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Vol. 2

GLOBAL ENVIRONMENT FACILITY

MEDIUM-SIZED PROJECT

Tajikistan:

Dashtidzhum Biodiversity Conservation Project (DBCP)

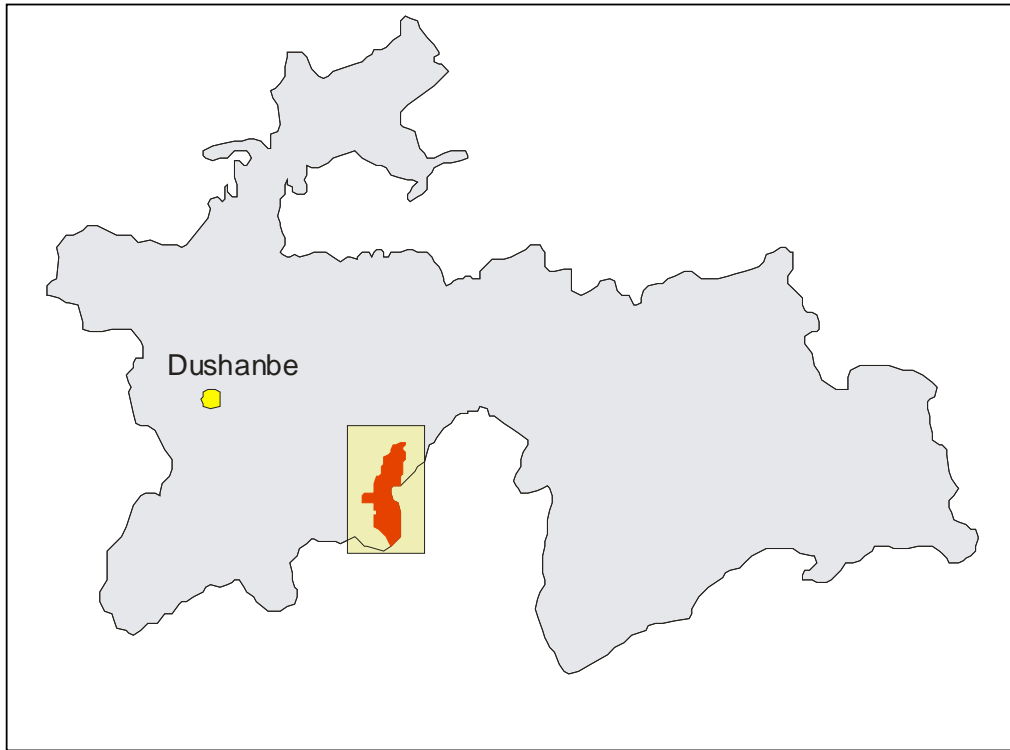
PROJECT BRIEF ANNEXES

May 2004

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ANNEX 1: PROJECT LOCATION



ANNEX 2: GLOBAL SIGNIFICANCE OF DASHTIDZHUM BIODIVERSITY

The Dashtidzhum Zakaznik was established in 1972 with the objective of restoring and conserving the *Capra falconer* population, a mountain forest ecosystem resource of global importance. The Zakaznik is located at the eastern slope of the south part of Khozratishoh Range, at east and south it is constrained by the Pyanj river. The northern boundary of the Zakaznik is limited by the Khojidara river valley.

Flora. The Zakaznik's flora is abundant and diverse. The vegetation cover is presented by relic walnut forests, narrow-endemic groups of *Calophaca grandiflora*, *Cousinia stephanophora*, rare communities of *Acer Regelii*, *Sophora mollis*, *Fraxinus sogdiana*, and subtropical varieties of *Punica granatum*, *Zizyphus jujuba*. The flora composition contains over 200 associations related to 74 formations and 19 florocoenosis types and counts about 1179 types of high vascular plants related to 490 genera and 92 families that is about 12,1% of flora composition of Tajikistan.

The biggest families of the zakaznik flora are *Asteraceae* (162 species), *Fabaceae* (124 species), *Poaceae* (104 species), *Rosaceae* (66 species), etc. Among angiosperm plants dominant forms are grass perennials (691 species), biennials (51 species) and annual plants (278 species). Endemic plants consist of 22 species: (*Fissidens karataviensis*, *Crocus korolkovii*, *Crataegus darvasica*, *Prunus darvasica*, *Tulipa tubergeniana*, *Anemone bucharica*, *Eremurus roseolus*, *Iris darvasica*, *Rosa longisepala*, etc.) (table 1), while 39 species of them are listed in the National Red Data Book (*Bunium persicum*, *Prunus darvasica*, *Ficus carica*, *Allium suworovii*, *Juno Nicolai*), etc. In zakaznik there are also 3 relic species (*Ostrowskia magnifica*, *Ficus carica*, *Juglans regia*) as well as 11 species of global importance (*Aspicilia oxneriana*, *Hordeum bulbosum*, *Fritillaria regelii*, *Tulipa subquinquefolia*, *Punica granatum*, *Ficus carica* etc.) (table 2), and 19 species of wild fruit plants: (*Pistacia vera*, *Celtis caucasica*, *Prunus bucharica*, *Crataegus pontica*, *Cerasus verrucosa*, *Rhus coriaria* etc). 4 plant species are endangered (*Eulophia turkestanica*, *Atnaphaxis avenia*, *Polygonum Ovschinikovii*, *Punica granatum*). Furthermore in Zkaznik there are 200 species of useful plants (medicinal - 56, food vitamin-containing – 30, oil – 10, aromatic – 22, tanning – 40, dye – 60 species). Over 70 plant species have regional importance.

Fauna. Zakaznik's fauna is characterized by irregular distribution in different ecosystems. Zoogeographically Dashtidzhum area relates to Tajikistan part of Central-Asian mountain palaeoarctic province. Fauna consists of Indo-Himalayan, Mediterranean origin and triple relic and endemic species components.

Invertebrates fauna of the zakaznik is rich and diverse with over 3000 species of insects. The zakaznik area is inhabited by nearly 300 hemipterous species from genera *Geotomus* (10 species), *Deruba* (20 species), *Helina* (10 species), *Nysius* (30 species). Arachnids species are also diverse containing about 50 species.

Vertebrates are represented by 203 species, including: pisces – 4, amphibians – 2, reptiles – 20, aves – 150, mammals – 27. Such vertebrates: *Capra falconeri*, *Unica unica*, *Naja oxiana*, which are registered in IUCN Red Data Book, while one relic (*Dalpada pavlovskii*) and 4 endemic species (*Porhyrophora sophora*, *Polymmatus kogistana*, *Pseudamnicola likharevi*, *P.pavlovskii*) are marked in the zakaznik. In zakaznik there are also 17 rare species (see table 3). At the same time the following species are considered as species of global importance: *Vipera cebetina turanica*, *Aquila chrysaetus daphanea*, *Unica unica*, *Capra falconeri*, *Naja oxiana*. Many of the fauna species are under human pressure and endangered. The list of endangered species contains 11 species: *Rivetina beybienko*, *Amblythespis mistshenkoi*, *Mantis macrocephala*, *Hystrix lencura satununi*, *Unica unica*, *Ovis vignei bochariensis* (see table 4). Red Data Book of Tajikistan includes 21 animal species, 9 species of birds, 4 species of insects, 3

species of snakes, 2 species of cloven-ungulates, 2 species of wild animals and 1 species of rodents that are placed in the project site.

15 vertebrates are presented by game animals (*Alectoris kakelik*, *Ammoperdix griseogularis*, *Sus scrofa*, *Lepus tolai*, *Vulpes vulpes*, *Canus lupus*, etc.) (see table 5).

Conservation of *Carpa falconeri*, *Unica unica*, *Ovis vigneri bochariensis* which are of global and regional importance is considered a priority activity for Dashtidzhum Zakaznik. Therefore, the evaluation of current state of their population is a priority task for development of appropriate actions for their conservation. Both flora and fauna species are currently under the severe socio-economic pressures and threats posed by unsustainable management of the productive landscape. Figure 1 presents the most important biodiversity threats and their areas of influence.

Table 1: Endemic Plant Species of Dashtidzhum Zakaznik

#	Name	#	Name
1.	<i>Fissidens karataviensis</i>	13.	<i>Tulipa tubergeniana</i>
2.	<i>Tortula ferganensis</i>	14.	<i>Vassilczenkoa sogdiana</i>
3.	<i>Jurinea pteroclada</i>	15.	<i>Atraphaxis avenia</i>
4.	<i>Crocus Korolkowii.</i>	16.	<i>Anemone bucharica</i>
5.	<i>Iris darvasica</i>	17.	<i>Delphinium decoloratum</i>
6.	<i>Astragalus insignis</i>	18.	<i>Crataegus darvasica</i>
7.	<i>Chesneya tadjikistana</i>	19.	<i>Prunus darvasica</i>
8.	<i>Allium Rosenbachianum</i>	20.	<i>Rosa langisepala</i>
9.	<i>Eremurus roseolus</i>	21.	<i>Parasilau asiaticus</i>
10.	<i>Tulipa Maximowiczii</i>	22.	<i>Valerianella Kulabensis</i>
11.	<i>Tulipa praestans</i>	23.	<i>Juno Nicolai</i>
12.	<i>T. Subguinguefolia</i>		

Table 2: Plant Species of Global Importance of Dashtidzhum Zakaznik

#	Name	#	Name
1	<i>Aspicilia oxneriana</i>	7	<i>Capparis rosanoviana</i>
2	<i>Iris darvasica</i>	8	<i>Amygdalus Vavilovii</i>
3	<i>Fritillaria regelii</i>	9	<i>Punica granatum</i>
4	<i>Tulipa subquinquefolia</i>	10	<i>Ficus carica</i>
5	<i>Eremurus roseolus</i>	11	<i>Vitis vinifera</i>
6	<i>Hordeum bulbosum</i>		

Table 3: Rare Animal Species of Dashtidzhum Zakaznik

#	Name	#	Name
1	<i>Porphyrophora cynodontis</i>	10	<i>Lycodon striatus bicolor</i>
2	<i>Gypaetus barbatus hemachalanus</i>	11	<i>Circaetus ferox heptneri</i>
3	<i>Neophron percnopterus</i>	12	<i>Aquila chrysaetus daphanea</i>
4	<i>Falco cherrug coatsi</i>	13	<i>Falco peregrinus babylonicus</i>
5	<i>Ammoperdix griseogularis</i>	14	<i>Otis tarda tarda</i>
6	<i>Garrulax lineatus bilkevitchi</i>	15	<i>Terpsiphone paradisi leucogaster</i>
7	<i>Myophonous coeruleus turkestanicus</i>	16	<i>Suncus etruscus</i>
8	<i>Vespertilio serotinus</i>	17	<i>Tadarida teniotis teniotis</i>
9	<i>Porphyrophora cynodontis</i>		

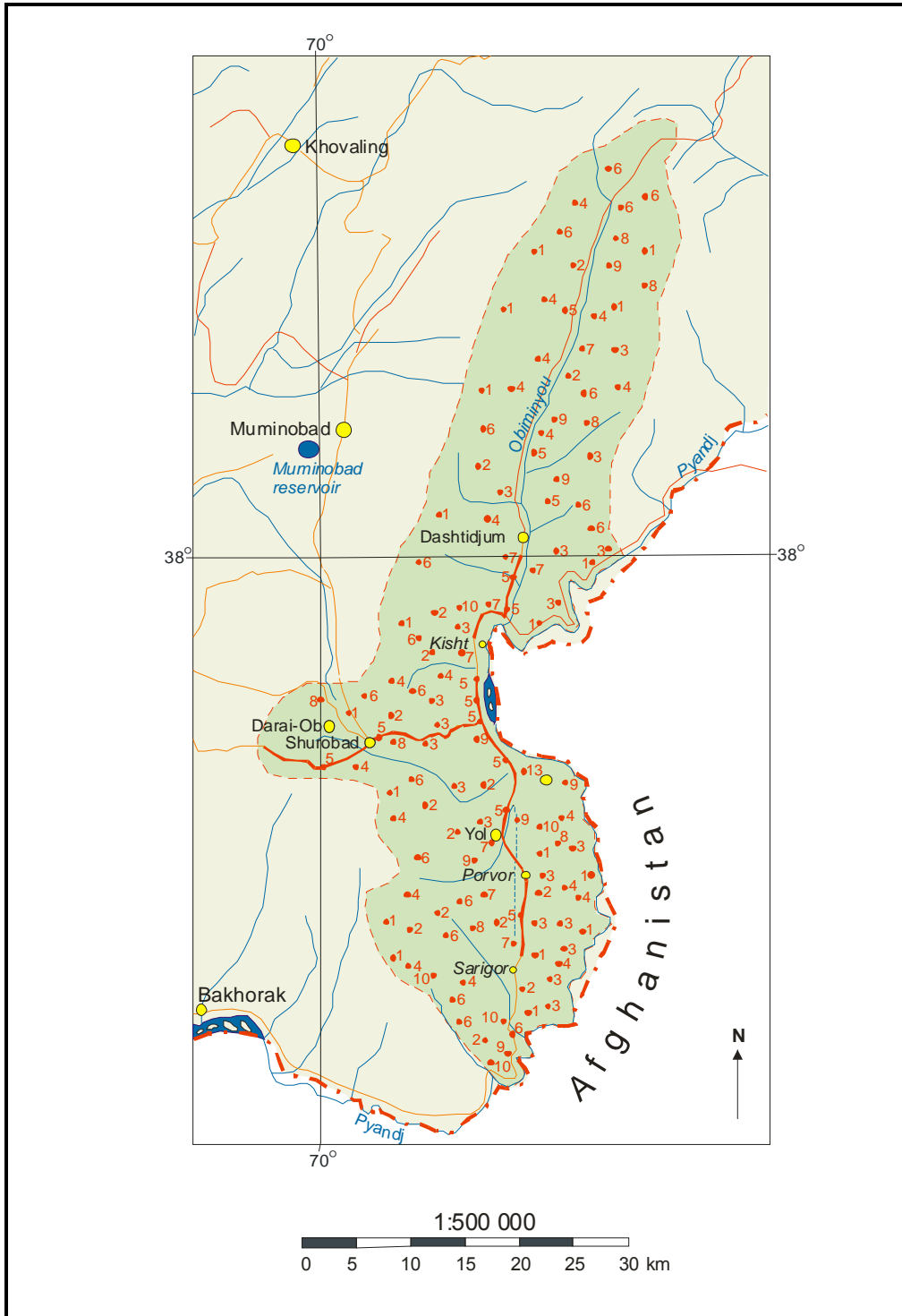
Table 4: Threatened Animal Species of Dashtidzhum Zakaznik

#	Name
1	<i>Rivetina beybienkoi</i>
2	<i>Empusa pennicornis</i>
3	<i>Hystrix lencura satunini</i>
4	<i>Carpa falconeri heptneri</i>
5	<i>Pterocles orientalis orenarius</i>
6	<i>Amblythespis mistshenkoi</i>
7	<i>Mantis macrocephala</i>
8	<i>Vipera lebetina turanica</i>
9	<i>Uncia uncia</i>
10	<i>Ovis vignei bochariensis</i>
11	<i>Naja oxiana</i>

Table 5: Game Animal Species of Dashtidzhum Zakaznik










#	Name
1	<i>Alectoris kakelik</i>
2	<i>Ammoperdix griseogularis</i>
3	<i>Columbia livina</i>
4	<i>Canus lupus</i>
5	<i>Carpa sibirica</i>
6	<i>Sus scrofa</i>
7	<i>Lepus tolai</i>
8	<i>Vulpes vulpes</i>
9	<i>Meles meles</i>

Figure 1: Main Threats to Biodiversity



Legend

- 1 - Uncontrolled catching and hunting of fauna
- 2 - Uncontrolled gathering of rare/medical plants
- 3 - Forest cutting
- 4 - Intensive cattle grazing
- 5 - Noise impacts, fragmentation
- 6 - Intensive erosion
- 7 - Waste pollution of reservoirs
- 8 - Landslides
- 9 - Ploughing of steep slopes
- 10 - Forest fire

- | | | | |
|---|------------------|---|----------------------|
|  | Area of zakaznik |  | Impact areas |
|  | State border |  | Improved earth roads |
|  | Earth roads |  | Horsepaths |
|  | Rivers |  | Reservoir |
|  | Settlements | | |

ANNEX 3: PROJECT SITE DESCRIPTION

Geographical description. The Dashtidzhum Zakaznik is located at the eastern slope of Khozratishoh Range, with altitudes ranging from 700-800 m (Pyanj river bed) to 2800-2900 m in the upper range. A de-alluvial-prolluvial plain is located along the foothills of the ranges. An interesting feature of the area is its extended inter-mountain depression located between the Suing Range and the eastern slope of Khozratishoh Range. The following main ecosystems are present within the Zakaznik area (see Figures 1 and 2): mid-mountain mesophytic forests, mid-mountain conifer forests, mid-mountain xerophytic rare forests, savannoides, high-mountain meadow and steppe ecosystems, tugais and agro ecosystems.

Mid-mountain mesophytic forest ecosystem belt lies within 1,500-2,600 m with subdue elements of shiblyak flora (e.g., almond, Judas tree). The grass cover is rich with semi-savanna plants. The juniper forests are scattered on the rocky steeps. Most trees are drawn towards natural water reservoirs, such as tectonic cracks, sandstone layers, and conglomerates. Some sections of the ranges are defined by juniper broad-leaf forests consisting of juniper and turkestan maple trees. Some juniper forests with shiblyak flora can be found at elevation range 1,200-1,400 m. The vegetation is xerophytic rough leaf formation at higher elevations.

Mid-mountain conifer forest ecosystems are placed mostly in the southern part of the territory at altitudes of about 2,000-2,600 m.

Mid-mountain xerofitic forest ecosystem covers a portion of the Zakasnik. The main florocoenosis type of the Zakaznik is a formation of xerophytic rare forest ecosystem that covers 50% of the Zakaznik territory, which mix with semi-savanna forests in the lower reaches and thermophylic juniper forests in the upper reaches. Due to the dry climate, no deciduous forest belt is found in the Zakasnik. The herbal-shrub pistachio type is dominant of the area. Trees are mainly represented by pistachio, Judas tree, and wild almond. The relatively easy access to the forests (low elevation) facilitate tree cutting for fuel wood by local population. The forest fires are common resulting for careless behavior of the population. Fires in 2003 destroyed several tens of hectares of forested area. The low zone of the shiblyak is heavily overgrazed by cattle.

Field survey conducted between Khirmanjou and Anjirou settlements showed the absence of seed renewing of arboreal plants and degradation of old formations. To prevent further deterioration of the landscape, it is necessary to improve fire management, impose grazing restriction in areas of high-value biodiversity, and provide local population with alternative heating sources.

Savanoid ecosystems. This ecosystem is present in the areas of Yol and Sarigor settlements. The vegetation is conformed by cereal and herbal plants. There are several vineyards along river-beds and pomegranate plantations. The mass vegetation of plants starts in March with the flowering of early geophytes. High ephemeroïds grow very quickly. In early April grass cover is maximally high. In April-May ephemers and high ephemeroïds are flowering. In late May, the grass cover disappears. These areas are used for winter pastures, and are mostly rainfed lands. Key actions to conserve this ecosystem includes: undertake fire prevention actions, establish forest shelter belts, improve grazing practices and reduce soil erosion.

Tugai forests. The Tugai vegetation is widely spread on the meadow of Pyanj river and its riverside lands. Its flora is represented by heat-loving arboreal plants, e.g., willow, sea-buckthorn, tamarisk and sometimes poplar trees. The grass vegetation is diverse and comprises licorice, sedge, etc. The arable lands are located in valleys and steep mountain slopes.

Agro-ecosystems. Agro-ecosystems are represented by pomegranate plantations located in Anjirou village and in Yol river valley. There are also several artificial plantations of pistachio in the Khojidara river estuary. These ecosystems are threaten by excessive cuttings and cattle grazing. Identified actions to reduce further degradation of these ecosystems include: reduction of cutting of trees and cattle over-grazing, and reforestation.

Social and economic description¹. The population on the project territory amounts to 9,000 people, living in 28 relatively small villages (kishlaks). Administratively all kishlaks belong to two municipalities (jamoats): Dashtidzhum and Yol. About 30 % of the population of each jamoat is concentrated in the centers of jamoats. Similar to other part of the country, the average household size is large: 7 members.

Agriculture is the main economic activity but the production is on the level of subsistence. The agricultural and forestry products collected by people are sold at a rate four to five times lower than the market price due to high transport costs. The agricultural activities are not diversified and haven't been changed for years. The main occupations are livestock, wheat production on small slope land plots, vegetable production in some areas of river meadows. In the buffer zone and in the Zakaznik itself the population collects different medical plants, walnuts, and pistachio. As in other parts of the country, people impoverished by the shortage of income, food and fuel, have turned to the land and are using it more intensively. Due to weak enforcement capacities of the Zakaznik, the population in the surrounding areas uses high value conservation pastures on mountain slopes, cuts trees for construction and heating, and practices illegal logging and hunting.

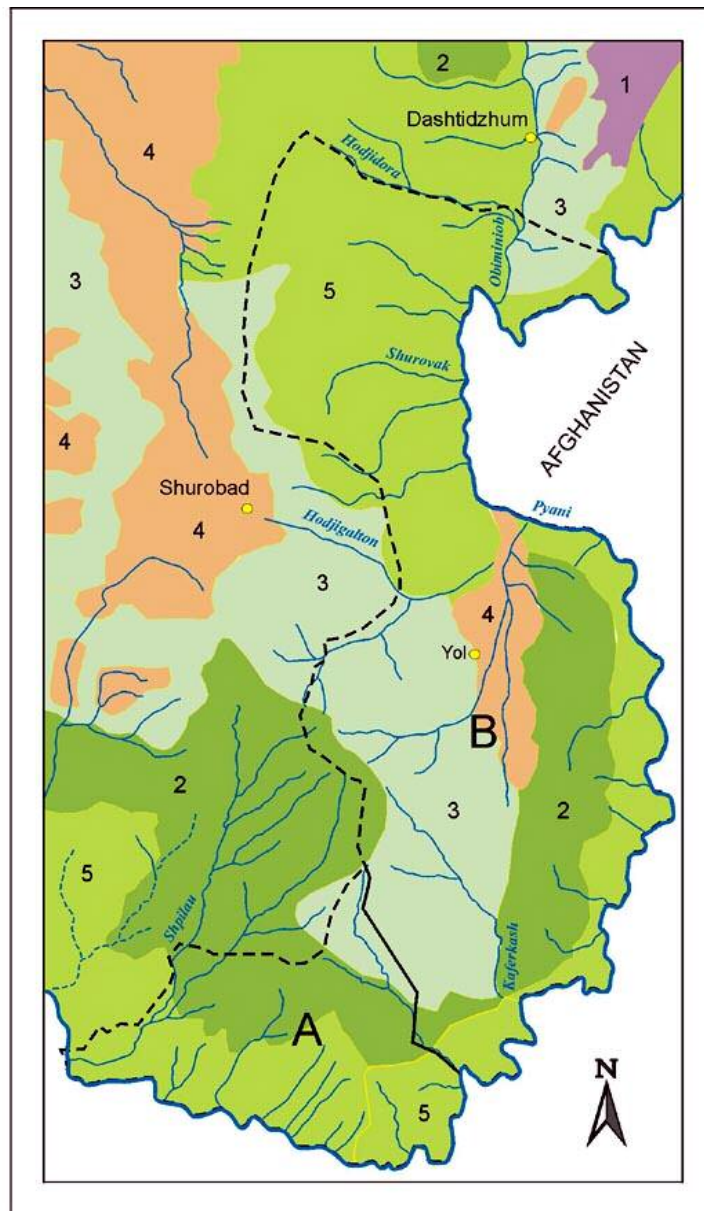
The educational level is very low: about half of the population has not completed secondary school, 40% have completed secondary education, and 13% have a university degree.

The region is extremely underdeveloped – the lack of main infrastructure (roads, water and electricity supply, communication), insufficient and unsatisfactory condition of existing social infrastructure (schools, hospitals, medical care, household appliances) determines the current low level of living standards.

The depressed socio-economic conditions in turn have translated into greater pressure being applied upon the Dashtidzhum natural resources. Despite the good will of local Zakaznik's staff and communities to protect the biodiversity, outside assistance is needed. Over the past few years there has been increasing ecological deterioration of the forests and land, mainly due to unsustainable land management practices, harvesting of trees, and wildlife. As a result, plant and animal species have declined in number and abundance and are at risk, decreased accessibility of habitats for wide-ranging species, soil erosion and landslides, loss of forest cover with its concomitant adverse environmental effects.

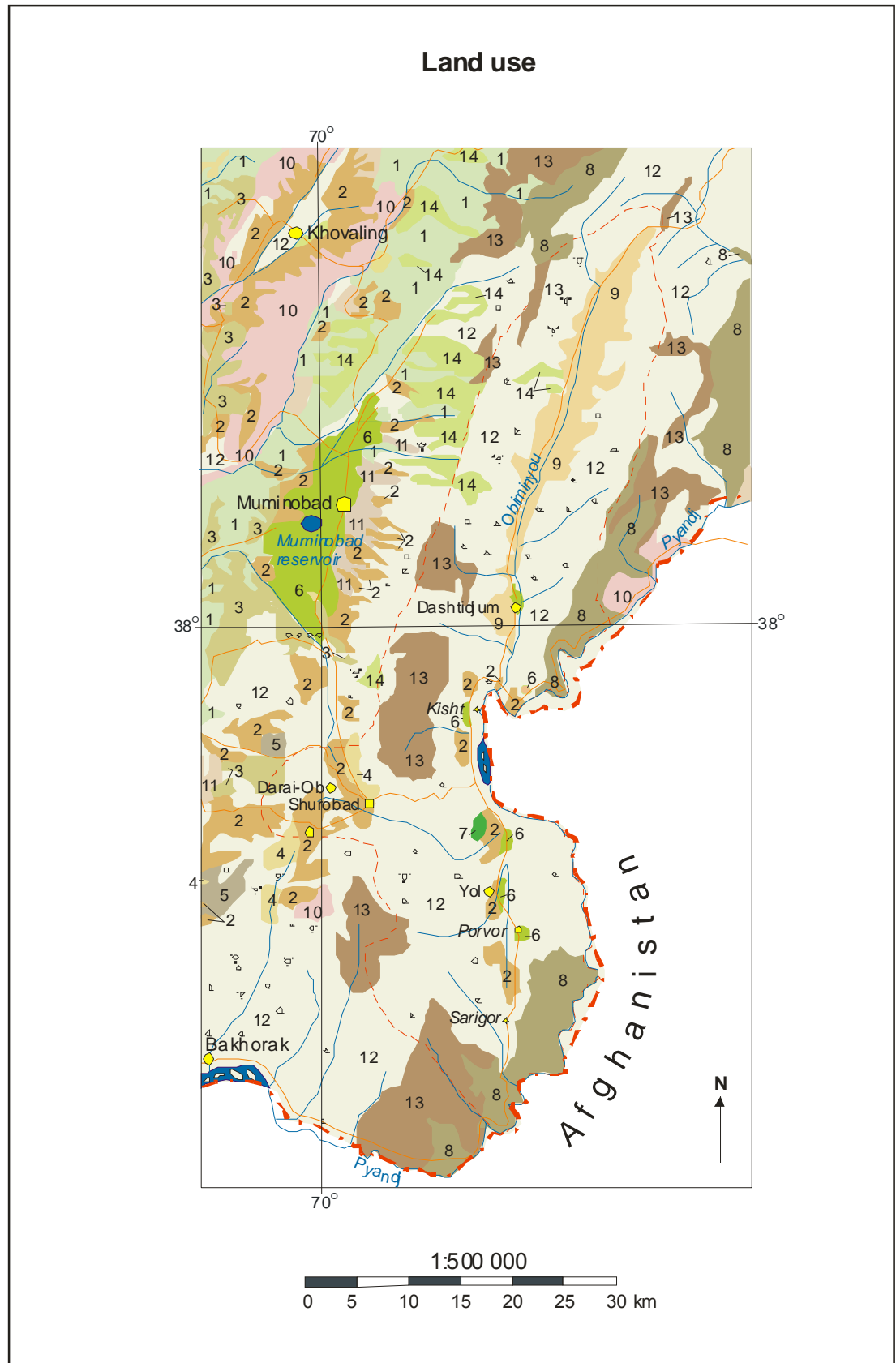
¹ Refer to Annex 6 for a summary of the Social Assessment.

Figure 1: Types of Ecosystems in the Project Area



- 0 5 10 15 20 25 30 km
- (A) - nature reserve (zapovednik) (B) - species management area (zakaznik)
- 1 - middle mountain semisavanna ecosystem (tall herb ephemeral vegetation)
 - 2 - middle mountain coniferous forest ecosystem (juniper forests)
 - 3 - middle mountain mesophyllic forest ecosystem (broad-leaved forests and shrubs)
 - 4 - agroecosystems (rain-fed lands)
 - 5 - middle mountain xerophytic light forest ecosystem (pistachio forests)

Figure 2: Land Use



Land use

The legend:

Agricultural lands

Arable lands

- 1 Irrigated lands
- 2 Rain-fed lands
- 3 Rain-fed with fragmentary irrigated lands
- 4 Rain-fed with fragmentary pastures and hayfields
- 5 Irrigated with fragmentary pastures

Perennials


- 6 Gardens
- 7 Pomegranate plantations

Pastures

- 8 Summer with fragmentary rocks
- 9 Spring-summer-autumn with fragmentary rocks
- 10 Spring-winter-autumn
- 11 Fragmentary autumn-winter
- 12 Rarefied summer with fragmentary rocks
- 13 Rocks and badlands

Forests

- 14 Forests

 Area of zakaznik











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|--|--|
|  State border |  Improved earth roads |
|  Earth roads |  Horsepaths |
|  Rivers |  Reservoir |
|  Settlements |  Forest belts |
|  Rare forests |  Rare shrubs and shrub groups |

Figure 3: Socio-Economic Features

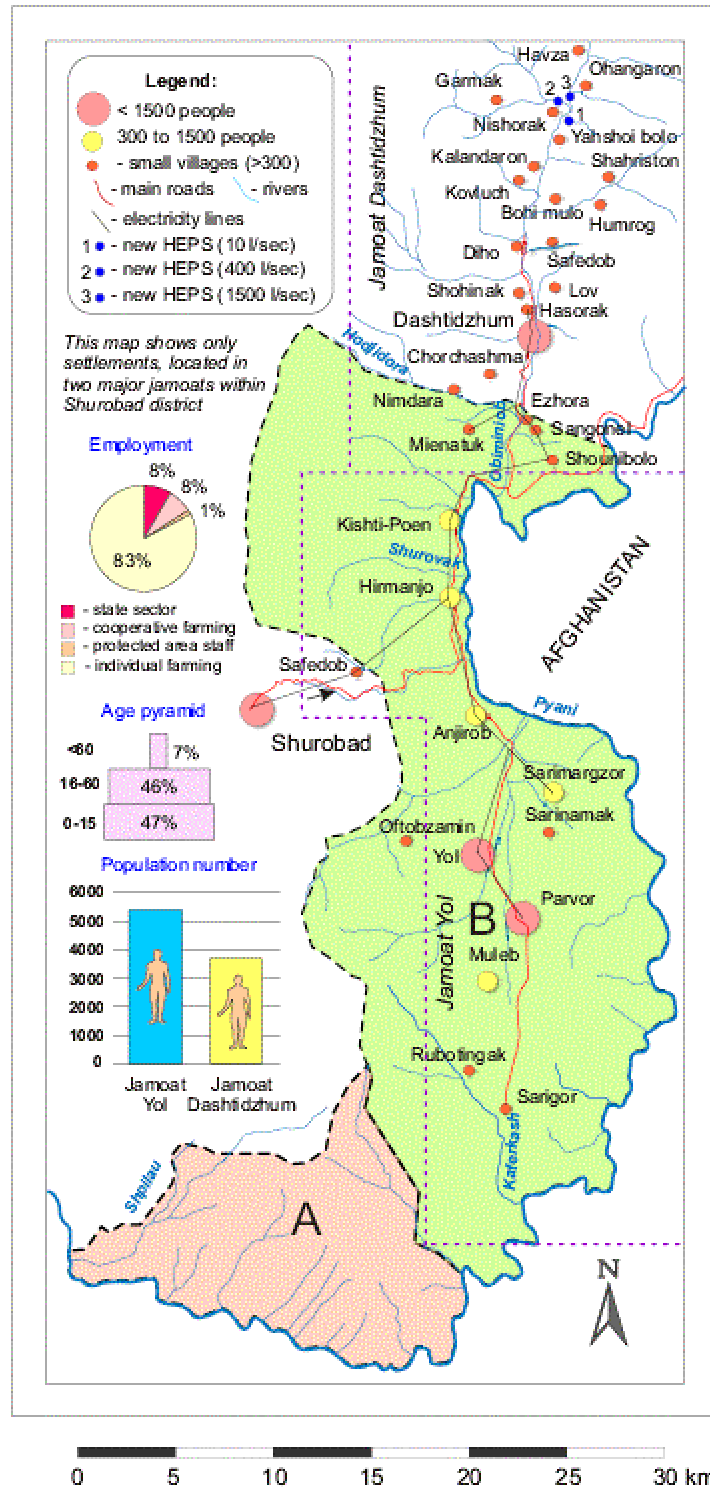
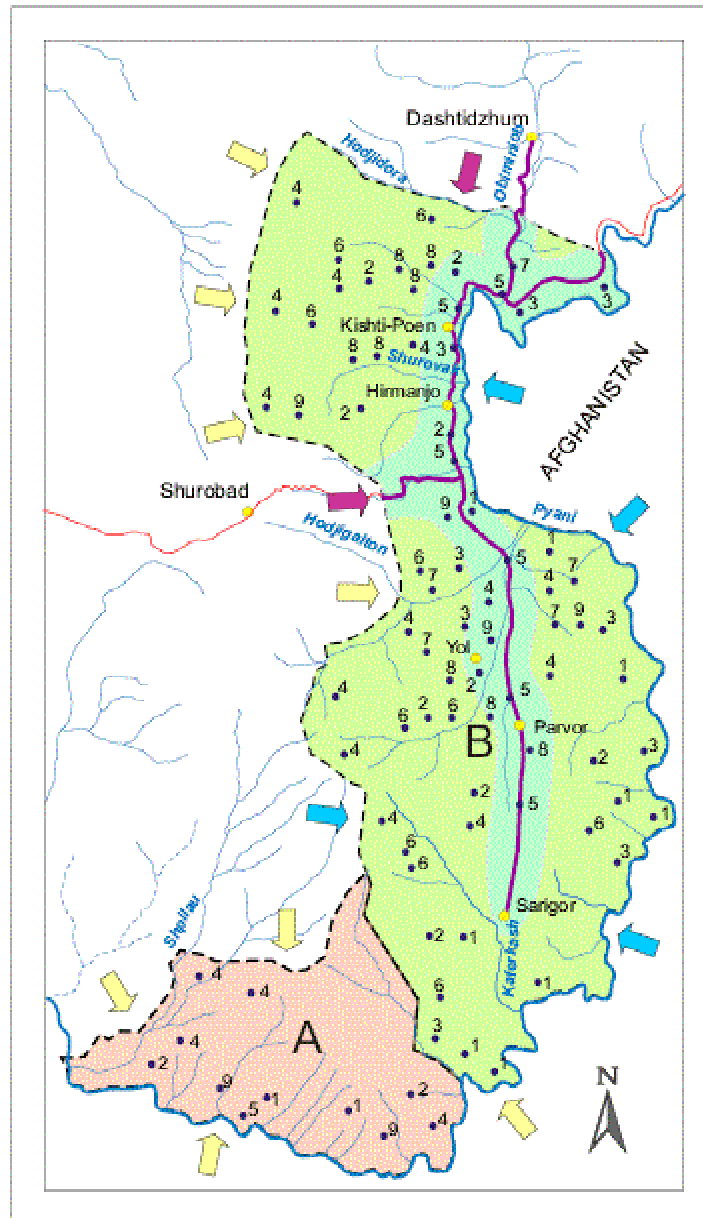


Figure 4: Main Threats



- (A) - nature reserve (zapovednik) (B) - species management area (zakaznik)
- 1 - uncontrolled catching and hunting of fauna
 - 2 - uncontrolled gathering of rare/medical plants
 - 3 - forest cutting
 - 4 - intensive cattle grazing
 - 5 - noise impacts, fragmentation
 - 6 - intensive erosion
 - 7 - landslides
 - 8 - ploughing of steep slopes
 - 9 - forest fire
- external disturbances:
- ↑ - high ↑ - medium ↑ - low
- - area with high risk of fragmentation
 — - intensive road traffic

**ANNEX 4: SUSTAINABLE DEVELOPMENT AND CONSERVATION GRANTS PROGRAM
OPERATIONAL MANUAL**

(See separate report)

ANNEX 5: SAFEGUARDS AND ENVIRONMENTAL MANAGEMENT FRAMEWORK

Noosfera, the implementing Agency for the Project, has carried out extensive consultations and workshops with various stakeholder groups and organizations to measure the environmental and social impacts of the project. The environmental impact of the project is expected to be largely positive. The proposed activities that would be supported by the Sustainable Development and Conservation Grants Program, including afforestation works, improving pasture lands, as well as new alternative and environmentally friendly activities, would contribute to soil improvements and to biodiversity conservation. The increase of vegetative cover would also benefit protection of important species of flora, and would provide better conditions for fauna species, making its inputs also to carbon sequestration. Furthermore, prevention of landslides, reduction in soil erosion losses will also reduce silt loads in the rivers, with a beneficial effect for the down stream area. At the result of project activities biodiversity degradation in the unique Zakaznik's mountain ecosystems will be halted, and various of indigenous flora species preserved. In the same time the project activities would provide new incomes for local population and would reduce its dependency on the Zakaznik's biological resources. The proposed project will not support any activities dealing with agricultural chemicals, any investment in resettlement nor large constructions or activities that can damage the natural habitats. The only safeguards that apply to this project is Environmental Assessment.

Safeguard Policies Triggered by the Project	Yes	No
<u>Environmental Assessment (OP/BP/GP 4.01)</u>	[X]	[]
Natural Habitats (OP/BP 4.04)	[]	[X]
Pest Management (OP 4.09)	[]	[X]
Cultural Property (OPN 11.03, being revised as OP 4.11)	[]	[X]
Involuntary Resettlement (OP/BP 4.12)	[]	[X]
Indigenous Peoples (OD 4.20, being revised as OP 4.10)	[]	[X]
Forests (OP/BP 4.36)	[]	[X]
Safety of Dams (OP/BP 4.37)	[]	[X]
Projects in Disputed Areas (OP/BP/GP 7.60)*	[]	[X]
Projects on International Waterways (OP/BP/GP 7.50)	[]	[X]

The environmental screening category for the project is FI. The Environmental Assessment addresses potential environmental issues of activities to be supported under the SDCGP and identify mitigation measures. The measures are simple to implement to ensure they are within the beneficiaries implementation capacity, and will be integrated into the overall operational guidelines and monitoring system. Consultations on the guidelines are completed and it will made available to the Info Shop and released within Tajikistan in early June 2004.

The environmental assessment guidelines and environmental management guidelines (see Attachment 1) will be included in the SDCGP Operational Manual. Criteria for selection of sub-projects will include compliance with Tajikistan environmental regulations. Temporary minor impacts from these small civil works will be addressed through enforcement of proper clause in civil works contracts.

* *By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas*

Attachment 1: Environmental Assessment Framework

World Bank and national Environmental Assessment Requirements

World Bank Environmental Safeguard Policies applicable to the current project as is specified above is the Operational Policy OP 4.01 on Environmental Assessment. The OP 4.01 requires that an environmental assessment (EA) should be carried out for projects proposed for Bank financing in order to help ensure that they are environmentally sound and sustainable. Therefore, at an early stage in project preparation, the Bank examines the type, location, sensitivity, and scale of the proposed project and depending on the nature and magnitude of the potential environmental impacts, the project is classified into one of four categories: A, B, C, or FI. The scope and extent of the EA varies with the assigned category.

The GEF Dashtidzhum Biodiversity Conservation Project has been assigned an overall category FI, since the project involves funds for subprojects which will be selected by the communities, NGOs and individuals during implementation of the project. For a FI category project, the Bank requires that before approving any subproject, the approving authority should verify that the subproject complies with relevant national and local environmental laws and regulations and is consistent with Bank policy and procedures as described in the OP/BP/GP 4.01. According to World Bank policy, therefore, an environmental assessment framework is required.

Tajikistan Environmental Assessment Requirements

In view of environmental project goals and objectives and under the SDCGP application, the project includes analysis of the short- and long-term environmental, genetic, economic, demographic, impacts and consequences shall be evaluated prior to making decisions on the siting, construction, or reconstruction of facilities, irrespective of their ownership. The environmental protection, mitigation, rehabilitation, and enhancement measures of projects shall be implemented initially. If these requirements are violated, construction will be terminated until necessary improvements are made, as prescribed by legislation of Republic of Tajikistan.

Procedures for Subproject Environmental Assessment

Environmental assessment procedures for the subprojects are designed to assure consistency with national environmental requirements as well as World Bank OP 4.01. Accordingly, it is proposed that each subproject will be assessed for its environmental impacts. Sub-project environmental assessment will involve one or more of the following steps:

Step 1: Initial Environmental Screening: Initial screening will involve a review of the subproject technical proposal. Typically the proposal would include an environmental section describing the key environmental features of the project site, whether critical natural habitats, forests, or rare and endangered species are likely to be impacted, whether major water courses or groundwater sources will be affected, the type of natural resource abstraction and use the project will entail, waste materials and polluting substances likely to be generated during construction and operation, whether project will involve pest management, etc.¹ Depending on the nature and scale of the impacts, the reviewing authority will inform the project proponents about the decision concerning further environmental documentation required for the subproject. All sub-projects have only positive impact on biodiversity state and the environment. Environmental authorities (local, regional and national) control the correct and full implementation of project activities according to the given document requirements. It is expected that most subprojects under the current project will be equivalent of World Bank environmental category B or C, requiring an EMP or no further action.

Step 2: Preparation of EMP: In those cases where such documentation is required, the project proponents will prepare (or organize preparation of) the relevant documents for submission within the time indicated by the reviewing authority. Depending on the project environmental impacts, the environmental

¹ .(A detailed content and structure of a such document is provided in “ Construction Norms and Rules No 1.02.01-85 “Instruction on preparing clearances and approval of project documentation for construction of enterprises and buildings”, approved by the USSR State Committee for Construction in 1985 (December 12, 1985, No 253).

documentation could either be a separate report, or simply presented as a section of the overall project document submitted for appraisal to the approving authority.

Step 3: Environmental Approval: The project documentation will be reviewed and approved. The decision on the environmental aspects of the project, and any additional measures or changes required to the proposed environmental management plan will be conveyed at this stage.

Step 4: Supervision and Reporting: Once project implementation starts, the competent authorities will supervise the implementation of the EMP.

Roles and Responsibilities for Implementation

The following roles and responsibilities are foreseen for the various participants involved in subproject development and implementation:

a. Communities, Interest Groups, NGOs and Individuals (subproject beneficiaries) will prepare the environmental sections of the project proposals, describing the project's potential adverse impacts, and the measures proposed to prevent, mitigate, and monitor these during implementation.

b. Technical Experts will provide assistance to communities in preparation of environmental assessments and environmental management plans.

c. Ecological Expertise Inspection will review and provide clearances for proposals of the sub-projects that might environmental impact based on recommendations of PCC and local authorities.

d. Project Management Unit will keep project files and assure completeness of environmental information submitted to the reviewing authorities.

Environmental Management Guidelines for the Subprojects

The environmental impact of the proposed project as was indicated above, is expected to be largely positive. The project will not involve any major construction requiring resettlement or land acquisition, nor invest in the construction of dams, chemicals for agriculture and forestry. The afforestation of degraded agricultural lands, rehabilitation of the pasture, and planting of fruit trees and horticultural crops in the mountains slopes will enhance soil and moisture conservation. The prevention of landslides and reduction in soil erosion will reduce silt loads in the rivers, resulting in beneficial impacts on the downstream areas. Training and capacity building support that is proposed under the project at the initial stage of Small Grant Program launching, will assure that communities will apply natural resources conservation approaches and pursue environment-friendly practices while designing interventions and prioritizing investment options. Attachment 2 provides a summary of the key environmental issues likely to be associated with the potential subprojects, as well the possible options for environmental mitigation.

Monitoring and Supervision

Monitoring of environmental indicators will be a part of the overall project monitoring. Periodic biodiversity conservation and environmental monitoring will be carried out by the district environmental inspectorates and zakaznik's staff. In order to strengthening their capacity to conduct these activities, the project would provide relevant training and capacity building. The Technical Experts and PMU SDCGP Manager will assist with the setting up of a monitoring program for periodic review of the project's impact on the environment. Monitoring the implementation of the environmental mitigation measures in the subprojects will be the responsibility of the district ecological inspectors. The SDCGP Manager will provide overall supervision and review all proposed sub projects for inclusion of necessary environmental requirements.

Institutional Strengthening

NOOSFERA PIU Capacity: A SDCGP Manager will be recruited into the PIU to organize the implementation of Program and to oversee the biodiversity and environmental aspects of project development and implementation. His/her main tasks will be to:

- Jointly with the technical experts assist zakaznik's staff with the review the environmental and biodiversity status of the project area and setting up a long term monitoring program for the major environmental and biodiversity parameters as part of the overall project monitoring and evaluation;
- oversee implementation of the environmental assessment framework for the subprojects;
- organize training programs to be conducted by the Group of Technical Experts;
- guide the project proponents about subproject requirements and provide them with necessary information (i.e., national, or international environmental standards and requirements for a obtaining permit/license, contracts, etc);
- provide guidance for project proponents for inclusion of relevant environmental mitigation measures and identify weaknesses in design and specifications to resolve environmental problems;
- serve as a liaison between the environmental staff in the Shurobad and Kulyab environmental inspectors and PMU; and
- assure that all relevant documentation and reports related to environmental aspects of subprojects are properly maintained by the PMU.

The SDCGP Manager will have an advanced degree in Environmental Science and at least a 5 year working experience related to Biodiversity Conservation environmental management in natural resources projects. He/she should be familiar with procedures for environmental assessment and monitoring, national and international environmental standards and requirements for biodiversity conservation and land management.

Training: The project will include training programs to expand professional skills and capacity of the staff involved in project implementation. Trainees would be experts from NBCC, Kulyab and Shurobod offices of State Committee for Environmental Protection and Forestry, Tajikless and Dashtidzhum Ileshoz, PIU staff, technical experts, jamoat and district officials, NGOs, communities, and individuals.

Following general training programs and information dissemination workshops will be organized under the project through PMU:

- training in environmental assessment and monitoring methods.
- short-term courses to upgrade existing knowledge on new concepts in the areas of: (a) environmentally sustainable technologies in agriculture;(b) biodiversity conservation; (c) soil improvement, irrigation and drainage management; (d) other environmentally friendly economic activities, including tourism development;
- a one-day seminar in the project area to review and exchange information on environmental aspects of the subprojects with a special emphasis on reviewing the results monitoring reports and creating awareness of the environmental issues to sensitize general public about the environmental impacts in the project area.
- a one-day national level seminar in the end of project implementation in Dushanbe to review and exchange information on the results of the project with the participation of the representatives from the project area, Journalists, Academicians, civic society members, NGOs, MIWR, MOA, MNP, Forestry Committee and other related Government institutions.

Budget: The project will include \$5,000 for PMU, zakaznik's staff and Environmental Inspectors strengthening, training to assure that Biodiversity Conservation issues under the project are properly addressed in accordance with this environmental management framework. Any additional costs for environmental monitoring will be covered under the project management component.

Stakeholder Involvement and information dissemination

Information dissemination. The information about the project itself and about its environmental impacts and mitigation measures was broadly disseminated at the local and national level:

- ③ The project goal and objectives have been presented at the UNDP workshop on Biodiversity Conservation project in Tajikistan (August, 2003);
- ③ Information concerning the MSP has been published in national newspapers and has been broadcasted during 2003-2004 (Dehkon, No 12, from October 17, 2003);
- ③ Presentation of the MSP objectives at the Oblast level during the oblast workshop on National Environmental Action Plan (September 26, 2003);
- ③ Project presentation at the roundtable on the Biodiversity Conservation priorities in the country, organized by Biodiversity Center, with the participation of representatives from Botanical Institute, Institute of Ecology, Ministry for Nature Protection, Tajikless, Eco Center, Tajik State University (September, 2003);
- ③ Various presentations on the MSP, project options and on the project itself have been made to government officials since September 2003 and in particular to the Ministry Nature Protection and Tajikless, as well as about the project preparation process;
- ③ The MSP Project Brief have been discussed with government and State Committee for Environmental Protection (March 2004);
- ③ Meetings with the Shurobod district and jamoats authorities and communities during the period of September 2003 -March 2004.

Consultations. Various stakeholders of the project have been consulted frequently. These stakeholders were visited individually or in groups. Extensive consultative meetings were held during project preparation and the inputs of these groups have helped in the outcome of project design. In the course of the project preparation have been organized meetings with the following state institutions, academia and NGO community:

- ③ State Committee for Environmental Protection and Forestry(December 2003 – March 2004);
- ③ State Ecological Expertise (March 2004);
- ③ Dashtidzhum leshoz (December 2003);
- ③ Environmental NGOs (including Kuhiston Foundation, For Earth, Safar, Tajikistan Association of Physiologists);
- ③ Academia (including experts from Botanical Institute, Soil Institute, Zoological Institute, Academy of Agriculture) (December 2003 – March 2004);
- ③ Local communities and councils(Yol and Dashtidzhum jamoats)(December 2004);
- ③ Districts administrations, including authorities responsible for environment protection, and agriculture (December 2003).

During these meetings were discussed the tasks of different stakeholders in project designing, major related problems and opportunities. Furthermore, the stakeholders were informed about the possible positive and adverse project environmental impacts and about the range of needed mitigation measures. Additionally Noosfera has discussed and agreed with environmental authorities the procedures and rules for subprojects clearances and if needed of ecological expertise.

Attachement 2 :Environmental Management Guidelines

Activity	Issues	Anticipated/Potential environmental Impact	Effects on Environment	Actions or Mitigation Measures
Small scale processing facilities	Incorrect (poor and inappropriate) storage and disposal of solid and liquid waste, especially along watercourses	Seepage of liquid and solid wastes into rivers. Noxious smells at times. Can encourage communicable diseases	Increasing soil and water pollution	Demonstrate proper storage and disposal of liquid and solid wastes. Train farmers.
Improvements in livestock production and introduction of pasture rotation	Possible disposal of animal wastes	Organic pollution of surface and ground water; pollution with nutrients (N and P)	Organic pollution may cause waterborne diseases; nutrient build up may lead to eutrophication of water bodies Positive effect - Improvement of pastures lead to reducing of land degradation	Proper storage and disposal of animal manure. Reuse as fertilizer or biogas. Train farmers.
Contour planting of trees, other appropriate soil and moisture conservation structures, landslides and ravines prevention	Forest and range-land terracing Inaction and improper terracing	Initially this could induce landslides, and lead to surface and gully erosion, poor drainage etc. The initial surface and gully erosion, if any, will be substantially offset by improved infiltration, soil stabilization, increased ground cover (biodiversity), improved microclimate. Positive effects are high	Protection of rain-fed arable sloping land. Restoration and re-vegetation of watershed areas. Overall reduction of erosion. More sustainable use of land. Reduced dissolved minerals in surface and ground water. Inaction and improper terracing etc. will result in continued degradation	Enforce standards for terracing and provide maintenance budget. Re-vegetate area quickly, especially terrace edges and chiefly with indigenous species. Provide training if necessary
Establishment of woodlots for fuel, building materials and windbreaks		Positive effects high – improved land condition, reduce soil erosion, improving of microclimate	Restoration and re-vegetation of project area. Overall reduction of erosion. More sustainable use of land. Reduced dissolved minerals in surface and ground water.	Enforce standards for terracing and provide maintenance budget. Re-vegetate area quickly, especially terrace edges and chiefly with indigenous species. Provide training if necessary
Development of pasture lands		Positive effects high – improved land condition, reduce soil erosion, fertile soil loss will be reduced, improving of microclimate	Restoration and re-vegetation of project area. Overall reduction of erosion. More sustainable use of land. Reduced dissolved minerals in surface and ground water	

Provision of water resources	Providing water supply to assure population needs for irrigation and potable purposes	Source contamination from animal manure stockpiles, inadequate drainage;	Poor chemical and/or bacteriological quality of water; increased incidence of waterborne disease;	Enforce sanitary protection zones; provide training in handling and use of disinfection chemicals; provide protective gear to prevent exposure to asbestos dust
Installation of wind driven power generation	Improper site selection and operation of facilities	Noise and vibrations during operation; noise and impairment of landscape from wind power structures Positive impacts: availability of clean renewable energy for population; reduced deforestation and soil erosion; reduced health risk from indoor air pollution	Disturbance to surrounding animal populations	Feasibility studies to include environmental feasibility criteria. Select locations for run-of-the-river facilities with no impoundment or dam construction; select sites to minimize impacts on fish and biodiversity; provide mitigation for noise and vibrations.
Small scale channel work, irrigation system and reservoir reconstruction/construction, rehabilitation	Dust, noise, solid waste during rehabilitation works	Initial soil erosion. Poor irrigation practices may lead to surface soil loss, mineral leaching and/or salinization. Better water use should decrease erosion by controlling flash flooding. The provision of more watering points will enable fuller and better use of range/wastelands. Increased ground cover by increasing cropping.	Minimize erosion potential, better control of water flow, greater all-year round use of arable and pastoral lands reduce pressure of over-grazing, decrease organic emissions and improve biodiversity	Apply construction standards and guidelines with environmental clauses. Re-vegetate canal banks with grasses and shrubs. Provide farmer training in drip and sprinkler irrigation and propose proper water pricing
Rural tourism development	Impacts on natural habitats and /or flora and fauna species	The tourism development can disturb fauna life and reduce the diversity of flora species, may have an impact on rare and threatened species of medicinal plants.	Reduction of biodiversity, natural habitats degradation, increased threats of rare and endangered species	Regulate tourism development taking into account natural habitats status and sensitivity, provide training for farmers
Small scale infrastructure investments/buildings rehabilitation construction of places for animal watering and feeding	Impact on natural habitats, their partial destruction and modification	These works can have a limited impact of the animal lifestyle and on the general landscape view	Natural habitats modifications	Regulate tourism development, taking into account the sensitivity of natural habitats and potential impacts, provide training for zakaznik's staff

ANNEX 6: SOCIAL ASSESSMENT

This Annex summarizes key social issues relevant to the project objectives, and specifies the project's social development outcomes. A full Social Assessment (SA) Report is available through Noosfera.

Objectives and methodology. The SA was undertaken between November 2003 and February 2004. The first stage consisted of primary and secondary data collection. This information was used to design the household survey instruments. The survey methodology was developed in conformity with the specifics of the project site. The social team interviewed 360 households living with the territory of the Dashtidzhum Zakaznik. They were selected on the basis of a quota sample selection (age and sex indicators, which strongly determine the social status). The female respondents were interviewed by female interviewers and participated in the survey with pleasure. About 30 in-dept interviews and more than 14 meetings and workshops were conducted with a full range of local and national stakeholders. The social assessment brought valuable information to assess and understand the life style, as well as conditions and attitudes of the local communities. Therefore, it had a significant impact on the project design and especially for determining the activities under Sustainable Development and Conservation Grants Program.

Socio-economic conditions. The number of population in the Zakaznik's surroundings is over 9,000 people. The average size of household is about 7 members. There are 1,279 households registered at the Jamoat's level, living in 28 relatively small villages (called Kishloks) belonging to Dashtidzhum and Yol municipalities (called Jamoats). About 30% of the population of each Jamoat is concentrated in the center of the Jamoat: the villages Yol and Dashtidzhum. After the collapse of the Soviet Union the population in the Jamoats increased considerably due voluntary resettlement to the native places. This tendency was interrupted because of the lack of jobs and livelihoods and very poor living conditions. The SA reveals a stable demographic situation since the year 2000 in the project area, compared to the high population in the rest of the country. The project area shows the same age distribution of the rest of the country: about 47% of the population in both jamoats is under 16 years. All the surveyed population is of Tajik nationality and belongs to the Muslim religion.

At present, the GoT is implementing and monitoring a special program for reducing population growth observed in the last ten years in the country. The demographic situation in the project area will be monitored by the project. A carrying capacity assessment of the Dashtidzhum's protected area will be conducted as a part of the management planning process.

Table 1: Number of households and population in the project area

Year	Number of households	Population
2001	1,244	9,188
2002	1,279	9,222
2003	1,279	9,124

The average per capita income level in the project area is close to the officially estimated minimum salary in the country (about US\$2.7 per month). The annual household income ranges between US\$233-US\$333 (about US\$2.7-3.9 per household member per month). Agriculture is the main economic activity of the population and almost all households have land plots. Almost two third (65%) have reported that agriculture activities are the main income source for their households. Due to climatic and geographical characteristic of the region, the agricultural occupations are limited to livestock breeding, wheat production on small slope land plots, and fruit gardening. Agriculture production is at the level of subsistence Excessive agricultural and forestry products collected by people are being sold at a rate four to five times lower than the market price due to high transportation costs. Salary is the main income source

for about 25% of the respondents. This confirms poor diversification of economic activities and lack of jobs and alternative livelihoods.

Resource use in the project area. The SA confirms the significant dependency on nature resources: over the half of the households collect wild fruits (58%) and herbs (52%); close to half of the households collect wild nuts, mainly walnuts and pistachio (46%); and one of every 12 households collects mushrooms (8%). Around 17% of the households have reported an average income of US\$33 for 2002 and US\$50 for 2003 from such economic activities. Only a small percentage of households (1.5%) has reported nature products gathering as their main source of income.

Poor rural infrastructure. The population is experiencing serious problems with fuel supply and energy sources because of the lack of infrastructure and organized trading system. Currently, 86% of households use collected wood for heating, averaging 5-7 cubic meters per family, which covers less than 1/3 of the household needs.

All settlements in the Zakaznik are of rural type and extremely underdeveloped. There is a total lack of piped water supply systems and canalization. None of the interviewed households has reported water supply in their backyard. Households use water without any treatment, and the main water sources are natural springs and the close-by river. Around one-third of the houses are not connected to the electricity system. About 40% of the villages (11 out of 28) do not have such access to electricity systems. When electricity supply is available, services is limited to 5-7 hours per day. There are no social services and entertainment facilities, except 14 medical points and one poorly equipped hospital. The road system is mainly of “track” type and crossing rivers. Some of the roads are not functional during winter or flooding periods. There is no operating public transport services in the region (neither a private one). These conditions cause serious difficulties and isolation: 37 % of respondents have never left the village area, about 29% have done it just once or twice.

The project site is accessible only through one road, which partly follows the ancient “Silk Road”. That is one of the culture landmarks of the project site, which creates a potential for development of tourism in a long term prospect.

Population expectations. The SA reveals that there is an overwhelming expectation of positive impacts from the project: more than 2/3 of the surveyed respondents indicated that it would be beneficial for their households. The benefits listed by the respondents include: general economic revitalization by infrastructure improvement, protection of natural resources and forest, agriculture improvement, and creation of jobs in public works activities and protected area maintenance. Respondents expect benefits will materialized in 3-5 years. No negative impacts from the proposed project have been identified by the respondents.

Social outcomes. Apart from the biodiversity conservation benefits, the project will support the following social development outcome: engagement of local communities in sustainable management and use of natural resources and environmental protection by involvement them in the preparation of the protected areas management plans and in the implementation of the Sustainable Development and Conservation Grants Program. The project will contribute to the better local life conditions by improving basic socio-economic infrastructure, providing opportunities for diversification of livelihoods, and supporting transition of current agriculture to environmentally friendly practices in accordance with climate, skills and willingness of the local population. The project will also contribute to addressing heating problems by supporting private forest nurseries/plantations and promoting biodiversity conservation, nature protection and sustainable use of natural resources through education and awareness raising.

Public participation plan. The project has been developed in a participatory manner through wide range of consultations, meetings and workshops conducted during the preparation phase, and involving various stakeholders, e.g., the state and local authorities, local branches of environmental and forest authorities, representatives of local communities, the scientific community, the administration and staff of the protected area and the public at large. The participatory process assisted in identifying the role of different stakeholders and in attaining high level of support from the project. Villagers are expected to continue to participate in the project activities and contribute for successful project implementation. The SA shows they are self motivated: only 15 % of the population find the life in the project area worse than in the rest of the country, 80% were born in the area, and 97% want their children to live in the same Kishlak.

The project will continue to implement the same participatory approach. For that purpose, a special plan for community involvement has been designed, which includes three elements:

- Setting up of a Project Coordination Committee (PCC). During the SA, local population shared their concerns that some safeguards need to be put in place to guarantee the successful implementation of the project (in order to inspiring a feeling of stability, financial security and effectiveness and gain public support) and suggested the setting of a PCC. This body was perceived as the “main protector of their interests” during project implementation. The PCC will involve local and national governmental authorities, representatives from forestry enterprises and jaomats, and will have the overall responsibility for overseeing project implementation.
- Development and implementation of an information campaign. The main goals of this campaign are to:
 - Continue motivation and support for the project, promote participation in project implementation and avoid any kind of tension in the future. This will answer to the survey conclusion that there is insufficient/or erroneous information, and unawareness of the essence, main activities and stages in the implementation of the project.
 - Inform about potential positive and adverse project impacts and the range of needed mitigation measures.
 - Prepare and distribute materials of the significance, importance and uniqueness of biodiversity in the region. The materials will be developed in accordance with surveyed preferences of local people and measured educational level.
- Supporting public consultation and consensus building. The project will launch public consultations for key decisions potentially affecting people’s livelihoods, such as: establishing the legal framework of protected area regime, which may impose restrictions on access and use of the area, limit some economic activities, but also offer also opportunities to local communities; and identifying options for sustainable protected areas management, given the widespread opinion that biodiversity conservation objective exclude use of natural resources in protected areas.
- Implementation of the Sustainable Development and Conservation Grants Program. The successful implementation of this program calls for the provision of training. A special group of technical experts would be formed to conduct training and seminars for introduction of SDCGP and provide technical assistance to project beneficiaries in preparation of project proposals. The special group will avoid raising false expectation regarding prospective opportunities to be provided under the framework of the project and will familiarize potential participations with the entire program.

Noosfera PIU will ensure full participation of stakeholders in the implementation and monitoring of the project. The PIU with the support of consultants will carry out socio-economic surveys to monitor project progress and measure the impacts of project activities compared to the initial socio-economic baseline survey carried out during the preparatory phase and intended project outcomes.

ANNEX 7: INCREMENTAL COST ANALYSIS

Overview

The general objective of the GEF Alternative is to demonstrate and provide for replication of in-situ conservation of Dashtidzhum Zakaznik's globally significant biodiversity. The GEF Alternative will: (i) support protected areas management planning; (ii) strengthen capacity to protect globally important flora and fauna species and ecosystems; (iii) promote sustainable use of natural resources by local population in the Zakaznik surroundings compatible with biodiversity conservation objectives; (iv) raise public awareness on conservation issues; and (v) involve local communities and NGOs in the decision making process. The GEF Alternative intends to achieve these outputs at a total incremental cost of US\$1.17 million to be financed by the GEF (US\$775,000), Dashtidzhum Leshoz (US\$33,000), National Biodiversity Conservation Center (US\$21,000), NGO Noosfera (US\$40,500), grant beneficiaries (US\$103,750) and parallel programs (US\$200,000). The GEF Alternative should be seen as complementary to ongoing projects and programs in the Dashtidzhum territory.

Context and Development Goals

Tajikistan has globally significant mountain flora and fauna species, including many of economic importance, but they all are under severe threats. Pastures, for example, which host over 3,000 plant species face threats from localized over-grazing. The wild-growing fruit plants of Tajikistan represent a unique genetic resource for agriculture. Forest areas, which at present cover only 3% of the country's territory, have decreased by about 15% over the past 10 years as a result of excessive logging for firewood.

Government of Tajikistan (GoT) has expressed its commitment to protect and enhance the biodiversity of the country. Biodiversity conservation and related measures such as afforestation, pasture improvements, soil conservation and protection are considered priorities as documented in the following strategies/programs: the State Ecological Program for 1998-2008 (prepared in 1997), the Governmental Measures for Implementation of the State Ecological Program (dated 1998), the National Strategy for Combating Desertification (dated 2002), the Strategy for Climate Change (dated 2002), the Biodiversity Conservation Strategy and Action Plan (dated 2003), and the draft National Environment Action Plan. Despite its scarce financial resources, Tajikistan has created a network of protected areas, comprising four nature reserves (Zapovedniks), 14 special protected management areas (Zakazniks), and two national parks. This network covers the main ecosystems in the country.

During the development of its Biodiversity Conservation and Action Plan, the GoT has identified main trends and principles for improving biodiversity conservation, and assigned a high priority to the protection of the biodiversity values at Dashtidzhum Zakaznik. Despite the difficult economic situation in the country that has restricted the Government's capacity to implement its priority programs, some investments in biodiversity conservation have taken place. Since 1991, protected areas have been increased by about 1,500,000 ha, raising the area under protection from 0.3% to 26%. Additionally, the Government has invested especially in the last 5 years in afforestation works, that resulted in about 15,000 of new forests.

Dashtidzhum is a mountainous area in southern Tajikistan with altitude ranging from 700 to 3,000 meters above sea level (masl). The area is located between 37°40' and 38°20' north latitude and between 70°00' and 70°20' east longitude. It comprises diverse elevations, land cover patterns, and land use types. While the core area of Dashtidzhum territory features undamaged natural environments, a part of the territory has experienced changes as a result of agriculture (including grazing) activities.

The proposed Project focuses on the Dashtidzhum Zakaznik. Its globally significant biodiversity is threatened by anthropogenic pressures and the high extent of ecosystem fragmentation. The total area of the Project site covers approximately 80,000 ha: 53,323 ha of special management area itself and 26,677 ha of its surroundings/buffer zone with different types of land use.

Dashtidzhum Zakaznik contains various endemic and endangered flora and fauna species of regional and global significance. More than 1,500 plants and fauna species recorded in the Zakaznik are endemic to Central Asia and several species are listed in the Tajikistan Red Data Book. The Project area is also rich in wild-growing fruit plants, which represent unique genetic resources including apples, pears, apricots, mulberries, cherry plums, plums, walnuts, almonds, grapes, currant, sea-buckthorn berries, among others.

Agriculture is the main economic activity, but production is at the level of subsistence. Excess agricultural and forestry products collected by people are sold at a rate four to five times lower than the market price. Farmer can not bring their products to larger markets because of the high transportation cost. The main agricultural activities are livestock, wheat production on small slope land plots, and vegetable production in some riverine areas. In the buffer zone and in the Dashtidzhum area itself, the population collects different medical plants, walnuts, and pistachio.

Factors contributing to the deterioration of the natural resources in Dashtidzhum can be summarized as follows:

- *Human pressure and unsustainable use of natural resources by local population.* The current economic difficulties have resulted in the radical reduction of the state support to the local population and increased rural poverty. Average monthly income per household is US\$21. Monthly salary levels rarely exceed US\$10 per capita. As in other parts of the country, people impoverished by the shortage of income and food and lack of alternative heating energy sources have turned to the land and are using it more intensively. Over the past few years, there has been increasing ecological deterioration of the forests and land, mainly due to unsustainable logging for fuel wood and building timber, overgrazing of fragile mountain ecosystems, unsustainable hunting and harvesting of wild fauna and flora, and limited alternative livelihood opportunities for the people in the surrounding area of the Zakaznik. Within the Zakaznik territory itself, many of the same unsustainable practices are also taking place but to a lesser extent.
- *Natural disaster risks.* The Zakaznik is located in a disaster prone area with frequent landslides, mudflows and avalanches. For example, in 1992, 300 houses in Dashtidzhum village were washed out by mudflows resulting in many casualties and forest damage. Forest fires (natural and human-made) pose another risk to biodiversity. In 1998, 240 ha of mountain forest were burned. Illegal logging and overgrazing have increased the risk to these natural hazards. In addition, they have reduced water retention capacity of the slopes, resulting in increased frequency and extend of droughts.
- *Weak institutional capacity and deteriorated infrastructure.* The management capacity of the Zakaznik is very weak. Because of lack of specialized staff, neither planning nor monitoring activities are being carried out. Staff of the Zakaznik lack the means to carry out basic biodiversity inventory and supervision.
- *Limited involvement of stakeholders in the decision-making process regarding the management of Zakaznik natural resources.* No efforts have been made so far to involve local stakeholders in the management of the protected area.

Baseline Scenario

As shown above, the Dashtidzhum territory is subject to a number of pressures from human activities, which are threatening the ecological sustainability and integrity of Dashtidzhum's ecosystem.

In the absence of GEF assistance for addressing short-term and long-term threats to biodiversity values, Tajikistan is unlikely to guarantee adequate protection of the Dashtidzhum's ecosystem. Although attention for attention to protected areas management is expected, existing government resources and programs will not be sufficient to address environmental issues associated with deterioration of globally significant biodiversity.

Tajikistan is undertaking a number of domestically and externally funded programs and activities to ecosystems management biodiversity conservation in the project. The Baseline Scenario consists of the following investments during the project life:

- *Government support for protected areas management.* Due to severe budget constraints, the Government's program on protected areas management and biodiversity conservation in the project site is very limited. The Government has allocated US\$8,000 in the 2004 budget to cover salaries of the Dashtidzhum Leshoz staff. Total government contribution for protected areas management is estimated at US\$20,000 during the project life.
- *Protected areas management activities supported by the Dashtidzhum Leshoz.* The National legislation allows forest enterprises to conduct its own economic activities that comprise selling of fuel wood, collecting and selling various non wood forest products, fruits, medical herbs, etc and to keep obtained financial resources for various internal activities. Such activities can provide essential financial resources for Leshozes that might be used for various activities, including afforestation works, prevention of forest fires, biotechnological measures, biodiversity monitoring. In 2003 Dashtidzhum Leshoz has spent for these purposes about US\$4,400. It is expected that the same level of annual investments will occur during the life of the project. Thus total Government contribution will amount US\$8,800
- *Afforestation programs funded by the National and Regional Ecological Funds.* During the past years these Funds have provided limited financial assistance for the local communities and for Dashtidzhum reserve and Zakaznik to conduct afforestation activities, including buying of tree seedlings. The level of financial assistance during year 2003 was US\$1,500. Total investments amounted to about US\$3,000. It is expected that during the next two years, similar activities will be carried out. Total value of community-based afforestation program will amount US\$6,000.
- *Afforestation activities supported by local authorities.* During 2003, afforestation works were commissioned by the Shurobod Hucumat and by two Jamoats within the project area, totaling US\$2,900. These institutions are committed to continue providing similar level of support in the future, and thus their contribution could be estimated at the level of about US\$8,700.
- *Sustainable development programs supported by donors and IFIs.* A number of rural development and land conservation activities in the project areas are being financed by Jamoat Development Committees formed by the UNDP Multi-donor Rehabilitation, Reconstruction and Development Program (RRDP), and the Aga Khan Foundation. These projects are financing mostly socio-economic infrastructure activities, such as reconstruction of schools and hospitals, roads rehabilitation, natural disasters prevention measures, rehabilitation of irrigation and water supply systems. Several IFIs and donors (e.g., Islamic Bank, Kuwait Foundation, AKF) are also provide financing for bridges construction. The German NGO "Agro action" provides micro credits for local farmers

for various agricultural activities and land improvements. One could estimate that about US\$100,000 would relate to GEF-project objective and GEF-project area.

Baseline Costs. The Baseline Scenario is therefore estimated at US\$143,500, and is based on a realistic assessment of financial resources allocated or to be allocated for activities related to the biodiversity conservation, land and forests degradation prevention, afforestation works, as well as for improving livelihoods and is consistent with the current national development goals and existing institutional capacity.

Baseline Benefits. The benefits of the Baseline Scenario can be summarized as follows:

- It would produce modest global benefits by maintaining and improving globally important Zakaznik's mountain ecosystems, species and biodiversity;
- The focus of national authorities and beneficiaries efforts will remain on those productive activities what could generate more revenues and that have clear short-term poverty benefits. The outcome will be a reduced impact on the environment.
- There will be a modest shift to more sustainable land use and afforestation of sloppy lands will be very limited. The scale of gullies and landslides prevention without external support will remain very limited.
- Limited contribution to create awareness among farmers and other stakeholders about sustainable land management and biodiversity conservation, including preservation of important genetic resources. The baseline activities doesn't provide opportunities for information dissemination and exchange with other regions and countries undertaking comparable efforts or replication activities in other parts of the country.

The Baseline Scenario will not ensure protection of Zakaznik's diverse and globally important mountain ecosystems, which are likely to continue to suffer from unsustainable biological resources and land use practices.

Global Environmental Objectives and GEF Alternative

With GEF assistance for addressing international biodiversity objectives, the Government of Tajikistan would be able to undertake an integrated conservation management program at a priority site of globally important biodiversity, which would generate both local and global benefits. The GEF Alternative would include the baseline scenario augmented with activities at Dashtidzhum Zakaznik to improve protected areas management and promote sustainable development economic activities.

The GEF Alternative would ensure streamlining of available scarce resources, channel investments towards biodiversity conservation and sustainable and environmentally friendly economic activities that would generate revenues for local population, raise public awareness and participation of the communities in the sustainable management of Zakaznik's resources by providing training, information dissemination and promoting participatory approaches for preventing biodiversity and land degradation. Without GEF support, marginal and ad-hoc efforts to conserve the biodiversity would continue, but could not ensure the protection of the Zakaznik territory.

The GEF Alternative would achieve more effective conservation of globally-significant Zakaznik's flora and fauna species, that represent very important genetic resources for agriculture and of soils and will promote more sustainable mountain ecosystem management. The project would also contribute to carbon

sequestration through conducted afforestation, planting of new fruit tresses, mitigating further degradation of vegetation cover and reducing soil erosion.

The total cost of the GEF Alternative is estimated at US\$1.32 million and will catalyze additional resources beyond the baseline scenario, totaling US\$1.17 million.

Incremental cost

The difference in cost between the Baseline Scenario and the proposed GEF Alternative is estimated at US\$1.17 million. This represents the incremental cost of achieving sustainable global environmental benefits. Of this amount the Government of Tajikistan and various stakeholders have committed to finance US\$0.40 million, GEF and stakeholders have already financed US\$25,000 and US\$5,500, respectively, for the preparatory phase. Thus, US\$0.75 million is requested from GEF. The table below summaries the project components and proposed financial plan of the incremental cost.

Incremental Cost Matrix

Component	Cost Category	Cost (in '000 US\$)	Domestic Benefits	Global Benefits
A. Strengthening protected areas management	Baseline	28,800	Limited capacity to plan and implement protected areas management.	
	With GEF Alternative	272,800	Increased local capacity to manage protected areas and to conserve biodiversity and increased flow of goods and environmental services at the local level	Sustainable integrated conservation management at a priority site of globally important biodiversity
	Increment	244,000		
B. Sustainable development and community involvement in protected areas	Baseline	114,700	Limited public awareness of the need for sustainable natural resources management	
	With GEF Alternative	911,950*	Increased opportunities for alternative income generation in rural communities based on sustainable management of natural resources. Reduced risk to landslides and mudslides common in the project area.	Increased awareness and use of environmentally friendly economic activities and increased local, national and international understanding of threats to globally significant biodiversity. Contribute to carbon sequestration through afforestation activities.
	Increment	797,250		
C. Project management and monitoring	Baseline	0	Not applicable	
	With GEF Alternative	132,000		Information sharing with other regions within Tajikistan and Central Asia
	Increment	132,000		
Total	Baseline	143,500		
	With GEF Alternative	1,316,750		
	Increment (GEF)	1,173,250 (775,000)		

Note: (*) It includes US\$200,000 from parallel programs supporting project development objectives

ANNEX 8: BUDGET BREAKDOWN (in US\$)

Component/Activity	GEF	Other Co-financing Totals	Total Cost
A. STRENGTHENING PROTECTED AREAS MANAGEMENT			
A.1 Zakaznik's Management Plan			
International consultant services	15,000	-	15,000
National thematic experts	18,200	-	18,200
Field studies	4,680	-	4,680
Office equipment	3,570	-	3,570
Operational costs (including transportation cost to the project site)	6,250	-	6,250
Publications	2,300	-	2,300
<i>A.1. Sub-total</i>	<i>50,000</i>	<i>-</i>	<i>50,000</i>
A.2 Strengthening Capacity of Protected Areas Management Institutions			
Consultant services	5,000	3,000	8,000
Refurbishment of buildings of Ileshoz, nature museum and small construction for conservation purposes of Dashtijum zakaznik:	17,900	20,000	37,900
Procurement of goods: various types of equipment, supplies, transport	38,640	1,500	40,140
Workshops / trainings: study tours on biodiversity conservation issues and protected areas management	17,960	2,500	20,460
Publications: booklets with lectures materials	500	-	500
<i>A.2. Sub-total</i>	<i>80,000</i>	<i>27,000</i>	<i>107,000</i>
A.3. Biodiversity Baseline and Monitoring			
International consultant services	15,000	-	15,000
National thematic experts	24,020	1,000	25,020
Field studies	6,680	-	6,680
Goods: field equipment	2,800	3,000	5,800
GIS equipment	5,700	500	6,200
Nature museum equipment	4,850	4,500	9,350
Other goods	3,800	-	3,800
Operational costs	3,210	-	3,210
Publications: survey materials and guidelines on biodiversity monitoring	3,940	-	3,940
<i>A.3 Sub-total</i>	<i>70,000</i>	<i>9,000</i>	<i>79,000</i>
<i>A. SUB-TOTAL</i>	<i>200,000</i>	<i>36,000</i>	<i>236,000</i>
B. COMMUNITY INVOLVEMENT ON PROTECTED AREAS MANAGEMENT			
B.I. Training and support to local communities in preparation of grants proposals			
Consultant services: Experts-trainers	5,850	2,500	8,350
Technical experts group	1,300	-	1,300
Workshops /trainings: Trainings on sub-projects preparation in jamoats	4,500	1,500	6,000
Operational costs	1,800	-	1,800
Publications: booklets, manuals on sub-projects and Small Grants Program	1,550	-	1,550
<i>B.1 Sub-total</i>	<i>15,000</i>	<i>4,000</i>	<i>19,000</i>

ANNEX 8: BUDGET BREAKDOWN (in US\$)

(continuation)

B.2 Sustainable Development and Conservation Grants Program			
Large-size grants	110,000	28,000	138,000
Medium-size grants	140,000	35,000	175,000
Small-size grants	150,000	38,000	188,000
Support each family with coal (Community Outreach Program)	40,000	10,000	50,000
Mitigation measures		200,000	200,000
<i>B.2 Sub-total</i>	<i>440,000</i>	<i>311,000</i>	<i>751,000</i>
B.3 Information dissemination and replicability			
Consultant services	6,500	4,500	11,000
Workshops: national, regional, local	6,600	2,500	9,100
Publications: manuals, film, radio, media. exhibitions	6,900	3,500	10,400
<i>B.3 Sub-total</i>	<i>20,000</i>	<i>10,500</i>	<i>30,500</i>
<i>B. SUB-TOTAL</i>	<i>479,000</i>	<i>325,500</i>	<i>804,500</i>
C. PROJECT MANAGEMENT AND MONITORING			
Staff and experts fee	40,100	-	40,100
Goods: office supply	5,000	16,500	21,500
Operational costs	8,900	22,000	30,900
Audit	9,000	-	9,000
<i>C. SUB-TOTAL</i>	<i>63,000</i>	<i>38,500</i>	<i>101,500</i>
<i>TOTAL PROJECT COST</i>	<i>750,000</i>	<i>400,000</i>	<i>1,150,000</i>

ANNEX 9: PROJECT FINANCIAL MANAGEMENT AND DISBURSEMENT ARRANGEMENTS

Responsibility

The PIU will include a qualified financial management expert in order to set up a reporting and financial management system for the project. During the initial phase of project implementation, the financial management expert will get training and assistance from the Financial Management Specialist of the CAWP PIU and LSRMP PCT. Noosfera will be responsible for preparing and sending to the Bank annual reports and semi-annual summaries of project.

Disbursements

The following table summarizes estimated disbursement scheduled by expenditure category.

Project Disbursements in Years FY05-FY07 (Only GEF grant)

DISBURSEMENT CATEGORIES	Total	FY05	FY06	FY07
Consultant Services	111,230	50,400	47,174	13,656
Goods	87,050	28,001	51,364	7,685
Works	17,900	-	17,900	-
Grants	415,000	83,000	207,500	124,500
Workshops	46,560	18,214	19,174	9,172
Operating Costs	72,260	25,733	25,874	20,653
Total	750,000	205,348	368,986	175,666

Project financial statements and financial reporting

Project financial statements will include a statement of receipts, sources and uses of funds, and undisbursed balances of the Special Project Account. The funds flow statement will indicate sources (GEF) and payments according to project expenditure categories and project components. Financial statements will show realized payments against those budgeted, and information reported will include the value of all contracts signed; i.e., commitments relative to actual payments.

Noosfera will maintain separate records and accounts for project expenditures as well as a register of assets purchased with project funds. It will also be responsible for preparing project financial statements including balance sheets, and source and use of funds statements, according to accounting standards accepted by the Bank and the government.

Audit

Audits will be carried out by competitively selected independent company, acceptable to the Bank. Audit reports will be sent to the Bank no later than four months after the end of each fiscal year (calendar year) in which grant funds are spent. The final financial report and audit will be sent within six months of the date of the last expenditure.

Special Account

Noosfera will open a Special Account (SA) in US dollars in a commercial bank satisfactory to the World Bank and project financing will be carried out in accordance with World Bank requirements. The initial deposit will be limited to US\$50,000 corresponding to estimated GEF-eligible project expenditures for the first 4 months of the project. Subject to the Bank's approval, the threshold of the Special Account will be

increased to US\$100,000, once the total disbursements from the Grant to Special Account reach US\$200,000.

The replenishment application will be submitted as needed, but at least once every four months and will be supported by the following documentation: (i) reconciled statement from the commercial bank in which the account is established showing all transactions in the Special Account; (ii) financial statements as per section above; (iii) report covering progress in realizing the activities and reaching the targets set forth in each disbursement period; and (iv) forecast of grant funds to be covered by the withdrawal application, adjusted for any under-expenditure during the previous period.

ANNEX 10: PROCUREMENT ARRANGEMENTS

General. All goods, works and services (other than consultants' services) shall be procured in accordance with the "Guidelines for Procurement under IBRD Loans and IDA Credits" dated May 2004 (the Procurement Guidelines). All consultants' services shall be procured in accordance with the "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated [May] 2004 (the Consultant Guidelines).

Notification of Business Opportunities. A General Procurement Notice (GPN) will be published in the UN Development Business (UNDB) online and paper form.

Procurement Management. The Republican Environmental Association "Noosfera" (Noosfera) is the Implementing Agency which would have the overall responsibility for project implementation while the Project Implementation Unit (PIU) hired by the Noosfera would coordinate day-to-day project activities and would be responsible for conducting and overseeing procurement. The PIU will be established within Noosfera and will be located in Dushanbe. The PIU will have strong physical presence at the project site. Noosfera will select and will assign among its members staff to work as part of the PIU. Expertise not available within Noosfera will be procured on competitive basis following World Bank procedures and rules. A procurement specialist has been appointed. He will be responsible for carrying out procurement of goods, works and services. In order to ensure adequate implementation of these activities and to initiate bidding procedures, documentation, filing, etc acceptable to the Bank, the procurement specialist will get assistance from the existing Procurement Unit within the CAWP-PIU and LSRMP-PCT. The procurement specialist will participate in the Regional Procurement Seminar being jointly organized by the Kyrgyz Regional Procurement Training Center and the World Bank in Bishkek in June 2004.

Procurement Methods. The project will finance the procurement of goods, works, and consulting services. The project components, their estimated cost and procurement methods are summarized in Table A1 and the consultant selection arrangements in Table A2. The following methods of procurement will be used:

(a) Goods and Technical Services

- (i) Shopping shall be used for goods contracts estimated to cost less than US\$50,000 per contract.

(b) Works

- (ii) Shopping (Works) will be used for works contracts estimated to cost less than US\$50,000 per contract.

(c) Consulting Services

- (i) Consultant's Qualifications (CQ) will be used for contracting consulting firms for assignments estimated to cost less than US\$50,000; and
- (ii) Individual Consultants will be hired in accordance with Section V of the Consultant Guidelines. Individual consultants will be used for small assignments of short-term duration and will be selected based on the qualification of the consultants.

Small grants. The project contains grants for environmentally friendly economic activities, afforestation, public awareness with an amount of about US\$500-US\$5,000 equivalent each with a limit amount of

US\$10,000. The selection method is described in details in the draft Sustainable Development and Conservation Grants Program Operational Manual (see annex 4). The PIU will assist and supervise the selection process for such small sub-projects contracts made by beneficiaries. The final Operational Manual will be subject to the Bank clearance.

Training/workshops/study tours/conferences. All training, study tours and workshops will be conducted according to semi-annual plans agreed with the Bank before implementation.

Operational Costs. The grant will finance operational costs such as operation and maintenance of staff salaries, transportation, travel costs, vehicles, rent, office equipment, insurance for equipment and vehicles procured under the project, office supplies, utilities and communication expenditures required for the implementation of the project.

Table A1: Project Costs by Procurement Arrangements
(US\$ equivalent)

Expenditure Category	Procurement Method				Total Cost
	ICB	NCB	Other*	N.B.F.	
1. Goods			87,050		87,050
2. Consultant Services			111,230		111,230
3. Training			46,560		46,560
4. Civil Works			17,900		17,900
5. Operating Costs			72,260		72,260
6. Small Grants			415,000		
Total			750,000		750,000

Table A2: Consultant Selection Arrangements (optional)
(US\$ equivalent)

Consultant Services Expenditure Category	Selection Method					Total Cost
	QCBS	LCS	CQ	Other	N.B.F.	
A. Individuals			102,230			111,230
B. Firm			9,000			
Total			111,230			

Note: QCBS = Quality- and Cost-Based Selection; LCS = Least-Cost Selection; CQ = Selection Based on Consultants' Qualifications; Other = Selection of individual consultants (per Section V of Consultants Guidelines), Commercial Practices, etc.; N.B.F. = Not Bank-financed.

Procurement Plan. The procurement plan (Table A3) has already been agreed with Noosfera. Changes to the plan may be incorporated after an official request in writing from the Recipient and the Bank's no objection to those changes. In any case, the procurement plan has to be updated not later than 12 months after the date of the preceding procurement plan, and should cover at least the next 18 months of Loan implementation.

Prior review Thresholds. Thresholds will be as follows:

- (i) First shopping contract for goods;
- (ii) First shopping contract for works.
- (iii) The audit contract; first two individual consultant contract, and all contracts with individuals estimated to cost \$10,000 equivalent.

All TOR's for consultant services, irrespective of the estimated cost of the contracts, are subject to prior review.

Ex-post Review. All contracts not subject to the Association's prior review will be subject to its ex-post review on a selective basis. Periodic ex-post review by the Association will be undertaken during regular supervision missions, but at least once per year, or more often at critical points during project implementation. Procurement documents, such as bidding documents, bids, bid evaluation reports, and correspondence related to bids and contracts will be kept readily available for IDA's ex-post review during supervision missions or at any other point in time. Ex-post review will apply to one in five contracts.

Procurement Records. The PIU will establish procedures to manage procurement and contract implementation in accordance with the Guidelines. Separate records and filing system by contract acceptable to the Bank will be established.

Overall Procurement Risk Assessment: High

Frequency of procurement supervision missions proposed: One every 12 months (includes special procurement supervision for post-review/audits).

GEF MSP TJ Dashtidzhum Biodiversity Conservation Project

ORIGINAL ACTIVITIES UNDER THE PROJECT DATA

PROCUREMENT PLAN - CONSULTANT SERVICES

<i>Bid No.</i>	<i>Bid Ref</i>	<i>Type</i>	<i>No: of Slices/items/packages</i>	<i>Method</i>	<i>Total Bid Est.</i>	<i>Exp. Of Interest</i>	<i>Finaliz. Of TOR</i>	<i>Cost Estim/ Budget</i>	<i>Short List Of Cons.</i>	<i>Req. For Props</i>	<i>Invitat. To Sel. Firm RFP Issued</i>	<i>Techn. Propos. Openn.</i>	<i>Eval. Of Tech. Prop.</i>	<i>Final Eval Report</i>	<i>Receipt Of Draft Contract</i>	<i>Award of</i>	<i>Contract Complet.</i>	<i>Prior Review</i>
A. Consultant Services																		
1	Field Studies	cs	Several	Ind Consultant	11,360						8/4/04					9/4/04		
2	Management Plan	cs	Several	Ind Consultant	33,200						8/4/04					09/004		
3	Capacity Building and Training, including on Biodiversity monitoring and GIS	cs	Several	Ind Consultant	44,020						8/4/04					9/4/04		
4	SGP Training Consultants, Assistance for Preparing project proposals	cs	Several	Ind Consultant	7,150						8/4/04					9/4/04		
5	Public Awareness and Replication Consultants	cs	Several	Ind Consultant	6,500						10/4/04					11/4/04		
6	Audit	cs	1	Cons Qualification	9,000						Spread over the project duration							
	Subtotal				111,230													
D. Workshops / Study Tours / Training																		
7	Education/special courses within the Tajik State			Per annual budget (a)	17,960						Spread over the project duration							

	<i>University and Agricultural Academy Study tours</i>																		
8	<i>Workshops/training seminars/study tours</i>			<i>Per annual budget (a)</i>	<i>14,500</i>														<i>Spread over the project duration</i>
9	<i>Local and National Conferences</i>			<i>Per annual budget (a)</i>	<i>14,100</i>														<i>Spread over the project duration</i>
	Subtotal				46,560														
E. Small Grants																			
			<i>As per OM (b)</i>		<i>415,000</i>														<i>Spread over the project duration</i>
G. Operating Costs																			
10	<i>PIU Operation, including facilities, communication, transport, office refurbishment,</i>			<i>Per annual budget (a)</i>	<i>20,900</i>														<i>Spread over the project duration</i>
11	<i>Operational operating costs</i>			<i>Per annual budget (a)</i>	<i>11,260</i>														<i>Spread over the project duration</i>
12	<i>Noosfera-PIU staff</i>			<i>Per annual budget (a)</i>	<i>40,100</i>														<i>Spread over the project duration</i>
	Subtotal				72,260														

GEF MSP TJ Dashtidzhum Biodiversity Conservation Project

ORIGINAL ACTIVITIES UNDER THE PROJECT DATA

PROCUREMENT PLAN - GOODS AND WORKS

Bid No:	Bid Ref	Type	No. of packages	Method	Contract Price Estimate	Specific Procurem. Notice	Bidder Short List	Draft Bidding Docs.	Bid Packages Available	Invitat. To Bidder	Bid Opening	Bid Eval. Report	Recomnd For Ctr. Awd.	Contract Signature	Contract Completion	Prior Review
B. Civil Works																
1	<i>Leshoz and Botanical Institute buildings Rehabilitation Works, their fencing; Building of small facilities for animals watering and feeding; Nature Museum refurbishment</i>	GW	1	Shopping	17,900					12/4/04				2/5/04		
	Subtotal	17,900														
C. Goods																
2	<i>Office Equipment for PIU</i>	GW	1	Shopping	5,000					8/4/04				10/4/04		
3	<i>Equipment, furniture for Zakaznik Nature Museum (including video camera, digital camera, TV set, literature, projector, screen) Vehicles(2), Communication equipment, binoculars, Horses(2), Suppliers for Leshoz staff</i>	GW	Several	Shopping	38,640					8/4/04				9/4/04		
4	<i>Office equipment, GIS, software for Zakaznik</i>	GW	1	Shopping	9,270					9/4/04				10/4/04		
5	<i>Equipment for Nature museum</i>	GW	1	Shopping	4,850					10/4/04				12/4/04		
6	<i>Portable power generators (2) and field equipment</i>	GW	1	Shopping	6,600					8/4/04				10/4/04		
7	<i>Publication material</i>	GW	1	Shopping	22,690					<i>Spread over the project duration</i>						
	Subtotal	87,050														

ANNEX 11: GEF NATIONAL FOCAL POINT ENDORSMENT LETTER

Ҷумҳурии Тоҷикистон

**BAZORATI
ҲИФЗИ ТАБИАТ**



Республика Таджикистан

**МИНИСТЕРСТВО
ОХРАНЫ ПРИРОДЫ**

734025, ш. Душанбе, кӯчаи Бохтар, 12.

Тел.: (+10 992 372) 21-30-39, 21-42-71, Факс: (+10 992 372) 21-18-39.

734025, г.: Душанбе, ул. Бохтар, 12.

№ 925/1 аз "7" 11 200 с.

Ба № _____

Global Environmental Facility

I express our sincere gratitude to the Global Environmental Facility and hope for further fruitful cooperation.

I support the project proposal "Biodiversity Conservation in Dashtidzhum" jointly prepared by the World Bank and Tajikistan's Biodiversity National Focal - Neimatullo Safarov.

Aforementioned project will promote conservation of unique local biodiversity, which has global importance.

Best regards,

Minister
National Focal Point

 U. Shokirov

(

ҶУМҲУРИИ ТОҶИКИСТОН
КУМИТАИ ДАВЛАТИИ
ҲИФЗИ МУҲИТИ ЗИСТ ВА
ҲОҶАГИИ ҶАНГАЛ



REPUBLIC OF TAJIKISTAN
STATE COMMITTEE
FOR ENVIRONMENTAL
PROTECTION AND FORESTRY

734025, ш. Душанбе, к/ч. Вохтар, 12
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Fax: (992 372) 21-18-39

№ 593/1-9

« 31 » 05 2004

Global Environment Facility

I would like to express my sincere gratitude for the support and cooperation, and hope for its further continuation and development.

I hereby endorse **Tajikistan Dashtidzhum Biodiversity Conservation Project**, jointly developed by Association "Noosfera" headed by CBD National Focal Point Dr. Neimatullo Safarov and World Bank.

Aforementioned project will promote conservation of unique local biodiversity of global importance and provide sustainable development of project area.

Sincerely yours,

Abduvokhit Karimov

Chairman

ANNEX 12: ADDITIONAL INFORMATION ON MSP PROPOSER INSTITUTION

Noosfera:

Contact address: 734025 Dushanbe, P. Lumumbi Str. 31

Tel.: (992 372) 21-89-78

Tel./Fax: (992 372) 21-89-78

E-mail: Noosfera@biodiv.tojikiston.com, NSafarov@biodiv.tojikiston.com

Contact person: Mr. Neimatullo Safarov, Director

Noosfera was registered as a national Tajik not-for-profit non-governmental environmental association in 1999 by the Ministry of Justice (under Order #484 in accordance with national legislation). The Association consists of scientists (4 staff hold PhD degrees), experts, teachers and students in ecology, biology, and law.

Priorities:

- ③ Development and implementation of environmental programs and policies.
- ③ Development and implementation of biodiversity conservation programs
- ③ Development of initiatives on sustainable use of natural resources and protected areas management
- ③ Design and implementation of environment education and awareness programs and environmental management information systems
- ③ Environmental impacts assessment

Activity outcomes: As shown in the attached table, Noosfera has participated and in many cases has led the development of several national strategies, environmental strategy and action plan, desertification strategy, and biodiversity conservation strategy. In the process, Noosfera has organized several roundtable discussions and forums with stakeholders to discuss draft reports, findings and recommendations. Noosfera was successful in developing this proposal with the input from several other organizations working actively on protected areas and biodiversity issues at the local and national level. Noosfera has also been very active in creating synergies with the Regional Central Asia Project on Biodiversity Conservation and will take a leading role in promoting a new financial management structure for Government-run protected areas, and raising awareness and interest of the donor community to revamp and expand the network of protected areas management in Tajikistan.

Publications:

- ③ Noosfera has published 3 ecological manuals.
- ③ “Biodiversity of Tajikistan” booklet
- ③ Colored manuals “biodiversity” – (fish, horses, sheep, valuable and rare plant species)
- ③ Noosfera publishes information materials in national newspapers.

Membership: Noosfera is a member of regional working group of Aarhus Convention on public awareness electronic mechanisms.

Links and Contacts: Noosfera has numerous links and contacts, including UNEP, GRID-Arendal, WWF-Russia, Social Ecological Unit – Russia, REC–Kazakhstan and the World Bank.

List of Projects Implemented By Noosfera

Client/Donors	Date	Project Title	Outcomes	Partners
WWF (US\$15,000)	1998	Biodiversity Conservation in Central Asia	Biodiversity and financing priorities analysis	“Kukhiston” Foundation
British Gold-Mining Company (US\$3 million)		Environmental impact assessment of Industrial Enterprise Tajik Gold-Mining Plant (TGMP)	Environmental impact assessment of TGMP technological process, baseline development and organizing procedures of public agreement, reassessment and investigation for modernization of technological process.	Local partner to “NIGHT Piesold”
American Embassy support to Government RT (US\$ 1,600,000)	1999	Inventory of unfavorable natural phenomena (natural disasters sources) under Government support	Project on evaluation of most critical areas of various natural disasters	Local partner to the Ministry for Nature Protection
Secretariat of Convention-GEF (US\$30,000)	1999	National Strategy and Action Plan on Desertification	Strategy development, workshop in GBAR on desertification issues	MNP RT
(UNEP-GRID-Arendal, Norway) (US\$10,000)	1999-2000	Environment State - Central Asia Region Project	On indicators suggested a regional review of environment state in Aral sea is prepared	Central Asian countries
(UNEP-GRID-Arendal, Norway) (US\$5,000)	2000	Biodiversity State in Tajikistan (electronic version)	CD-ROM and IT information in UNEP web site	MNP
(UNEP-GRID-Arendal, Norway) (US\$5,000)	2001	Biodiversity State in Tajikistan (electronic version)	Interactive CD-ROM with maps, diagrams is compiled	MNP
(UNEP-GRID-Arendal, Norway) (US\$6,000)	2001	Biodiversity State in Dushanbe City (electronic version)	CD-ROM/publication have been issued with UNEP support	State Committee on Environment Protection and Forestry
GEF-UNDP (US\$35,000)	2003	National Strategy and Action Plan on Biodiversity	Workshops in Khujand, Kurgan-Tyube, Kulyab	RLNP MNP RT
World Bank – GEF (US\$25,000)	2003	Project baseline for Dashtidzhum Biodiversity Conservation	Preparation of Mid-Sized Project	FEP, NBBC

No support	2003-pr.	Regional Project of Central Asia and Mongolia “Genetic Resources Conservation, Biosafety and Benefit Sharing”	Country reporting on status of genetic resources and their conservation	Central Asian countries and Mongolia
World Bank-GEF	2003-2004	Involvement in NBSAP preparation (on-going)	Development of pilot biodiversity projects and analysis of financing priorities	RLNP MNP RT
	2004-present	Regional project “Agroweb” on agriculture – development and project baseline.	Information provision	Central and East Europe and Central Asian countries
UNEP-GEF (US\$15,000)	2004	Biosafety framework development	Workshops in Kulyab, Rudaki, Yavan	NGO “For the Earth”, Public Ecological Unit

