NATIONAL FOREST POLICY REVIEW



SRI LANKA

by

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The current situation of forest resources and the forestry sector *General*

Sri Lanka covers an area of 65 610 km². The country is divided into three major agro-ecological zones according to annual rainfall. The wet zone receives an average annual rainfall that exceeds 1 500 mm. The annual rainfall in the intermediate zone is between 900 and 1 500 mm. It is below 900 mm in the dry zone.

Sri Lanka's population is 18.73 million and the population density is 309 persons/km². The current population growth rate is 1.14 percent. The rural population constitutes approximately 75 percent.

The per capita gross national product (GNP) was LKR63 752 in 2000. The annual GNP growth rate was five percent in 2000 and is estimated to have been around one percent in 2001.

Present status of forestry

In 1999, the forest cover was estimated to be about 2 million ha, which amounts to 30.8 percent of the total area of Sri Lanka. The forest areas consist of 1.46 million ha of dense forests and 0.46 million ha of sparse forests (Table 1). The per capita forest area is around 0.11 ha and the estimated annual rate of deforestation is 0.8 percent.

 Category
 Extent (ha)
 Percent of total land area

 Dense forests
 1 462 900
 22.4

 Sparse forests
 460 600
 7.0

 Forest plantations
 93 000
 1.4

 Total
 2 016 500
 30.8

Table 1. Forest cover area (1999)

Forest plantations account for 93 000 ha mainly comprising pines, eucalypts, acacias, teak and mahogany, with about 14 500 ha of other species (Table 2).

Table 2. Forest plantations by species

Category	Extent (ha)		
Conifers (pines)	16 440		
Eucalypts and acacias	27 500		
Teak	31 713		
Mahogany	2 800		
Miscellaneous	14 547		
Total	93 000		

Sri Lanka has initiated numerous activities to protect natural forests for their biodiversity and cultural as well as aesthetic values. Two institutions, namely the Forest Department and the Department of Wildlife Conservation administer the protected forest areas. The present extent of protected forest areas is estimated to be around 15 percent of the total area of Sri Lanka.

Forest products, trade and consumption

The major portion of the industrial roundwood volume (1 281 200 m^3) that is consumed is produced within the country (1 275 000 m^3). Owing to national logging bans enforced in the natural forests, imports of roundwood have increased in the last few years and amount to 8 200 m^3 while exports are a mere 2 000 m^3 .

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 $^{^{1}}$ US\$1.00 = LKR 81 (December 2000)

In the context of sawnwood, the total consumption is 575 300 m³, of which 515 000 m³ are produced within the country. The logging ban has resulted in more sawnwood being imported to Sri Lanka with an annual growth rate of around 1.4 percent. Currently 62 300 m³ of sawnwood are imported. Most wood panels and particleboards are imported. The annual consumption of pulp and paper is 22 000 m³, of which 10 000 m³ are produced locally while 12 000 m³ are imported. Annually, 129 000 m³ of paper and pulp boards are consumed, of which 104 000 m³ are imported, while 25 000 m³ are produced locally. Table 3 gives the production, trade and consumption patterns of various forest products.

Table 3. Forest products, trade and consumption

Category	Production	Imports	Exports	Consumption
Industrial roundwood '000 m ³	1 275.0	8.2	2.9	1 281.2
Sawnwood '000 m ³	515.0	62.3	2.0	575.3
Wood panels and particle boards '000 m ³	5.0	32.0	-	37.0
Pulp for paper '000 m ³	10.0	12.0	-	22.0
Paper and paper boards '000 m ³	25	104	-	129.0

Current and emerging issues, trends and critical problems

Problems and issues in the forestry sector

Deforestation and forest degradation

Deforestation and forest degradation are the key issues facing the forestry sector. Sri Lanka has a predominantly agricultural economy, and agricultural production has increased to support the growing population mainly by expanding cropping areas. The forest resources in Sri Lanka diminished dramatically during the last century. The main causes of land-use change are rapid population growth, which has led to the conversion of forests to non-forest uses through agricultural plantations (e.g. tea, coconut and rubber) and shifting cultivation. The only significant natural causes for deforestation and forest degradation are fires and cyclones. The main causes for deforestation and forest degradation are:

- Conversion of forests to non-forest uses;
- Overexploitation of forests for timber production;
- Lack of established forest boundaries;
- Lack of a national land-use policy;
- Illegal felling of timber and encroachment on state forests; and
- Shifting cultivation.

The closed canopy forest cover in Sri Lanka has dwindled rapidly from about 44 percent in 1956 to 24 percent in 1992. The average annual rate of deforestation from 1956 to 1992, both through planned and spontaneous conversion, has been about 42 000 ha. The average annual deforestation from 1992 to 1999 was around 17 000 ha, or an annual deforestation rate of about 0.8 percent. The reduced rate is primarily attributable to the completion of most large-scale agricultural expansion schemes such as the Mahaweli Project, by 1990.

Between 1965 and 1990 the natural forests were overexploited for timber production to provide raw material for the forest industries. Formerly, forest management was based on the "Commercial Selection System", which caused severe forest degradation with regard to stand structure and species composition. The absence of a national land-use policy and principles for land-use management has contributed further to deforestation and the degradation of land resources. Forest boundaries have been surveyed and demarcated only in gazetted forest areas that represent only about 66 percent of the total forest area. The balance of 34 percent, categorized as

Proposed Forest Reserves and Other State Forests, has not been surveyed and demarcated. This shortcoming has contributed to illegal logging and encroachment of state forests.

The control of illegal activities in state forests has been difficult due to widespread socio-economic problems such as limited land availability, unemployment and poverty. The meagre resources of the Forest Department are another constraint. Shifting cultivation, which is a major contributor to deforestation, is still a traditional practice in remote areas. Large swathes of secondary forests are cleared every year by shifting cultivators, particularly in the intermediate and dry zones.

The main constraints of the forestry sector can be listed as follows:

- Ineffective management of forest plantations.
- An inadequate legal framework for effective participatory forest management.
- The lack of participatory forest management and benefit-sharing mechanisms.
- Inadequate support and incentives for private sector involvement in commercial forest plantation development.
- Outdated and inefficient machinery in the wood industries that generate much waste.
- Inadequate attention paid to non-timber forest products.
- The State Timber Corporation's monopoly for extraction of timber from state forestland.
- Inappropriate national accounting systems, which do not consider the total value of forest products and services.

In light of the increasing demands placed on the forestry sector, its diminished capacity to meet the needs of society sustainably is a major problem. The most serious consequences of deforestation and forest degradation include:

- Reduction of biodiversity because of the destruction of natural habitats;
- Increased scarcity of wood, including fuelwood;
- Increased soil erosion and associated loss of soil fertility;
- Irregular water supply due to reduced dry season flows;
- Shortened lifespans of irrigation and hydropower reservoirs; and
- Reduced carbon sequestration.

Implications of international conventions and similar initiatives

Sri Lanka is party to a number of international conventions and initiatives on forestry and related areas. They include the UNESCO Man and Biosphere (MAB) Programme, the Convention on International Trade in Endangered Species (CITES), the Convention on Conservation of Migratory Species of Wild Animals (Bonn Convention), the World Heritage Convention, the Convention on Wetlands of International Importance especially as Waterfowl Habitats (Ramsar Convention), the Forest Principles, the Convention on Climate Change (CCC), the Convention on Biological Diversity (CBD), and the Convention to Combat Desertification (Appendix 1).

The government accords high priority to adherence to international conventions and initiatives. Several national policies, master and action plans, laws and regulations have been prepared to meet the national commitments. Among the key policies are the National Forest Policy (1995) and the National Wildlife Policy (1999). The policy statement in the National Forest Policy on international forest-related conventions advises that "The state will observe international forest-related conventions and principles that have been agreed to by Sri Lanka".

The National Forest Policy is related directly to the MAB Programme, the World Heritage Convention, Forest Principles, Conservation of Biodiversity and Convention to Combat Desertification; whereas the National Wildlife Policy leans towards CITES, the Bonn Convention, the Ramsar Convention, the Forest Principles and the Convention on Biological Diversity. Two laws support the implementation of the National Forest Policy (National Heritage and Wilderness

Area Act and Forest Ordinance). The Fauna and Flora Protection Ordinance supports the implementation of the National Wildlife Policy. Currently, the Forest Ordinance and the Fauna and Flora Protection Ordinance are being amended to provide the provisions for implementing the newly formulated national policies and legal provisions required under the Convention on Biological Diversity. The Forestry Sector Master Plan (1995), the Biodiversity Action Plan (1998), the Forest Resources Management Project (1999) and the Biodiversity Conservation and Protected Areas Management Project also cover action programs of forestry-related conventions.

Current national forest policies

Objectives related to forests

The objectives related to forest management and conservation are clearly defined in the National Forest Policy (1995). They are to:

- Conserve forests for posterity, with particular regard to biodiversity, soils, water, and historical, cultural, religious and aesthetic values;
- Increase the tree cover and productivity of the forests to meet the needs of present and future generations for forest products and services; and
- Enhance the contribution of forestry for the welfare of the rural population and to strengthen the national economy, with special attention being paid to equity in economic development.

The National Forest Policy was formulated after the Ministry of Agriculture, Lands and Forestry organized three-year intensive consultations with relevant government agencies, universities, research institutes, non-governmental organizations (NGOs) and the general public. The Ministry of Agriculture, Lands and Forestry and the Forest Department provided the leadership during the consultation process. The National Forest Policy was published in July 1995, along with implementation strategies and the Executive Summary of the Forestry Sector Master Plan (FSMP) prepared by the Forestry Planning Unit of the Ministry. Copies of this publication have been disseminated to all the relevant stakeholders and are available in the Forest Department library and libraries of relevant government institutions and universities. The National Forest Policy was approved for implementation by the Cabinet of Ministers in 1995. Since then, the objectives of the policy have been recognized by all the state and non-state sector organizations. The National Forest Policy and policy objectives and statements have been referred to in many policies and action plans, including the:

- National Land Use Policy (draft), 2002. Ministry of Lands.
- National Status Report on Land Degradation, Implementation of the Convention to Combat Desertification in Sri Lanka, 2001. Natural Resources Management Division, Ministry of Forestry and Environment.
- State of the Environment, Sri Lanka, 2001. Ministry of Forestry and Environment/UNEP.

Specific forestry policies and thrust areas

The following section outlines the policy statements in the National Forest Policy related to specific thrust areas. These policy statements describe lower level policy objectives for attaining overall national policy objectives.

Forest resources and land-use change

 Planned conversion of forests to other land uses can take place only in accordance with procedures defined in the legislation and with accepted conservation and scientific norms.

Forest management including timber harvesting

- All state forest resources will be managed sustainably both in terms of the continued existence of important ecosystems and the flow of forest products and services.
- Natural forests will be allocated primarily for conservation, and secondly for regulated multiple-use production forestry.
- For the management and protection of natural forests and forest plantations, the state will, where appropriate, form partnerships with local people, rural communities and other stakeholders, and introduce appropriate tenurial arrangements.
- The establishment and management of industrial forest plantations on state lands will be entrusted progressively to local people, rural communities, industries and other private bodies, keeping pace with the institutionalizing of effective environmental safeguards.
- Degraded forestland will be rehabilitated as forest for conservation and multiple-use production, where this is economically and technically feasible, mainly for the benefit of local people.

Forest and biodiversity conservation

- All state forest resources will be managed sustainably both in terms of the continued existence of important ecosystems and the flow of forest products and services.
- Natural forests will be allocated primarily for conservation, and secondly for regulated multiple-use production forestry.
- Degraded forestland will be rehabilitated as forest for conservation and multiple-use production, where this is economically and technically feasible, mainly for the benefit of local people.
- The general public and industries will be educated about the importance of forestry, and of conserving biodiversity and protecting watersheds.

Forest industries

- Greater responsibility will be given to local people, organized groups, cooperatives, industries and other private bodies in commercial forest production, industrial manufacturing and marketing.
- Efficient forest product utilization, development of competitive forest industries based on sustainable wood sources and the manufacturing of value-added products will be promoted.

Non-wood forest products

• Effective measures to protect the forests and prevent illegal trade in wood, non-wood forest products and endangered species of flora and fauna will be institutionalized.

Trees outside forests

- Growing trees on homesteads, and other agroforestry activities, will be promoted as a main strategy to supply wood and other forest products to meet household and market needs.
- The state will promote tree growing by local people, rural communities, NGOs and other non-state sector bodies for the protection of environmentally sensitive areas.
- The state will facilitate the harvesting and transport of forest products grown on private lands.

Wood energy

- All state forest resources will be managed sustainably both in terms of the continued existence of important ecosystems and the flow of forest products and services.
- Degraded forestland will be rehabilitated as forest for conservation and multiple-use production, where this is economically and technically feasible, mainly for the benefit of local people.

Investments in forestry and wood processing

- The establishment, management and harvesting of industrial forest plantations by local people, communities, industries and others in the private sector will be promoted.
- Greater responsibility will be given to local people, organized groups, cooperatives, industries and other private bodies in commercial forest production, industrial manufacturing and marketing.
- Efficient forest product utilization, development of competitive forest industries based on sustainable wood sources and manufacturing of value-added products will be promoted.

People's participation and devolution of forest management responsibilities

- For the management and protection of the natural forests and forest plantations the state will, where appropriate, form partnerships with local people, rural communities and other stakeholders, and introduce appropriate tenurial arrangements.
- The establishment and management of industrial forest plantations on state lands will be entrusted progressively to local people, rural communities, industries and other private bodies, supported by effective environmental safeguards.
- Growing trees on homesteads and other agroforestry activities will be promoted as a main strategy to supply wood and other forest products to meet household and market needs.
- The establishment, management and harvesting of industrial forest plantations by local people, communities, industries and others in the private sector will be promoted.
- Greater responsibility will be given to local people, organized groups, cooperatives, industries and other private bodies in commercial forest production, industrial manufacturing and marketing.
- Nature-based tourism will be promoted to the extent that it does not damage ecosystems and insofar as it provides benefits to the local population.
- The National Forestry Policy will be kept up to date and implemented in a participatory and transparent manner.

The role of forestry agencies in forest management

- The establishment and management of industrial forest plantations on state lands will be entrusted progressively to local people, rural communities, industries and other private bodies, supported by effective environmental safeguards.
- The state will provide full support to the various resource managers for sustainable forestry development, and its institutions will be reoriented and strengthened to enable them to accomplish their role.
- NGOs and community-based organizations will be supported in their forest-based rural development activities.

Forestry research, education and extension

- The state will coordinate, carry out and promote research that focuses on the requirements of beneficiaries and supports the implementation of the sectoral policy.
- The general public and industries will be educated about the importance of forestry, and about conserving biodiversity and protecting watersheds.

Forest plantations

• For the management and protection of natural forests and forest plantations, the state will, where appropriate, form partnerships with local people, rural communities and other stakeholders, and introduce appropriate tenurial arrangements.

- The establishment and management of industrial forest plantations on state lands will be entrusted progressively to local people, rural communities, industries and other private bodies, supported by effective environmental safeguards.
- The establishment, management and harvesting of industrial forest plantations by local people, communities, industries and others in the private sector will be promoted.

Watershed management

 Natural forests will be allocated primarily for conservation and secondly for regulated multiple-use production forestry (conservation includes soil and water conservation and watershed protection).

Forest fires were not identified as a significant problem. Hence no specific policy statements have been included in the National Forest Policy on fire prevention and management. There are also no specific forest policy statements related to climate change.

Policy instruments of specific forest policies and implementation processes

Regulatory and administrative instruments and tools

With regard to legal and regulatory provisions, there are three laws relating to the management of forest resources in Sri Lanka:

- (a) Forest Ordinance No. 16 of 1907
- (b) National Heritage and Wilderness Areas Act No. 3 of 1988
- (c) Fauna and Flora Protection Ordinance No. 2 of 1937

The Forest Ordinance and National Heritage and Wilderness Areas Act are administered by the Forest Department whilst the Fauna and Flora Protection Ordinance is administered by the Department of Wild Life Conservation.

Forest Ordinance

The Forest Ordinance No. 16 of 1907 (amended by Act No. 13 of 1966) and subsequent amendments make provisions for the establishment of forest reserves, conservation forests and for the protection of other state forests and their products. The forest reserves, conservation forests and other state forests are managed by the Forest Department and the Forest Ordinance and regulations framed under the ordinance provide legal provisions for the following issues:

- Declaration of forest reserves and conservation forests (protected area category).
- Protection of forest reserves, conservation forests and other state forests.
- Extraction of forest products from state forests through a permit system.
- Transport of timber (including private timber) through a permit system.
- Regulation and monitoring of timber industries through a registration and reporting system.
- Inspection and legal action for illegal timber under storage.

The Forest Ordinance is being amended at present to incorporate new provisions for the more effective implementation of the National Forest Policy (e.g. for participatory management, benefit sharing, private sector involvement).

National Heritage and Wilderness Areas Act

The National Heritage and Wilderness Areas Act No. 3 was passed in 1988 to overcome some inherent weaknesses of the Forest Ordinance and to provide for the preservation of unique ecosystems and genetic resources, physical land, biological formations and precisely delineated areas constituting the habitats of threatened plant and animal species of universal scientific or conservation value.

This law provides legal provisions for the management of very special protected areas as described above and has provisions for the:

- Declaration of national heritage and wilderness areas.
- Protection of fauna and flora, habitats, biological and physical features in such areas.
- Observation of fauna and flora and scientific research.
- Preparation of management plans for national heritage and wilderness areas.

Activities permitted within a national heritage and wilderness area are restricted to the observation of fauna and flora and scientific research. This law is administered by the Forest Department. At present only the Sinharaja World Heritage Forest has been declared under this act.

Fauna and Flora Protection Ordinance

The protected areas under the jurisdiction of the Department of Wildlife Conservation are administered under the provisions of this law. The Fauna and Flora Protection Ordinance No. 2 of 1937 (last amended in 1993) makes provisions for:

- Declaration of national reserves (strict natural reserves, national parks, nature reserves, jungle corridors, buffer zones, refuges) and sanctuaries.
- Protection of fauna and flora and habitats of wildlife within national reserves and sanctuaries.
- Total protection of protected species of fauna and flora.

Administrative provisions: In addition to provisions in the legislation to implement the National Forest Policy, there are many administrative orders (circulars) with respect to implementing various policy directives. These administrative orders cover various forest management aspects (e.g. forest protection, reforestation, establishment of private nurseries, participatory forestry, management of forest plantations, forest harvesting, private timber transport, release of forest lands for non-forest uses, legalization of encroached areas).

Some administrative orders (circulars) provide guidance for operationalizing policies that do not have appropriate legal support for effective implementation. Others provide details on strategies for implementing various policy statements.

Voluntary tools

Incentives for tree growing have been identified as a key instrument of the National Forest Policy and FSMP. They apply to the promotion of tree growing on state lands and private home gardens as well as private sector involvement in commercial forest plantation development. These incentives may be of the direct economic, indirect economic and non-economic variety. The Forest Department provides the following direct incentives for tree growing:

- (a) Under the ADB-funded Participatory Forestry Project (1993-1999) food stamps to encourage participation in nursery development, farmers' woodlot development and protective woodlot programs.
- (b) Under the ADB-funded Upper Watershed Management Project (1999-2005) cash for farmers for nursery development, buffer zone development and the establishment of timber farms.
- (c) Free planting material for farmers and the general public under the aforementioned projects and other Forest Department extension programs.
- (d) Seedlings for sale (at production cost) from the Forest Department.
- (e) Free state land for farmers' woodlots and timber farm development programs. The private sector is charged a concessional fee for commercial forest plantation establishment.
- (f) Free technical assistance and training.
- (g) Free transport of seedlings to planting sites for farmers' programs (e.g. farmers' woodlots and timber farms).
- (h) Information is disseminated to the private sector through extension and training programs.

In addition, the permit requirement for the transport of private timber is relaxed. The relevant policy statement of the National Forest Policy indicates "The State will facilitate the harvesting and transport of forest products grown on private lands". Subsequently, the relevant regulations of the Forest Ordinance were amended in 2000 and 2001 to deregulate 85 tree species from the transport permit requirement.

In addition, the research and extension services of the Forest Department provide information to the general public through publications and various extension and awareness programs. The main research publication is *The Sri Lanka forester*, which is published annually. The extension and awareness programs are aimed at wider target groups; the main themes include conservation and tree growing. The material and methods include films and TV programs, videos and slide shows, information brochures, exhibitions and seminars.

Specific non-forestry policies affecting the management of forests and tree resources

National Wildlife Policy (1999)

Although the National Wildlife Policy was formulated as a separate policy specifically for the conservation of wildlife, it can be viewed as a complementary national policy for forestry. The primary objective of the National Wildlife Policy is to conserve wildlife resources for the benefit of present and future generations, while assuring their sustainable use for education, recreation and research in a transparent and equitable manner. The main concern of the policy is protected area management and wildlife conservation. The Fauna and Flora Protection Ordinance under the administration of the Department of Wildlife Conservation provides the legal framework for implementing the policy.

National Land Use Policy (2002)

The National Land Use Policy is in draft form at present. It provides for the sustainable management of existing forest resources and gives priority in forestry to conservation, which is complementary to the National Forest Policy. The National Land Use Policy emphasizes the need for maintaining protective forest cover on lands steeper than 60 percent.

Other policies

The National Agriculture Policy and National Policy on Industrial Development emphasize the need for expanding the area under field and industrial agricultural crops in addition to increasing yields. Sometimes these policies conflict with the objectives of forest policies and exert pressure to convert degraded and secondary forests to non-forest uses.

Forest policy formulation

Policy formulation process

The process for the formulation of forest policy consists of four steps:

- 1. Review of past forest policies and performance of the sector in relation to policy objectives.
- 2. Assessment of people's needs concerning forestry (in relation to the prevailing realities).
- 3. Analysis and development of appropriate means to meet people's requirements.
- 4. Formulation of a policy statement that considers people's aspirations and is realistic in terms of its development objectives and options.

Review of past forest policies and performance of the sector in relation to policy objectives

The first step of the policy formulation process encompassed a review of past and prevailing forestry and related policies. It indicated that the main objectives of the first explicit forest policy of 1929 were to:

- Provide for self-sufficiency in construction timber and foster the export of timber and forest produce; and
- Conserve the water supply, prevent soil erosion and coordinate forestry operations with the prime objectives of preserving indigenous fauna and flora.

Influenced by FAO's declaration of the principles of forest policy in 1951, the Forest Department introduced comprehensive sectoral forest policy objectives in 1953. These objectives were concerned with the maintenance and conservation of forests for environmental purposes; the protection of local fauna and flora; to ensure and increase the surplus of small wood for agricultural requirements and fuelwood for domestic consumption; to maintain as far as possible a sustained yield of timber and other forest products to cater to the general requirements of the country; and to work the forest to its highest possible economic advantage.

Until 1980, forestry was considered the responsibility of the state. In 1980, there was a clear change when the importance of involving local people in forestry was recognized by including the following statement:

"...to involve rural communities in the development of private woodlots and forestry through a program of social forestry."

During the review process, the performance of the sector in relation to current policy objectives was reviewed. Some glaring deficiencies were continuous deforestation and forest degradation, which have resulted in a reduction of biological diversity and agricultural productivity and depletion of wood and other forest products. In addition, it was revealed that the contribution of forestry to the national economy was considerably less significant than it could have been. The involvement of rural people and communities in forestry has been limited also. Past and prevailing policies, legislation and organizational frameworks were reviewed. Their relationships with the sector's performance were analysed as they relate to the rate and causes of deforestation; the relative importance of various land types as sources of timber and bio-energy; the status of biodiversity on forestlands; the quality and quantity of forest cover; the profitability of forest plantations; the demand for forest products and services in relation to supply potential; and import and export trends.

Several working groups were established comprising government officials from the Ministry of Forestry, the Forest Department, the State Timber Corporation, the Department of Wildlife Conservation and non-governmental personnel such as representatives from NGOs and universities, and several eminent scientists. The studies conducted by these working groups contributed to the policy formulation process.

Assessment of people's needs concerning forestry

In the next step people's needs concerning forestry were assessed by various methods such as analysis of newspaper articles and letters during the past decade; previous government policies; and the decisions and activities conducted by NGOs. In addition, policy and its related issues were addressed at several workshops (at national, district and local levels) where all the relevant stakeholders were given an opportunity to express their views. The studies on the demand for wood and non-wood forest products provided quantitative data on the tangible requirements of the people. This assessment revealed that the state of the forestry sector was not what people desired and that many forest trends ran contrary to people's expectations.

Analysis and development of appropriate means to meet people's requirements

The penultimate step was to develop realistic options for fulfilling the national forest requirements. Various studies helped in the development of alternative scenarios and the analytical process. For example, the wood-based industries' development study assessed the impact of wood supply trends on the forest industries. It identified the conditions, which would allow the sound development of the sub-sector to meet people's needs. A computer model assisted in analysing various scenarios and in studying the impacts of alternative policy decisions. Examples of policy decisions/scenarios analysed included the options of 100 percent self-

sufficiency in various industrial forest products and a total logging ban in the remaining natural forests. The scenario analysis was used to prioritize types of forestry land uses.

Development of a policy statement

The forest policy addresses biophysical, sociopolitical and economic aspects of forestry. Various policy statements were developed consistent with the national economic policy and national policy for the Wildlife Conservation and National Conservation Strategy.

In this context, the close interrelation between the formulation of the forest policy and the preparation of the FSMP has to be emphasized. The FSMP studies have assisted in policy formulation. At the same time, the policy developed provided the foundation for the preparation of various development programs.

Institutional arrangements for policy formulation

The main responsibility for formulating the policy was awarded to the Ministry of Agriculture, Lands and Forestry. The policy was formulated by forestry policy working groups comprising different stakeholders. For three years, the working group acted mainly as a secretariat and facilitator in the formulation process. During this period a newsletter, newspaper articles and other media as well as formal and informal discussions with the various parties were used to make the process transparent, to elicit feedback and to obtain guidance on policy directions.

Involvement of stakeholders in forest policy formulation

Once the draft of the national policy had been prepared, it was submitted for public review, which culminated in an open public forum attended by about 250 people. Rural people, government officials, concerned citizens and representatives from industries, universities and NGOs attended the forum. Written comments and feedback were analysed and incorporated into the policy document before it was submitted for approval by the government.

Capacities for policy formulation, implementation, monitoring and evaluation

Organizational framework for policy formulation and policy analysis

The present policy has been prepared by the Ministry of Agriculture, Lands and Forestry based on a participatory planning process and continuous dialogue with various stakeholders. The various mechanisms employed were expert panels, a broad steering committee with representatives from various interested groups, public workshops and consultations. In the future, a mechanism will have to be developed that fosters a bottom-up approach into national-level planning and policy implementation. These procedures will make the policy formulation process more dynamic and ensure that forest policy is more effective and responsive to the real needs of the people.

The policy planning unit of the Ministry of Environment and Natural Resources is responsible for the present organizational framework for policy analysis and formulation. This unit/division undertakes policy analysis with the assistance of relevant institutions and various experts in the field of forestry. However, the real mechanisms and the procedures to be adapted are yet to be formalized and accepted by relevant organizations and other stakeholders.

Organizational and institutional reforms in the forestry sector

With the swearing in of the new government in December 2001, a new ministry, the Ministry of Environment and Natural Resources², was created. This ministry is now responsible for all the organizations that deal with environmental matters, such as the Forest Department, the Department of Wildlife Conservation and the Central Environmental Authority. The

² For more information on the new ministry please visit the following web page: http://www.priu.gov.lk/Ministries/Min Environment&NaturalResources.html

establishment of this ministry has helped in the planning and implementation of forestry and environment-related activities in an integrated and well-coordinated manner.

Initial action has been taken to devolve responsibilities and some functions of the Forest Department from the central to the regional level through the establishment of four regional – Deputy Conservator of Forests – offices. The prime objective of devolving responsibilities is to enhance the efficiency of implementing forestry activities through an integrated forestry management plan. In this context, the strengthening of implementation at district and range forest levels through capacity building is emphasized.

At present, the Forest Department has a well-trained and efficient workforce, both at professional and at technician levels. Normally, professionals are trained abroad and technicians are given formal training at the Sri Lanka Forestry Institute. Recently the field level organization of the Forest Department was strengthened by the recruitment of 1 200 people below the rank of Beat Forest Officer level, to strengthen forest protection within the department.

The managerial capacities of the relevant personnel are enhanced and kept up to date through numerous training programs. The frequencies of the training programs have been increased with the implementation of the recent forest resources management project funded by ADB.

Forest policy implementation and impacts

Institutional arrangements and actions carried out to achieve policy objectives

Legislation

Implementation of the forest policy requires sound legislation and an efficient organizational framework. However, the present legislation seems to be *ad hoc* in nature. Various items of legislation were introduced over the years in response to problems and needs at the time. While they were relevant then they may have lost their significance and justification in the present environment. When the laws were enacted, priority was given to forest exploitation and revenue collection by the state. Today, conservation and people's participation have emerged as priority issues.

Weak law enforcement and cumbersome legal procedures are other major constraints. Despite the increased attention on conservation by the Forest Ordinance, forest cover has continued to decline and the remaining forests are being degraded. As a result of the "command and control" nature of the legislation and weak enforcement, forest officers spend too much time in courts instead of managing the forest. The main problems and their implications can be summarized as follows:

- Outdated forest legislation.
- A glaring deficiency is that the existing laws do not address the main issues and thus do not support policy implementation adequately. As legislation is the most important tool in translating policy statements into action, achieving the objectives set out in the policy is unlikely. The legislation should be designed to permit and encourage wise use of the resource.
- Wildlife policy is not supported by legislation. The legislation concerned is not conducive
 to achieving the policy objectives. In particular, the conservation aspects of the objectives
 will not be reached.
- Excessive emphasis on regulatory "command and control" mechanisms.
- Lack of corresponding legislation in other sectors, particularly in agriculture.
- Lack of interagency linkages.
- Forest legislation and other legislations that may impact forestry are not well coordinated.
- Forest and wildlife legislations do not classify forests and protected areas clearly.
- Lack of transparency and participation.

Various efforts, listed hereafter, have been undertaken to overcome these impediments to policy implementation.

Outdated forest legislation: The Forest Ordinance has been amended to facilitate the effective implementation of policy elements. This was done through a consultative process and the final draft is with the Attorney General's Department. It is hoped that this will be enacted soon.

Wildlife policy is not supported by legislation: The Ministry of Environment and Natural Resources has established a committee to address this aspect. At present the committee has reviewed the existing Fauna and Flora Ordinance to make it more conducive for achieving the wildlife policy objectives of 1999.

Excessive emphasis on regulatory "command and control" mechanisms: The existing Forest and Wildlife Ordinances emphasize command and control mechanisms. The new policy stresses the importance of people's participation and more transparency, which require amendments to the policy. Currently, this is being considered, especially with a view to encouraging people's participation.

Lack of corresponding legislation in other sectors, particularly in agriculture: A major impediment is the lack of an acceptable land-use policy. The latest draft of the new land-use policy addresses this issue. The new agricultural policy also recognizes this aspect and recommends various strategies to minimize conflicts between agriculture and forestry.

Lack of interagency linkages: The inter-ministerial sub-committees and cabinet sub-committees that have been established recently have improved interagency linkages vastly.

Forest legislation and other legislation that may impact forestry are not well coordinated: The establishment of the National Forestry Sector Steering Committee that involves all the stakeholders in the forestry sector and the National Forest Protection Committee together with district forest protection committees has helped to improve coordination among institutions with the task to administer forest legislation and other related legislations.

Forest and wildlife legislations do not clearly classify forest and protected areas: The amended draft Forest Ordinance classifies forest areas according to the forest policy objectives and strategies. Additionally, it is expected that the amendments to the wildlife legislation will clarify the classification of protected areas.

Lack of transparency and participation: The policy formulation process clearly indicated the importance of involving stakeholders in forest policy formulation and the benefits of a transparent process. Although the process described in this report is accepted generally, it is important to formalize it.

The legislation, especially the Forest Ordinance, was revised through a consultative process to make necessary amendments and addendums to support the new forest policy. However, the complex nature of this process has resulted in a long delay and after five years the amendments have yet to see the light of the day. It is hoped that the amended Forest Ordinance will be enacted by mid-2002.

Institutional framework

The newly established Ministry of Environment and Natural Resources is responsible for policy formulation and implementation. The two main institutions responsible for the implementation of policies and respective legislation are the Forest Department and the Department of Wildlife Conservation. The State Timber Corporation has the monopoly for harvesting and marketing of timber from state forest areas. However, as mentioned earlier, owing to weak legislation and the poor capacities of these institutions, policy implementation remains constrained.

Action initiated to implement the policy

The policy emphasizes the involvement of community-based organizations and NGOs in forestry. Involvement of communities and individuals in reforestation activities is accepted widely in forestry development activities in Sri Lanka. Considerable experiences in this regard have been gained through a participatory project funded by the ADB. In addition, several conservation activities in the buffer zones of protected forest areas rely on the participation of communities to ease the pressure on forest areas.

To facilitate the harvesting and transport of forest products grown on private lands, some timber species have been deregulated recently. The impact of this policy is being assessed. A positive outcome may result in the deregulation of all the timber species in two stages.

To foster private sector participation in forestry, pine plantations have been leased to enterprises for resin tapping. This has generated employment and income for poor rural people as well as foreign exchange earnings.

Constraints

The slow attitudinal changes and pressure from outside sources has hindered the implementation of certain programs. For example, according to the forest policy, the State Timber Corporation's monopoly for harvesting timber from state forest areas is to be abolished. To date, this has not occurred due to a lack of political will and pressure from certain groups.

Some new policy elements such as private sector participation in forest management and participatory forest management are not being implemented. The lack of provisions in the current legislation and the slow change in attitudes by government officials have contributed to this delay.

Various components of the FSMP were based on the new forest policy. Subsequently, a five-year investment program was prepared with the intention of implementing some components of the plan to achieve policy objectives.

Based on the five-year investment program, the ADB agreed to fund the Forest Resources Management Project. The project started in 2000 and its main thrust areas are conservation, commercial forest production, participatory forestry management and encouragement of private sector involvement in various activities such as forest management and reforestation.

Impacts and effectiveness of the forest policy in implementation *Policy on conservation*

Most of Sri Lanka's forests have been reserved for conservation purposes. The National Heritage Wilderness Area Act of 1988 emphasizes the importance of conservation. The Sinharaja forest was established under this act and was also declared as a World Heritage Area by UNESCO.

The National Conservation Review undertaken during the late 1990s was instrumental in collecting data on biodiversity, soil and water conservation and similar aspects. It led to the declaration of an additional 32 conservation forests. The conservation forest (protected area) network, at present under the Forest Department, represents 33 forests in the wet zone.

At present the forest legislation is being amended to include three categories of forests: strict conservation forests, conservation forests and multiple reserved forests.

Action has also been taken to survey and demarcate the boundaries of all the forest areas in the country through the Forest Resources Management Project and to classify them into various categories. The ultimate objective is to declare a national forest estate for conservation and multiple-use management.

Private sector participation

A program has been initiated to involve the private sector in establishing commercial forest plantations through long-term leases of degraded land. Until now 506 ha have been handed over

to 80 private sector entities. In addition, under the Forest Resources Management Project, initial action has been undertaken to hand over 6 000 ha of forest plantations to the private sector for management.

Monopoly status of the State Timber Corporation

In line with the forest policy, the monopoly of the State Timber Corporation will be abolished by 2004 and the private sector will be allowed to bid for the harvesting of timber from state forest plantations along with the State Timber Corporation through an open tender system.

Participatory forest management

A pilot project will be initiated under the Forest Resources Management Project to involve communities in forest management. In addition, the Natural Resources Management Project has been proposed with funding from the Australian Agency for International Development (AusAID) with an emphasis on participatory forest management.

Facilitating private timber transport

The forest policy stresses the importance of facilitating timber harvesting and transport from non-forest areas. Trees outside forests are the main source of wood in Sri Lanka. In this context, several timber species have been deregulated and action has been taken to simplify the issuance of timber permits for other species.

Development of wood industries

Although the forest policy states that the government is to develop an efficient wood industry, unfortunately no action has been undertaken in this context. Owing to lack of funds, timber utilization research is non-existent.

The aforementioned pilot programs will be monitored and evaluated regularly to discover whether amendments to legislative and administrative procedures are required. Steps will be taken to effect necessary amendments on the basis of these evaluations.

Conclusions and recommendations

Assessment

The National Forest Policy envisaged periodic reviews of the policy elements. However, a proper mechanism has not been developed for this purpose and responsibilities remain unclarified. Normally, the ministry in charge of forestry should conduct a policy assessment. The policy division of the ministry should lead and be responsible for the exercise. In addition, the review process should be transparent and acceptable to all stakeholders.

Formulation process

The policy formulation process as described in this report was developed and adapted during the formulation of the National Forest Policy of 1995. This process is well defined and accepted by all the stakeholders. However, it needs to be formalized either through legislation or administrative directives.

Implementation

A main shortcoming in policy implementation is the slow process of enacting supportive legislation. Although action was initiated as far back as 1998 to review the legislation, the new forestry act with required amendments has still not been enacted. It is hoped that this will be rectified soon.

The lack of an appropriate land-use policy has complicated the implementation of the forest policy as land-use conflicts remain. Although several statements have been incorporated into the National Forest Policy regarding the conversion of forests, the lack of a land-use policy has hindered the process.

According to the National Forest Policy, the state is to make provisions to facilitate the harvesting and transport of forest products grown on private lands. In this connection action has been taken to deregulate some of the timber species that require transport permits. However, this has become a contentious issue. Currently, an independent and consultative study is reviewing the impact of deregulation.

In addition, some policies, especially in the agriculture sector, conflict with the National Forest Policy. The current agriculture policy promotes the expansion of croplands in forest. The conflict between the two policies needs to be resolved through a proper mechanism.

With regard to the development of a competitive forestry industry, no action has been taken to convert the old and inefficient timber industries. Clearly, this indicates a lack of commitment and coordination with the private sector although various provisions are included in the National Forest Policy.

Appendix 1 International conventions and initiatives related to forestry

Entry	Convention	Objective
1970	UNESCO Man and Biosphere (MAB) Programme	To establish a global system of biosphere reserves representative of natural ecosystems to conserve genetic diversity and to promote conservation activities.
1979	Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (1973)	To protect certain endangered species from over exploitation by means of a system of import/export permits.
1979	Convention on the Conservation of Migratory Species of Wild Animals, Bonn Convention (1979)	To protect those species of wild animals that migrate across or outside national boundaries.
1980	World Heritage Convention (Convention Concerning the Protection of the World Cultural and Natural Heritage) (1972)	Protection of cultural and natural properties deemed to be of outstanding universal value.
1990	Convention on Wetlands of International Importance especially as Waterfowl Habitat (1971) (Ramsar Convention)	To stem the loss of wetlands and ensure their conservation for fauna and flora and for ecological processes.
1992	Forest Principles, UNCED (1992) Non- legally binding authoritative statement of principles for a global consensus on the management, conservation and sustainable development of all types of forests	To contribute to the management, conservation and sustainable development of forests, and to provide for their multiple and complementary functions and uses.
1992	Convention on Climate Change (CCC) (1992)	Sustainable management and conservation of sinks and reservoirs of all greenhouse gases, including forests in order to regulate the levels of greenhouse gas concentration in the atmosphere.
1992	Convention on Biological Diversity (CBD) (1992)	Conservation of biodiversity, sustainable use of its components, and equitable sharing of benefits arising from utilization of genetic resources.
1998	Convention to Combat Desertification (CCD) (1994)	To combat desertification and mitigate the effects of drought in the countries affected through effective action at all levels.

Source: Ministry of Environment and Natural Resources.