GEORGIA

Georgia Forest Sector Development Center
World Bank

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GEORGIA FORESTS DEVELOPMENT PROJECT
LABORATORY ZONE

SECTORAL ENVIRONMENTAL ASSESSMENT

FILE COPY

FINAL REPORT

ANNEXES

June 2001

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Mr. Zaal LOMTADZE - Deputy Minister
Mr. Revaz CHAGELISHVILI - Deputy Minister
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State Department of Land Management
Mr. Temur BEKAURI - First Deputy Chairman of the Department
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Mr. Iva KHITARIDZE - Deputy head, World Bank Project of Agriculture Development, Component of Cadastre and Land Registration;
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ANNEX 2

Forests Development Project (P044800)
Project Summary (December 2000)
GEORGIA
Forests Development Project (P044800)

PROJECT SUMMARY

The Project is proposed to be financed in 2002-2007 by an IDA credit of US$20 million. It is closely linked and coordinated with the Protected Areas Development Project (GEF grant of US$8.7 million).

PROJECT OBJECTIVES AND COMPONENTS

The main objective of the Project is to establish sound forest management systems that would maximize the contribution of Georgia's forests to economic development and rural poverty reduction on an environmentally sustainable basis.

The Project is of critical importance to Georgia's forests and people. With the enactment of the new Forest Code of Georgia (June 1999), Georgia has adopted a legal framework and roadmap for transition to market principles of forest economy, including its possible privatization, while safeguarding the critical environmental, social and cultural functions of the nation's forests. The Project is designed to provide critical support to this ambitious transition.

The Project is expected to be implemented over a period of 5 to 6 years and will include the following five components:

<table>
<thead>
<tr>
<th>Components</th>
<th>Estimated Total Cost (US$ m)</th>
<th>% of Total Cost</th>
<th>IDA (US$ m) for 2000-01 (US$ m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) Support to national forest policy formulation and implementation</td>
<td>6.8</td>
<td>25%</td>
<td>6.0</td>
</tr>
<tr>
<td>(B) Support to efficient and participatory forest management planning</td>
<td>3.3</td>
<td>13%</td>
<td>2.7</td>
</tr>
<tr>
<td>(C) Support to effective forest protection and afforestation</td>
<td>9.5</td>
<td>35%</td>
<td>5.0</td>
</tr>
<tr>
<td>(D) Promotion of private sector participation in sustainable forest management</td>
<td>6.0</td>
<td>22%</td>
<td>5.3</td>
</tr>
<tr>
<td>(E) Project management</td>
<td>1.4</td>
<td>5%</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td><strong>27.0</strong></td>
<td><strong>100%</strong></td>
<td><strong>20.0</strong></td>
</tr>
</tbody>
</table>

PROJECT DESCRIPTION

**Component A. "Support to National Forest Policy Formulation and Implementation" (US$6.8 million).**

Under this component, investments would be made in improving the capacity of the Government of Georgia (GOG) for forest sector analysis, planning and policy formulation, completing the legislation for implementation of the new Forest Code, designing and carrying out appropriate institutional, governance and financial reform in the sector, training of public officials, and raising public awareness in the objectives of the national forest policy.

In particular, this component would support the State Forestry Department (SFD) and other relevant agencies in: (i) finalization and public discussion of new forest regulations supporting implementation of the 1999 Forest Code of Georgia; (ii) development and implementation of a forestry institutional reorganization plan; (iii) development and implementation of a forestry financial system reform plan; (iv) preparation and public discussion of the National Forest Policy and Strategy and the draft law "On Privatization of State Forests in Georgia". A cohesive system of implementing regulations would form initial basis for further forest governance reforms and forest policy formulation. Given this priority, development and discussion of regulations is already carried out under the PPF financing, while the privatization law and national policy would be finalized at the later stages of the project. The
development of the financial system reform plan is also already being financed though the PPF; it would be based on the overall assessment of the national forest resources, evaluation of the governance, transparency and capacity of the private sector in forestry, evaluation of the market prospects for wood and non-wood products, and analysis of all public revenues from forestry, including the setting of stumpage values and the organization of auction systems. The component would then support implementation of this plan, specifically by setting up a Forest Management Information System (FMIS) and training the SFD and core ministries' staff in operating it. The development of an institutional reorganization plan (also financed under the PPF) would lay ground for strengthening normative and regulatory functions of the SFD, rationalizing central and field capacity for its forest management planning and oversight responsibilities and proper coordination with other line agencies, private sector, communities, and civil society. In addition to restructuring the central office, the existing 54 district offices would be replaced with two regional offices and 36 range offices. The component would then provide all the necessary technical assistance, training and incremental logistical means (mainly building rehabilitation, transportation, equipment/materials) to implement this plan. Overall, the most critical elements of this component (development of implementing regulations and reform planning) are financed up-front through the PPF phase (see Box 1 for a summary of activities financed in 2000-2001 by the PPF credit advance of US$0.99 million).

Component B "Support to Efficient and Participatory Forest Management Planning" (US$3.3 million).

Under this component, investments would be made in improving the quality of forest assessment and inventory carried out by the SFD, introduction of integrated forest conservation and utilization planning techniques on a landscape-ecological basis, enabling transparent access to forest management planning process and facilitating public participation in.

In particular, this component would support: (i) a total economic valuation of Georgian forests; (ii) preparation of an improved forest inventory for a model forest area of the Central Caucasus Planning Area ("laboratory zone" - four districts over around 460,000 ha); in the Central Caucasus; (iii) preparation of model land-use and forest management plans for the above areas; and (iv) promotion of public awareness in sustainable forest management through participatory management planning for community and local forests. These activities would be implemented jointly and in coordination with the planning component of the GEF-financed Protected Areas Development Project. The underlying landscape-ecological planning techniques have already been developed using Japanese grant funding under the preparation phase and the field testing, and an initial inventory of 100,000 ha (together with provision of equipment and aerial photography) is being carried out with PPF financing. The component would then support provision of additional equipment, surveys and training to replicate improved inventory and planning on a significant scale outside of the laboratory zone, and additional facilities and equipment for information dissemination.

Component C "Support to Effective Forest Protection and Afforestation" (US$9.5 million).

Under this component, investments would be made in forest protection and afforestation of the most critically degraded forest areas near population centers through improvements in technical capacity of local forest management units and development of public works in community-based forestry.

In particular, this component would support: (i) improved seed production/processing and nursery development, (ii) carrying out an afforestation program over about 3,100 ha, and (iii) carrying out a forest restoration program over about 5,600 ha in the priority zone around Tbilisi. Seed processing and testing operations will be brought together under one existing Seed Centre that will be upgraded. An existing nursery in the priority zone will be expanded/upgraded and used for supplying quality seedlings for afforestation and forest restoration, and as a model for replication in other districts. The afforestation and restoration programs will take place in the priority zone using a combination of community-managed public works and, where appropriate, private contractors using more cost-efficient techniques. These actions will result in the SFD having significantly increased its capacity for collecting, processing and testing quality seeds and producing quality seedlings. They would also facilitate a phased development of community-managed forestry in Georgia (to be supported by parallel donor financing). Moreover, around 40% of the erosion-prone areas in the priority zone will be afforested and 10% of the degraded areas restored.

Component D "Promotion of Private Sector Participation in Sustainable Forest Management" (US$6.0 million). Under this component, investments would be made in development, demonstration, certification and promotion of sustainable forest harvesting and transportation standards and techniques, so as to facilitate the emergence of private sector operators in forestry, as well as in the development of non-wood forest products, hunting and ecotourism on an environmentally sustainable basis.
This component would significantly draw on the technical assistance provided under Component A towards development of the draft law "On Privatization of State Forests in Georgia" where the parts of the national legal and fiscal systems dealing with the possible operations of private businesses in forestry will be revised, simplified and made more stimulating for entrepreneurs. In particular, this component would support setting up a privately-run Business Support Association. The Association would be set up on a full cost-recovery basis and would provide demand-driven support services to interested entrepreneurs (e.g. training in book keeping and management, market intelligence, certification of products and systems and transfer of improved technologies). The Association would be initially operated under contract by the private sector that would eventually be expected to take it over and convert it into a private entity. Furthermore, upon completion of the improved forest management plan in a suitable area of the Central Caucasus 'laboratory zone', the component would support there a privately-run demonstration program of improved, low-impact harvesting and transportation systems and a forest road rehabilitation/construction public program. The program should result in a growing use by private entrepreneurs of independently certified techniques, processes and equipment that are more cost-efficient and environment-friendly. Moreover, the forest road network inside the laboratory zone will be significantly improved through the operation of the road construction unit included as part of the demonstration program introducing improved transportation systems. In addition, the road rehabilitation/construction works under the public program - contracted out to private entrepreneurs – will cover about 225 km outside of the laboratory zone. Lastly, the component would support preparation of a strategy for promoting non-wood forest products and carrying out pilot investments in 2 or 3 selected sites. The component's support should result in increased sales and exports of wood and non-wood products from the private sector and in a greater involvement of the entrepreneurs in the carrying out of forestry operations.

Component E. "Project Management" (US$1.4 million). This component would support overall project administration and provide to the SFD staff hands-on training and technology transfer in project development and implementation, application of fiduciary and anti-corruption safeguards. A number of critical capacity building steps, including setting up the project management unit, training in implementation and procurement planning, monitoring & evaluation, financial management systems, etc. - is being financed up-front under the PPF phase (see Box 1).

IMPLEMENTATION ARRANGEMENTS

The preparation and implementation of the Project is administered by the Forest Sector Development Center (FSDC) - a legal body of civil law established by the decree of the President of Georgia on October 29, 2000. FSDC operates under the overall guidance of a Supervisory Board appointed by the President of Georgia. The Supervisory Board is chaired by a member of the Parliament of Georgia and comprised of officials of the key interested ministries and presidential administration, with participation of the academic and NGO community. (To ensure proper coordination between this project and the GEF-funded Protected Areas Development Project, a significant overlap is ensured in the membership of their respective Supervisory Boards.) FSDC is headed by the Project Director selected in an open tender by a selection commission and approved by the President of Georgia. FSDC reports to the Ministry of Finance of Georgia on financial matters and to the Georgian State Department of Forest Management on technical matters.

TIMETABLE OF PROJECT PROCESSING

- Oct. 1998 - FAO identification report
- March 1999 - FAO preparation report
- April 1999 - Project endorsement by the Presidential Investment Council
- June 1999 - PCD review and Country Director's recommendation for PPF
- June 1999 - new Forest Code enacted
- March 2000 - PPF approval (ratified in July 2000)
- May 2000 - Social Assessment completed
- Oct. 2000 - new PMU established by Presidential decree
March 2001 - draft PAD and PIP
April 2001 - Environmental Assessment completed
May 2001 - Decision meeting, appraisal departure
Sept. 2001 - Negotiations
Nov. 2001 - Board
February 2002 - effectiveness and project launch.

Box 1. Summary of PPF-funded Project Activities

The Government of Georgia has already borrowed US$0.99 million of IDA funds through a PPF credit advance to implement in 2000-2001 the following subset of front-loaded project activities:

(1) Development of improved forest policies and regulations, including (i) finalization and public discussion of new forest regulations supporting implementation of the 1999 Forest Code of Georgia; (ii) development of a forestry institutional reorganization plan; and (iii) development of a forestry financial system reform plan;

(2) Development of improved forest management planning and protection techniques, including (i) total economic valuation of Georgian forests; (ii) methodology of improved forest inventory on a landscape-ecological basis in a model forest area in the Central Caucasus; (iii) participatory management planning for community forests; and (iv) promotion of public awareness in sustainable forest management;

(3) Project implementation capacity building, including (i) setting up a project management unit; (ii) preparation of detailed project implementation, procurement and monitoring and evaluation plans, financial management systems, including project advisory and audit services; and (iii) training of project management unit staff.

Up-front implementation of these project activities under the PPF would generate immediate and sustained benefits to Georgia on their own merit and would also provide favorable conditions for start-up and efficient implementation of follow-on project activities and increase their developmental impact.
ANNEX 3

Forests Development Project
Project Summary (May 2001)
Georgia: Forests Development Project

Project Development Objective

The objective of the project is to establish sustainable forest management systems, which would maximize the contribution of Georgia's forests to economic development and rural poverty reduction on an environmentally sustainable basis.

Project Description Summary

The project would support implementation of national regulatory and financial reforms in the forest sector and capacity building in the State Forestry Department and other agencies dealing with the forest sector; sustainable forest planning and management in demonstration areas, which would serve for replication, and support reforestation in degraded areas.

1. National Regulatory and Financial Reforms: The project would complete the institutional and regulatory reforms initiated with PPF financing, and would support:

   a) Finalization of the forest regulatory framework, including finalization if the subsidiary regulations for proper implementation of the new Forest Code and their harmonization with environmental, budgetary and tax legislation, redefinition of institutional functions of agencies related to the forest sector. This would include development of regulations for the transfer and management of community forests. There would be widespread public discussion of these draft regulations before they are finalized.

   The ongoing transition in Georgia from a centrally planned to a market economy is proving difficult to achieve, particularly in the forestry sector where environmental considerations (a public concern) are very important. Within the framework of the existing National Environmental Action Plan, a National Forestry Strategy was prepared in 1997 by a Georgian governmental team with assistance from the World Bank's Institutional Development Fund. The main objectives of the strategy are to maximize the environmental/economic benefits derived from the forests while encouraging the privatization of forestry activities to the extend possible. It is indicated that reform should be carried out in four ways:

   i) to make possible the development of sustainable forestry development,
   ii) to elaborate financial/ economic management methods,
   iii) to integrate the forestry institutions in the general economic reform,
   iv) to interest international community in supporting forestry development.

   Although the strategy contains very valid elements, such as the necessity to improve land-use planning as well as the overall management of the state forests, there is still a need for further analytical work (clarification/prioritization). In order to obtain fully operational document it is also important public participation in its preparation and implementation.

   Forest Code of Georgia has been approved by the Parliament in 1999, it is a foundation for institutional and policy reforms in the sector, it provides the legal basis for the organization, management and financing of the sector. In order to enact the Forest Code, various supplementary normative acts and regulations have to be prepared. Preparation of regulations listed below will be a guarantee for sustainable forest management and wood resource utilization.

   1. On authorization of local governing and self governing bodies for managing the local forest fund and procedures for separating the local forest fund from state forest fund;
   2. On procedures for allocating designated area of the state forest fund and regulations for permitting forest use, permitting, restricted forest use and banning forest use in this area;
   3. On setting boundaries of the usable state forest fund;
   4. On the system of registry of the state forest fund;
   5. On special requirements for registering protected areas of the state forest fund;
   6. On authorized issuance of biological and chemical preparations to the physical and legal bodies with the purpose of forest protection;
7. On regulations and methods of inventory of animal wildlife in the specific areas of the state forest fund;
8. On the listing of biological, chemical and generic interventions permitted for the purposes of forest protection;
9. On selection and use of plant species for restoring and expanding the state forest fund;
10. On calculating and recovering losses born by the state forest fund due to illegal forest use;
11. On regulations for using non-wood resources of the state forest fund;
12. On regulations for accounting for the state forest fund;
13. On information on the state forest fund and its disclosure to the State Department of Forestry;
14. On regulations for forest protection;
15. On regulations for defining the annual allowable cut;
16. On regulations for producing timber and the secondary wood products;
17. On general regulations for carrying out scientific research and educational activities in the territory of the state forest fund;
18. On preparing documentation for issuing forest use tickets, including calculations of costs required for allocating cutting areas and setting regulations for recovery of these costs.

b) Revision of financial and tax regulations, including
1. Revision of the principles and amount of financing the State Department and other governmental agencies related to the forest sector and identification of the financial resources dispersed in different institutions and intended for the implementation of the same functions. Return these revenues and other existing income and use them to carry out forest protection and management.
2. Revision of forest resource pricing principles and methodologies, including stumpage regulations in order to differentiate by quality and provide stronger incentives for resource conservation;
3. Implementation of administrative regulations in order to carry out forests activities based on the sustainable management principles and allow for better tracking of timber harvesting and export.

According to the present day Budget and Tax laws all stumpage fees collected from the State Forest Fund are directed to local budgets. The Tax Law states that the purpose of adoption of those taxes is the provision of financing of the measures for protection and restoration-reproduction of nature resources. But neither of the legislation act defines its complete percentage volume and the rule of its returning to local forestry. Hence the local authorities do not transfer the above stated income to the adequate body and use it for their local need.

It is necessary to move new introductions to the Budget and Tax Codes and Laws. It will ensure partly return (40-50%) of forest use tax payment to the local forestry.

The calculation and differentiation of forests timber resources stumpage fees need to be studied and regulated. At present it is based on the product market price and is differentiated according to the timber size and the distance between the timber produce place and the nearest railway station. Today the prices are not transparent, in addition the of goods transportation by road is more developed than by railway.

Division of forest timber resources needs to be improved. The rule of carrying out of Auction and fixed price systems are among them. This will stimulate local forest enterprises development/broadening. The mechanisms of price formation should be elaborated.

Forest resources economical evaluation is envisaged by the project. It gives us possibility of state forest fund total evaluation, of registration non-timber resources procuring and usage and support non-timber resources evaluation and their involvement into the local forestry income and Georgian budget.

The following activities should be done:

- To revise existing legislative base in order to carry out Georgian financial policy (the Georgian law of State budget, Tax Code, Forest Code and other under law normative acts);
• Financing of different governmental institutions related to the forest management and State control from the State budget and identify the financial resources dispersed in these institutions and intended for the implementation of the same functions.
• To revise the indicative plan of Georgian economical development in connection with the forest sector;
• To revise the regional (local) socio-economic development plan;
• To revise the branch structure of regional economics;
• To define the part of the forest sector in Georgian total inner product;
• To define the part of the forest sector in commodity circulation;
• To study the price formation on the main forest products;
• To study the forest products market and trade conditions;
• To revise tariffs, taxes, licenses, quota, "special tickets" etc.
• To study the import-export balance;
• To define the methods of registration of the forest sector income;
• To revise the forest sector expenses (direct and indirect), income, currency flow, financing, liquidity, financial reports and the mechanisms of financial control;
• To study the methods of marketing;
• To define the participation of the private sector in forest activities;
• To analyze the financial activities of enterprises engaged in the forest sector;
• To evaluate Georgian investing environment;

c) A national public education and awareness campaign to engage the public about the challenges facing the forest sector to help finalize the new national forest policy and strategy. The project would support equipment, TV, newspaper and other mass media campaigns, consultancy services and training for development of the program, workshops, and a hotline for the local population to send proposals for better forest management. According to social researches there is a high interest of society to participate in forest resources management. Unfortunately, most of people are not aware of their legal rights. Because of lack of information and appropriate knowledge, people try to show their displeasure often in illegal ways (blocking roads etc) and as a rule they react on the results, not on the reasons causing these results. The public control is spontaneous and ineffective. Thus the most part of society prefer to be passive and inert as they see the ineffectiveness of fighting against the illegal actions in forest sector.

It is for the first time that the new Forest Code allows participation of population and public association in the management of the State Forest Fund. According to the Code the issues of regulation of Forest Inventory, division of The State Forest Fund into categories, define the regime of protection of territories of the State Forest Funds, transfer of the State Forest Fund for a term of 5 years for temporary use, as well as the accessibility of the information about condition of the State Forest resources have been guaranteed less the cases stipulated by the legislation of Georgia.

With the purpose of ensuring the publicity the Project plans to elaborate adequate programs, to organize "hot" line in Tbilisi, to use mass media and NGO for informing the wide masses of local population and for finding out their opinion. With this purpose it is planned to create a center favoring the publicity in the Oni region, which through seminars, meetings and conferences will investigate the opinion of the local population about current situation in forests and about forest using, will provide attraction of masses in elaboration of plans of management of local forestry. The training will be organized for elaboration of the programs.

d) Elaboration of the national standards of forestry certification.

The existing situation in Georgian forests needs to be changed, one way is to implement the forestry certification in the forestry sector according to the world standards. This system will help to prevent illegal timber harvesting, decrease forest damages during forest use processes, eliminate illegal timber export, support the implementation of sustainable forest management principles and development of the legal timber trade market mechanisms.

The State institutions of the forestry sector and different non governmental organizations consider that among the certification systems existing in the world, the most suitable for
Georgia is FSC certification system as it have more environmental demands, which are very important for Georgian forests, having water regulative, soil protective and other unique properties.

At present where is no such standards in Georgia and the initiative group who has started independently elaborating them is facing financial and other problems.

The State structures of the forest sector, ministries of economic and environment and the president of Georgia have supported forest certification and expressed their readiness to assist in this activity. The implementation of this component is envisaged by the project. For this purpose it is necessary to form a 3 member unit, equip them with the office space, computer and supply with special literature. Operational costs of the unit should be included in the project.

g) The objective of the forest sector reorganization plan is to provide with a detailed, phased and costed plan for the future role, restructuring and strategic development of the SFD, which will be a guarantee of the Georgian forests protection, management based on the sustainable development principles and increase forests economic efficiency. Necessary studies will be carry out for obtaining a better understanding of the forest department’s present role, management and main activity functions, financial policy of the branch, institutional possibilities and operational activities with identification of the future optimal scenario on the central and regional level. The study should be also done to identify the role and duties of the forestry related state organizations in the field of forest protection, management and state control. This will include forest department’s public purpose activities, not core activities that could be privatized.

It is supposed to unify the regional forest offices with their resources and forestry activities. The public juridical body will be established based on the several forestry. The project will create the necessary material-technical base and be responsible for the reorganized forestry staff training (carry out building rehabilitation, supply with communicative facilities, office furniture and techniques).

Setting up the Forestry Management Information System stage by stage is envisaged by the project. The outputs will be a fully operational FMIS systematizing all forest sector information and carrying out the monitoring.

h) Under the project it is foreseen to merge the forest protection Unit and Forest Inspection under the State Department of Forestry and set up a Unit of Forest Protection and Operational Service. It is assumed that the mobile group comprising ten members will be responsible for controlling/inspecting and monitoring the forest operations at national level. The group will periodically visit the regional offices (including the visits based on the signals received from the local population), in order to inspect the operational activities carried out by the regional officers in accordance with the Forest Code, Cutting rules and other normative acts. Besides the unit will be obliged to reveal and react on all the violations regarding the wood utilization and forest management. For efficient functioning, it is critical that the unit was well equipped, particularly the unit should have one four-wheel drive vehicles for field visits, 5 mobile phones for communication, uniforms and one computer for putting all data into and for monitoring.

2. Improved forest Planning and Management in Central Caucasus Pilot Area

a) The elaboration of the forest management updated plans is foreseen under the project. These plans will improve forest sector organizational, financial, operational and commercial efficiency and optimize its contribution to the total inner product of Georgia. The following activities should be done:

- Elaboration of the new improved forest inventory methodology based on the landscape-ecological and SFM principles. The methodology must consider socio-economical and ecological aspects. Carry out the Forests inventory, using the new methodology in Oni lab.zone first.

- Elaboration of the total forests economical evaluation methodology and testing stage by stage in lab. Zone forests after inventory.

5
Finally, after inventory and total economical evaluation of the forests we will have all information about resources in lab. zone. It will give possibility to elaborate fully operational forest management plans.

The forest management information centre will be an instrument for the implementation of forest policies and will help to increase production from State-forested lands through new forest management plans. Using the information system in the lab. zone the proper computer program and its effectiveness will be identified.

b) The construction and rehabilitation of the forest roads is envisaged by the project. Amortization of old roads and lack of new ones have done ecological and economical harm to forests and the country.

Georgian forests are rich in timber and non-timber resources. It is very important to use these resources effectively and increase the role of forest sector in the countries total inner product. In this case all ecological aspects of sustainable forest management principles should be taken into consideration. In particular the lack of road network causes the press of population on the nearest forests. Which is the main reason of the forests distraction.

For using natural resources, without destroying ecological balance it is necessary to construct new roads in the forests. To conduct forest tending, protection and other forest management activities it is also important to rehabilitate the existing road net-work.

The planned construction of new roads and rehabilitation of existing roads in the Lab-Zone is 45 and 150 km respectively. Geological materials about rock stability as well as updated machinery will be used during constructing new roads to prevent serious damage of the forest ecosystem.

c) Support to improved forest silvicultural operations.

The project envisages the implementation and demonstration of the ecologically improved cutting machinery and cable logging system. Using these systems The Forest Sector will be able to produce timber on the 30-35 degree forest fund slopes without destroying it. Under the project it is foreseen to exam them in the “real” situation, in the lab. zone (2-3 region) and define the real costs and profits in the connection to the existing situation.

As a result the private sector should study and use these systems.

d) Forest protection. 43% of Georgia’s total territory are forest areas. 39,6% are actually covered with forests. Georgian forests are constantly threatened by destructive agents such as fire, wind, insects disease and illegal cutting. Three agents: illegal cutting, forest fires and spreading insect disease were indicated as the main factor of forest losses over the past decade. Together these account for forest losses averaging 3 million Lari. Losses due to pests account for 84% of this sum. The Georgian forest management seriously suffers from the insect and disease. They cause different type of damages such as total defoliation, producing physiological stress and decrease the timber thickness process, local and dispersed type of withering on the large areas of forests.

In nurseries pests diseases often fully destroy nurseries and decrease outputs of standard seedlings.

In Georgian forest management system the most spreaded pests diseases are: Ips typographus, Dendroctonus micans, Ocnemia dispar, Nymia phacorhoehoa etc. The development of the leaves and needles eating pest are the reason of their withering. Pests diseases have damaged fir, pine, chestnut, oak and beech stands in Georgia.

Under the project it is foreseen to study in details pests damaged forest areas, pests spreading dynamics over past five years, define the types of pests and reasons of their appearance, prognosticate pests spreading areas and elaborate effective pests preventive activities. It is also envisaged by this project the restoration-renovation of the pest control laboratory where the methods of the concrete pest preventive activities will be identified, tested and certified (satisfactory to the criteria of the policy of GoG and the WB).

The project will pay much attention to the problems of physical protection, which are very important and actual. At present the forest protection workers of forest management system have not enough knowledge of the Forest Code’s laws and rules. They are enable to use them in everyday life. Insufficient financial support, lack of equipment and labor power force local people to use forest properties (legal and illegal harvesting of timber) and satisfy their elementary needs. This leads to irregular and unsustainable forest use and forests degradation.
Under the project it is foreseen to equip forest protection workers of the forest management system with beepers, uniforms, means of conveyance and communication. It is also envisaged to set up barriers and observation points for control and monitoring.

e) Support to private sector development of non-timber forest products.

The advertisement of non-timber production, hunting and ecotourism is envisaged by the project. The investment would be implemented in the following actions:

1. To elaborate the strategy of non-timber products for advertising and for experimental investments implementation;
2. To inventory of the lab.zone Wild Life and elaborate the hunting strategy;
3. To identify the objects of ecotourism and define the model object in the lab.zone;

For these purposes under the project it is foreseen to implemented two business supporting centers in Oni and Mestia.

f) Support to communal forest management

It should be noted that in 1995 the Georgian Parliament approved the resolution “On Usable and Municipal forests” (No 671-11 7.3.1995) to improve forests tending/protection activities. According to this regulation The Cabinet of Ministry had to transfer to the management above mentioned forests land to the SDFM.

The process became drawling and from 5165000 ha former “Kolxoz” forests land 3326000 ha (64%) is transfered to the forest department up-to-date: Including 172000 ha former “kolxoz” land examined and legally affirmed by the State Committee of Land Management Use and Protection in Oni region and 3154000 ha forest land transferred to the regional self governing bodies without material-technical base and demarcation procedures.

1839000ha is left without supervision. Former “kolxoz” forest land is mainly located near the local population and they use the forests illegally as the source of income, food and energy (firewood).

According to the Forest Code (adopted in 1999) the Local Forest Fund is defined as a part of the State Usable Forest Fund. The juridical relationship on this matter is regulated by the local governing and self governing bodies based on the Georgian legislation and the Forest Code. The rights of the local governing and self governing bodies in local forest fund managing is not defined. The preparation of the project of the Georgian President decree “on authorization of local governing and self governing bodies for managing the Local Forest Fund and procedures for separating the Local Forest Fund from the State Forest Fund” is envisaged by the project.

At present the KFW is financing the establishment of the Municipal forests based on the Borjomi-Kharagauli National Park nearby forests.

3 Forests Restoration – Afforestation in Degraded areas.

The Forests Restoration-Afforestation program envisages to provide nurseries with seed of adequate quantity, species and quality. The nurseries from their side will have enough quality, quantity and seedlings for forests afforestation-restoration.

A) Seed collection, processing and storage

To obtain the adequate quantity and quality seed the following activities should be done:

- Tools for cleaning undergrowth and improving access to existing seed production stands;
- Small storage shelters in each seed production stand;
- Ladders and hand tools to improve cone collection;
- Small tractors to collect and transporting cones to forest roads;
- Renovation of the former seed processing buildings;
- Renovation of selected items of seed processing equipment;
- Equipment and materials for drying, packaging and dewing seeds;
- Set up procedures for testing and certification of forest tree seed;
- Buy the laboratory equipment for seed testing and certification;
B) The renovation of the Sartichala central forest nursery including irrigation system is envisaged by this project. The credit will finance nursery operating and maintenance costs at the first stages. Improved forest nursery will produce high quality seed and seedling for afforestation-renovation works and for individuals. Soon the nursery should be able to cover its costs for labor, machinery and for reinvestment in technological improvements. The long-term goal is to privatize the nursery.

C) Georgian forests are rich in forest resources

3-3) Georgia is rich in forest resources. However, a large part of the State forests are located on mountain slopes. Socio-economical problems which developed in Georgia during the last period, different negative events (illegal cutting for fuel wood production, livestock in the forests etc.) and climate problems have effected on the forests degradation and soil erosion and subsequently on the agricultural productivity. Afforestation programs should be recommenced and focused on erosion-prone areas. The region selected for these works, consists of nine the most damaged districts within a 50 km radius of Tbilisi – “priority zone” where the 3100 ha erosion and 5600 ha degraded areas are foreseen to be afforestate.

4. Project management and monitoring.

The preparation and implementation of the Project is administrated by the Forest Sector Development Center (FSDC)- a legal body of civil law established by IDA Q212-) GE agreement and by the decree No 469 of the president of Georgia. FSDC is operate under the overall guidance of a Supervisory Board appointed by the President of Georgia. The Supervisory Board is chaired by the Chairman of the committee of National Resources and Environment Protection of the Parliament of Georgia and comprised of officials of the key interested ministries and academic and NGO community. The FDSC is headed by the Project Director and has six member staff: Technical Manager, Procurement Specialist, Financial Manager, Accountant, Secretary-Translator and Operational Assistant. The FSDC will report to the Georgian State Department of Forest Management on technical matters and to the Ministry of Finance of Georgia on Financial matters. The FSDC or the Project Implementation Unit (PIU) will elaborate the detailed plans of Procurement, monitoring, and evaluation, necessary for implementation of the project and will be responsible for exact fulfillment of these plans and the WB procurement procedures. The PIU will provide financial management system satisfactory to the WB. With this system all financial and accounting operations will be carried out, according to demands of the WB and the local bank, where the special account of the project will be held.

The PIU will collaborate with the State Forest Department. Special training, envisaged by the project, will help the department staff to be familiar with the WB project implementation, management, and procurement procedures. The project will finance the PIU members training in project implementation procedures, Bank project management approaches, special computer programs and language, PIU office refurbishment, office furniture, financial management computer programs installation and service and operational costs.
ANNEX 4

Forests Development Project
Budget Component (March 2001)
### Table 1: Setting up of Project Implementation Unit (Component A)

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Quantities</th>
<th>Unit Cost</th>
<th>Base Cost</th>
<th>Pry Cost Rate</th>
<th>Tax Rate</th>
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<td></td>
<td>Unit 2001</td>
<td>2002</td>
<td>2003</td>
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<td>I Investment Costs</td>
<td></td>
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<tr>
<td>A Building</td>
<td>Rehabiliation(in Tbilisi) sq m</td>
<td>17,566</td>
<td>9,554</td>
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<td>Renting/maintenance month</td>
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<td>3,000</td>
<td>3,000</td>
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<tr>
<td>Subtotal Building</td>
<td>17,566</td>
<td>12,554</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
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<tr>
<td>B Equipment</td>
<td>Furniture set</td>
<td>5,000</td>
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<tr>
<td>C Vehicles</td>
<td>Car unit</td>
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</tr>
<tr>
<td>Additional vehicle rental veh/month</td>
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<td>1,100</td>
<td>1,100</td>
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<tr>
<td>Subtotal vehicles</td>
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<td>13,100</td>
<td>1,100</td>
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<td>D Technical Assistance</td>
<td>International consultant pers/month</td>
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<tr>
<td>National project director pers/month</td>
<td>12</td>
<td>12</td>
<td>12</td>
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<td>12</td>
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<tr>
<td>Technical Manager pers/month</td>
<td>12</td>
<td>12</td>
<td>12</td>
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</tr>
<tr>
<td>Financial Manager pers/month</td>
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<tr>
<td>Accountant pers/month</td>
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<td>12</td>
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<td>Procurement officer pers/month</td>
<td>12</td>
<td>12</td>
<td>12</td>
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<td>Interpreter/Translators pers/month</td>
<td>12</td>
<td>12</td>
<td>12</td>
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<tr>
<td>Subtotal Technical assistance</td>
<td>54,200</td>
<td>54,225</td>
<td>56,936</td>
<td>59,783</td>
<td>62,772</td>
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<tr>
<td>Subtotal National staff</td>
<td>54,000</td>
<td>54,225</td>
<td>56,935</td>
<td>59,783</td>
<td>62,772</td>
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<tr>
<td>Project audit services</td>
<td>15,000</td>
<td></td>
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<td></td>
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<tr>
<td>Training of project management unit</td>
<td>Equipment</td>
<td>16,000</td>
<td>10,700</td>
<td>10,660</td>
<td>10,628</td>
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<tr>
<td>Training in computer and language skills persons</td>
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<td>14</td>
<td>14</td>
<td>14</td>
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<tr>
<td>Subtotal Training</td>
<td>8,000</td>
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<td>TOTAL INVESTMENT COSTS</td>
<td>123,998</td>
<td>201,427</td>
<td>101,036</td>
<td>103,883</td>
<td>106,872</td>
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<td>B Recurrent Costs</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>A Operation and Maintenance</td>
<td>Equipment</td>
<td>16,800</td>
<td>20,100</td>
<td>21,700</td>
<td>23,300</td>
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<td>Building</td>
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<td>221,527</td>
<td>122,736</td>
<td>127,603</td>
<td>131,772</td>
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<td>Vehciles lumpsum</td>
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<td>4,000</td>
<td>4,500</td>
<td>5,000</td>
<td>5,400</td>
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<tr>
<td>Total Recurrent Costs</td>
<td>140,758</td>
<td>221,527</td>
<td>122,736</td>
<td>127,603</td>
<td>131,772</td>
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Table 2: Support to National Policy Analysis / Planning Capacity (Component B)

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>A. Carrying out of technical/thematic studies</td>
<td>100,000</td>
<td>80,000</td>
<td>70,000</td>
<td>250,000</td>
<td>106,002</td>
<td>106,002</td>
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<td>250,000</td>
<td>106,002</td>
<td>106,002</td>
<td>80,000</td>
</tr>
<tr>
<td>B. Training/setting up of MIS</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
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<td>5,000</td>
<td>5,000</td>
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<td>5,000</td>
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<tr>
<td>C. Total technical assistance</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>D. Total technical assistance</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>E. Other lumpsum</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
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<tr>
<td>F. Total recurrent costs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>G. Total recurrent costs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tbody>
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TOTAL INVESTMENT COSTS = 117,002, 285,700, 254,800, 281,000, 122,000, 122,000, 122,000, 122,000, 122,000, 122,000, 122,000, 122,000, 122,000.
<table>
<thead>
<tr>
<th>Component Costs (US$)</th>
<th>Quantity</th>
<th>Total Cost (US$)</th>
<th>% of Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. General Costs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Production of the S.G.A.</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Building</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Central Office renovation in Thill</td>
<td></td>
<td></td>
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<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2. Office equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. General costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Technical assistance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. International consulting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Technical assistance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. International training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Computer services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Subtotal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Development of forestry institutional reorganization and financial system reform plan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Subtotal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. National coordination</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>F. Subtotal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Carrying on forestry research</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>G. Subtotal</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>H. Total costs</td>
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### Table 4: Support to Private Sector (Component D)

#### Detailed Costs (US$)

<table>
<thead>
<tr>
<th>Parameters (in.)</th>
<th>Unit Cost</th>
<th>For Each</th>
<th>Gross Tax Rate</th>
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<tr>
<td></td>
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</tbody>
</table>

#### I Investment Costs

**A. Improvement of Legal/ fiscal environment**

<table>
<thead>
<tr>
<th>1. Legal Assistance</th>
<th>Total Recurrent Costs</th>
<th>Total Investment</th>
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</thead>
<tbody>
<tr>
<td>International consultants</td>
<td>20,000</td>
<td>106,000</td>
</tr>
<tr>
<td>Local Consultants</td>
<td>72,000</td>
<td>36,000</td>
</tr>
<tr>
<td>Subtotal Legal Assistance</td>
<td>77,000</td>
<td>136,000</td>
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</table>

**B. Setting up of Business Support Centre**

<table>
<thead>
<tr>
<th>1 Building</th>
<th>Rehabilitation (in Table)</th>
<th>2,000</th>
<th>2,000</th>
<th>2,000</th>
<th>2,000</th>
<th>2,000</th>
<th>12,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Equipment</td>
<td>Furniture</td>
<td>15,000</td>
<td>15,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Office equipment</td>
<td>20,000</td>
<td>20,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Subtotal equipment</td>
<td>35,000</td>
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#### II Recurrent Costs

**A. Operating Cost and Technical assistance**

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#### TOTAL Component D

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Total Recurrent Costs: 71,000
Total Investment Costs: 60,000
Total Cost: 392,000
Table 5: Support to Forest Management Planning / Protection (Component E)

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| Table 6: Support to Afforestation and Forest Restoration  
| (Component F)  

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</tbody>
</table>

### 1. Building

- Finishing of Seed Processing Lab construction
  - Quantity: 400
  - Unit: m²
  - Cost: $400,000

- Construction of shelter store
  - Quantity: 460
  - Unit: m²
  - Cost: $460,000

### 2. Equipment

1. Seed to improve seed lot: 1.600
2. Tools to collect 4 transport cases: 12,500
3. Other processing seed equipment: 80,000
4. Subtotal equipment: $51,600

### 3. Technical Assistance

1. International Consultants: 2
2. Training of the SFD staff: 5

### 4. Machinery

1. Tractor attachments: 2
2. Tractor 75-100hp wheeled: 2
3. Mini-tractors (small local): 3

### 5. Transportation Vehicles

1. Micro-bus 12 passengers: 1
2. Light bus 10 passengers: 1
3. Truck 3.4 ton, double axle: 1

### 6. Technical Assistance

1. International Consultants: 1
2. Training of SFD staff: 2

### 7. Afforestation

1. Preforestation of Afforestation Program
2. Taking of SFD supervisors
3. Private Contracts - Afforestation

### 8. Nursey Development

1. Construction of Administration building
2. Renovation of existing buildings
3. Subtotal Building
4. Equipment: 60,000

### 9. Miscellaneous

1. Other SFD activities
2. Subtotal SFD activities
3. Subtotal Total Costs

### 10. Summary

- Total Costs: $160,000
Table 6: Support to Afforestation and Forest Restoration (Component F)

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<th>Parameters (in)</th>
<th>Detailed Costs (US $)</th>
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<th>Parameters (in)</th>
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<tr>
<td>1. Preparation of Restoration Program</td>
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<td>C. Forest Nursery Specialist</td>
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<td>D. Specialist in Afforestation, Social Forestry and Economics</td>
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<td>R. Chemicals, materials, fertilizers, excluding seeds already costed in A</td>
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<td>Quanrty</td>
<td>Unit</td>
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<td>Transport / service vehicles</td>
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<tr>
<td>Equipment</td>
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Table 7: Development of Forest Harvesting and Transportation (Component G)
Table 8: Promotion of Non-Wood Products / Hunting / Ecotourism (Component H) (31.01.01)

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ANNEX 5

Forests Development Project
PID 8124 (May 25, 2001)
1. Country and Sector Background

Georgia is a mountainous country of 5.5 million people, 40% of whom are rural dwellers, with a rich cultural history and a long tradition of respect for their natural heritage. The economy deteriorated after independence, and although the reform agenda is quite well advanced and the economy is growing, per capita GDP (US$970) is still well below pre-1990 levels. Georgia's climate and topography are varied, with rainfall between 600 and 4000 mm per annum and elevations rising to 5000 m. 2.75 million ha (40% of its land area of 70,000 km2) is forested, of which 2.2 million ha are classified as state forests. (24% is classified as pasture land, 11% as arable land and 5% horticulture and tree crops). Deciduous forest species predominate, including beech (Fagus orientalis), which comprises nearly half of the forest area, oak (mostly Quercus iberica), hornbeam (Carpinus caucasica), alder (Alnus glutinosa) and chestnut (Castanea sativa). Conifers including spruce (Picea orientalis), firs (Abies nordmanniana) and pines (Pinus sosnowskyi). Standing wood is estimated at 434 million m3, or more than 80 m3 per person, three times the European average. Much of the forest land is located on the slopes of the biodiversity-rich Caucasus mountains (included in WWF's Global 200 priority ecosystems) and serve a protective function for soil and water in these erosion-prone areas. Only about 20% of forest area is classified as production forest. Forests thus play a key role in watershed protection and are rich in biodiversity; the forests include over 4000 vascular plant species and 573 vertebrates. Georgians have a long tradition of respect for their natural heritage. The forest sector is especially complex because of the broader importance forests play in the social, cultural and economic life of Georgia. Many of the country's historical and cultural sites are found in forests. Georgia's forests were intensively harvested for industrial purposes from the 1930s to the 1960s. Forest policy was then changed, and the forests were managed largely for protection (72%) and recreation (24%) during the Soviet period. The Georgian wood industry benefited from low-cost imports of timber from remote areas of Russia. Since the beginning of the transition the situation has changed. Poverty increased as GDP declined sharply following independence, and phasing out energy subsidies for fossil fuels has led to pressure on the forests for fuel-wood. The loss of cheap wood imports has led timber processors to harvest Georgian forests. Revenues from forest tourism have declined. And Georgian logs have been exported to Turkey, in many cases illegally for very low prices. Finally, the Georgian forest management agency has faced declining budgets and real salaries for forest management and protection. Georgia thus faces major challenges in managing its forests to take account of the new economic circumstances, while balancing the economic, ecological and social demands on its forest resources in a way, which contributes both to sustainable management and to broad-based economic growth and job creation. It is estimated that annual sustainable forest harvest, with good management, can be well over 1.5 million m3 compared with the total harvest presently estimated at 0.8 million m3 (of which 0.43 million m3, or about 52%, is estimated to be unofficial harvest). However, the issue is not the overall level of harvest, but harvesting methods at local level, especially with widespread uncontrolled harvesting, which are wasteful and do not always follow principles of biologically sustainable management and regeneration. Approximately 77% of the harvest is used currently for fuelwood and 23% for timber products. Harvesting and processing have been privatized. With more adequate forest management systems in place, the level of unregulated harvest could decrease...
substantially, and there could be much higher value added from commercial-grade timber. Almost all forest land is owned by the State. The State Forestry Department, with a staff of 3,300 mostly located in the field, is responsible for forest policy and management. Revenues from harvesting are transferred to the Treasury. Most revenues are used by District authorities for education and other expenditures, and budgetary allocation from the Ministry of Finance to the State Forestry Department is insufficient for adequate forest management, in turn reducing further forest revenues. A revision of forest financing policy is necessary. Forest inventories and management plans were prepared according to a 10-year rolling program, but the planning process needs to be revised to take into account the new socioeconomic environment. It is estimated that only 0.5 million ha (17%) of the forest estate have updated forest management plans. About 0.5 million ha of forest were managed by agricultural collective farms (former kolkhozes), and the intention is to transfer them to local communities (sakrebulo); in these areas, close to villages, forest degradation is generally worse than in forests managed by the state. A further issue concerns forest management around urban areas, where land use planning must be undertaken together with other government agencies, and management for local recreation is especially important. Partly because most Georgian forests were managed for protection, the protected area network is presently insufficient. It comprises 2.7% of the land area, and has been managed primarily for research purposes, rather than to assure sustainable conservation management addressing local as well as global and scientific interests. Protected areas, many in forest ecosystems, are the responsibility of the State Department of Protected Areas, Reserves and Hunting. While collaboration with the State Forestry Department is good at local level, there have sometimes been difficulties at national level.

The Georgian authorities are well aware of the recent difficulties. They have prepared a forest strategy in 1996, which emphasized the need to manage the change from a forest management regime oriented towards conservation to one which balances conservation and sustainable use. They have prepared a Biodiversity Strategy and Action Plan. The recently completed National Environmental Action Plan also includes improved forest management as a priority. And the recently approved GEF Protected Area Management Project supports the strengthening of the protected area system. The authorities have, in collaboration with a range of stakeholders, prepared and adopted a new Forest Code (1999). Its major innovations include: (1) defining the principles of protection, sustainable development, and management of the forests of Georgia on the basis of the 1992 Rio Declaration (i.e. proclaiming focus on multiple use of forests and its environmental, economic, social, and cultural dimensions); and (2) allowing for multiple forms of forest ownership (state, municipal/community, church, and private). The Code also allowed for long-term lease of forests and privatization of forest management activities. Delineation of regulatory and oversight responsibilities between the State Forestry Department and the Ministry of Environment was improved. However, further work is needed to make the Code operational and transparent. Many of its important regulatory provisions are not yet effectively applied (due to lack of implementing regulations and the public finance crisis), there remains strong political pressure to reintroduce a temporary ban on commercial logging and on log exports (lifted with enactment of the Forest Code in 1999). Georgia has also borrowed an advance of US$0.99 million under the Bank's PPF (project preparation facility) in order to elaborate the regulations to permit implementation of the Forest Code, and develop concrete plans for forest sector institutional reorganization and financial reforms. The PPF has also financed elaboration of improved forest inventory methodologies, promotion of public awareness in forest management, as well as project preparation. Georgia has also collaborated with FAO and a range of bilateral organizations and NGOs to discuss and review forest management alternatives. With WWF they have undertaken steps to increase public awareness of the principles of sustainable forest management (including options for forest certification). With the German KfW and French GEF, they are preparing a pilot project to test community-based approaches to forest management in areas near densely populated rural settlements. Aware of the broad social and environmental values of forests, the Georgian authorities have also participated in a preliminary "total economic valuation" (TEV) of Georgia's forests supported by the Bank; the exercise when complete will estimate the broad range of "use" and "non-use" values of the forests. There is strong political commitment to manage Georgia's forests sustainably, for the benefit of society as broadly defined.

2. Objectives

The main objective of the project is to establish sound forest management systems which would maximize the contribution of Georgia's forests to economic development and rural poverty reduction on an environmentally sustainable basis.
3. Rationale for Bank's Involvement

The Government of Georgia has sought Bank assistance and advice in the forest policy debate since 1996. The Forest Strategy was prepared with the assistance of an IDF grant, and the Biodiversity Strategy with a GEF grant, the GEF-financed Coastal Zone Management Project includes support for improved management of fragile lowland forests, and the Protected Areas project addresses conservation of forest ecosystems. The Bank has been able to encourage and convene forest policy debates at both technical and at political level. Forestry issues related to trade have been part of the ongoing debate of economic reform. The Bank has also facilitated improved coordination between the environmental and the forest management interests in Georgia, balancing conservation and sustainable development. It has been able to bring its experience with forest reform in other transition economies (e.g. Croatia, Poland, Bosnia, Romania, Russia, Albania) to assist with the debate in Georgia. The Bank-wide forest-policy review which is nearing completion, and a number of new initiatives in forestry (e.g. the World Wildlife Fund/World Bank Alliance for Forest Conservation and Sustainable Use, the Prototype Carbon Fund) is also facilitating a transfer of experiences from other countries. The World Bank is also in a unique position in its ability to relate forest sector issues to IMF-discussions with the Government, the overall economic reform agenda, and other inter-sectoral issues (e.g. energy, environment) through the CAS.

4. Description

The project would support implementation of national regulatory and financial reforms in the forest sector and capacity building in the State Forestry Department and other agencies dealing with the forest sector; sustainable forest planning and management in demonstration areas which would serve for replication, and support more effective forest protection and reforestation in selected priority areas. 1. National Regulatory and Financial Reforms and Institutional Strengthening (total cost US$4.41 million): The project would complete the institutional and regulatory reforms initiated with PPF financing, and would support: (a) Finalization of the forest regulatory framework, including: finalization of subsidiary regulations for implementation of the Forest Code, harmonization with environmental, budgetary and tax legislation, redefinition of institutional functions of agencies related to the forest sector, development of regulations for the transfer and management of community (local) forests, public discussion of these draft regulations(b) Revision of financial and tax regulations in the forest sector, including: (i) revision of the method of financing the State Forestry Department to guarantee for it a sustainable source of revenue to carry out forest management and protection functions; (ii) revision of forest resource pricing principles and methodologies, including stumpage regulations in order to differentiate by quality and provide stronger incentives for resource conservation; and (iii) implementation of administrative regulations in order to allow for better tracking of timber harvesting and exports and improved coordination with the customs administration. Agreement on the mechanisms for implementing these financial reforms would be a dated covenant in the credit agreement (e.g. 12 months after credit effectiveness). (c) Public education and awareness campaign to help finalize the new national forest policy and strategy; secure stakeholder support for a medium term vision for Georgia's forests, equipment, TV, newspaper and other mass media campaigns, consultants' services and training for development of the program, workshops, dissemination, and a hotline for the local population to send proposals for better forest management.(d) Development of improved national standards for certification of forest management and utilization practices (including environmentally safe forest harvesting and forest road improvement/maintenance standards). (e) Capacity-building in the State Forest Department through (i) support for training and re-training programs for State Forest Department central and district staff; (ii) university-level training and research program for the forest sector (iii) implementation of the nationwide forest district rationalization plan (developed under PPF), including preparation of operational business plans for new districts; and (iv) basic rehabilitation of and logistical support to forest offices in Tbilisi, five districts in the Central Caucasus and nine districts with heavily eroded forest areas; (v) phased installation of the national Forest Management Information System (FMIS) on the basis of smaller scale pilot information systems developed and tested in the Central Caucasus pilot area.2. Improved Forest Planning and Management in Central Caucasus Pilot Area (total cost US$9.05 million)(a) Introduction of improved techniques for forest inventory on an ecological basis: (i) Development of ecosystems-based landscape planning and forest inventory approaches using sustainable forest management principles (jointly with the GEF-financed Protected Areas Development Project); (ii) support to a landscape planning, ecosystem-based inventory involving multiple stakeholders; (iii) further development of the Total Economic Valuation of forests and its application and testing in specific model areas of landscape inventory; (iv) detailed forest inventory and management plans in the areas selected for sustainable forest utilization; and (v)
testing of components of a Forest Management Information System (FMIS) prior to their expansion at the national level. (b) Improvement of forest roads for better forest management: (i) Road maintenance and rehabilitation in the areas selected for detailed forest management planning and sustainable forest utilization. An estimated 150 km of roads would be rehabilitated. (ii) A limited length of new road would also be constructed (estimated at up to 70 km) if environmental impact assessments and management plans approved according to Georgian environmental law indicate that these will improve the sustainability of forest management. Their location would be determined following the detailed forest management plans and site-specific studies. (c) Training in improved forest harvesting technologies: (i) Support to improved forest silvicultural operations (appropriate stand thinning and tending, site preparation and improvement) through provision of one improved cable logging system and related equipment to be used in areas with approved forest management plans; (ii) provision of training in this improved technology to small harvesting enterprises in the Central Caucasus. (d) Support to communal forest management: the project would learn from the early experience of the KfW-financed pilot communal forest management project expected to be piloted in 2002-2004 over 15,000 ha of forest in ten communes (sakrebulo) in the support zone of the Borjomi-Kharagauli National Park.. The IDA project would replicate this experience, starting from the 3rd year, over 50,000 ha of community forests in self-selected communes of the Central Caucasus. Assistance would be provided to these communes in preparation and implementation of participatory communal forest/range management plans and development of necessary extension services and training in local forest and range management.3. Forest Protection and Reforestation in Selected Priority Areas (total cost US$11.52 million) (a) Support to improved forest inspection and oversight through (i) a 5 person mobile inspectorate unit to verify forest operations at district level and (ii) strengthening enforcement in the Central Caucasus and other selected priority areas through logistical and equipment support to forest guards. (b) Improved forest protection: support to improved forest pest protection and effective fire management, including pest and fire hazard analysis and diagnosis, laboratory renovation, fire and pest monitoring and support to integrated pest management, including testing and certification of improved pest control methods (according to criteria approved by Georgian law and the Bank operational policy on use of pesticides). (c) Seed collection, processing and storage (seed processing equipment, de-winging, de-coning, propagators for seed germination, lab equipment, complete a building renovation, development of seed certification standards). (d) Renovation of the central nursery buildings and irrigation system, seedling development in the nurseries, and transport of seedlings (e) Reforestation, afforestation and provision of shelterbelts over an approximately 8,100 ha of sloping and degraded land in nine districts around Tbilisi. 4. Project Management and Monitoring (total cost US$1.07 million) (a) Support to project implementation management and monitoring, including procurement and financial management support, and training to State Forest Department staff in Bank project management approaches.

5. Financing
Total (US$m) Total Project Cost 26.05

6. Implementation
The project's implementation arrangements have been approved by the Presidential Decree dated October 29, 2000 and include the following main elements. The project's main implementing agency is the State Forestry Department, with its staff at central and district levels being responsible for technical and policy issues of project implementation. The Ministry of Finance is responsible for the project's financial management and oversight. The project is supervised by an inter-agency Supervisory Board (appointed by a presidential decree) which is chaired by a member of the Parliament and comprised of officials of the key interested ministries/departments (such as Economy, Finance, Environment, Agriculture, Forestry, Land Management, Protected Areas) and presidential administration, with participation of the academic and NGO community. The Supervisory Board would meet at least every 3 months, approve annual reports, work plans and budgets and resolve inter-agency issues. In order to assure coordination with the Protected Areas Projects, its membership is substantially the same as that of the Protected Areas Project. The project management unit is the Forest Sector Development Center of Georgia (FSDC) - founded by the President of Georgia in October 2000 as a "legal body of civil law" with an overall responsibility for implementation of project components, including procurement, administration, reporting and monitoring. FSDC reports to the State Forestry Department (SFD) on technical matters and to the Ministry of Finance on financial matters (with both agencies sitting on the project's Supervisory Board). FSDC has a core staff of seven, including the Project Director, technical manager, financial manager, accountant, procurement specialist, operational assistant, and secretary-interpreter. Additional consultants (national coordinators) support the SFD central and district managers and the FSDC core staff in organization and planning of project activities under specific subcomponents in specific geographical areas. FSDC is already administering the on-going preparatory activities funded by the Japanese Grant and the PPF and its operations are currently funded from the PPF. Financial and procurement monitoring would be assured by the Project Monitoring and Reporting System (see
from the Tbilisi office, and the project management unit, in developing its operational manual, has taken account of these issues. They are now being addressed at a country level with additional support and oversight being provided. These “stand-alone” forest projects as they can best tackle forest policy and management issues, and greater integration in the context of a review of the 1991 Forest Strategy, and project design takes these lessons into account. Project financial management arrangements of the FSDC do not currently satisfy the minimum requirements of the Bank. The FSDC has agreed to develop its financial management arrangements on the basis of those already developed by the Protected Areas Development Project (PADP) which were found by the Bank to be satisfactory. These are described in more detail in Annex 6. Project Management Reports (PMRs) and Disbursements. Project management-oriented PMRs will be used for project monitoring and supervision and the indicative formats of these will be agreed upon during appraisal. The FSDC will start producing a full set of PMRs for every calendar quarter throughout the life of the project beginning with the period ending December 31, 2002. Credit funds will initially be disbursed on the basis of established procedures, including Statements of Expenditures (SOEs), and a move to PMR-based disbursements will be considered once the FSDC is familiar with the project’s monitoring aspects and is considered able to produce sufficiently timely and reliable PMRs. Audit Arrangements. Annual audits will be conducted by independent private auditors acceptable to the Association, and procured by the FSDC through the Least-Cost Selection process. Audited project financial statements will be provided to the Association within six months of the end of each fiscal year and also at the closing of the project. The cost of the audit will be financed from the proceeds of the credit. The FSDC will develop a terms of reference and short-list of auditors for the annual audit prior to Board presentation.

7. Sustainability

The project does not involve significantly increased recurrent cost financing and does not involve new staff recruitment. Incremental recurrent costs are estimated at US$1.7 million over the project period (or on average about US$0.3 million per annum). These compare with present annual budget allocation to SFD of US$1 million. As indicated above the project should generate substantially increased revenues for the Treasury by improving tax collection from forest management activities. The project will be implemented by existing institutions with management support from the PIU; capacity building of the State Forestry Department during implementation would ensure that project activities will continue after Bank support ends. (Georgian forest staff have a good basic training and education, though it has been difficult to maintain this since the transition). District organizations exist and would also be strengthened with the assistance of project activities. Social sustainability should be assured by the involvement of a range of stakeholders and local communities in project implementation.

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

Experience with project implementation in Georgia has indicated that strong ownership of key stakeholders, at political as well as at technical and community level, is key to project success. Adequate donor coordination is also important. Project preparation has included an extended period of consensus building at political, technical and local level for the improved approaches to forest management incorporated into project design. There have and will continue to be extensive consultations with the donor and NGO community, with which relations are good in the forest sector. Implementation issues have included difficulties with counterpart funding and lack of clarity regarding procedures for payment of VAT, social charges and taxes, and difficulties with financial management. These issues are now being addressed at a country level with additional support and oversight being provided from the Tbilisi office, and the project management unit, in developing its operational manual, has taken account of the lessons learned. Project implementation in the region more generally has also illustrated the importance of involving all stakeholders in the planning of policy and institutional changes; when this is well done, the overall environment, at community, political and technical level, is generally very positive towards improved forest management. Forestry in ECA has also benefited from an OED review of ECA forest operations completed in 2000 in the context of a review of the 1991 Forest Strategy, and project design takes these lessons into account. (The review also emphasizes the importance of stakeholder participation, but also recommends expanded support for "stand-alone" forest projects as they can best tackle forest policy and management issues, and greater integration of forestry issues into the country assistance dialogue).

9. Program of Targeted Intervention (PTI)

10. Environment Aspects (including any public consultation)
Issues: The project's environmental assessment (EA) and management plan (EMP) have been commissioned in the form of a Sectoral Environmental Assessment (SEA), as the project is designed to have a sectoral impact. The main findings and recommendations of the SEA were taken into consideration during project design and are reflected in the project components. The results of the SEA and EMP are summarized below and in Annex 12. The full Sectoral EA is available in a separate document in the project files. The SEA concludes that the proposed project will improve overall environmental management of Georgia's forests. Georgia has comprehensive environmental legislation, covering the forest sector, but there are still certain legal inconsistencies and also the capacity for its implementation is not adequate. In this regard, introduction of the right incentives for long-term investment and sustainable use of forest resources and reducing illegal felling and smuggling of timber are the key challenges to be taken by the Government with support from the project. Assistance to the improved forest management planning is a critical component of the project. The practice of developing ten-year forest management plans has been in place in Georgia for decades, though none of the plans - prepared mostly 10-15 years ago - have been updated in the last ten years and neither have they been implemented due to insufficient funding. Current level of public participation on land use and forest management planning is not satisfactory. The project will provide for the development of technically sound and participatory methods of planning based on technically up-to-date and reliable information base, deploying Forest Management Information Systems and GIS technology. This activity would be supported jointly with the GEF-funded Protected Areas Development Project. Infrastructure and wood harvesting systems currently used for harvesting forest resources are out-of-date and depreciated. Forest roads and the main district roads are in a poor condition. Environmental damage caused by logging is much higher than it could have been for the same volume of extracted timber if better technologies were deployed. The project will provide for demonstration of the advanced and environmentally less damaging equipment for harvesting, including skyline cable lines designed for mountain terrain. Rehabilitation and construction of some forest roads will be carefully planned and implemented in a selected zone of the Central Caucasus for maximizing economic benefits and reducing environmental damage caused by long skidding distances, which create erosion channels. Environmentally sound construction practices and technologies will be tested out and promulgated for their adoption county-wide. Other environmental benefits of the project include reduced erosion and improved hydrological regimes of reforested areas and an increase in atmospheric carbon sequestration resulting from afforestation activities of degraded slopes. No serious negative impacts of the project were identified. Minor potential impacts might include damage from misuse of harvesting and road equipment at demonstration and training sites. This risk would be addressed by proper design and selection of sites for demonstration activities which will be subject to a site-specific environmental review and permit. A similar minor risk is associated with erosion caused by misuse of heavy equipment during limited forest road rehabilitation and construction. This risk would be also addressed by limiting road activities only to appropriate areas delineated by the overall landscape-based forest management plan, and road contractors would have to comply with improved road standards. Selection of road sites will also be subject to site-specific environmental review and permit.

11. Contact Point:

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12. For information on other project related documents contact:

The InfoShop
The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 458-5454
Fax: (202) 522-1500
Web: http://www.worldbank.org/infoshop

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 June 1, 2001.
ANNEX 6

RESOLUTION OF THE PARLIAMENT OF GEORGIA
Concerning the Law of Georgia on “Environmental Permits” (October 15, 1996 No 425 -IS)
(Official English translation)

THE LAW ON ENVIRONMENTAL PERMITS
(October 15, 1996 No 424-IS)
(Official English translation)

RESOLUTION OF THE PARLIAMENT OF GEORGIA
(Official English translation)

THE LAW OF GEORGIA ON THE STATE ECOLOGICAL EXPERTISE
(October 15,1996, No 426-IS)
(Official English translation)
RESOLUTION OF THE PARLIAMENT OF GEORGIA

Concerning the Law of Georgia on "Environmental Permits"

The Parliament of Georgia resolves:

1. The Law of Georgia on "Environmental Permits" to come into force from January 1, 1997.

2. To request the President of Georgia to ensure that the Ministry of Environment of Georgia elaborate and approve by January 1, 1997 the provisions: "On the list of the 4th category activities specified by the procedure for the issue of environmental permissions" and "On the rule for submission of applications for obtaining environmental permits and issuance of environmental permits". These provisions to be implemented from January 1, 1997.

3. The Committee for protection of natural resources and the environment of the Parliament of Georgia shall:

   a) elaborate and present for consideration to the Parliament of Georgia by January 1, 1997 a draft of the Regulation "On Environmental Impact Assessment".

   b) in conjunction with the Committees of the Parliament of Georgia for Budgetary-financial and Economical Policy and Reforms to elaborate and present for consideration to the Parliament of Georgia by June 1, 1997 a draft of the Law "On Environmental Permission Fees".

   c) in conjunction with the Committee of the Parliament of Georgia for Consultations, Legal Affairs and Legality, to elaborate and present for consideration to the Parliament of Georgia by June 1, 1997 drafts of the Laws "On amendments and changes to the Georgian Codes on administrative and legal violations" and "On amendments and changes to the Criminal Code of Georgia".

Deputy Chairman
Parliament of Georgia

Edward Surmanidze

Tbilisi,
October 15, 1996
No 425 –IS
THE LAW OF GEORGIA ON ENVIRONMENTAL PERMITS

This law establishes the legal basis for the issue of the environmental protection permits for an activity implemented on the territory of Georgia, state ecological expertise, environmental impact assessment as well as the legal basis for the public notification and participation in the decision-making process on the issue of the environmental protection permits.

Only activities planned after the enactment of the law shall be subject to the present law.

This law does not regulate the issue of other permits on the activity.

CHAPTER 1
GENERAL PROVISIONS

ARTICLE 1. THE AIM OF THE LAW

The aim of the law shall be:

1. to protect human health, natural environment, cultural and material valuables during the implementation of the activity.
2. to ensure basic rights of a citizen provided for by the Constitution of Georgia - to acquire full, objective and timely information on his working and living environment as well as, with the purpose of democratic development of the country, to ensure public participation in the adoption of important decisions by the state in the area of environmental protection.
3. to take into consideration ecological, social, economic interests of the society in the process of the adoption of important decisions pertaining to the activity.

ARTICLE 2. THE OBJECT OF THE LAW

The object of the law shall be:

1. to elaborate and defend the rights and obligations of investors, community and the state in the area of environmental protection.
2. to facilitate protection of the environment and national resources from irreversible quantitative and qualitative changes as well as to ensure their rational utilization.

ARTICLE 3. DEFINITION OF TERMS

The term "activity" shall denote entrepreneurial, economical or any other activity, implementation of habitation and development plans and projects, infrastructure projects, the implementation of settlement, habitation and sectoral development plans, including the implementation of plans and projects for protection, utilization and use of water, forests, land, mineral ore and other natural resources existing on the territory of Georgia, as well as significant reconstruction and technical and technological re-equipment of existing enterprises.

The term "investor" shall denote a physical or juridical person - the initiator of an activity who shall address the body authorized in the issue of environmental permissions to obtain the environmental protection permission.

The term "Environmental Protection Permission" shall denote a written decision of the Ministry of Environment of Georgia, its regional and local bodies and the Ministries of Environment of Ajarian and Abkhazian Autonomous Republics. The contents and the issuance procedures of the permission are different for different kinds of activities. The environmental protection permission represents an integrated permission, which consists of permissions on exhausts, waste disposals, etc.

The term "Consultation Firm" shall denote a consulting juridical person, which is entitled under the charter to carry out consultation works in the area of environmental protection.

The term "Environmental Protection Standards" shall denote the establishment of such standards of the impact on the environment, which shall ensure the ecological balance. In view of the foregoing, the following standards shall be established: qualitative standards on the condition of the environment - in atmospheric air, water and soil; permissible standard limits for the quantity of the concentrates and micro-organisms harmful for human health and nature, permissible standard limits for noise, vibration, electromagnetic fields and other physical impacts, permissible standard limits for radiation impact; permissible standard limits for the inputs of harmful substances into the environment and environment pollution by microorganisms; permissible standard limits for the utilization of chemical means, ecological requirements for the products; load standards on the environment.

The term "Significant reconstruction, technical and technological re-equipment" - shall mean such reconstruction, technical and technological re-equipment, the implementation of which shall require an elaborate feasibility study.

The term "Regional body of the Ministry of Environment" shall denote the organizations subject to the Ministry of Environment of Georgia, in particular, regional (urban) environmental divisions, as well as the Tbilisi Committee for environmental protection and regulation of natural resources.

The term "The local body of the Ministry of Environment" shall mean regional structural sub-divisions of: regional (urban) environmental divisions of Georgia, as well as the Ministries of Environment of Ajarian and Abkhazian Autonomous Republics and the Tbilisi Committee for environmental protection and regulation of natural resources.
The term "Best technology" shall denote the best, usable and economically available technology in terms of environmental protection which: is most effective in avoiding, minimizing or transforming harmful impact on the environment; may not be widespread but its mastering and utilization are possible from technical standpoint; economically may not condition the reasonableness of the ostentation of marginal environmental benefit at the expense of considerably high value, but which at the same time from economic standpoint is available for investor.

CHAPTER II
THE PROCEDURE FOR THE ISSUE OF ENVIRONMENTAL PROTECTION PERMISSION

ARTICLE 4. CATEGORIES OF ACTIVITIES

1. In accordance with the present law the activities shall be grouped into 4 categories by their scope, importance and the quality of their impact on the environment.

2. The first category is the category which, due to its scope, location and essence can cause serious and irrevocable impact upon the environment and human health.

The first category of activity are the following:

a) Mining of mineral ores
   - Mining of mineral ores (except the activities listed in Point 3 of Article 4) and mineral dressing;
   - Ground and underground constructions for the extraction and dressing of mineral ores;
   - Deep drilling, especially activities aimed at the extraction of deep circulation thermal waters;
   - Activities for the accumulation and deployment of mining output.

b) Power industry
   - Processing of oil raw materials and petrol-chemical production;
   - Gasification and liquefying of coal;
   - Carbonization of coal;
   - Briquetting of coal and lignite;
   - Construction of heat and power stations and other thermal enterprises;
   - Construction of main facilities; for gas, steam, hot water and electric power transmission;
   - Construction of hydro-electric power stations (with the capacity of more than 10 Megawatts);
   - Construction of dams, artificial water reservoirs and other hydro-technical buildings;
   - Construction of nuclear reactors of different purposes and capacities;
   - Construction of nuclear power stations;
   - Production and dressing of nuclear fuel, processing of the used nuclear fuel.

c) Agriculture
   - Fisheries;
   - Wood-felling (including all systems of felling) and the usage of forest fund soils for different purposes;
   - Utilization of virgin soils and unbroken expanses for intensive agriculture activities;
   - Carrying out soil melioration works;
   - Soil re-cultivation;
   - Measures taken against hazardous natural calamities;

d) Food industry
   - Production of flour from fish and animal bones;
   - Production of vegetable and animal oils and fats;
   - Industrial production of starch;
   - Production of canned goods (objects processing more that 5 000 tons of raw materials);
   - Breweries, liquor, cognac, vodka distillers, wine production (objects with the production capacity of greater than 30 million liter bottles per year)

e) Chemical industry
   Chemical industry of any type and capacity:
   - Among them: chemical processing of semi-finished goods (interim products) and production of chemical substances; production and processing of pesticides, pharmaceutical goods, chemical colorings, varnishes, peroxide and production and processing of elastic substances (rubbers or plastic substances), production and packing of gunpowder or any other explosives; production of batteries; production of graphite electrodes, production of refrigerators.

f) Metallurgy
   Metallurgy of any type and capacity;

f) Machine-building and ship-building among them:
   - automobile, shipbuilding, railway and aircraft industries;
   - ship-repair, railway-repair, aircraft-repair industries;
   - production and testing of engines, turbines, reactors;

g) Production of building materials
   - Any asbestos utilizing production;
• Production of cement;
• Production of asphalt;
• Production of glass and glass ware;

h) Wood processing, paper, leather and textile industries
• Production of fiber and sawdust boards and plywood;
• Production of artificial mineral fiber;
• Production of cellulose, paper and cardboard;
• Leather processing industry and leather utilizing production;
• Construction of fullery-worsted spinning group of enterprises in which wool is refined, degreased, bleached.

i) Waste processing and disposal
• Disposal of municipal and industrial wastes, location of their dumping places and location and operation of the factories for their processing and burning;
• Disposal of toxic, hazardous and radioactive wastes, location and operation of their dumping places and rendering them harmless.

j) Location and operation of storages
• Location and operation of ground and underground storages for gas, oil, coal, petrochemical products;
• Location and operation of storages for radioactive substances.

k) Implementation of infrastructure plans, projects and programmes
• Urbanization and city-planning programmes;
• Industry development programmes;
• Power-systems’ development programmes;
• Residence area purification utilities construction projects;
• Forest use programmes (including prospective projects for forestry and hunting farms organization and follow up plans);
• Transport infrastructure development programmes, projects for motorways, railways, airfields, bridges, over-passes;
• Land use schemes for administrative-territorial units (regions);
• Projects for the main pipe-lines for any purposes;
• Projects of sea ports and terminals;
• Projects for subways, underground motor-way and railway communications;
• Projects of hotel and resort complexes;
• Projects of sport complexes and constructions;
• Projects of hospitals of oncolgy, infectious and tuberculosis diseases.
• Long-term rehabilitation programmes for preserved territories;
• Plans and projects for protection and utilization of water, forests, land, mineral ore and other natural resources existing on the territory of Georgia;
• Programmes and projects of national, regional and local importance for location of all types of economical and engineering objects with the view to avoid negative effects of natural spontaneous processes anticipated on the territory of Georgia.

All the afore-mentioned activities are subject to the environmental protection permits.

Infrastructure plans, projects and programmes shall require environmental permits issued by state legislative and executive bodies in accordance with the rule specified by the law prior to their adoption, approval or confirmation.

The environmental protection permit for these categories of activities shall be issued by the Ministry of Environment of Georgia.

The obligatory integral part of the procedure for the issue of the environmental protection permits shall be the following:
• environmental impact assessment (EIA); the procedure shall be carried out in accordance with Chapter III of the present law);
• state ecological expertise; the procedure shall be carried out in a manner specified by the law);
• participation of the community in the decision-making process.

3. The II\textsuperscript{nd} category is represented by an activity the scope, location and content of which can have a significant impact on human health and the nature of the region where the activity will be carried out.

The II\textsuperscript{nd} category is comprised of:

a) Mining of mineral ore:
• ore reconnaissance and mining activities;
• operation of low capacity (below annual 100 000 tons) quarries for building, inert, decorative materials and reconnaissance activities;
b) Power industry:
- construction of thermal and power-stations for industrial purposes and other thermal enterprises (with the capacity of less than 10 Megawatts);
- construction of hydro-power stations (with the capacity less than 10 Megawatts).

c) Agriculture and food industry
- utilization of virgin soils and unbroken expanses for intensive agriculture activities;
- construction and operation of potable and irrigation water supply internal systems;
- utilization of agricultural arable land (of the area from 30 to 50 hectares) for non-agricultural purposes;
- construction of complex poultry and cattle breeding farms;
- reception of carbamide from the cattle-breeding farms;
- setting up of mariculture and aquaculture farms;
- setting up of fishing and hunting farms;
- production of sugar;
- breweries, liquor, cognac, vodka distillers, wine production (objects with the production capacity from 20 to 30 million liter bottles per year);
- production of jams, syrups and juices;
- production of dairy goods;
- production of yeasts;
- setting up of smoking-drying enterprises;
- setting up of enterprises for the processing of animal remains;
- construction of grain production factory;
- setting up of a non-alcoholic, wine and spirit bottling enterprise.
- re-cultivation of land (of the area greater than 100 hectares);
- canning industry (objects annually processing from 3000 to 5000 tons of raw materials).

d) Forestry
- using of forestry fund lands (of the area greater than 100 hectares) for non-forestry and economic purposes);
- wood-felling - on the forest area greater than 500 hectares (including all felling types).

Other activities:
- publishing activities;
- construction of timber and wooden furniture factory;
- construction of mineral and insulation cotton enterprise;
- construction of lime-stone and chalk production enterprise;
- municipal facilities including sewerage;
- fiber drying industry;
- construction of a brick and ceramic tile production enterprise;
- construction of a plaster tile production enterprise;
- municipal facilities including sewerage;
- establishment of an enterprise for the production of building materials out of mineral raw materials;
- construction of chemical product containers' washing enterprise.

The environmental permits for the Il category of activities shall be issued by the Ministry of Environment of Georgia.

The obligatory integral part of the procedure for the issue of the permission shall be:
- state ecological expertise; the procedure shall be carried out in a manner established by the law;
- public participation in the decision-making process.

4. The III category comprises activity, the scope, location and content of which will not bring about serious impact on the environment.

The activities under the III category are the following:

a) Agriculture and food industry
- collection of medicinal herbs in the environment;
- setting up of slaughter-houses;
- construction of a coffee beans and sunflower roasting enterprise;
- utilization of agricultural arable land (of the area from 20 to 30 hectares) for non-agricultural purposes;
- establishment of an egg product manufacturing enterprise (with the annual capacity exceeding 40 tons);
- establishment of semi-finished food production factories (with the annual capacity exceeding 200 tons);
- construction of a grain drying, cleaning, storing and silo tower;
- production of non-alcoholic beverages;
- production of tobacco;
- construction of buildings to store agriculture goods;
- construction of hot-houses of industrial designation;
- construction of agricultural product storing and processing buildings, facilities and enterprises;
- construction of warehouses for chemical pesticides and mineral fertilizers;
- canning industry (objects annually processing from 3000 to 5000 tons of raw materials).
- breweries, liquor, cognac, vodka distillers, wine production (objects with the production capacity from 10 to 20 million liter bottles per year)

b) Forestry

- using of forestry fund lands (of the area from 50 to 100 hectares) for non-forestry and economic purposes);
- wood-felling - on the forest area from 100 to 500 hectares (including all felling types).

Other activities:

- production of flax;
- establishment of a sawmill (with the annual capacity exceeding 1,000 m³);
- construction of buildings for timber storage (land-based, water spraying or on-water of more than 1000 cubic meters);
- setting up of a ceramic goods enterprise;
- construction of local motor-ways;
- construction of gasoline stations;
- construction of a harbor for sailing vessels;
- operation of sterilization equipment in the hospitals using ethylene oxide;
- setting up of municipal laundries;
- construction of hospitals.

The environmental protection permits for the IIIrd category of activities shall be issued by the regional bodies of the Ministry of Environment of Georgia as well as the Ministries of Environment of Ajarian and Abkhazian Autonomous Republics.

The obligatory integral part of the procedure for the issue of the permission shall be the following:

- state ecological expertise; the procedure shall be carried out in a manner established by the law;
- notification of the community of the planned activity.

5. The IVth category is not included in points 2, 3 and 4 of Article 4, and its the impact of which on the environment is insignificant.

The list of the activities under IVth category shall be elaborated and approved by the Ministry of Environment of Georgia basing on the provisions "On the list of IVth category activities specified by the procedure of the issue of environmental permits".

The environmental protection permission for the IVth category of activities shall be issued by the regional or local bodies of the Ministry of Environment of Georgia.

The obligatory integral part of the procedure for the issue of the permission shall be the state ecological expertise; the procedure shall be carried out in a manner established by the law.

ARTICLE 5. APPLICATION FOR THE ENVIRONMENTAL PROTECTION PERMISSION

1. In order to obtain the environmental protection permits, the investor shall be obligated to submit an application to the Ministry of Environment of Georgia, its regional or local bodies and the Ministries of Environment of Ajarian and Abkhazian Autonomous Republics.

2. The investor shall be obligated to prepare a detailed application in a complete shape and in written form.

3. The application should include the evidential documentation on the activity, investor's application to obtain the environmental protection permission, feasibility study project of the activity, assessment report on the activity's impact on the environment (for the 1st category activity).

The application should include the following information:

a) name of the planned activity, name and address of the investor;
b) location of the planned activity on the map of the given region;
c) assumed date of the initiation and termination of the activity, the aims of the activity;
d) plan of the buildings necessary for the activity;
e) description of the technological process;
f) the list of substances which will be used during the activity or are received as a result of the activity;
g) detailed description of the measures which are planned in order to reduce the impact of the activity on the
environment and social factors;
h) types and quantity of the natural resources to be used;
i) volume and type of the expected emission;
j) methods for the measurement of emission volume;
k) types and quantity of the industrial wastes, the probable places for their disposal, measures planned for the
reduction of the waste volume and processing.
l) safety measures to be taken against accidents of technical nature.

4. For the activities under I, II, III categories, along with the application the investor shall be obligated to submit a brief
annotation in accordance with the form given below.
- name of the planned activity, name of the investor;
- location of the planned activity;
- assumable date of the initiation and termination of the activity;
- aims of the activity;
- category of the activity;
- place and time for the public discussion of the activity;
- address, where the public will be able to familiarize itself with the documentation connected with the activity.

The information submitted in this form shall be published in the press and shall be made available to the representatives of
the public.

5. The investor shall have the right to submit additional information, which he finds necessary for the specific case.

6. Having received the application presented in full, the Ministry of Environment of Georgia, its regional or local bodies and the
Ministries of Ajarian and Abkhazian Autonomous Republics shall commence the procedure provided for by the law.

7. The Ministry of Environment of Georgia shall determine the content and form (the issuance rule) of environment permits as
well as the form of the application to be submitted to obtain environment permits, on the basis of the provision "On the rule
for submission of applications to obtain environmental permits and the issuance of environmental permits".

ARTICLE 6. STATE, INDUSTRIAL AND COMMERCIAL SECRETS

1. The investor shall be obligated to provide the Ministry of Environment of Georgia with the complete scheme of the
technological process even in case the activity contains industrial, commercial or state secret.

The part of the application which contains industrial, commercial or state secret should be submitted separately by the
investor.

2. The part of the application including the secret should be labeled and kept separately. This sector should be inaccessible
for public representatives.

3. The body issuing environmental permits shall be obligated to keep the secrecy. Relevant officials shall be given the right of
access to the secrecy in accordance with the rule laid down by the law.

4. The persons who shall be authorized by the present law to familiarize themselves with the part of the application containing
secret information, in the event of its disclosure, shall bear responsibility in accordance with the legislation of Georgia in
force.

ARTICLE 7. PROCEDURE FOR THE ISSUE OF ENVIRONMENTAL PERMITS FOR THE FIRST CATEGORY ACTIVITIES

1. In order to obtain an environmental protection permit for the I category activity, the investor shall be obligated to conduct
environmental impact assessment.

2. In order to conduct a thorough environmental impact assessment and ensure the public participation in the assessment
process, the investor shall be entitled to:
   • announce a tender for obtaining the right to conduct the EIA. The terms and conditions of the tender should be
     published in the central press.
   • ensure the availability of the examination materials, reviewed by the environmental impact assessment, to public
     representatives.

3. After the receipt of the detailed application on the I category activities, the Ministry of Environment of Georgia shall be
obligated to carry out the procedure provided for by the present article which covers the state ecological expertise of the
activity (the procedures for the expertise shall be regulated by the applicable legislation of Georgia) and to assure public
participation in the decision-making process for the issue of the environmental permits.
4. Within 10 days following the receipt of the application the Ministry of Environment of Georgia shall be obligated to:

a) ensure the publishing in press of the application and brief annotation to which the information on the date and venue of public discussion of the issues related to implementation of the activity should be enclosed;

b) receive and discuss the written comments of the public in 45 days following the publishing of the information on the activity.

5. Within 2 months at maximum after the receipt of the application the Ministry of the Environment of Georgia shall be obligated to hold a public discussion of the activity with the participation of the investor, the Ministry of Environment of Georgia, local administration bodies and public representatives.

6. The review period of the evidential documentation on the activity at the Ministry of the Environment of Georgia shall be 3 months at maximum.

7. The copy of the application shall be kept by the body of the Ministry of Environment of Georgia where the review of the evidential documentation on the activity is planned and the public representatives shall be able to familiarize themselves with the application (with the exception of the part containing commercial, industrial and state secrets) within the entire period of application review.

8. Within this period the Ministry of Environment of Georgia shall be obligated to:

- carry out the expertise of environmental impact assessment;
- determine the compliance of the activity or its separate part with the legislation of Georgia in force;
- determine the compliance of the activity or its separate part with the standards in effect of the condition of the environment in Georgia;
- determine the measures the elaboration of which shall be necessary for the reduction of the impact on the environment in case the activity is implemented;
- adopt a decision on the issue of the environmental permission for the activity taking into account the environmental impact assessment conclusion and public opinion.

ARTICLE 8. PROCEDURE FOR THE ISSUE OF ENVIRONMENTAL PERMITS FOR THE II CATEGORY ACTIVITIES

1. After the receipt of a detailed application for the environmental protection permission on the III category activity the Ministry of Environment of Georgia shall be obligated to carry out procedures provided for by the law, which cover the expertise of the activity and public participation in the decision-making process on the issue of the permission.

2. In 10 days following the receipt of the application for public information, the Ministry of Environment of Georgia shall be obligated to provide the publishing of application and a brief annotation of the planned activity to which the information on the date and venue of public discussion of the issues related to implementation of the activity should be enclosed;

In view of the above, the Ministry of Environment of Georgia shall:

- ensure the publishing of the information in press;
- receive and discuss public comments in writing within 45 days following the publishing of the information.

3. The copy of the application shall be kept in the body of the Ministry of Environment of Georgia where the review of the evidential documentation on the activity is planned and the public representatives shall be able to familiarize themselves with the application (with the exception of the part containing commercial, industrial and state secrets) within the entire period of application review.

4. In order to ensure public participation in the process of the issue of the environmental protection permission for the activity, the Ministry of Environment of Georgia shall be obligated to carry out a public discussion within 2 months at maximum after the receipt of the application, with the participation of the investor, the Ministry of Environment of Georgia, local administration bodies and public representatives;

5. Maximal term for the review of the evidential documentation of the activity following the receipt of the application at the Ministry of Environment of Georgia shall be 2 months. During this period the Ministry of Environment of Georgia shall be obligated to:

- carry out the state ecological expertise of the evidential documentation;
- determine the compliance of the activity or its separate part with the legislation of Georgia in force;
- determine the compliance of the activity or its separate part with the standards in effect of the condition of the environment in Georgia;
- determine the measures the elaboration of which shall be necessary for the reduction of the impact on the environment in case the activity is implemented;
- adopt a decision on the issue of the environmental permission for the activity taking into account the environmental impact assessment conclusion and public opinion.

ARTICLE 9. PROCEDURE FOR THE ISSUE OF ENVIRONMENTAL PERMITS FOR THE III CATEGORY ACTIVITIES

1. After the receipt of the detailed application to obtain environmental permits for the III category activities, the regional bodies of the Ministry of Environment of Georgia (further referred to as a "regional body") and the Ministries of Ajarian and
Abkhazian Autonomous Republics shall be obligated to carry out the procedure as provided for by the present article which covers the state ecological expertise of the activities as well as public notification on the planned activity.

2. Within 10 days following the receipt of the application for public notification, the regional bodies of the Ministry of Environment of Georgia and the Ministries of Ajarian and Abkhazian Autonomous Republics shall ensure the publishing of the information on the activity in the form of a brief annotation along with the application.

3. The copy of the application shall be kept by the body of the Ministry of Environment of Georgia (also in the Ministries of Ajarian and Abkhazian Autonomous Republics) where the review of the evidential documentation on the activity is planned and the public representatives shall be able to familiarize themselves with the application (with the exception of the part containing commercial, industrial and state secrets) within the entire period of application review.

4. Maximal term for the review of the evidential documentation of the activity following the receipt of the application at the regional bodies of the Ministry of Environment of Georgia and the Ministries of Ajarian and Abkhazian Autonomous Republics shall be 2 months. During this period the regional bodies of the Ministry of Environment of Georgia and the Ministries of Ajarian and Abkhazian Autonomous Republics shall be obligated to:
   - carry out the state ecological expertise of the evidential documentation;
   - determine the compliance of the activity or its separate part with the legislation of Georgia in force;
   - determine the compliance of the activity or its separate part with the standards in effect of the condition of the environment in Georgia;
   - determine the measures the elaboration of which shall be necessary for the reduction of the impact on the environment in case the activity is implemented;
   - adopt a decision on the issue of the environmental permission for the activity taking into account the environmental impact assessment conclusion and public opinion.

ARTICLE 10. PROCEDURE FOR THE ISSUE OF ENVIRONMENTAL PERMITS FOR THE IV CATEGORY ACTIVITIES

1. In order to issue an environmental protection permission the regional or local body of the Ministry of Environment of Georgia (further referred to as a "local body"), after the receipt of a detailed application shall commence the procedures provided for by this law which cover the state ecological expertise of the activity.

2. The maximum period for the discussion of the evidential documentation of the activity by a regional or local body shall be one month. Within this period the regional or local body shall be obligated to:
   - carry out the state ecological expertise of the evidential documentation;
   - determine the compliance of the activity or its separate part with the legislation of Georgia in force;
   - determine the compliance of the activity or its separate part with the standards in effect of the condition of the environment in Georgia;
   - determine the measures the elaboration of which shall be necessary for the reduction of the impact on the environment in case the activity is implemented;
   - adopt a decision on the issue of the environmental permission for the activity taking into account the environmental impact assessment conclusion and public opinion.

ARTICLE 11. GROUNDS FOR THE DENIAL TO THE ISSUE OF THE ENVIRONMENTAL PERMITS

1. The Ministry of Environment of Georgia, its regional or local bodies and the Ministries of Environment of Ajarian and Abkhazian Autonomous Republics shall not issue an environmental protection permit if:
   a) the legislation of Georgia is violated during the implementation of the activity;
   b) the standards for the condition of the environment effective in Georgia are violated during the implementation of the activity and the deterioration of the condition of environment in the place where the activity is carried out is caused by the use of technologies which do not meet the technology standards established by the law;
   c) implementation of the activity (for infrastructure projects) is not feasible for its location, content or scope;
   d) the existing environmental protection standards are not violated as a result of the implementation of the activity but there is a precedent of the deterioration of the health of the population due to the implementation of the similar activity or any of its part.

2. In case the Ministry of Environment of Georgia, its regional or the local body and the Ministries of Environment of Ajarian and Abkhazian Autonomous Republics (for the IVth category activity) refuses to issue a permission on the activity, the investor shall be notified in writing on the decision with the detailed argumentation upon the expiry of the specified period (3 months for the Ith category, 2 months for the IIth category and IIIth categories and 1 month for the IVth category).

ARTICLE 12. THE BASIS FOR THE ISSUE OF PERMITS ON THE ACTIVITY

1. The Ministry of the Environment of Georgia, its regional or local bodies and the Ministries of Environment of Ajarian and Abkhazian Autonomous Republics shall issue a permit on the activity, if:
   a) in the case of implementation of the activity the legislation of Georgia is not violated;
b) in the case of implementation of the activity the standards for the condition of environment in Georgia are met.

c) the implementation of the activity is feasible for its location, nature and scope (for the infrastructure projects).

2. In the case when it is identified that - as a result of the implementation of the activity, the standards in effect for the condition of the environment in Georgia are violated and that the violation of the standards for the condition of the environment are caused by the increase in the total emission by different enterprises located in a place where the activity is implemented, but at the same time the activity under discussion plans to use best available technologies, then the investor will be given the right to implement the activity. The emission standards for the existing enterprises shall be revised and the period shall be specified by the Ministry of Environment of Georgia, upon the expiry of which the enterprises shall adhere to the new emission standards.

3. In case of the issue of the permission, the Ministry of Environment of Georgia, its regional or local bodies and the Ministries of Environment of Ajarian and Abkhazian Autonomous Republics shall, upon the expiry of prescribed period (3 months for the I category, 2 months for the II and III categories and 1 month for the IV category), notify the investor in a written form on the decision and provide the list of measures to be taken after the implementation of the activity. in case the decision on the issue of a permission on the activity is made.

ARTICLE 13. RIGHTS AND RESPONSIBILITIES OF THE INVESTOR

1. The investor shall be obligated to provide the Ministry of Environment of Georgia, its regional or local bodies, the Ministries of Environment of Ajarian and Abkhazian Autonomous Republics and the consultation firm (for the 1st category activities) with the objective data on the planned activity.

The investor shall bear the responsibility in accordance with the legislation of Georgia for the provision of the biased information.

2. In case the permission on the activity is granted, the investor shall be obligated to:

a) implement the activity provided for by evidential documentation in accordance with terms and conditions of the state ecological expertise conclusion;

b) after commencing to implement the activity, to take the measures reducing the impact on the environment which the Ministry of the Environment of Georgia, its regional or local bodies, the Ministries of Environment of Ajarian and Abkhazian Autonomous Republics shall deem necessary.

3. The investor shall have the right to select on the basis of a tender a consultation firm to carry out the environmental impact assessment.

4. In the case when the investor does not agree with the decision of the Ministry of Environment of Georgia, its regional or local bodies, the Ministries of Environment of Ajarian and Abkhazian Autonomous Republics he shall have the right to appeal to the court.

CHAPTER III
ENVIRONMENTAL IMPACT ASSESSMENT

ARTICLE 14. THE ENVIRONMENTAL IMPACT ASSESSMENT PROCEDURE

1. The procedure for environmental impact assessment shall be determined by the Ministry of Environment of Georgia. Environment impact assessment shall denote the study and investigation procedure of the planned activity aimed at the protection of certain elements of the environment, people, landscape and cultural heritage.

2. Environmental impact assessment shall reveal and describe direct and indirect impacts on the human health and safety, vegetation, and animal world, soil, air, water, climate, landscape, eco-systems and historical monuments or the aggregate of the above-listed factors, including the impact of these factors on the cultural values (heritage) and social and economical factors (for infrastructure projects).

3. In accordance with the present law, if the activity planned by the investor falls under the I category, environmental impact assessment shall be the essential and significant part of the decision-making on the issue of an environmental protection permit. The issue of a permission for the I category of activities shall be forbidden without the environmental impact assessment except for the cases listed in paragraph 14.4 of the present law.

4. The activity may be released from environmental impact assessment if:

- The investor repeats or continues the activity undertaken before for which the procedure for environmental impact assessment has been carried out and the repeated assessment cannot not include additional information,

- Common state interests require that the activity shall commence and the decision shall be made urgently.

The decision on the release of the activity from environmental impact assessment shall be made on the basis of investor's request by a special council for environmental impact assessment. The composition and functions of the council shall be defined by the Ministry of Environment of Georgia.

The decision of the council shall be approved by the Ministry of Environment of Georgia.
5. The consultation firm shall, in accordance with the legislation of Georgia, bear the responsibility for carrying out environmental impact assessment in an unbiased manner.

6. The Ministry of Environment of Georgia, its regional or local bodies and the Ministries of Environment of Ajarian and Abkhazian Autonomous Republics shall be responsible for the compliance of the results of environmental impact assessment expertise with environmental standards. The executor of the state ecological expertise shall, in accordance with the Georgian legislation, be liable to conduct the expertise in an unbiased manner.

7. The expenses required to conduct environmental impact assessment shall be borne by the investor.

8. Public participation in the environmental impact assessment procedure shall be obligatory.

**ARTICLE 15. PARTICIPATION OF PUBLIC REPRESENTATIVES IN THE ENVIRONMENTAL IMPACT ASSESSMENT**

1. Public representatives shall be entitled to provide the investor with their considerations and comments on the first category activity.

2. With the view to take into consideration public opinion and to ensure public participation, the investor shall be obligated to familiarize himself with public representatives' written considerations and comments on the first category activity and give heed to their arguments in the process of final issuance of evidential documentation.

3. Public representatives shall be entitled to carry out independent environmental impact assessment for the first category activity for their own account and present it to the body issuing environmental permits.

4. The results of independent environmental impact assessment should be taken into consideration during the decision-making process on the issue of environmental permits.

5. If the public representative deems that his rights have been violated, he shall be entitled to apply to Court.

**ARTICLE 17. DENIAL TO PROVISION OF INFORMATION FOR FIRST CATEGORY ACTIVITY**

1. The investor shall (in the course of planning first and second category activities and in the environmental impact assessment process) have the right to refuse the provision of information, based on adequate argumentation, only if:

   a) the demanded information includes a state, commercial or industrial secret;

   b) the specific investigation pertaining to EIA, has not yet been finalized and, accordingly, the information is not complete and does not describe the actual state of affairs.

2. In the event of a denial to provide the information, the public representative shall have the right to appeal to the Court.

**ARTICLE 18. THE RULE FOR FUNDING OF ENVIRONMENTAL PERMITS**

Within the limits of the process of the issue of environmental permits, the expenses required for arranging the environmental permission procedure shall be funded in accordance with the legislation.

**ARTICLE 19. RESPONSIBILITY FOR THE VIOLATION OF THE LAW “ON ENVIRONMENTAL PERMITS”**

The responsibility for violation of this law shall be borne in accordance with the legislation of Georgia.

President of Georgia

Tbilisi 15 October 1996 No 424-IS

Edward Shevardnadze
RESOLUTION OF THE PARLIAMENT OF GEORGIA

On the Law of Georgia “On State Ecological Expertise”

The Parliament of Georgia resolves:


2. To request the President of Georgia to ensure that the Ministry of Environment of Georgia elaborate and approve before January 1, 1997 the Provisions “On the rule of conducting the state ecological expertise” and “On Environmental impact assessment”.

3. From January 1, 1996, the provisional Provision “On the state ecological expertise of Georgia” adopted by the Resolution of the Government of Georgia N 894 of September 5, 1992 on “Provisional provisions of the state ecological expertise of the Republic of Georgia and the approval of the provisional rule for state ecological expertise funding and compensation” to be deemed void.

Deputy Chairman
of the Parliament of Georgia

Edward Surmanidze

Tbilisi,
15 October, 1996

№ 427-IS
ARTICLE 1. STATE ECOLOGICAL EXPERTISE

1. The state ecological expertise is an essential environmental measure which shall be carried out in the course of decision-making process on the issuance of environmental permits for an activity which covers entrepreneurial, economical or any other activity, implementation of habitation and development plans and projects, infrastructure projects, the implementation of settlement, habitation and sectoral development plans, including the implementation of plans and projects for protection, utilization and use of water, forests, land, mineral ore and other natural resources existing on the territory of Georgia, as well as significant reconstruction and technical and technological re-equipment of existing enterprises.

2. The list of the categories of activities, which in the course of decision-making process to obtain environmental permits, are subject to state ecological expertise, shall be determined by the legislation of Georgia. The law shall be applied only to the activities, the implementation of which is planned after the enactment of the Law.

The purpose of the state ecological expertise shall be to ensure control on conservation of ecological balance in the environment, basing on the principles of environmental requirements, rational utilization of natural resources and sustainable development.

The opinion of the state ecological expertise shall be an essential condition for making decision on the issue of environmental permits for implementation of an activity.

ARTICLE 2. STATE ECOLOGICAL EXPERTISE LEGISLATION

State ecological expertise legislation shall be based on the Constitution of Georgia, international agreements and arrangements, this Law as well as other legislative regulations.

ARTICLE 3. KEY PRINCIPLES OF THE STATE ECOLOGICAL EXPERTISE

The key principles of the state ecological expertise shall be:

1. Potential ecological risk assessment arising from entrepreneurial or other types of activities specified by the law;
2. All-round assessment of the possible impact of entrepreneurial or other type of activities on the environment prior to their commencement;
3. Giving heed to environmental requirements and standards;
4. Independence of experts and unlimited execution of their powers;
5. Argumentation and legality of the expertise conclusion;

CHAPTER II

THE BODY AUTHORIZED TO CARRY OUT THE STATE ECOLOGICAL EXPERTISE

ARTICLE 4. BODY AUTHORIZED IN CARRYING OUT THE STATE ECOLOGICAL EXPERTISE, ITS RIGHTS AND OBLIGATIONS

1. The Ministry of Environment of Georgia, the Ministries of Environment of Ajarian and Abkhazian Autonomous Republics, regional (urban) environmental divisions included into and subject to the Ministry of Environment of Georgia (including the Tbilisi Committee for environmental protection and regulation of natural resources), as well as the regional structural subdivisions of the regional (urban) environmental divisions, Ministries of Environment of Ajarian and Abkhazian Autonomous Republics, and the Tbilisi Committee for environmental protection and regulation of natural resources (further referred to as the bodies authorized to carry out state ecological expertise) shall be authorized to carry out state ecological expertise.

2. The obligations of the Ministry of Environment of Georgia shall be:
   • to elaborate and approve provisions and the rule for conducting state ecological expertise;
   • to elaborate and approve necessary normative-technical documentation and methodical instructions.

3. The body authorized to carry out the state ecological expertise shall be obliged:
   • to set up expert commissions intended for studying the objects subject to the expertise;
   • to provide the expertise process with required information;
   • to register independent experts and to develop their data base;
   • to cooperate with executive authorities on state expertise related issues.

4. In the state ecological expertise area the Ministry of Environment of Georgia shall have the right to:
 invite, in accordance with the established rule, in the process of making decisions on the issue of environmental permits for the activities, foreign specialists to conduct state ecological expertise except for the cases when the expert project is a state or commercial secret;

5. The body authorized to carry out state ecological expertise shall have the right to:

- obtain from executive authorities and state juridical persons free of charge information (data, statistics and including the information for official use), required to conduct state ecological expertise, within the period specified by the law;

6. The body authorized to carry out state ecological expertise shall be obligated to:

- ensure the compliance of state ecological expertise with the legislation in force, normative-technical documentation and methodical instructions;
- provide for familiarization the applicant of an expert object (an activity entity) with legislative, normative-technical documentation and methodical instructions regulating the organization and execution of the state ecological expertise;
- at the request of public representatives, to provide them for familiarization purpose, the documents regulating the conducting of the state ecological expertise;
- notify local authorities and public representatives having submitted justified comments on an expert object, the results of their comments review;
- at the request of government authorities, deliver the information on the results of the state ecological expertise carried out at an individual object;

ARTICLE 5. THE OBJECTS SUBJECT TO STATE ECOLOGICAL EXPERTISE

The object of the state ecological expertise shall be the evidential documentation of all the activities the list of which, apart from entrepreneurial and other types of activities, shall include the following:

- the drafts for: infrastructure planning (urbanization and town-planning, industrial, power systems and transport infrastructure development programmes including the projects for: purification facilities for populated areas, highways, railways and airfields, bridges and viaducts, main pipelines designated for any purpose, marine ports and terminals, metros, underground road and railway communications, hotel and resort complexes, sport complexes and facilities, hospitals of oncology, infectious and tuberculosis diseases), development plans for populated areas, settlement and sectoral development plans and programmes, production capacities development and placement schemes, plans and programmes, which should be approved, adopted and confirmed by the state executive and legislative authorities;
- construction, reconstruction, conservation, expansion, technical and technological re-equipment projects (notwithstanding the ownership and organizational-legal forms of the activity entities) pertaining to the activity;
- long-term rehabilitation programmes for the territories where emergency ecological situation, resulting from ecological catastrophes and epidemics, was announced;
- schemes and plans for protection, use and utilization of water, forests, woods, soil, mineral wealth and other natural resources existing on the territory of Georgia;
- projects and programmes pertaining to changing the purpose and status of the territories;
- layouts and projects of all types of economic and engineering objects (national, regional and local) targeted at evading negative effects of natural disaster processes on the territory of Georgia.

ARTICLE 6. THE RULE FOR CARRYING OUT STATE ECOLOGICAL EXPERTISE

1. Within the limits of decision-making process for the issue of environmental permits, the state ecological expertise shall be carried out after the submission, in a manner established by legislation, of an application for the expertise of an activity. The application should contain the documentation evidencing the activity which shall include: the application of an activity entity to obtain a permit for his activity, the feasibility study draft and environmental impact assessment report on the categories specified by the law as well as a brief annotation.

2. The decision on the necessity of incorporating environmental assessment report in evidential documentation shall be made in a manner established by the law.

3. The conducting procedure of state ecological expertise shall be defined by provisions "On the rule for carrying out state ecological expertise".

4. Within the limits of decision-making process for the issue of environmental permits, the body authorized to carry out state ecological expertise shall conduct the state ecological expertise and, accordingly, prepare the state ecological expertise opinion by activity categories within the period specified by the legislation of Georgia.

ARTICLE 7. STATE ECOLOGICAL EXPERTISE OPINION

1. The results of the state ecological expertise shall be incorporated into the state ecological expertise opinion, which shall be prepared by the state ecological expertise expert commission and shall be approved by the body authorized to carry out the state ecological expertise.

2. State ecological expertise opinion may be positive or negative. The positive opinion of the state ecological expertise shall be issued in the cases when the evidential documentation:
is in compliance with the legislation of Georgia as well as the environmental norms and standards effective on the territory of Georgia;
• the implementation of the activity outlined in it shall not cause irreversible qualitative and quantitative changes in the environmental condition and natural resources;
• makes provision for measures reducing or evading the impact on the environment including the measures for liquidation of possible effects of emergency situations.

3. The validity of terms and conditions of the positive opinion of the state ecological expertise on the activity specified by the law shall be determined by the provisions “On carrying out of state ecological expertise” within the limits of decision-making process for the issue of environmental permits by activity categories.

CHAPTER III
ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

ARTICLE 8. ENVIRONMENTAL IMPACT ASSESSMENT PROCEDURE

1. Environmental impact assessment shall represent the preparation of evidential documentation for an activity and determine the nature and quality of their anticipated impact on the environment in the course of decision-making process on this activity, as well as assess their ecological, social and economic effects.

2. The responsibility for organization and conducting of environmental impact assessment shall be assumed by an activity entity specified by the law.

3. The environmental impact assessment result shall be represented by environmental impact assessment report.

4. The environmental impact assessment procedure as well as the requirements for the content of environmental impact assessment report shall be defined by the legislation of Georgia and “The environmental impact assessment” provisions, which shall be elaborated and approved by the Ministry of Environment of Georgia.

CHAPTER IV
RIGHTS AND OBLIGATIONS OF THE ACTIVITY ENTITY IN THE STATE ECOLOGICAL EXPERTISE AREA

ARTICLE 9. RIGHTS OF THE ACTIVITY ENTITY IN THE STATE ECOLOGICAL EXPERTISE AREA

The activity entity in the state ecological expertise area shall be entitled to:

• submit to the state ecological expertise authorized body the evidential documentation for carrying out of the state ecological expertise.

• appeal to Court in the event of disputes arising from conducting of the state ecological expertise.

ARTICLE 10. OBLIGATIONS OF THE ACTIVITY ENTITY IN THE STATE ECOLOGICAL EXPERTISE AREA

The activity entity in the state ecological expertise area shall be obligated:

• to submit evidential documentation of the activity for the state ecological expertise in accordance with the requirements provided for by the law;

• to provide funding of the state ecological expertise process;

• subsequent to the obtaining of environmental permit for the activity, to implement the activity provided for in evidential documentation in accordance with the terms and conditions of the positive opinion issued by the state ecological expertise.

CHAPTER V
STATE ECOLOGICAL EXPERTISE FUNDING

ARTICLE 11. STATE ECOLOGICAL EXPERTISE FUNDING RULE

Expenses required to prepare and carry out the state ecological expertise shall be the part of the total expenses, required for organization of the decision-making process for the issue of environmental permits for the activity that, in accordance with the legislation, shall be incurred by the activity entity.

The expenses to be incurred by the activity entity for compensation of preparation and carrying out of the state ecological expertise shall cover: the costs of material and technical provision of the state ecological expertise process, compensation of independent experts and expenses pertaining to drawing up of the state ecological expertise opinion.

CHAPTER VI
RESPONSIBILITY FOR VIOLATION OF THE LAW OF GEORGIA “ON STATE ECOLOGICAL EXPERTISE”

ARTICLE 12. RESPONSIBILITY FOR VIOLATION OF THE LAW OF GEORGIA “ON STATE ECOLOGICAL EXPERTISE”

Responsibility for violation of this law shall be borne in a manner established by the legislation of Georgia.

President of Georgia Edward Shevardnadze
Tbilisi
15 October 1996, No 426-IS
Environmental Assessment

Note: OP and BP 4.01 together replace OMS 2.36, Environmental Aspects of Bank Work; OD 4.00, Annex A, Environmental Assessment; OD 4.00, Annex B, Environmental Policy for Dam and Reservoir Projects; OD 4.01, Environmental Assessment; and the following Operational Memoranda: Environmental Assessments: Instructions to Staff on the Handling of the Borrower’s Consultations with Affected Groups and Relevant Local NGOs, 4/10/90; Environmental Assessments: Instructions to Staff on the Release of Environmental Assessments to Executive Directors, 11/21/90; and Release of Environmental Assessments to Executive Directors, 2/20/91. Additional information related to these statements is provided in the Environmental Assessment Sourcebook (Washington, D.C.: World Bank, 1991) and subsequent updates available from the Environment Sector Board, and in the Pollution Prevention and Abatement Handbook. Other Bank statements that relate to the environment include OP/BP 4.02, Environmental Action Plans; OP/BP 4.04, Natural Habitats; OP 4.07, Water Resources Management; OP 4.09, Pest Management; OP 4.11, Safeguarding Cultural Property in Bank-Financed Projects (forthcoming); OP/BP 4.12, Involuntary Resettlement (forthcoming); OP/GP 4.36, Forestry; OP/BP 10.04, Economic Evaluation of Investment Operations; and OD 4.20, Indigenous Peoples. This OP and BP apply to all projects for which a PID is first issued after March 1, 1999. Questions may be addressed to the Chair, Environment Sector Board.

1. The Bank requires environmental assessment (EA) of projects proposed for Bank financing to help ensure that they are environmentally sound and sustainable, and thus to improve decision making.

2. EA is a process whose breadth, depth, and type of analysis depend on the nature, scale, and potential environmental impact of the proposed project. EA evaluates a project’s potential environmental risks and impacts in its area of influence; examines project alternatives; identifies ways of improving project selection, siting, planning, design, and implementation by preventing, minimizing, mitigating, or compensating for adverse environmental impacts and enhancing positive impacts; and includes the process of mitigating and managing adverse environmental impacts throughout project implementation. The Bank favors preventive measures over mitigatory or compensatory measures, whenever feasible.

3. EA takes into account the natural environment (air, water, and land); human health and safety; social aspects (involuntary resettlement, indigenous peoples, and cultural property); transboundary and global environmental aspects. EA considers natural and social aspects in an integrated way. It also takes into account the variations in project and country conditions; the findings of country environmental studies; national environmental action plans; the country’s overall policy framework, national legislation, and institutional capabilities related to the environment and social aspects; and obligations of the country, pertaining to project activities, under relevant international environmental treaties and agreements. The Bank does not finance project activities that would contravene such country obligations, as identified during the EA.

EA is initiated as early as possible in project processing and is integrated closely with the economic, financial, institutional, technical analyses of a proposed project.

4. The borrower is responsible for carrying out the EA. For Category A projects, the borrower retains independent EA experts not affiliated with the project to carry out the EA. For Category A projects that are highly risky or contentious or that involve serious and multidimensional environmental concerns, the borrower should normally also engage an advisory panel of independent, internationally recognized environmental specialists to advise on all aspects of the project relevant to the EA. The role of the advisory panel depends on the degree to which project preparation has progressed, and on the extent and quality of any EA work completed, at the time the Bank begins to consider the project.

5. The Bank advises the borrower on the Bank’s EA requirements. The Bank reviews the findings and recommendations of the EA to determine whether they provide an adequate basis for processing the project for Bank financing. When the borrower has completed or partially completed EA work prior to the Bank’s involvement in a project, the Bank reviews the EA to ensure its consistency with this policy. The Bank may, if appropriate, require additional EA work, including public consultation and disclosure.
6. The *Pollution Prevention and Abatement Handbook* describes pollution prevention and abatement measures and emission levels that are normally acceptable to the Bank. However, taking into account borrower country legislation and local conditions, the EA may recommend alternative emission levels and approaches to pollution prevention and abatement for the project. The EA report must provide full and detailed justification for the levels and approaches chosen for the particular project or site.

**EA Instruments**

7. Depending on the project, a range of instruments can be used to satisfy the Bank’s EA requirement: environmental impact assessment (EIA), regional or sectoral EA, environmental audit, hazard or risk assessment, and environmental management plan (EMP). EA applies one or more of these instruments, or elements of them, as appropriate. When the project is likely to have sectoral or regional impacts, sectoral or regional EA is required.

**Environmental Screening**

8. The Bank undertakes environmental screening of each proposed project to determine the appropriate extent and type of EA. The Bank classifies the proposed project into one of four categories, depending on the type, location, sensitivity, and scale of the project and the nature and magnitude of its potential environmental impacts.

(a) **Category A:** A proposed project is classified as Category A if it is likely to have significant adverse environmental impacts that are sensitive, diverse, or unprecedented. These impacts may affect an area broader than the sites or facilities subject to physical works. EA for a Category A project examines the project’s potential negative and positive environmental impacts, compares them with those of feasible alternatives (including the “without project” situation), and recommends any measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and improve environmental performance. For a Category A project, the borrower is responsible for preparing a report, normally an EIA (or a suitably comprehensive regional or sectoral EA) that includes, as necessary, elements of the other instruments referred to in para. 7.

(b) **Category B:** A proposed project is classified as Category B if its potential adverse environmental impacts on human populations or environmentally important areas-including wetlands, forests, grasslands, and other natural habitats—are less adverse than those of Category A projects. These impacts are site-specific; few if any of them are irreversible; and in most cases mitigatory measures can be designed more readily than for Category A projects. The scope of EA for a Category B project may vary from project to project, but it is narrower than that of Category A EA. Like Category A EA, it examines the project’s potential negative and positive environmental impacts and recommends any measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and improve environmental performance. The findings and results of Category B EA are described in the project documentation (Project Appraisal Document and Project Information Document).

(c) **Category C:** A proposed project is classified as Category C if it is likely to have minimal or no adverse environmental impacts.

Beyond screening, no further EA action is required for a Category C project.

(d) **Category F1:** A proposed project is classified as Category F1 if it involves investment of Bank funds through a financial intermediary, in subprojects that may result in adverse environmental impacts.

**EA for Special Project Types**

**Sector Investment Lending**

9. For sector investment loans (SILs), during the preparation of each proposed subproject, the project coordinating entity or implementing institution carries out appropriate EA according to country requirements and the requirements of this policy. The Bank appraises and, if necessary, includes in the SIL components to strengthen, the capabilities of the coordinating entity or the implementing institution to (a) screen subprojects, (b) obtain the necessary expertise to carry out EA, (c) review all findings and results of EA for individual subprojects, (d) ensure implementation of mitigation measures (including, where applicable, an EMP), and (e) monitor environmental conditions during project implementation. If the Bank is not satisfied that adequate capacity exists for carrying out EA, all Category A subprojects and, as appropriate, Category B subprojects-including any EA reports—are subject to prior review and approval by the Bank.

**Sector Adjustment Lending**

10. Sector adjustment loans (SECALs) are subject to the requirements of this policy. EA for a SECAL assesses the potential environmental impacts of planned policy, institutional, and regulatory actions under the loan.
For a financial intermediary (FI) operation, the Bank requires that each FI screen proposed subprojects and ensure that subborrowers carry out appropriate EA for each subproject. Before approving a subproject, the FI verifies (through its own staff, outside experts, or existing environmental institutions) that the subproject meets the environmental requirements of appropriate national and local authorities and is consistent with this OP and other applicable environmental policies of the Bank.

In appraising a proposed FI operation, the Bank reviews the adequacy of country environmental requirements relevant to the project and the proposed EA arrangements for subprojects, including the mechanisms and responsibilities for environmental screening and review of EA results. When necessary, the Bank ensures that the project includes components to strengthen such EA arrangements. For FI operations expected to have Category A subprojects, prior to the Bank's appraisal each identified participating FI provides to the Bank a written assessment of the institutional mechanisms (including, as necessary, identification of measures to strengthen capacity) for its subproject EA work. If the Bank is not satisfied that adequate capacity exists for carrying out EA, all Category A subprojects and, as appropriate, Category B subprojects—including EA reports—are subject to prior review and approval by the Bank.

Emergency Recovery Projects

The policy set out in OP 4.01 normally applies to emergency recovery projects processed under OP 8.50, Emergency Recovery Assistance. However, when compliance with any requirement of this policy would prevent the effective and timely achievement of the objectives of an emergency recovery project, the Bank may exempt the project from such a requirement. The justification for any such exemption is recorded in the loan documents. In all cases, however, the Bank requires at a minimum that (a) the extent to which the emergency was precipitated or exacerbated by inappropriate environmental practices be determined as part of the preparation of such projects, and (b) any necessary corrective measures be built into either the emergency project or a future lending operation.

Institutional Capacity

When the borrower has inadequate legal or technical capacity to carry out key EA-related functions (such as review of EA, environmental monitoring, inspections, or management of mitigatory measures) for a proposed project, the project includes components to strengthen that capacity.

Public Consultation

For all Category A and B projects proposed for IBRD or IDA financing, during the EA process, the borrower consults project-affected groups and local nongovernmental organizations (NGOs) about the project's environmental aspects and takes their views into account. The borrower initiates such consultations as early as possible. For Category A projects, the borrower consults these groups at least twice: (a) shortly after environmental screening and before the terms of reference for the EA are finalized; and (b) once a draft EA report is prepared. In addition, the borrower consults with such groups throughout project implementation as necessary to address EA-related issues that affect them.

Disclosure

For meaningful consultations between the borrower and project-affected groups and local NGOs on all Category A and B projects proposed for IBRD or IDA financing, the borrower provides relevant material in a timely manner prior to consultation and in a form and language that are understandable and accessible to the groups being consulted.

For a Category A project, the borrower provides for the initial consultation a summary of the proposed project's objectives, description, and potential impacts; for consultation after the draft EA report is prepared, the borrower provides a summary of the EA's conclusions. In addition, for a Category A project, the borrower makes the draft EA report available at a public place accessible to project-affected groups and local NGOs. For SILs and FI operations, the borrower/Fl ensures that EA reports for Category A subprojects are made available in a public place accessible to affected groups and local NGOs.

Any separate Category B report for a project proposed for IDA financing is made available to project-affected groups and local NGOs. Public availability in the borrowing country and official receipt by the Bank of Category A reports for projects proposed for IBRD or IDA financing, and of any Category B EA report for projects proposed for IDA funding, are prerequisites to Bank appraisal of these projects.

Once the borrower officially transmits the Category A EA report to the Bank, the Bank distributes the summary (in English) to the executive directors (EDs) and makes the report available through its InfoShop. Once the borrower officially transmits any separate Category B EA report to the Bank, the Bank makes it available through its InfoShop. If the borrower objects to the Bank's releasing an EA report through the World Bank InfoShop, Bank staff (a) do not continue processing an IDA project, or (b) for an IBRD project, submit the issue of further processing to the EDs.
Implementation

20. During project implementation, the borrower reports on (a) compliance with measures agreed with the Bank on the basis of the findings and results of the EA, including implementation of any EMP, as set out in the project documents; (b) the status of mitigatory measures; and (c) the findings of monitoring programs. The Bank bases supervision of the project's environmental aspects on the findings and recommendations of the EA, including measures set out in the legal agreements, any EMP, and other project documents.22

1 "Bank" includes IDA. "EA" refers to the entire process set out in OP/BP 4.01; "loans" includes credits; "borrower" includes, for guarantee operations, a private or public project sponsor receiving from another financial institution a loan guaranteed by the Bank; and "project" covers all operations financed by Bank loans or guarantees except structural adjustment loans (for which the environmental provisions are set out in OP/BP 8.60, Adjustments Lending, forthcoming) and debt and debt service operations, and also includes projects under adaptable lending-adequate program loans (APs) and learning and innovation loans (LILs) and projects and components funded under the Global Environment Facility. The project is described in Schedule 2 to the Loan/Credit Agreement. This policy applies to all components of the project, regardless of the source of financing.

2 For definitions, see Annex A. The area of influence for any project is determined with the advice of environmental specialists and set out in the EA terms of reference.


4 Global environmental issues include climate change, ozone-depleting substances, pollution of international waters, and adverse impacts on biodiversity.

5 For screening, see para. 8.

6. EA is closely integrated with the project's economic, financial, institutional, social, and technical analyses to ensure that (a) environmental considerations are given adequate weight in project selection, siting, and design decisions; and (b) EA does not delay project processing. However, the borrower ensures that when individuals or entities are engaged to carry out EA activities, any conflict of interest is avoided. For example, when an independent EA is required, it is not carried out by the consultants hired to prepare the engineering design.

7. The panel (which is different from the dam safety panel required under OP/BP 4.37, Safety of Dams) advises the borrower specifically on the following aspects: (a) the terms of reference for the EA; (b) key issues and methods for preparing the EA; (c) recommendations and findings of the EA; (d) implementation of the EA's recommendations, and (e) development of environmental management capacity.

8. These terms are defined in Annex A. Annexes B and C discuss the content of EA reports and EMPs.

9. Guidance on the use of sectoral and regional EA is available in EA Sourcebook Updates 4 and 15.

10. A potential impact is considered "sensitive" if it may be irreversible (e.g., lead to loss of a major natural habitat) or raise issues covered by OD 4.20, Indigenous Peoples, OP 4.04, Natural Habitats; OP 4.11, Safeguarding Cultural Property in Bank-Financed Projects (forthcoming); or OP 4.12, Involuntary Resettlement (forthcoming).

11. When the screening process determines, or national legislation requires, that any of the environmental issues identified warrant special attention, the findings and results of Category B EA may be set out in a separate report. Depending on the type of project and the nature and magnitude of the impacts, this report may include, for example, a limited environmental impact assessment, an environmental mitigation or management plan, an environmental audit, or a hazard assessment. For Category B projects that are not in environmentally sensitive areas and that present well-defined and well-understood issues of narrow scope, the Bank may accept alternative approaches for meeting EA requirements: for example, environmentally sound design criteria, siting criteria, or pollution standards for small-scale industrial plants or rural works; environmentally sound siting criteria, construction standards, or inspection procedures for housing projects; or environmentally sound operating procedures for road rehabilitation projects.

12. SILs normally involve the preparation and implementation of annual investment plans or subprojects as time slice activities over the course of the project.

13. In addition, if there are sector-wide issues that cannot be addressed through individual subproject EAs (and particularly if the SIL is likely to include Category A subprojects), the borrower may be required to carry out sectoral EA before the Bank appraises the SIL.

14. Where, pursuant to regulatory requirements or contractual arrangements acceptable to the Bank, any of these review functions are carried out by an entity other than the coordinating entity or implementing institution, the Bank appraises such alternative arrangements; however, the borrower/controlling entity/ implementer institution remains ultimately responsible for ensuring that subprojects meet Bank requirements.

15. Actions that would require such assessment include, for example, privatization of environmentally sensitive enterprises, changes in land tenure in areas with important natural habitats, and relative price shifts in commodities such as pesticides, timber, and petroleum.

16. The requirements for FL operations are derived from the EA process and are consistent with the provisions of para. 6 of this OP. The EA process takes into account the type of finance being considered, the nature and scale of anticipated subprojects, and the environmental requirements of the jurisdiction in which subprojects will be located.

17. Any FL included in the project that requires appraisal complies with the same requirement as a condition of its participation.

18. The criteria for prior review of Category B subprojects, which are based on such factors as type or size of the subproject and the EA capacity of the financial intermediary, are set out in the legal agreements for the project.

19. For the Bank's approach to NGOs, see GP 14.70, Involving Nongovernmental Organizations in Bank-Supported Activities.

20. For projects with major social components, consultations are also required by other Bank policies-for example, OD 4.20, Indigenous Peoples, and OP/BP 4.12, Involuntary Resettlement (forthcoming).


22. See OP/BP 13.05, Project Supervision (forthcoming).
Sectoral Environmental Assessment

Sectoral environmental assessment (SEA) is a much needed complement to project-specific EAs in development planning. Where project EAs focus on the impacts of specific investments and often treat sector strategic planning as a given, SEA offers an opportunity for sector-wide environmental analysis before investment priorities have been determined. It also supports integration of environmental concerns into long-term development and investment planning. SEA is most commonly applied in the context of sector investment programs involving multiple sub-projects. It can also be applied in conjunction with sector-oriented time-slice and line-of-credit projects, and even with sector adjustment operations or in evaluation of sector policies.

This EA Sourcebook Update, which belongs to Chapter 1: The Environmental Review Process (Update Binder), describes SEA in terms of advantages, operational context, selection criteria, and components. It also discusses what some of the challenges associated with SEA preparation are, and how SEA is being used in Bank operations. This Update expands on existing information in Chapter 1 (pp. 14-17) of the EA Sourcebook.

Background

World Bank guidance on sectoral EA was introduced in 1989 with the adoption of Operational Directive (OD) 4.00, Annex A: Environmental Assessment (amended in 1991 as OD 4.01). The Environmental Assessment Sourcebook (1991) provided more detailed advice that has helped the Bank and its borrowers to introduce SEA in project preparation, despite the lack of a tested methodology. On the basis of this accumulated experience, it is now possible to expand Bank guidance on SEA.

SEA avoids the inherent limitations of project-specific EAs in addressing issues related to policy and planning and the legal and institutional framework. By moving upstream in the planning process to a stage where major strategic decisions have not yet been made, SEA offers better opportunities not only for analyzing existing policies, institutions, and development plans in terms of environmental issues, but also for supporting environmentally sound sector-wide investment strategies. A SEA may, for example, allow for a more realistic environmental assessment of competing investment alternatives in the power sector, where one option might favor massive coal thermal and hydro-electric expansion; a second option, nuclear and hydro-electric power; and a third, a combination of coal and gas thermal power coupled with demand-side management and development of renewable biomass energy. Similarly, where project-specific EA would analyze the impacts on ambient air quality around a new industrial estate, the sectoral EA might look at the cumulative effects of acid rain or other problems resulting from proposed industrial developments in terms of their regional, national or even transnational impacts.

The Bank's increasing use of programmatic, sector-oriented loans and time-slice investment programs has served to build demand for a sectoral EA approach, and has provided the best opportunities for developing SEA as a planning tool. An example of this approach is presented in Box 1. In other cases, sectoral EA may be the only EA output if the sub-projects do not require EAs individually. Environmental planning measures and/or guidelines developed by the SEA may then be applied (see Box 2 for a list of Bank-financed projects with a SEA component).

Advantages of Sectoral EAs

The growing Bank experience with SEAs has revealed several important benefits to be gained from use of this instrument in development planning (see Boxes 1 and 3–6). The following advantages are worth highlighting:

- Sectoral EAs can prevent serious environmental impacts through analysis of sector policies and investment strategies upstream in the planning process, before major decisions are made.
- They can assist governments in forming a long-term view of the sector and can increase the transparency of the sectoral planning process (that is, show the reasoning behind development plans), thereby decreasing the opportunities for purely political decisions that might be environmentally harmful.
- They are suitable for analysis of institutional, legal and regulatory aspects related to the sector, and for making comprehensive and realistic recommendations regarding, for example, environmental standards, guidelines, law enforcement, and training, thus reducing the need for similar analysis in downstream EA work.
• They provide opportunities for consideration of alternative policies, plans, strategies or project types, taking into account their costs and benefits, particularly the environmental and social costs that are often ignored in least-cost project planning.

• SEAs help to alter or eliminate environmentally unsound investment alternatives at an early stage, thus reducing overall negative environmental impacts, while also eliminating the need for project-specific EA of these alternatives (see Figure 1).

• They are well suited to consider cumulative impacts of multiple ongoing and planned investments within a sector, as well as impacts from existing policies and policy changes.

• They are valuable for collecting and organizing environmental data into information and, in the process, identifying data gaps and needs at an early stage, and for outlining methods, schedules and responsibilities for data collection and management during program or project implementation.

• They allow for comprehensive planning of general sector-wide mitigation, management, and monitoring measures, and for identifying broad institutional, resource and technological needs at an early stage.

• They provide a basis for collaboration and coordination across sectors, and help to avoid duplication of efforts and policy contradictions between sector agencies and ministries.

• They may strengthen preparation and implementation of sub-projects by recommending criteria for environmental analysis and review, and standards and guidelines for project implementation.

The Operational Context

Three broad operational contexts, or situations, may trigger SEA work. The need to interpret OD 4.01 varies according to these contexts.

The first type of situation is a category A or B investment program or a series of independent A and/or B projects in a given sector. In these cases, the process and timing and the scope of the SEA should follow the requirements of OD 4.01. For B projects a limited sectoral environmental analysis would normally be the appropriate form of SEA. Types of projects in this first context may include:

• a national or sub-national sector program;
• a series of projects in the same sector;
• a large project with sectoral implications;
• a sectoral intermediate credit operation; or
• a sectoral time-slice investment operation.

The second context is in projects and programs where a SEA is prepared to complement the planning process. These SEAs may be triggered by Bank environmental screening of a project; but they cover a broader set of issues than merely the impact of the project, and they proceed in parallel with the required project EA work. This SEA approach may, for example, be appropriate in sectors with widespread and well-known environmental damage although the project supported by the Bank may not create any significant additional problems. The Bank might help secure funding for such SEA work, but OD 4.01 does not directly apply (and subsequently the SEA does not have to be completed prior to appraisal). Box 6 provides an example of a SEA prepared in this context.

The third context is when sectoral environmental analysis is employed without any direct link to lending activities. In this case, the SEA is typically related to Bank economic and sector analysis for a country. OD 4.01 does not apply, and no particular procedures need to be followed although this Update may provide valuable information.

Criteria for Choosing SEA

The following questions will help identify where a sectoral EA approach may be particularly appropriate and useful in a project or program where OD 4.01 applies. If the answer to the following question is positive, SEA should be seriously considered:

• Is the Bank considering any of the investment types listed in the section on Operational Context (above), in a sector with significant environmental issues?

If the answer to the next three questions is also positive, SEA is highly recommended:

• Are there major existing environmental problems associated with the sector, and/or sector-wide potential environmental impacts resulting from the proposed program or series of projects?

• Is there a clear potential for significant environmental improvement or avoidance of major problems in the sector?
• Are there clear policy, regulatory and/or institutional weaknesses relative to environmental management in the sector?

• In addition, there are conditions that increase the potential value of SEAs but are not sufficient or completely necessary requirements:

• Is the borrower at an early planning stage or at a new major investment phase, where important strategic decisions have not yet been made?

• Are conditions in the sector relatively stable and predictable (rather than tending to rapid and unpredictable change), so as to allow for a medium to long-term planning horizon and therefore better chance of gaining long-term value from the SEA?

• Is the borrower willing to pay for the SEA and likely to give weight to the findings and recommendations?

Sections of a Sectoral EA Report

SEAs will vary in scope and content according to the types and significance of issues and the operational context. A general outline for a full (category A) SEA can be constructed, however, using the guidance provided in OD 4.01, Annex B, for a full project-specific EA (see also Box 5 for a sector-specific example).

Executive Summary. As in a project-specific EA, a SEA should contain an executive summary (in English), with a concise discussion of significant findings and recommended actions.

Policy, Legal and Administrative Framework. This section is one of the most important parts of a sectoral EA. It is helpful to analyze both (1) the national environmental legal, regulatory and institutional framework, and (2) sector-specific policies, regulations and institutions (see Box 3). If other, recent studies have already analyzed these dimensions in an adequate way, the SEA should draw on this work rather than duplicate it.

• The national framework. The relevant national environmental policies, laws and regulations should be assessed for completeness and appropriateness in light of the particular conditions and problems of the sector, and gaps and weaknesses noted. Non-environmental laws and policies that have significance for the sector’s utilization of resources, production processes, or pollution should also be identified. Similarly, the national regulatory framework for EA preparation and review should be assessed. The SEA should look closely at the institutional capacity of the main environmental ministry or agency, in terms of effectiveness and capacity for providing guidelines, setting and enforcing standards, and reviewing environmental assessments. The capacity and performance of agencies responsible for specific environmental services such as nature protection and cultural heritage should also be reviewed when relevant.

• The sector framework. The SEA should analyze sector-specific policies, laws and regulations that have environmental implications. It should also identify how environmental responsibilities are distributed among (public or private) sector institutions and assess their capacity to administer these tasks. The sectoral investment planning process, in terms of objectives, methodology and procedures for review and approval of plans and projects, should be carefully reviewed. The relationship between timing of project review, issuance of licenses and permits, and the sectoral planning process should be clearly indicated. The SEA should assess whether environmental and social issues are adequately covered by current procedures.

Project Description. The nature and objectives of the program, plan, series of projects or other context to which the SEA is attached should be described, and the main environmental issues associated with the sector and these programs, identified.

Baseline Data. This section should describe and evaluate the current environmental situation in the sector. Where a project-specific EA would describe conditions such as ambient air and water quality or existing impacts from pollution around a proposed project site, the SEA should concentrate on the issues and problems that are typical of the sector as a whole. For example, occupational health may be a concern across enterprises within a specific industry; seepage of heavy metals into streams and groundwater may be a recurring problem in the mining sector; or deforestation may result from activities in the agriculture sector. Another important function of this section is to note major data gaps.

Environmental Impacts. The single most difficult challenge in SEAs is to produce a sufficiently precise impact analysis, often in the face of uncertainties related to the final investment decisions and their individual and combined impacts. In recent years, advances have been made in the methodologies for assessing cumulative impacts, in relation to development plans and programs. Means include quantitative modeling, forecasting and various qualitative analyses. If any proposed sub-project is expected to cause particularly significant impacts, the SEA should recommend an appropriate course of action to address them, including carrying out a project-specific EAs (see Box 4).
All cumulative effects should be considered: positive and negative, direct and indirect, long-term and short-term. Aggregate problems such as sewage discharge, acid rain, ozone depletion and deforestation are usually the result of several activities, sometimes stemming predominantly from a single sector. Cumulative impacts on environmentally important and sensitive areas and assets such as coastal zones and wetlands, or freshwater resources, are also important in cases where the sector activities heavily affect these areas and/or resources.

The sectoral EA is an appropriate instrument for considering issues related to long-term sustainable development. Specifically, the SEA may contain a discussion of how a proposed investment program may influence long-term productivity of environmental resources affected by the program.

Analysis of Alternatives. A major purpose of a SEA is to do a thorough analysis of alternative investment options and strategies in terms of environmental costs and benefits. For example, if a proposed agricultural program emphasizes conversion of wetlands to rice production, an alternative approach such as intensification of production in existing fields, conversion of other land types, or crop rotation may be considered.

All major investments under consideration, besides the option being considered by the Bank, should be considered at this stage, whether complementary or alternative to the Bank option. The other options may include investments by the private as well as the public sector.

A comparative analysis of alternative programs is highly recommended, applying indicators of environmental and social impacts and methods to evaluate and compare the indicators and ultimately the alternative options. Where several donors are involved in the sector, the SEA should review their existing and/or planned activities and, if necessary, suggest ways to coordinate efforts.

The sectoral EA can also be used to evaluate the environmental effects of sector policy alternatives. For example, changes in tax and subsidy rates on the use of natural resources may greatly influence rates and methods of extraction.

The analysis could conclude with a list of sector proposals, ranked according to environmental preference. The analysis of impacts and alternatives should result in a recommendation for an optimal investment strategy, in terms of environmental and social costs and benefits.

Mitigation Plan. Mitigation measures are usually of a detailed, technical nature, and therefore normally addressed in project-specific EAs. However, if planned or existing production and process technologies in a sector are relatively uniform, the SEA could recommend broad options for eliminating, reducing to acceptable levels, or mitigating environmental impacts. Such solutions could include a complete production system design as well as end-of-pipe cleaning technologies. SEA mitigation recommendations should draw on findings from the analysis of policy, legal and institutional issues as well as the analysis of impacts and alternatives.

A SEA is an effective tool for designing and recommending mitigation measures that can be implemented only at the national or sectoral level for regulatory or economic reasons. In an urban transportation program, for example, automobile emission limits could be recommended if the level of emissions were found to supersede acceptable standards for air quality. Similarly, in a sector program involving multiple investments, the SEA may be better placed than project-specific EAs to consider sector-wide mitigation solutions that require economies of scale in order to be cost-effective. Construction of a solid waste recycling plant for an entire country is one such example.

Environmental Management and Training. One of the main outputs of a SEA should be an institutional plan for improving environmental management in the sector, based on findings of the previous sections (see Boxes 1 and 6). The plan might recommend training of existing staff, hiring of additional staff, reorganization of units or agencies, or redefinition of roles and responsibilities. This section might also include recommendations on policy and regulatory instruments for environmental management and enforcement in the sector. A screening process to separate those sub-project needing a project-specific EA from those not requiring further analysis should be designed, if it is not already in place (see Box 4).

Environmental Monitoring Plan. The SEA should provide general guidelines for long-term sector-wide environmental monitoring to ensure adequate implementation of investments. A monitoring plan should use the findings of the baseline data section as a basis to measure progress in mid-term review and final evaluation. The plan should also recommend measures needed to collect and organize missing data.

Public Consultation. Public consultation is an integral part of the EA process, whether a project-specific or sectoral EA is being prepared (see OD 4.01 and EA Sourcebook Update No. 5: Public Involvement in Environmental Assessment for more specific guidance). However, since a SEA normally covers an entire sector (in a national or subnational context) and is conducted before concrete investment decisions are made, it may not always be possible to consult representatives of all potentially affected people during preparation of the SEA. Often, it is more feasible and appropriate to carry out consultations with national NGOs (for example, for nature protection), scientific experts, relevant government agencies, and perhaps also industrial and commercial interests. A successfully implemented consultation process will help ensure public support for the final sector program.
Challenges in SEA

Timing and Status

In order for a SEA to reach its full potential as a planning tool, it must be undertaken in concert with the overall investment planning in the sector. In practice, this is sometimes difficult to achieve because Bank-financed projects and programs are often prepared after government sector planning and strategic decision-making. This makes any consideration of strategic alternatives difficult. Early coordination between the planning processes of the borrower and the Bank is the best way to overcome this constraint.

If a SEA is undertaken, its relevance to sector planning should be ensured through preparation of terms of reference (TORs) and coordination between preparers and sector planners. If SEAs over time demonstrate high quality and usefulness as a planning tool, they likely will have growing acceptance.

Costs

A sectoral EA is generally more costly to undertake than project-specific EA. For this reason, some borrowers may be reluctant to choose the SEA option unless the SEA can be expected to so improve the quality of sector planning that the need will be reduced for project-specific EA work—and associated costs—downstream.

Appropriate TORs and Consultants

Experience and special skills are required to do adequate SEA work, especially in cumulative impact assessment and in analysis of alternative options and the policy, legal and institutional framework. At the same time, TORs for the EA need to be realistic in their requirements and manageable. TORs should narrow the scope of analysis to issues that are most significant and widespread within the sector, rather than require coverage of all aspects. TOR preparation and EA team selection should also support development of in-country capacity for SEA work.

Adjusting to Circumstances

A sectoral EA approach may be useful even in cases where major sector decisions have already been made. For example, the SEA can be adjusted to the purposes of a time-slice or financial intermediary loan involving numerous sub-projects in which the primary issue is setting up appropriate mechanisms for sub-project screening, review, impact analysis, and monitoring. In these cases, doing a more limited SEA may reduce the amount of EA work needed for individual sub-projects, while facilitating more effective review and monitoring at the sectoral level.

In many developing countries, economic and social changes are often rapid and unpredictable, as are changes in technological opportunities (for example, with regard to pollution abatement). On the other hand, planning time frames tend to be long-term due to difficulties in raising capital and limited absorptive capacity. Because of this tension, a full SEA may not always be the optimal option. An alternative approach, currently used by Kenya in the energy sector and supported by the Bank, is to identify major investment options within the sector, rank them by environmental and social criteria and impacts, and provide a general overview of mitigation requirements for each option. This approach allows for gathering of essential data and can serve as a "preamble" to project-specific EAs where needed.

Ensuring Specificity and Follow-Up

Doing a SEA should not become an excuse for over-looking site-specific environmental issues, even though the emphasis is primarily on issues generic to the sector. The SEA should be employed to identify prevalent problems in the sector as a whole and major site-specific problems, which might subsequently be addressed in project-specific environmental assessment. The SEA should help determine where more EA work is needed downstream.

Boxes

Box 1. State of Orissa, India: Water Resources Consolidation Project

India has begun increasing irrigation capacity through more efficient operation and maintenance of existing facilities, rather than through construction and development. A series of Water Resources Consolidation projects (WRCP) currently being planned by four State Governments and supported by the Bank will facilitate this change of direction. A sectoral EA approach is being adopted for these projects because: (1) they are substantially programmatic and not all activities will be fully defined at appraisal; (2) the main environmental issues concern monitoring and management rather than impacts from new construction projects; and (3) environmental considerations related mainly to water quality and quantity are becoming increasingly important in all these states. The governments need improved technical advice on how to cope with these challenges on the institutional and policy level.

The first of these projects was Orissa WRCP, and preparation of the SEA was divided into two phases. Phase 1, currently in progress, focuses heavily on the institutional and legal framework for the water sector and includes the following objectives and tasks:
Box 3. Bolivia: Sectoral EA for Industry and Mining

The purpose of this EA was to help design the Environment, Industry and Mining Project (EIMP), proposed to begin about mid-1995. A sectoral approach was chosen to strengthen capability in planning new industrial and mining investments and to build institutional capacity for environmental management. The SEA was prepared by a Swedish team and a counterpart group appointed by the National Environmental Secretariat (SEMA). The EA report included all the components described in OD 4.01—Annex B, with an emphasis on (1) the policy, legal and institutional framework; (2) assessment of impacts from on-going activities and planned investments (covering natural resources and the environment, occupational health and safety, social structures, and heavily affected regions); and (3) recommendations for a mitigation plan. There was also a separate chapter on public participation in the EA process, which documented consultations with some 40 governmental and nongovernmental organizations, including several NGOs at the local level.

Policy, Legal and Institutional Framework

The analysis of the cross-sectoral policy, legal and institutional framework was comprehensive and covered the following aspects: (1) organization of the State (branches of government, key ministries and major legal instruments); (2) economic policy; (3) national policies, laws and institutions for the environment; (4) environmental impact assessment requirements; (5) policies and laws for the use of natural resources; (6) environmental management in areas such as water quality, solid waste, pesticides and air pollution; (7) occupational health and safety; and (8) foreign assistance. Major issues related to the policy, legal and institutional framework included: (1) unclear environmental law about institutional responsibilities, which leads to weak enforcement; (2) almost no environmental laws regarding mining, and poor enforcement of the few provisions in place; (3) no regulations specifically for hazardous waste or industrial air emissions; and (4) no effective regulation of industrial water pollution except in a few municipalities.

EA Recommendations

The EA preparers were able to produce a series of concrete recommendations that were directly related to the environmental problems caused by activities in the two sectors. Recommendations for changes fell into three areas: (1) broad policy, legal and institutional changes (e.g., setting goals for ambient environmental quality, implementing new EIA regulation, and improving laboratory capacity); (2) major mitigation activities (e.g., addressing environmental issues in privatization of state-owned mines on the basis of environmental audits, ex-tending sewerage systems in Cochabamba, and addressing problems related to alluvial gold mining in the Bolivian Amazon basin); and (3) additional priorities (e.g., encouraging broad public participation, building a coherent national environmental database, and introducing environmental audits, first voluntarily and eventually as a requirement, of industrial and mining facilities).

Box 4. Procedures for Sectoral EA: Asia Region

Extensive experience with program and time-slice lending in the highway sector, particularly rural areas, has spurred development of informal procedures for sectoral EA in the Bank’s Asia region, to ensure consideration of all possible impacts on the environment. According to the informal procedures, a sectoral EA should contain:

- a screening process designed to identify sub-projects having potentially significant issues that would need to be addressed in a sub-project EA;
- a general assessment of the kinds of impacts that might be associated with the different types of rural road sub-projects; and
a sectoral environmental action plan to eliminate, minimize or mitigate the impacts identified in the sectoral EA, and provide general guidelines for long-term monitoring.

Two categories are used in environmental screening of sub-projects:

- sub-projects that may create a few minor and easily recognizable environmental problems, but no significant ones; and

- sub-projects with potentially adverse impacts on environmentally sensitive areas, defined as zones of significant human habitation: ecologically important areas such as wetlands and primary forests; archeological, historical and cultural sites; and terrain with slope greater than 50%.

The second category of sub-projects requires project-specific EA, while the first category is addressed primarily through the sectoral EA in the form of general impact assessments, sectoral action plans, and codes of engineering practice for environmentally sustainable road development. These codes apply to both categories of sub-projects and cover such issues as construction practices, site selection, resettlement and compensation, and public consultation/participation.

Box 5. Technical SEA Guidelines in the Electricity Sector: LAC Region

The Bank's Latin American and Caribbean (LAC) region has developed technical guidelines for sectoral EA in the electricity sector, based on its extensive experience in this sector. The guidelines stipulate that a sectoral EA is recommended where project-specific EAs are not appropriate, due to:

- minimal preparation of individual project components at the time of Bank appraisal (e.g., hydro-power developments may be at very preliminary stages of planning);

- the nature of the lending operation, such as time-slice operations involving a large number of projects at varying stages of development; and/or,

- the nature and scale of the projects or programs under consideration.

The guidelines describe the principal sections of a SEA for the power sector: (1) description of the current situation of the power sector; (2) review of the country's environmental institutional framework; (3) review of the power sector's regulatory framework and planning procedures; (4) analysis of planned and alternative power sector strategies; (5) choice of an optimal investment strategy; (6) review of institutional capacity of power sector agencies; (7) public consultation; and (8) action plan (for mitigation, management and monitoring).

Box 6. Morocco: Large-Scale Irrigation II (Sectoral EA as Part of Sector Planning)

The Government of Morocco and the Bank agreed to conduct a sectoral EA as a complementary activity in the preparation of this project. Although a full EA or SEA was not required for the proposed project under OD 4.01, both parties saw the potential added value a SEA could bring to the integration of environmental concerns into the long-term development of the irrigation sector. Concurrently, the investment component of the project, focusing on the rehabilitation of existing irrigation infrastructure, was placed in environmental screening category B and was thus the subject of a field-based environmental review. A joint venture of two French consulting firms, financed with a Japanese grant, was hired (following a competitive selection process) to prepare both the SEA and the environmental review.

The SEA examined the long-term environmental implications of proposed future investments in the sector; evaluated environmental concerns associated with system operation and maintenance; and analyzed institutional, legal and regulatory aspects. The SEA proposed an environmental management framework focused on development of environmental units for irrigation at both the national and district levels. Support for the initial phase of implementation of the institutional strengthening and training recommended in the SEA was included in the project. It should be noted that the SEA preparation and review process resulted in significantly increased awareness of the diversity and complexity of environmental issues in this sector by the Moroccan study coordinators and participants.

The SEA provided an analysis of legal, regulatory and institutional aspects of environmental management in the irrigation sector, including recommendations for: (1) creation of new institutions responsible for policy and strategy formulation, environmental monitoring, and training; and (2) development of new laws and regulations for improving management and overall performance in the sector. Major technical activities recommended in the SEA included: (1) protection of watersheds; (2) water use planning; (3) soil conservation; (4) protection of ecologically sensitive habitats and species; (5) public health programs and monitoring; and (6) training and special studies.
ANNEX 8

MONTREAL PROCESS CRITERIA AND INDICATORS FOR THE CONSERVATION AND SUSTAINABLE MANAGEMENT OF TEMPERATE AND BOREAL FORESTS
MONTREAL PROCESS CRITERIA AND INDICATORS FOR THE CONSERVATION AND SUSTAINABLE MANAGEMENT OF TEMPERATE AND BOREAL FORESTS

CRITERION 1: Conservation of biological diversity

Biological diversity includes the elements of the diversity of ecosystems, the diversity between species, and genetic diversity in species.

Indicators:

1.1 Ecosystem diversity
   1.1.a. Extent of area by forest type relative to total forest area-(a);1
   1.1.b. Extent of area by forest type and by age class or successional stage-(b);
   1.1.c. Extent of area by forest type in protected area categories as defined by IUCN2 or other classification systems-(a);
   1.1.d. Extent of areas by forest type in protected areas defined by age class or successional stage-(b);
   1.1.e. Fragmentation of forest types-(b).

1.2 Species diversity
   1.2.a. The number of forest dependent species-(b);
   1.2.b. The status (threatened, rare, vulnerable, endangered, or extinct) of forest dependent species at risk of not maintaining viable breeding populations, as determined by legislation or scientific assessment-(a).

1.3 Genetic diversity
   1.3.a. Number of forest dependent species that occupy a small portion of their former range-(b);
   1.3.b. Population levels of representative species from diverse habitats monitored across their range-(b).

CRITERION 2: Maintenance of productive capacity of forest ecosystems

Indicators:

   a. Area of forest land and net area of forest land available for timber production-(a);
   b. Total growing stock of both merchantable and non-merchantable tree species on forest land available for timber production-(a);
   c. The area and growing stock of plantations of native and exotic species-(a);
   d. Annual removal of wood products compared to the volume determined to be sustainable-(a);
   e. Annual removal of non-timber forest products (e.g. fur bearers, berries, mushrooms, game), compared to the level determined to be sustainable-(b).

CRITERION 3: Maintenance of forest ecosystem health and vitality

Indicators:

   a. Area and percent of forest affected by processes or agents beyond the range of historic variation, e.g. by insects, disease, competition from exotic species, fire, storm, land clearance, permanent flooding, salinisation, and domestic animals-(b);
   b. Area and percent of forest land subjected to levels of specific air pollutants (e.g. sulfates, nitrate, ozone) or ultraviolet B that may cause negative impact on the forest ecosystem-(b);
   c. Area and percent of forest land with diminished biological components indicative of changes in fundamental ecological processes (e.g. soil nutrient cycling, seed dispersion, pollination) and/or ecological continuity (monitoring of functionally important species such as fungi, arboreal epiphytes, nematodes, beetles, wasps, etc.)-(b).

CRITERION 4: Conservation and maintenance of soil and water resources

This criterion encompasses the conservation of soil and water resources and the protective and productive functions of forests.

Indicators:

   a. Area and percent of forest land with significant soil erosion-(b);
   b. Area and percent of forest land managed primarily for protective functions, e.g. watersheds, flood protection, avalanche protection, riparian zones-(a);
   c. Percent of stream kilometres in forested catchments in which stream flow and timing has significantly deviated from the historic range of variation-(b);
d. Area and percent of forest land with significantly diminished soil organic matter and/or changes in other soil chemical properties-(b);

e. Area and percent of forest land with significant compaction or change in soil physical properties resulting from human activities-(b);

f. Percent of water bodies in forest areas (e.g. stream kilometres, lake hectares) with significant variance of biological diversity from the historic range of variability-(b);

g. Percent of water bodies in forest areas (e.g. stream kilometres, lake hectares) with significant variance from the historic range of variability in pH, dissolved oxygen, levels of chemicals (electrical conductivity), sedimentation or temperature change-(b);

h. Area and percent of forest land experiencing an accumulation of persistent toxic substances-(b).

CRITERION 5: Maintenance of forest contribution to global carbon cycles

Indicators:

a. Total forest ecosystem biomass and carbon pool, and if appropriate, by forest type, age class, and successional stages-(b);

b. Contribution of forest ecosystems to the total global carbon budget, including absorption and release of carbon (standing biomass, coarse woody debris, peat and soil carbon)-(a or b);

c. Contribution of forest products to the global carbon budget-(b).

CRITERION 6: Maintenance and enhancement of long-term multiple socio-economic benefits to meet the needs of societies

Indicators:

6.1 Production and consumption
   6.1.a. Value and volume of wood and wood products production, including value added through downstream processing-(a);
   6.1.b. Value and quantities of production of non-wood forest products-(b);
   6.1.c. Supply and consumption of wood and wood products, including consumption per capita-(a);
   6.1.d. Value of wood and non-wood products production as percentage of GDP-(a or b);
   6.1.e. Degree of recycling of forest products-(a or b);
   6.1.f. Supply and consumption/use of non-wood products-(a or b).

6.2 Recreation and tourism
   6.2.a. Area and percent of forest land managed for general recreation and tourism, in relation to the total area of forest land-(a or b);
   6.2.b. Number and type of facilities available for general recreation and tourism, in relation to population and forest area-(a or b);
   6.2.c. Number of visitor days attributed to recreation and tourism, in relation to population and forest area-(b).

6.3 Investment in the forest sector
   6.3.a. Value and volume of wood and wood products production, including value added through downstream processing-(a);
   6.3.b. Level of expenditure on research and development, and education-(b);
   6.3.c. Extension and use of new and improved technologies-(b);
   6.3.d. Rates of return on investment-(b).

6.4 Cultural, social and spiritual needs and values
   6.4.a. Area and percent of forest land managed in relation to the total area of forest land to protect the range of cultural, social and spiritual needs and values-(a or b);
   6.4.b. Non-consumptive use forest values-(b).

6.5 Employment and community needs
   6.5.a. Direct and indirect employment in the forest sector and forest sector employment as a proportion of total employment-(a or b);
   6.5.b. Average wage rates and injury rates in major employment categories within the forest sector-(a);
   6.5.c. Viability and adaptability to changing economic conditions, of forest dependent communities, including indigenous communities-(b);
   6.5.d. Area and percent of forest land used for subsistence purposes-(b).
CRITERION 7: LEGAL, INSTITUTIONAL AND ECONOMIC FRAMEWORK FOR FOREST CONSERVATION AND SUSTAINABLE MANAGEMENT

INDICATORS:

7.1 Extent to which the legal framework (laws, regulations, guidelines) supports the conservation and sustainable management of forests, including the extent to which:

7.1.a. Clarifies property rights, provides for appropriate land tenure arrangements, recognizes customary and traditional rights of indigenous people, and provides means of resolving property disputes by due process;

7.1.b. Provides for periodic forest-related planning, assessment, and policy review that recognizes the range of forest values, including coordination with relevant sectors;

7.1.c. Provides opportunities for public participation in public policy and decision-making related to forests and public access to information;

7.1.d. Encourages best practice codes for forest management;

7.1.e. Provides for the management of forests to conserve special environmental, cultural, social and/or scientific values.

7.2 Extent to which the institutional framework supports the conservation and sustainable management of forests, including the capacity to:

7.2.a. Provide for public involvement activities and public education, awareness and extension programs, and make available forest-related information;

7.2.b. Undertake and implement periodic forest-related planning, assessment, and policy review including cross-sectoral planning and coordination;

7.2.c. Develop and maintain human resource skills across relevant disciplines;

7.2.d. Develop and maintain efficient physical infrastructure to facilitate the supply of forest products and services and support forest management;

7.2.e. Enforce laws, regulations and guidelines.

7.3 Extent to which the economic framework (economic policies and measures) supports the conservation and sustainable management of forests through:

7.3.a. Investment and taxation policies and a regulatory environment which recognize the long-term nature of investments and permit the flow of capital in and out of the forest sector in response to market signals, non-market economic valuations, and public policy decisions in order to meet long-term demands for forest products and services;

7.3.b. Non-discriminatory trade policies for forest products.

7.4 Capacity to measure and monitor changes in the conservation and sustainable management of forests, including:

7.4.a. Availability and extent of up-to-date data, statistics and other information important to measuring or describing indicators associated with criteria 1-7;

7.4.b. Scope, frequency and statistical reliability of forest inventories, assessments, monitoring and other relevant information;

7.4.c. Compatibility with other countries in measuring, monitoring and reporting on indicators.

7.5 Capacity to conduct and apply research and development aimed at improving forest management and delivery of forest goods and services, including:

7.5.a. Development of scientific understanding of forest ecosystem characteristics and functions;

7.5.b. Development of methodologies to measure and integrate environmental and social costs and benefits into markets and public policies, and to reflect forest-related resource depletion or replenishment in national accounting systems;

7.5.c. New technologies and the capacity to assess the socio-economic consequences associated with the introduction of new technologies;

7.5.d. Enhancement of ability to predict impacts of human intervention on forests;

7.5.e. Ability to predict impacts on forests of possible climate change.

1: Indicators followed by an "a" are those for which most data are available. Indicators followed by a "b" are those which may require the gathering of new or additional data and/or a new program of systematic sampling or basic research.

2: IUCN categories include: I. Strict protection, II. Ecosystem conservation and tourism, III. Conservation of natural features, IV. Conservation through active management, V. Landscape/Seascape conservation and recreation, VI. Sustainable use of natural ecosystems.

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ANNEX 9

PUBLIC CONSULTATION AND DISCLOSURE PLAN - GUIDELINES
Public Consultation and Disclosure Plan - Guidelines

Public Consultation as part of an Environmental Assessment

In accordance with World Bank policy, a Sectoral Assessment has been implemented. Public consultation is an integral part of the Environmental Assessment process, when a project specific or sectoral EA is being implemented. However, since SEA covers an entire forest sector in national context and is conducted before concrete investment decisions are made, at this level, it was not possible to consult representatives of all potentially concerned people during preparation of this SEA. Obviously, successful consultation process will help ensure public support for the final forest sector program. Therefore, in the beginning of the study potential stakeholders were identified and consultations were held.

The purpose of public consultation during an SEA is two-fold. First, consultation during the SEA preparation process helps to identify key environmental issues and provides information on stakeholders’ concerns about and views of potential cumulative environmental impacts of development of various scenarios of the investment program. Second, consultation allows stakeholders to review findings and comment on proposed mitigation and management options.

Levels of Consultation

The consultation process for the SEA will take place at two levels:

At the national level, consultation with interested government bodies, NGOs, and other interested members of civil society will take place at both the preparation phase and the disclosure of the SEA phase.

At the local level, consultation with government authorities, forest users, potentially affected nearby villagers, and any other interested stakeholders will take place in some depth during the SEA preparation phase. Public meetings at the regional level will be organized for the second phase of consultation, when the SEA report is disclosed and discussed.

Phases of Consultation

For the purposes of the SEA, consultation will take place in the following way:

SEA preparation: During the SEA preparation, consultation will take place with key stakeholders at the local level. These include:

- Local branches of the State Department of Forest Management
- Local branches of the Ministry of Environment
- Local branches or agencies of relevant State Authorities (State Department of Geology, Roads, Protected Areas, Land Management, etc.);
- Local government authorities
- Village Councils nearby forest who might be affected by the project implementation
- NGOs active in the relevant local areas
- Forest farms
- Wood processing enterprises
- Forest users (private companies)
- Any other stakeholders identified through the consultation process

List of stakeholders interviewed to date is given in Annex 1.

At the national level, consultation will also take place on a general project input level in Tbilisi. Consultation with an interested audience will be undertaken as a method of disclosing information about the project and the SEA, and receiving feedback on either the process or specific aspects of the project.
EIA of Proposed Projects in the Forest Sector

Once the concrete investment decisions are made and project is finalized, EIA of the proposed project must be implemented according to the national legislation and the World Bank guidelines described in Operational Policy 4.01 "Environmental Assessment". EIA of the specific projects must focus on potential impacts of the proposed project and develop mitigation measures to ensure that the project options are sound and sustainable. EIA is expected to inform all stakeholders and decision makers on the nature of the environmental risks and consult representatives of all potentially affected people during preparation of the study.

Disclosure and Discussion of Draft EIA Report: When the draft EIA report is complete, it should be sent directly to a group of key stakeholders, which will be identified during the first phase of consultation (as it was done during SEA). A non-technical summary should be written, translated into Georgian and made widely available through government and non-government networks at the national and local level. Meetings with key stakeholders at the national and local level should be held to discuss the EIA report in order to get reaction and feedback to the environmental management options proposed in the draft report. Additionally, a series of public meetings ( provisionally in Tbilisi and on site) could be held, and advertised to the public at large in order to disclose the draft EIA and the proposed environmental management plan.

Methods

The following methods could be used for disclosing and discussing project information:

- leaflet with basic project information (Text of project flyer see below),
- small group meetings,
- briefings/workshops at the regional/national level, and

Meetings at the local level can be organized with the assistance of local offices of the State Department of Forest Management and government authorities. Meetings at the national and regional level can be organized through invitation to specific workshops, and through open advertisement using print media and radio of public meetings.

The non-technical summary of the draft EIA report should be distributed to identify interested parties and should be made available at appropriate locations, such as government offices, libraries, town halls, and other sites identified during the consultation process. The public should be notified of the availability of the non-technical summary through appropriate media, such as posters at the local level and through newspaper and radio advertisements at the national level.

On-going Consultation

Given that consultation is a process, this Public Consultation and Disclosure plan should be updated as the consultation process proceeds in order to identify specifically which stakeholders should receive what kind of information, and what mechanisms should be used to keep interested parties and stakeholders informed of and included in the process.
**Text of project flyer** *(to be translated into and distributed in Georgian)*

<table>
<thead>
<tr>
<th>Some common questions like:</th>
<th>Contact Information:</th>
<th>Indication of investor:</th>
</tr>
</thead>
<tbody>
<tr>
<td>What will the project's impacts be?</td>
<td>For further information, please contact the following project representative.</td>
<td><em>(The Government of Georgia and the World Bank)</em></td>
</tr>
<tr>
<td>Answer.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Will there be any conflicts over forest use?</th>
<th>Name, Position</th>
<th>Environmental Impact Assessment of <em>(the title of the project)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer.</td>
<td>Address, Telephone, Email</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What are the benefits of the project?</th>
<th>Your comments will help us to ensure that the project is undertaken in an environmentally responsible manner, in accordance with the laws of Georgia and the World Bank standards and policies.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Etc.</th>
<th></th>
<th>This leaflet forms part of a program of public information and consultation in relation to the environmental assessment of the proposed <em>(title)</em> Project.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Project description:</th>
<th>Project Components:</th>
<th>The Environmental Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>(describe briefly the proposed project)</em></td>
<td><em>(List the project components)</em></td>
<td><em>(Aims and objectives of EIA)</em></td>
</tr>
</tbody>
</table>
ANNEX 10

Public Consultations report
Tbilisi (May 18, 2001)
Oni (June 2, 2001)
Public Presentation of the findings of a Sectoral Environmental Assessment (SEA)

Organization of Public Presentations

Based on what was learned during the first phase of consultation, and in accordance with the World Bank guidelines, two public presentations were held - one in Tbilisi (on May 18, 2001) and one in Oni (on June 2, 2001). Oni was selected as a site for a second public presentation, firstly, as it is very important to let the local population in the Lab Zone know regarding the planned activities envisaged by the FDP and there are notably more stakeholders with an interest in that particular project site and secondly, as it was planned by the FSDC to organize a seminar in Oni.

- Publicity

Notices about these presentations were posted at different relevant locations and were made widely available through governmental and non-governmental networks at the national and local level (government offices, NGOs, etc.) and included information on where to obtain a copy of the SEA and executive summary\(^1\). Individual invitations were sent by the PIU to the relevant stakeholders as well.

Following the public presentation in Tbilisi on May 18, 2001, the Georgia Forest Sector Development Center announced publicly the second time that the following documents were publicly available:

- a soft version of the executive summary of the SEA in Georgian via e-mail upon request\(^2\);
- hard copies of the SEA report in English and in Georgian at the public disposal at the office of the FSDC.

Deadline for comments and remarks was set till June 1st 2001.

- Purpose of the meetings

The purpose of the meetings was to present the Sectoral Environmental Assessment of the Forests Development Project to the public. The focus of the presentations was to reveal and disclose details of the SEA and the Project itself, which were of concern to the participants. Together with representatives of NGOs and various State organizations, appropriate technical staff from the PIU and the SDFM attended the presentations, in order to present the planned Forests Development Project and introduce results of the Sectoral Environmental Assessment study, and to respond to questions raised.

- Outcome of Public Presentations

The presentations themselves provided an opportunity for the interested public to ask questions and raise concerns about the SEA. They were both well attended, in particular by people dealing with the forestry issues, NGOs and by local foresters in Oni meeting. The meeting in Tbilisi was attended by 35 persons and by 49 persons in Oni. Both presentations were chaired by Mr. Vladimer Abashidze, Director of the FSDC. A list of attendees at each of the hearings is presented in the Annex. The meetings lasted for 3-4 hours. Discussions were in Georgian language with translation provided for foreigners were necessary.

The meetings started with outlines main characteristics of the proposed Georgia Forests Development Project, and was followed with presentation of Sectoral Environmental Assessment. It was emphasized that the SEA, which is the essential tool for elaboration of the project, is a relatively new practice in Georgia. Difference between EIA and SEA was explained and main objectives of SEA study were described. It was mentioned that the SEA developed mitigation measures for different activities planned in the framework of the proposed project and proposed guidelines for environmental management plan for the FDP considering general criteria of sustainability, participatory management and biodiversity.

Discussions were very dynamic on many topics.

- Summary of some of the key concerns

A summary of some of the key concerns raised (and answers) at the two presentations in Tbilisi and Oni is given below.

- The value of Public Participation for SEA

The meetings were useful to the team preparing the SEA and to participants although rather different views and interests were expressed by various participants.

A number of small changes in the content of the SEA were made as a result of ideas expressed at two public presentations.

\(^1\) Copy of Notices are annexed in the end

\(^2\) Furthermore, 100 hard copies of executive summaries were distributed to attendees of the Tbilisi meeting and any interested individuals.
Notice announced (on 15.05.01) for invitation on the Public Presentation of the Sectoral Environmental Assessment

NOTICE

This is to announce that a Public Presentation will take place to present the findings of a Sectoral Environmental Assessment (SEA) of the World Bank sponsored:

Forests Development Project

The meeting will take place at the office of the Georgia Forest Sector Development Center (in the building of the State Department of Forest Management, 5 floor), on May 18, at 11:00 AM.

ALL ARE WELCOME

Copies of the SEA full report as well as executive summaries are available to view at the office of the Georgia Forest Sector Development Center.

Those interested to attend the meeting, please confirm your participation to the Georgia Forest Sector Development Center at the following phones:

32 05 49
8 99 57 67 92 (Kate Metreveli)

or e-mail: kattimet@geo.net.ge

Georgia Forest Sector Development Center

Second Notice announced by the Georgia Forest Sector Development Center announces on 21.05.01

ANNOUNCEMENT

Following the public presentation of the Georgia Forests Development Project and its Sectoral Environmental Assessment, Friday May 20, 2001, the following documents are available:

- a soft version of the executive summary of the SEA in Georgian can be sent by e-mail upon request;
- hard copies of the report in English and in Georgian are at the public disposal at the office of the Georgia Forest Sector Development Center.

Comments and remarks for consideration can be sent in written form to the Center till June 1st 2001.

Address of the Georgia Forest Sector Development Center:
9, Mindeli street
(in the building of the State Department of Forest Management, 5 floor)

32 05 49
8 99 57 67 92 (Kate Metreveli)
E-mail: kattimet@geo.net.ge

Consultant’s e-mail: acta@acta.ch

Georgia Forest Sector Development Center
**Venue:**
Tbilisi, Office of the Georgia Forest Sector Development Center

**Date:**
May 18, at 11:00 AM

**Participants:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Position/Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Givi Japaridze</td>
<td>Head of the State Department of Forest Management (SDFM)</td>
</tr>
<tr>
<td>Avto Geladze</td>
<td>State Department of Forest Management, Head of Department</td>
</tr>
<tr>
<td>Roman Mamaladze</td>
<td>State Department of Forest Management, Head of Department</td>
</tr>
<tr>
<td>Emako Sikharulidze</td>
<td>State Department of Forest Management, Head of Department</td>
</tr>
<tr>
<td>Amiran Labaladze</td>
<td>State Department of Forest Management, Head of Department</td>
</tr>
<tr>
<td>Shota Rusadze</td>
<td>Director of ForestProject</td>
</tr>
<tr>
<td>David Gigaure</td>
<td>Deputy Director of ForestProject</td>
</tr>
<tr>
<td>Otar Shengelia</td>
<td>ForestProject, Head of Devison</td>
</tr>
<tr>
<td>Avtandil Mikaberidze</td>
<td>State Department of Protected Territories, Nature Reserves and Hunting Farms, leading specialist</td>
</tr>
<tr>
<td>Chikviladze</td>
<td>State Department of Land Management, Deputy Head</td>
</tr>
<tr>
<td>Paata Shanshiashvili</td>
<td>Protected Areas Development Center, Director</td>
</tr>
<tr>
<td>Lela Khoperia</td>
<td>NGO Center for Strategic Planning and Development, member of environmental group</td>
</tr>
<tr>
<td>Manana Devidze</td>
<td>NGO “Caucasus Ecology”, Executive Director</td>
</tr>
<tr>
<td>Ramaz Gokhelashvili</td>
<td>NGO GCCW</td>
</tr>
<tr>
<td>Paata Khumarashvili</td>
<td>NGO Georgia’s Protected Areas Program (GPAP)</td>
</tr>
<tr>
<td>Manana Kochladze</td>
<td>CEE Bankwatch Network</td>
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<tr>
<td>Zurab Sigua</td>
<td>NGO Environmental Union</td>
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<tr>
<td>Nugzar Meladze</td>
<td>NGO “Green Earth”</td>
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<tr>
<td>George Gigauri</td>
<td>Mountain Forest Research Institute, Director</td>
</tr>
<tr>
<td>Bidzina Tavadze</td>
<td>Mountain Forest Research Institute</td>
</tr>
<tr>
<td>Vladimir Abashidze</td>
<td>Georgia Forest Sector Development Center, Director</td>
</tr>
<tr>
<td>Ketevan Metreveli</td>
<td>Georgia Forest Sector Development Center, Deputy Director</td>
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<tr>
<td>Nicolas Beruchashvili</td>
<td>Georgia Forest Sector Development Center, Coordinator</td>
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<tr>
<td>Leri Chochua</td>
<td>Georgia Forest Sector Development Center, Coordinator</td>
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<tr>
<td>George Imamadze</td>
<td>Georgia Forest Sector Development Center, Coordinator</td>
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<tr>
<td>Merab Machavariani</td>
<td>Georgia Forest Sector Development Center, Coordinator</td>
</tr>
<tr>
<td>Manana Gvasalia</td>
<td>Georgia Forest Sector Development Center, Secretary/Interpreter</td>
</tr>
<tr>
<td>Sandro Urushadze</td>
<td>Georgia Forest Sector Development Center, Assistant</td>
</tr>
<tr>
<td>Darejan Kapanadze</td>
<td>World Bank Mission, Tbilisi</td>
</tr>
<tr>
<td>Laurent Nicole</td>
<td>ACTA Consultants, Project leader</td>
</tr>
<tr>
<td>Nana Janashia</td>
<td>ACTA Consultants</td>
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<tr>
<td>Nino Sulikhanishvili</td>
<td>ACTA Consultants</td>
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<tr>
<td>Zaza Shavliashvili</td>
<td>ACTA Consultants</td>
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<tr>
<td>Dimitri Kalandadze</td>
<td>ACTA Consultants</td>
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<tr>
<td>Merab Barbakadze</td>
<td>ACTA Consultants</td>
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</tbody>
</table>
Venue:
Oni

Date:
June 2, at 14:00 PM

Participants:

<table>
<thead>
<tr>
<th>Name</th>
<th>Position/Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avto Geladze</td>
<td>State Department of Forest Management, Head of Department</td>
</tr>
<tr>
<td>Otar Dvaladze</td>
<td>State Department of Forest Management</td>
</tr>
<tr>
<td>Vasil Maisuradze</td>
<td>State Department of Forest Management</td>
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<tr>
<td>Teziko Tagvadze</td>
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</tr>
<tr>
<td>Natia ???</td>
<td>NGO Georgia’s Protected Areas Program (GPAP)</td>
</tr>
<tr>
<td>Zurab Gurielidze</td>
<td>NACRES</td>
</tr>
<tr>
<td>Aleko Rukhadze</td>
<td>Geographical Society</td>
</tr>
<tr>
<td>Tamaz Antadze</td>
<td>Newspaper Ecology</td>
</tr>
<tr>
<td>David Kereselidze</td>
<td>Green Movement of Oni, Lider</td>
</tr>
<tr>
<td>Dato Rekhviashvili</td>
<td>local NGO</td>
</tr>
<tr>
<td>Bidzina Tavadze</td>
<td>Mountain Forest Research Institute</td>
</tr>
<tr>
<td>Shalva Aptiauri</td>
<td>Agrarian University</td>
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<tr>
<td>Tengiz Chikhladze</td>
<td>ForestProject</td>
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<tr>
<td>Zaliko Daushvili</td>
<td>ForestProject</td>
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<tr>
<td>Bichiko Lobjhanidze</td>
<td>ForestProject</td>
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<td>Vladimir Abashidze</td>
<td>Georgia Forest Sector Development Center, Director</td>
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<td>Nicolas Beruchashvili</td>
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<td>Sandro Urushadze</td>
<td>Georgia Forest Sector Development Center, Assistant</td>
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<tr>
<td>Neli Jamaspashvili</td>
<td>Tbilisi State University</td>
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<tr>
<td>Ramin Gobejishvili</td>
<td>Tbilisi State University</td>
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<tr>
<td>Nodar Elizbarashvili</td>
<td>Tbilisi State University</td>
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<td>Zurab Tkeshelashvili</td>
<td>Head of Oni office of the SDFM</td>
</tr>
<tr>
<td>Merab Ordinadze</td>
<td>Deputy Head of Oni District</td>
</tr>
<tr>
<td>George Margveladze</td>
<td>Head of Ambrolauri office of the SDFM</td>
</tr>
<tr>
<td>Staff of the offices in Oni and Ambrolauri</td>
<td></td>
</tr>
</tbody>
</table>
1. p. 62 The concept that Georgia used to import wood resources from Russia, while keeping its own forest resources untouched is not correct (there was a period when 1,5 mln. cub.m. of timber was cut annually in Georgia).

Answer: Page 65 of Georgian version / page 51 of English version
The source of information is the National Environmental Action Plan 2000, approved by the Presidential Decree n° 191, date May 20, 2000. Reference 49

Also the statement " Most Georgia’s forests are still categorized as protected forests" needs clarifying (A great part of the forests belongs to the category of limited Forest use regime, the other part belongs to the protected forests category).

Answer: Page 65 of Georgian version / page 51 of English version
This comment is reflected in the core text

Further, on the same page: what is the reason of the conclusion "Most harvesting is therefore illegal"?

Answer: Page 65 of Georgian version / page 51 of English version
Due to a translation mistake, “therefore” was interpreted as “however”. It has been corrected.

2. p. 130, which decrees of the President of Georgia and the Chairman of the State Department, were not included in the Forest Code.

Answer: Page 133 of Georgian version / page 100 of English version (footnote)
For example:
- Presidential Decree on Establishment of “Georgia Forest Sector Development Center” as a legal entity of Civil Code (29.10.2000).
- Head of the SFDM issued Decree n° 10/53 on 23.09.2000, on “Approval of rules on form, issuance and registration of Forest use licences”

Which normative acts have been abolished since the Code was enforced;

Answer: Page 133 of Georgian version / page 100 of English version (footnote)
According to article 119 of the Forest Code, the following normative acts were announced cancelled after enactment of the Forest Code:
- Law on Arranging Forest Use on the territory of Georgia, approved on June 25, 1998

What does the statement " The Forest Code is de facto not effective" mean?

Answer: Page 133 of Georgian version / page 100 of English version (footnote)
Number of new regulations should have been issued for enactment of the Forest Code, refer to articles 116 to 120. Today, more than half of these needed regulations have still to be issued. On the same way, some existing regulations had to be cancelled or adjusted, as for example:
- Presidential Decree n°479 of 24.07.1996 on "Rules of allocation of standing timber" (Article 116, § b.g) was not cancelled, although new Forest Code considers issuance of the new Presidential Decrees regarding this issue (which was not done).

- Article 118 of the Forest Code: Adjusting a Normative Act to This Code after its Enactment. Till now, Presidential decree n° 64 of January 28, 1997 "On Establishing an Inter-Agency Expert Council for Licensing Use of Plant Resources (Forest Resources Inclusive) in Georgia was not adjusted, although one month period was allocated by the Forest Code.

Absolutely impossible to agree with the conclusion, that "The Forest Code is so intricate that its enforcement will be difficult. It might be not useful to mitigate negative environmental impacts and generate positive social benefits".

Answer: Page 133 of Georgian version / page 100 of English version (footnote)
Although SDFM admits that the text of the Forest Code is complicate, it disagrees with the fact that the code might not be useful to mitigate negative environmental impact and generate positive social benefits.

The Forest Code compiles both concepts and detailed descriptions of procedures. According to international experience this leads to difficulties in regulations' implementation.

Par. 1.2 What rules are implied?

Answer: Page 133 of Georgian version / page 100 of English version (footnote)
Refer to the footnote 21 on the same page

Par. 1.3 " Regulations for long term planning of forest resources shall be created" -sounds ambiguous.

Answer: Page 133 of Georgian version / page 100 of English version (footnote)
The previous Forest Code of 1978, had been defining "long term planning of forest resources", however it does not appear in the new Forest Code of 2000.

3. p.132. The second par. The idea is hard to understand. It is unacceptable to make assumptions in the final report. The penalties in Georgia are occasionally 5-10 and 15 times as high as taxes.

Answer: Page 134 of Georgian version / page 101 of English version (footnote)
The Georgian translation has been improved to better correspond to the English text. The fact is that today in Georgia, if police, or official, catches someone, the real risk to pay the official penalty is rather low, as the case will be easily solved by a bribe.

Further -The last sentence -What special regulation was developed in the MoE.

Answer: Page 136 of Georgian version / page 102 of English version
As it is obvious from the title ("Issue 5: legal basis for environmental impact assessment (EIA) and environmental permits") and the content of the chapter, the MoE developed special regulation on Procedures of implementation of the EIA.

4. p. 165.- "Laboratory Zone" does not include Mestia region: why?

Answer: Page 168 of Georgian version / page 127 of English version
The Laboratory Zone was initially defined in the ToR as composed by five districts, but Mestia was removed from the Lab Zone upon request of the PPU, on December 15, 2000, as the mission of consultants was already prepared and the head of Mestia region was already prepared to welcome in Zugdidi.
The statement that "Forest management plans cannot be used for environmental monitoring" is not clear;

**Answer:** Page 168 of Georgian version / page 127 of English version
As given in the text, the traditional forest management plans are not providing socio-economic and environmental information in a form suitable to trace changes of the forest conditions and long-term monitoring.

what is implied by definitions: "Standing volume is estimated on the basis of a" limited and subjective choice of samples" or "Harvesting operations are not recorded in the management plans or maps".

**Answer:** Page 168 of Georgian version / page 127 of English version

Information coming from the local forestry practices

5. p. 168. Issue 16- Additional measure 16. It is difficult to agree with the authors unless they substantiate the idea. ("Absence of information on the changing of the Forest fund").

**Answer:** Page 168 of Georgian version / page 127 of English version

6. pp.174-175. What is the reason of the statement concerning intensive / forest exploitation, illegal wood cutting, influence of poor harvesting technique on the environment.

**Answer:** Page 178 of Georgian version / page 135 of English version
Answer is in the text and footnote

7. p. 176. The conclusions of paragraph 8.2. are obscure. What is the reasoning? The same applies to issue 21 and the mitigation measures.

**Answer:** Page 179 of Georgian version / page 135 of English version
Refer to § 8.1 and § 2.2

8. p.234. par.14.3 sub par. land 2. The context is impossible to understand.

**Answer:** Page 236 of Georgian version / page 181 of English version
Chapter 14 has been changed already

VI. Abashidze
Director of the Forest Sector Development Center
8. 8.234 ყარჩნილი პატარა ყარჩნილი 176-2-3 დღეს - 8.176 სათაურზე გადაწერილი უკან 3 ქველთან 45-176 სათაურზე გადაწერილი უკან 3 ქველთან 3 ქუთხი, ტექნიკურ სერვისში. ზოგიერთი პარაგრაფი ყარჩნილი როგორც პარაგრაფი გუბრები, როგორც სერვისში. ზოგიერთი პარაგრაფი ყარჩნილი როგორც პარაგრაფი გუბრები, როგორც სერვისში. ზოგიერთი პარაგრაფი ყარჩნილი როგორც პარაგრაფი გუბრები, როგორც სერვისში. ზოგიერთი პარაგრაფი ყარჩნილი როგორც პარაგრაფი გუბრები, როგორც სერვისში. ზოგიერთი პარაგრაფი.
1. ჩამოთვლილი ექსპონატი 33 / სხვაობით ქვემოთ 33 / 51

იმუშავებს წინამდებარე სარეალურ საქმეში დასავლეთით მოქმედების უკანასკნელი
ჭეშმარიტი, რომელიც დატრიალობული ქმედება ამ პროცესიდან №191 მინიჭებულია, 20 თებერვალი,
2000. ძირითადი სახელი №49

2. ჩამოთვლილი ექსპონატი 33 / სხვაობით ქვემოთ 33 / 100 (სტატიალური მინიჭება)

- პროფესორმა კარგად განახლდა “საქართველოს საქართველოს ეკონომიკის სპეციფიკა”.
  როგორც საქართველოს საქართველოს უზრუნველყოფული რაოდენობა, ჰერთენი შემზღვარ (29.10.2000);

- საქართველოს საქართველოს ეკონომიკის თავისუფალობის ღიროებს №10/53
  23.09.2000 წ. „ცხოვრობინარობამ ლიტერატური ყოფილი, ლიტერატურა და არქეოლოგიის ქვების დამსახურების შესახებ“;

3. ჩამოთვლილი ექსპონატი 33 / სხვაობით ქვემოთ 33 / 100 (სტატიალური მინიჭება)

ქმედების 119 შეხვედრა შესთავაზობა, შეხვედრა ნორმატიური აუცილებელი აქტიურობა
საქართველოს ეკონომიკის სპეციფიკა:

- 1978 წლის 21 დეკემბერს არხში დატრიალური საქართველოს ქმედება;

- “საქართველოს ქრონიკურად ჯარისკაცობის შორის შესახებ” საქართველოში 1998 წლის 25 ძველი არხში.

4. ჩამოთვლილი ექსპონატი 33 / სხვაობით ქვემოთ 33 / 100 (სტატიალური მინიჭება)

ქმედების 120 შეხვედრა აქტიურად საქართველო არხში შეკვეთილი სოციო-ეკონომიკური პრობლემები
(აქტიურ, ქმედ. ქოლორული, შეხვ. 116-120). თვალსაზრისი ერთ აქტიურად გამოსახული ქმედები
საქართველოში განლაგებული პრობლემები ნებისმიერ ორგზეთი ცხრა ცხრა ჯარისკაცია საქართველო. აქვე
ეს მხრივ, თბილისში ხელმძღვანელი სოციო-ეკონომიკური პრობლემები უფრო გაუმჯობესებელი ხოლო როგორ შეგამოსახული პრობლემები შეიძლება სტატირობა;

  “საქართველოს ქრონიკურად ჯარისკაცობის შორის შესახებ” (შეხვ. 116, ე. 2.1).
ჯარითი ვერსია არ გვირჩევთ.

- დღეს დღე 28.01.1997 წლის 16 საათის 20 წინამული საათის ამინდ დღის 118 მეოთხეთი პორტული იო განგზინდურება ახალგაზრდა 1 თავის შენიშვნა.

3

ჯარითი ვერსია 3.143 / განგზინდური ვერსია 3.101 (საქართველოში შენიშვნა)

ძალიან არავითარი გავრცელებით, რადგან შესაბამისობაში მდგომარეობა სხვაობა გადახდა.

3.143 / განგზინდური ვერსია 3.102 (საქართველოში შენიშვნა)

ჯარითი ვერსია 3.168 / განგზინდური ვერსია 3.127 (აღწერის ლინკი)

ივანე ჯარი გარემონტირებით, რადგან დღის კოდექსი გაოფარნაგრებული არ მისაღწერა და გავრცელებით საქართველოს საქართველოში სახელო გადახდა.

4

ჯარითი ვერსია 3.168 / განგზინდური ვერსია 3.127 (აღწერის ლინკი)
1. 2

ფალახიდან ლომოებიბით სხვა ტექნიკური დამოკიდებულება მოიცავს 5 რიგს. მაგრამ მიუხედავად იმისა, რომ ჭორბმგებს მოიცავს ყველა მიღწევის სახალხო ქალაქი და ქალაქები, გამჭვირვალე შედეგი იყო შემთხვევად საბავშვო ბიჭმა. მსგავსი ამოცანი იყო ლიხების სიმძლავრის ხანის 2000 წლის 15 ნიმუშის პროცენტის მხარეთში ჩემწოვნილი ფორუმის თემის შესახებ.

2. 3

ჭრილით პროცენტი 33. 168 / სტატიალური პროცენტი 33. 127

ჯგუფური შეფარგმება მომხდარი. ჯგუფართული შეფარგმება შეერთება ან შეყვანა საქართველო-ეროვნებული და გარემოსთავის აქტიური შეღებით ინფორმაცია და მოთხოვნა იმისა, რომ მოხსენიება შიდა ჯგუფური შეფარგმების უძლიერეს ღირების და გამჭვირვალობის მონაცემთა სახით.

3. 4

ჭრილით პროცენტი 33. 168 / სტატიალური პროცენტი 33. 127

აღმართვის წესით წარმოადგენს რეგულირებული სახით სამუშაო პროცენტი.

5.

ჭრილით პროცენტი 33. 168 / სტატიალური პროცენტი 33. 127

???

ჭრილით პროცენტი 33. 178 / სტატიალური პროცენტი 33. 135

ხარჯით მოხსენიება შეფარგმები და ბიჭის წარმოდგენა.

ჭრილით პროცენტი 33. 179 / სტატიალური პროცენტი 33. 135

აღმართ 88.1 და 82.2

ჭრილით პროცენტი 33. 236 / სტატიალური პროცენტი 33. 181

თანხა 14 მარტ შერეული.
1. Quality of translation is rather poor. There are too many vague terms and sentences, it should be seen whether the original (English) is such too.

**Answers:** All these comments have been discussed after the Draft Report submission and needed changes have been done

2. "Laboratory Zone" sometimes is presented by four regions, sometimes - by five (including Mestia region).

**Answer:** The Laboratory Zone was initially defined in the ToR as composed by five districts, but Mestia was removed from the Lab Zone upon request of the PPU, on December 15, 2000, as the mission of consultants was already prepared and the head of Mestia region was already prepared to welcome in Zugdidi.

3. If the assessment deals with "Laboratory Zone' then what fore are the data about the development of forestry sector of all Georgia?

**Answer:** De facto, the study deals with forestry sector, and to restrict the investigation, mainly for baseline data, the geographical area has been limited to the Laboratory Zone.

4. The goal, contents and purpose of this document are not clear. (It should be given in introduction, from the very beginning). No criteria of evaluation are given (typical or juridical), which are to define the conformity of environment of the project to them.

**Answer:** Due to number of visible misunderstanding, a “Foreword” has been added into the final report, as well as the Guidelines of the World Bank on SEA.

5. There are many reiterations of data and texts. The account should be arranged different succession.

**Answer:** Different structure could have been envisaged for the report, the proposed one gives a clear view of the situation following the main subjects to be treated.

6. The document would gain much if authors had had contacts and had consulted with qualified specialists. In such a case there would be no illogical and unqualified discourses and conclusions.

**Answer:** -

7. The concrete comments are as follows:
   a) p. 5 The terms are often vague and unclear;

   **Answer:** The definitions of terms used in the report does not pretend to be an academic dictionary, but a compilation of the general understanding of the key-words used in the report.

   b) p. 9 The Lab. Zone forests area (460000ha) is not given correctly and this section says almost nothing;

   **Answer:** Reference is made from the executive summary, the sub-paragraph “description of the Laboratory Zone” in the paragraph 2.3 gives a complete description, taking into account some corrections.

   c) p. 10, point 4. The forests are not alienated only by the State Forestry Department.

   **Answer:** Reference is made to the executive summary. The complete description of Forests ownership is given in the chapter 5.

   d) p.II point 6. The reason of the conclusion in the first paragraph needs clarifying;
Answer: Reference is made to the executive summary. The complete answer will be found in the chapter 7.

e) p.11, point 7. What is the origin of the illegal cutting data (3500-10000 cub.m);

Answer: Footnote has been added on page 131 of the English version and 175 of the Georgian version. The sources of information are: the SDFM, the MoE, NGOs, local foresters.

f) p.12 7 criteria of the Montreal process should be included in the report.

Answer: It has been annexed in the Final Report, as Annex 7.

g) p.15, point 1.6 Many data and terms in this clause need clarifying;

Answer: Has been discussed, and needed changes have been brought to the Final Report.

h) p. 19, point 1 6. 1 The recommendations are unclear; The details should be explained;

Answer: Has been discussed, and needed changes have been brought to the Final Report.

i) p.20 Do the Lab. Zone indexes display the real situation or the quality of priority;

Answer: Reference is made to the “Summary of the Indicators of Sustainable Forest Management”, also Table 13.2.2 in the Final Report. This table lists indicators which should be taken into account during EIA processes.

j) p.66, point-6. The conclusion that there are difficulties in the practical use of the inventory projects is not correct; The last but one paragraph also needs clarifying.

Answer: Has been discussed.

k) p. 128 The conclusion that the forests maps are not completed and less dependable need the explanation;

Answer: Has been discussed

l) p. 139, point 17. It will be very useful if the authors have the professional consultations on this subjects.

Answer: Has been discussed.

There are also the questions that should be discussed directly with the authors.

Answer: Has been discussed.

L. CHOCHUA
The chief specialist of Inventory and Forest use administration of Georgian State Department of Forestry.
• გ. 66, ა. 6 დამატებით აქვს შესაბამი. როდესაც დიდი გადადგინების პასუხების პირველი ეტაჟზე მიწისქვეშა დარჩენილობა არის უმეტესად, ა. 88 არასწორი შეფასებით მისცემი აზრის დამატება.
• გ. 128 ადგილობრივი პირადი დიდი შესაბამი დამატება, როდესაც თუ არ არის გადადგინებით და ნაკლები სამოპაუსო - არასწორი;
• გ. 139, პ. 17. ა. 127 სამი ჟანგები სამი ჟანგები ვეტერანის პირველი ეტაჟზე ბანაჯის დამატება.

ცნობა შემოტო ხანითამდელი დღესდღეობიდან ახალ ზოგნაირ ინფორმაციის შედგენის და გაუმჯობესების საჭიროებით, რთულობთ უნდა გამოიყენო უფასო ვიზუალურ მეგობრები.

გ. ჭოტები
1. პასუხი: ყველა ეს შენდები გაშვებული იქნია აღარისთვის პირობების მნახველებმა და საგულისხმო ლეგალურად შეუძლია იქნებოდეს აღარისთვის.


3. პასუხი: ელექტრონი ვერგის შეკერვა მოლივ სახელის გუმბათი და ლიჩკანი. რომ შეიძლობოდა ფორმატი კვლევის შესაძლებლობა, გარდაქმნილი არის შემოთქმილი ლაბორატორიული ზომით.

4. პასუხი: ელექტროსრული საქმეები ადგილი დადია “შრემთავლით” და გარემოდ სხესარული შეფასების შემდგომი ბირთე საქმეთაგანყოფილ პროცედურებთან.

5. პასუხი: აღარისთვის შესაძლო შექმნათ ხელში მოდელირება; შემოთავაზული მოდელებით იძახეთ შესაძლო გამოთქმის სკრიპტს და შექსპირება იმ მოდელზე საკმაოდ. რომელთაც უძრა გამოთქმის წყარე.

6. პასუხი: ა.

7. პასუხი: ა.

a) პასუხი: აღარისთვის გამოყენებული შეფასების ყურადღება არ შეინარჩუნდა ჯაიშა-ნინგი გამარჯვებით ლირიზებით, არამედ ნერვიშე გამოყენებული ქართული ორიმეტრო თვითმმართველთა სწორი გამოყენების შესახებ.

b) პასუხი: შეარჩება გამოყენებული აღარისთვის უხსნებენ 2.3 თაღის შექრო “ლაბორატორიული ზომის არჩევა” იძახეთ ლაბორატორიული ზომის მობილურ არჩევა თავიანთთან რომ გამოთქმა შექსპირები.

c) პასუხი: შეარჩება გალარებული აღარისთვის უხსნებენ. სხვა გალარებული აღარ შეიძლება. შექსპირება და პასუხისმგებლობის სახეობები გამოთქმით დე-5 თაღი.

d) პასუხი: შეარჩება გალარებული აღარისთვის უხსნებენ, აი კომენტო პასუხი მოცემული დე-7 თაღი.

1
a) საქვთ.: სტრატეგიული პლანირება დამტკიცებულ იქნა საფარიშო დეპარტამენტის 131 გაფრთხილება და ფიქსირებული პლანის 172 გაფრთხილება. გრაფიკული პროექტის სახელმწიფო გაფართოვება, დამოუკიდებელი დაცვის სამუშაოები, ამასთან არსებული სიმულირები, ადგილობრივი ორგანოები.

b) საქვთ.: ცხრული სახელმწიფო პლანირება დამტკიცებულ იქნა (ლიკური 7)

c) საქვთ.: გამოყენებული იქნა და საქვთო სტრიტეზული შენახვა იქნა სახელმწიფო პლანირება.

d) საქვთ.: გამოყენებული იქნა და საქვთო სტრიტეზული შენახვა იქნა სახელმწიფო პლანირება.

e) საქვთ.: შენახვა გვირაბული იქნა შედეგი შეიძლება მნიშვნელოვანი ჩანაწერებით სამოქმედო ორგანო და სამოქმედო პლანირება 13.2.2 გამოწვევა. ეს გამოწვევა გვირაბულ იქნა შენახვა სამოქმედო ორგანო რომელიც როგორც კომუნალური პლანები გამოეწვევა შემდეგ პროცესების გარეშე.

f) საქვთ.: გამოყენებულ იქნა.

g) საქვთ.: გამოყენებულ იქნა.

h) საქვთ.: გამოყენებულ იქნა.

i) საქვთ.: გამოყენებულ იქნა.

j) საქვთ.: გამოყენებულ იქნა.
Major Comments
on the Georgian Version of the ACTA Project
Dr. Pr. N. Beruchashvili
National Coordinator of Inventory

The project has been compiled without accomplishment of the substantial field researches.

*Answer:* A Sectoral Environmental Assessment is not requiring substantial fieldwork researches, as it is not an academic research. It is mainly a compilation of existing documents and, if identified, evaluation of gaps in missing data.

For that reason, there are actually no new data on the Lab. Zone.

*Answer:* As written above, no new field data were expected

The first volume represents a complication (and in the given case not a very good one) of the already available materials.

*Answer:* -

It doesn't contain any references to previous operations.

*Answer:* The chapter 15 "References and Bibliography" gives a list of all documents used during the elaboration of the report, including the one referring to components of other projects.

The Lab. Zone is well investigated

Recently, thanks to the Soros Grant, the Racha- Lechkumi -Kvemo Svaneti Computer Atlas has been complied, coinciding entirely with the Lab.Zone. Not a single word mentioned about it

*Answer:* This document was not needed

There are neither references, nor even comments on the N. Beruchashvili Report (1999-2000) concerning specifications of the Central Caucasus that had been made in relation to the Protected Territories Project;

*Answer:* Reference is given under number 58 in the Chapter 15, with reference to the World Bank. It is to be mentioned that the GIS developed for this study was refused to be given.

not to mention the absence of investigations being carried out in connection with the Oni district landscape -ecological carcass (in year 2000), nor any other similar investigations.

*Answer:* out of the scope of work

Detailed remarks:

Section -Relief (pp 35-38)

*Answer:* According to the ToR, which are given in the annexes, part of the work having to be done was defined as assessment of existing documents. Reference is given under number 58 in the Chapter 15, with reference to the World Bank.

It has no references at all to original sources of literature (works of L. Maruashvili, Geo- Morphology of Georgia etc ).

*Answer:* all document used during the carrying out of the report are listed in the chapter 15

Mistakes were made when translating from Russian.

*Answer:* Reference is probably done to the document referenced number 58, which was in English. No document in Russian was used
Recommendations on improving environment influencing aspects are given in the second volume of the ACT A report. In most cases such recommendations are rather general and well-known through manuals as well as mentioned in the reference-books and standard norms for environment preservation.

Answer:

A small paragraph dealing with Geo-information-Systems in the ACTA report can be named as a positive one. However, there are no software products attached to the report that could assist in judgment on completed research works.

Answer: A GIS was developed, and given in soft version, out of the scope of work, by ACTA to the PIU.

What is more, they deal with only a minor part of the Laboratory Zone, but at least the same work should have been done for the complete Oni region, and have it attached to the report.

Answer: Good reading the Foreword, of the definition of a Sectoral Environmental Assessment as well as of the ToR, integrally given in the annexes, would have probably prevent such confusion.

National coordinator on inventory basen on the landscape/ecological principles

Doctor of Geografical Science, professor

N. Beruchashvili
Основные замечания по проекту АКТА

Проект составлялся без проведения конкретных полевых исследований. Поэтому в нем практически отсутствуют какие либо новые данные по Лабораторной зоне. Первый том отчета представляет собой компиляцию и при том не всегда удачную) существующих материалов. В нем не цитируются предыдущие работы. Лабораторная зона хорошо исследована. В самое последнее время благодаря гранту Сороса составлен Кампийский атлас Рача-Лечкуми — Квемо Сванети, полностью совпадающий с лабораторной зоной. О нем ничего не сказано. Нет цитирования и даже упоминания об отчете Н. Беручашвили (1999-2000) по характеристике Центрального Кавказа, представленного в связи с проектом Охраняемых территорий, нет сведений о работах проводимых в связи с ландшафтно-экологическим каркасом Онского района (2000 г.), или других аналогичных работах.

Конкретные замечания

Раздел рельеф (35-38 стр.)
- представляет собой компиляцию отчета Н.Б., который был предоставлен в 2000 г. Из него исключены только ссылки на первоисточники (работы Л.И Маруашвили, Геоморфология Грузии, Геология Грузии и т.п.). При переводе с русского языка сделаны ошибки. Например, в отчете Н.Беруашвили:

<table>
<thead>
<tr>
<th>В отчете Н. Беруашвили</th>
<th>В отчете АКТА</th>
</tr>
</thead>
<tbody>
<tr>
<td>скалистые и снежно-ледяные горные вершины и</td>
<td></td>
</tr>
<tr>
<td>гребни с интенсивными процессами</td>
<td></td>
</tr>
<tr>
<td>связанными с эрозией и морозным</td>
<td></td>
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<tr>
<td>выветриванием</td>
<td></td>
</tr>
<tr>
<td>современные ледники и фирновые поля</td>
<td></td>
</tr>
<tr>
<td>древнеледниковые эрозионные и</td>
<td></td>
</tr>
<tr>
<td>аккумулятивные формы</td>
<td></td>
</tr>
<tr>
<td>эрозионные формы</td>
<td></td>
</tr>
</tbody>
</table>

Неправильность перевода показывает практическое незнание основ геоморфологии —
- фирновые поля переведены как V-образные ущелья (эти ущелья приурочены к эрозионным процессам, а с ледниками связаны троговые ущелья),
- древнеледниковые процессы переведены как раннеледниковые (?);
- эрозионные формы, как абразионные формы. Хорошо известно, что абразионные процессы развиты на берегах морей и озер, а для ледников характерна эрозия

Из того же отчета докеобийские сланцы переведены как: - рифели-песчаники - полное несоответствие. Нижнеорскими сланцево-песчаниковыми флишевыми толщами переведены как палинятие, порфиритовая толща переведена как порфиритовая (порфиритовые включения) и т.п.

В отчете много неправильных выражений, типа: а) генеральный план переведен как генеральный планик (33 стр.) б) переведено как 12, 34 стр. 37
В общем, раздел «Рельеф», стр. 35-38 представляет собой плагиат из отчета Н. Берушвили (2000) и при этом перевод его на грузинский язык осуществлен неправильно не только с языковой точки зрения, но и стилистически и смыслового — географического.

Раздел Гидрография (стр. 38-40)
- представляет пример также неудачных сокращений из отчета Н. Берушвили. Например в отчете Берушвили написано «Суммарная площадь бассейна р. Риони составляет 13400 км, из них в пределах Центрального Кавказа — 6016 2 км2 (без Кванского участка — 4568,2 км2). Общее количество рек — 6359, их суммарная длина 13656, а густота расчленения — 1,02 км/кв. км. Данных по количеству рек, их длине и густоте расчленения в пределах Центрального Кавказа — нет». В отчете Акты опущена последняя фраза и мы читаем, что "(суммарно) из общих реки
федерации армении и грузии 6359 акт, из них в пределах 13656, т. е. данные из всего бассейна Риони перенесены на его бассейн в Пределях Центрального Кавказа.

Непонятно почему параграфом «Климат» (стр. 33-35) начинается раздел «Геология». По всем правилам географического описания территории сперва идет геолого-геоморфологическое строение, а уже потом климат. И этот раздел представляет компиляцию отчета Н. Берушвили (естественно, как принято в АКТ, без всяких ссылок на первоисточники). И как всегда малодушные переводы русского текста на грузинский язык.

To же можно сказать и о разделе «Ландшафты» (стр. 43-45). Полный плагиат из отчета Н. Берушвили с неправильными переводами. Например. Верхнегорные ландшафты переведены как высокогорные, а высокогорные — как альпийские (стр. 43). Род ландшафтов переведен как семьи ландшафтов, а вид ландшафтов переведен как серия ландшафтов (Основы этой классификации приведены в учебнике для 8 класса).

Совершенно, ничего не сказано об источниках. Это общее правило АКТ, все приписывают себе Перепутаны все принципы наименований ландшафтов. Поэтому их названия исказены до неузнаваемости. Летуфы видны сразу же. Оказывается в Рача Лечуми есть вечно зеленые леса (36-37, армении фуелиган, агрария дарфур) — (стр. 43). Научным изысканиям АКТ нет предела. Наверно они ставят на Нобелевскую премию. Так на странице 44 читаем, что среднегорно-лесные ландшафты распространены на черноземах (фуелиган, фуелиган дарфур, беда) — (стр. 43). Научным изысканиям АКТ нет предела. Наверно они ставят на Нобелевскую премию. Так на странице 44 читаем, что среднегорно-лесные ландшафты распространены на черноземах (фуелиган, фуелиган дарфур, беда) — (стр. 43).

Авторы сами иногда признают свои ошибки так на стр. 51 читаем "(суммарно) из общих реки
федерации армении и грузии 6359 акт, из них в пределах 13656, т. е. данные из всего бассейна Риони перенесены на его бассейн в Пределях Центрального Кавказа.

В рекомендациях на стр. 51-55 нет ничего конкретного и они настолько общи, что общеизвестны.

Разделы "двуоколо Экспедицией посольства" написаны в на основе отчета GORBI, который был издан в 2000 году. Оттуда взяты таблицы на стр. 20, 23 и др. Описание отдельных районов сделано на основе данных этого же отчета, но переформатировано по отдельным районам.
Раздел Лесной фонд, лесные ресурсы, использование леса
Представляет собой выдержки из отчета по Охраняемым территориям Центрального Кавказа. При этом иногда «забыт» Местный район и его данные не исключены из материала.
Классификация растительности на стр. 5-5 (неправильная нумерация) взята из Атласа Рача-Лечхуми Квемо Сванети. Автор (Н. Беручашвили) не упоминается.

В отчете АКТА нет карт и картографического материала, что сильно снижает возможности оценки проведенных работ.

Vo втором томе отчета АКТЫ приводятся рекомендации по улучшению аспектов воздействия на окружающую среду. Эти рекомендации в большинстве случаев носят общий характер и хорошо известны из учебников и нормативно-справочных материалов по охране окружающей среды.

Положительным моментом в отчете АКТЫ является небольшой параграф об Геоинформационных системах. Однако к отчету не приложены программные продукты, которые позволяют судить о проведенных исследованиях. Кроме того они касаются лишь небольшой части Лабораторной зоны (непосредственные окрестности г. Они). Необходимо аналогичные работы провести если не на всю Лабораторную зону, то хотя бы на весь Онский район и приложить эти данные к отчету.

Национальный координатор по ландшафтно-экологическому лесоустройству,
доктор географических наук, профессор

Н. Беручашвили
პასუხი: წინარისხები შესწორება გავაკეთე სამუშაო ოფერთა მიხედვით.

პასუხი: გარკვეულად.

პასუხი: გარკვეულად.

პასუხი: იმ. თავი №15 “მოდელობული მსახური და მოქმედება”.

პასუხი: გარკვეულად.

პასუხი: -

პასუხი: -

პასუხი: -

პასუხი: იმ. თავი №15 მოქმედების სახელმწიფო პროგრამი რეგ. №15 მოქმედება.

პასუხი: -

პასუხი: იმ. თავი №15 მოქმედების სახელმწიფო პროგრამი რეგ. №15 მოქმედება.


პასუხი: რომებისათვის ვარ.

2
პაგეთი: ეტაბლირებისათვის საქმიანობის მნიშვნელობა ქვეყნის ფინანსებში აბართულ ქალაქებში ACTA-ს მიერ მნიშვნელოვან სარგებლობა ევროებრივი დედამიწის აზროების ტეგლამის გამოყოფის შემთხვევაში.

პაგეთი: აღნიშნული და შედგენილი მოგვიანების სუნთქვევის გამოყოფა გვერდის გამოყოფის შემთხვევაში აღბერთობდა აზროება ქალაქებში გამოყოფის შემთხვევაში.
The report is devoted to the Laboratory Zone: Racha-Lechxumi-Kvemo Svaneti- "sector" environmental assessment. The report consists of two parts (about 250 pages) and a summary.

Comment: a third volume “Annexes” is an integrant part of the report

From the beginning it must be noted, that the report can't correspond the title "Sectoral Environmental assessment", because there is not concretized what typical features of the Lab. Zone it meant for study and hence, there is not made concrete conclusions too. More over, if we discuss by the title of the English version, the justified title of the Georgian versions would be "Estimation of the sectoral environment", as the report is about one, large sector of Georgian forests, particularly: Racha- Lechxumi- Kvemo Svaneti region.

Comments: The Sectoral Environmental Assessment is defined in different places in the report, as for example in “Definition of terms used in the report” page ix, in the “Foreword” page 1, in the § 1.4 “Objectives of the SEA, page 10, and World Bank Guidelines regarding SEA are annexed.

The word “Sectoral” does not refer to a geographical area, but to an economical sector. The indication of the Laboratory Zone is given as a restriction in terms of baseline data and local investigation.

The proposed report is full of repetitions, abstract, common phrases and conclusions, it represents too big volume, that is unjust, as there is much materials which have no relation with the environment of the "sector"; hence, practically using it will be within the limits of the possible.

Comments: see previous comment

The Georgian version of the report is not enclosed with the executors and the consultants list which we could find in the English version.

Comments: refer to annex 1 of the Volume "Annexes"

Unfortunately, the Mountain Forestry Institute is riot mentioned in this list. It is not clear how it was estimated such large region of Georgia without The Mountain Forestry Institute, while the Institute of Botany and the Plant Protection Institute have taken part in it.

Comments: -

In the report is not clear, what field works were fulfilled for finding out of this or that question.

Comments: According to the definition given above and the scope of the consultants, given in annexes, no in-deep field-works were planned, and only a reconnaissance mission was organised in the Laboratory Zone. It has to be said that the period dedicated to the study work, winter, was a considerable obstacle for mountain forest investigation.

The Georgian version of the report from the point of view of linguistic or terminology is unstylized, the ideas of many paragraphs are unclear and the conclusions are so general (and often unclear), that it may be used in each report.

Comments: following this comments, the consultants, double check the Georgian version, together with the different specialist listed in the annexes, two translators and one philologist.

More detailed notes will take us too far, therefore we’ll dwell on some of hem:
1. From the point of view of terminology, there are many misunderstandings, e.g. the explanations of "Environmental assessment", "Environmental sectoral assessment" and "The environmental impact assessment" are vague and translation from English is rather poor.

Comments: these definitions are coming from general documents of the World Bank

It is obscure, why is explained from the sorts of forest felling only "Thinning" and "Clear cutting". To say noting of vagueness of the explanation, final cutting is not permitted in our forests and putting it in this report is out of place.

Comments: Making reference to the Chapter XV of the Forest Code. Article 68 and 70 are giving definition of categories of Final Cuts, and Clear Cuts is one of it.

The explanations of the terms " timber" and "wood" are not correct.

Comments: -

The term " Silvicultural care " in Georgian means "Forestry activities";

Comments: -

instead of "forest cutting in the road building ", the term "Cutting during the road building" should be used.

Comments: In that specific case, the word "cutting" does not refer to tree cutting, but to the excavation needed by the road construction.

Generally it is obscure, what do the words "Take the cream from the forests" mean? maybe the authors mean here increasing of the timber.

Comments: The word "creaming" has to be taken as an imaged form, meaning "to take the best off".

The terms " vascular", "habitat" and so on. are not correct.

Comments: -

In this respect many questions are to be corrected.

2. According to the project objectives, it is quite superfluous the data about the protected areas (pp. 102-108),

Comments: An integrated forest management planning has to integrate such kind of elements, subsequently it was thought to be needed.

extractions from the " Constitution of Georgia" and from other Georgian rules (pp. 110-173), as they have not a direct dependence to the assessment of this Lab. Zone.

Comments: refer to second comment on the objectives and definition of a SEA

3. The characteristics of the Lab. Zone biodiversity are amorphous and not concrete, for example. There is first conversation about flora biodiversity and then is given the characteristics of the Lab. Zone's Botany-Geography originality. (it must be on the contrary). On the whole, when estimating the biodiversity of the Lab. Zone, concrete conclusions and recommendations are not given.

Comments: Chapter 2.4 is a compilation of baseline data, which is not to lead to specific conclusion

4. The materials, connected to the Lab. Zone includes chapters 8-13. They are full of general phrases and do not contain clear and concrete determinations, e.g. in the table N 8.1.4. which concerns to non-timber productions, the units of measure are not even pointed.

Comments: the units are [to/year], and were unfortunately skipped during the translation

5. At the end of the report schedules and conclusions are full of such curious sentences as:
Comments: These remarks might come from the analysis of the table 13.2.3, summarising the identified issues and the proposed mitigation measures.

"Risk of flood and erosion for a low areas".

Comments: -

"Bogging up or forming puddles as a result of forest management".

Comments: -

"Forest management and a sexual dividing problem".

Comments: The original word which is misunderstood is “Gender” which seems to be largely accepted in such a context.

"Road building is not allowed in slope zones".

Comments: The original sentence is "In zones with too steep slopes or/and instable geological condition, no roads shall be built.

"In the road building process the remnants of the timber must be carried out to a place of sweepings, which is on a safe place."

Comments: The original sentence is “Excess cut material (meaning extraction material) must be transported to the planned earth dumps located on safe grounds.

6. In the resume, however, together with a lot of misunderstandings, such recommendations, like ultimatum, are given: Georgian Government can’t receive a credit from the World Bank without such a project, without fulfilment of a scenario, as the “Sectoral Environmental assessment” is; and without abolishing illegal cutting, which causes utter amazement.

Comments: Reference is made to the Chapter 14 “Conclusion – Tentative Scenario Comparison.

7. As it is seen from the notes above, the proposed report needs processing and refining with suitable specialists’ participate.

Comments: -

Director of the Mountain Forestry Institute of the name of V. Gulisashvili Academician
G. GIGAURI.

Chief of the laboratory of the Mountain, Forestry Institute of the name of v. Gulisashvili Candidate of biology science
B. TVARADZE

Received May 28, 2001
სტატიაში შეიცავულია პატივით მიჩნეული “გარეული პროფესიული წლევა” სრული ანგარიში და დემოგრაფიული განმავლობით სტატიის გადაწყვეტილება, რის შედეგად გადაწყვეტილება შეიძლება განივიყოს და ჯგუფთან ახალ დათვალიერებს შეუვიწრო გადაწყვეტა.

1. ჰ. პ. ჯ.

2. ჰ. პ. ჯ.

3. 28 ივლის 2001 წლის
პასუხი: მასთან დაარსებული “განართული” ლექსიკონი. აღნიშნულმა დარბაზული თემი არ შეიძლება.


პასუხი: თუ რა პერიოდ.

პასუხი: თუ „სამი აღმოსავლეთ“ თემა გამოხატავდა პერიოდი.

პასუხი: ასე გამოთქვამი შეიძლება პარლემენტის წიგნს ზოგადი ფიქრობებს.

პასუხი: თანამედროვე სუბოლონის მქონეს ქვემო ლანდშაფტ, და ტიუფი, მთავარ ქონება XV საუკუნე 68 და 70 მესრე რუმინიურ სიმუსტამბრად გვარდნებს. ამით აღნიშნული განთავსება აქვს აქვდად ვეფხვა სიმაგრები, რათა მხოლოდ მისი გამოყენება მოხდომი.
პასუხი: ას საფრთხო შეფასებით, ჭირ არ შეიძლება ხელის მოხდის. ამისთვის ჭირს შეიძლება მინიჭებული არ შეიძლება პროცესი აღლებით საჭირო მიწის შენახვის დიდი ობიექტი სამოქმედო სიახლოვე დამტკიცებით.

პასუხი: "ჭირს ხელის მოხდის" მითხრა რომლები “საჯათო და ფიქრობებიძმები ჭირის ჭირო” (როგორც ამ ფიქრობის გამოკვლევით, ას შეგვიძლია, რაიმა ვალდებულ არ შეიძლება).

პასუხი: -

პასუხი: ბიბლიოთეკის სტეფან შეღვიძმების დადგენილების გათვალისწინებით, ინვენტარი არ მოქმედი საჭიროებით დაღუპულია.

პასუხი: - სახით ვარირობთ არის შეღვიძმება თუ შეღვიძმება გამოკვლევით უჯოხო დრო.

პასუხი: - ქმ. შეღრმული უფალი მოხდის (ქრონ. 13.2.3-დან), რომლები მოითხოვდნენ საცოლის საქმიანობა და მოითხოვდნენ შეღრმულის ლოიმობებს.

პასუხი: -

პასუხი: -

პასუხი: თავმოაღწერით ბრწყინვალე რთული საიშლო, ჩახდი ჩათ, რომ გაუვრცელოთ გამომწვა. გარდაიქმნა ამ შეღობის დამოუკიდებელ საიშლო მდგომარეობა უმეტეს მოქმედებში.

ჰარეს: თ. საჩ. 14  “რამდენიმე - შეხვედრილი ადგილობრივის მეთისი” (საუცხოო “პოლონოლი პროტესტი” საქართველოს შემოქმედებით, საქართველოს მთავრობის ერთ შეხვედრაში შეზღუდვა ჰქონდა შლაფული მოღვაწე.)

ჰარეს: -
ANNEX 11

Comments of NGOs on the Project
As a letter to the World Bank (April 24, 2000)
To: Mr. Pieter Stek  
Executive Director of the World Bank  
for Armenia, Bosnia and Herzegovina, Bulgaria, Croatia,  
Cyprus, Georgia, Israel, Macedonia (former Yugoslav  
Republic of), Moldova, Netherlands, Romania, Ukraine  

CC: Mr. Judy M. O'Connor  
Country Director for Georgia, World Bank  
Mrs. Nino Chkhobadze  
Minister of Environment and Nature Resources  
Protection  
cc: Mr. Givi Djapharidze  
Chairman of State Forestry Department  
c: Mr. Joseph Owen  
WB Resident Representative in Georgia

24 April, 2000, Tbilisi

Dear Sir,

The Georgian Forestry Department, with support of the World Bank, is preparing the Forestry Sector Development National Program. As it states in the introduction, the program represents the outcome of the several missions of the WB and FAO Investment Center.

The Georgian Environmental non-governmental organizations, after the careful review and wide discussion of the document, would like to express our great concerns regarding the activities that would be carried out according to this programme.

First of all, we would like to underline that the program generally is in contradiction to UN Biodiversity Convention and principles of sustainable development. It is mainly focused on full utilization of forest timber resources and less attention is paid to the issue of forest ecosystems conservation. In this letter we would like to emphasize the problem issues that we consider most significant.

Volume of Logging

From the project document: "The Department desires to increase the annual volume of logging by the year 2005 to 1 mln cubic meters. (2.2 article)." The logic of the argument is that: summarized mean increment is 3.9 mln m³ and the actual cutting is only 400 000 m³. In the same document the data of the Ministry of Environment (that is not considered as official data?!), indicate that annual cutting of forest timber in Georgia amounts to 2.5 mln m³ (legal plus illegal logging). We consider the data of the Ministry of Environment more accurate because it reflects the real situation regarding the level of destroyed forests in Georgia. Based on this data, it is clear that without a significant improvement of the forest management system, the proposed logging will increase to 1 million m³ and will result in complete degradation of Georgian forest resources. To support this concern, same project shows that 40% (2.2 mln ha) of Georgian Territory is classified as State Forest. Total volume of Standing Forests is 434,000,000 m³ and summarized mean increment is 3,9,000 m³. Calculating the average volume and growth, the standing trees average volume is about 197 m³/ha, by the summarized mean increaof about 1.8 m³.

It must be taken into consideration, that according to the legislation in force (new Forestry Code, 1999, and related other), forest cutting is not allowed on the specific territories of state forest, including:

- Forest covered territories under the supervision of Department of Natural Resources and under the Protected- and Hunting Areas -168,000 ha  
- Degraded areas (200 000 ha);  
- Reserve (31 600 ha), that need urgent restoration;  
- Flood Forests;  
- Resort and Green Zones, falling under the specific protection regime (Forestry Code article 41) and at  
- Forest covered slopes (more than 350).

Therefore, the territory where the logging is allowed is, in fact, less than 2,200,000 ha. Apart from this, in the project it has been shown that before the adoption of the new Forestry Code (1999) the use of only 30% of forest territory (600,000 ha) was allowed. After the adoption of the Code the forest logging will be increased significantly. That in itself is a negative fact. If the commercial use will reach even 50% (1,100,000 ha) of the
State Forest territory, the related estimated annual growth will be 1,980 min m\(^3\). This figure will be even smaller, if taking into consideration the fact also mentioned in the project that the middle age forests area where the logging is to be undertaken covers only 48% and the mature forest - only 30% of the territory where logging is allowed. In the best scenario, the forest territory under the legal logging will make up only 78% (858 000 ha).

Accordingly, the annual growth for this territory could be estimated as 1.6 min m\(^3\), instead of 3.9 min m\(^3\), and, respectively, the standing trees volume -as 169 min m\(^3\), instead of 434 mln m\(^3\).

It must be taken into account too, that a significant part of Georgian forests is located in Aphkhasia and South Ossetia regions, where the separatist governance and where the Forestry Department definitely has controlling problems. In fact, this further reduces the actual areas under permitted logging.

Based on the above facts, the arguments given in the forestry Project are overestimated. The real situation is much more severe. Due to the actual hard socio-economic conditions, especially the acute energy crisis, the forest resources of the country came under significant pressure through uncontrolled timber cutting by the local population for heating/cooking use and, by country-wide illegal cutting of timber designated for illegal trade (export).

The forest-covered areas are drastically shrinking in Georgia every day. Due to the fact that forest inventory does not carried out for several years, data does not accurately reflect the real situation. Also, two main governmental bodies who manage the utilization of forest resources, Ministry of Environment and Forestry Department, are reporting significantly questionable and at times conflicting data.

Our strong belief is that the first priority in Georgia must be the inventory of existing forest resources. Only after this activity is complete, is possible to start thinking about the utilization volume, applying for credit.

**Allocation of funds**

On another issue, the allocation of funds in the program is also not acceptable: 37 mln USD credit investment is placed without inflation and taxes. Is Georgia able to cover the credit in appropriate time, or will it be a long-term loan, permanently imposed on next generations? Meanwhile, the total amount of credit would be increased due to the inflation rate and taxes. Covering the credit by the incomes of the proposed project is very problematic because it includes the highest risks for the state (population).

Another issue is the allocation of funds by the program components: institutional development – 43%, afforestation and deforestation – 25%, forest management and protection – 6%, development of transport and logging facilities 23%, non-timber product production, facilitation of hunting and tourism –3%. From these figures, it is clear that the bigger part of credit is allocated to the institutional development (creation of central and regional offices and equipment, creation of business center) and for logging. It is not clear what is meant under "forest management". The forest management should be the essential component of institutional development. To the contrary, this component has lost all sense and looks very artificial.

There is no assurance that "institutional development of existing Forestry Department" could even theoretically contribute to the improvement of the actual forest resources management in Georgia.

**Forest Protection**

Concerning the forests protection part of proposed project: the only issue addressed is fighting against the forest diseases. The conservation aspects are supposed to be implemented through the WB/GEF project "Caucasian Mountainous Forests Biodiversity Conservation" only (Annex 5, para 32).

The funds allocated for afforestation (1 769 000 USD) will be added to the already enormous amount allocated for institutional development (restoration of seed center and nursery Gardens development – annex 5, F1 and F2 components). Yet, forest restoration works must be implemented with "corridor-" and "window- technique" (annex 5, comp.4.) This means, that first the forest should be cut and then it will be restored? The logical question is: Is this a restoration?

Along with these issues, serious concerns arise in connection with the proposed increase of the timber prices (article 4). Taking into consideration the actual socio-economic situation of the Georgian population and the energy crisis, it's clear that it would be impossible for the population to purchase timber and illegal cutting will increase. That will increase the pressure on forests, but not the fiscal incomes of Ministry of Finance, as it states in the project.

**Conclusion**

In conclusion we would summarize our the concerns about the "Georgia forestry sector development program" as follows:
1. The project is oriented only to utilization. Forest conservation (sustainable use) aspects are fully ignored;

2. In the proposed program implementation the Georgia forests will be in great danger, with probable total loss of commercial forest resources;

3. Considering the forest as a multi-component ecosystem (species, population and so on) is fully ignored. The implementation of the proposed program principles would endanger the existence of many species, populations and, as a result, the forest itself as an ecosystem.

4. Proposed programs oppose the principles of sustainable development, Biodiversity Convention, Landscape and Biodiversity Pan-European Strategy and other international agreements and provisions.

5. Despite the fact underlined in the reviewed text that WB-/International Experts contributed to the program preparation, many arguments in favor of this program document appear to be weak or incomplete, as cited in our letter.

It is our strong belief that there is an urgent need for revising the document to address our concerns and to take into account the principles of sustainable development, Biodiversity Convention, Landscaped and Biodiversity Pan-European Strategy and other international agreements and provisions, also by involving more high qualified experts.

We look forward to receiving a response to our comments within the next month. If you would like to discuss any issues or have questions about this letter, we would be happy to meet with you.

Sincerely,

Zura Gurielidze
NACRES

Manana Kochladze
FOE Georgia/CEE Bankwatch Network

Merab Barbakadze
ECOLAW Club

Mariam Djordjadze
Elkana
IMPORTANT REMARK

The initial terms or reference (ToR) given below have been reworked by the Project Preparation Unit (PPU), to fix the limits of each task, before signing of the contract. These two elements are integrant part of it.

The tasks breakdown table given after the ToR shows, in the first column, the tasks and subtasks description and in the second column, the limits defined with PPU, to fit with the time schedule and the financial resources allocated.
GEORGIA

FORESTS DEVELOPMENT PROJECT

SECTORAL ENVIRONMENTAL ASSESSMENT

(Project Preparation Grant JPN 25144-GE)

Terms of Reference

1. **Introduction.** The Government of Georgia (GoG) has requested that the World Bank (the Bank) provide support for a Forests Development Project (the Project). This Project will help the GoG to establish sound forest management systems that would maximize the contribution of Georgia's forests to economic development and rural poverty reduction on an environmentally sustainable basis. The Project is of critical importance to Georgia's forests and people. With the enactment of the new Forest Code of Georgia in June 1999, Georgia has adopted a legal framework and roadmap for transition to market principles of forest economy, including its possible privatization, while safeguarding the critical environmental, social and cultural functions of the nation's forests. The Project that will be implemented in 2001-2008 is designed to provide critical support to this ambitious transition. The total project cost estimate is about US$30 million dollars equivalent and will be financed by the GoG, the World Bank, Japan and, possibly, the European Union and other international and bilateral donors.

2. To support preparation of the proposed Project, the GoG seeks the services of internationally qualified consultant(s) to prepare a Sectoral Environmental Assessment (SEA) which will be consistent with the GoG environmental procedures and the requirements of the Bank as outlined in Operational Policy 4.01 "Environmental Assessment" (attachment A).

3. The project has been placed in the Bank environmental screening category "B." However, the GoG seeks to undertake a Sectoral Environmental Assessment which will also fulfill the requirements of the Bank's environmental screening category "A," including information disclosure and public consultations. As a significant focus of Project implementation is to promote policy development, it is expected analyses on the sectoral environmental impact will continue as policies and forests-related programs evolve.

4. **Background Information.** The proposed Forests Development Project is expected to be appraised by the World Bank in March 2001 and submitted for World Bank's Board approval in July 2001. The Project will have the following five complementary and inter-related components:

   (a) development and improvement of national forest policies, laws and regulations (including forest sector institutional reorganization plans and financial system reform plans);
   (b) development and improvement of forest management planning systems (including forest inventory, landscape-ecological zoning and environmental and social assessments for forest conservation and multiple-purpose use, forest management information systems, economic valuation and pricing of forest resources, effective forest fire and pest management, reforestation and afforestation, and community participation in forest management);
   (c) strengthening of forest sector institutions and human resources development (including training and re-training of professional forest management staff, forest research and education, public awareness campaigns for rural communities and general population);
   (d) support to private sector in sustainable forest management and utilization (including assistance with development and demonstration of environmentally sustainable forest harvesting and transportation techniques, training in forest road planning, maintenance and rehabilitation, training in preparation of environmental impact assessments and public consultations for private projects); and,
   (e) promotion of sustainable use of non-wood forest products (including development of sustainable hunting and ecotourism in forest ecosystems).

5. Substantial technical work detailing each component was completed in 1998-99 by the SFD together with the FAO specialists. Additional preparation work (including Overall forest utilization planning, Social Assessment, and this Sectoral EA study) is being financed by a Japanese project preparation grant and has to be completed before project appraisal. The remaining critical preparation and start-up activities for the Project including: (i) development of improved forest policies and regulations; (ii) development of improved forest management planning and protection techniques; and (iii) project implementation capacity building - are being funded through a project preparation advance (PPF) in September 2000 to July 2001.

6. Project implementation will be carried out in the following way. The Forestry Development Fund (FDF) - a project preparation unit established under the SFD that is currently administering the Japanese Grant, will be used as the core of the new Project Management Unit (PMU) that will be established in August-September 2000 by a decree of the President of Georgia. Administration of the remainder of the Japanese grant will also be transferred to this new entity. The PMU will be established as a legal person under Georgia's civil law and its Executive Director will be nominated by the Ministry of Finance and SFD and appointed by the President.

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Depending on the project, a range of instruments can be used to satisfy the Bank's EA requirement: environmental impact assessment (EIA), regional or sectoral EA, environmental audit, hazard or risk assessment, and environmental management plan (EMP). When the project is likely to have sectoral or regional impacts, sectoral or regional EA is required. A Sectoral Environmental Assessment (SEA) is an instrument which offers opportunities for sector-wide environmental analysis and support integration of environmental concerns into long-term development and investment planning. SEAs are particularly suited for reviewing (a) the effect of sectoral policy changes; (b) sector investment alternatives; (c) institutional capacity and requirements for environmental review, implementation and monitoring at the sectoral level; and (d) cumulative impacts of many relatively small, similar investments which by themselves may not appear to have significant environmental impact. World Bank guidance on sectoral EA can be found in OP 4.01, the *Environmental Assessment Sourcebook* (1991) and the October 1993 *Environmental Assessment Sourcebook Update* (Number 4).
The objectives of the SEA are to (i) analyze the policy, legal and administrative framework relevant to the forest sector and make recommendations for reform if needed; (ii) identify major environmental and social issues related to the development of the forest sector; (iii) collect baseline data in relation to these environmental and social issues and their trends; (iii) analyze potential impacts from proposed Project activities vis-à-vis alternative programs, particularly for long-term sustainable development, and make recommendations for mitigation if necessary; (iv) analyze in-country capacity for environmental management and assessment in the sector; (v) provide general guidelines for long-term sector-wide environmental monitoring; and (vi) assist in inter-agency coordination and public/NGO consultation process.

Environmental Assessment Requirements. The following regulations and guidelines should guide the assessment and assist in specifying the content of the final report:

- World Bank Operational Policy (OP) and Bank Procedure (BP) 4.01: Environmental Assessment;
- World Bank Operational Policies on Forestry (4.36), Natural Habitats (OP 4.04), and Cultural Heritage (OP 4.11);
- Law of Georgia on State Environmental Assessment
- Other national, region provincial or communal laws and/or regulations on environmental reviews and impact assessments;
- Draft Biodiversity Strategy and Action Plan
- World Bank Environmental Assessment Sourcebook (1991) and the October 1993 Environmental Assessment Sourcebook Update (Number 4).

Scope of Work. The SEA should be carried out in an open and participatory manner involving consultations with all the major stakeholders. Specific tasks will include the following:

Task 1. Project description and identification of major environmental and social issues related to the development of the forest sector and the Project.

Task 2. Baseline data and monitoring. Assemble, evaluate and present baseline data in relation to these environmental and social issues, and include information on any changes anticipated in the near future. Whereas a project-specific EA would describe impacts around a proposed project site, the SEA should concentrate on the issues and problems that are typical of the sector as a whole. This may include information on the physical environment, biological environment and socio-cultural environment. It may also include the identification and current management practices on ecologically sensitive areas, information on land and resource use (including non-timber forest products), systems of land tenure and resource use rights, extent and causes of illegal harvesting at the community level, existing and planned development activities. A more detailed subset of baseline data shall be assembled and evaluated at a local (district) level - for the territory of the Oni District - using the results of the Overall forest utilization planning and the Landscape-ecological zoning undertaken in 1998-2000. The consultant(s) should also closely review the results of the Social Assessment undertaken by other consultant(s). This section of the SEA will also identify major data gaps.

Task 3. Policy, Legal and Administrative Framework. Identify and analyze both the (a) national environmental legal, regulatory and institutional framework and (b) sector-specific policies, regulations and institutions, and make recommendations for future needs or changes.

The relevant national environmental policies, laws and regulations should be assessed for their completeness and appropriateness in light of the conditions and problems of the sector, and gaps and weaknesses noted. Non-environmental laws and...
The composition of the SEA Team should include the following expertise:

- an internationally qualified ecologist and biodiversity conservation specialist
Georgia Forests Development Project

- 6 -

Sectoral Environmental Assessment

Terms-of-Reference

- a forest management specialist, with particular knowledge of Georgian forest management
- an internationally qualified expert in environmental impact assessment of forest harvesting and road development, in particular cumulative effects
- an internationally qualified expert in participative management of natural resources
- an internationally qualified expert in natural resources legislation
- an internationally qualified expert in environmental institutions

26. **Schedule.** The consultants are expected to carry out the review over a period of 5 (five) months (in October 2000 to February 2001) according to the following timetable:

- **3 weeks:** consultants review available documents and conduct initial stakeholder consultation to review TOR and identify any outstanding issues that need consideration in the SEA;
- **2 weeks:** Consultants draft workplan for the SEA based on review and stakeholder consultations;
- **3 Months(s):** detailed review of existing documents; data gathering in Georgia including consultations, local expert workshops to close information gaps; preparation of draft report.
- **1 week:** distribution of draft report to stakeholders;
- **January 31, 2001:** last date for presentation of the revised draft to the Ministry of Environment, State Department of Forests and the World Bank for comments; presentation of report to stakeholder consultation; and
- **February 25, 2001:** last date for submission of final report incorporating these comments.

26. **Payment Schedule:**

- 15% upon signing of contract;
- 40% upon GoG and Bank approval of the work plan;
- 45% upon GoG and Bank acceptance of the satisfactory final report.

27. **Other Information.** In carrying out this assignment, the Consultant(s) should report to the Executive Director of the Project Management Unit (PMU) at the Georgian State Department of Forest Management. The following data sources, project background reports and studies should be consulted (to be made available through the PMU):

- Promotion of Sustainable Forest Management in Georgia. Workshop Report. WWF/World Bank Alliance, October 1999.
## TASKS BREAKDOWN

<table>
<thead>
<tr>
<th>Task</th>
<th>Title</th>
<th>Limitations defined with PPU</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PROJECT DESCRIPTION</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
| 1.1  | Identification of major environmental and social issues related to the development of the forest sector and the Project | • This is a summary of:  
(a) literature and scientific reviews;  
(b) social assessment already completed by GORBI; and  
(c) any issues identified by stakeholders. (documents forming the basis of EA attached)  
• While the PIU can make available documents on file such as the GORBI report, scientific reports on environmental issues State Program should be compiled by the Georgian experts.  
• The PIU would be responsible for the coordination of any stakeholder consultations | 1 |
| 2    | BASELINE DATA AND MONITORING | | |
| 2.1  | Baseline data collection and analysis | • physical environment  
• biological environment  
• socio-cultural environment | 1 |
| 2.2  | Forecast on anticipated changes | Literature review / summary. Much of the social information already readily available in SA | 2 |
| 2.3  | Presentation of data | This is not modeling, but merely a write-up of expected trends  
We recommend the data be presented in GIS. However, if cost is an issue, or other project activities will be providing this type of data in GIS form use ACTAAlt numbers | 1 |
| 2.4  | Identification and current management practices on ecologically sensitive areas | Identification of Current and Planned Land Use Practices in five districts  
Combination of review of land use planning documents and field visits. This section gives and overall view of the landscape and how it may be impacted by sector development. It is important to keep in. | 2 |
| 2.5  | Collection of information on land and resource use, including non-timber forest products | | 2 |
| 2.6  | Analysis of systems of land tenure and resource use rights | | 2 |
2.7 Analysis extent and causes of illegal harvesting at the community level

2.8 Analysis of existing and planned development activities

2.9 Collection and evaluation of more specific detailed subset of baseline data at a local (district) level - for the territory of the Oni District.

This is not the collection of new data. This is merely to use existing report to assess how nation-wide issues and data are being translated down to the district-level

2.10 Review of the results of the Social Assessment undertaken by other consultant(s)

3.1 Identification, analysis and assessment of:

- national environmental legal, regulatory and institutional framework
- sector-specific policies, regulations and institutions

3.2 Recommendations for future needs or changes

This should be just a detailed overview, as the in-depth analysis will be done through an institutional reform component of the PPF.

- While the PIU should be able to obtain many of the necessary information, the Georgian lawyer hired should collect most of this information

3.3 Identification of non-environmental laws and policies having significant effect for the sector’s utilization of resources and/or production processes, including legislation related to:

- land restitution,
- tenure systems,
- private sector development,
- enforcement,
- judicial system
- customs

Again, just an overview, not in-depth analysis

3.4 Analysis of current and proposed forest sector-specific policies, laws and regulations having environmental implications.

3.6 Identification of any gaps in subsidiary regulations being developed to support this Forest Code that are critical to support sustainable forest management (SFM).
<table>
<thead>
<tr>
<th>3.4</th>
<th>Assessment of the regulatory framework for EA preparation and review of forest sector investments.</th>
<th>EA regulatory framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.7</td>
<td>Analysis of the impact of the recent (1998-99) temporary ban on commercial logging vis-a-vis alternatives should, and development of suggestions for regulatory and/or other adjustments to ensure that the effective lifting of this ban after approval of the 1999 Forest Code does not lead to the acceleration of unsustainable harvesting practices.</td>
<td>Review of institutional responsibilities (forest and environmental) and their capacities This should be only a detailed overview, as the in-depth analysis will be done through an institutional reform component of the PPF</td>
</tr>
<tr>
<td>3.8</td>
<td>Identification of environmental distribution among public and private institutions.</td>
<td></td>
</tr>
<tr>
<td>3.9</td>
<td>Assessment of the capacity to administer the tasks.</td>
<td></td>
</tr>
<tr>
<td>3.10</td>
<td>Review of the State Forest Department’s investment planning process, in terms of objectives, methodology and procedures for review and approval of plans and projects.</td>
<td>Review &amp; Assessment of State FD’s investment planning process &amp; State program actions &amp; utilization forecasts</td>
</tr>
<tr>
<td>3.11</td>
<td>Assessment whether environmental and social issues are adequately covered by current procedures.</td>
<td></td>
</tr>
</tbody>
</table>

### 4 ANALYZIS POTENTIAL IMPACTS FROM PROPOSED FOREST SECTOR DEVELOPMENT SCENARIOS (INCLUDING THOSE OUTLINED BY THE FD PROJECT)

<table>
<thead>
<tr>
<th>4.1</th>
<th>Analysis of potential impacts through:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• comparison of alternative forest sector development scenarios proposed during project preparation by the GoG and FAO, including a “do-nothing alternative”</td>
</tr>
<tr>
<td></td>
<td>• short-term and long-term effects of various harvesting scenarios on forest structure, watersheds and biodiversity</td>
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<td></td>
<td>• short-term and long-term effects of logging roads;</td>
</tr>
<tr>
<td></td>
<td>• likely impacts of developing community-forest management systems, and what systems would need to be in place to ensure communities manage their forests sustainably</td>
</tr>
<tr>
<td></td>
<td>• effects of the development of a forests product processing sector</td>
</tr>
</tbody>
</table>

Analysis

- This is national-level, sector-wide desk analysis (not review of individual investment proposals), and it significantly overlaps with 2.4 – 2.8 | 1 |
### 5 IN-COUNTRY ENVIRONMENTAL ASSESSMENT CAPACITY

<table>
<thead>
<tr>
<th>5.1 Analysis of capacity within the relevant ministries or departments to run an effective EA process during forest management planning.</th>
<th>Institutional Mandates for EA of forest activities (MoE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>o This overlaps significantly with 3.8 - 3.9</td>
<td></td>
</tr>
</tbody>
</table>

| 5.2 Review of the mandates and capacity of institutions at local, provincial/regional and national levels, and recommend steps to strengthen or expand them. | PIU can help to organize documents and organize meetings |

### 6 ENVIRONMENTAL MONITORING AND MANAGEMENT PLAN

<table>
<thead>
<tr>
<th>6.1 Development of general guidelines for</th>
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<tbody>
<tr>
<td>long-term sector-wide environmental monitoring,</td>
</tr>
<tr>
<td>Forest Management Information System (FMIS) which is to be funded under the Project</td>
</tr>
<tr>
<td>processes by which the environmental impact of any potential future forestry operations will be assessed</td>
</tr>
<tr>
<td>The FMIS will be developed by another consultancy during project implementation. This is not the design of a monitoring system, merely recommendations based on major gaps in data and existing systems.</td>
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<table>
<thead>
<tr>
<th>6.2 Recommendation of measures to collect and organize missing data</th>
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<table>
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<tr>
<th>6.3 Development of an Environmental Management Plan</th>
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</thead>
<tbody>
<tr>
<td>Environmental Management Plan</td>
</tr>
<tr>
<td>Design of process by which potential impacts will be mitigated, environmental impact of future operations will be assessed for FPP&amp;State Program</td>
</tr>
</tbody>
</table>

### 7 CONSULTATION

<table>
<thead>
<tr>
<th>7.1 Assistance in inter-agency coordination and public/NGO participation</th>
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<tbody>
<tr>
<td>The PIU will coordinate all stakeholder consultations. The consultancy would be required to liaise with the PIU on who should be invited, information picked up during the course of the work, and be prepared to either make presentations at the consultations and respond/follow-up to questions and comments, incorporating them in the final report</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7.2 Coordinate the SEA with other government agencies, in obtaining the view of local NGOs and affected groups, in keeping records of meetings and other activities, communications, and comments and their disposition</th>
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</thead>
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* Note: A Sectoral Environmental Assessment (SEA) is an instrument which offers opportunities for sector-wide environmental analysis and support integration of environmental concerns into long-term development and investment planning. The SEA therefore attempts to take a broader, landscape view of sector-wide development – and does not focus as much on investment-specific environmental impacts (an investment-specific EA will be conducted within the scope of the early phase of the Project itself before these investments are financed by the Bank at the second phase of the Project)

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1 Tasks numbering is following the initial ToR