

## PROJECT BRIEF

### 1. Identifiers:

Project Number:  
Project Name: **Georgia Conservation of Forest Ecosystems**  
Duration: 6 years  
Implementing Agency: World Bank  
Executing Agency: Ministry of Environment  
Requesting Country or Countries: Georgia  
Eligibility: Government of Georgia ratified CBD in June, 1994  
GEF Focal Area: Biodiversity Conservation  
GEF Programming Framework: Operational Programs 3 and 4: Forest Ecosystems, Mountain Ecosystems

### 2. Summary:

The GEF will finance the incremental costs of programs and investments needed to conserve biodiversity in Caucasus forest ecosystems. The project would establish ecologically effective protected areas and wildlife corridors; integrate biodiversity conservation into forestry and range management inside and outside protected areas; strengthen institutions responsible for biodiversity conservation programs; support monitoring and applied research on threatened flora and fauna as indicators of ecosystem health; improve public awareness of the values of Georgian biodiversity; support public, private and civil society partnerships for conservation planning and management; and promote regional / international cooperation in TransCaucasus biodiversity conservation

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### 3. Costs and Financing (Million US):

<b>GEF:</b>	-Project	US\$ 8.7 m
	- PDF:	US\$ 0.35 m
	Subtotal GEF:	<b>US\$ 9.05 m</b>
<b>Co-financing:</b>	-IDA: (Forest Dev. Proj.)	US\$ 20.0 m
	-Other International (tbd):	US\$ 2.60 m
	-Government of Georgia:	US\$ 1.50 m
	Subtotal Co-Financing:	<b>US\$ 24.10 m</b>
<b>Total Project Cost:</b>		<b>US\$ 32.80m</b>

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### 4. Associated Financing (Million US\$)

US\$ 0.12 m

Biodiversity Strategy and Action Plan

### 5. Operational Focal Point endorsement:

Name: Nino Chkhobadze Title: Minister  
Organization: Ministry of Environment Date: August 13, 1998

### 6. IA Contact:

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## **A: Project Development Objective**

### *1a Background*

*Overview.* Georgia, a mountainous country covering 70,000 km<sup>2</sup> with a population of 5.5 million people, is situated between the south slope of the Caucasus Mountains, the east coast of the Black Sea and the northern edge of the Turkish Anatolia plain. Forests cover 40% of the country (2.8 million hectares), largely in the Greater Caucasus Mountains (Georgia's northern border), the Lesser Caucasus (its southern border), and in intervening lowlands and foothills. The principal landscapes of the Caucasus include foothill and mountain forests and subalpine meadows of the Greater and Lesser Caucasus; treeless mountain upland plateaus of the lesser Caucasus; humid lowland forests of western Georgia, and the arid steppe and deserts of eastern Georgia. In the project region between the Caucasus Major and Minor ranges of central and eastern Georgia, the flora and fauna of at least three biogeographic provinces converge and mix, resulting in high levels of biodiversity.

During the Soviet era, Georgian forests were managed for protection and recreation and timber and timber products were obtained from Russia (up to 3.5 million m<sup>3</sup> annually). Since the collapse of the former Soviet Union and Georgia's independence, the country is relying increasingly on its forests to meet domestic demand for forest products. At the same time, the sector experienced a collapse of the forest products industry, declining state budgets for forest management, and a steady rise in illegal and undermanaged harvesting of timber and fuelwood. In addition, since the transition and the associated economic decline, local peoples are increasingly seeking to re-establish traditional/historical land uses that were disrupted for over 70 years under the former Soviet Union.

There are important environmental challenges to the intensified use of Georgian forests, including maintenance of soil and water conservation objectives, and adequate protection of the region's globally significant biodiversity. Since the transition, unsustainable timber harvesting, grazing, and game hunting have accelerated, and now pose a major threat to Georgia's diverse and abundant biodiversity. While relatively large areas of natural habitat remain, significant declines in available habitat threaten the persistence of some of Georgia's most distinctive biodiversity. The most important threats to Georgian biodiversity are habitat loss and fragmentation; unsustainable forest management practices and illegal logging; poor rangeland management, overstocking and overgrazing; and overhunting and illegal hunting of key large mammal species. These problems are common to both the proposed protected areas and the surrounding forests and agricultural estate. Additional information on Georgian biodiversity and the threats to its long-term viability is found in Annex 3.

Georgia has recognized the need to address the problems facing the forest sector in an integrated fashion. The Department of Forestry prepared a forest sector strategy for inclusion in the government's National Environmental Action Plan. The strategy recommends broad ranging reforms in the forest sector, including strengthening institutions to undertake interdisciplinary forest planning, the re-classification of forest lands in accordance with ecological, economic, and social values, development of the private sector, and the creation of job opportunities for rural communities.

Georgia has also begun to act to protect important natural resources and to preserve biodiversity. NGOs, the Ministry of Environment, and the Department of Forestry have collaborated on a protected area strategy and biodiversity strategy/action plan. These strategies prioritized the country's biodiversity conservation needs and how to achieve these through: i) mainstreaming biodiversity into forestry planning and management, and ii) development of a protected area network that improves the coverage and representation of Caucasus forest ecosystems in comparison with the current system of small, fragmented, strict nature reserves. This work has been underway since 1993, facilitated by the regional support groups comprised of local representatives, NGOs, and Department of Protected Area staff. These support groups have been active in educating local communities on the protected area proposals and

preparing management plan guidelines.

The current situation in Georgia provides a window of opportunity to address natural resource management issues in general and forestry management in particular. Building on inter-agency and government- NGO collaboration initiated through the forest and biodiversity strategy initiatives, the Bank is developing two projects to address the integrated goals of promoting commercial/sustainable use forest practices and protection of representative, unique, and threatened biodiversity of Caucasus forest ecosystems.

The Bank Forestry Development Project (FDP) will address the root causes of biodiversity loss by assisting government to develop a national policy on forest classification, sustainable use and protection and build the institutional capacity and mechanisms to better plan, implement, regulate and monitor forestry operations at the field level. It will support the preparation and execution of model sustainable forest management plans, including preparation of a land use plan for the forests of the Central Caucasus which will designate areas for production, conservation and wildlife corridors within production forest.

The Georgia Forest Conservation Project (FCP), for which GEF assistance is being sought, will build on this rationalization of forest management by providing additional resources to further plan, develop and strengthen a representative protected area network that protects important habitats and wildlife corridors in the Central and Eastern Caucasus. The biodiversity conservation project would also provide support to strengthen and expand proposed protected areas in eastern Georgia along an altitudinal gradient descending from the Caucasus Mountains (5000 meters elevation) to the Iori plateau (200 m). To ensure close coordination between the forestry and conservation objectives, the two projects will be prepared and implemented in close collaboration.

The conservation project will also have important links and synergies with other Bank projects under preparation. The Second Agriculture project, under preparation, provides an opportunity to disseminate lessons learned from pilot range management activities to a wider area through the agricultural extension services. A Cultural Heritage project focussing partly on the geographical area close to Tusheti provides opportunities to link biodiversity and cultural goals and integrate biodiversity objectives into mainstream tourism development. This Forest Conservation project thus provides a rare opportunity to mainstream biodiversity goals into lending projects addressing the forestry, agriculture and tourism sectors.

*1b. Project development objective and key performance indicators (see Annex 1):*

The general objective of the project is to conserve biodiversity in Caucasus forest ecosystems. The project development objectives are to: (i) establish ecologically effective protected areas; (ii) integrate biodiversity conservation into forestry and range management inside and outside of protected areas through landscape corridors managed for biodiversity conservation; (iii) strengthen institutions responsible for biodiversity conservation programs; (iv) monitor threatened flora and fauna as indicators of ecosystem health and project impact, (v) improve public awareness of the values and importance of Georgian biodiversity; (vi) strengthen public-private partnership for biodiversity conservation, and (vii) promote regional/international cooperation for conservation of biodiversity in the TransCaucasus region.

*2. Project global objectives and key performance indicators (see also Annex 1):*

The general objective of the project is to conserve biodiversity in forest ecosystems of the Caucasus Mountains, an area that has been identified as one of the 200 globally important ecoregions for terrestrial biodiversity. Some important indicators of project success are: formulation and implementation of national policy on sustainable forestry and biodiversity conservation, implementation of landscape-level plans linking protected areas and commercial forest lands, establishment of an ecologically representative

and viable protected area network that contributes importantly to the goal of protecting at least 10% of Caucasus forest ecosystems; recovery, through natural regeneration under improved management systems, of overgrazed forest and steppe habitats; increased population numbers of key threatened species; reduced hunting of large mammals, and development of nature-based tourism industry around the new national parks, acting as an incentive to protect biodiversity.

## **B: Strategic Context**

*1a. Sector-related Country Assistance Strategy (CAS) goal supported by the project (see Annex 1):*

CAS document number: 17000-GE

Date of latest CAS discussion: 9/22/97

The conservation of Georgia's rich biological diversity and sustainable natural resources management, especially of its forest resources, is one of the CAS objectives. The CAS identifies the proposed conservation and associated forest projects as major tools to assist the GoG in achieving this objective. Through the technical assistance to firms and individuals providing nature-based tourism, the project is also consistent with the CAS objective of private sector development.

*1b. Links with National Biodiversity Conservation Priorities:*

This proposal builds on the results and recommendations of previous and on-going dialogue with the Government of Georgia on its Georgian natural resource management priorities. The proposed forest conservation project is identified as a national priority in both the Georgian forestry and biodiversity strategies. The draft National Biodiversity Strategy/Action Plan (BSAP) identifies the project regions as centers of Georgian biodiversity, and the project activities as the highest priority for improving the protection of threatened ecosystems. This proposal is consistent with the biodiversity planning exercises regarding the significance of Georgian biodiversity, the priorities for its protection and management, and the specific areas targeted for development and implementation of the Georgia Protected Area Plan.

*1c. Links with Regional Strategic Work.*

In addition to the Forestry Development Project currently under preparation, the proposed biodiversity project is linked with the Bank's Cultural Heritage Project. The Cultural Heritage project will strengthen private sector involvement in cultural heritage conservation, build public and private partnerships to assist the tourism industry, and alleviate poverty by targeting vulnerable groups for special assistance. The forest conservation project would complement one component of the Cultural Heritage project in eastern Georgia where the investments overlap, by creating a national park and related infrastructure whereas the Cultural Heritage investments would support protection of a culturally important site and promote environmentally responsible tourism. The overlap in geographical areas provides opportunities for collaboration, mutually supportive activities and linkage during supervision.

*1d. GEF Operational Strategy/program objective addressed by the project:*

Georgia ratified the Convention on Biological Diversity in June 1994. The project focuses on conservation and sustainable use of biodiversity in critical forest ecosystems of the Central and Eastern Caucasus Mountains. The project is consistent with the GEF Operational Program for biodiversity conservation particularly in Mountain and Forest ecosystems. Through activities in Vashlovani National Park it will also support conservation in semi-arid ecosystems. The project region between the Caucasus Major and Minor ranges of central and eastern Georgia lies at a biogeographical crossroads where the flora and fauna of at least three biogeographic provinces converge, resulting in high levels of biodiversity. In this region are found species typical of Europe (e.g., bear, lynx, chamois, red deer), Central Asia (e.g.,

Caucasian tur or mountain goat, leopard), and the Middle East regions (e.g., hyena, gazelle); many of these species are threatened elsewhere in their ranges. The varied terrain and climatic conditions contribute to a diversity of ecosystems and species. The Georgian forests of the Caucasus Mountains contain over 200 plant community associations, and 120 species of tree, 250 bushes, and 4,500 species of vascular plants. Among vascular plants, nine percent are endemic to Georgia and 14 percent are endemic to the Caucasus region. There are 572 vertebrate species (348 species of birds, 95 mammals, 52 reptiles, 13 amphibians, and 64 fishes).

The project area, and surrounding Transcaucasus region, has been identified by the World Wide Fund for Nature as one of the Global 200 Ecoregions using selection criteria of species richness, levels of endemism, taxonomic uniqueness, unusual evolutionary phenomena, and global rarity of major habitat types. It has also been identified as an Endemic Bird Area, with several bird species and subspecies endemic to the region. The Caucasus region also harbours several wild close relatives of domestic food plants such as wild rye, wheat, barley, millet, wild pears, cherry, and over 200 varieties of grapes as well as at least nine important domestic animal breeds, including the Tusheti sheep, Tusheti horse, and the Caucasian sheep dog which are found within the production zones of the proposed national parks.

The project addresses conservation activities defined as priorities in the Georgia national biodiversity strategy, prepared with GEF support. The project will support *in-situ* conservation and sustainable use by strengthening and expanding protected areas in the Caucasus Mountains and by promoting forest management in the surrounding production landscape that is consistent with biodiversity objectives. It responds to COP guidance by promoting capacity building, especially for NGOs; promoting conservation and sustainable use through adaptive management of forest landscapes; and supporting activities that meet the objectives of other international conventions. In particular, the project will support the objectives of the Bonn Convention by supporting conservation and monitoring of transboundary populations of threatened ungulates and their predators as well as, migratory raptors on Palearctic flyways. The project responds to COP IV guidance through its emphasis on a landscape approach to ecosystem conservation and support to innovative public, private and NGO partnerships to support biodiversity conservation in forest and agricultural production landscapes.

## 2. *Main sector issues and Government strategy:*

Unsustainable forest practices: Under-managed and illegal harvesting of timber and firewood exceeds the annual allowable cut, according to one estimate by 1 million m<sup>3</sup> per year. The Government prepared a National Forest Strategy with Bank assistance which targets institutional and policy reforms to support sustainable forest management. At the Government's request, the proposed Georgia Forestry Development Project will support these reforms.

Unsustainable range management practices: The rangelands (alpine meadows and lowland steppe communities) of the Eastern Caucasus have been overgrazed by sheep, both within and outside proposed protected areas. Unsustainable range management, mainly by overstocking, has been intensified by the repopulating of high mountain villages, starting in the late 1980s. Currently, over 250,000 sheep are herded seasonally between the summer alpine pastures at Tusheti (4000 m elevation) and winter steppe pastures on the Iori floodplain (200 m) competing for food resources with native ungulates and impacting on endemic flora and fauna. The project will test sustainable grazing regimes in park support zones. Successful models will be replicated by dissemination of information through agricultural extension services under the Second Agriculture project, currently under preparation.

Inadequate protected area network. Georgia's protected area network, modeled on the zapovednik system of the former Soviet Union, consists of a number of small, disjunct, strictly protected reserves. Less than 1% of forests within the Georgian Caucasus currently lie within protected areas. The legal framework for

a national protected area plan is provided by recent legislation on the Protected Areas System of Georgia. Georgian NGOs, the Ministry of Environment, and the Parliamentary Commission on Protected Areas have worked together on preparing technical reports and developing regional support groups to prioritize the country's protected area needs.

Weak but improving capacity for biodiversity conservation. The three main institutions responsible for biodiversity conservation activities in the project region are the Ministry of Environment (MoE), Department of Protected Areas, and the Department of Forestry. Each institution shows relatively weak capacity. Since its formation in 1991, the MoE (the lead agency for the proposed conservation project) has been expanding its role and capacity in environmental management. The MoE is implementing an IDF grant to strengthen institutional capacity for environmental and natural resources management. The same program is supporting preparation of a National Environmental Action Plan, which will serve as a strategic document for addressing national environmental priorities. The MoE is engaged in a number of training activities, some of them funded with international assistance.

In recognition of the need to develop its biodiversity conservation capacity, the MoE formed a Department of Biodiversity Conservation. This department formulates and implements GoG national policy on biodiversity protection and attempts to integrate biodiversity objectives in its dialogue with other government sectors. The multi-sectoral steering committee established to support the Biodiversity Strategy planning process has helped to develop important collaborative links between sectors and strengthened public-NGO partnerships.

## 3. Sector issues to be addressed by the project and strategic choices:

<i>Major Sector Issue</i>	<i>Strategic Choice</i>
Unsustainable forestry	The Forest Development Project will establish and implement policies, programs, institutional restructuring and capacity building to better plan, implement, monitor and regulate forest management and harvesting operations.
Lack of adequate protected area network for Georgian Caucasus forest ecosystems	Build on existing governmental commitment and national support for establishment of a national park system by finalizing the draft Protected Area Plan and implementing management plans for at least 3 priority areas.
Inadequate institutional capacity and budgetary resources for protected areas management and integrating biodiversity conservation objectives into forestry and agriculture	Project would build capacity, strengthen institutions, including NGOs, and foster partnerships with international programs and agencies.
Unsustainable agricultural practices	Project would provide technical assistance for, and assist with the recovery of natural habitats through improved grazing in the support zones of national parks. Small-scale support will also be provided for in-situ conservation of unique but threatened agrobiodiversity.
Insufficient coordination and cooperation on transboundary conservation issues in the Caucasus region	Strengthen cooperation among regional environmental protection ministries and create Caucasus NGO network to assist with monitoring and public education activities
Low government budgets for environmental issues, including protected areas support	Emphasize protected areas categories (e.g. National Parks) which focus on sustainable use; develop revenue generating activities such as nature-based tourism and seek approval for establishment of revenue account for protected areas.

**C: Project Description Summary***1. Project components:*

<u>Component</u>	<u>Indicative Costs (US\$M) and Cofinancing Plan</u>				<u>Total</u>	<u>% of Total</u>
	<u>GoG</u>	<u>GEF</u>	<u>IDA Forestry*</u>	<u>Other Co-financing</u>		
Planning and Policy Development	0.45	1.3	2.7	0.7	5.15	15.7
Biodiversity Protection and Management Inside and Outside of Protected Areas.	0.45	6.0	17.2	1.1	24.70	75.4
Institutional Development	0.35	1.0		0.4	1.75	5.3
International cooperation	0.25	0.4	0.1	0.4	1.15	3.5
Totals	1.5	8.65	20.0	2.6	32.75	100.0

\* \$17 m of IDA resources will directly contribute to biodiversity conservation outside protected areas through promotion of

sustainable forest management. \$1 m of IDA financing will be devoted to forestry policy development and \$2 m will contribute directly to activities undertaken under the forest conservation project.

### **Project components**

**A. Planning Development.** The project would assist the Department of Protected Areas, MoE, and Department of Forestry, Academy of Sciences, and NGOs to develop a representative protected area network plan for the whole country and to prepare a detailed forest land use plan for the Central Caucasus that balances forest conservation and utilization.

- i) **Georgia National Protected Area Plan:** (GEF \$0.2 million : Other \$0.5 million) Developing and implementing a national protected area system plan involves four steps: 1) identifying ecoregions, 2) promoting and rationalizing conservation areas within ecoregions, 3) gazettelement of priority protected areas, and 4) preparation and implementation of management plans for key protected areas. To date seven ecoregions have been identified. In two of these, Western Georgia (Kolkheti) and Eastern Caucasus, the planning process is well developed. A conservation plan is well advanced for the Eastern Caucasus regions with three important protected areas identified and operational plans prepared under project preparation. Additional surveys and planning need to be undertaken to identify important wildlife corridors outside PAS and the Eastern Caucasus as a prerequisite to identifying and implementing management options consistent with biodiversity conservation in adjoining production forests and agricultural lands. Elsewhere the project would provide resources for identifying, prioritizing and rationalizing conservation areas within all national ecoregions (step 2), beginning with the Central Caucasus. The project would fund ecological surveys, workshops, and strengthening of regional support groups to finalize the Georgia Protected Area Network Plan. The objectives of the plan will be to create an ecologically representative network of protected areas to protect and manage the country's biodiversity, and which is in balance with the productive needs of its local communities and economic sectors (e.g., forestry and agriculture). The final plan for the national system of protected areas with multiple management objectives would be submitted to the appropriate executive and parliamentary bodies for endorsement. It is intended that other GoG and donor financing, outside this project will then be mobilized to finance development of the priority protected areas outside the Eastern Caucasus.
  
- ii) **Protected Area and Forestry Planning in the Central Caucasus Mountains:** (GEF \$1.1 million : Other \$2.3 million) The Central Caucasus region is rich in biodiversity and forest resources and as such is the site of competing demands for both protected areas and commercial forest operations. The Conservation and Forestry projects would work together to develop a land use plan for forest conservation and use. It will focus initially on four districts of Ambrolauri, Lentekhi, Oni and Tsageri, which include ecosystems rich in biodiversity. A Central Caucasus Commission, backed up by a technical multidisciplinary team, has been set up under preparation funds from the Bank Forestry Development Project (FDP) for the purposes of preparing model land-use plans for the management of all the existing natural resources, including both the protected areas and the forest areas available for sustainable management. Completion of a plan for Oni is expected by mid-October for discussion at a national seminar. The three other districts would be addressed during the first years of the Forestry Development Project. Areas identified for conservation will be reallocated from Department of Forestry to Department of Protected Areas. This exercise will be a collaborative effort between the Forest Development and Conservation Projects, with developmental activities in conservation and forest management financed under the two projects as appropriate. This project would cofinance technical assistance and field studies needed to prepare a detailed opportunities and constraints of the Central Caucasus Mountain region, based on surveys of forest and biodiversity resources, an economic and social analysis of 'highest and best use' by subregion, and preparation of a general plan for

the region with respect to protected areas, wildlife corridors, and land use consistent with biodiversity conservation. Special measures will be identified for conservation of threatened flora and fauna.

**B. Biodiversity Protection and Management Inside and Outside of Protected Areas.**

Management plans or management guidelines have been prepared for three protected areas in eastern Georgia: for the creation of Tusheti National Park (115,800 ha) and Vashlovani National Park (44,796 ha), and the expansion of Lagodeckhi Nature Reserve (from 17,932 to 25,400 ha). These protected areas form an altitudinal gradient from 100 to 4000 meters elevation comprising alpine, montane, and lowland forest, and arid lands. The sites contain some of Georgia's most important and threatened biodiversity, including critical habitat for unique large mammal fauna. More detailed information on the biodiversity values and threats in each protected area is supplied in Annex 3.

- i) **Tusheti, Lagodeckhi, Vashlovani Protected Areas.** (GEF \$5.5 million : Other \$1.1 million) The project would finance the implementation of management plans for Tusheti National Park, Vashlovani National Park, and Lagodekhi Nature Reserve. The draft management plans for the two national parks were prepared under project preparation and contain the following activities:
  - a. Creation/expansion of protected areas. In accordance with the 1996 Law on Protected Areas System, new protected areas are established by law and enacted by Parliament. The project would assist with finalization of the draft legislation for the creation and gazetting of each protected area, and support to the regional support groups necessary for their successful implementation.
  - b. Provision of infrastructure and equipment. The project would fund the infrastructure and equipment for establishing and managing the new/expanded national parks and reserves as a necessary means to achieving the project's objectives of biodiversity conservation and promotion of sustainable regional development. The infrastructure may include establishment of the park and reserve boundaries, limited fencing of sensitive habitats to mitigate grazing impacts, and construction of an administration/visitors center, guard stations and checkpoints and small infrastructure needed to accommodate and manage nature-based tourism such as hiking trails, observation towers for birdwatching, and information centers for tourists
  - c. Environmental education. The project would raise the level of environmental awareness and understanding of biodiversity values among all sectors of society at the local, regional, and national levels. This would be accomplished through interpretive materials for visitors of the protected areas, teacher education seminars, and ecological education camps for school children.
  - d. Professional development and training. Key park staff and specialists responsible for management of the protected areas will receive in-country and on-the-job training in protected areas management and natural resources management. Wardens and field staff will be trained in patrolling, enforcement and monitoring. Opportunities will be offered for joint training and work exchange experience between protected areas.
  - e. Monitoring and ecological studies. The project would finance monitoring and applied research to fill major gaps in the existing information on the biodiversity of the protected areas necessary for park zoning; to guide park management, and to evaluate the results of management actions. The project would fund improved surveys for target species, selected on the basis of their importance to the ecosystem and on existing capacity and experience

among staff.

- f. Restoration of degraded habitats through natural regeneration, and use of targeted agricultural biodiversity. The project would support management interventions in selected forest and steppe communities to encourage natural regeneration. The project would develop and implement grazing practices to effect the restoration of alpine meadow and steppe ecosystems within protected areas and immediate buffer zones and reduce negative interactions with native ungulates. These would serve as demonstration activities for integrating biodiversity conservation objectives into range management on a wider scale. The project would support small-scale interventions to assist the recovery and use of agricultural biodiversity in the support zones of national parks. This could involve encouraging farmers to grow local crop varieties of millet, grapes, and barley, and to maintain flocks of local animal breeds such as Tusheti sheep as visitor attractions.
  - g. Nature based tourism plan. There is good potential for nature-based tourism in Georgia due to its scenic landscapes, and rich cultural and biological diversity. The project would provide technical assistance to develop a business plan for nature-based tourism in Vashlovani and Tusheti National Parks. Business plans for the two parks would be developed in partnership with the Georgian private sector, communities in the park support zones, and the national park administrations. In Tusheti this plan would be developed in association with the Cultural Heritage project.
  - h. Support to folk hotel development (non-GEF financing). The project would assist with the development of a folk hotel system that targets ecological and educational types of tourism. The folk hotels would be existing homes located in the support zones of the national parks. The project would establish a microcredit facility to make small loans, possibly with matching grant funds, to local residents for improvements needed to provide small hotel services to tourists (e.g., bathroom fixtures, heating facilities, beds and other furniture). The terms of the loans would be determined during preparation. Technical assistance would be provided to local communities to complete applications for loans/credits, and to assist local communities in developing tourism services. Dissemination of information would be accomplished through promotional brochures and development of a World Wide Web site for Georgian tourism. Both media would highlight the natural and cultural attractions of the region, recreation opportunities inside and outside the national parks, and basic information on transportation and accommodations in the region (including hotel and folk hotel facilities). This activity is expected to be financed through bilateral funds; folk hotels adjacent to Tusheti will be supported under the Cultural Heritage project.
- ii) **Habitat conservation plans.** (GEF \$0.4 million : Other \$0.6 million) The project would fund implementation of one or two habitat conservation plans that would link management activities within protected areas and those on adjacent state forest lands under individual forest management units; these would serve as models for replication in other forest management units under the Forestry Development Project. The plans will integrate enforcement, education, forestry, and range management. One objective of the plans would be to implement habitat management (including no hunting zones) consistent with the needs of key threatened fauna such as Caucasian and Dagestan tur (mountain goats), lynx, and wolf. The plans would also integrate recommendations for range management in specific alpine habitats and provide detailed performance indicators to gauge the effectiveness of management efforts. In the forest ecosystems of the central and eastern Caucasus, both the wildlife and the threats they face are transboundary in nature. Therefore, responsible agencies from Russia would be invited to participate in development of the habitat plans.

- iii) **Socio-economic monitoring for sustainable development.** (GEF \$0.1 million : Other \$0.1 million) The integration of biodiversity conservation with traditional and non-traditional economic activities is necessary to achieve the project objectives. Social assessments to measure local dependence and impact on the Eastern Caucasus and Iori plateau ecosystems are being undertaken as part of project preparation and monitoring of socioeconomic indicators will continue throughout implementation. Detailed social assessments are being prepared for Central Caucasus as part of the Forestry Development Project preparations. These assessments will provide objective and quantitative understanding of the impacts of the various subsistence and economic activities on biodiversity. They will also provide information on attitudes and needs of local stakeholders and communities in order to guide the implementation of other project activities (education and awareness, enforcement, grazing management, development of nature based tourism). The project would provide professional development and training to MoE staff and NGOs in social assessments and human ecology studies, and fund the implementation of socioeconomic monitoring and dissemination of results.

**C. Institutional Development.** (GEF \$1.0 million : Other \$0.8 million) This component would restructure the Department of Protected Areas and strengthen capacity for biodiversity conservation in the Department of Protected Areas, Department of Forestry, and the Ministry of Environment.

- i) Department of Protected Areas. The Department of Protected Areas in Tbilisi is a small department charged with oversight of the existing protected areas (currently one national park, 13 Strict Nature Reserves, and a number of managed use reserves), and with management of state hunting laws. The project would strengthen the Department of Protected Areas, modernize its administration, and prepare it for managing the national park system. Technical assistance would be provided to improve the department's cost effectiveness and performance, and to develop legislation and policy related to revenue generation mechanisms, such as day charges, hunting fees (permitted only in some categories of protected areas), development of ecotourism and management of recreational use.

Professional development and training activities would be provided to administrative staff. This training will include principles and practices of national park administration. The park administration training would result in production of an operation and administration plan, including final job descriptions for all staff. This component will provide support to the whole national protected areas network, including Kolkheti National Park which is also benefiting from GEF support. Similarly the whole protected areas network will benefit from development of revenue generation mechanisms to support the park system, as well as the legal and institutional changes needed to permit the parks to utilize such revenue for park investments.

- ii) Department of Biodiversity Conservation, MoE. The Department of Biodiversity Protection is responsible for biodiversity conservation within the MoE, including reviews of sectoral operations and approval of forest management plans, monitoring forest operations to ensure that they conform with permit conditions, and in guiding and coordinating the activities of the regional MoE offices. The project would strengthen the Department of Biodiversity Conservation through assistance with review and, as needed, revision of regulations and preparation of best practice guidelines for biodiversity conservation and use in production landscapes.
- iii) NGOs. The project would build capacity in targeted Georgian NGOs engaged in biodiversity conservation activities and community groups in the support zones of the national parks. Selected NGOs and community groups from the project area, and with experience and expertise relevant to project needs, would be strengthened through participation in structured professional development and training programs in all aspects of operations, including office and business

planning skills, fund-raising, and program design and implementation.

- iv) The project would administer a small grants program for a range of activities consistent with the project objectives, from policy functions to public education and awareness activities. Two activities under consideration are preparation of field guides on Georgian biodiversity (e.g., the birds of Georgia, birds and flora of individual parks), and the establishment of a quarterly newsletter for disseminating Caucasus conservation biology news both nationally and internationally.
- v) An expert panel will review the project progress and development of the national park system. The panel will be comprised of Georgian specialists and park administrators from other European parks and international NGOs such as IUCN and WWF. Donors other than GEF will finance the panel's activities.

**D. International Transboundary Cooperation.** (GEF \$0.4 million : Other \$0.8 million)  
Transboundary cooperation in protected area management will be fostered in those sites bordering Russia (Lagodeckhi, Tusheti) through exchange of regional expertise, and occasional joint professional development and training and monitoring activities. In addition to these activities related to individual protected areas, the project would strengthen international cooperation on Caucasus regional conservation through the following:

- i) The project would provide small scale resources to allow regional experts and representatives of governmental agencies and NGOs engaged in nature conservation and environmental protection, from both scientific and social perspectives, to meet, discuss and collaborate on issues of mutual concern and to develop strategies to address joint problems, improve protected areas management and biodiversity conservation among the countries of the Caucasus bioregion (Armenia, Azerbaijan, Georgia, Turkey, and Russia).
- ii) The project would provide incremental support to a Caucasus regional NGO network, strengthen links for transboundary cooperation and establish and implement a monitoring and reporting system for transboundary threats. The network would provide modest assistance to Georgian NGOs to collaborate with NGO colleagues in Armenia, Azerbaijan, Turkey, and Russia, to support communications, and regional workshop costs. For this component, funds from other donors will be used to finance Azerbaijan's involvement if it has not ratified the Convention on Biological Diversity at the time.
- iii) The project would establish a monitoring program for migratory raptors in Vashlovani National Park to monitor annual numbers along the migratory pathway, with involvement of protected areas staff, NGOs and civil society. Data will be submitted to the European Raptor Network and disseminated internationally through a web site. This will support the objectives under the Bonn Convention on the conservation of migratory species of wild animals.

## *2. Key policy and institutional reforms to be sought:*

Two key policy issues to be considered during preparation are the administrative and organizational design for Georgian protected areas and the development of cost recovery mechanisms. These policy and institutional issues and any others that emerge will be addressed during preparation, discussed during appraisal, and agreed upon during negotiations.

## *3. Benefits and target population:*

The target populations include public sector staff (Departments of Protected Areas and Forestry, MoE, and Academy of Sciences) and NGOs responsible for sustainable development of the region, ranchers, and user groups (e.g., hunters) of the proposed areas, and local urban and rural communities in the region. The project would: i) have a positive global benefit by conserving biodiversity in the Caucasus Mountains, an area with globally significant wildlife and numerous threatened endemic species; ii) improve biodiversity protection and sustainable forestry along an altitudinal gradient that encompasses forests and adjoining pasture lands; and iii) continue with the community-based conservation efforts (regional support groups) initiated by WWF-Georgia in concert with local NGOs and regional government; and iv) benefit local economies through development of nature-based tourism.

#### *4. Institutional and implementation arrangements:*

The Ministry of Environment (MoE) will be responsible for preparation, appraisal, and implementation of the project over a six-year period through a Project Implementation Unit (PIU) funded under the project. The Department of Protected Areas, MoE, and NGOs will implement individual project components or activities. The PPU established during preparation will continue to operate during implementation, coordinating all of the activities and take responsibility for financial management of the project, including procurement of all goods and services. The Department of Protected Areas will be responsible for the implementation of specific projects in the protected areas. The Caucasus transboundary regional NGO network will be implemented and led by a competent Georgian NGO.

## **D: Project Rationale**

### *1. Project alternatives considered and reasons for rejection:*

The project activities are based largely on protected areas and sustainable development activities developed in country by NGOs in collaboration with the MoE and other ministries.

The main project alternative is to combine the Forest Conservation and Forest Development Projects into a single Georgia forests project. This alternative was not selected due to differences in the processing schedules of the two projects (6 months to one year). Given the urgent threats to Georgian biodiversity, it is proposed to prepare the Conservation and Forestry project in parallel. Nonetheless, a combined forest project is the preferred alternative because it better serves the objective of integrating biodiversity conservation into forestry. To accommodate both concerns, it is proposed that the projects be coordinated during preparation, designed with complementary objectives and activities, and linked during implementation.

### *2. Major related projects financed by the Bank and/or other development agencies (completed, ongoing and planned):*

<u>Sector issue</u>	<u>Project</u>	<u>Latest Form 590 Ratings</u> (Bank projects)	
		<u>IP</u>	<u>DO</u>
(Rural development, environment)		IP	DO
<u>IDF-financed</u>	National Environmental Action Plan (ongoing)	NA	N/A
<u>IDA-financed</u>	Coastal Management Project	Not Under Implementation	“
	Cultural Heritage Project (approved 1/29/98)	“	
<u>GEF-financed</u>	National Biodiversity Strategy/Action Plan (ongoing)	N/A	N/A
	Black Sea Environment Program (ongoing)	“	“
<u>Other development agencies</u>			

IP/DO Ratings: HS (Highly Satisfactory), S (Satisfactory), U (Unsatisfactory), HU (Highly Unsatisfactory), NA (Not Applicable)

### *3. Lessons learned and reflected in proposed project design:*

A key lesson learned from GEF and Bank projects in the Europe and Central Asia region is that the project should be initiated by a preparatory phase that focuses on certain capacity-building activities and policy changes that are needed for successful implementation of most project activities. During its first year, the Conservation project would focus on policy and planning issues, and integration with the Bank Forest Development Project.

Another key lesson is that the project should have broad support in the government, civil society, and local communities where protected areas are proposed. The project design was developed in collaboration with Georgian stakeholders, building on the existing protected area planning initiatives developed by Georgian NGOs in collaboration with the GoG. The Georgia Protected area program is a recognized national priority and has the support of senior government officials, including the President, and NGOs. Regional support groups located in the areas of the proposed national parks have participated importantly in the development of the proposals for national parks and the guidelines for their management. The project design seeks to take full advantage of the nature-based tourism opportunities of Georgia.

The project design also takes into consideration the results of the ‘quality at entry’ assessment conducted by the Bank’s Quality Assurance Group. Of special relevance here are the need to avoid unnecessary project complexity; avoiding institutional complexity was one rationale for maintaining the Forestry and Conservation projects as separate but linked projects. Preparation of an adequate social assessment and economic analysis has been identified as key to project performance. A social assessment is underway and will provide inputs into project design during preparation. An economic analysis will be prepared, targeting the long-term costs for the maintenance of protected area infrastructure and opportunities for revenue generation from user fees.

The STAP review acknowledges the global significance of the biodiversity addressed by the project and the country-driven approach to addressing underlying factors of biodiversity loss. The review identifies four main areas requiring further attention during preparation:

- i) Strengthen the linkage to the Forestry Development Project. The principal recommendation from the STAP review is the need to ensure integration of this project with the Bank Forestry Development project. The projects are now linked in two ways: (a) through the policy and planning activities at the national level and in the Central Caucasus region where a master plan for sustainable forestry and protected areas will be jointly produced, and (b) through biodiversity overlay plans for the forest units in the corridors which will link protected areas in the eastern Caucasus (Tusheti, Lagodekhi, and Vashlovani) and the Central Caucasus.
- ii) Ensure local participation in planning and implementation. Regional support groups, (selected from the project regions and representing public and private sectors and civil society) have been part of the management planning teams for the protected areas, and will play central roles in their implementation.
- iii) Evaluate the need for institutional reform. The lack of clarity of responsibilities for biodiversity conservation in Georgia has been identified in the draft biodiversity strategy/action plan, and represents one of the policy issues to be addressed jointly with the Forestry Development Project during the first phase of the project.

iv) Evaluate the need for ex-situ conservation. No ex-situ conservation interventions are currently included in the project. In the Vashlovani area, it is hoped that the project's approach to addressing overgrazing and illegal hunting may result in the natural recovery of wild gazelle populations. If ex-situ measures are warranted to propagate native animals, financing for these will be obtained independently from the project. With regard to conservation of agricultural biodiversity, the project would seek to maintain plant varieties and animal breeds through distribution of seeds, agricultural extension and by seeking support from NGOs and herder organizations.

#### *4. Indications of borrower commitment and ownership:*

Georgia ratified the Convention on Biological Diversity in June 1994 and is signatory to the Bonn and Bern Conventions, the Bucharest Convention for the Black Sea, and the Convention on International Trade of Endangered Species. An important indication of support is that the project has been developed since 1993 by Georgian NGOs working in collaboration with various ministries and the Parliamentary Commission on Protected Areas, with the direct support of President Schevardnadze.

The project has strong country ownership and has benefited from full and participatory collaboration between all sectors of society, including government agencies, scientific institutions and NGOs.

#### *5. Value added of Bank and Global support in this project:*

The Bank is assisting Georgia with preparation of a National Biodiversity Strategy/Action Plan, National Environmental Action Plan, and Forest Sector Review, which together provide a strategic foundation for the project. Through these and other activities, the Bank has developed an understanding of the environment and development issues facing Georgia, and the necessary experience with government and civil society. The value added of Bank support includes development of linkages with other sources of expertise and funding, and the opportunity to integrate project results into policy dialogue on environment and development. The Bank is also preparing a Forestry Development Project that would be linked to the biodiversity protection project.

The Bank involvement in the GEF-assisted Kolkheti National Park project will allow valuable lessons and initiatives tested in Kolkheti to be incorporated into further development of the protected area network. Conversely the Kolkheti project will benefit from this project which will provide the national protected area management strategy for the whole of Georgia, elaborate financial mechanisms and the legislative supporting framework for parks to capture their recurrent costs from user fees, and provide institutional support, capacity building and training to the Department of Protected Areas, from which all protected areas will ultimately benefit.

The GEF adds value through its global experience on the design, implementation, and financing of biodiversity conservation projects. GEF support is justified by the global significance of the biodiversity of the Caucasus region, the existing threats to ecosystem integrity and species survival, and the commitment of the government to implementing the project. GEF-supported initiatives have helped to foster greater collaboration between government agencies and NGOs in project preparation.

## **E: Issues Requiring Special Attention**

### *1. Economic*

Summarize issues below (e.g., fiscal impact, pricing distortions)

To be defined (indicate how issues will be identified)  None

Economic evaluation methodology:

Cost benefit       Cost effectiveness     Incremental Cost     Other [specify]

Incremental costs analysis is attached as Annex 2.

## 2. *Financial*

Summarize issues below (e.g., cost recovery, tariff policies, financial controls and accountability)

To be defined (indicate how issues will be identified)       None

Financial mechanisms for ensuring the long-term sustainability of project benefits will be addressed during project preparation. These will include: (a) development of financial incentives for biodiversity conservation; (b) strengthening of protected areas administration to improve their cost effectiveness, and (c) establishment of revenue generating mechanisms to support protected area management. See also discussion under F1 below.

## 3. *Technical*

Summarize issues below (e.g., appropriate technology, costing)

To be defined (indicate how issues will be identified)       None

Various technical issues identified in the PCD are being developed under preparation, including rapid biodiversity assessment techniques, and management and grazing plans.

## 4. *Institutional*

Summarize issues below (e.g., project management, M&E capacity, administrative regulations)

To be defined (indicate how issues will be identified)     None

Project targets existing institutions (MoE, Department of Protected Areas, Department of Forestry) for capacity building. Needs and approach for capacity building activities are being addressed during preparation.

The success of the project will depend on close collaboration and institutional linkages between this project and the associated Forestry Development Project. Preparation activities to date have already fostered and encouraged more collaborative and collegial working relationships between the production-orientated Forestry Department and the conservation agencies and environmental NGOs. The planned collaboration on the forestry planning for the Central Caucasus makes a significant breakthrough, reflecting increased open-ness to NGO participation in sectoral planning.

## 5. *Social*

Summarize issues below (e.g., significant social risks, ability to target low income and other vulnerable groups)

To be defined (indicate how issues will be identified)     None

A Social Assessment (SA) and Public Participation Plan focusing on local communities in the vicinity of proposed national parks and other protected areas in Eastern Caucasus is being financed during project preparation. A detailed social assessment for the Central Caucasus is underway as part of preparation for the Forestry Development Project.

## 6. *Environmental*

a. Environmental issues:

Summarize issues below (distinguish between major issues and less important ones)

To be defined (indicate how issues will be identified)     None

Major:  
Other:

b. Environmental category:        A        B        C

c. Justification/Rationale for category rating:

The project is proposed to be classified under Category B. The project would have a positive environmental impact by conserving flora and fauna in situ, by financing new, or expanding existing, protected areas; implementing management plans; undertaking applied research and monitoring activities for key threatened species, and promoting international cooperation. However, the project would also build infrastructure in national parks. Although the amount of infrastructure is small and expected to be located away from sensitive habitats, a mitigation plan for the project activities will be prepared during preparation.

d.. Resettlement

Summarize issues below (e.g., resettlement planning, compensation)

To be defined (indicate how issues will be identified)  None

e. Borrower permission to release EA:     Yes     No     N/A

f. Other remarks:

#### 7. *Participatory Approach:*

a. Primary beneficiaries and other affected groups:

Name and describe groups, how involved, and what they have influenced.

Not applicable (describe why participatory approach not applicable with these groups)

The draft Georgia Protected Area Plan, has been developed since 1993 by Georgian NGOs working in collaboration with the Government of Georgia and local communities. The preparatory work for individual protected areas that would be implemented under this project was initiated through regional support groups, which include NGOs within the project region. The affected groups will include communities around the proposed national parks and organized user groups such as sheep ranching enterprises (state-owned). Some of these same groups will be beneficiaries of the project. To address the social impacts of the project and provide inputs to improve its design, a social assessment will be undertaken. The project will seek to develop recreational/tourism use of the project region. To improve the effectiveness of these and other project activities, a Participation Plan will be prepared in conjunction with the Social Assessment. The Participation Plan will target user groups such as hunters, sheep ranchers, and other users of forest and range resources.

Project preparation to date has benefited from a highly participatory process involving a broad group of stakeholders. The expected levels and collaboration between this project and the Forestry Development Project will encourage further participation of committed and concerned groups from government and civil society – see (4) above.

b. Other key stakeholders:

Name and describe groups, how involved, and what they have influenced.

Not applicable (describe why participatory approach not applicable with these groups)

These include the private sector (e.g., tour operators, marketing agents for forest products, etc.); interest groups (including environmental NGOs and hunters' associations, etc.); local government; and

implementing agencies (government and NGO).

#### 8. Checklist of Bank Policies

a. This project involves (check applicable items):

- |                                     |  |                                     |  |
|-------------------------------------|--|-------------------------------------|--|
| <input type="checkbox"/>            | Indigenous peoples ( <a href="#">OD 4.20</a> )   | <input type="checkbox"/>            | Riparian water rights<br>( <a href="#">OP 7.50</a> ) ( <a href="#">BP 7.50</a> ) ( <a href="#">GP 7.50</a> )                         |
| <input type="checkbox"/>            | Cultural property ( <a href="#">OPN 11.03</a> )  | <input type="checkbox"/>            | Financial management ( <a href="#">OP 10.02</a> ) ( <a href="#">BP 10.02</a> )   |
| <input type="checkbox"/>            | Environmental impacts<br>( <a href="#">OP 4.01</a> ) ( <a href="#">BP 4.01</a> ) ( <a href="#">GP 4.01</a> ) | <input checked="" type="checkbox"/> | Financing of recurrent costs ( <a href="#">OMS 1.21</a> )  |
| <input checked="" type="checkbox"/> | Natural habitats<br>( <a href="#">OP 4.01</a> ) ( <a href="#">BP 4.01</a> ) ( <a href="#">GP 4.01</a> )      | <input type="checkbox"/>            | Local cost sharing<br>( <a href="#">OP 6.30</a> ) ( <a href="#">BP 6.30</a> ) ( <a href="#">GP 6.30</a> )                            |
| <input type="checkbox"/>            | Gender issues ( <a href="#">OP 4.20</a> )  | <input type="checkbox"/>            | Cost-sharing above country three-year average<br>( <a href="#">GP 6.30</a> ) ( <a href="#">OP 6.30</a> ) ( <a href="#">BP 6.30</a> ) |
| <input type="checkbox"/>            | Involuntary resettlement ( <a href="#">OD 4.30</a> )   | <input type="checkbox"/>            | Retroactive financing above normal limit<br>( <a href="#">OP 12.10</a> ) ( <a href="#">GP 12.10</a> )                                |
| <input checked="" type="checkbox"/> | NGO involvement ( <a href="#">GP 14.70</a> )<br>( <a href="#">OP 4.36</a> ) ( <a href="#">GP 14.70</a> )     | <input type="checkbox"/>            | Disputed territory<br>( <a href="#">OP 7.60</a> ) ( <a href="#">BP 7.60</a> ) ( <a href="#">GP 7.60</a> )                            |
| <input type="checkbox"/>            |  | <input type="checkbox"/>            | Other (provide necessary details)  |

b. Describe issue(s) involved, not already discussed above:

### **F: Sustainability and Risks**

#### *1. Sustainability:*

The sustainability of the project-funded capacity building was observed to be good in the pilot phase GEF biodiversity projects elsewhere in the region. Given the budgetary challenges facing the Government, the project should take into account the following to address other aspects of project sustainability: (a) to contribute to regional economies through careful development of nature-based tourism opportunities; (b) develop appropriate user fees for the national parks and seek approval for a revenue account that allows part of the fees to be used for park maintenance; and (c) consider recurrent costs of park infrastructure as one of the determinants for the investments undertaken under the project. The U.S. National Park Service has agreed to assist with addressing these issues during preparation, by providing in kind support through secondment of staff to provide technical assistance.

2. *Critical Risks (reflecting assumptions in the fourth column of Annex 1):*

<u>Risk</u>	<u>Risk Rating</u>	<u>Risk Minimization Measure</u>
Weak institutional capacity	M	The project will include a component to build capacity at national and local levels
Inadequate stakeholder support	M	Stakeholders are fully involved in project preparation and will contribute to project design
Inadequate collaboration among key stakeholders	M	Project plans will include measures to support and encourage collaboration among stakeholders.
Overall Risk Rating	M	

Risk Rating - H (High Risk), S (Substantial Risk), M (Modest Risk), N (Negligible or Low Risk)

3. *Possible Controversial Aspects (Project Alert System):*

Risk	Type of Risk	Risk Rating	Risk Minimization Measure

Type of Risk – S (Social), E (Ecological), P (Pollution), G (Governance), M (Management capacity), O (Other)  
 Risk Rating - H (High Risk), S (Substantial Risk), M (Modest Risk), N (Negligible or Low Risk)

**G: Project Preparation and Processing**

1. *Has a project preparation plan been agreed with the borrower (see Annex 2 to this form):*

Yes, date submitted: MM/DD/YY     No, date expected: March, 1999

2. *Advice/consultation outside country department:*

Within the Bank:                       Other development agencies:                       External Review: STAP

3. *Composition of Task Team (see Annex 2)*

Phillip Brylski (ECSRE), Andrew Bond, Kerstin Canby (ENV)

4. *Quality Assurance Arrangements (Annex 2)*

Peer Reviewer: Anthony Whitten (EASEN),

Total Preparation Budget: US\$350K (under implementation)    Bank Budget: US\$94K (GEF)    Trust Fund: US\$

Cost to Date: US\$45K

GO                       NO GO

Further Review: Appraisal - FY99

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Task Team Leader Phillip Brylski

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Sector Manager/Director: Kevin M. Cleaver

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Country Director: Judy O'Connor

Annex 1

Project Design Summary

Narrative Summary	Key Performance Indicators	Means of Verification	Critical Assumptions
<p><b>CAS Objectives:</b></p> <p>1. Protect the environment, support sustainable natural resources management, and foster private sector rural development</p> <p><b>2. GEF Operational Program:</b> Support <i>in-situ</i> conservation, sustainable use, and capacity building</p>	<p>1.1 National protected area plan completed and adopted.</p> <p>1.2 Creation of national parks in Eastern and Central Caucasus</p> <p>1.3 Habitat conservation plans adopted to integrate biodiversity conservation objectives and activities into forest and range management</p> <p>1.4 Increased public awareness of natural resources management issues</p> <p>1.5 Development of nature-based tourism plans for 2 areas</p> <p>2.1 National Protected Areas network identified, representatives of all major habitats</p> <p>2.2 Increase in populations of key indicator and threatened species</p> <p>2.4 Protected Areas Department restructured professional development and training activities</p>	<p>National and park monitoring programs.</p> <p>Parliamentary gazette.</p> <p>Area under conservation and or sustainable use and range management agreements.</p> <p>National Protected Area Plan endorsed by the government</p> <p>Independent evaluation by international panel</p> <p>Annual and supervision reports</p>	<p>Continued Government commitment to project implementation</p> <p>Commitment of local stakeholders to project objectives.</p> <p>A Forestry Development Project will be implemented in parallel with and closely linked to this project.</p>
<p><b>Project Development Objective:</b></p> <p>1. Establish ecologically effective protected areas</p>			

	<p>1.1 Creation of 2 national parks and expansion of 1 nature reserve</p> <p>1.2 Implementation of management plans for protected areas.</p> <p>1.3 Substantial involvement of local communities in protected area planning and implementation</p> <p>1.4 Development and implementation of alternative economic activities in protected area support zones</p> <p>1.5 Establishment of revenue-generating mechanism for new national parks, based on user/entrance fees</p>	<p>Legal gazettelement</p> <p>Supervision reports</p> <p>Annual and supervision reports</p> <p>Legislation and institutional mechanisms for park financing in place</p>	<p>1.1 National support for Georgia Protected Area Plan and local support for individual protected areas</p> <p>1.2 Institutional capacity to implement project</p> <p>1.3 Sufficient domestic and international demand for recreational opportunities in the national parks</p>
<p>2. Integrate biodiversity conservation into forestry and range management inside and outside of protected areas;</p>	<p>2.1 Preparation and adoption of integrated plan for forestry and protected areas in the Central Caucasus , in collaboration with the Forestry Development Project</p> <p>2.2 Development and implementation of grazing plans, resulting in reduced grazing pressures and recovery of overgrazed range</p> <p>2.3 Forest management agreements to wildlife corridors and appropriate management regimes in place</p>	<p>Plan presented.</p> <p>Forest areas redesignated from production to conservation status.</p> <p>Monitoring of key plant and animal populations.</p>	<p>2.1 Government commitment to mainstreaming biodiversity conservation objectives into resource management activities</p> <p>2.2 Adequate stakeholder participation in policy formulation and in development and implementation of forestry and range management planning.</p> <p>2.3 Local support for biodiversity conservation activities</p>
<p>3. Strengthen institutions responsible for biodiversity conservation programs</p>	<p>3.1 Recruitment of qualified staff for new protected/expanded protected areas</p> <p>3.2 Completion of professional</p>	<p>Annual and supervision reports.</p> <p>Numbers staff trained/training courses</p>	<p>3.1 Availability of technically qualified and highly motivated personnel.</p>

	<p>development and training activities</p> <p>3.3 Reduction of illegal hunting of threatened species</p> <p>3.4 Establishment of appropriate communications and information management systems for Department of Protected Areas central and field offices.</p> <p>3.5 Improvement of standing of protected areas administration in country's natural resources management system</p>	<p>completed</p> <p>Monitoring of key animal populations</p> <p>Procurement records</p> <p>Independent evaluation</p>	
4. Improve ecological basis of landscape planning	<p>4.1 Establishment of regular (semi-annual or annual) censuses of target species</p> <p>4.2 Dissemination of results nationally and internationally</p> <p>4.3 Preparation and implementation of corridor plans linking forest units and protected areas</p>	<p>Field reports</p> <p>Area of forest under corridor management regime</p>	Capacity to implement recovery plans
5. Improve public awareness of Georgian biodiversity	5.1 Establishment of a public information center for Caucasian biological diversity and sustainable development	Independent survey	None
6. Promote international cooperation in Transcaucasus biodiversity conservation.	<p>6.1 Develop and implement an action plan for transboundary cooperation at ministerial and non-governmental levels</p> <p>6.2 Establishment of a network of international NGOs in the Caucasus region</p>	Number of international meetings/workshops	None

<p><b>Outputs:</b></p> <p>1. Establish ecologically and socially effective protected areas</p> <p>2. Integrate biodiversity conservation into forestry and range management inside and outside of protected areas</p> <p>3. Strengthen institutions responsible for biodiversity conservation programs</p> <p>4. Improve monitoring and applied research on threatened flora and fauna, and effect their recovery</p>	<p>1.1 Creation of laws for new protected areas</p> <p>1.2 Management plans for new protected areas</p> <p>2.1 National policy document on sustainable forestry and conservation</p> <p>2.2 Forestry and protected area specific plan for Central Caucasus region</p> <p>2.3 Biodiversity assessments and habitat conservation plans for Central and/or Eastern Caucasus regions to be incorporated into forest management plans</p> <p>2.4 Sustainable use plans for forest and pasture in support zones of selected protected areas</p> <p>3.1 Review of institutional arrangements and responsibilities for biodiversity conservation</p> <p>4.1 Censuses and technical reports completed on forest biodiversity</p>	<p>Plans, reports, and other project milestones, such as legal gazettelement of new National Parks.</p> <p>The project will monitor practical environmental parameters, such as biodiversity abundance and distribution, which provides baseline information for examining project effectiveness in the mid to long term.</p> <p>The project will use private sector (market survey) methodologies to develop awareness programs and monitor their success</p> <p>Technical assistance report</p> <p>Independent evaluation</p> <p>Park and Protected Areas Department reports</p>	<p>Adequate institutional capacity for project implementation and effectiveness.</p>
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<p>5. Improve public awareness of Georgian biodiversity</p> <p>6. Promote international cooperation in Transcaucasus biodiversity conservation.</p>	<p>4.2 Habitat conservation plans</p> <p>5.1 Public information center for Caucasian biological diversity, including development of a Georgia biodiversity web site with information for recreational opportunities in national parks</p> <p>5.2 Field guides on Georgian biodiversity</p> <p>6.1 Action plan for transboundary cooperation</p> <p>6.2 Functional network of international NGOs</p>	<p>Newsletter and web page established</p>	
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Annex II

GEORGIA

CONSERVATION OF FOREST ECOSYSTEMS

INCREMENTAL COSTS AND GLOBAL ENVIRONMENT BENEFITS

Overview

1. The general objective of the GEF Alternative is to conserve biodiversity in the Caucasus forest ecosystems of Georgia. The general objective of the project is to conserve biodiversity in Caucasus forest ecosystems. The project development objectives are to: (i) establish ecologically effective protected areas; (ii) integrate biodiversity conservation into forestry and range management inside and outside of protected areas; (iii) strengthen institutions responsible for biodiversity conservation programs; (iv) improve monitoring of threatened flora and fauna, and effect their recovery; (v) improve public awareness of Georgian biodiversity; and (vi) promote regional/international cooperation in Transcaucasus biodiversity conservation. The GEF Alternative intends to achieve these outputs at a total incremental cost of **US\$ 8.7** to be financed by the GEF. The proposed GEF Alternative should be viewed as complementary to ongoing activities in the Georgian Caucasus region.

**Context and Development Goals**

2. Georgia, a mountainous country covering 70,000 km<sup>2</sup> with a population of 5.5 million people, is situated between the south slope of the Caucasus Mountains, the east coast of the Black Sea and the northern edge of the Turkish Anatolia plane. Forests cover 40% of the country, largely in the Greater Caucasus Mountains (Georgia's northern border), the Lesser Caucasus (its southern border), and in intervening lowlands and foothills. The principal landscapes of the Caucasus include foothill and mountain forests and subalpine meadows of the Greater and Lesser Caucasus; treeless mountain upland plateaus of the lesser Caucasus; humid lowland forests of western Georgia, and the arid steppe and deserts of eastern Georgia. In the project region between the Caucasus Major and Minor ranges of central and eastern Georgia, the flora and fauna of at least three biogeographic provinces converge, resulting in high levels of biodiversity. In this region are found species typical of Europe (e.g., bear, lynx, chamois, red deer), Central Asia (e.g., Caucasian tur or mountain goat, leopard), and the Middle East regions (e.g., hyena, gazelle). The varied terrain and climatic conditions contribute to a diversity of ecosystems.

3. The project and surrounding Transcaucasus region has been identified by the World Wide Fund for Nature's Global 200 Ecoregions program, based on the region's species richness, levels of endemism, taxonomic uniqueness, unusual evolutionary phenomena, and global rarity of Major Habitat Types. These forest ecosystems and the flora and fauna within them are under threat as a result forest harvesting, illegal hunting, overgrazing, agriculture and fishing. Converting the legal status of protection from existing Nature Reserves to expanded Protected Areas and drafting and implementing management plans of these areas will be critical to halting these threats to the ecosystem.

4. The broad development goals of Georgia focus on public sector restructuring; private sector development; social protection and poverty reduction; and environmental protection. The Government's overall development agenda attempts to focus on these issues consolidating the stabilization recently achieved, strengthening the current economic recovery while protecting the

environment. The Government of Georgia has taken important steps toward improved environmental management in recent years, including the development of a national strategies, recently approved framework environmental legislation and the development of specific environmental laws underneath this framework, activities under the Black Sea Environmental Program and some specific actions under the World Bank-financed Municipal Infrastructure Rehabilitation Project. An Institutional Development Fund (IDF) grant is helping the Government to prepare its National Environmental Action Plan (NEAP) currently in draft form, designed to detail environmental priorities, set the basis for future cooperation, and strengthen the Ministry of Environment, while at the same time a Bank/GEF Biodiversity Strategy/Action Plan is also being prepared. Environmental improvements will still face institutional challenges such as gaining cooperation from governmental agencies with no previous history/capacity in dealing with these issues, promoting public awareness, and building partnerships with NGOs. With World Bank and GEF support, the Government intends to preserve Georgia's rich environmental diversity and natural resources base for future generations by implementing the recently approved environmental legislation. The country's natural resources, such as the forests, will need to be appropriately managed to reduce illegal harvesting and damage, while appropriate commercialization policies fostering renewal and growth could allow for a new source of foreign exchange earnings.

### **Baseline Scenario**

5. The collapse of the Soviet Union in late 1991 and the attendant disruption in institutions that managed the economy until then has forced the Georgian economy into a tailspin. The civil salary structure is currently very low. It is in these difficult conditions that Georgia is attempting to establish the foundations of a market economy. The task is especially daunting because Georgia started the transformation virtually from scratch: existing institutions are ill suited to a market based economy, and there is a dearth of people who know and understand how the transition to a market economy is to be managed. Yet, unlike many of the other countries of the former Soviet Union, Georgia has a long tradition of high levels of education and entrepreneurship which should serve it well during the transition. The medium term prospects for the economy are good, based on robust growth in exports. There is a solid potential in agriculture, and services are likely to develop strongly. With appropriate macroeconomic stabilization policies and structural reforms, this potential can be achieved.

6. Since the transition, unsustainable timber harvesting, grazing, and game hunting have accelerated, and now pose a major threat to Georgia's diverse and abundant biodiversity. In addition, since the transition and the associated economic decline, local peoples are increasingly seeking to reestablish traditional/historical land uses that were disrupted for over 70 years under the former Soviet Union. In response to these activities, the Government of Georgia has begun to act to protect important natural resources and to preserve biodiversity.

7. Under the Baseline Scenario, it is expected that the Government of Georgia expenditures related to forest ecosystems management biodiversity conservation in the project area over the period of the project will be **US \$1.5 million through the Department of Protected Areas and Department of Forest Management annual budgets.**

8. A number of natural resource management and biodiversity conservation activities in Georgia are being financed by other international developing agencies, or will be under implementation through proposed IDA projects. These plus Government of Georgia contributions are summarized in the Incremental Cost Analysis matrix and discussed below:

- i. The US\$20 million **World Bank Forestry Development Project** under preparation is expected to have considerable direct biodiversity conservation benefits, addressing the root causes of forest biodiversity loss by promoting forest policy reform, preparing and implementing model sustainable forest management plans, and building the capacity to plan, better regulate, and monitor forest harvesting and sustainable use. The components related to these issues are valued at \$18 million (the additional \$2 million will contribute specifically towards forestry planning in the Central Caucasus and inclusion of biodiversity objectives in forest management plans in production forests. This is a part of the incremental cost of the GEF alternative).
- ii. Components of the **WWF Georgia Conservation Environmental Education and Conservation Programs** which can be expected to bring specific biodiversity benefits *to the project region* in planning, protection policy and transboundary cooperation are estimated at US \$887,000.
- iii. **UNDP Environmental Capacity-Building Project** . The project will strengthen MoE, especially in areas of information management and communication and professional development and training activities at national, regional, district, and municipal levels. The project also supports public awareness on environmentally related issues. The project activities which are expected to have specific positive benefits for biodiversity are estimated at US\$25,000.

9. **Costs.** Total expenditures under the Baseline Scenario are estimated at **\$US 20.4 million** including US\$18 million from the Forestry Development project, **US\$ 1.5 million** from the Government of Georgia and **US\$0.9 million** through international donors.

10. **Benefits.** Implementation of the Baseline Scenario will result in improvements to the protection and management of biodiversity within the proposed protected areas and public awareness of the need for biodiversity conservation. NGO efforts will serve to increase awareness of threats to biodiversity in the region and establish management plans for their protection in the project region. The Baseline Scenario will also address issues of capacity building within the Ministry of Environment and the elementary protection of the existing Nature Reserve areas. However, due to the extensive planning and investments needs to stabilize the status of biodiversity in the region during the period of transition, existing government resources and international financing efforts directed to forest biodiversity will not ensure protection of globally significant biodiversity in the expanded designated areas. In terms of protecting biodiversity in the Caucasus region, it is unlikely that the limited expenditures will have a significant impact on continuing damage to these fragile habitats.

### **Global Environmental Objective**

11. The GoG ratified the Convention on Biological Diversity in June 1994. The World Bank / GEF National Biodiversity Strategy/Action Plan (BSAP), now under preparation, identifies the project region as a center of Georgian biodiversity, and the project activities as the highest priority for improving the protection of the threatened Caucasus ecosystems. The Forest Sector Strategy, prepared as an input for the National Environmental Action Plan, currently in draft form, identifies the need to develop interdisciplinary forest planning, including through the integration of biodiversity conservation.

12. As a consequence of the current course of action, regarded as the Baseline Scenario, Georgia's diverse and abundant biodiversity will likely continue to suffer from unsustainable timber and fuelwood harvesting, overgrazing and associated disturbance, illegal hunting, and habitat loss and fragmentation.

13. **Scope.** The GEF Alternative would provide the means (above and beyond the Baseline Scenario) for expanding the existing Nature Reserves and National Park and drafting and implementing of management plans. The specific objectives of these management plans are: i) conservation of the biodiversity of the forest ecosystems within the project region through protection and management; ii) improved monitoring and applied research on biodiversity and effectiveness of conservation efforts; iii) establishment of infrastructure for improved biodiversity protection and development of nature-based tourism in the region; iv) recovery of threatened agricultural biodiversity; (v) preparing and supporting Park administration and management; (vi) strengthening public education and awareness; (vii) improving the integration of biodiversity conservation and range management outside of the proposed Parks; and (viii) improved coordination in the protection of Transcaucasus biodiversity.

14. **Costs.** The total cost of the GEF Alternative is estimated at **US\$33.7million**, detailed as follows:

- i. **Planning and Policy Development:** Preparation of country-wide plans and policies for the protection of biodiversity through national park systems and the integration of biodiversity into regional forestry sector planning outside of protected areas through i) Caucasus Protected Area Plan; ii) forest conservation and sustainable use policy formulation; iii) planning for protected area and forest planning in the Central Caucasus; and iv) inventories and ecological studies -- **US\$ 5.6 million (GEF financing - US\$ 1.3 million)** ;
- ii. **Biodiversity Protection and Management Inside and Outside of Protected Areas:** Preparation and implementation of Management Plans for at least three protected areas (Tusheti, Lagodeckhi and Vashlovani), habitat conservation plans, and studies on human impacts and social requirements. The Management Plans include the development and implementation of grazing management plans inside and outside protected areas to effect the restoration of alpine meadow and steppe ecosystems; and the integration of conservation into forest management at the landscape level through protection and management of critical habitat for key threatened species, including conservation and sustainable use of non-timber species in production forests -- **US\$ 24.7 million (GEF financing - US\$ 6.0 million)**;
- iii. **Institutional Development:** Activities for strengthening and training of the Department of Protected Areas, Department of Biodiversity Conservation, Ministry of Environment, and Georgian NGOs. -- **US\$ 1.8 million (GEF financing - US\$ 1.0 million)**;
- iv. **International Cooperation:** Support to international cooperation by developing an action plan for transboundary cooperation for protected areas management and through support for ministerial regional cooperation and an NGO network in the Caucasus region, including Azerbaijan, Turkey, Armenia and Russia -- **US\$ 1.6 million (GEF financing US\$ 0.40 million).**

15. **Benefits.** Implementation of the GEF Alternative would provide the means for establishing effective protected areas and integrating biodiversity conservation objectives into regional and local development activities. Global benefits would include the recovery of forest and steppe habitats and protection of endemic threatened flora and fauna and their recovery. Benefits generated from the project would also include the promotion of local and regional cooperation in biodiversity conservation.

### Incremental Costs

16. The difference between the cost of the Baseline Scenario **US\$ 20.4 million** and the cost of the GEF Alternative **US\$ 33.7 million** is estimated at **US\$13.3 million**. This represents the incremental cost for achieving sustainable global environmental benefits. Of this amount, \$8.7 million is requested from GEF, \$2 million is leveraged under the IDA funded Forestry Development Project and approximately \$2.6 million is expected as cofinancing from bilateral donors.

### Incremental Cost Matrix

Component Sector	Cost Category	US\$ Million	Domestic Benefits	Global Benefits
<b>Planning and Policy Development</b>	Baseline	<b>1.9</b>	Improved planning for the sustainability of production forests.	
	With GEF Alternative	<b>5.6</b>	Increased opportunities for alternative income generation based on sustainable utilization of biodiversity in buffer zones and protected areas.	Protection of globally significant biodiversity
	Increment	<b>3.7</b>		
<b>Biodiversity Protection and Management Inside and Outside of Protected Areas</b>	Baseline	<b>17.4</b>	Maintained or increased flow of forest goods and environmental services. Some support for alternative income generation.	Limited conservation of globally significant biodiversity in the Caucasus Mountains and Iori Plateau.
	With GEF Alternative	<b>24.7</b>	Increased flow of goods and environmental services. Increased opportunities for income generation in rural communities.	Improved conservation of globally significant biodiversity in the Caucasus Mountains and Iori Plateau. Increased collection and analysis of information vital for conserving endemic flora and fauna.
	Increment	<b>7.3</b>		
<b>Institutional Development</b>	Baseline	<b>0.4</b>	Improved forest policies.	
	With GEF Alternative	<b>1.8</b>	Increased public sector capacity to manage protected areas and generate income from tourist-based activities.	Increased public sector capacity to protect biodiversity.
	Increment	<b>1.4</b>		

<b>International Cooperation</b>	Baseline	<b>0.7</b>		Information sharing between Azerbaijan, Armenia and Georgia
	With GEF Alternative	<b>1.6</b>		Increased joint activities in transboundary areas.
	Increment	<b>0.9</b>		
<b>Totals</b>	Baseline	<b>20.4</b>		
	With GEF Alternative	<b>33.7</b>		
	Increment	<b>13.3</b>		

### ANNEX III

#### GEORGIAN BIODIVERSITY –SIGNIFICANCE AND THREATS

*International and Global Importance of Georgian Biodiversity.* The principal landscapes of the Caucasus include foothill and mountain forests and subalpine meadows of the Greater and Lesser Caucasus; treeless mountain upland plateaus of the lesser Caucasus; humid lowland forests of western Georgia, and the arid steppe and deserts of eastern Georgia. Between the Caucasus Major and Minor ranges of central and eastern Georgia, the flora and fauna of at least three biogeographic provinces converge, resulting in high levels of biodiversity. The region contains species typical of Europe (e.g., bear, lynx, chamois, red deer), Central Asia (e.g., Caucasian tur or mountain goat, leopard), and the Middle East (e.g., hyaena, gazelle). The varied terrain and climatic conditions contribute to a diversity of ecosystems.

The Georgian forests of the Caucasus Mountains contain over 200 plant community associations, and 120 species of tree, 250 bushes, and 4,500 species of vascular plants. Among vascular plants, nine percent are endemic to Georgia and 14 percent are endemic to the Caucasus region. There are 572 vertebrate species (348 species of birds, 95 mammals, 52 reptiles, 13 amphibians, and 64 fishes). The diverse and threatened large mammal fauna includes three species of wild goats, chamois, red and roe deer, and their predators, including wolf, lynx, wild cats and possibly leopard. Some of these species (e.g., wild goats, deer, and wolf) undertake large-scale annual movements, increasing their susceptibility to habitat loss, degradation, and fragmentation, and overhunting, and competition with domestic sheep for forage.

Georgia also possesses rich agricultural biodiversity that is gradually being replaced by more cosmopolitan varieties. The list of Georgian plant genetic resources includes varieties and subspecies, some endemic to the Caucasus region, which are close relatives of domestic food plants such as wild rye, wheat, barley, millet, wild pears, cherry, and over 200 varieties of grapes. According to Georgian experts on animal genetic resources, at least nine important domestic animal breeds, such as the Tusheti sheep, Tusheti horse, and the Caucasian sheep dog occur within the production zones of the proposed national parks.

*Environmental Threats and Priorities.* There are important environmental challenges to the intensified use of Georgian forests. These include maintenance of soil and water conservation objectives that had been developed under the former Soviet system, and adequate protection of the region's globally significant biodiversity. While relatively large areas of natural habitat remain, significant declines in available habitat threaten the persistence of some of Georgia's most distinctive biodiversity. The most important threats to Georgian biodiversity are as follows:

- i) Habitat loss and fragmentation. Deforestation and habitat fragmentation is a growing problem throughout the Caucasus. Forests that occur in mountain river valleys and riparian forests, which have relatively good access, have been the hardest hit. The conversion of elm (*Alnus barbata*) forests to agricultural land has depleted riverine forests, especially in the Trialeti and Meskheta ridges of the Lesser Caucasus. Unsustainable forest practices have led to the destruction of some forest types previously common in Georgia, such as those dominated by *Quercus longipes* and *Ulmus suberosa*.
- ii) Unsustainable forest practices: Under-managed and illegal harvesting of timber and firewood exceeds the annual allowable cut, according to one estimate by 1 M m<sup>3</sup> per year.

- iii) Unsustainable practices. The rangelands (alpine meadows and lowland steppe communities) of the Eastern Caucasus have been overgrazed by sheep. Unsustainable range management, mainly by overstocking, has been intensified by the repopulation of high mountain villages, starting in the late 1980s. Currently, over 250,000 sheep are herded seasonally between the alpine pastures at Tusheti (4000 m elevation) and summer steppe pastures on the Iori floodplain (200 m). In subalpine meadows, overgrazing and associated disturbance is contributing to declines in Caucasian goat (*Capra cylindricornis*) and chamois (*Rupicapra rupicapra*). In the lowland grasslands of southeastern Georgia, where the same domestic sheep move to winter pasture, severe overgrazing is significantly impacting the endemic flora and fauna of steppe communities. Such competition for grazing contributed importantly to the extirpation of gazelle (*Gazella subgutturosa*) from eastern Georgia and, indirectly, the hyaena (*Hyaena hyaena*).
  
- iv) Illegal hunting. Censuses have revealed dramatic declines in the numbers of carnivores and ungulates over the last 10 years. The causes identified include overhunting and habitat loss, although a better understanding of the biological and social dimensions of these causes is needed. Census data for four key species indicate the seriousness of the problems. The Caucasian tur (*Capra caucasica*), a mountain goat endemic to the Transcaucasus region, has declined by one-half between 1985 and 1994, to about 2,800 individuals. The bezoar (*Capra aegagrus*), a wild relative of the domestic goat, is nearing extirpation from Georgia and today numbers fewer than 100 individuals in the Lesser Caucasus. Chamois (*Rupicapra rupicapra*) have declined from an estimated 6,000 individuals in 1985 to about 1,000 individuals. Red deer (*Cervus elaphus*) have declined three-fold in census areas and the entire Georgian population may be less than 1,500 individuals. Lynx (*Lynx lynx*) numbered 500 or more individuals in 1990; today the Georgian population is estimated at about 160 individuals.

Sites Proposed for GEF Financing				
Characteristics	Tusheti	Lagodeckhi Reserve	Vashlovani	Central Caucasus
Region	Eastern Caucasus planning region (adjacent to border with Chechnya, Russia)	Eastern Caucasus planning region (adjacent to border with Dagestan, Russia)	Iori Plateau planning region (Eastern Georgia, adjacent border to Azerbaijan)	Central Caucasus planning region
Size	115,800 ha Altitude 2500 to 5000m.	24,500 ha Altitude 1,000-3,500m	25,400 ha Altitude 200-900m	743,000 ha Altitude 1,000-5,000m
Population	Population is transhuman, migrating with sheep herds between Tusheti and Vashlovani. Approx. 3000 people inhabit the Tusheti area during the spring and summer. Fewer than 500 live at this high elevation in the winter	The local economy, which includes the largest city of the Telavi region ( Akhmeta), is heavily dependent on agriculture, livestock production, and forest harvesting.	In the immediate area of the proposed national park, the summer population is low, limited to cattle livestock ranchers and crop farmers. The surrounding villages contain 1000 year-round inhabitants. Summer population includes an additional 500 sheep ranchers.	Substantial number of villages throughout the region. Population estimate not available but expected to be at least 50,000.
Biological Diversity	Northern slopes of the Greater Caucasus include diverse communities indicative of the elevational range (broadleaf and conifer forests, subalpine and alpine meadows, and subnival screes).	Forests dominated by live oaks ( <i>Quercus</i> spp.), Oriental beech ( <i>Fagus orientalis</i> ), Caucasian lime ( <i>Tilia caucasica</i> ), oriental sweet chestnut ( <i>Castanea sativa</i> ), Caucasian hornbeam ( <i>Carpinus caucasicus</i> ), and walnut ( <i>Juglans regia</i> ).  Alpine and forest habitats support threatened east Caucasian goat or tur ( <i>Capra cylindricornis</i> ).	Proposed protected area comprises threatened alluvial floodplain forest, pistachio woodland, and steppe communities, which support highly diverse flora and fauna including gazelle, hyaena, bear, griffin vultures, and concentrations of migrating raptorial birds.	Central Caucasus forests support dwindling numbers of endemic West Caucasian goat or tur ( <i>Capra caucasica</i> ), and endangered yew trees ( <i>Taxus baccata</i> ), Georgian hazelnut ( <i>Corylus iberica</i> ), and Bichvinta pine ( <i>Pinus pithycesa</i> ).
Current Status	Three small nature reserves (total, 10,109 ha) within the proposed national park	Existing reserve (17932 ha)	A single nature reserve (8034 ha) within the proposed national park	No protected areas

<p>Main Threats</p>	<p>Habitat loss and fragmentation due to conversion of riparian forests to agricultural land</p> <p>unsustainable forest management</p> <p>illegal hunting of large mammals such as tur and chamois.</p> <p>unsustainable use of summer pastures and subalpine birch forests: severe overgrazing, exclusion/ competition with native fauna, and sedimentation of streams from erosion of shallow top soils</p> <p>loss of animal breeds such as the Tusheti horse, Tusheti sheep, Caucasian dog – breeds selected for the local environmental conditions, endurance, milk/meat/wool productivity.</p>	<p>Illegal hunting of large mammals, especially tur and wolf</p> <p>habitat loss through overharvesting adjoining existing reserve, adversely impacting ecological viability of reserve</p> <p>conversion of oak, elm forests to agricultural land and scrub.</p>	<p>Overgrazing of steppe communities, mainly by sheep herds on the fall and winter range (moved from Tusheti) but also cattle.</p> <p>illegal and unmanaged hunting attendant human disturbance to native ungulates and carnivores</p>	<p>illegal hunting of large mammals</p> <p>forest habitat loss and fragmentation due to conversion of riparian forests to agricultural land</p> <p>under-managed and illegal timber and fuelwood harvesting</p>
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<p>Key interventions</p>	<p>Gazette national park, administration, and strengthen staff and wardens to control illegal activities and promote sustainable tourism.</p> <p>Develop revenue account to help finance investments through entrance fees, sponsorships, etc.</p> <p>Implement protected area management plans and integrate into regional development needs.</p> <p>Implement habitat conservation plans and corridor planning in adjacent forests</p> <p>Maintain Tusheti horse and sheep breeds, and linkage of the biological and cultural landscapes through:</p> <ul style="list-style-type: none"> <li>• technical assistance in animal husbandry</li> <li>• increase public awareness and seek support from NGOs and herder organisations to maintain genetic resources, form breeders organisations</li> <li>• organise farm shows to showcase endemic breeds</li> </ul>	<p>Expand reserve (by 25,000 ha) to include key threatened alpine and forest habitats.</p> <p>Implement specific management plan and strengthen protected area management with emphasis on anti-poaching</p> <p>Collaborate with Forestry Department to develop wildlife corridor under appropriate forest management regime</p> <p>Transboundary cooperation with Russia (Dagestan) on wildlife corridor and poaching issues</p> <p>Monitoring of key species as indicators of ecosystem viability and recovery</p>	<p>Gazette an extended areas as a national park, strengthen staff and wardens to control illegal activities</p> <p>Pilot best practices in sustainable grazing management</p> <p>Develop ecologically appropriate tourism with strong links to the Cultural Heritage Project.</p> <p>Transboundary cooperation with Azerbaijan to address poaching issues</p> <p>Monitoring of key species as indicators of ecosystem viability and recovery</p>	<p>Develop protected area plan and wildlife corridor plan for Central Caucasus region, in collaboration with Forestry Project.</p> <p>Develop regional support groups to guide local efforts to create/expand protected areas</p> <p>Regional training workshops to build on best practices developed in the eastern Caucasus and transfer expertise and skills.</p> <p>Transboundary cooperation with Russia on wildlife corridor and poaching issues</p>
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<p>Key interventions (cont'd)</p>	<p>Demonstrate best practices in range management, through:</p> <ul style="list-style-type: none"> <li>• development/implementation of grazing plans that address technical issues and options and choices in sustainable land tenure</li> <li>• formation of pastoral user associations for planning and conflict resolution</li> <li>• establish position of rangeland management unit for the protected areas (probably one range management specialist, with some laboratory and logistic support)</li> </ul> <p>strengthen transborder cooperation. Local NGO 'Flag of Tusehti', has support of Chechen NGOs and authorities for such activities.</p> <p>Monitoring of key species as indicators of ecosystem viability and recovery</p>			
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