GLOBAL ENVIRONMENT FACILITY
PROPOSAL FOR PROJECT DEVELOPMENT FUNDS (PDF)
BLOCK B GRANT

Country:	**Turkey**
Project Name:	**Protected Areas and Sustainable Resource Management**
Requesting Agency:	**World Bank**
Executing Agencies:	**Ministry of Forestry and NGOs through local offices of the General Directorate of National Parks Game and Wildlife**
Estimated Cost:	**US$9.7 million**
Financing Plan (tentative):	**GOT: US$1 million** **GEF: US$ 8 million** **Cofinancing: US$700,000**
Project Duration:	**Five years**
PDF Block B Funds Requested:	**US$350,000**
PDF Co-Financing:	**US100,000 Canadian GEF Trust Fund**

Background

1. **Special features of Turkish biodiversity**: Turkey has 75% of the 12,000 plant species that occur in the whole of Europe. One third of the flora occurs only in Turkey. The country has several distinct biogeographic regions, each with its own endemic species and natural ecosystems. These include Caucasian mountain mixed temperate rain forests and alpine ecosystems of the North East Black Sea Coast; steppe grasslands of the Central Anatolian plateau; and the European and the Mediterranean regions, which, respectively, include probably the largest remaining stands of pristine alluvial and Cyprus forests. In addition, one of the three major flyways for millions of migratory birds, which move between the Western Palearctic and Africa each year, passes through Turkey. Since the country is predominantly semi-arid, Turkish wetlands are of crucial importance for many of these migrants, and also for many breeding species of water birds (e.g., a globally significant population of greater flamingoes).

2. Furthermore, Turkish flora include many wild relatives of important domestic species (e.g., wheat, barley, chickpea, lentil, cherry, pear, apricot, chestnut, pistachio, etc.). In addition to agricultural species, the Turkish flora also include many commercially important timber species, and medicinal, aromatic, industrial and ornamental plants. Also, since domestication of plants took place in the region, there is a wide variety of land races of domestic species, whose genetic resources could be of immeasurable economic value.

3. **Threats to Turkish biodiversity**: Turkish biodiversity is of major international importance but is under threat from a variety of unsustainable land and natural resource use pressures, which have been exacerbated by the sixfold increase in population that has taken place in the country over the last 60 years. These include: overgrazing and other unsustainable agricultural practices; unsustainable use of forests; conversion of wetlands and other critical natural habitats to agriculture or other land development; interference with the hydrological regime of wetlands for agriculture, municipal and industrial use of water; pollution, hunting and

unsustainable harvesting of wild plants and tubers. A staggering 80% of Turkey's land area (63 million hectares) is estimated to be suffering from various levels of erosion due to unsustainable land use; since the 1940s, over three million hectares of gazetted forest lands have been lost to other forms of land use; more than one third of Turkish wetlands (approximately 700,000 hectares) have been lost in the last four decades, and as many as 70 million wild harvested ornamental bulbs and tubers (including aconites, anemones and snowdrops, etc.) are exported annually. Designated protected area coverage is only 1% of the country; furthermore, since the traditional focus of national parks management has been provision of recreational facilities for the public, often to the detriment of the ecological integrity of internationally important sites, there is a need to improve the effectiveness of conservation management of many of these last remaining critical ecosystems. This will entail addressing the threats to biodiversity from regional development and natural resource use within the context of integrated conservation and sustainable land use plans for protected areas and the lands surrounding them.

4. **Positive Developments**: The Turkish authorities are becoming increasingly aware of the threats to sustainable resource management and rural development. The Ministry of Environment, which was established in 1991, has developed environmental assessment procedures and a new environmental law is being reviewed by Parliament. A National Environmental Action Plan (NEAP) is under preparation. The NEAP is being prepared in a participatory manner with the involvement of Government, Municipalities, the private sector, and the NGO community. As part of this exercise, and with the support of GEF, a National Biodiversity Strategy has been prepared (see below). The Ministry of Forestry is developing programs to involve local communities in forest management and is beginning to use a mixture of indigenous rather than exotic tree species in its reforestation program. The World Bank supported Eastern Anatolia Watershed Project is also using a participatory approach to sustainable natural resource management in project provinces. A number of national and local NGOs, such as DHKD, TEMA and the Turkish Development Foundation, are actively involved in promoting public awareness of the need for environmental protection, conservation and sustainable rural development. With regard to irrigation, the recent, widespread establishment of water users associations for operation and maintenance should lead to more efficient water use. The World Bank is planning to support this effort through the proposed Irrigation Privatization Project. Finally, population growth has started to decline, with fertility currently 2.67 compared with 3.9 in 1986.

5. **Links with GEF pilot phase activities in the region**: Under the pilot phase, GEF is supporting *in-situ* conservation of wild relatives of agricultural crops (including woody species) in Turkey. The project initially focused on identifying sites containing genetically distinct populations of the target species that should be the focus of *in-situ* conservation. The second phase of the *in-situ* conservation project is developing and implementing management plans for these sites. In order to achieve its objectives, the *in-situ* project established, for the first time in Turkey, collaborative arrangements for information sharing and project management among the three participating ministries (Agriculture, Environment and Forestry). The implementing agencies are now experimenting, for the first time, with the use of participatory methods for development of conservation management plans, and with subcontracting this work to NGOs.

This intersectoral cooperation and participatory natural resources management would be further developed under the proposed project.

6. In preparing and implementing management plans for the four protected area sites, the proposed GEF project would build on the experience of the pilot phase GEF project and would strengthen NGO capacity to undertake this key role in partnership with Government and local stakeholders. The project would also benefit from the lessons learned in other pilot phase GEF biodiversity conservation projects in the region (e.g., Belarus, Poland, Romania, Trans-Carpathians and Ukraine) by identifying the needs for local community and conservation prior to project implementation. Under the proposed project, the role of local communities in the conservation strategies will be developed in parallel with the technical studies on protected areas management.

7. **Links with national biodiversity conservation priorities**: The Government of Turkey is currently finalizing a National Biodiversity Conservation Strategy and Action Plan. The proposed project would address priority strategic recommendations highlighted in the Plan, including the need for: (a) establishment and preparation of management plans for protected areas, (b) development of institutional capabilities for protected area and biodiversity management, (c) greater public awareness and the involvement of local communities in biodiversity management, and (d) improved monitoring and information exchange.

Project Goals and Objectives

8. **The overall goal** of the project is the sustainable conservation management of protected areas in selected forest, wetland, steppe and alpine ecosystems of the four major Turkish biogeographic zones. Sites, which were chosen by the Turkish Biodiversity Steering Committee for their international significance, include some of the largest remaining stands of pristine and natural Mediterranean, Turkish Caucasian, and European (Thracian) alluvial forests, together with steppe ecosystems of the Central Anatolian Plateau, and wetlands in Thrace and Central Anatolia (see attachment) These sites, which were identified by the Turkish Biodiversity Steering Committee, include examples of the main challenges for biodiversity conservation and protected area management in Turkey (i.e., sites coming under threat from development, including inappropriate forms of tourism, hydro-technical works, and road construction; and unsustainable natural resource use, including inappropriate forms of forest management, overgrazing, hunting, fishing, etc.).

9. **The objectives of the project** are to : (i) develop and implement sustainable protected area and natural resource management plans at the four priority biodiversity conservation demonstration sites and buffer zones, and (ii) build capacity at the national level for conservation management. The project would develop conservation management strategies appropriate to local needs and conditions. Local communities and NGOs would participate in planning and implementation of the project, which would focus on working with buffer zone communities and other stakeholders to bring about sustainable natural resource management and conservation of landraces and biodiversity in the production landscape. Investments, training and institutional

arrangements funded under the project would address priority conservation planning and management problems that are common to many important and threatened biodiversity sites throughout Turkey and would therefore allow for replication throughout the country.

10. Following on from the experience of pilot phase protected area projects in Eastern Europe, the project will develop a new integrated approach to conservation of natural ecosystems and sustainable resource management in the associated production landscape. This will entail greater emphasis on preparation. Social assessment and participatory planning that will be undertaken during the preparation phase will further define project components and activities. The main components of the project that are currently envisaged would build on experience in related existing and planned Government, NGO and international initiatives, and would include:

(a) Preparation and implementation of protected area management plans

(b) Sustainable natural resource management and buffer zone development

(c) Local capacity building - within key government agencies and NGOs involved in project implementation at the field level

(d) Capacity building at the national level

(e) Public awareness and education

Description of PDF Activities:

11. The PDF would be used to assist the Turkish authorities with project preparation. International and local consultants would be recruited to assist with the following tasks:

(a) **Ecological assessment:** Following a review of available documentation, field survey of the proposed protected areas and buffer zones, (including ecological mapping, species range and distribution, current land-use practices, forest and wildlife management practices, etc.) in order to provide the ecological basis for preparation of protected area management plans, and for development of ecological monitoring programs;

(b) **Social assessment**: This would evaluate the impact of local populations on protected areas and visa versa. Working with the local populations, an assessment would made of current socio-economic activities and their implications for conservation and sustainable natural resources management, perceived constraints and opportunities, local organizational structures, and identification of the best mechanisms for ensuring stakeholder participation in plan preparation and implementation;

(c) **Institutional needs assessment:** Together with local organizations an assessment would be carried out of institutional responsibilities for protected area and buffer

zone land-use and management, financing arrangements and strengths and weaknesses, and proposals for improvement would be developed;

(d) **Protected area and buffer zone planning:** Together with local stakeholders, preliminary plans for implementation of sustainable protected area and buffer zone management would be prepared and costed, including landuse planning, sustainable economic uses, phasing and zone development.

(e) **Local and national capacity building**: Plans for capacity building at local and national level would be prepared and costed, including training of village organizations, private sector groups, and NGOs involved in natural resources use and conservation at selected protected areas/buffer zones. In addition, a program would be prepared and costed together with the Turkish authorities for capacity building at national level, including improvement of regulations and protected area classification, institutional arrangements, staff-training, improved financing mechanisms, and improved monitoring and information management;

(f) **Public awareness:** A program for improvement of public awareness and conservation education at the local and national level would be prepared and costed;

(g) **Preparation of project proposal:** A full project proposal plan would be prepared, including implementation and procurement arrangements, project costs and phasing, disbursement arrangements, economic analysis and comparison of the most cost-effective alternatives, and identification of mechanisms to ensure financial sustainability of project activities as appropriate; and

(h) **Monitoring and evaluation:** Project monitoring/evaluation arrangements would be prepared and costed.

Eligibility:

12. In line with the strategic considerations for biodiversity conservation of the GEF Operational Strategy, the proposed project would specifically focus on *in-situ* conservation under Article 8 of the Convention, and consistent with GEF biodiversity operational programs for forest ecosystems, and land degradation. Turkey ratified the Convention on Biological Diversity December 1996.

13. The project would support implementation of strategic priorities of the National Biodiversity Conservation Strategy and Action Plan, and by focusing on the four selected sites the proposed project would support conservation of some of the last and largest pristine and natural alluvial and mixed forests, globally important wetlands, and representative steppe and alpine ecosystems in Turkey. Moreover, through sustainable economic development in buffer zones, the project will demonstrate options for sustainable natural resource management in the production landscape.

National Level Support:

14. **Local Commitment**. The Government of Turkey first expressed interest in a possible second GEF biodiversity project in mid 1994. Turkey is preparing a Biodiversity Strategy in 1995-97. Preparation of the strategy, which is currently being finalized with the support of the Canadian Global Environmental Trust Fund, has involved a participatory process to achieve consensus and identify priority issues. Key Government institutions (including the Ministries of Agriculture, Culture, Environment, Forestry; the State Hydraulic Works, and the Agency for Specially Protected Areas), academic and the NGO community (represented by the Society for Protection of Nature in Turkey) were involved in preparation of the Biodiversity Strategy, which identified the major elements of the project as national priorities.

15. The participatory manner in which the project has been identified will be continued throughout preparation and implementation. While many demonstration site stakeholders have already been identified, a detailed participation plan, that would identify and involve all stakeholders in the initial stages of project preparation, identify their needs and focus on development of mechanisms to address these needs in support of project objectives, will be developed during preparation.

Justification for PDF Support:

16. The proposed project is consistent with GEF Operational Strategy for Biodiversity, especially for support of in-situ conservation and protected areas under the Operational Program for Forest Ecosystems.

17. The project is consistent with Article 8 (in-situ conservation) of the convention on biological diversity as it will support protection, management and extension of protected areas in a region of internationally important biodiversity; promote environmentally sound and sustainable development in areas adjacent to protected areas, with a view to assuring protection of these areas; promote recovery of threatened species through the development and implementation of plans and management strategies, and will support maintenance of viable populations of indigenous and endangered species within and beyond protected area boundaries.

18. The project is consistent with Agenda 21 and guidance from the Conference of parties since it will promote conservation, management and sustainable use of forest, steppe and alpine ecosystems and endemic species; strengthen the involvement of local communities and build partnerships at the local, national and regional levels, and promote cost effective measures to conserve biodiversity, including economic incentives and alternative livelihood opportunities for local communities.

Costs

19. The PDF grant would be used to finance the costs of national and international consultants, field surveys, research and monitoring plans, workshops, and consultations in the demonstration site areas, and reporting. Items to be financed are summarized in the table below:

Activity	GEF Financing	Government	Co-Financing
Ecological assessment	40,000	2,500	
Social assessment	45,000	5,000	
Institutional needs assessment	40,000	5,000	
Protected area and buffer zone development planning	80,000	7,500	50,000 (Canada)
Planning for local and national capacity building	50,000	7,,500	50,000 (Canada)
Public awareness planning	30,000	2,500	
Proposal	35,000	2,500	
Monitoring and evaluation planing	30,000	2,500	
Total:	350,000	35,000	100,000

20. During project identification, a preliminary review of donor activities in related sectors and consultation with local representatives from potential cofinancing agencies was undertaken with the support of the Canadian Global Environmental Trust Fund. In general, donors have indicated interest in increasing the effectiveness of their, relatively small, grant funded activities through participation in the proposed larger GEF/World Bank lead project. Arrangements for provision of cofinancing, the participation of other donors, and links with related Government, NGO and international initiatives will be further explored and detailed during project preparation. There should be scope for private sector involvement in implementation of many sustainable economic development activities.

Outputs

21. The expected outputs of this PDF Block B Grant will be a GEF project proposal for review, which will incorporate:

(a) outline of conservation strategy/action plans for the four protected areas and their buffer zones, including mechanisms for the involvement of key stakeholders;

(b) plans for building capacity at the local and national level;

(c) plans for promoting public awareness;

(d) a detailed project implementation plan;

(e) a detailed project investment and financing plan;

(f) a monitoring and evaluation plan, and

(g) agreement with at least one other donor for cofinancing elements of the project. mechanisms for regional coordination identified.

Preparation Implementation

22. Overall coordination of project preparation and implementation among Government and other stakeholders at the national level, will be assured through regular meetings of the Biodiversity Steering Committee (which has been formed during preparation of the National Biodiversity Conservation Strategy and Action Plan, and includes representation from the Ministries of Agriculture, Culture, Environment, Forestry; the State Hydraulic Works, the Agency for Specially Protected Areas, and an NGO, the Society for Protection of Nature in Turkey). This would be supported by the RMT where appropriate. **Execution of project preparation will be undertaken by the Ministry of Forestry.**

23. Following GEF approval in April 1997, project preparation is expected to begin in September 1997 and would be completed by March 1998.

Attachment 1.

Protected Area Demonstration Site Descriptions

1. **Caucasian mixed temperate rain forest and high alpine meadows** - Camili Forest District, Artvin Province, North East Black Sea mountains (27,000 ha., altitude 400-3,500m), which is adjacent to the Georgian border and includes some of the regions last pristine and natural mixed forest, dominated by oriental beech (Fagus orientalis), oriental spruce (Picea orientalis), Caucasian lime (Tilia rubra), Crimean fir (Abies nordmanniana), Alder (Alnus glutinosa), chestnut (Castanea sativa), walnut (Juglans regia), hornbeam (Carpinus betulus), and oak (Quercus pontica and petraea). The understory of this unique forest system is predominantly rhododendron (Rhododendron caucasicum, ponticum, ungernii, smirnowii and luteum). **The local economy** (population 2,700) is currently based on traditional sustainable subsistence agriculture, and the production of honey (from lime and chestnut blossom) and livestock products for barter and sale. Due to its remote location and proximity to the international border, Camili is the only Forest district in the N.E. Black Sea Mountains that has not yet been logged or developed for tourism. **Threats:** However, the district currently has no protection status and, unless carefully integrated within the context of a conservation and rural development program, current plans to harvest timber, construct roads and fish farms, and to encourage tourism, constitute an imminent threat to the biodiversity and ecological integrity of this important site.

2. **Wetland and steppe ecosystems** - Sultan Sazligi-Erciyes protected area, Kayseri, Central Anatolian Plateau (18,000 ha., altitude 1,000-3,000m). Due to its diversity of ecosystems, which include salt steppe, freshwater meadows, and saline and freshwater lakes and pools, Sultan Sazligi is listed as a Ramsar site and also falls under several overlapping categories of protection status. Of the 365 taxa of flora present, approximately 25 species are endemic. As many as 50,000 greater flamingoes and a wide variety of other migratory water bird species rely on the food resources, provided by the areas wetland ecosystems, during autumn and spring migrations. **Local economy:** Major sources of income for the seven villages (approximate population 10,000) that surround the wetlands, include agriculture, livestock production and reed harvesting (150 tones per annum). **Threats**: Diversion of rivers feeding the wetlands for irrigation, and discharge of irrigation drainage water into the wetlands, have interfered with the hydrological cycle and caused loss of some natural habitat. Lack of livestock grazing management around the reserve has also affected species regeneration and contributed to erosion. However, Sultan Sazligi provides an opportunity to develop and demonstrate mechanisms to ensure the conservation management of Turkey's wetlands involving all key Government agencies working with local communities and NGOs.

3. **Mediterranean forest and high alpine ecosystems** of the Taurus mountains - Koprulu Kanyon National Park, Taurus Mountains, Southern Turkey (approximately 40,000 ha., altitude 400-2,500m), which includes probably the largest remaining pristine cyprus forest in the world (approximately 300 ha of Cupressus sempervirens), 350 plant species (including 43 endemics), and most elements of the Mediterranean Maquis community (e.g., Arbutus andrachnea, Olea europea, Cistus spp., Laurus nobilis, Pistacea lentiscus and terbinthus, Myrtus communis, Quercus spp. and infectoria, Styrax officinalis, etc.). The site also has features of significant international cultural heritage including the ruins of the ancient (400 BC) city of Selge, including a spectacular Greco-Roman theater. Several Roman single arch bridges, from which the National Park derives its name, span the narrow central gorge. **Local economy:** The park and environs includes 18 villages (approximate population 25,000). Rural populations living above the tree line, currently employ traditional agricultural systems to cultivate locally adapted landraces of wheat and barley, and also derive income from harvesting pine resin, livestock production and tourism. **Threats:** The site is threatened by inappropriate tourism developments, increased visitor impact, and unsustainable use of natural resources, including tree cutting, grazing of forest areas by goats, and uncontrolled hunting.

4. **Alluvial forest with associated aquatic and coastal ecosystems** - Igneada, Kirklareli, protected and wildlife management areas of the Thracean Black Sea coast, (2,500 ha.), which is dominated by ash (Fraxinus spp.), elm (Ulmus spp.), beam (Carpinus spp.) and oak (Quercus spp.). This largely pristine forest, includes approximately 200 ha of pristine pure stands of ash forest (Fraxinus excelsior). Alluvial (floodplain) forests, once common throughout Europe, were among the first to be lost due to the high value of the timber, and the suitability of alluvial soils for agriculture. Igneada's ash forest is seasonally flooded but also includes several permanent mesotrophic wetlands, and is separated from the marine environment of the Black Sea by a narrow border of sand dune ecosystems. The forest is an important winter sanctuary for migratory water birds, and a bottleneck for many bird species (including tens of thousands of raptors) that move along the Bosphorus flyway between the Western Palearctic and Africa. **Local economy:** A small number of subsistence families seasonally graze cattle in floodplains area, which is surrounded by production beech forest that is managed by the local forest authority for timber production. In addition, Igneada residents are beginning to recognize opportunities for the development of beech tourism. **Threats:** Three different categories of protection status apply to separate portions of the forest, and yet the natural integrity of the site is threatened by inappropriate forest management practices, habitat conversion for land development, uncontrolled hunting and the growth of tourism, particularly in the coastal zone.

REPUBLIC OF TURKEY
PRIME MINISTRY
UNDERSECRETARIAT OF TREASURY
The General Directorate of Foreign Economic Relations

Ref: DEI. 01.02/183 - 780

Ankara, 28 MARCH 1997

Ms. Michele de Nevers
Chief
Agriculture and Regional Development Operations
Central and Southern Europe Departments
Europe and Central Asia Region

Dear Ms. de Nevers:

Re: Proposed Biodiversity Project

As you know, the Government of Turkey has been conducting preliminary work for about a year in cooperation with the Bank to prepare a project towards provision of conservation and sustainability of biodiversity in selected areas in Turkey, each of which presenting high value in this respect.

The proposed project has also been listed in the CAS document and the potential implementing agencies have jointly prepared the "Biodiversity Strategy and Action Plan for Turkey" as the bases for this project. Turkey has also completed the procedure for ratification of the United Nations Framework Convention on Biodiversity.

We are writing this letter to reaffirm the Government of Turkey's commitment to preparation and implementation of the proposed GEF Biodiversity Project "Protected Areas and Sustainable Resource Management " and, on behalf of the Government of Turkey, to request World Bank assistance in making available GEF PDF Grant Funding to support project preparation at the earliest possible date.

Looking forward to hearing positive news from you in this regard and collaborating with the Bank and GEF in this important project in the near future.

Best regards.

Sincerely yours.

cc: Mr. Frederick Temple, Chief, RMT

D. Sen AKMAN
Acting Deputy
Director General