

Project Name Armenia-Natural Resources Management (@)...
and Poverty Reduction Project

Region Europe and Central Asia Region

Sector Natural Resources Management

Project ID AMPE57847

Borrower(s) REPUBLIC OF ARMENIA

Implementing Agency
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Environment Category B

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1. Country and Sector Background

Rural poverty. Since the dissolution of the former Soviet Union, Armenia has suffered a number of serious setbacks that have led to the impoverishment of many rural communities, especially in the remote mountain and border areas. The withdrawal of Soviet subsidies and markets has destroyed industries that once provided employment and has led to the deterioration of rural infrastructure. At present, some 55% of the Armenian population is classified as poor. Rural poverty is particularly evident among those living in high altitude mountain areas such as Tavoush and Gegharkunik. The primary activity of approximately 70 percent of rural households in the project area is subsistence farming with small amounts of agricultural surplus bartered in local markets. Remittances, pensions and day labor provide cash. The rural economy has provided a "safety net" during the crisis years and absorbed a significant share of Armenia's excess labor, as rural communities have been able to buffer themselves somewhat through their access to natural resources. The majority of farmers are cash constrained and are unable to invest in their land and pasture, which leads to slow mining of renewable natural resources. By the same token, rural people have had little choice but to exploit the natural resource base for survival. For example, timber and non-timber products in Dilijan State Reserve are illegally harvested, as are fish of Lake Sevan. Over time, this "mining" of natural resources has led to severe degradation of forests, fish stocks, pastures and soil, with consequent loss of habitat and decline in indigenous flora and fauna. Declining soil fertility and degradation of pastures. Since the transition land that is near villages, where cost of access is lower, is

farmed more intensively, while remote land is left idle. More intensive farming of land near villages has led to reduced application of crop rotation techniques, leading to declining soil fertility and nutrient mining, while use of production inputs that could protect the soil from exhaustion remains sub-optimally low. At the same time, inappropriate farming techniques, especially on slope lands, have increased soil erosion. It has been estimated that more than 60% of Armenia's arable land now needs improved soil management. Grazing patterns, like crop production patterns, have undergone a fundamental shift since the economic transition began. Small average household livestock numbers, collapse of organized grazing arrangements, high costs of accessing more distant pastures, and limited availability of labor have led to increased use of pastures located around villages. These areas have become subject to heavy pressure from overgrazing, even while carrying capacities have improved in Armenia's pasturelands as a whole, and while more-remote summer pastures and Alpine meadows are underutilized. Pressure on village pastures is further increased by the shortened pen-feeding periods that are increasingly farmers' practice as winter fodder and farm by-products become relatively more expensive. In a further turn of the vicious cycle, declining livestock productivity has pushed households to generate income through increasing their livestock numbers, which have added further pressures on pastures. Most community pastures are now overgrazed, subject to various forms of degradation that range from change in vegetative cover to generation of erosion centers, leading in turn to landslides and mudflows. Degradation of forests. The rising cost to Armenians of other fossil fuel sources has increased reliance on wood as a source of heating and cooking fuel, in both rural and urban areas. The demand for wood, including both fuel wood and also the timber illegally harvested, now seriously exceeds the sustainable cut, resulting in significant loss of forest cover from year to year. Overgrazing in forest areas contributes to loss of forest cover. For all these reasons, forest cover has diminished 10% over the last ten years. Moreover, as a result of overlogging, soil erosion has increased in the mountain areas, contributing to increased siltation of irrigation structures and surface waters. An inadequate legal and policy framework for forest stewardship exacerbates these problems, and sustainable management of forests is limited by the weak capacity of the Forest Administration (Hayantar) to implement or enforce sustainable forest management practices. Weakness of protected areas network. Armenia has a network of protected areas. However, the network is geographically fragmented. In a number of cases, park boundaries omit areas of high biodiversity value that are just beyond the boundary, while including large-scale farming areas and high-intensity tourism sites. In addition, the reserve, recreation and economic zones are far too broadly defined. In addition, management effectiveness is very low. The various environmental and conservation laws, decrees and regulations developed over the past decade do not provide a clear and effective enabling environment for protected areas management, and the protected areas generally operate as "paper parks." Management of natural resources within both protected areas is largely restricted to minor enforcement of laws and regulations. Monitoring systems are not well developed. Communication and transport equipment required for even a minimal level of management and enforcement is lacking. Infrastructure development and maintenance is nonexistent due to financial constraints. Outdated materials and the poor condition of visitors' centers hamper public awareness and education programs. Scientific studies within

protected areas have been very limited in the past decade and are not well integrated into protected management decisions. Planning for biodiversity conservation in protected areas is constrained by weak financial, human and technical capacity, and does not employ participatory management planning or make a primary goal of maintaining ecological integrity. Local people are largely unaware of the protected areas system values it protects, while the resource managers often view communities in the vicinity as enemies rather than potential partners in biodiversity conservation. Global importance of Armenia's biodiversity. Besides being of vital importance to those whose subsistence depends on them, the habitats and ecosystems under threat have global biodiversity significance. Armenia is located in the Caucasus Eco-Region, one of the Global 200 Eco-Regions, at the crossroads of three biogeographic zones, the European, Central Asian, and Middle Eastern. This eco-region includes unusually rich flora, fauna and natural landscapes and ecosystems. Armenian habitats contain nearly every plant community found in the southern Caucasus and 50% of the region's floral diversity; a great variety of landscape zoning and climatic conditions in Armenia has resulted in the generation of plant forms in diversity centers independent of each other. These species are notable for their productivity and their resilience to unfavorable conditions, diseases, and pests; they constitute a significant basis for conservation of agro-biodiversity. However, biodiversity is threatened by natural resource mining. Increasing pressures on critical rangelands and forest habitats have reduced to isolated areas of globally significant biodiversity, making the movement of wildlife increasingly difficult. Even within protected areas such as Dilijan State Reserve, for example, many demarcated "protected" areas are becoming small islands rather than part of a larger mosaic of protected ecosystems inside and outside park boundaries. Under-use of remote cropland and pasture also threatens agro-biodiversity, which depends on interaction with agricultural activities such as grazing and mowing. Due to the difficulty of access to them, many meadows are no longer used and may lose their global ecological value. Rich forest biodiversity is subject to heavy pressure as well. Illegal logging often completely removes dominant trees and species, resulting in the loss of wildlife habitats in the forest ecosystem. In the legal sector, the historic forestry orientation of Armenia's resource managers means that they tend to support stand-level interventions, such as removal of over-mature trees and deadfall in accessible forest areas. In contrast to this, broader ecosystem management would allow some areas in different forest cover types to follow natural cycles, providing ecological and socio-economic benefits other than simply maximizing sustainable timber yields. As for Armenia's fauna, about 330 of the 17,500 species found in Armenia are listed as rare or declining. The Armenian Red Book lists 99 vertebrates, among which are many considered internationally threatened by the IUCN. Government Strategy The immediate development goals of the GOA include restoration of macroeconomic stabilization and mitigation of possible social impacts of the economic hardships on the poor. In that context project objectives provides the necessary linkage to address rural poverty through improved and sustainable use of natural resources. The following reform policies are relevant to the successful implementation of project interventions: Reduce rural poverty. The immediate development goals of the Government of Armenia include mitigation of the social impact of the transition on the poor, and the Interim Poverty Reduction Strategy Paper (I-PRSP) identifies conservation and improved management of natural resources as one of

Armenia's priorities in attacking poverty. Reverse declining soil fertility and degradation of pastures. To reverse the spiral of poverty and natural resource degradation, the Government has initiatives underway to make agriculture more profitable and meanwhile to increase the incentives for good management of natural resources. The Government's strategy in agriculture includes further liberalization of the agriculture sector, support for the development of agricultural support services, and halting the deterioration of basic agricultural infrastructure. The Government is also committed to land-use policy reform and establishment of a functioning land market. Steps have been taken to establish a legal framework for land registration and titling. Land ownership is expected to increase incentives for sustainable land management. In the meantime, the Government has been granting short-term leases of state pasture lands to local households and communities. The Government has recognized, however, that these short-term leases have had a negative impact on the lands involved. In order to address the disincentive for sustainable management that is inherent in such leases, the new Land Code (adopted in 2000) sets up the legal framework for long-term lease arrangements. The Government plans to undertake transfer of pastures to local communities on a long-term basis. Restore forests. The Government of Armenia intends to declare the 21st century the century of Armenia's reforestation. It has initiated a process of reform in the forestry sector that aims to rationalize the functions of different state institutions, resolve overlapping responsibilities, and update the professional knowledge and skills of foresters. The Government has made attempts to increase the flow of revenue from utilization of state forests in order to generate the budget resources needed for forest management activities. To that end, it has set out to improve collection of taxes and social fees among citizens and enterprises and to better control black market activities in the forest sector. At the same time, public awareness of forestry issues needs to be raised, and the Government intends to re-institute community forests and facilitate local participation in forest management in rural areas. Conserve biodiversity and strengthen protected areas network. Armenia ratified the Convention on Biological Diversity (CBD) in May 1993. Recognizing the importance of contributing to the international effort to mitigate greenhouse gas emissions, Armenia also ratified the UN Framework Convention on Climate Change (UN FCCC) in May 1993. In order to fulfill the basic provisions of these conventions, Armenia has committed to contribute to international objectives by developing two national projects (i) First National Report to CBD and Biodiversity Strategy and Action Plan (BSAP), and (ii) Country Study on Climate Change, which were funded by GEF. As a result, Armenia has identified at national and regional levels, natural ecosystems and spheres of activity that are most vulnerable to climate change effects and ecological consequences that need to be addressed through practical actions. Armenia's strategy for biodiversity conservation, as identified in its National Environmental Action Plan (1999) and BSAP focuses on sustainable development of landscapes, building human capital and increasing financial investments to achieve improvements in four key areas: (i) institutional and community activities in sustainable development and the legal framework that would enable it; (ii) public awareness and participation; (iii) protected area network planning and management; and (iv) safeguarding of flora and fauna through mainstreaming of biodiversity conservation in agriculture, forestry and other sectors. The Government has established a National Steering Committee for the implementation of the BSAP. The Committee will form one avenue for

mainstreaming biodiversity conservation into central and other line Ministries. The Committee comprises the Minister of environment (chairman), Deputy Minister, head of International Relations Department, head of Department of Fauna and Flora, the CBD focal point, representatives of the Ministries of Agriculture, Education, Economy and Finance, Industry, Trade, and Tourism; representatives of the National Academy of Sciences, NGOs, UNDP, and the World Bank.

2. Objectives

Development objective. The project's development objective is to promote adoption of sustainable natural resource management practices and alleviation of rural poverty in the Tavoush and Gegharkunik districts of Northern Armenia, mountainous areas where degradation of natural resources is now reaching a critical point. The project will help avert further deterioration of natural resources (soil, water, forest, fishery, and biodiversity), stabilizing incomes in the local communities that depend on these resources. Natural landscapes in the project area are managed by the following Government institutions: state forests are managed by Forest Administration (Hyantar) under the Ministry of Nature Protection (MONP); protected areas are managed by the Department of Bioresources and Land Protection of MONP; and Village Councils (Haymanks) have legal responsibility for community pastures whilst overseeing management of privately held land within the village area. Since the end of Soviet times, the landscapes have not been managed in a planned or coordinated way. As a result of this, and the economic hardship experienced during the past decade, the natural resource assets of Gegharkunik and Tavoush marza are degrading. Global environmental objective. The global environmental objective of the proposed project is to preserve the mountain, forest, and grassland ecosystems of the Southern Caucasus, through enhanced protected area and mountain ecosystem conservation and sustainable management. Project Background Armenia is a mountainous country with a territory of 29,000 sq. km, and a population of 3,740,000 people. More than 50% of the population is rural and living in poverty. Only 28 percent of the land area is below 1,500 m elevation. The mountain ecosystems of Armenia are a productive asset that produces a valuable flow of goods and services of local and global significance. Unsustainable exploitation of natural resources is eroding the asset's productivity. The project area include a variety of mountain, forest, meadows, aquatic and steppe ecosystem, which host a significant share of country's biodiversity resources. Forests in the project area have a significant role in fauna conservation and creation of the transboundary wildlife corridor between Armenia and Georgia. Two main protected areas in the geographic area of the project are the Sevan National Park (1,500 sq.km) and Dilijan State Preserve (280 sq.km). In addition the area is rich for its cultural heritage amenities, which together forms a unique ecosystem which has significant potential for developing eco and natural heritage tourism. The proposed project is a long term investment for sustainable management of the country's natural resources.

3. Rationale for Bank's Involvement

The project is a logical follow up of the NEAP and Lake Sevan Action Plan, which identified a set of national priorities and will continue the support to the implementation of a number of measures of the environmental reform agenda. The project is in full correspondence with the NEAP and LSAP and BSAP priorities. The value added of Bank support in this project

lies in its global experience in: (i) developing and implementing community-based strategies for natural resources management; (ii) establishing a community based institutional arrangements for natural resources management; and (iii) acting as a catalyst for mobilizing co-financing from various multilateral and bilateral sources to contribute towards project needs and future investments. Furthermore, the Bank's involvement would promote valuable lessons and initiatives tested by the project to be scaled up into a larger program in the future and to be used for the development and implementation of the similar initiatives in other CEE/NIS countries. The GOA has indicated its interest to use the project implementation experience to potentially replicate the project activities on a nationwide scale. Specifically, the project implementation experience will be used to replicate project activities as part of a national system of protected areas. The GEF value added comes from its global experience in the design, implementation, and financing of biodiversity conservation projects. GEF support is justified by the global importance of the province's biodiversity and by the unique opportunity to strengthen the management of globally and regionally important protected areas. The Bank's suite of GEF and biodiversity projects in the Caucasus region provides opportunities for promotion of exchange of ideas, cross-fertilization with other GEF projects in the region, and strengthened trans-boundary cooperation in biodiversity monitoring and evaluation, review, and scientific oversight. Finally, the value of the GEF support comes from providing additional funds in a form of grants to allow the farmers to be involved in biodiversity conservation projects. Without the Banks and GEF support the GOA and NGOs will not be able to ensure protection of Armenia's diverse and abundant biodiversity, which is likely to continue from unsustainable timber and fuel wood harvesting, overgrowing and associated disturbance, illegal hunting and habitat loss and fragmentation.

4. Description

1a. Description of project areas. Project intervention will focus on Gegharkunik and Tavoush marzes located in Northern part of Armenia. The area of Gegharkunik marza is 4,055 sq.km, out of which Lake Sevan National Park consists of 1,500 sq. km. The altitude range in the marza is 2,000 to 3,500 m, and total population is 277,000 thousand (175,000 rural, which is 84% of total). It is estimated that extreme poverty in the area ranges from 30% to 70% depending on location. The area of Tavoush marza is 2,688 sq.km, with total population of 156,000 (98,000 rural which is 79% of total), of which Dilijan State Preserve consists 290 sq. km. Total area covered with forests in Tavoush is 131,800 ha. Altitude range in the marza is 400 to 2,800 m. Poverty is high among the 62 communities, where extreme poverty ranges from 30% to 70% depending on location. The GOA has identified these two marzes as priority sites where project approaches will be piloted. Tavoush marza has the largest share of forest resources of any district in the country. Gegharkunik marza is selected because of strategic location of the Lake Sevan, which is the largest water basin in Armenia that has high economic, environmental and cultural heritage values. Both marzes have above national average rural poverty levels (51%, 72% and 65% for Armenia, Tavoush and Gegharkunik respectively). 1.b Project Components: The project will include four components: 1. Community-based Watershed Management; 2. State Forest Management; 3. Protected Areas Management and Biodiversity Conservation; and 4. Project Management and Administration. Component 1. Community-Based Watershed

Management. This component will focus on Gegharkunik and Tavoush marzes located in northern Armenia. At the outset, it will focus on eight watersheds in these marza, including nineteen communities. However, identification and selection of additional watersheds will start during the second year of project implementation, based on agreed selection criteria. The component would support preparation and implementation of community based micro-catchment rehabilitation plans. The plans will be generated by the community selecting from a menu of activities developed by the project (presented below). Participating communities will be eligible to apply for small grants to support small-scale local initiatives related to biodiversity conservation. The menu of options from which communities will choose is as follows:

- 1.1: Community forest management. Support will be provided for preparation and implementation of community forest management plans including: rehabilitation and enriching of forests (under planting), reforestation and afforestation, thinning and tending, rehabilitation of forest pastures, demonstrations of sustainable pig-beech-oak silvo-pastoral agro-forestry; and demonstrations of bio-gas production installations.
- 1.2: Community small-grants for biodiversity conservation. Participating communities will be eligible for financial assistance (maximum \$5,000) to support local initiatives which benefit biodiversity conservation either directly or indirectly by supporting local livelihoods and reduce pressure on the protected areas and biological resources.
- 1.3: Community pasture management. This activity will undertake improvement of the management of natural grasslands and hay meadows in the project area, including rehabilitation of hay meadows, indigenous reseeding, rotational grazing and restoration of degraded pasturelands, construction of livestock watering points and re-introduction of forage legumes into crop rotations.
- 1.4: Sustainable agricultural practices. Financing will be provided for demonstration cultivation of improved variety of rainfed barley and wheat, improved soil fertility and improved methods of animal husbandry, and bee-keeping. The project will assist communities participating in the IFAD-supported irrigation project or the USDA agricultural-marketing project.
- 1.5: Community infrastructure and income generation. The project would also support small water-collection systems for irrigation, restoration of field tracks and culverts, road network rehabilitation for management and protection of community forests, and measures to control land slides and gully erosion. In collaboration with IFAD, the project would support improvement of small-scale on-farm irrigation systems. Other opportunities will be identified during implementation.
- 1.6: Development of Community Institutions. Logistical support will be provided to village councils, marza-level organizations and village resource user groups to develop capacity to implement and monitor watershed and community forest plans. The project would finance small works, equipment, work hire and materials (e.g., seeds, tree seedlings, inputs, and fertilizers) and technical assistance (resources planning, training, outreach and awareness, and demonstrations). Communities are expected to contribute their labor. GEF funds would finance technical assistance for measures to conserve forest biodiversity and to co-finance the costs of recovery of alpine meadows and steppes, including re-seeding with indigenous grass species, native wild fruit trees and non-wood forest products.

Component 2: State Forest Management. It will support rehabilitation, protection and sustainable management of state forests in the project area; improve the forest sector's institutional, legal and policy framework; and enhance institutional capacity to monitor and control forest operations.

- 2.1:

Demonstrate improved forest management practices. This sub-component will undertake: (i) preparation of modern multipurpose state forest management plans in state forests; (ii) pre-commercial thinning and thinning of pole stands in naturally regenerated forests; (iii) measures for regeneration of over-mature, partially disintegrating stands by applying group selection felling and low-impact harvesting methods; (iv) reforestation of overlogged stands and afforestation of blanks in forests; (v) protection of forests against fires and insects; (vi) rehabilitation of road network for implementation of the approved forest management plans and for efficient forest protection; (vi) measures for strengthening the operational capacity of the forest service (Hayantar) and its local branches as well as to rehabilitate its offices and equipment. 2.2: Strengthen legal and institutional framework and increase human resources capacity for sustainable forest management and biodiversity conservation. This component will increase national and local capacity for implementation of sustainable forest management programs. I would support: (i) review and improvement of forest-related legislation; (ii) improved marketing and pricing of forest products, including initiatives to reduce illegal logging and to undertake forest certification; (iii) organizational reform of Hyantar; (iv) development and execution of training programs for staff of Hyantar, protected areas, extension and inspection services; (v) establishment of a national forest and biodiversity training center in Zikatar. SIDA will provide technical assistance for studies, training and capacity building. GEF funds will be used for training and awareness activities, mainstreaming of biodiversity-conservation issues into national forest laws, and development of regulations and forest management plans. Component 3: Protected Areas Management and Biodiversity Conservation. This component will support measures to: (i) improve the role of two key protected areas (Lake Sevan National Park and Dilijan State Reserve) in the conservation and sustainable use of the region's biodiversity, and sustain these improvements; (ii) improve the capacity of the Department of Bioresources and Land Protection of the MoNP to meet its biodiversity conservation mandate inside and outside protected areas - including mainstreaming of biodiversity in government policies and laws as well as activities of the line ministries and marza governments. 3.1: Improve the management of Dilijan State Reserve and Lake Sevan National Park. This sub-component will support preparation and implementation of new management plans for Lake Sevan National Park and Dilijan State Reserve. The management plans will review the boundaries of these protected areas and propose more effective boundaries and zoning. The planning process will take the view that protected area management plans are tools to address a wide variety of demands and values (biodiversity, human, cultural, socioeconomic) with a primary goal of conserving globally and nationally important biodiversity. In the case of Dilijan State Preserve, the management plan will be input for the decision of the Government of Armenia concerning the Preserve's proposed change in status. Specific activities under this component will include: (i) preparing participatory protected area management plans; (ii) developing monitoring systems and undertaking applied studies in support of improved management; (iii) providing professional development and training for protected-areas staff and local stakeholders; (iv) providing environmental education and public community programs to build local awareness of the protected area's multiple objectives and encourage participation of local communities; (v) establishing park infrastructure and logistical support at Dilijan State

Reserve and Lake Sevan National Park.3.2: Build capacity in the MoNP to administer the system of protected areas, and build public awareness of biodiversity conservation. Specific activities under this sub-component will include:(i) reform of key legislation and regulations concerning conservation of flora and fauna of protected areas; (ii) mainstreaming biodiversity conservation into the planning and policy processes of central and sectoral ministries; (iii) strengthening information dissemination; (iv) rapid assessment of biodiversity conservation at the landscape level; (vi) strengthening of transboundary cooperation in biodiversity monitoring and protected-areas management. Component 4: Project Management and Administration. This component will support project administration and implementation. The project will finance the incremental operational costs of the project management team, essential technical assistance for project management (e.g., financial management and procurement training, project audit, institutional coordination, implementation assistance to communities and public sector training for capacity building, basic equipment and facilities, and the operating costs of the PIU).

5. Financing

| | Total (US\$m) |
|--|----------------|
| GOVERNMENT | 1.51 |
| IDA | 8.31 |
| GLOBAL ENVIRONMENT FACILITY | 5.12 |
| SWEDEN: SWEDISH INTL. DEV. COOPERATION AGENCY (SIDA) | 1.08 |
| Total Project Cost | 16.02 |

6. Implementation

Project Management Board. The Project Management Board (PMB) established for the preparation of the project will continue functioning during the implementation phase. The Minister of Nature Protection will chair the PMB with membership from Ministries of Finance and Economy, Agriculture, Social Welfare and State Department of Cadastre who be represented on the Board. Representatives of Tavoush and Gegharkunik Marzes will have a deliberative voice in the PMB. On behalf of the Government the PMB will have the responsibility for overall supervision of project activities including approval of annual work plans and budgets and inter-agency coordination. Project Lead Agency: Ministry of Nature Protection (MoNP) will be the lead agency responsible for project implementation in close coordination with other stakeholder agencies and beneficiary groups. However, the Department of Forestry (Hayantar) will be responsible through its district branches for implementation of Component 2, "Forest Management," under the supervision of the MONP and PMB; while Component 3, "Protected Areas Management," will be the direct responsibility of the Department of Biodiversity and Land Protection in close coordination with the PIU, administrations of Lake Sevan National Park and Dilijan Nature Reserve. Hayantar will also provide forest extension services to community for implementation of forest management activities, and the Forest Research Center (FREC) will provide assistance in forest management planning and forest training activities. Project Implementation Unit. A Project Implementation Unit (PIU) has been established in the MoNP. Good inter-agency coordination is crucial for project implementation. The PIU would be responsible for coordinating activities with project stakeholders and government institutions during project implementation.PIU staff in the

Marzes will provide day-to-day implementation support to communities. Specifically the PIU will: (a) provide planning and technical assistance to participating communities in the Marzes; (b) serve as liaison with the Marza governments and local agencies; (c) coordinate project activities with other donor-funded projects in the project area; and (d) popularize project activities and disseminate information. The project will provide logistical support and training for environmental and agricultural departments of the Marza governments that will be involved in monitoring project activities. On behalf of the Government, the PIU will enter into Micro-Catchment (MC) agreements with Village Councils that will specify the MC activities, implementation arrangements, monitoring requirements and budgets of annual village plans. The PIU will help the villages to prepare and implement MC and involve in preparation of community forest management plans. The PIU will contract implementation services, such as technical support and supervision of implementation of annual community work plans, review of design works and supervision of work undertaken by contractors, and will carry out quality control by site visits.

Implementation Arrangements at Watershed Level. Implementation arrangements at the local level will be as set out in the Guidelines for Participatory Watershed Management that were developed during preparation. The project will strengthen existing village-level institutions for project management and administration and support the establishment of informal community-based groups. In each project area, the Marzpeteran's office will facilitate coordination between local stakeholders and participating communities. Local service providers may qualify for provision of technical and implementation services and will be contracted by the PIU on a competitive basis. Existing Agricultural Support Centers could be contracted to assist village Resource Management Associations in planning and implementing community-based soil control, forestry, pasture and resource management sub-projects, farmers' training and extension support. The PIU will be responsible for independent monitoring to ensure efficient and transparent use of project funds by communities. Such monitoring will be carried out through frequent site visits, significant site presence, and preparation and dissemination of public information

7. Sustainability

The project will create conditions for land use that address the sustainability of proposed interventions at watershed and household level; in particular, institutional stability, financial sustainability, and a high level of ownership. Institutional stability is being promoted by consensus-building on the project design among a wide range of stakeholders and by adopting a participatory process throughout. Most of the implementing institutions are at the local level, and therefore strong participation and better coordination among the Ministries responsible for natural resources planning and management (MOA and MONP and Hayantar) and their local departments and district branches are critical for sustainability of project investments. Second, financial sustainability is a clear necessity. This is to be pursued by selection of investments and activities that will generate income streams over time, often in the sense of increased profitability of ongoing natural resources use, and which rural communities and producers' organizations will become capable of managing and maintaining over time. Third, a high level of ownership of the planning and implementation process by project beneficiaries is critical for the project success. Early involvement of key stakeholders

(i.e. village communities, farmers, NGOs, local authorities) in decision making and later during implementation will increase the chances of sustainability. The project will promote equity among community members as most households will gain access to project investments. The sustainability of GEF biodiversity projects elsewhere in the region has been considered good (e.g. Romania, Ukraine). The project will address the problem of financial sustainability by designing the project with activities that promote nature-based tourism, and by strengthening mechanisms for the MONP to collect user fees and other charges that finance the long-term maintenance cost of protected areas.

8. Lessons learned from past operations in the country/sector

Lessons from a review of Bank experience in natural resources management and poverty alleviation include the following. It is important clearly to identify the impact of project interventions on use of natural resources and on the incomes of rural poor who use these resources. The project needs to have clear development objectives and a simple yet flexible monitoring and evaluation system to avoid activities with questionable financial and environmental sustainability or which have little overall impact. The project's rationale, benefits and objectives should be made known to all stakeholders, through consultations and public awareness programs. Substantial capacity often exists at the local and national level, even though project beneficiaries may not be able to fully demonstrate their skills at the outset of project implementation. Beneficiary training and extension programs are important, therefore, to provide the skills necessary to utilize the investments and opportunities delivered by the project in the most profitable and sustainable way. Active participation of project beneficiaries is important in identification of problem and solutions. Activities and strategic approaches will have greatest impact and full ownership by beneficiaries if problems are solved jointly with them, not for them. Capacity and skill transfer to beneficiaries leads to the best results in practice. Project design should be within the limits of the Government's ability to implement the project. Past environmental and natural resources management projects often suffered from over-sizing, attempting to cover diverse issues and placing large implementation/coordination burdens on environmental/natural resources management agencies that are often young and inexperienced. Environment-friendly agricultural activities should establish a link between environmental protection and tangible benefits for local communities and other key stakeholders. The focus of the project on participatory, community-based activities that lead to improved management and conservation of resources should be maintained; focus should not be transferred to a rural development project. Lessons learned from other Bank projects in Armenia point to additional critical issues. It is important that the project addresses the need for better inter-sectoral and inter-agency coordination of implementation activities. Sufficient time should be allocated for planning to ensure adequate participation of local population in project activities and full response to new ideas proposed by the community and its individual members. Decentralization of decision-making to the local level is critical to make the project demand-driven and to strengthen project ownership among beneficiaries. There is a critical need to strengthen the capacity of local government staff and communities so that they can fully participate in the preparation and implementation of the proposed project activities. In accordance with GEF guidelines a STAP review was undertaken. The review

was generally positive and approval by GEFSEC was recommended.

9. Program of Targeted Intervention (PTI) Y

10. Environment Aspects (including any public consultation)

Issues : Environmental Assessment. Based on the Environmental Assessment conducted during preparation, the project is classified as Category B. The project objectives are to achieve a range of positive environmental and social impacts, and the components of the project have been designed to enhance the positive outcomes and to also include mitigation measures for possible adverse or negative impacts. The EA process involved a secondary assessment of possible impacts, both positive and negative as well as an assessment of the proposed enhancement and mitigation measures. The project will have an overall positive environmental impact by reversing current trends of natural resources degradation in mountainous areas through improved watershed management. The project will have positive impact by conserving globally and nationally significant biodiversity in two protected areas and in watersheds in the project area. The environmental benefits of improving natural resource management would include increased productivity of grazing lands, better protection against soil erosion, and more sustainable use of biological resources. In the short term, unsustainable forest and pasture use in the project areas would be reduced. These benefits are expected to have a noticeable impact before the end of the GEF funding. The primary major impacts are not individually significant but have the potential to be cumulatively significant. Public consultations were held in project communities during project preparation and during the EA public consultations and Disclosure process. Participating communities, stakeholders and interested parties were fully informed of the environmental assessment process and given opportunity to voice their concerns and opinions. Consultations were carried out at two levels: national and local level. Given the nature of the work to be financed under this project, the project is classified as Environmental Category "B." d. Status of Category A assessment: BEA start-up date: 08/15/2001 Date of first EA draft: 10/18/2001 Current status: Final draft completed on December 18, 2001. Public consultations completed in January 2002. Final EA issued February 1, 2002. Proposed Actions: The MONP and PIU will be responsible for ensuring that mitigation measures included in the EMP are incorporated in microcatchment, forest management and protected areas management plans. Status of any other environmental studies: Completed National Environmental Action Plan, Lake Sevan Action Program, and National Biodiversity Strategy and Action plan.

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Note: This is information on an evolving project. Certain components may not be necessarily included in the final project.

This PID was processed by the InfoShop during the week ending March 1, 2002.