in tourism activities, including populations, administrations of local municipalities, park management, etc. To achieve this goal the government supports a range of activities, such as raising local awareness on the benefits of tourism, organization of training to foster participation of local people in "rural tourism", provision of basic services to tourists, creation of model farming households as potential tourist destinations, etc. The Government of the Altai Republic and local administrations also plan to establish Republic and local tourism information offices to provide various types of information regarding tourism opportunities, both to tourists and the local population. A similar programme on eco-tourism development was adopted and is being implemented by the Government of the Khakasiya Republic. However, current tourism development policies do not pay sufficient attention to control over environmental impacts of tourism activities, especially in biodiversity-sensitive areas, and they do not provide for clear environmental standards of tourism activities and compliance mechanisms.

Lack of incentives for public-private partnerships in support of biodiversity conservation and sustainable development:
While there are a number of large businesses present in the ASE, basing their operations on exploitation of natural resources (such as aluminum factories, logging companies, growing tourism sector, etc.), there are almost no examples of private sector involvement in sustainable development and biodiversity conservation initiatives across the Ecoregion. So far only the Sayan aluminum factory has established a charity fund "Chazy" to finance conservation activities in Khakasia. Business yields maximum benefits from extensive use of the region's rich natural resources while

bearing no responsibility for the results of these activities. For instance, in the Altai Republic outside investors (usually from more developed Siberian regions) own more than 90% of existing tourism infrastructure, services, and companies, thus deriving most of the benefits accrued from tourism, leaving local people to deal with the destructive consequences of tourism on the environment. Major constraints to cooperation and partnership between private and public sectors are lack of general awareness on biodiversity values and the absence of adequate financial, legal and institutional frameworks.

Although still limited in number and scale, a few large multinational private companies are starting activities in the Altai-Sayan Ecoregion. They are potential supporters of future biodiversity conservation efforts, particularly with their interest to ensure sustainable use of natural resources in the region, as well as to create a positive public image. As one of such private companies, IKEA has initiated operations already in Siberia through involvement in sustainable forest certification and conservation of High Conservation Value Forests (HCVF). Through the existing partnership between WWF and IKEA, conservation of HCVF will be promoted in the Altai-Sayan Ecoregion.

Absence of mechanisms to foster traditional nature use practices among indigenous people and local populations and to involve them in natural resources management:
Regional governments acknowledge the need to restore traditional nature use practices among local and indigenous people as a way to rehabilitate their currently marginalized social and economic conditions and ensure sustainable use of natural resources in the region, including grasslands, hunting areas and forest resources. There are a number of federal and regional targeted programmes aimed at improvement of the social and economic circumstances of the indigenous peoples in the Ecoregion. The Federal Targeted Programme "Economic and Social Development of the Indigenous People of the North until 2011" is being implemented in all six subjects of the Russian Federation. There are also similar regional targeted programmes in the Kemerovo oblast and Tuva Republic.

As one of the key mechanisms for promoting traditional natural resource use in the Ecoregion, regional governments consider establishment of special territories, such as territories of traditional nature use, ethno-cultural parks, and nature-economy parks. This involves introduction of appropriate management and property regimes for these territories, providing for relevant legislative frameworks, creation of incentives for local populations to pursue traditional practices, and development of mechanisms and guidelines allowing indigenous people and local communities to participate in decision-making. Only a few examples of the traditional nature use territories exist today in the ASE, such as the Nature-Economic Park "Chuy-Oozy" and the Ethno-Cultural Nature Park "Uch-Enmek" in the Altai Republic (Project site 2). In particular, the Nature-Economic park "Chuy-Oozy" (805 hectares) provides for year-round employment of the local population and creates conditions for preservation of traditional ecologically sustainable forms of land use, such as cattle breeding.

There are plans to designate new territories in the Kemerovo oblast and in the Altai Republic. For instance, the Russian Association of Indigenous People of the North (RAIPON) in cooperation with CIDA and Kemerovo oblast Government are currently working on establishment of a territory of traditional nature use in the Shore Mountains (Project site 4). There are, however, a number of serious constraints preventing establishment of new territories and effective management of existing ones. They include an underdeveloped regional legislative base, extremely weak institutional and technical capacities for effective management of the territories, and lack of relevant experience and knowledge not only in the ASE, but also in Russia in general.

Furthermore, there are no mechanisms in place to foster participation of indigenous people and local communities in decision-making regarding management of natural resources. Historically, there has

been no such tradition or experience among resource development agencies where public participation was not a hallmark of decision-making. The development of community-based management programs is essential. Local communities need to become directly involved in decision-making and management, and they must come to see sustainable use of natural resources as being in their cultural, social and economic self-interest. The major contributions that traditional environmental knowledge may make in management must also be maximized. The unique valuable roles and contributions of indigenous peoples in this regard must also be tapped and utilized. The lack of community-based conservation is particularly acute at a time of budgetary constraint when local communities could take on some of the management responsibilities with appropriate training.

THREATS AND ROOT CAUSES AFFECTING THE PROJECT SITES

To reach maximum demonstration effect, the project will address the threats to biodiversity and their root causes described above in six selected project sites. In general, poaching and illegal trade in endangered species, uncontrolled tourism, and degradation of forests and pastures are primary threats observed in one or more project sites. However, each site demonstrates important differences among the threats to be addressed and therefore in the potential measures to counter them. Table 3 thus presents a description of the specific factors affecting biodiversity and their root causes for the selected sites.

Table 3: Threats and root causes of biodiversity loss in the project sites

Threats	**Location within project site**	**Root causes**
Project site #1: Tigirekskaya		
Category A: Threats in and around PAs and biodiversity hotspots		
1) Uncontrolled tourism	1) In the western part of the Western Altai zapovednik and in the Tigireksky zapovednik	1.1 Inadequate management capacity for existing protected areas 1.2 Institutions, NGOs and communities have insufficient understanding, knowledge and skills required to effectively promote and establish community-based tourism
2) Poaching and illegal trade in endangered species	2) Tigireksky and Western Altai zapovednik: inside PAs and around in the unprotected areas, especially along the Russia-Kazakhstan border	2.1 Deficiencies in legislation, institutions and lack of management and enforcement capacity 2.2 Insufficient system of protected areas to provide for effective and regionally based (trans-boundary) habitat protection for migratory species and those of concern 2.3 Inadequate management capacity for existing protected areas 2.4 Low awareness and support for biodiversity conservation
3) Over-exploitation of resources by local population: over-use of forest and NTFP	3) In the buffer zone of the Western Altai zapovednik	3.1 Government institutions and private entrepreneurs often work at cross-purposes and need incentives to create partnerships for biodiversity conservation and local sustainable development 3.2 Low awareness and support for biodiversity conservation
4) Resources development and transport;	4.1) The road connecting Russia and Kazakhstan is being constructed through the territory of the Western Altai zapovednik 4.2) Potential mineral deposit development in the areas surrounding Tigireksky zapovednik	4.1 Inadequate institutional framework for mainstreaming biodiversity into development policy 4.2 Information on ASE biodiversity is out of date or superficial and awareness of decision-makers of biodiversity values is low

Project site #2: Central Altai		
1) Poaching and illegal trade in endangered species (snow leopard, kabarga, etc)	1.1) In and around existing PAs (Shavlinsky and Kosh-Agachsky zakazniks, Regional Nature parks "Argut", "Uch-Enkeg", "Chuy-Oozy") 1.2) In the unprotected areas around Belukha mountain, Ukok plateau and along the borders with Mongolia and Kazakhstan – area suggested for establishment of transboundary reserve "Central Altai"	1.1 Inadequate management capacity for existing protected areas 1.2 Inadequate mechanisms and weak capacity for required cross-boundary management of biodiversity values 1.3 Gaps and deficiencies in legislation, institutions and lack of management and enforcement capacity 1.4 Insufficient system of protected areas to provide for effective and regionally based (trans-boundary) habitat protection for migratory species and those of concern
2) Uncontrolled tourism	2.1) In the unprotected areas around Belukha mountain, Ukok plateau (UNESCO Heritage site)	2.1 Institutions, NGOs and communities have insufficient understanding, knowledge and skills required to effectively promote and establish community-based tourism 2.2 Low awareness among tourists
3) Resource over-exploitation by local population: overgrazing by livestock	3.1) Ongudaysky, Kosh-Agachsky and Ulagansky raions of the Altai Republic	3.1 Absence of mechanisms to foster traditional nature use practices among indigenous people and local population and to involve them in natural resources 3.2 Government institutions and private entrepreneurs often work at cross-purposes and need incentives to create partnerships for biodiversity conservation and local sustainable development
4) Mining industry and infrastructure potential development	1.1) Mineral deposits at and around plateau Ukok 1.2) Plans to construct road and pipeline through the Plateaus Ukok to China	1.1 Regional land and resource use allocation conducted without balancing biodiversity conservation with economic development interests 1.2 Inadequate institutional framework for mainstreaming biodiversity into development policy 1.3 Information on ASE biodiversity is out of date or superficial and awareness of decision-makers of biodiversity values is low
Project site #3: Teletskaya (Eastern Altai)		
1) Poaching and illegal trade in endangered species	1) State Nature Reserves "Altaisky", "Khakassky" and "Uvs-Nuur Depression"	1.1 Deficiencies in legislation, institutions and lack of management and enforcement capacity 1.2 Insufficient system of protected areas to provide for effective and regionally based (trans-boundary) habitat protection for migratory species and those of concern 1.3 Low awareness and support for biodiversity conservation 1.4 Lack of up to date and sufficient information on Ecoregion's biodiversity
2) Uncontrolled tourism	2) Unprotected area around Teletskoye Lake: proposed for creation of regional nature park	2.1 Lack of capacities to promote community-based tourism 2.2 Low awareness and support for biodiversity conservation among tourists
3) Resource overexploitation by local people: overgrazing by livestock	3) Buffer zones and unprotected areas around State Nature Reserves "Altaisky", "Khakassky" and "Uvs-Nuur Depression	3.1 Absence of mechanisms to foster traditional nature use practices among indigenous people and local population and to involve them in nature resources 3.2 Lack of incentives for public-private partnerships in support of biodiversity conservation and sustainable development

4) Forest fires	Everywhere in the forest zone	4.1 Inadequate forest management capacity
5) Potential development of infrastructure	5) Road is being constructed from Kemerovo oblast to the unprotected area along Teletskoye lake	5.1 Regional land and resource use allocation conducted without balancing biodiversity conservation with economic development interests 5.2 Inadequate institutional framework for mainstreaming biodiversity into development policy 5.3 Information on ASE biodiversity is out of date or superficial and awareness of decision-makers of biodiversity values is low
Project site #4: Gornaya Shoriya		
1) Uncontrolled tourism	1) In and around Nature Park "Shorsky"	1.1 Inadequate management capacity for existing protected areas 1.2 Lack of capacities to promote community-based tourism 1.3 Low awareness and support for biodiversity conservation among tourists
2) Overexploitation of resources by local people: agricultural use of land and forest cuts	2) In the buffer zone of the regional park Shorsky.	2.1 Absence of mechanisms to foster traditional nature use practices among indigenous people and local population and to involve them in natural resources
3) Mining industry	3) Altai mines extracting gold on the rivers of Chulesh and Mras-Su in the buffer zone of the Shorsky Natural Park;	1.1 Regional land and resource use allocation conducted without balancing biodiversity conservation with economic development interests 1.2 Inadequate institutional framework for mainstreaming biodiversity into development policy 1.3 Information on ASE biodiversity is out of date or superficial and awareness of decision-makers of biodiversity values is low
Project site #5: Western Sayan		
1) Poaching and illegal trade in endangered species	1) In and around State Nature Reserves "Sayano-Shushensky" and "Maly Abakan"	1.1 Inadequate management capacity for existing protected 1.2 Deficiencies in legislation, institutions and lack of management and enforcement capacity 1.3 Insufficient system of protected areas to provide for effective and regionally based (trans-boundary) habitat protection for migratory species and those of concern 1.4 Low awareness and support for biodiversity conservation
2) Uncontrolled tourism	2) In the buffer zone of the Sayano-Shushensky State Nature Biosphere Reserve	1.1 Inadequate management capacity for existing protected area 1.2 Lack of capacities to promote community-based touris m 1.3 Low awareness and support for biodiversity conservation among tourists
3) Overexploitation of resources by local population: Agricultural use of land and overgrazing	3) In the buffer zone of Sayano-Shushensky Reserve on the border between Krasnoyarsk krai and Tyva Republic.	3.1 Absence of mechanisms to foster traditional nature use practices among indigenous people and local population and to involve them in natural resources
Project site #6: Todjinsko-Sengilenskaya		

1) Poaching and illegal trade in endangered species	1) In and around State Nature Reserves "Belin" and five existing zakazniks 2) Unprotected habitat and migration routes of rare species, especially on the border with Mongolia	1.1 Inadequate management capacity for existing protected areas 1.2 Inadequate mechanisms and weak capacity for required cross-boundary management of biodiversity values 1.3 Gaps and deficiencies in legislation, institutions and lack of management and enforcement capacity 1.4 Insufficient system of protected areas to provide for effective and regionally based (trans-boundary) habitat protection for migratory species and those of concern

Baseline summary: Under the baseline situation, global environmental values are not conserved. Local capacities to ensure sustainable use of natural resources and long-term biodiversity conservation at ecosystem scale continue to be extremely limited. Local populations remain uninvolved in decision-making regarding use of natural resources and biodiversity conservation measures. Government expenditures on biodiversity conservation, and the mobilization of resources from other sources within the country, will continue to be limited.

2 b iii. Proposed Alternative Course of Action

Project Strategy

This is Phase 1 of a two-phase project. Considering the vastness of the Ecoregion and the complexity of the challenges, the approach will include a mix of activities designed to address the most pressing issues in the ASE, with the aim of developing experience-based capacity in order to replicate best practices to other areas of the ASE for long-term impact. Certain activities, such as strengthening institutional capacity and raising biodiversity awareness among all stakeholders, will be applicable to the entire Ecoregion. Other activities will be more targeted and tied to one or a set of the six selected project sites. The second phase of the project will be focused on replication of the most successful and sustainable pilot projects demonstrated during the first phase, including those which have mobilized additional resources from the private sector with a long-term perspective.

This project will build upon existing baseline conditions in the ASE with a GEF-financed suite of incremental biodiversity conservation initiatives in tandem with leveraged, non-GEF, co-funded sustainable development baseline expenditures.

The project Phase 1 will realize its objectives over a timeline of 5 years. The full cumulative impact of all project activities will be realized in the fifth year and beyond through the synergistic results of inter-related activities. The threats analysis (Annex 2Aii) summarizes the relationships among the threats, their root causes, and the activities to be undertaken to eliminate the threats. Nine major project outputs are to be realized. GEF would fund the associated incremental costs (Annex 2F). Co-financing will be provided by the MNR, Governments of the different Republics, and the Regional Administrations, WWF, and private companies (Annex 2G).

GOAL: Conservation and sustainable use of globally significant biological diversity in Russia's Altai-Sayan Ecoregion.

OBJECTIVE: ECOSYSTEM-BASED APPROACH TO BIODIVERSITY CONSERVATION IS OPERATIONALIZED IN THE RUSSIAN TERRITORY OF THE ALTAI-SAYAN MOUNTAIN ECOREGION (GEF FINANCED & CO-FINANCED)

The ecosystem approach is viewed as a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. The project

will mobilize multiple stakeholders and build/strengthen national, regional and local capacities for the application of key principles of adaptive ecosystem management in ASE. Thus, outputs and activities described below will be aimed at, but not limited to increasing human and institutional capacities of local authorities to conservation-based management and decentralized decision-making; increasing appreciation of developmental and economic value of biodiversity conservation among principle stakeholders; strengthening the information baseline and promoting traditional environmental knowledge as input to PA management; raising public awareness, ownership and involvement in PA and ecosystem management; and promoting sustainable use and traditional nature use models and practices. The transboundary nature of the project will permit conservation objectives to be addressed at the appropriate geographic scale focusing on ecosystem structure and linkages.

OUTCOME 1: STRENGTHENED AND EXPANDED PROTECTED AREAS SYSTEM
Note: Most of the outputs and activities under Outcome 1 will be concentrated in selected project sites (PS) and the PAs within them. Criteria for selection of particular PS are defined based on the results of the threat/root causes analysis.

Output 1: Establish new PAs
While the existing PA system in the ASE is large in number, it is not entirely effective in conserving the region's biodiversity given the scale of the territory and key species' habitat requirements. New areas are still required and an ecologically functioning Econet, complete with cores, buffer zones and connecting corridors must be established. Also, there is an urgent need to create transboundary protected areas and to adopt collaborative and coordinated approaches to the management of these sites, as well as the habitat of migratory species.

Activity 1.1 PA establishment

This activity will support the establishment of new PAs in the Ecoregion that are key to ensuring the conservation of biodiversity. Enlargement of the PA system will be undertaken in accordance with the regional "Econet" plans developed by WWF and the Conservation Action Plan of the Russian Altai-Sayan Region prepared in the course of the PDF B project and endorsed by governments of all the six regions participating in the project. A total of 16 new protected areas will be established, including various forms of PAs such as regional nature parks, clusters and buffer zones to existing nature reserves, migration corridors between nature reserves, etc.

The UNDP/GEF project will directly support establishment of only a few new PAs, the most important being the transboundary Biosphere reserve on the border between China, Mongolia, Kazakhstan and Russia (subject to the results of the feasibility study now underway). Respective regional governments, WWF and other donors will fund this activity. The GEF funds will be used to ensure integration of the newly established protected areas in the existing PA system by promoting cooperation, especially as far as joint anti-poaching activities are concerned, and facilitating dissemination of information and knowledge among PAs in the ASE (see Activity 4.3).). To ensure financial sustainability of the new and existing PAs the project will promote revenue generating capacities of the protected areas (see Activity 8.3).

Output 2: Conservation of Rare and Endangered Species

Activity 2.1 Strengthen law enforcement practices with respect to poaching and illegal trade in rare and endangered species

The project will support creation of mobile inter-regional anti-poaching groups in the Western Sayan (PS 5) and Todjinsko-Sengilenskaya (PS6) project sites. They will involve representatives of primary stakeholders, including the game management service, police, border patrol, NGOs and local population. Special institutional and regulatory frameworks will be designed to allow the groups to function effectively across the boundaries of the three administrative regions (Tuva and Khakasiya Republics and Krasnoyarsky krai). Human and technical capacities of the groups will be strengthened through provision of training and basic equipment.

The project will promote legal and institutional measures to undermine economic market of the poached wildlife products and establish effective legal and economic barriers to illegal trade of these products. Legal and regulatory instruments will be developed to identify and register the owners of the products derived from illegal game (Snow Leopard and Argali sheep); to increase considerably penalties for poaching (up to the market value of these products); and introduce penalties for storing, selling and/or ownership of derivatives from illegal game. Special materials for TRAFFIC network will be prepared in order to attract attention of international environmental organizations and community to the problem of Altai-Sayan "flagship species". Targeted awareness campaigns for custom/border officials and patrols will be carried out to involve them in control and protection measures.

As well, cooperation between local enforcement agencies and courts will be strengthened by disseminating information on CITES to border stations, road inspection points, and village administrations. This work will be complemented by a review of local and regional legislation concerning rare and endangered species. Most of the activities in this area will be co-funded by the WWF project.

Activity 2.2 Raise public awareness and involve local populations in conservation of rare and endangered species

Under this activity, a comprehensive campaign to educate local stakeholders about existing and proposed policies on poaching and illegal trade will be conducted. Focus will be on two target groups: local residents (herders living near the boundaries of PAs and habitat for key species, and hunters) and local enforcement authorities. Their feedback on the existing anti-poaching policies and suggestions on how to improve it will be sought. This will also include translation of policies into local languages (Tuva, Altai, Kasakh) and their dissemination. Special training will be given to game inspectors and police officers on anti-poaching law enforcement principles and practices.

Activity 2.3 Update baseline information and establish a system to monitor populations of "flagship species", especially Snow leopard and Argali sheep

Lack of sufficient, up-to-date information about the population of "flagship" species significantly impedes successful conservation measures. Under this activity limited targeted research will be conducted to update the existing information baseline regarding populations of Snow leopard and Argali sheep. This will include data on range structure, status of existing groups, dispersal and reclamation of new territories, migration patterns, population numbers within the groups in Russia, age and sex structures of the groups, home range size and types in different age and sex groups, diet in various location, parasites and diseases. The activity will build upon the results of existing surveys, the current activities of the WWF, International Snow Leopard Trust, as well as UNDP/GEF project in Mongolia.

To sustain the information base, a monitoring system for "flagship species" will be designed and piloted in a network of four monitoring sites, one in each of the following PS: Western Sayan (PS 5), Central Altai (PS 2), Teletskaya (PS 3), and Todjinsko-Sengilenskaya (PS6). Standardized protocols for data gathering and analysis will be elaborated; they will involve, to the extent possible, local stakeholders in the monitoring of key indicators for species conditions, numbers and locations. In addition to censuses, a unified database will be established to accumulate various data coming from occasional encounters and census data, as well as information on parasitology and infectious diseases and descriptions of hunting behavior. The monitoring sites will also serve as training and research centers for PA employees, scientists and students, and will provide information and produce awareness raising materials for the general public.

Output 3: Strengthening capacity for existing priority PAs

Activity 3.1 Strengthen priority PA infrastructure and staff capacity

The near absence of enforcement capacity in PAs seriously compromises their biodiversity conservation effectiveness. Poaching is cited as the most pressing problem confronting the PAs. The project will support activities that will lead to a significant improvement in the resource protection capability in the PAs. This will include the establishment of patrol stations in key locations in PAs where they are most needed, the provision of means of communication and transport, and increasing the number of protection staff and their level of qualification through training.

PDF B threat-root causes analysis has showed that poaching represents significant threat to biodiversity in the several PAs located within the selected project sites. This activity will thus foster enforcement capacities and infrastructure of the following priority PAs:
PS 2 "Central Altai": Regional Nature Park "Argut";
PS 3 "Teletskaya area": State Nature Reserves "Altaisky", "Khakasky" and "Uvs-Nuuv";
PS 5 "Western Sayans": State Nature Reserve "Sayano-Shushensky";
PS 6 "Todjinsko-Senmgilenskaya area": State Nature Reserve "Azas".

This activity will build upon the results of the small model projects implemented under the WB/GEF Biodiversity Conservation Project. The WB/GEF project has provided support to model projects in the Altaisky and Katunskiy Zapovedniks (below US$ 100,000 each) in the form of strengthening the inspection and control operations (mainly material support in the form of equipment, vehicles etc.). The proposed project will benefit from some of the outputs of the activities, but will not duplicate work already done or underway. The UNDP/GEF activities will also be complemented by WWF's on-going efforts to strengthen the network of PAs in the Altai-Sayan Ecoregion.

Activity 3.2 Develop five model management plans for priority PAs

Management and administrative capacities in PAs are also deficient, especially in the case of newly established regional protected areas. Under this activity five model management plans will be developed and implemented in the selected PAs. With the aim of maximizing demonstration value and replicability of the project's results, PAs were identified for development of model management plans based on criteria relating to institutional and social contexts, as well as management issues and regimes. The five selected protected areas represent the following management designations:

(1) State national park (potentially - traditional resource use area) "Shorsky" (PS 4) -- priorities: conservation, support of indigenous peoples' traditional lifestyles and sustainable resource use in biodiversity management, and tourism;
(2) Regional nature park "Uch-Enmek" (PS 2) – priorities: conservation of landscapes' ethno-cultural and spiritual values, support of indigenous peoples' traditional lifestyles and sustainable resource use in biodiversity management, and cultural tourism;
(3) Quiet Zone "Ukok" (PS 2) – UNESCO World Heritage site, priorities: conservation of fragile mountainous landscapes and ancient burial mounds, public awareness and education;
(4) State Nature Reserves "Altaisky" (PS 3) -- strict protected area, IUCN category I, UNESCO World Heritage site, priorities: strict conservation, research and education;
(5) State Nature Reserve "Uvs-Nuuv" (PS 3) -- UNESCO Biosphere reserve, priorities: conservation, research, education, and local sustainable development in buffer zone.

Output 4: Strengthened coordination and management between PAs

Activity 4.1 Build capacities of regional authorities to manage PA system in the ASE

Currently, responsibility for PA management is shared between federal-level and regional-level authorities. While the federal Ministry of Natural Resources realizes its function (management of the federal PAs) through a system of regional departments in each of the subjects of the federation, there is still no administrative system in place at the level of regional administrations. Thus capacities of regional governments to effectively manage regional protected areas and coordinate their activities with the national PAs are largely deficient.

In this regard the project will support current endeavors of two regional administrations (Tuva Republic and Altai Republic) to establish separate administrative bodies within the governmental structures dealing with PA management at the regional level. This activity will be realized through design of the appropriate institutional framework for new bodies (assessment of staff, technical and financial needs, development of TORs and operational procedures), provision of training and advisory services, as well as building capacity for information management and its use in decision-making. The latter will be complemented by activities under Output 7. Special emphasis will be placed on development of methodological guidelines for regional nature park creation and management, building on the best practices and lessons learnt from results of the UNDP/GEF PA management project in Russia's Kamchatka, as well as other GEF initiatives in this area. Finally, the project will raise efficiency of the PA system through improved coordination of functions and collaboration among all responsible agencies involved in PA management at the regional level.

Activity 4.2 Create enabling environment for community participation in PA management

The activity will foster effective public/civil society partnerships in the protected areas of the Altai Republic and Altaisky krai (PS 1, 2, 3). This will be pursued through development of an institutional framework allowing local people to take part in decision-making, encouraging park management to source employment locally, as well as providing socio-economic incentives for the local communities' involvement in conservation activities. In the selected sites, collaborative management processes (organizing, negotiating and learning by doing) will be promoted and assisted towards developing and implementing co-management plans. These are likely to involve facilitated negotiation and conflict management, the development of zoning agreements, devising and targeting specific incentives and disincentives, etc. New human and institutional capacities will be created and will foster the development of more effective environmental policy and action. Public awareness of the benefits of conservation partnerships will be enhanced via a

variety of communication avenues such as art events, exhibition and fairs, etc., and will be complemented by awareness raising efforts under Activity 6.1.

In this context, the project will build upon the results of the UNDP-supported Local Agenda 21 process in the Altai Republic. LA21 initiative groups in the municipalities located in the project sites will be used as a platform for raising public awareness and community involvement in negotiation on the collaborative PA management. The LA21 Secretariat (established in the Republic's capital, Gorno-Altaisk) will facilitate communication and networking among these groups in the Altai Republic and in the neighboring Altaisky krai. Throughout the project, efforts will be made to collect and disseminate successful practices on community involvement in PA management in other regions of the ASE (see Activity 4.3).

Activity 4.3 Promote cooperation and information and knowledge exchange among PAs

The project will strengthen capacities of the Association of the Altai-Sayan Protected Areas and Parks (AASPA) to provide for more efficient information exchange and cooperation among the protected areas in the Ecoregion. AASPA will play a key role in ensuring that knowledge and experience accumulated in the project sites is disseminated and used in other areas of the ASE. For this purpose, the project will support a range of activities, such as support to regular meetings of Association members, organization of study-tours and staff exchange between PAs, creation of an AASPA web-site and upgrading its networking capacity. Lessons learnt and best practices generated under Output 1,3, and 4 will also be disseminated and shared through MNR, WWF, and LA21 networks in the Ecoregion, among others.

Output 5: Strengthened Legal and Institutional Framework for Biodiversity Conservation and Transboundary Management

Activity 5.1 Development of model legislative and regulatory provisions for biodiversity conservation to cover gaps in existing policies and to adjust regional legislation to federal laws

5.1.1 Strengthening regional PA legislation: Existing legislation, regulations and policies governing PA management are deficient in several ways. There exist contradictions between federal and regional legislation, and there is no basis in federal legislation for certain categories of proposed protected areas. In this regard, the project will develop recommendations for the regional legislative councils to amend existing regional PA-related laws in order to adjust them to the federal-level provisions. The project will also strengthen regional legal frameworks for PA management. To do so, the following legislative and regulatory provisions will be elaborated:

- procedures for establishment of regional and local PAs;
- provisions for nature use and protection regimes within certain categories of regional PAs (regional nature parks, ethno-cultural parks, etc);
- regulations governing territorial zoning in the PAs to ensure their integration into the regional socio-economic structure;
- methodological guidelines for establishment and management of regional PAs for regional authorities and PA managers.

5.1.2 Development of a regional legislative base for traditional natural resources use:
Regional legislation on traditional natural resources use is currently absent in all six subjects of the federation. The Federal Law "On Territories of Traditional Nature Use of the Indigenous People of the North, Siberia and Far East", adopted in May 2001 provides for general framework for establishment and management of such territories. At the same time there is a need to

develop regional-level legislation reflecting local specific, natural conditions, and socio-economic traditions of indigenous peoples. Building on the work being conducted now by RAIPON in cooperation with CIDA in Kemerovo oblast, the project will help to develop model regional legislation to provide for establishment of territories of traditional natural resource use in the ASE. The project will ensure that biodiversity conservation objectives are introduced in the new legislation and will also facilitate participation of all stakeholder groups in the process through organization of a series of consultations with local authorities and workshops for indigenous communities.

Activity 5.2 Promote transboundary conservation actions

5.2.1 Strengthening institutional frameworks for transboundary biodiversity conservation: Efforts under this activity will enhance capacity of existing transboundary initiatives to integrate biodiversity conservation objectives into their agenda. In particular, under the framework of the "Altai - Our Common House" initiative, the project will facilitate transboundary communication of information and exchange of knowledge regarding the current status of biodiversity, existing and potential threats and opportunities for sustainable use of transboundary resources and joint efforts for biodiversity conservation. As well, the project will support Strategic Environmental Assessment of key transboundary development projects that are now being prepared under the auspices of "Altai- Our Common House", and help to design appropriate mitigation measures to address potential negative impact on environment. As well, work will be sustained during full-sized project implementation of the UNDP/GEF Regional Steering Committee established during the PDF B period. This will provide for coordination between major biodiversity conservation initiatives in the eco-regions, such as UNDP/GEF, WWF and GTZ projects on transboundary reserve establishment in Central Altai.

5.2.2 Development of transboundary conservation agreements: Following the recommendations of the UNDP/GEF Regional Steering Committee, the project will support elaboration of a series of transboundary agreements (bilateral and trilateral) covering the following aspects of transboundary cooperation and clearly describe methods of implementation:

1) Regional/cross-border conservation programs for priority species (Argali and Snow leopard) and habitat;
2) Monitoring and enforcement procedures;
3) Poaching and illegal trade in wildlife and endangered species;
4) Border Inspection and Poaching Alleviation: developing and implementing a comprehensive border inspection program with training and enhanced enforcement;
5) Regional information management protocols.

Output 6: Increased Levels of Biodiversity Awareness Among Major Stakeholder Groups and the Rural Population

Awareness and advocacy activities will be focused on specific target groups, which have the greatest impacts on the achievement of biodiversity conservation objectives in the ASE. The project will apply appropriate tools and techniques of reaching these groups based on research into their perceptions made in the course of PDF B studies. Awareness raising and educational instruments will be used in strategic combinations with legal and economic policy instruments. By adopting more realistic approaches for engaging various sectors in relevant phases of the policy cycle, the efficacy of project interventions in reaching major stakeholder groups will be enhanced.

Activity 6.1 Work with local populations and visitors in key project sites to raise awareness of environmental values and the benefits of biodiversity conservation

The project will place particular emphasis upon work with natural resource dependent communities, and with resource users within and adjacent to the selected project sites. Work with visitors to and residents of the PAs will also be undertaken, focusing on biodiversity values, their global significance, and codes of appropriate behavior. In this regard, the traditional ecological knowledge (TEK) of local and indigenous populations will be extensively solicited and incorporated into biodiversity awareness programming, as well as management. The project will also support the preparation of biodiversity conservation information programmes and materials, and their distribution using a variety of media.

For the purpose of this activity the project will run a micro-grant programme (up to USD 500) to enable local NGOs, community-based organizations, schools and PAs to develop and implement awareness raising activities in their localities. This will allow tailoring of awareness raising and education approaches to local ways of learning, and the learners´ context, values, attitudes, knowledge and beliefs. Also, this will contribute to strengthening capacities of local civil society and its role in the decision-making process. Costs of the programme will be shared between the UNDP/GEF project and other grant-making organizations in the ASE (Institute for Sustainable Communities, REC, etc.).

As well, the project will help to develop and implement two pilot awareness raising and education programmes for indigenous communities in the Tuva Republic (PS 6) and Mountain Shoriya (PS4). The objective will be twofold: on the one hand, efforts will be made to collect TEK and analyze its potential use for biodiversity conservation purposes, on the other, indigenous communities will receive training in existing nature use regulations and will identify economic and legal incentives for community-based sustainable natural resource use.

Awareness raising and training activities will be complemented in the selected project site by practical demonstration projects implemented under Output 9.

Activity 6.2 Promote children and youth involvement in biodiversity conservation through innovate education programmes for school in the selected project sites

School aged children will also be targeted by biodiversity awareness raising activities. The project will pilot development and introduction of school curricula for continuous environmental and biodiversity-related educational programmes for children and youth. It is worth mentioning that curricula changes will not focus on introducing a new subject – biodiversity - but will focus on changing the curricula by integrating biodiversity concerns into existing subjects. This work will build upon the efforts undertaken in the Altaisky krai and Kemerovo oblast with regard to introduction of a system of continuous environmental education. This will be accompanied by development and approval of teaching methodologies and provision of training for teachers in the project sites. Close collaboration with environmental NGOs and protected areas will be encouraged to complement formal educational processes with fieldwork, ecological camps, and research activities in nature.

Activity 6.3 Evaluate efficiency of awareness raising programmes and provide for exchange of experiences, best practices and lessons learnt

As part of the awareness and advocacy component, efforts will be made to build regional and local capacity to effectively utilize accumulated knowledge and replicate best practices in the ASE. A thorough evaluation of awareness raising and educational programmes will be undertaken in the middle of project implementation to document mistakes and provide guidelines and lessons for use in other parts of the Ecoregion and in Russia, in general. The project will

support establishment of an eco-regional network of practice on environmental education and awareness. In doing so the aim will be to build on the capacity of existing educational organizations and NGOs to network and cooperate and thus increase exposure to case studies, training, and curricula to the groups actively involved in education and public awareness activities in the ASE.

OUTCOME 2: STRENGTHENED ENABLING ENVIRONMENT FOR ECOSYSTEM BASED BIODIVERSITY CONSERVATION (GEF FINANCED & CO-FINANCED)

Output 7: Improved Information on Biodiversity, Including TEK, and its Use in Decision-Making

Activity 7.1 Undertake an ecosystem and biodiversity conservation information needs assessment

Information on the Ecoregion's biodiversity is to varying degrees incomplete or outdated. The information is incomplete even in the PAs. Data gathering has traditionally been driven by the particular interests of researchers or funding bodies rather than ecosystem management considerations. Information on some orders and on some ecosystem processes is also absent or deficient. This prevents the development and implementation of ecosystem-based and effective management programmes in the Ecoregion. Thus, activities under this output will initially be geared at addressing gaps in *key* information. Only *essential* information will be compiled, with support for these activities being derived from sustainable development baseline funding sources. The definition of essential information will be undertaken. The contributions of local communities and the TEK of indigenous populations will be relied upon in this assessment. This will be followed by activities to establish an ecological baseline against which the effectiveness of the areas' management, and the impact of the project, will be measured.

Activity 7.2 Develop and implement an ecosystem-based biodiversity monitoring program in the Ecoregion

The program will be designed in a manner that will yield *key* information to managers and other decision-makers. A central element of monitoring programme development will be the selection of appropriate indicators. The indicators selected should also be capable of differentiating natural changes from anthropogenic effects. Likewise, thresholds for acceptable variation in specified ecosystem parameters will also be incorporated into the programmes, as will clearly presented monitoring protocols. Impact monitoring will be an integral element of the monitoring programme. A reporting mechanism will also be instituted. Research will help in describing areas of traditional activity, and work with community members will help identify key indicators of use on the basis of local knowledge. The extremely valuable contributions of local and indigenous people will be relied upon in strengthening the information base. To enable the implementation of monitoring as well as periodic biodiversity assessments, the project will support the establishment of modest permanent monitoring stations in key project sites.

Activity 7.3 Establish biodiversity and TEK databases

The project will also support activities geared towards improving the storage, management, and distribution of biodiversity information to decision-makers and the general public. The compilation, storage, and dissemination of TEK pertaining to biodiversity conservation will also be supported. The compilation and use of TEK in all aspects of management and sustainable use of natural resources will be relied upon extensively. The latter will be built upon the results of

demonstration projects on establishment of territories of traditional nature use (TTNUs) (see Activity 9.1).

Activity 7.4 Train natural resources management authorities and other state employees to effectively integrate basic biodiversity and TEK information into sectoral practice

The project will strengthen the capacity of natural resource management authorities at the regional and local levels to integrate biodiversity information, and conservation principles and practices into their daily work and decision-making. Key staff from the following governmental bodies will be given practical demonstrations and training on information management and data analysis into sectoral practice:

- Regional Directorate of the Ministry of Natural Resources (GUPRs): forestry and water departments;
- Department of economic and social development within the regional administrations;
- Staff of the municipal administrations in charge of local economic development planning and land use;
- Regional Land Use Committees.

Besides other issues, focus will be made on rational land use and rangeland management to reduce threats from over-grazing. Several pilot district-level agriculture/land use plans and recommendations to local farmers will be prepared encompassing information on biodiversity monitoring/zoning and landscape health.

Output 8: **Awareness and inclusion of biodiversity conservation into regional decision making**

Activity 8.1 Raise awareness on biodiversity values among decision-makers and nature management authorities

While there has been a marked increase in general environmental concern and biodiversity conservation awareness and advocacy in the Ecoregion over the past decade, the overall level remains rather low, especially among key politicians and decision-makers in the area of natural resource use. This project will support a number of activities designed to raise awareness of biodiversity and the need for its conservation, as well as on land and natural resource values and uses among the decision-makers. To do this the project will:

Conduct economic assessments of biodiversity values: The project will analyze the value of biodiversity, the costs of its degradation and loss, and the distribution of these values between different groups, sectors and areas in the ASE. The economic assessment will provide important information for justifying biodiversity conservation, and therefore will help to recognise trade-offs being made as part of the normal decision-making process, to assess the long-term consequences of those trade-offs, and to design and implement effective policies to minimize them. For this purpose several biodiversity hot spots will be identified on the territory of project sites representing both biodiversity and economic development values for which economic assessments will be conducted and then presented to respective decision-making authorities.

Undertake biodiversity impact assessment of regional economic policies and plans: Currently impacts on biodiversity are poorly considered in environmental impact assessments. They almost never address biodiversity aspects of the foreseen economic activities, such as impact

on protected species and habitats, diversity between species and habitats, species abundance and distribution, functional components of biodiversity. Changes are needed in the established practices of impact assessment, if these objectives for biodiversity and impact assessment are to be achieved. In this regard, the project will identify a number of case studies to conduct impact assessment of regional economic development plans, sectoral programmes (mining and tourism) and large industrial projects to explore their implications for biodiversity.

Design and implement a biodiversity awareness-raising programme for decision-makers: Building upon the results of the above case studies, a comprehensive awareness-raising programme for regional decision-makers will be designed and implemented in all regions of the ASE. Best practices and lessons learnt will be summarised and presented to a broad range of regional authorities and state employees in the area of economic development and natural resources use through a series of regional workshops, publications and other communication tools.

Activity 8.2 Strengthening enforcement capacities and collaboration among governmental agencies to implement existing environmental laws

Project resources will help the regional departments of the Ministry of Natural Resources (GUPRs) improve their environmental review function with respect to economic development (forestry, tourism, mining, and infrastructure development) practice. Enforcement requirements of existing laws, in particular, application of EIA and environmental expertise, will be clarified. Biodiversity related guidelines, criteria and codes of practice will be formulated and incorporated into sectoral programs such as regional development planning, forestry, tourism, and agriculture management, and environmental impact assessment practice.

Training will be given to the staff of GUPRs, as well as relevant sectoral ministries. The project will conduct annual training courses and seminars in each of the six project regions. The following priority issues will be included: Environmental Impact Assessment and ecological expertise, principles of forestry and pasture management, environmental law enforcement principles.

This activity will complement and expand envisaged project activities under Output 2 to strengthen law enforcement practices with respect to poaching and illegal trade in rare and endangered species. Analysis of past court practices will be conducted and recommendations developed for environmental inspectors and regional authorities to defend court cases for violation of environmental legislation.

Activity 8.3 Establish legal and regulatory environment to mainstream biodiversity into regional development policies

Under this activity, the project will facilitate the mainstreaming biodiversity in key economic sectors in the Altai-Sayan Ecoregion. The objective will be to enhance the value to biodiversity of landscapes outside PAs by internalizing biodiversity considerations within regular, mainstream production activities through policy development and implementation, capacity building, promotion of public-private partnerships and demonstration projects. Support will be provided for the development of institutional capacities of government agencies and other stakeholders (e.g. enabling legislation to remove barriers, policy,

institutional structures and management procedures, relevant knowledge,) that secure biodiversity conservation. The project will promote new legislation, policy and practice for the establishment of strategic public-private partnerships to encourage sustainable use, conservation and rehabilitation of biodiversity in key and growing economic sectors in the Altai-Sayan Ecoregion, such as forestry, mining, and tourism. To achieve this the project will focus on the following strategic areas:

Assessment of environmental damage and biodiversity losses and legal liability. The project will develop and test a methodology for economic assessment of environmental damage from planned economic activities in the region and its incorporation into existing environmental requirements for investment projects (such as environmental impact assessment and environmental expertise).

Economic instruments and tools for biodiversity conservation. Assessments will be made and recommendations developed on introduction of economic instruments for biodiversity conservation at the local and regional level, including charges, fees, and other financial tools. PA revenue generation options will be explored (related to tourism and visitation, and others) to provide for better financial sustainability of the protected areas. Experience, legal instruments and models developed by the UNDP/GEF protected areas project in Russia's Kamchatka oblast launched in 2002 will be utilized.

Linking investments in tourism with conservation of biological resources: The project will help to integrate regional tourism development programmes with other planning efforts, particularly in regional nature parks and other PAs, which are popular tourist destinations. Cooperation between tourism authorities and PA managers should be encouraged to determine the level of visitor use an area can accommodate with high levels of satisfaction for visitors and few negative impacts on the environment, and ensure that this level is not exceeded. Criteria and requirements for EIA for tourism development projects or programs will be formulated. Also the ways and means that the tourism development can provide economic benefits to both the local people and the natural areas that are the primary tourist destinations will be specified. The project will support preparation of pilot management plans for major tourist destinations in the Ecoregion to specify objectives for both tourism and resource management, and to determine how sufficient income from tourism can be provided to the natural area to provide an incentive for improved management.

Output 9: Development of alternative livelihoods and involvement of local communities in natural resource management

Activity 9.1 Establish pilot territories of traditional nature use

Building upon the project results under Output 5, Activity 5.1.2, three pilot territories of traditional nature use will be established in the selected project sites (#3 Teletskaya, #4 Gornaya Shoriya, and #6 Todjinsko-Segilenskaya). This activity will be implemented in partnership with the Russian Association of Indigenous Peoples of the North, Siberia and Far East (RAIPON) building upon their experience in other Russian regions. Financial support will be provided by Federal and Regional Targeted Programmes for the socio-economic development of indigenous people of the North and CIDA. Following is the list of tentative activities to be supported from non-GEF partner sources:

1. Creation of information and legal centers to distribute information on indigenous rights to use, monitor and protect territories of traditional use; as well as information on ethnic enterprises, NGOs and community-based organizations registered in the project sites.
2. Creation of indigenous self-government structures on the established territories to provide for indigenous people's participation in economic decision-making processes on the use of resources and distribution of derived benefits.
3. Education and consultation on protection of indigenous rights at workshops and conferences organized locally.
4. Implementation of small grant programmes in the established territories to help local communities develop alternative livelihood opportunities.

Incremental GEF funding will support integration of traditional environmental knowledge for biodiversity conservation and sustainability of natural resources through:

1. Compilation, storage, and dissemination of TEK in the established sites;
2. Building capacity of local communities to use, express and develop their traditional knowledge on the basis of their own cultural and institutional norms;
3. Development of local institutional arrangements to incorporate traditional knowledge in forest and pasture management;
4. Integrate traditional and formal sciences for participatory monitoring as a basis for development of adaptive strategies for management of natural resources.

Activity 9.2 Design and implement community-based wildlife and NTFP management programmes

The purpose of this activity is to demonstrate community-based solutions to mitigate overexploitation of wildlife and natural resources by local population in the selected project localities. Demonstration projects will be developed and implemented in the following key project sites: i) #6 "Todjinsko-Sengilenskya" - community-based wildlife management; ii) # 1 "Tigirekskaya" – community-based NTFP management.

Community-based wildlife management (CBWM): Currently there are no effective mechanisms in place providing incentives for local people to maintain sustainable populations of argali or any other game species, including ibex and elk. The purpose of this demonstration activity will be to protect wildlife species against illegal, uncontrolled and unauthorized hunting, and at the same time generate income opportunities for the local communities and improve their lifestyle through the sustainable use of the environment. The project will work with the regional department of the Ministry of Natural Resources in the Tuva Republic (GUPR) and WWF to showcase the "win-win" results of community-based wildlife management. It will supply the initial technical support to organize community members, devise a mechanism whereby local communities' share of revenues generated through sport hunting permits is equitably shared among all stakeholders. Project input will also help to establish sustainable off-take levels, and a participatory monitoring program of rare and endangered species (thus contributing to Output 2).

Community-based non-timber forest product (NTFP) management:
The rationale behind this pilot activity is to demonstrate local communities' greater interest in conservation and sustainable use of resources when they are provided with the responsibility for adjacent forestlands and the products from these forests, and are able to benefit economically from sustainable levels of harvesting. In doing so, the project will build

capacity of local communities within the project site #1 to manage forest values and to broaden economic benefits and resource sharing opportunities, including:

- development of skills and experience in management of NTFP and other forest values;
- determination of the extent and productivity of NTFP's within the project site;
- determination of the interests of community members in NTFP management and in business and employment development (participatory rural appraisal);
- elaboration of institutional arrangements for co-management of NTFP resources.

Activity 9.3 Disseminate accumulated knowledge and best practices in the ASE

Throughout the project, efforts will be made to facilitate effective monitoring and reporting of experiences and results of the demonstration projects, so as to provide a basis for lessons learnt and further replication of similar activities in the Ecoregion and other places in Russia and around the world with similar geographic and economic environments. Special emphasis will be given to compilation of the results of demonstration projects in the area of community-based tourism and public-private partnerships.

Activity 9.4 Promote eco-tourism development capacity of selected PAs

Given the current push for development of recreational opportunities and tourism in the PAs, and considering that already unmanaged recreation is threatening the PAs' biodiversity values, there is an urgent need for instituting effective management controls for these spheres of activity. The project will support activities that determine recreational carrying capacities for the PAs, and those that strengthen visitor management. The latter include training for PA personnel involved in eco-tourism management, signage, erection of barriers to sensitive areas, rehabilitation or clean up of degraded sites, the construction of hardened trails where necessary, and the provision of essential infrastructure, such as campsites and waste facilities, at visitor concentration sites. The project will organize a series of workshops to elaborate and agree upon the conceptual framework of eco-tourism development in the ASE, including common principles, standards and rules to be applied by practitioners from the PA, mechanisms for stakeholder involvement and participation, and development of a common marketing and price-setting strategy.

On a pilot basis, the project will strengthen an existing partnership formed around the Sayan Golden Ring tourist route in the Western Sayan project site. It will strengthen visitor management in four protected areas located along the Sayan Golden Ring route with the purpose of reducing negative impacts of recreation and tourism. These will include creation of better facilities, new routes and trails, signposting and information, physical barriers, more active ranger services, provision of alternative facilities in new locations, etc. In this regard, the GEF project will complement private and governmental investment in building tourism infrastructure around key PAs by providing incremental funds to make tourism in PAs biodiversity harmless. Furthermore, the project will facilitate replication of tested models of cooperation between PAs and private tour operators in other areas in the ASE.

Activity 9.5 Demonstrate community-based tourism development and livelihood improvement

The purpose of this activity is to demonstrate how local communities can directly benefit from tourism development and at the same time avoid ecosystem damage from uncontrolled tourist activities. By doing so the project will build on the results of capacity building efforts undertaken under Output 8 (Activity 8.3) and will complement the activities on eco-tourism

development within selected PAs (Output 9, Activity 9.4). The demonstration projects will be implemented in five of the six project sites (1,2,3,4,5), where threats from growing tourism activities and unsustainable resource use by rural population are particularly acute. More specifically, the project resources will be applied in combination with inputs from regional governments and tourism companies to implement the following tasks:

- Expanding business and employment opportunities for the poor. Particular types of tourism activities, which may demonstrate both market potential and an ability to generate income directly for local people include home-stays, small scale accommodation, camping sites, catering and various forms of guiding and activity provision. To optimize community and environmental benefits, attention will be paid to supply chain issues in product development, including use of sustainably produced local foods and other materials. It will also focus on skills development to foster employment of local people in the formal tourist sector and natural parks.
- Training and building capacity of local populations to provide them with knowledge and skills (such as business planning and management, customer care, marketing and interpretation of nature to visitors) required to effectively participate in tourism activities. Special attention will be given to building skills of rural women and youth to benefit from tourism activities. Attention will be paid both to quality and to environmental management standards of tourism activities through both training and support for investment.
- Promotion of partnerships and ensuring effective marketing. The project will facilitate networking and communication with domestic and international tour operators; foster joint product development, stimulate media coverage and direct marketing of Altai-Sayan tourism products to specialist ecotourism groups and organizations, such as the Russian Ecotourism Association. On a pilot basis the project will work with the Sayan Golden Ring partnership between the tourist enterprises, regional government and PAs in the Western Sayan project site (PS 5) while targeting specifically those communities in most economic need and where conservation issues are most profound.

2 b iv. Incremental Cost estimation based on the project logical framework

Process used to jointly estimate incremental cost with Russian project partners

The concept of incremental costs was at the core of the project development process during the entire PDF B stage. It was introduced to project partners at the First Project Steering Committee meeting and was then presented and widely discussed at many meetings with regional and national authorities, as well as other stakeholders, such as PA managers, NGOs, private sector, academia, and international organizations. The IC concept was used by the project team to secure significant non-GEF co-funding for sustainable baseline associated with the project. Each of seven thematic task forces (Biodiversity, Indigenous Peoples, Public Awareness, Legal Framework, Economic Development, Transboundary Cooperation, and Public-Private Partnerships) established during the PDF B process identified all sustainable baseline activities, programmes, projects etc., relevant to their area and presented a summary of existing funding levels of these identified initiatives. IC analysis was approved by the project SC meeting, and is confirmed by respective letters of co-funding from regional authorities, NGOs and private sector.

Project outputs, activities and costs that result in mostly GLOBAL benefits

Output 2:	Conservation of Rare and Endangered Species Promoted in the ASE	**$ 370,000**
Output 7:	Improved Information on Biodiversity, Including TEK, and its Use in Decision-Making	**$ 200,000**

Project outputs, activities and costs that result in GLOBAL and NATIONAL benefits		
Output 3:	Strengthening Capacity for Existing priority PAs	**$ 800,000**
Output 4:	Strengthened Coordination and Management between PAs	**$190,000**
Output 5:	Strengthened institutional Framework for biodiversity Conservation and Transboundary Management	**$410,000**
Output 9:	Development of alternative livelihoods and Involvement of Local Populations in Natural Resource Management	**$800,000**
Project outputs, activities and costs that result in mostly NATIONAL benefits		
Output 6:	Increased Levels of Biodiversity Awareness among major stakeholders groups and the Rural Population	**$120,000**
Output 8:	Awareness and inclusion of biodiversity conservation into regional decision-making	**$585,000**
	Total incremental costs:	**$3,515,000**

c) Risks and Sustainability (including financial sustainability)

Project Risks: Project risks in general are assessed as low. Commitments to the baseline and co-financing indicate current and future commitment of the GOR and other regional entities to conservation in the ASE. The course of action proposed in this project has been thoroughly discussed and accepted by all major stakeholders in the ASE, during PDF B consultations and project formulation exercises. Institutional and technical capacities are strong, and economic alternatives to current negative practices appear feasible for locally generated threats, especially when coupled with increased enforcement capacities. Stakeholder participation and multisectoral coordination mechanisms are widely supported.

The principal potential project risks are listed, below, alongside the proposed mitigative measures to be employed to eliminate or minimize them. Perceived potential risks include potential political instability and poor economic conditions. The Altai-Sayan eco-region is one of the most politically stable regions in the Russian Federation, owing in part to the relatively low and widely dispersed population, as well as to prevailing economic conditions resulting in economic dependency on federal state resource transfers. While economic uncertainty presents a risk of increased unsustainable extraction, the project monitoring mechanism will greatly help in managing and mitigating this potential risk. On the basis of widespread support for the project exhibited by all stakeholders, and the continuing demonstrated commitment to support the realization of the project's objectives, this risk is considered minimal.

Risk	Rating	Mitigative Measures
Political instability	L	The project region is particularly stable in relation to other regions in the Russian Federation.
Institutional uncertainty	L	Project design has garnered support at all levels of government. Institutional changes will not greatly affect project delivery, aside from potential delays.
Misunderstood objectives	L	The project's objectives have been clearly articulated during project design and will continue to be presented through a project newsletter and mass media throughout project implementation

Lack of institutional support	L	Responsible authorities have been party to project design and recognize the need for the project. All affected authorities will be directly involved in implementation and will have input throughout project delivery. Both federal and regional governments have endorsed the project.
Conflicts among stakeholders	M	Much effort has gone into precluding this possibility during project design by involving **all** stakeholders in open fora. The project manager and the PSC will mediate and resolve any unforeseen potential conflict.
Delays in required institutional adjustments	M	Project management will play advocacy role in promoting required adjustments. Specified adjustments converge with national and regional objectives and current trends.
Weak coordination with co-financed project inputs	L	Project Steering Committee will provide required coordination between GEF input and the inputs of other sources of co-financing.
Insecurity of co-financing from executing agency and other sources	L	Co-financing is primarily for baseline and sustainable development baseline and represents currently recurring on-going commitments of expenditures, as well as planned expenditures on the part of partners.
Lack of coordination with transboundary states	L	Establishment of Regional Steering Committee with representation from all transboundary states will ensure that required coordination is an ongoing feature of the project

Risk Rating: L=low; M=medium; H=high

Sustainability: The project's operational sustainability has been ensured through broad, intensive involvement of all relevant stakeholders during the preparatory stage. This involvement will be maintained throughout implementation – both through Project Steering Committee and stakeholder consultations, as well as through participatory project management mechanisms.

Project interventions have been carefully designed taking into account management capacities of institutions involved. The project has a consistent focus on building institutional capacities at multiple levels, in terms of systematically building performance of protected areas management teams, as well as in creating and operationalizing an adequate enabling environment for effective institutional action.

The financial sustainability of the project's outcomes will be enhanced through activities to provide protected areas with the means to generate their own income through economic instruments and financial mechanisms, as well as through innovative partnerships with private sector investors. At the same time, the project will pursue partnerships with private investors and NGOs to engage in sustainable use of biodiversity in buffer zones and corridors.

The level of co-financing for this project, as well as the diversity of sources, indicate wide-ranging support for the project's goals and objectives. Tourism sector interest in the project's outcomes is strong because of the direct link between biodiversity conservation, protected areas and ecotourism. The multi-stakeholder approach to project design and implementation has created a specific broad-based level of support throughout the ASE for this initiative, and the partnership with WWF has strengthened it.

d) Replicability

Sustainability of project outcomes is enhanced by the high replication potential of lessons to be learned during the project. Regional nature protected areas and strong local community involvement in biodiversity management and conservation is new and innovative for Russia, and has a huge potential in other biodiversity rich regions, where the interests of local populations and other stakeholders have to be continuously balanced with conservation needs. This applies both to areas within the Altai-Sayan Ecoregion, outside the selected project sites, as well as to other protected areas in Russia (e.g., in the Caucasus and Ural Mountains and Siberia).

The project will provide valuable lessons for building private-public partnerships in support of sustainable development and development of biodiversity conservation incentives for other sectors of the economy, which is particularly important for Russia, taking into account current economic growth and the increasing role of resource extraction industries. Lessons and best practices derived from partnerships with tourism enterprises and forestry companies, for example, will be valuable to many other protected areas and buffer zones of the ASE and elsewhere in Russia.

Experience with economic instruments and financial mechanisms aimed at assisting PAs to generate own revenue will have readily adaptable, practical applications throughout Russia.

The project's activities aimed at developing local participation in PA management (indigenous and rural communities) will yield important lessons and practices for use in and around PAs in many areas of the ASE and Russia.

Results from the project, including best practices and lessons learned, will be systematically disseminated within and beyond the Altai-Sayan Ecoregion through a number of information sharing networks and fora. In general, the strategy will be to strengthen capacity of existing organizations (such as the Association of the Altai-Sayan Protected Areas - in case of protected areas, or Altai – Our Common House – in the case of transboundary cooperation) to provide information and knowledge exchange in the particular area of specialization. Taking into account that since 1996 seven regional associations of Protected Areas have been established in Russia, the experience obtained during project implementation and afterwards would be shared and discussed at the all-Russia Protected Areas Managers Forum to be organized by the Ministry of Natural resources bi-annually.

In addition, project managers will participate, as appropriate, in UNDP/GEF sponsored networks, organized for senior project management staff working on projects that share common characteristics, and they will participate in scientific, policy-based and other networks, deemed beneficial to generation and dissemination of project knowledge and experience.

The project will identify, analyze, and share lessons learned that might be beneficial to the design and implementation of similar initiatives. Identifying and analyzing lessons learned is an on- going process, and such lessons will be codified and disseminated through UNDP once every 12 months at a minimum. UNDP/GEF will assist the project team to categorize, document and report lessons learned, and a portion of project resources have been allocated for these activities..

e) <u>Stakeholder Involvement</u>

Extensive stakeholder participation was pursued and obtained during project preparation. This project was designed through extensive consultations and the direct participation and input of all stakeholders throughout the PDF B development period. The project development process directly involved the federal government at the national and regional levels, relevant branches of the regional governments and Administrations, non-governmental organizations, representatives of

communities and indigenous peoples' organizations, academics, the research community, the mass media, and the public at large. Over 500 individuals took part in the project development process. Workshops and stakeholder meetings were held in Krasnoyarsk, Kemerovo, Novosibirsk, Barnaul, Abakan, Gorno-Altaisk, Kyzyl, and in other communities in the region. Experts working on various aspects of the project have likewise met with all key stakeholders during project preparation. The administration and staff of PAs were also directly involved throughout the project development process. Representatives of numerous other government agencies and departments, as well as the academic and research community participated in and provided input into the project's development.

Three meetings of the Steering Committee were held involving representatives of the federal Government, the regional Governments and Administrations, regional and local NGOs, indigenous peoples' representatives and UNDP. Likewise, there have been three meetings of the Regional Steering Committee to ensure coordination with complementary projects in Mongolia and Kazakhstan. The PDF team has also given numerous interviews in the public media to raise awareness about the project

The project development process was particularly sensitive to the views and aspirations of local communities and indigenous people. Specialized expertise was hired during project development to assess the conditions and needs of local communities. To this end, the project development team also visited and had extensive discussions with community and indigenous organization representatives in all of the directly affected communities. In these consultations, it was particularly important to not only solicit the population's direct input but also to convey the implications of the project to their daily activities, including both opportunities and potential changes to the norm. As a result, the project is widely supported, and indeed anticipated, by local communities and indigenous people.

The PDF B process likewise directly involved teams of regional experts in fulfilling information gathering and analysis requirements. Information provided by teams included: biodiversity status and threats; social and economic characteristics; legal and regulatory regime; indigenous peoples; environmental awareness and advocacy; protected area network development; transboundary biodiversity conservation issues; and, alternative livelihoods. The project development process similarly brought together numerous other parties by providing a unifying and coherent framework for their particular mutually supporting initiatives. These parties included UNDP – Kazakhstan, UNDP- Mongolia, the World Bank, UNESCO, WWF- Russia, WWF-Mongolia, and IUCN. Extensive consultations with these partners have resulted in the development of a partnership for project design and delivery.

As a result of the extensive consultations undertaken and the direct participation of all stakeholders throughout the project development process, the project has attained high levels of support among project stakeholders. All stakeholders have expressed support for the project's objectives (see Annex 2G – letters of support). The draft project brief has also been reviewed by the federal and regional authorities, and endorsed by all stakeholders and the GEF National Operational Focal Point (Annex 2B).

f) Monitoring & Evaluation

2 f i. Describe how the project design has incorporated lessons from similar projects in the past.

The project's design incorporates lessons from other biodiversity conservation activities that have been undertaken in the Russian Federation over the past decade.

Lesson	Relevant Project Design Feature
Project objectives and parameters must be clear to all interested parties and the general public in order to avoid unfounded expectations	Objectives and parameters were clearly presented to all affected and interested parties during project development and will continue to be during implementation using a regular project newsletter and the mass media
Project progress monitoring must be an on-going process	Tracking and reporting on implementation is integral to the project M&E plan
Multiple stakeholders, including local communities, must be involved in project implementation	All responsible authorities and local communities were involved in project design and will be participating in its implementation
Reporting on project achievements to all interested parties and the general public must be done regularly	Project newsletter and regular mass media contact is provided for in the project
Project delivery must be politically neutral and transparent	Project Steering Committee to be responsible for ensuring this
Project management structure and associated responsibilities must be clear to all	Structure and responsibilities to be clarified through project approval

2 f ii. Describe approach for project M&E system

Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures (see Annex 3) and will be provided by the project team and the UNDP Country Office (UNDP-CO) with support from UNDP/GEF. The Logical Framework Matrix in Annex 2Ai provides *performance* and *impact* indicators for project implementation along with their corresponding *means of verification*. These will form the basis on which the project's Monitoring and Evaluation system will be built.

Annex 3 outlines the principle components of the Monitoring and Evaluation Plan and indicative cost estimates related to M&E activities. The project's Monitoring and Evaluation Plan will be presented and finalized at the Project's Inception Report following a collective fine-tuning of indicators, means of verification, and the full definition of project staff M&E responsibilities.

1. FINANCING

Project outputs	Co-financing	GEF	Total
Output 1: Establish new PAs	**800,000**		**800,000**
1.1 Establish new PAs	800,000	-	
Output 2: Conservation of Rare and Endangered Species Promoted in the ASE	**915,000**	**370,000**	**1,285,000**
2.1 Strengthen law enforcement practices with respect to poaching and illegal trade in rare and endangered species	300,000	280,000	
2.2 Raise public awareness and involve local population in conservation of rare and endangered species	230,000	30,000	

2.3 Update baseline information and establish monitoring system to control population of "flagship species", snow leopard and Argali sheep	385,000	60,000	
Output 3: Strengthening capacity for existing priority PAs	**900,000**	**780,000**	**1,680,000**
3.1 Strengthen priority PA infrastructure and staff capacity	350,000	340,000	
3.2 Develop and implement management plans for priority PAs	550,000	440,000	
Output 4: Strengthened coordination and management between PAs	**650,000**	**190,000**	**840,000**
4.1 Build capacities of provincial authorities to manage PA system	300,000	50,000	
4.2 Create enabling environment for community participation in PA management	100,000	50,000	
4.3 Promote cooperation and information and knowledge exchange among PAs	250,000	90,000	
Output 5: Strengthened institutional framework for Biodiversity Conservation and Transboundary Management	**815,000**	**410,000**	**1,225,000**
5.1 Development of model legislative and regulatory provisions for biodiversity conservation to cover gaps in existing policies and adjust provincial legislation to federal laws	360,000	160,000	
5.2 Promote transboundary conservation actions	455,000	250,000	
Output 6: Increased Levels of Biodiversity Awareness among major stakeholder groups and the rural population	**550,000**	**120,000**	**670,000**
6.1 Work with local population and visitors in key project sites to raise awareness on environmental values and benefits of biodiversity conservation	175,000	50,000	
6.2 Promote children and youth involvement in biodiversity conservation through innovate education programmes for school in the selected project sites	260,000	30,000	
6.3 Allow for effective exchange of experiences, best practices and lessons learnt	115,000	40,000	
Output 7: Improved information on biodiversity, including TEK and it use in Decision-Making	**525,000**	**200,000**	**725,000**
7.1 Undertake an ecosystem and biodiversity conservation information needs assessment	115,000	20,000	
7.2 Develop and implement an ecosystem based biodiversity monitoring program in the Ecoregion	125,000	100,000	
7.3 Establish biodiversity and TEK data bases	130,000	70,000	
7.4 Train natural resources management authorities and other state employees to effectively integrate basic biodiversity and TEK information into sectoral practice	155,000	10,000	
Output 8: Awareness and inclusion of biodiversity conservation into regional decision-making	**825,000**	**565,000**	**1,390,000**
8.1 Raise awareness on biodiversity values among decision-makers and nature management authorities	175,000	125,000	

8.2 Strengthening enforcement capacities and collaboration among governmental agencies to implement existing environmental laws	350,000	175,000	
8.3 Establish legal and regulatory environment to mainstream biodiversity into regional development policies	300,000	265,000	
Output 9: Development of alternative livelihoods and involvement of local populations in Natural Resources Management	**5,680,000**	**800,000**	**6,480,000**
9.1 Establish pilot territories of the traditional nature use	760,000	210,000	
9.2 Design and implement community-based wildlife and NTFP management programmes	90,000	160,000	
9.3 Disseminate accumulated knowledge and best practices in the ASE	30,000	100,000	
9.4 Promote eco-tourism development within selected PAs	1,500,000	50,000	
9.5 Demonstrate community-based tourism development and livelihood improvement	3,300,000	280,000	
Monitoring and Evaluation		**80,000**	**80,000**
TOTAL UNDP/GEF BUDGET:	**11,660,000**	**3,515,000**	**15,175,000**

Cost Effectiveness: The total project costs to provide for the long-term conservation of globally significant biodiversity values in this eco-region are very reasonable given the comprehensive nature and enormous spatial coverage of the project. The cost effectiveness is further enhanced by the fact that a large portion of the expenditures will be used in a proactive manner to minimize or prevent biodiversity loss from the outset, which is always more effective than rectifying damages that have already occurred.

4. INSTITUTIONAL COORDINATION & SUPPORT

a) Core commitments & Linkages

4 a i. Linkage with UNDP CPO

Environmental protection is a key focus area of the Country Programme Outline. The project is entirely supportive of and consistent with the UNDP's country programmes. To date, UNDP has demonstrated a high level of commitment to furthering biodiversity conservation in the Russian Federation. In the five years UNDP has developed close working relations and mutual understanding with representatives of the federal and regional governments, communities, NGOs, and other stakeholders in many parts of the Russian Federation. Presently UNDP's environment portfolio includes two full-scale biodiversity conservation projects in Kamchatka, now under implementation. With the aid of GEF-PDF resources, UNDP is currently assisting proponents to prepare medium-sized projects in the Taimyr Peninsula, Daurian steppe, Commander islands and Komi Republic as well as a full-scale project in the Lower Volga delta. UNDP maintains close cooperation and exchange of knowledge and lessons between the biodiversity conservation initiatives under its management in different areas of Russia. In particular, this project will analyze and adapt experience of the Kamchatka projects with establishment of new financial mechanisms for biodiversity conservation, and development of alternative livelihood opportunities for local communities.

The UNDP-Capacity 21 project "Promotion and Development of Local Agenda 21 in the Altai Republic of Russia" has recently been completed. This project was designed to increase the potential of local authorities and other stakeholders to develop and realize local strategies for sustainable development. As a result, local initiative groups have been established in three pilot regions of the Republic of Altai. These groups have prepared sustainable development plans with the help of domestic and international experts. A number of training programs in the field of strategic planning, creation and management of specially protected areas, ecotourism management, etc., were implemented in the course of the project. Several pilot projects were selected at the final stage of the project and are currently under implementation in line with the strategies. In addition, public awareness and educational programmes conducted under the Capacity 21 programme complement UNDP-GEF project activities by having raised local public awareness on biodiversity conservation and sustainable development issues among the populations of the selected municipal districts.

4 a ii. GEF activities with potential influence on the proposed project

There are a number of GEF supported projects presently in various stages of implementation in the Russian Federation, Kazakhstan, and Mongolia. All three projects were developed in close collaboration and continuous consultations with neighboring countries. This project was designed and will be carried out in such a way so as to maximize the complementarity of the different projects' activities and benefits. A complementary UNDP/GEF project for the Mongolian portion of the Altai-Sayan Ecoregion has recently been approved for funding by the GEF. At the same time, Kazakhstan is preparing a biodiversity conservation project that is complementary to the proposed Altai-Sayan project. Cooperation among these projects has been established through the UNDP/WWF supported Regional Steering Committee; close working level coordination and information sharing will be ensured between the project teams. To the extent possible the projects will coordinate and combine transboundary activities, such as research and monitoring, as well as evaluation missions.

The Russia WB/GEF Biodiversity Conservation Project has prepared a national biodiversity strategy, biodiversity database and information system, and guidelines for economic valuation, among other results. Existing or planned GEF-financed projects are not working in the geographic area of the Russian portion of the Altai-Sayan Ecoregion, with the exception of small model projects under the WB/GEF Biodiversity Conservation Project in the Altaisky and Katunskiy zapovedniks (below US$ 100,000 each). The WB/GEF project has provided support to model projects in the Altaisky and Katunskiy Zapovedniks in the form of strengthening the inspection and control operations (mainly material support in the form of equipment, vehicles etc.), and assisting in environmental education activities. The proposed project will benefit from some of the outputs of the activities, but will not duplicate work already done or underway. Component B (Protected Areas) of the WB/GEF Biodiversity Conservation project also included a sub-component that was aimed at improving cooperation between protected areas. A model project (US$ 96,485) was implemented in the Republic of Altai by an NGO, Fund for 21st Century Altai. This project was narrower in geographical terms, including only protected areas in only one of the six Russian regions of this project. That project prepared an inventory of the protected areas in the Altai Republic using GIS, mapped and published an inventory of the flora and fauna therein, and prepared the normative framework for networking among the protected areas. It also improved coordination among the different authorities of the Altai Republic.

An effective cooperation mechanism will be created between the two projects and WWF, to harmonize methodologies and technologies used and to ensure that all outputs will be utilized in the full UNDP/GEF project, possibly by replicating in other regions successful methods and models

developed in the WB/GEF initiative. The Project Steering Committee and Regional Steering Committee will ensure that the approved activities will be complementary to activities completed under the WB/GEF project.

Kazakhstan has completed its National Biodiversity Strategy and Action Plan (supported by UNDP/GEF). The country is currently in the development stage of its medium-size project for the conservation of biodiversity in the Altai-Sayan Ecoregion that is complementary to this project. In addition, a UNDP-GEF migratory bird wetland conservation project has recently initiated implementation. This project will demonstrate sustainable wetland management in four priority areas, although none will be in the Altai region of Kazakhstan. Kazakhstan is also participating in a World Bank/GEF-funded regional project working to conserve priority areas in the Tien Shan Mountains of Kazakhstan, Kyrgyzstan, and Uzbekistan.

b) Implementation arrangements

The project will be executed by the GOR through the MNR with the direct joint participation of the Regional Governments and Administrations, and will adhere to UNDP nationally executed (NEX) project requirements. The administration of project funds will be the joint responsibility of the UNDP and the GOR. The GOR's responsibilities will include: 1) certifying expenditures under approved budgets and work plans; 2) tracking and reporting on procurement and outputs; 3) coordinating the financing from UNDP and GEF with that from other sources; 4) assisting in the preparation of Terms of Reference for contractors and required tender documentation; and 5) chairing the Project Steering Committee (Project Director). The PSC will monitor the project's implementation to ensure timely progress in attaining its desired results, and efficient coordination with other projects. The GOR and the Regional Governments and Administrations will also facilitate the implementation of the required legal and regulatory reforms. The UNDP will be responsible for: 1) financial management; and 2) the final approval of payments to vendors, the procurement of goods in excess of $US 10,000, the approval of Terms of Reference, recruitment of consulting services, and sub-contracting. The implementation arrangements for the project have been designed to maximize transparency and accountability. Disbursement figures will be made publicly available. These arrangements have been accepted by all stakeholders.

Participatory decision-making is also highly stressed in the project. A Project Steering Committee (PSC) will be formed to provide overall guidance and support for project implementation activities. The PSC will consist of representatives from: the GOR, the six subjects of the Russian Federation, UNDP, the indigenous population, research institutes, and NGOs. The PSC will meet at the beginning of the project, 6 months after commencement of project implementation, and every 6 months thereafter to review project progress and set major policy and implementation directions as required.

The PSC will be chaired by the Project Director (PD). The PD, who will be designated by the Government of the Russian Federation, will be responsible for carrying out the directives of the PSC and for ensuring the proper implementation of the project on behalf of the Government. In doing so, the PD will be responsible for project delivery, reporting, accounting, monitoring and evaluation, and for the proper management and audit of project resources.

Reporting to the PD will be the Project Manager (PM), who will be assisted by Programme Officers based in Moscow and in the region. The PM will be a full time employee of the project and will be chosen in an open and fair competitive manner following standard UNDP hiring procedures. The PM will be in charge of daily implementation of the project and managing project activities. He/she

will oversee and co-ordinate the work of the working teams. All staff will be hired using standard UNDP hiring procedures.

The UNDP Country Office will support the project's implementation by maintaining the project budget and project expenditures, contracting project personnel, experts and subcontractors, carrying out procurement, and providing other assistance upon request of the National Executing Agency. The UNDP Country Office will also monitor the project's implementation and achievement of the project outputs and ensure the proper use of UNDP/GEF funds. Financial transactions, reporting and auditing will be carried out in compliance with the national regulations and UNDP rules and procedures for national execution. The UNDP Country Office will ensure the implementation of the day-to-day management and monitoring of the project operations through the UNDP/GEF Programme Co-ordinator based in Moscow and the Project Manager based in the region. The Project Manager will be also responsible for the working level co-ordination of the other on-going UNDP/GEF projects in the Altai-Sayan eco-region, reporting to the UNDP/GEF Programme Co-ordinator. Close links will be established and maintained with the Regional Steering Committee to ensure the maximization of collaboration and integration of the on-going and planned projects in the region, namely in Mongolia and Kazakhstan.

Project implementation will be shared among: the MNR at the federal level, relevant agencies of the federal and regional Governments and Administrations, the PAs, research institutes, indigenous peoples' organizations, community organizations, NGOs including WWF, and contracted expertise This allocation of responsibilities proceeds from legally mandated responsibilities of the governments and agencies, as well as the distribution of required and available expertise in the Ecoregion. Four thematic Working Groups will be established, each headed up by a Group Leader that will be paid for from the project. Each team will be responsible for performing activities under specific outputs:

- **Working Group on protected areas and endangered species** will be responsible for performing tasks and activities under the Outputs 1, 2 and 3;
- **Working Team on institutional capacity building** will be responsible for performing tasks and activities under the Outputs 4 and 5.
- **Working Team on monitoring, information and public awareness** will be responsible for performing tasks and activities under the Outputs 6 and 8.
- **Working Team on local community development and alternative livelihood** will be responsible for performing tasks and activities under the Outputs 7 and 9.

Each Working Group will be responsible for the coordination and implementation of the activities under its area of responsibility. The implementing agents will work collaboratively among themselves and with local populations to ensure effective and timely implementation of project activities. The proposed implementation arrangement will be critically reviewed during project evaluation and revised, if necessary, to improve its effectiveness.

5. RESPONSE TO REVIEWS

a) Council

Respond to Council Comments at pipeline entry.
Respond to Council comments at work program inclusion.

b) Convention Secretariat

Respond to comments from Convention Secretariats

c) GEF Secretariat

Respond to comments from GEFSEC on draft project brief.
Respond to comments from GEFSEC at work program inclusion

d) Other IAs and relevant EAs

Respond to comments from other IAs, relevant EAs on draft project brief.

e) STAP

Respond to comments by STAP at work program inclusion

f) Review by expert from STAP Roster

Respond to review by expert from STAP roster.
Respond to review by expert from STAP roster at work program inclusion

Annexes to Section 2

Annex 2 A i:	Log Frame Matrix
Annex 2 A ii:	Summary of Threats and Root Causes (separate annex)
Annex 2 B:	Endorsement Letter (separate annex)
Annex 2 C i:	STAP review
Annex 2 C ii:	Response to STAP review
Annex 2 D:	Response to GEFSEC and Council comments at work program inclusion
Annex 2 E:	Map of Project Sites (separate annex)
Annex 2 F:	Incremental Cost Assessment
Annex 2 G:	Co-funding letters (separate annex)
Annex 3:	Monitoring and Reporting

ANNEX 2 A I LOGICAL FRAMEWORK MATRIX

1.1 REGIONAL BIODIVERSITY CONSERVATION IN THE ALTAI-SAYAN MOUNTAIN ECOREGION -- LOG-FRAME RESULTS MEASUREMENT MATRIX

1.2 OBJECTIVE/OUTCOMES	Key Performance Indicator	Baseline (Year 1)	Target (Year _)	Verification means / Data collection strategy	Assumptions & Risks
Goal: *Conservation and sustainable use of globally significant biological diversity in Russia's Altai-Sayan ecoregion* ***Objective:*** *Ecosystem-based approach to biodiversity conservation is operationalized in Russia's Altai-Sayan Mountain ecoregion*					
Purpose: to conserve the globally significant biodiversity of the Altai-Sayan Ecoregion through the expansion, consolidation, and operationalization of an effective PA system in the Russian portion of the ASE, in close coordination with similar efforts in other countries of the ASE.	**Key Impact Indicators:** - Populations of flagship or keystone species in the project sites are stable or are increasing by end of project a) Increased biologically important habitat under legal protection	TBD in YR 1	**Yr 5:** populations of specific species have not declined from poaching and/or demonstrate increase in numbers **Yr 5:** 900,000 additional ha under legal protection	- PA inspectors records - Monitoring records - PA registry - MNR annual report on state of PA system	- Increased enforcement capacities and alternative livelihood incentives will be effective in decreasing the rate of poaching - National and regional authorities remain committed to biodiversity conservation and sustainable development and are willing to commit institutional and financial resources
OUTCOME 1: Strengthened and	**Key Indicators:**	TBD in	**Yr 5:** Management	Internationally	- Management

1.2 OBJECTIVE/OUTCOMES	Key Performance Indicator	Baseline (Year 1)	Target (Year _)	Verification means / Data collection strategy	Assumptions & Risks
Expanded Protected Areas System	Management effectiveness of ten PAs in the project sites improved measurably by end of the project Increase in # of hectares placed under protection in national and regional PAs, and within the UNESCO World Heritage Site "Altai Golden Mountains"	YR 1	effectiveness of PAs meets ARCBC protected areas competencies or similar - 100%. **Yr 5:** 900,000 hectares added to national and regional PAs, including 300,000 hectares within "Altai Golden Mountains	accepted assessment of management effectiveness of PAs (baseline, mid-term and end of project) PA registry and MNR annual reports on the state of PA system in Russia	effectiveness scorecard results adequately reflect the effectiveness of ecosystem conservation - National and regional authorities remain committed to biodiversity conservation and sustainable development and are willing to commit institutional and financial resources
Output 1: Establishing new Protected Areas					
Specific Result 1.1 New PAs established	– **Key indicator:** new PAs established and operational by end of project; – Number of buffer zones and clusters around existing PAs substantially increased by the end of the project		**Yr 3:** 3 new PAs established including one transboundary **Yr 5:** 4 new PAs established **Yr 5:** 60% increase in buffer zone and cluster areas around PAs	- PA registry and annual reports to MNR and regional Governments	- Funding for new PA establishment will be made available by the federal and regional governments
Output 2: Conservation of Rare and	**Key Indicators:** - Populations of	TBD in YR 1	**Yr 4:** 50% decrease in frequency of	– Independent field assessments and	– Monitoring system is operational and

1.2 OBJECTIVE/OUTCOMES	Key Performance Indicator	Baseline (Year 1)	Target (Year _)	Verification means / Data collection strategy	Assumptions & Risks
Endangered Species Promoted	flagship/keystone species in the project sites remain stable or have increased by end of project - Frequency of poaching and illegal trade in flagship species outside PAs decreased		poaching and illegal trade **Yr 5:** 70% decrease in poaching and illegal trade	interviews with PA staff, members of anti-poaching group, and local enforcement authorities; – Monitoring records	data collected are reliable
Specific Result 2.1 Strengthened law enforcement practices with respect to poaching and illegal trade in rare and endangered species	– Increase in Inter-regional anti-poaching groups – New regulatory and legal requirements developed and introduced to cover gaps in anti-poaching legislation	TBD in YR 1	**Yr 2:** 2 anti-poaching groups operational **Yr 3:** new regulatory and legal requirements for anti-poaching sufficient to cover gaps	– Anti-poaching group reports, interview of local stakeholders – Reports on the law enforcement system – Drafts of regulatory and legal documentation – Expert independent panel to assess gaps	– Regional authorities and local communities maintain their interest and support for protection of endangered species
Specific Result 2.2 Improved public awareness on conservation of rare and endangered species	– % improvement in level of awareness of local residents and enforcement authorities of anti-poaching measures and illegal trade	TBD in YR 1	**Yr 5:** increased awareness compared to baseline	- Before/after awareness programme surveys	- PAs staff, enforcement authorities (militia, custom, court, border service) are ready to cooperate - Local population is sensitized to biodiversity conservation
Specific Result 2.3 Updated baseline information and established monitoring system to control population of	– **Key indicator:** Monitoring system for flagship/keystone species designed and piloted in a network	0	**Yr 4:** 4 monitoring sites and systems established with participatory	– Monitoring records and Protocols; – Field interviews – Reports to MNR	- Minimum infrastructure and expertise is available

1.2 OBJECTIVE/OUTCOMES	Key Performance Indicator	Baseline (Year 1)	Target (Year _)	Verification means / Data collection strategy	Assumptions & Risks
"flagship/keystone species"	– Participatory monitoring of key species in place		monitoring		to build monitoring systems - Local communities are willing to share information and participate in monitoring
Output 3: Strengthened Capacity of Existing PAs					
Specific Result 3.1 Strengthened priority PA infrastructure and staff capacity	- **Key indicator:** % improvement in PA enforcement capacity; - Personnel trained in wildlife management; - New patrol stations established and adequately equipped.	TBD in YR 1	**Yr 3:** 70% of PA staff trained **Yr 3:** 10 new patrol stations **Yr5:** Increased PA performance capacity compared to baseline in 4 project site	- Assessment of PAs' management effectiveness (baseline, mid-term and end of project) - PA registry and annual reports to MNR; - Field visits and interviews with PA staff	- Political support for PAs is sustained at the federal and regional levels - Socio-economic conditions do not deteriorate and funding for additional staff will be made available by the federal and regional governments
Specific Result 3.2 Management plans for priority PAs developed and implemented	– Management plans prepared and approved, including one for the Ukok Plateau - part of the World Heritage Site – Altai Golden Mountains. – Implementation of management plans	0 0	**Yr 3:** 2 new PA management plans developed **Yr 3:** implementation of 2 management plans **Yr 5:** 3 new PA management plans developed	- Approved management plans (documents); - Local community perceptions surveys and interviews with local communities - Assessment of PAs' management	- Participatory approach is adopted for preparation and public discussion of management plans

1.2 OBJECTIVE/OUTCOMES	Key Performance Indicator	Baseline (Year 1)	Target (Year _)	Verification means / Data collection strategy	Assumptions & Risks
				effectiveness - Local community development plans	
Output 4: **Strengthened coordination and management between PAs**					
Specific Result 4.1 Improved capacities of regional authorities to manage PA system	- **Key indicator:** PA directorates created and functioning within the regional administrations - % of PA directorate staff trained in PA management - Level of collaboration among regional and federal PA management authorities and other relevant governmental agencies improved by end of project	0 0% 	**Yr 2:** Two PA directorates created and functioning **Yr 3:** 100 % PA Directorate staff trained	- Approved official documents re directorates' establishment; - Directorates' annual reports to regional government - Federal officials' participation in regional activities	- Political support for PAs is sustained at the regional level - Socio-economic conditions do not deteriorate and funding for additional staff will be made available by the regional governments
Specific Result 4.2 Enabling environment created for community participation in PA management	- Co-management process determined, formalized, and is operational between authorities, PA managers and local communities at project sites; - % increase of local population (adults) at project sites involved and/or benefiting from PA activities - % increase in number of local residents formally employed by PAs as part-time rangers	0 0%	**Yr 5:** 5 new participatory management agreements underway **Yr 5:** 20% of local population engaged in PA activities compared to baseline **Yr 4:** 50% increase in employment of	– Participatory management agreements – social polls/surveys among local residents	- PA managers, regional authorities, business, and local communities are willing to collaborate

1.2 OBJECTIVE/OUTCOMES	Key Performance Indicator	Baseline (Year 1)	Target (Year _)	Verification means / Data collection strategy	Assumptions & Risks
			residents as part-time rangers		
Specific Result 4.3 Collaboration and information and knowledge exchange among PAs improved	– **Key indicator:** ASPAA effectively facilitates collaboration among PAs through organization of semi-annual AASPA meetings, quarterly exchange programmes and issuance of regular (at least one per month) information bulletins; – Lessons learnt compiled and disseminated among PA and authorities in the ASE and nationally by end of project.	0	**Yr 2:** ASPAA hosts meetings and quarterly exchange programmes **Yr 4:** Dissemination of lessons learnt **Yr 5:** Nationwide dissemination	- AASPA annual reports; - Survey of PA managers - Field visits and interviews with PAs staff	- PAs staff and authorities are open for co-operation and information exchange within the Ecoregion
Output 5: **Strengthened Institutional Framework for Biodiversity Conservation and Transboundary Management**	**Key Indicators:** - Number of regional sectoral policies and regulations reflecting biodiversity consideration increases constantly by the end of the project - Cross-sectoral collaboration between natural resources use and conservation authorities and transboundary	TBD in YR 1	**Yr 4**: 4 regional sectoral policies	Project progress reports and results of independent evaluation	- Willingness to collaborate among management agencies; - Regional authorities are committed to undertake policy and regulatory reforms

1.2 OBJECTIVE/OUTCOMES	Key Performance Indicator	Baseline (Year 1)	Target (Year _)	Verification means / Data collection strategy	Assumptions & Risks
	cooperation improved as compared to baseline level				
Specific Result 5.1 *Regional legislative bases for biodiversity conservation improved*	– Regional legislative base for PA management improved and existing gaps and deficiencies eliminated	TBD in YR 1	**Yr 4:** regional legislative reforms underway compared to baseline	– Independent expert assessment of legal regulations and provisions	– Regional authorities are committed to undertake policy and regulatory reforms
Specific Result 5.2 Transboundary conservation actions implemented	– **Key Indicator:** transboundary cooperation agreements signed – transboundary conservation project launched between Russia and Mongolia and another between Russia and Kazakhstan	0	**Yr 3:** three transboundary cooperation agreements signed **Yr 3:** Russia-Mongolia transboundary conservation project launched **Yr 5:** Russia-Kazakhstan transboundary conservation project launched	- Signed agreements; - Project progress reports - Mid-term evaluation - Independent expert evaluation of projects	- Political situation between Russia, Mongolia and Kazakhstan continues to favor transboundary cooperation
Output 6: **Increased Levels of Biodiversity Awareness Among Major Stakeholder Groups**	**Key Indicator:** - % increase in share of allocation for biodiversity-related activities in regional budgets - Level of awareness and support to biodiversity conservation among tourists, children, and local population increases measurably throughout the project	TBD in YR 1	**Yr 3:** 30% increase for biodiversity activities in regional budget compared to baseline **Yr 5:** 80% increase in support for biodiversity activities in regional budget compared to baseline	– Regional budgets review – Project mid-term evaluation – Awareness assessment surveys in the project sites (baseline, mid-term and end of project)	- Socio-economic conditions of the regions and local population do not deteriorate

1.2 OBJECTIVE/OUTCOMES	Key Performance Indicator	Baseline (Year 1)	Target (Year _)	Verification means / Data collection strategy	Assumptions & Risks
Specific Result 6.1 Raised awareness of local population and visitors in key project sites on biodiversity conservation benefits	– Level of environmental awareness among children and general public and visitors within the project areas includes measurably beginning mid-term evaluation and improving up to end of project – Awareness raising programmes for indigenous communities developed and implemented	TBD in YR 1	**Yr 5:** Steady increase in environmental awareness compared to baseline **Yr 3:** indigenous targeted awareness-raising programmes developed **Yr 5:** indigenous targeted awareness-raising programmes implemented in 2 project sites	– Pre- and post-awareness programme assessment; – Project progress reports and field visit reports;	- Education institutions collaborate with PAs and among themselves with awareness raising activities; - Support from regional media sustains
Specific Result 6.2 Children and youth involved in biodiversity conservation	– School curricula for biodiversity education adjusted to regional specific and officially approved by educational authorities – School curricula for biodiversity education and successfully tested – micro-projects for children and youth involvement in biodiversity conservation implemented	0	**Yr 3:** Education authorities approve regional biodiversity additions in school curricula **Yr 5:** Biodiversity curricula conducted in 2 project sites **Yr 2:** 10 micro-projects implemented	– Programme of biodiversity education – Project progress reports and project evaluation – Micro-project reports and evaluation	- Educational authorities support environmental education
Specific Result 6.3 Exchange of experiences, best practices and lessons learnt	– Network of practice in environmental education is established and functioning – **Key indicator:** successful replication of project-introduced practices by governments, educational institutions, NGOs, PAs and PA	0	**Yr 2:** 5 leading educational institutions and NGOs engaged in network of environmental education **Yr 3:** 4 cases of	– Project evaluation and project reports – Published results of studies, newspaper articles and TV programmes, interviews with stakeholders;	– education institutions and NGOs will collaborate with PAs and among themselves with

1.2 OBJECTIVE/OUTCOMES	Key Performance Indicator	Baseline (Year 1)	Target (Year _)	Verification means / Data collection strategy	Assumptions & Risks
	networks		replication of project-introduced practices **Yr 5:** 4 new cases of replication		awareness raising activities
OUTCOME 2: Strengthened Enabling Environment for Ecosystem Based Biodiversity Conservation					
Output 7: **Improved Information on Biodiversity, Including TEK, and its Use in Decision-Making**	**Key Indicator:** - Essential information on biodiversity status in project sites is available, reliable and updated - Database on TEK available - % of concerned regional and local employees receive training in management and application of information.	0%	**Yr 2:** biodiversity information in project sites available on project and institutional websites **Yr 4:** TEK Database available **Yr 5:** 50% of employees receive training	- Biodiversity and TEK data bases; - Interviews with governmental authorities and decision-makers - Independent assessment	– Political support for biodiversity conservation is sustained at the regional level
Specific Result 7.1 Ecosystem conservation data needs assessment conducted	– To define required key biodiversity data	0	**Yr 1:** Data needs for biodiversity identified	Reports on required biodiversity data assessment surveys	Stakeholders willing to share information and participate in assessments;
Specific Result 7.2 Ecosystem based biodiversity monitoring program developed and implemented	– Standardized protocols for monitoring of biodiversity and threat levels developed and accepted – Participatory monitoring mechanism put in place – Monitoring system established in project sites	0	**Yr 1:** protocols for monitoring of biodiversity and threats standardized **Yr 2:** monitoring mechanism in place **Yr 2:** monitoring system in 4 project sites	Monitoring protocols and records	Initial infrastructure and expertise exist to establish monitoring system Stakeholders share information and participate in

1.2 OBJECTIVE/OUTCOMES	Key Performance Indicator	Baseline (Year 1)	Target (Year _)	Verification means / Data collection strategy	Assumptions & Risks
					assessments
Specific Result 7.3 *TEK data base created*	– Levels of TEK appraised and methods for TEK integration into decision-making developed	0	**Yr 1:** TEK appraisal completed	TEK Database	TEK maintained local communities and among indigenous peoples
Specific Result 7.4 *Decision-makers trained to integrate biodiversity and TEK information in sectoral policy*	– **Key indicator:** % of concerned regional and local staff receive training in management and application of information.	0%	**Yr 5:** 50% of staff have received training	Training reports Results of project evaluation, Interviews	Government officials are open to learning
Output 8: **Increased Awareness and inclusion of biodiversity conservation in regional decision making**					
Specific Result 8.1 Raised awareness of biodiversity values among decision-makers and nature management authorities	– Level of biodiversity awareness among decision-makers improves measurably by mid-term evaluation and continues improving up to project closure – Economic valuation of biodiversity benefits in project sites conducted – Results of economic valuation of biodiversity benefits communicated to key stakeholders and to general public	TBD in YR 1 0	**Yr 5:** Steady increase of biodiversity awareness among decision makers compared to baseline **Yr 2:** 3 project site economic valuations of biodiversity carried out **Yr 4:** Economic valuation results disseminated	– Pre- and post-awareness programme assessment; – Chapters on valuation of biodiversity benefits in PA management plans; – Articles and other media products	– Decision-makers are open to awareness-raising – Support from regional media sustains
Specific Result 8.2 *Enforcement capacities of environmental authorities and cross-sectoral collaboration*	- Knowledge of enforcement requirements improved by 50% over baseline level by mid-term evaluation and compliance	TBD in YR 1	**Yr 3:** 50% increase over baseline of knowledge of enforcement	– Survey of policy enforcement practices as compared to PDF B	– Willingness to collaborate among management agencies

1.2 OBJECTIVE/OUTCOMES	Key Performance Indicator	Baseline (Year 1)	Target (Year _)	Verification means / Data collection strategy	Assumptions & Risks
strengthened	mechanisms applied - Institutional arrangements for improved collaboration among nature conservation and resource management agencies at the regional level designed and implemented		requirements and implementation of compliance mechanisms **Yr 2:** improved institutional collaboration	baseline – Project progress reports and results of independent evaluation – Interagency agreements	
Specific Result 8.3 *Legal environment to mainstream biodiversity into development policies created*	- **Key indicators:** strategic impact assessments conducted for sectoral development programmes in two targeted regions; - Recommendations on introduction of economic mechanisms for biodiversity conservation developed - Economic instruments/ mechanisms for biodiversity conservation legally introduced	0	**Yr 3:** 2 pilot impact assessments carried out **Yr 3:** recommendations for economic mechanisms for biodiversity conservation developed **Yr 5:** economic instruments/ mechanisms legally introduced	– Project progress reports and results of independent evaluation – Legislative documents; – Impact assessment documentation	– Regional authorities are committed to undertake policy and regulatory reforms
Output 9: **Development of Alternative Livelihoods and Involvement of Local Populations in Natural Resource Management**	**Key Indicators:** – Increased % of population in the targeted project sites involved in project-promoted community-based resource management practices, including women and youth – Threats from unsustainable exploitation of natural resources in targeted project sites by end of project reduced from	TBD in YR 1	**Yr 5:** 40 % of population over baseline engaged in community-based resource management practices **Yr 5:** Number of unregulated tourists reduced by 80%; **Yr 5:** Poaching	– Project progress reports – Project evaluation – Employment statistics – Threat analysis in the project sites – Independent expert assessments	– Baseline funding is maintained and expected levels of co-financing realized; – Incentives provided prove effective in altering livelihoods to more sustainable forms

1.2 OBJECTIVE/OUTCOMES	Key Performance Indicator	Baseline (Year 1)	Target (Year _)	Verification means / Data collection strategy	Assumptions & Risks
	baseline levels		incidence reduced by 70%; **Yr 5:** Unsustainable use of NTFP reduced by 70%		
Specific Result 9.1 Pilot territories of traditional natural resource use established	– **Key indicator:** territories of traditional natural resource use established – Legal provisions for establishment of the territories of traditional natural resource use are developed and approved for a # of targeted regions	0 0	**Yr 5:** 3 traditional natural resource use territories established **Yr 3:** legal provisions for traditional natural resource use territories approved in 3 targeted regions	– Legal documents on the status of territories – Legislation documents – Independent assessments of legal provisions	– Consensus reached with indigenous communities and regional authorities on the status of territories; – Expected levels of co-financing realized
Specific Result 9.2 Pilot community-based wildlife and NTFP management programmes implemented	– **Key indicator:** % increase in number of rural population in two project sites that have adopted project-promoted community-based NTFP and wildlife management practices – Feasibility of community-management practices demonstrated, instruments designed and approved by respective authorities by end of year 2 and implemented by end of year 3 – Revenues from NTFP raised in two selected project sites by the end of the project	TBD in YR 1 TBD	**Yr 5:** 40% of rural population adopt BD friendly NTFP and wildlife management practices compared to baseline **Yr 5:** 50%increased revenues from NTFP compared to baseline	– Project progress reports – Partnership and community agreements – Field visits and interviews with local people and other stakeholders – Project evaluation – Independent expert assessment	– Baseline funding is maintained and expected levels of co-financing realized; – Incentives provided prove effective in altering livelihoods to more sustainable forms; – Local population is sensitized to biodiversity conservation and sustainable use of natural resources.
Specific Result 9.3 Best practices on community-based natural resource	– **Key Indicator:** # of cases of successful replication of project-promoted practices in	0	**Yr 3:** 3 cases of replication of project promoted	– Field visits and interviews with local people and	

1.2 OBJECTIVE/OUTCOMES	Key Performance Indicator	Baseline (Year 1)	Target (Year _)	Verification means / Data collection strategy	Assumptions & Risks
management replicated and knowledge disseminated	other areas in ASE. – # of regional workshops on community-based tourism, NTFP and wildlife management conducted; – Selected case studies and practical recommendations are compiled and published	0	practices **Yr 5:** 5 new cases of replication of project promoted practices **Yr 5:** 3 regional workshops held **Yr 4:** publication of case studies and practical recommendations	other stakeholders – Project evaluation – Workshop proceedings – Project publications	
Specific Result 9.4 Effective management of tourism activities demonstrated in selected PAs	– **Key indicator:** % Increase in revenues of three project PAs from organized eco-tourism – # of recreational carrying capacity assessments; – PAs' tourism management capacities improved measurably; – # of new partnerships between PAs and tourist companies established to pursue joint eco-tourism activities	TBD in YR 1 0	**Yr 5:** 100% increase in revenues from 3 PAs due to eco-tourism initiatives compared to baseline **Yr 1:** 3 PA recreational carrying capacity assessments completed **Yr 5:** PA tourism management capacities in 3 project sites improved compared to baseline **Yr 5:** 7 new PA/Tourist Operator partnerships established	– PA annual financial reports – Recreational capacity assessment (agreed documents); – Independent expert assessment of PAs' management effectiveness – Partnership agreements	– Properly organized tourism activity can directly benefit conservation through providing a source of revenue for protected area management and specific conservation activity; – Consensus can be reached with business, authorities, and local communities regarding tourism development inside and around PA.

1.2 OBJECTIVE/OUTCOMES	Key Performance Indicator	Baseline (Year 1)	Target (Year _)	Verification means / Data collection strategy	Assumptions & Risks
		0			
Specific Result 9.5 Pilot community-based tourism practices demonstrated	– **Key indicator:** partnerships between local communities and tourist operators created and operate in the project sites. – % increase in the number of women and youth in the three project sites involved in project-promoted tourism initiatives	0 7%	**Yr 3:** 5 community-tourist operator partnerships established **Yr 5:** 3 more community-tourist operator partnerships established **Yr 3:** 20% of youth / women involved in tourism initiatives compared to baseline **Yr 5:** 40% of youth/women involved in tourism initiatives compared to baseline.	– Project progress reports – Partnership agreements – Field visits and interviews with local people and other stakeholders – Project evaluation – Employment records	– Region's tourist attraction maintained; – External factors do not constrain development of tourism as a viable economic alternative; – Consensus reached with local communities on tourism development.

Annex 2 C i: STAP review - Review by expert from STAP Roster

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Institute of Ecology and Evolution, Russian Academy of Sciences

The revised project proposal included 58 pages of the main text and 56 pages of annexes I have received from the UNDP Russia Country office on December 23, 2003. In spite of hard time at the end of 2003 I should confess that I experienced a pleasure in the comprehensive study of this highly professional document devoted to biodiversity conservation in the Altai-Sayan Mountain Ecoregion. At the end of my study I came to the conclusion that this particularly project properly fits goals and programme priorities of the Global Environment Facility (GEF) and if it will be accepted for co-funding I am sure 5 years of work provided for the first phase of the project will be of great benefit to conservation of biodiversity, sustainable development and improving the well-being of local people of this unique ecoregion situated in the heart of the vast Asian continent.

According to the Terms of Reference for Review of Project Proposals it is necessary to focus upon some features of this project proposal. My comments are the following:

The Altai-Sayan Mountain Ecoregion is an enormous area (1,065,000 sq. km) which overlaps four countries (Russia, Mongolia, Kazakhstan and China) and results of the proposed project will be important for all of them. It is appropriate that a Regional Steering Committee with representatives of Russia, Kazakhstan and Mongolia was already created and it will coordinate the sound implementation of projects elaborated in these countries.

The global significance of biodiversity of the area was confirmed in 1998, when WWF specialists listed it as one the World's 200 priority ecoregions. Besides that conclusion five natural areas in the Altai Republic in 1998 were included into the UNESCO World Heritage List and after that, in 2003, the whole Uvs-Nuur depression was designated as a trans-boundary (Mongolia and Russia) World Heritage Site. The Altai-Sayan Ecoregion was selected also by the Millennium Ecosystem Assessment's International Programme for its sub-global multi-scale assessment to be completed in 2003-2004. Results of the MA project based on natural and social sciences are very relevant to the proposed one and could be used in some extent.

I am not going to describe all richness of fauna and flora of this Ecoregion and its diversified ecosystems since it was excellently presented in the project proposal and well known from many publications some of which have been prepared during the previous international and national projects implemented at this territory. Total number of Rare and Endangered Species of six taxonomic groups is shown in the Table 1 (page 8 of the Project Proposal) but contrary to the opinion of compilers of this table it is impossible to see which of them have been already entered into the Russian Federation Red Data Book and the IUCN Red Data Book. Anyhow I could confirm that this is true and this is meant that urgent measures to save them and other species not yet included into such Red Data books are very desirable. In table 1 among vascular plants were mentioned 318 endemics but in the text below this table – 317. It is necessary to correct such inaccuracy in printing.

The project at its current format will implement a comprehensive set of different actions within the Russian portion of the Ecoregion (62% of the whole area). Six subjects of Russian Federation are mentioned (Altaisky and Krasnoyarsky krai, the Tuva, Altai and Khakasiya Republics, and Kemerovskaya oblast') and six project target sites were chosen. These sites cover different types of ecosystems and also represent various types of threats to biodiversity. The comprehensive description of these sites is given in the table 2 (pages 9-11). Three UNESCO/MAB Biosphere

Reserves (Katunsky, Uvs-Nuursky and Sayano-Schuschensky) have been included into the Project's target sites and their data will be useful for the programme of monitoring of different types of ecosystems and the justification of optimal ways to sustainable development of selected areas envisaged in the Project. In this connection I have to mention that the Russian portion at the East of the Altai-Sayan Ecoregion (closer to the Baikal lake) includes two more administrative territories –Irkutsk oblast' and the Republic of Buryatia, which are not listed in the project proposal but could be used as test areas (at the second stage of the project) for a replication of the lessons learned during the first five years.

The Altai-Sayan Ecoregion is unique not only thanks to its rich biodiversity but also for its diverse ethnic and cultural heritage. Several groups of indigenous people inhabit different parts of the Region (in total about 350,000 people). A number of actions proposed in the Project to collect their traditional knowledge on natural resource management and apply for conservation and restoration of biodiversity. Besides ecosystem approach and adaptive management the close attention to indigenous people is very important input into the implementing the Convention on Biodiversity in this Region, which was included as priority into the National Biodiversity Conservation Strategy and Action Plan.

The replication of results of the Project is important in the global aspect also because mountain regions are situated in different parts of the World and due to the global changes of climate and environment in recent years are receiving more and more attention from decision-makers and scientists. For example, UNESCO and the International Geosphere-Biosphere Programme (IGBP) are planning to begin researches of impacts of global changes on the base of mountain biosphere reserves. All three BRs in the Altai-Sayan ecoregion mentioned above are suitable for such researches and at present time some negotiations with UNESCO and IGBP are going on to include them into this specialized World network of BRs.

The project is devoted to GEF Focal Area – Biodiversity, but I believe it could include some synergism with the Climate Change Focal Area and even to present valuable results (based on studies of desert ecosystems in the Uvs-Nuur Depression and near-by areas) to the Convention on Control of Desertification signed by Russia in 2003. May be such aspects will be proper to include into the second stage of the project. Using this opportunity I would like to mention that in the section # 1b i (page 4) it is necessary to make such addition into the list of international conventions and exclude the Convention on the Conservation of Migratory Species of Wild Animals (CMS – correct spelling) not yet signed by Russia.

Baseline situation and existing and potential threats to the Ecoregion's biodiversity are covered in the Project at different scales. Their description, I believe, is more than sufficient: pages 15-27 plus a comprehensive table 3 presenting the specific factors affecting biodiversity and their root causes for the 6 selected sites, and five different maps for the whole Region (Annex 2E i-v). Acquainting with this table I initially couldn't understand why in the description of the Project site # 1 Tigirekskaya more attention is given to the West Altai zapovednik situated in the Kazakhstan than to Tigireksky zapovednik itself but keeping in mind the future cooperation with Kazakhstan coordinated by the Regional Steering Committee I came to conclusion that it is the proper addition. This addition shows also that joint actions should be taken in future to mitigate risks of the construction of road connecting Russia and Kazakhstan across these two zapovedniks. In the same table (also in Table 4) it is necessary to substitute Russian name of one of endangered species (kabarga) by its English name (musk deer). Referring to the map showing key territories for the biodiversity conservation (Annex 2 E i) I should say, that it is not clear at all and some

additional explanations of the different shadings at the map should be given besides figures and names of project sites.

As it is stated at the page 31 the Objective of the Project is "Ecosystem-based approach to biodiversity conservation operationalized in Russia's Altai-Sayan Mountain Ecoregion (GEF Financed & Co-financed)". It is the proper objective but according to all previous description in the project proposal and the attention given to trans boundary cooperation it will be better to say "in Russia's portion of Altai-Sayan Ecoregion". Ecosystem approach is a strategy for the integrated management of land, water and living resources. Thus, the application of the ecosystem approach will help to reach a balance of the three objectives of the CBD: conservation; sustainable use; and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources. Currently it is more and more in usage for implementing this Convention and I believe it will be useful for this particularly project proposal to include into this section (2 b iii) what does it mean and how some of the twelve proposed principles will be applied in different target sites of the Project. Anyhow it is only my personal suggestion. All other components of this section (outcomes, activities and outputs) are described in very detail form and adequately justified (pages 31- 44 plus Table 4 giving Summary of the interventions in each project site and in the Ecoregion). I sincerely wish to future project's field teams to put into effect all envisaged activities urgently needed for conservation of rich biodiversity and improving well-being of local people of the unique Altai-Sayan Ecoregion.

Risks for implementing this project are rather low and it is verified by intensive stakeholders' participation during the entire PDF B stage, and financial support given to this project by regional administrations (about 10,500 thousand US$). Replicability of lessons to be learned during this project itself was already mentioned above but here I would like emphasize the necessity to conduct the similar projects in two other regions in North Eurasia with rich biological and landscape diversity - Far East and Caucasus mountains not to mention about adjacent to the Altai-Sayan Ecoregion countries. In this case one of the positive results of the Project could be creating the Transboundary Biosphere Reserve with close cooperation between Russia, Kazakhstan, Mongolia and China in conservation of such valuable flagship high mountain species as Snow leopard and Argali sheep as it was mentioned in Activity 5.2. Incremental cost analysis (Annex 2F) covering all nine outputs is beyond any my doubts and could be treated as a model one for any other projects. The same I could say about Annex 2 Aii Threats analysis summary and the Project's implementation arrangements section (pages 55-56).

So, in result of my review of the project proposal "Regional Biodiversity Conservation in the [Russia's portion of] Altai-Sayan Mountain Ecoregion" I could evaluate it as very successful one and capable to satisfying the GEF requirements. In conclusion I wish to support words of Mr. K.V. Yankov, Deputy Minister of Natural Resources of Russian Federation and the GEF Operational Focal Point in his letter dated 30th of May 2003 that implementation of the above-mentioned project will significantly contribute to the conservation of unique nature complexes and different objects of the mountains of the Southern Siberia.

Dr. Valery M. Neronov
2 January 2004
Moscow

Annex 2 C ii: Response to STAP review

Project title: Regional Biodiversity Conservation in the Altai-Sayan Mountain Ecoregion

Project Reviewer: Dr. Valery Neronov, Institute of Ecology and Evolution, Russian Academy of Sciences

	Comments by the STAP reviewer	**Comments addressed**	**Project Brief reference**
1	Total number of Rare and Endangered Species of six taxonomic groups is shown in the Table 1 (page 8 of the Project Proposal) but contrary to the opinion of compilers of this table it is impossible to see which of them have been already entered into the Russian Federation Red Data Book and the IUCN Red Data Book**.**	Table 1 presents the list of rare and endangered species included in the Red Data Books of the Russian regions - subjects of the Federation (regional Red Data Books). Corresponding clarification was added in the text of the brief.	**Page 8**
2	In table 1 among vascular plants were mentioned 318 endemics but in the text below this table – 317. It is necessary to correct such inaccuracy in printing.	Correction made in Table 1.	**Page 8**
3	… the Russian portion at the East of the Altai-Sayan Ecoregion (closer to the Baikal lake) includes two more administrative territories –Irkutsk oblast' and the Republic of Buryatia, which are not listed in the project proposal but could be used as test areas (at the second stage of the project) for a replication of the lessons learned during the first five years.	Corresponding note added to the text. Feasibility of expanding or introducing new project sites and activities at the second phase of the project will be assessed during final evaluation of phase 1.	**Page 11**
4	UNESCO and the International Geosphere-Biosphere Programme (IGBP) are planning to begin researches of impacts of global changes on the base of mountain biosphere reserves. All three BRs in the Altai-Sayan ecoregion mentioned above are suitable for such researches and at present time some negotiations with UNESCO and IGBP are going on to include them into this specialized World network of BRs.	The UNDP/GEF project team will be advised to develop cooperation with the UNESCO/IGBP research programme, once it develops.	

5	The project is devoted to GEF Focal Area – Biodiversity, but I believe it could include some synergism with the Climate Change Focal Area and even to present valuable results (based on studies of desert ecosystems in the Uvs-Nuur Depression and near-by areas) to the Convention on Control of Desertification signed by Russia in 2003. May be such aspects will be proper to include into the second stage of the project. Using this opportunity I would like to mention that in the section # 1b i (page 4) it is necessary to make such addition into the list of international conventions and exclude the Convention on the Conservation of Migratory Species of Wild Animals (CMS – correct spelling) not yet signed by Russia.	Reference to the Convention to Combat Desertification added to the text. Reference to the UNFCCC thought to be potentially confusing as there are no other references or activities in the document clearly outlining synergy with climate change mitigation objectives. No reference has been included.	**Page 4**
6	(Also in Table 4) it is necessary to substitute Russian name of one of endangered species (kabarga) by its English name (musk deer).	Done	**Pages 28, 45**
7	It is not clear at all and some additional explanations of the different shadings at the map should be given besides figures and names of project sites	Additional notes to the map provided	**Annex 2E i, page 19**
8	As it is stated at the page 31 the Objective of the Project is "Ecosystem-based approach to biodiversity conservation operationalized in Russia's Altai-Sayan Mountain Ecoregion (GEF Financed & Co-financed)". It is the proper objective but according to all previous description in the project proposal and the attention given to trans boundary cooperation it will be better to say "in Russia's portion of Altai-Sayan Ecoregion"	Proposed language adopted: Ecosystem-based approach to biodiversity conservation operationalized ***in Russian territory of the*** Altai-Sayan Mountain Ecoregion	**Page 31**
9	Ecosystem approach is a strategy for the integrated management of land, water and living resources … I believe it will be useful for this particularly project proposal to include into this section (2 b iii) what does it mean and how some of the twelve proposed principles will be applied in different target sites of the Project.	Brief explanatory note to the project objective added to the text	**Page 31**

Annex 2 D: Response to GEFSEC and Council comments at work program inclusion

ANNEX 2F Incremental cost analysis

Baseline :
The Russian section of the Altai-Sayan ecoregion partly includes six subjects of the Russian Federation. They are Krasnoyarsky and Altaisky krais, Tuva, Altai and Khakasiya Republics, and Kemerovskaya oblast'. All these administrative subjects will continue to support a number of activities associated with the PAs' management and development as well as ecosystem-based efforts outside the protected sites. Regardless of support from the GEF all six civil administrations are committed to provide baseline financing for the next 5 years, which would be grossly insufficient to secure biodiversity benefits. Nevertheless, the most essential baseline activities will include: establishment of new regional protected areas, regional departments of nature protection support, Environmental Impact Assessment, forest fire prevention, ecotourism and recreation promotion. The total baseline appropriations of the 6 subjects of Federation for the years 2004-2008 would comprise US$ 4.670 million (table 2f.1 below).

Table 2f.1 **Baseline appropriations and co-financing commitments of regional Administrations (million US$)**

Region	Baseline (in Mln USD)	Co-financing commitment (in Mln USD)	Total contribution from the regions (in Mln USD)
Kemerovskaya oblast' (KO)	1.17	1.33	2.5
Republic of Khakasiya (RKh)	0.14	0.46	0.6
Altai Republic (AR)	0.29	0.71	1.0
Tuva Republic (TR)	1.20	1.30	2.5
Altaisky krai (AK)	0	0.20	0.2
Krasnoyarsky krai (KK)	1.87	1.83	3.7
Total, US$ million	**4.67**	**5.83**	**10.5**

Baseline appropriation will also be provided by the Federal Government: the Ministry of Natural Resources (MNR) annually expends approximately US$ 1.336 million on wildlife protection, minimal forestry activities (in State Natural Parks) and environmental education in 9 federal protected areas within the ASE. These federal budget allocations would comprise the total sum of US$ **6.680** million over the course of the project's timeline.

GEF Alternative

The proposed GEF Alternative will build upon the ongoing baseline activities, and will leverage additional co-financing to complement GEF funds. Project stakeholders managed to secure substantial resources during the PDF-B, many of them being regional budgetary allocations, and contributions from WWF and the private tourist company "Sayan Ring" (annexes 2Gi).
Six Subjects of the Russian Federation are committed to provide parallel co-financing to a range of project activities for the total amount of US$ 4.670 million (the breakdown is shown in table 2f.1 above).

WWF worked long-term in the ecoregion and will continue conservation efforts, mostly focusing on new PA establishment, protection of "flagship" species and Econet enhancement. The total WWF parallel contribution would amount to US$ 1.200 million (of which US$ 100,000 is in kind).

Recreational tourism is considered as one of the priorities for developing an alternative path for regional economic development. As such, both regional authorities and private companies are keen to invest in this quickly developing sector. Regional budgets have very limited resources however. One of the leading private tourist companies in Krasnoyarsky Krai decided to launch its own project fully devoted to biodiversity-friendly tourism. It was agreed during the PDF-B phase that "Sayan Ring" would contribute US$ 4.630 million to tourist infrastructure and training of PA staff at 3 project sites.

Thus the total figure of co-financing arranged for the first phase of project implementation would amount to US$ 11.660 million.

The incremental cost matrix below summarizes the national and global benefits resulting from 9 project outputs. GEF funds would support activities that yield national and regional benefits and underpin the ultimate realization of global benefits. Total incremental costs amount to US$15.175 million. Of this sum, the GEF contribution would amount to US$ 3.515 million and the remaining US$ 11.660 million would be funded through co-financing. Project preparation costs were US$ 745,000 with GEF input of US$ 245,000. The total project cost, including project preparation, sustainable development baseline and increment amounts to US$ 15.920 million. The GEF alternative would cost US$ 26.525 million, of which GEF would fund 13.24% only.

Annex 2.F - INCREMENTAL COST MATRIX

Component	**Cost (US$, thousands)**	**Intervention Summary**	**DOMESTIC BENEFIT**	**GLOBAL BENEFIT**
Outcome 1	***Strengthened and Expanded Protected Areas System***			
Output 1: New PAs established	Baseline: US$ 550	Federal Government pays low attention to creation of new PAs due to insufficient financial resources and lack of clarity vis a vis benefits. Regional authorities support establishment of local PA networks but both legislative and financial constraints remain the key barrier. Transboundary PAs in the ASE have low profile.	Existing PA regional network does not provide effective way for biodiversity conservation efforts	Biodiversity of the ASE is not protected
	GEF Alternative: US$ 1,350	Enlargement of PA system within the ASE will allow creation of viable Econet which is the key condition to ensure biodiversity conservation.	Effectiveness of national and regional conservation efforts is increased. Regional and transboundary PAs are recognized at the national and international levels and receive visible support	Habitat of migratory species is secured. Expanded PA network safeguards globally significant biodiversity values in ecoregion
	Increment:	WWF: US$ 500 AK1: US$ 20 AR: US$ 80 TR: US$100 KK: US$ 100 Total: US$ 800		

[1] KO- Kemerovskaya oblast'; RKh-Republic of Khakasiya; AR – Altai Republic; TR-Tuva Republic; AK – Altai Krai, KK-Krasnoyarsk Krai
[2] KO- Kemerovskaya oblast'; RKh-Republic of Khakasiya; AR – Altai Republic; TR-Tuva Republic; AK – Altai Krai, KK-Krasnoyarsk Krai

Output 2: Conservation of rare and endangered species is promoted in the ASE	Baseline US$ 500	Support to anti-poaching activities in the buffer zones and outside PAs will remain limited; enforcement capacities will be insufficient to prevent illegal trade in endangered species, including transborder trade. No awareness raising activities regarding existing policies on poaching and illegal trade will be conducted among rural population and local authorities. Lack of up to date and reliable information about the population of "flagship" species.	Poaching of rare and endangered species causes loss of wild natural resources and stimulates aggravation of crime	Rare and endangered species become extirpated or their populations no longer viable
	GEF Alternative US$ 1,785	Elaboration of a rationalized regional interagency patrolling system and strengthening law enforcement practices with respect to poaching and illegal trade in rare and endangered species. Raising public awareness and involving local population in conservation of rare and endangered species. Baseline information updated and monitoring system established to control population of "flagship species", i.e. Snow leopard and Argali sheep.	Strengthened capacity to monitor and manage species populations and control illegal activity; active involvement of local communities and authorities in enforcement and monitoring activities	Diversity and population of globally significant rare and endangered species is maintained in the long term
	Sustainable development baseline: Increment:	WWF US$ 200 AR: US$ 250 KK: US$ 350 KO: US$ 115 TOTAL: US$ 915 GEF: US$170 TOTAL: US$ 170		

Output 3: Strengthened Capacity of the Existing Priority PAs	Baseline: US$ 1,420	Guard service will be unable to fulfill its main function to protect PAs due to worn-out equipment and declining skill levels. Existing priority PAs will continue to perform their functions on case-to-case basis without solid planning tools and other key management instruments.	Insufficient financial and human resources result in low capacity to perform PAs main functions, ineffective management of rather scarce resources	Inability to effectively manage the PAs presents an on-going threat to the ASE biodiversity
	GEF Alternative: US$ 3,100	Significant improvement in resource protection capability in priority PAs: Guard staff is trained and equipped enough to perform its functions effectively. Management plans for 5 pilot PAs are developed and become an effective modern instrument for medium-term planning and performance. Experience and lessons learned are replicated in the ASE and other regions.	Improved local PA management skills and increased effectiveness and efficiency of PAs allow them to fulfill their key management objectives	Strengthening of the management capability and increased efficiency in the PAs safeguards globally significant biodiversity values
	Sustainable development baseline: Increment	WWF US$ 100 AK: US$ 30 AR: US$ 200 KK: US$ 400 KO: US$ 160 RKh: US$ 10 TOTAL: US$ 900 GEF: US$ 780 TOTAL: US$ 780		
Output 4: Strengthened Coordination and Management between PAs	Baseline: US$ 550	Capacity of regional authorities to plan, manage and coordinate functioning of regional protected areas remains deficient. AASPA unites only federal PAs and does not share its knowledge with regional PAs. Local communities are not involved in PA management and therefore do not support their development.	PA management teams work in isolation and without support from local communities. Knowledge and experience is not accumulated/disseminated between PAs. Budget resources are not disbursed in the most efficient way.	PA network does not consolidate conservation efforts within ASE. Lack of coordination and gaps/weakening in conservation efforts cause loss of biodiversity.

	GEF Alternative US$ 1,390	Complementarity and consistency among national, regional and local conservation efforts will be established; regional PA management capacities will be enhanced. Efficiency of horizontal and vertical communication will be improved. PAs will build up their professional community through AASPA. Local communities will be involved in both park management and decision-making at the regional level.	Improved coordination between national and regional authorities, PAs and population enhances management effectiveness and efficiency of budget spending for biodiversity conservation and resource management. AASPA will become a "brain center" of the ASE PA network	Better coordination of federal and regional conservation efforts and involvement of local population removes gaps in conservation planning and management
	Sustainable development baseline: Increment:	KK: US$200 KO: US$ 200 RKh: US$ 100 TR: US$ 150 TOTAL: US$650 GEF: US$ 190 TOTAL: US$190		

Output 5: Strengthened legal and institutional framework for biodiversity conservation and transboundary management	Baseline: US$ 1,000	Institutional and legislative deficiencies will limit the effectiveness of planning, management and use of land and natural resources, including biodiversity. There will remain instances of incongruence between federal and regional legislation. Legislative deficiencies will hamper application of sustainable traditional natural resource use practices. Transboundary cooperation will lack practical dimension and further development.	Legal/regulatory base insufficient to regulate biodiversity over- exploitation and not conducive to development of transboundary management	Legal deficiencies compromise effectiveness of PAs and other conservation instruments and constrain their development
	GEF Alternative: US$ 2,225	Development of model legislative and regulatory provisions for biodiversity conservation will cover gaps in existing policies and adjust regional legislation to federal laws. Traditional users of natural resources will get legislative support; pilot projects will be implemented. Practical transboundary conservation agreements and actions will be put in place.	Legal/regulatory base strengthened to effectively address current conservation and management requirements. Regional institution use new instruments to support traditional natural resource use.	Legal and institutional framework ensures comprehensive ecosystem-based biodiversity conservation
	Sustainable development baseline: Increment:	WWF US$ 200 KK: US$200 KO: US$ 85 RKh: US$ 30 AK: US$ 100 TR: US$ 200 TOTAL: US$ 815 GEF: US$ 410 TOTAL: US$ 410		

Output 6: Increased Level of Biodiversity Awareness Among Major Stakeholder Groups and the Rural Population	Baseline: US$ 480	Low level of biodiversity awareness will further lead to apathy or negative attitudes among local communities and PA visitors. Environmental NGOs being one of the most active driving forces in the region remain passive due to lack of appropriate resources. No biodiversity conservation programmes for communities and users of PAs will be developed.	Local communities, school children and youth audience know little about biodiversity values and their linkage to sustainable development in the region	Environmental awareness remains relatively low and efforts at raising it are fragmented and ineffective in general
	GEF Alternative: US$ 1,150	Biodiversity conservation information programmes and materials will be developed and implemented. Environmental education curricula will be developed and tested. Micro-grant programme will enable local NGOs, community-based organizations, schools and PAs to develop awareness raising activities. Best information sharing and awareness dissemination practices will be analyzed and introduced	Appreciation of biodiversity values and the need for their conservation at all levels and among all stakeholders is increased	Enabling environment for conservation policy in the ASE is created and maintained with target population groups, thus establishing a strong constituency for long-term conservation

	Sustainable development baseline: Increment:	WWF: US$ 80 1.6 KO: US$ 50 KK: US$ 120 RKh: US$ 150 TR: US$ 150 1.7 TOTAL: US$ 550 1.8 1.9 GEF: US$ 120 TOTAL: US$ 120		
Outcome 2: Strengthened Enabling Environment for Ecosystem Based Biodiversity Conservation				
Output 7: Improved Information on Biodiversity, Including TEK, and its Use in Decision-Making	Baseline: US$ 750	ASE-based research institutions will continue to gather biodiversity and natural resource data as limited funds permit. Some additional species inventories will be conducted and further research on selected species undertaken. Key gaps in biodiversity information, however, will remain. Monitoring capacity, effort, and thus relevance of monitoring results to decision-making will progressively decrease	Decision-making and resource management and use not based on most up to date or required information	Effectiveness of all conservation efforts is compromised due to inaccurate/incomplete information baseline

	GEF Alternative: US$ 1,475	An ecosystem and biodiversity conservation information needs assessment will be carried out. An ecosystem-based biodiversity monitoring program in the Ecoregion will be designed and put in place. Biodiversity and TEK databases will be established. Training will be provided to natural resources authorities and other state employees on effective integration of basic biodiversity and TEK information in their sectoral policy	Effectiveness of information, its collection, management and use is enhanced. Decision-makers are equipped with up to date data and information.	Management is based on relevant information and conservation of biodiversity is enhanced and made more effective
	Sustainable development baseline: Increment:	KK: US$200 AK: US$ 50 KO: US$ 140 TR: US$100 RKh: US$ 35 TOTAL: US$ 525 GEF: US$ 200 TOTAL: US$ 200		
Output 8: Awareness and Inclusion of Biodiversity Conservation into Regional Decision-Making	Baseline: US$950	Overall understanding of biodiversity values among decision makers will remain at low level and there won't be specific economic instruments in place to provide benefits of conservation approach. Regional decision-makers will remain poorly trained in modern legislation application modalities, including EIA.	Regional decision-makers ignore economic benefits from biodiversity conservation and sustainable use. EIA does not reflect fair assessment of environmental risks.	Potential threat of infrastructure and mining development in the buffer zones remains at high level

	GEF Alternative: US$ 2,340	Economic assessment of biodiversity values and benefits from its sustainable use will be carried out, to provide strong pro-conservation information to regional decision-makers. Enforcement capacities and collaboration among governmental agencies to implement existing environmental laws will be strengthened. Legal and regulatory environment to mainstream biodiversity into regional development policies will be established.	Economic benefits from sustainable use of biodiversity will be proven and operationalized at the regional level. Increased appreciation among decision-makers of the need for conservation to achieve sustainable development	Alternative environmentally-sound course of sustainable economic development ensures long term conservation in ASE
	Sustainable development baseline: Increment:	WWF: US$ 120 AR: US$ 80 TR: US$ 200 KO: US$ 230 KK US$ 160 RKh: US$ 35 TOTAL: US$ 825 GEF: US$ 565 TOTAL: US$ 565		

Output 9: Alternative Livelihoods and Involvement of Local Population in Natural Resources Management	Baseline: US$ 5,170	Natural resources will continue to represent the only source of subsistence for the local population, while the development of sustainable alternative livelihoods will receive no appreciable support. The regional authorities and the Federal Government will provide only minimal financial support to rural communities to fight unemployment. Development of tourism sector will continue as a priority for the regional economy. However, it is unlikely that the additional costs associated with developing biodiversity-friendly tourism will be forthcoming. Therefore, the pressures arising from unplanned and uncontrolled tourism will continue to exert greater threats to biodiversity in key areas. Local communities will remain uninvolved in natural resources management.	Conservation objectives and needs of local populations not mutually supporting	Conservation objectives compromised through lack of local community involvement and support
	GEF Alternative US$ 11,650	Community-based tourism development and alternative livelihood options will be demonstrated. Pilot community-based wildlife and NTFP management programmes will be designed and implemented. Accumulated knowledge and best practices will be disseminated through the ASE	Conservation and community development objectives are inter-dependent and mutually reinforcing, and are pursued concurrently	Pressures on biodiversity from local communities are eliminated and local communities actively participate in biodiversity conservation

	Sustainable development baseline: Increment:	AR US$ 100 "Sayan Ring" US$ 4,630 KK US$ 100 KO US$ 350 TR: US$ 400 RKh: US$ 100 TOTAL: US$ 5,680 GEF: US$ 1,000 TOTAL: US$ 1,000		
M&E		GEF: 80		
Total	Baseline	US$ 11,370	GEF Alternative	US$ 26,545
Incremental Cost	Full Project GEF Non-GEF Total	US$ 3,515 US$ 11,660 US$ 15,175	Preparation GEF Non-GEF Total	US$ 245 US$ 500 US$ 745
GRAND TOTAL	US$ 15,920			

KO- Kemerovskaya oblast'; RKh – Republic Khakasiya; AR – Altai Republic; TR – Tuva Republic; AK – Altai Krai; KK – Krasnoyarsky krai

ANNEX 3

MONITORING AND EVALUATION (M&E) PLAN

This project is designed to integrate M&E into the fabric of project implementation. M&E is a crucial part of the project's emphasis on knowledge management/adaptive management, as well as its emphasis on lessons learned through the many round table discussions and workshops to be held to discuss and reflect upon lessons being learned.

A detailed Monitoring & Evaluation work plan will be fleshed out at the inception of the project, which will allow for a critical assessment of project performance by showing the schedule of related activities, their cost and the expected outputs and achievements according to the established benchmarks and milestones. The work plan will be the main tool for monitoring and evaluating the progress of the project.

Monitoring. An information baseline on the level and extent of threats to biodiversity in each site will be established during the first year of the project to provide a basis for future monitoring and evaluation. Indicators of success are included in the project's Logical Framework (Annex 2A) and will be utilized on a continuous basis as the project monitors and evaluates its progress. Project progress will be monitored using annual reviews and implementation milestones following UNDP rules and procedures. Baseline surveys will: 1) determine the nature and extent of threats in each site to be reduced; 2) conduct ecological surveys within the site areas to determine specific health and size of key habitats and richness of habitat mosaic; 3) conduct attitude and awareness level surveys of key stakeholder groups, from top-level policy makers to local village level stakeholders; and 4) conduct economic surveys of local communities around project areas to quantify their reliance on wild nature resources and their income levels. Monitoring will be ongoing, involving data collection and assessment of the project's field implementation and will involve key project staff meeting annually to review operations and field implementation and assessing whether new priorities require a shift in project implementation.

Specific indicators will be developed during the project's first year based upon baseline surveys. This will include indicators of 1) threat reduction and prevention, and; 2) ecosystem/biodiversity health.

In addition to this the project will be subject to standard UNDP/GEF monitoring requirements. The UNDP-CO will conduct monitoring field visits at least twice per year. The PM will prepare and submit quarterly narrative reports to the NPD and UNDP. The project manager will be required to produce an Annual Project Report and Project Implementation Review (APR/PIR). The report is designed to obtain the independent views of the main stakeholders of a project on its relevance, performance and the likelihood of its success. The APR/PIR then supports an annual Tripartite Review (TPR) meeting and the Steering Committee meeting -- the highest policy-level meeting of the parties directly involved in the implementation of a project.

Evaluation

Outcomes will be evaluated by measuring indicators of ecosystem integrity and function, threat reduction, and sustainable use. In addition, annual participatory evaluation exercises will be undertaken with key stakeholders, including local communities, NGOs, and partner organizations. UNDP will report on project performance to the GEF at the annual Project Implementation Review (PIR). The project will document the lessons learned, and make it available to stakeholders over the worldwide web.

Mid-term and final evaluation for the five-year I Phase of the project

Two external independent evaluations are scheduled in the project's five year first phase: one in month 25 or 26, and the second in month 50. These independent evaluations of project performance will match project progress against predetermined success/threat reduction indicators. Each evaluation of the project will document lessons learned, identify challenges, assess management effectiveness and provide recommendations to improve performance. WB/WWF management effectiveness tracking tool will be used to assess enhancement pf the management and performance of individual PAs included in the project.

Evaluation #1:
The first evaluation will be conducted in month 26, upon completion of year two. This evaluation will assess progress in establishing the information baseline, reducing threats, and identifying any difficulties in project implementation and their causes, and recommend corrective courses of action. Effective action to rectify any identified issues hindering implementation will be a requirement prior to determining whether implementation should proceed.

Project performance will be measured based on the quantitative and qualitative indicators to be finalized during the first year of project implementation. Many of these indicators will relate to the reduction/prevention of the key threats to biodiversity in each of the four sites.

Other indicators to be considered are defined in the Logical Framework. The logical framework for this project sets out a range of impact/implementation indicators that will be used to gauge impact. Success and failure will be determined in part by monitoring relative changes in baseline conditions established during year one of the project. Baseline conditions will be defined with respect to the nature and extent of threats, as well as habitat size and condition, and population size of indicator species to ensure that viable populations of these species are present in perpetuity. Where possible, indicator species that are sensitive to habitat change and indicative of increased pressure will be identified and monitored. If populations of rare or endangered species are shown to be in decline, measures will be taken to identify the reason for the decline, and alternative management strategies will be developed to ensure the long-term health of populations and incorporated into site management.

Evaluation #2:
The second and final evaluation in Phase I will be conducted during our around the month 50-52 of project implementation, eight months prior to the closing of Phase I. This evaluation will focus upon four concerns: 1) assessing the ongoing impact of the project on threat reduction; 2) consolidating the lessons learned during the first four years of the project; and 3) recommending the most successful experiences for replication and consolidation in other sites in Phase II; 4) assessing the effectiveness of the overall project in attaining its objectives, and on describing and quantifying the overall impact of the project and of GEF's incremental investment in the project.

Both evaluations should also assess:

(a) Relevance of the project original problem analysis (approach, objectives, modalities of implementation, etc.) with regard to the prevailing context;
(b) Effectiveness of the approach used to produce these results;
(c) Efficiency of project management, including the delivery of inputs in terms of quality, quantity and timeliness; and the monitoring system;
(d) Transfer of capacity to the provincial institutions;
(e) Views of the direct beneficiaries on the preliminary outcomes and on the consultative process taking place for the project.

Sustainability of the results needs to be reviewed in light of the following considerations:

(a) Commitment of the host government to the project targets, and
(b) Involvement of the local organizations (participatory process)
(c) Management and organizational factors
(d) Co-funding actually leveraged for replication of best practices in other sites.
(e) Human resources development

Activities	Responsible party	Timeframe
Monitoring field visits	UNDP CO, project management	Semi-annually
Narrative progress reports	Project manager	Quarterly
Annual project report/Project Implementation Review	UNDP CO, National Executing Agency, project team	Annually
Baseline indicators (part of inception report)	Project team	1st year of the project
Specified M&E indicators (part of inception report)	Project team	1st year of the project
Terminal report	UNDP CO, National Executing Agency, project team	Last year of the project prior to operational closure
Mid-term evaluation	UNDP/GEF, UNDP CO, independent evaluation team	3d year of the project (months 25-26)
Final evaluation of the 1st phase	UNDP/GEF, UNDP CO, independent evaluation team	5th year of the project (months 50-52)
Financial audit	UNDP CO	Annually