National Forest Policy of Suriname

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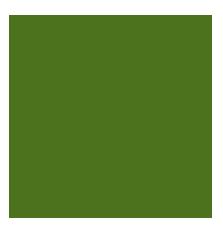
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In the framework of the forest policy formulation process, intensive discussions took place in various contexts.

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PREFACE



long period of preparation preceded the formulation of a national forest policy for Suriname. In the late nineties, with the support of the FAO, a proposal was developed concerning a process of policy formulation according to international standards. In 2003, the Ministry of Natural Resources initiated this process of policy formulation. After approximately eight months, this process was finalized together with the contribution of expertise from all sections of society and with international support. In the forest policy document in question resulting thereof, the opinions and wishes of the several stakeholders in the forest sector, have been attuned and compiled as well as possible. This was done in order to present a nationally supported forest policy, of which the formulated principles and objectives form a proper foundation for the future development of the forest sector.

The Foundation for Forest Management and Production Control (SBB), functioning as the executive organ of the Ministry of Natural Resources, has fulfilled a special role during the start and further realization of the formulation process. Furthermore, the Ministry was fortunate to receive an active and constructive contribution from all stakeholders in the forest sector, from the beginning up to the point of realization. I therefore express my appreciation and thanks to the entire community of Suriname. During the formulation of the national forest policy we have encountered a great deal of cooperation and support. Therefore, I would like to extend my thanks towards the international partners, in particular the Food and Agricultural Organization of the United Nations (FAO) for the technical support, and the Inter-American Development Bank (IDB) which has provided us with the financial means that we needed.

The government's aim was to include all social partners and civil society in the process of social and economic development and sustained fight against poverty. In this process of the forest policy formulation the partners in the forest sector, lead by the Ministry's technical team, have intensively worked together at defining a common national vision and in doing so have successfully expressed the government's aim.

The possibilities of our forest are plentiful and with great variety. It was, however, necessary for us to reflect deeply in what manner we are to deal with those possibilities in order to gain optimal economic benefit from our resources.

The main conclusion drawn from the deliberations is that our forest can contribute to the development objectives of Suriname. Through utilization of the natural resources of our country, we will be able to increase the prosperity and wellbeing of the Surinamese community. There are substantial possibilities to promote the economic growth and to stimulate investments that will provide profits in the short term.

Increased national forest production must include diversification of the exploitation of natural resources and broad mobilization of human potential. Thus, now more than ever, a part of our population residing in and around the forest areas, wants to get the opportunity to share in the development and prosperity. It is more than obvious that the forest sector is determined to contribute in filling these needs

Another factor is that the forest of Suriname situated on the Guiana Shield and belonging to the Amazon rain forest, is of global importance with its invaluable profusion of biodiversity. Furthermore, our extensive forest area is of great value to stabilize the global environment. By signing for instance, the Rio Declaration in 1992, Suriname has committed itself to preserving these values and to utilizing them in a sustainable manner. We realize that by making sensible choices, we can turn these profusions into national economic gain.

With this policy document available, we now have a common and clear vision and we therefore can see where our forest sector stands within the social-economic events in Suriname and the effort that we must make together, in order to realize the agreed policy objectives.

The Ministry of Natural Resources is ready to play a proactive part to ensure implementation of this forest policy and thereby welcomes any initiative fitting this policy, and all contributions from the national and international partners and the other actors in the sector.

The Minister of Natural Resources

F.R. Demon, LL.M.

s indicated above by the former Minister of Natural Resources - the preceding Minister responsible for the policy and management with regard to forestry and nature conservation within the Government of Suriname this National Forest Policy of Suriname provides the basis for the long desired sustainable utilization and conservation of the pertaining natural resources for the benefit of all relevant sectors of the Surinamese community as well as for the global community.

It is very important that this document will be made accessible to all stakeholders, so that it will become an active guideline in the daily management of forests, protected areas and wildlife. This is also a prerequisite for its elaboration into a concrete strategy for the sustainable conservation and utilization of the pertaining resources, as is scheduled to start soon, in a similar participatory process of all stakeholders as the one in which this document was formulated.

This English translation will contribute to our endeavors to make this document a viable instrument for our national development.



Michael Jong Tjien Fa, BA Minister of Physical Planning Land - and Forestry Management

1. INTRODUCTION



Project team together with Granman (Chief) Songo Aboikoni. The highest authorities of the interior communities were involved in the policy formulation process.

This document has come about with the contribution and participation of many stakeholders throughout the country

n the course of time, forest policy in our country has evolved fragmentarily. The need for a more coherent forest policy tuned to modern ideas about forest management became increasingly stronger. National and international partners have supported the execution of background and sector studies in the past few years, and also produced documents relevant to policy. In this connection, the contribution of the Food and Agriculture Organization (FAO) in particular should be acknowledged. The material produced offered a good basis for the formulation of a coherent forest policy with contribution of all stakeholders, and in which the roles of the various actors came out well. The Minister of Natural Resources has set up a project and formulation team of independent experts to prepare this present document about forest policy. The formulation process was finished in the first half of 2003.

This document has come about with the contribution and participation of many stakeholders throughout the country. The Foundation for Forest Management and Control (SBB) has been instrumental in starting up and realizing this process of formulating a national forest policy.

The project team has directly consulted more than 500 stakeholders throughout the country. The consultation took place in two series of three stakeholder consultation meetings in Nieuw Nickerie, Moengo

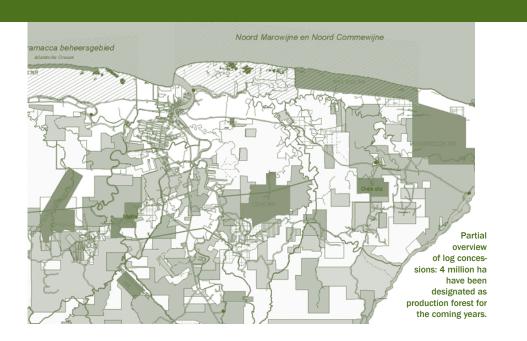
and Lelydorp respectively. The first series gave the formulation team good insight into such views, bottlenecks, problems and possible resolutions as the various stakeholders have. During the second round the first draft of the forest policy was discussed and commented on. The good preparation and valuable suggestions of a number of participants has been remarkable. In particular, the contribution of the representatives of the people living in the interior and the industry, represented in the Platform Houtsector Suriname, which in an earlier stage presented a document with proposals concerning forest policy, has been outstanding. In addition to the stakeholder consultation meetings, the team has also spoken with individuals and groups, and has incorporated the remarks that were submitted in writing, Finally, the team also paid various visits to the traditional authorities in the interior and to organizations and companies.

All in all the stakeholders represented a cross section of interest groups of various backgrounds such as members of parliament, businessmen and entrepreneurs, representatives of the traditional authorities and communities living in the interior, the administrative service and other government agencies such as police and military, women and youth clubs, environmental organizations and scientists.

Finally the formulation team received support in the form of advice and guidance from an interdepartmental policy advice group and a steering committee consisting of prominent experts of various disciplines.

Because of these intensive and general consultations, the hope that the policy has a broad social basis seems justifiable.

2. DESCRIPTION OF THE FOREST SECTOR





§ 2.1 Forest area and spatial use

ore than 90% of the land area of our country, 14.8 million ha. in total, is covered with forest. Especially in the coastal plain, there is a great variety of forest types, such as extensive swampand mangrove forests. The greater part of our forest, however, consists of predominantly mesophytic high dry land forest.

The spatial use of the natural forest is classified in the Forest Management Act as follows:

- Protection forest, primarily intended for the protection of soil and downstream land and the maintenance of the water regulation.
- Protected areas (forest nature reserves, nature parks) and specially protected forest, primarily intended for the conservation of biodiversity,
- **Production forest**, primarily intended for the production of timber and non-timber forest products, but actually multifunctional forest, according to modern concepts of sustainable forest manage-
- Conversion forest, intended for other land use.

In the coastal plain, some types of swamp and savanna forest are exploited for wood production. During the last 50 years, the most important wood production area has been the "forest belt", a 40 - 100 km wide strip crossing the country from East to West and made accessible by the second East-West connection. This area of 2.5 million ha. was designated as production forest because of the timber stocks present and the favorable condition of the ground. In the past decade this strip has been expanded. For the coming years the production area could amount to some 4 million ha. Within this area there are less productive forest types, so that the potential net production area will be approximately 2.5 million ha. This area offers the possibility to harvest 1-1.5 million m³ annually. Starting from a cutting cycle of 25 years, 10 to 15 m³ per ha. will be harvested if a steady expansion of the package of currently lesser-known species is realized.

The greater part of the forest lies further inland. Due to the topography and the lack of infrastructure, it is not likely that these vast areas will be used for commercial wood production in the near future. Also from the policy point of view it is not obvious that timber exploitation will be stimu-

This area offers the possibility to harvest 1-1.5 million m³ annually

Up to now, the integrity of the forest has not been threatened significantly

lated there. After all, forests are of great significance for the environment, the biodiversity, and the economy because of the fact that they fulfill important and valuable functions as protection forests. Regulation of the water balance, the supply of fresh water and the control of erosion do not only benefit the people living in the interior, but are also of vital importance to the social functioning of the coastal plain. Formally protection forests have not yet been designated. Proposals to designate 90,000 ha. as protection forest are in preparation.

Protected areas cover over 2 million ha, or 13% of the land surface. In the coastal plain, almost all mangrove forests and some unique ecosystems are designated as protected areas. The larger part of the protected forest, including the 1.6 million ha. Central Suriname Nature Reserve lies in the remote interior. Despite the relatively high percentage, in relation to many other countries, the nature reserves do not seem to cover all relevant ecosystems systematically.

Besides the natural forests, there are approximately 7,000 ha. of pine plantations and some smaller plantations of broadleaf species that were planted in the sixties, mostly by way of experiment. During the last 30 years there has not been any afforestation. There is a largely untapped timber stock of variable quality on the present plantations.

Up to now, the integrity of the forest has not been threatened much and the degree of deforestation is negligible. During the last 10 years, less than 1% of the total forest estate was converted into other uses. Conversion has mainly taken place for mining, generation of energy and agriculture. The realization of the plans for a new mining project in the Bakhuys area in combination with the construction of a second large storage reservoir will have dramatic consequences for the forest and its functions in that area.

Timber from these conversion forests is generally not harvested. Another problem that does not only occur in conversion, or in all cases of conversion for that matter, is insufficient consultation of stakeholders and the granting of overlapping licenses for conflicting land use.

Finally, there is land use that lacks any sort of planning, such as uncontrolled gold mining and other mining activities, illegal logging, and theft of plants and animals. This proliferation poses a threat to the integrity of the ecosystems, the environment, the sustainability of forest management, the economy, and social stability.

§ 2.2 Forest ownership and land rights

In accordance with the Constitution of the Republic of Suriname (1987) all forests, except for those on privately owned land, belong to the state. Forests on private land do not cover more than a total area of 50,000 ha. The Constitution does not provide for collective rights of land use. However, the indigenous and maroon people claim these rights. In some cases two or more village communities claim the tenure of the same forest area. Within the forest communities, the vounger generation may have a different view of development and land rights and tenure than the older generation. The state grants land tenure in the form of wood cutting rights, mining rights, and licenses for fishing, collection of non-timber forest products, and bioprospecting. In addition, land tenure is granted for such purposes as agriculture and ecotourism. At the moment 2.2 million ha. has been issued as timber concession.

Part of the forest, approximately 435,000 ha., has been granted as communal wood cutting license (HKV) and since the Forest Management Act (1992) as community forest. It is estimated that 250,000 ha. of these forests is commercially logged annually. Originally the purpose of the нку was to meet the needs for timber and non-timber forest products for their own use by the members of the communities who actually live in the villages. This is also true for the community forests, but the Forest Management Act explicitly adds the use for commercial logging and clearance for agriculture.

The HKV was issued to the name of the village chief or captain. In many cases, the consequence is that control of the rights and the proceeds remain with the licensee. Because of this, the villagers do not get an equitable share of the benefits of their community forests and the purpose of granting community forests was thus overreached. In the case of commercial logging, the harvesting is mostly carried out by private logging companies. However, there is no integral management at all. We can safely say that only a few нку's are managed by the local communities themselves.

Most of the community forests are situated in the coastal plain and in the forest belt. Because of the large distance from the commercial center, the central government has not yet granted community forests in the remote interior. Under the supervision of the traditional authorities there is a satisfactory use of the forest. With a view to a more uniform arrangement for land tenure, the idea has arisen to establish "economic zones" around villages and settlements, where the people living in the interior can have control.

§ 2.3 Economic, social and environmental significance

§ 2.3.1 **Timber production**

Forests are one of the most abundant natural resources of our country, with a high economic potential. The annual national production is around 150,000 m³. Companies owned by foreign investors account for approximately 10% of that production. This production level is in sharp contrast with the potential production level of 1-1.5 million m³.

To realize the timber production, the government grants timber concessions and in certain cases short-term incidental wood cutting licenses. In accordance with the Forest Management Act, the concessions are granted for areas varying in size (up to 150,000 ha.) and the duration (up to 20 years). Apart from the private timber companies, there is one semi-governmental wood enterprise, Bruynzeel Suriname Houtmaatschappij N.V., with a concession area of 150,000 ha. Bruynzeel is the largest timber company with the greatest impact in the sector. The government's declaration of the 2000 - 2005 policy states that the process of commercialization, and possibly the privatization of the company, will be intensified. The last few years a large part of the national timber production comes from non-concession areas. Some 20% comes from HKV's and community forests. An average of 20% of the total round wood production is exported. The export is mainly unprocessed timber. Foreign investments account for 30 - 40% of the total export. The export is mainly to the Asian markets: approximately 65%, while approximately 30% is exported to Europe and the United States of America. The annual foreign exchange income from this export amounts to US\$ 4 - 5 million. Import of wood products also takes place. The import consists mostly of wood panels, approximately 3,250 m³ with a value of approximately US\$ 1.5 million, and end products such as furniture, with a value of US\$ 1.5 million.

The wood processing industry with more than 70 sawmills, including smaller mobile and portable mills, has an installed capacity of about 600,000 m³ round wood per year. This is more than three times the current national production level. However, most sawmills are obsolete, inefficient and work with limited means. While part of the capacity is not utilized at all or only partly, investments, albeit limited, have been made in the last few years, especially in sawing capacity. The export can thus be increased.

Since the seventies the contribution of the forestry sector, including the wood industry, to the national economy and the state income has been limited to less than 3% of the gross national product and less than 1% of the total export value, which contrasts sharply with the present potential. This is ascribed to such factors a low utilization level of the production potential and the very low levies for forest use, which were charged until recently.

The government has already taken a number of measures to improve utilization of the potential for timber production, to bring the levies for this forest use in conformity with the market, and to intensify control of payment of these levies. In order to improve the forest management, market information, and international cooperation in this field, Suriname became a member of the International Timber Trade Organization (ITTO) in 1998. At the same time the private sector has shown new spirit recently. With foreign support, one company is now in the process of becoming certified for responsible forest management. The Platform Houtsector Suriname, where some five organizations work together, (Chamber of Commerce, Association of Loggers; General Timber Union of Suriname; Society of

Forests are one of the most abundant natural resources of our country, with a high economic potential

Surinamese Trade and Industry; Association of Surinamese Manufacturers), has made several proposals to improve the management and to increase the production. The Platform Houtsector Suriname also carries out activities to improve the structure within the sector and to enhance the quality by stimulating and facilitating technical education and training, etc.

§ 2.3.2

Non-timber forest products

Non-timber forest products, such as vegetable products, meat products and freshwater fish products are of vital importance to the nutrition and health of communities living in the interior. However, this "in kind" income is, overlooked in the public accounts, although some of these products are traded commercially, such as game, fish, live animals, ornamental plants, fruits, herbs and medicinal plants and lianas. Some income generating activities, such as bioprospecting, scientific research and ecotourism, are being developed as alternative commercial utilization of the forest by private individuals.

§ 2.3.3 **Employment**

Forest exploitation and the wood processing industry offer employment to approximately 4,000 people. About half of that number is employed in one way or another



To many of these Surinamese the forest will serve as their living and social environment.

in forest exploitation. Besides that, some 500 persons are working in nature conservation and research institutions. Altogether, that amounts to about 5% of the work force.

§ 2.3.4

Social functions

The forest serves as a dwelling-place and living environment for an important part (possibly 10%) of our population. These are mainly indigenous and maroon people, who belong to the least wealthy of our society. A large part of these Surinamese depends directly on the forest for their survival and subsistence.

§ 2.3.5

Ecological functions

The major part of our forests is still intact. In a global perspective, they are responsible for the sequestration of CO² and the conservation of the biodiversity, by offering a natural habitat for many animals and plants, including endangered species. In the WWF Guiana's "Sustainable Forest Resources Management" project document it is estimated that 200 plant species and 6 amphibian species are rare and endemic. Locally the forests fulfill important functions such as the regulation of the water balance, the maintenance of the water quality, the maintenance of the soil fertility by resisting erosion. The socio-economic significance of these ecological functions is great, but financially this is hardly visible. Because of this, there is a danger that these ecological functions will be sacrificed for seemingly more financially attractive options for forest use. Now already the forest as source of fresh water is locally contaminated. The international community also has a task to safeguard its interest in the conservation of the ecological functions of our forests.

Suriname is signatory to the most important international conventions in the field of environment, including the Convention on Biological Diversity (CBD), the UN Convention on Climate Change (UNFCCC), the UN Convention to Combat Desertification and Degradation (UNCCDD), the Convention on International Trade of Endangered Species of Wild Flora and Fauna (CITES), and the Wetlands Convention.

§ 2.4

Capacity and institutions within the forest sector

§ 2.4.1

Personnel capacity

The Forest Management Act contains regulations to improve the quality of forest management, but the actual implementation of the act is hampered because of the lack of sufficient personnel capacity in both the private and the public sector. The shortage of higher, middle-level and lowerlevel staff is felt throughout the sector, in the government but also in trade and industry. Also at the level of forest workers and supervisors, the capacity is insufficient. Apart from that, there are still issues that need to be addressed regarding the intensity of the management and silvicultural prescriptions that can be appropriate in the predominant forest types in our country.

§ 2.4.2 Institutions

Within the government, the Ministry of Natural Resources was also made responsible for the care of the forests, nature reserves, game management, mining, energy, water and land management, by Besluit Taakomschrijving Departementen 1991. By Instellingsbesluit 1947, the Forest Service (LBB) was put in charge of management of all forests in the broadest sense of the word, including nature conservation, with the specific task of: "sustainable management of the forest to the benefit of the community".

Due to several causes, among other things the interior war, LBB has gradually lost much authority and capacity in vital areas. With the arrival of Asian timber companies in 1994, the need was felt to strengthen the execution of government tasks again, especially in the field of management and supervision of the logging activities. For this purpose, the Foundation for Forest Management and Production Control (SBB) was established in 1998. In the current phase, SBB is in charge of the management of the production forests, especially with regard to facilitating trade and industry and supervising and controlling the logging activities. While the responsibilities are formally still with LBB, it is the intention that these are transferred to SBB.

The responsibility for the preparation and



Headquarters of The Foundation for Forest Management and Production Control (SBB), founded in 1998.

implementation of the policy regarding nature conservation is still with LBB. In compliance with the Nature Conservation Ordinance 1954, the head of LBB is in charge of the management of the nature reserves. The tasks resulting from this are executed by the department of Nature Conservation of LBB with the assistance of the Foundation for Nature Preservation (STINASU). This foundation focuses on education and facilitates ecotourism and areabound research. The Nature Conservation Committee was established to give advice regarding important management issues and management plans. However, it is years since the committee has convened.

Other ministries such as Planning and Development Cooperation (PLOS), Labor, Technological Development and Environment (ATM), Regional Development (RO), Trade and Industry (HI), Finance, and Agriculture, Animal Husbandry and Fisheries (LVV) have shared responsibilities for land use planning, environment, community forests, export levies and industry, determining levies and phytosanitary matters. In relation to the National Environmental Council and the Ministry of ATM, the National Institute for Environment and Development in Suriname (NIMOS) is responsible for the preparation of environmental policy, environmental legislation, environmental impact studies, etc.

The private forest exploitation- and wood processing industry is clustered in several associations and there are different interest groups for loggers, sawmills, manufac-



Sawn wood produced by means of mobile saws constitutes a growing part of the national wood production.

The forest sector can make an appeal to a number of supporting institutes e.g.: JSOOC. NATIN, and **ADEKUS**

turers of wood products and timber exporters. Recently a coordinating Platform Houtsector Suriname with representatives from several organizations has become active. This development offers good prospects for formal consultation between the private sector and the state, to discuss vital issues regarding forest utilization, especially logging and wood processing and to realize satisfactory solutions.

The forest sector can call upon a number of supporting institutes, namely: the Jan Starke vocational training center (JSOOC), that takes care of the education of lowerlevel staff; the Nature Technical Institute (NATIN), that offers a forestry course at middle level, and the Anton de Kom

University of Suriname (ADEKUS) which offers BSc-programs for forestry and environmental sciences. Forestry research is conducted by the Center for Agricultural Research in Suriname (CELOS), which is linked to the University, while STINATU and ADEKUS are engaged in other aspects of nature research. In paragraph 5.4 'Capacity building: information, education, training and research', these institutes will be dealt with in detail.

3. ASSESSMENT OF THE FOREST SECTOR



ing: careful preparation takes place before felling

n this chapter we will assess the forest sector on the basis of the description of the forests in the previous chapter: their significance and use, the wood industry and the institutional framework. With this brief assessment we want to point out the challenges and the most important bottlenecks for the forest policy. The assessment has identified five points:

- With the harvesting and processing of timber and non-timber forest products, the forest area has the potential to contribute to the national economy and the well-being of the people, in particular the people living in the interior. Up to now this potential has been exploited only partially.
- To a great extent the forests of Suriname create the conditions for a sustainable socio-economic development of the country. It is true that the yield of environmental functions such as water regulation, supply of clean water, protection against erosion, CO2 sequestration, biodiversity does not (yet) appear on the public accounts, but nevertheless it is crucial for the economy of our country and the international community. In the future, these func-

The forest area has the potential to contribute to the national economy and the wellbeing of the

people



tions will probably grow in importance and take a place in the market mechanism.

Poor consultation and in relation to that the lack of conformity in the issuance of land tenure has led to tensions, notably between traditional collective users and the government and between traditional

collective users and individual users. This has intensified the discussion on the issue of land rights. Furthermore, there is dissatisfaction among individual members of forest communities about their limited say in the collective land tenures that were granted.

The practice of overlapping licenses for incompatible land use, such as the mining of raw materials, sustainable logging and protection of biodiversity calls for a solution in view of the efforts to manage the forest in a sustainable manner.

- The personnel capacity will have to grow in quantity as well as in quality, in order to effect sustainable forest management. This applies to all the agencies and parties involved in policy formulation, planning and implementation, start with education, training and research. Parallel to this growth, the investment capacity will also have to be raised.
- The instruments the government has at its disposal such as legislation, the issuance of licenses and the imposition of levies, the enforcement of control, and government agencies determine the conditions of the forest management. Adaptation of their contents and application of these instruments is necessary to achieve optimal forest use, with a view to a sustainable development of the economy.

4. MAIN POLICY OBJECTIVE

t is not easy to summarize the points of the evaluation into one aim in which the separate elements are sufficiently recognized. We have therefore chosen for one general main objective that is elaborated in three particular goals.

The main forest policy objective:

Enhancing the contribution of the forests to the national economy and the welfare of the current and future generations, taking into account the preservation of the biodiversity.

For this purpose the capacity to utilize this national resource in a way that is economically profitable, socially justifiable, and ecologically safe will be developed. This means that three goals of equal weight are contained in the main objective, namely:

Economic goal:

Forests will be used efficiently and in a sustainable manner in order to enhance the contribution of the sector to the national economy, including foreign currency, government income, and employment. For this purpose the potential offered by the diversity of products and services of the forest will be utilized as much as possible.

Socio -cultural goal:

Raising the minimal subsistence level of the population in general, and in particular of those people who live in and around the forests and who are directly dependent on the forests for their livelihoods, such as the indigenous and maroon communities. An important aspect of this is to participate, on the basis of full information, in activities in and around their surroundings and to share in the benefits and proceeds thereof. The cultural values and traditions of the populations will be respected in the planning and implementation of these activities.

Environmental goal:

Forests with a special protective function or water storage and supply function will be conserved and managed for that purpose. In order to maintain viable populations of plants and animals found in Suriname, the network of representative protected areas for the diverse forest types will be expanded and managed for that purpose. Production forests will be managed and utilized

in such a way that the negative effect on the environment will be minimized.

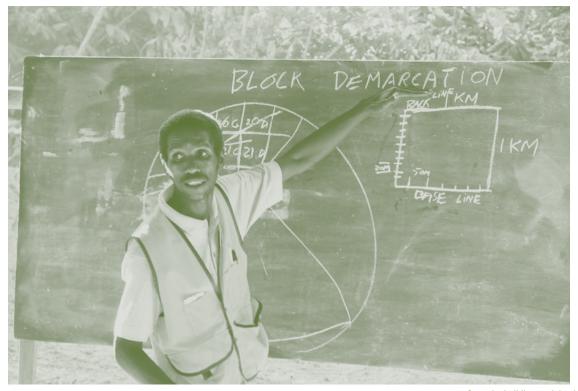
§ 4.1 Realization

These goals can only be achieved with joint efforts of all the stakeholders in the forest sector. Every one has his own responsibility and role. Much depends on the willingness and the capacity of the business community to adapt to the demands of technology, the market and the society. As long as the burning issue of land rights is not resolved, it is not easy for the people living in the interior to take a stand with respect to the formulation and implementation of the forest policy. Nevertheless, the realization of the policy will also depend on the ability of these fellow-countrymen to see and seize the opportunities offered by this forest policy. The government wishes to support them in this by entering into structural and constructive consultation with them, in order to resolve the land rights issue in a way that gives satisfaction to all. For that matter, the government will try to realize the conditions for the development of a strong and sound sector by developing and deploying all the instruments at its disposal. The government makes out a case for resolving the bottlenecks pointed out in the assessment and utilizing the potential for improvement, in collaboration with national and international partners and stakeholders.

Although the government intends to implement each strategic action item, it will not be possible to undertake all the actions at the same time. The government considers the following the most urgent matters:

- Start a structural dialogue about land rights
- Adapt the concession policy
- Develop a national standard for sustainable forest management
- Transparent procedures for the designation and re-categorization of actual forest use
- Ensure a structural financial basis for the forest management organization

5. THEMATIC GOALS **AND STRATEGIES**



Capacity building: training in Reduced Impact Logging (RIL)

The theme's are: 1. necessary conditions to realize an enhanced contribution of the forests 2. the specific purposes for use 3. the institutional framework. capacity building and supporting measures

he main objective and specific goals formulated above will be pursued by activities in the thematic priority fields dealt with below. The themes can be subdivided into three groups.

- The first group comprises thematic facets that determine the necessary conditions to realize an enhanced contribution of the forests to the national economy and welfare. To this group belong: Land use planning and land use rights. These facets are important for the realization of all specific goals for the use of the natural resource.
- The specific purposes for use form the second group. To this group belong: contribution to the economy -by increasing the income from timber, non-timber forest products and environmental functions of the forest and distributing them equitably- and environmental protection and protected areas.

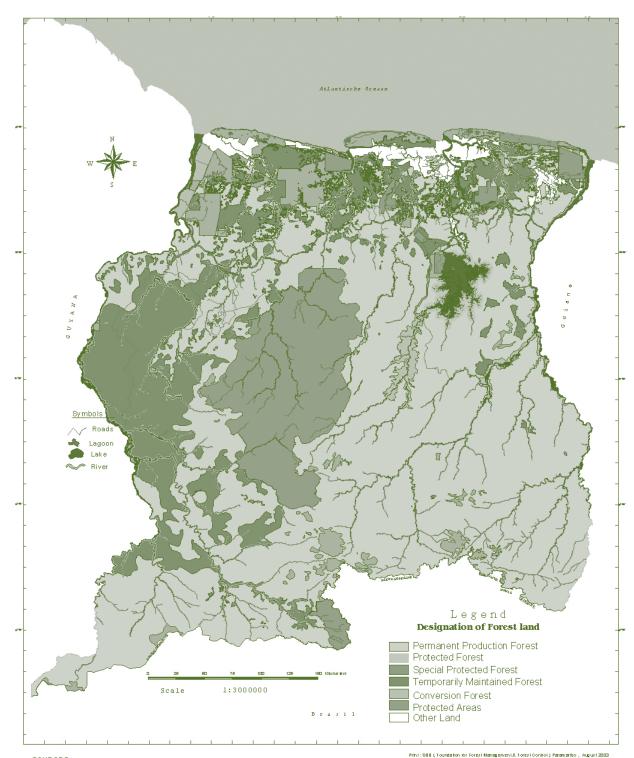
The third group comprises the institutional framework, capacity building and supporting measures in the field of land rights, legislation, policy coordination, the provision of information, partnership, strategic planning, and monitoring and financing.

The themes are closely related to the problems and challenges identified in the assessment. Each theme is introduced by a description of the most important bottlenecks and possibilities for improvement. An objective for improvement within the thematic field is formulated, as well as a number of strategic action items to be (under)taken by the government in order to tackle the bottlenecks and create the conditions under which the thematic goal can be realized, in collaboration with the other stakeholders.

MINISTRY of NATURAL RESOURCES

Indicative Forest Classification Map of the Republic of SURINAME

[In Implementation of the Forest Management Act 1992, (S.B. 1992 no. 80, art. 4 en. 5]



SOURCES:
NARENA (The Dept. of Natural Resources & Environmental Assesment)
ÆELOS (Centre for Agricultural Research in Suriname)
C.B.L. (Central Bureau of Aerial Survey)
F.A.O. [GCP / SUR / 001 / NET]
L.B.B. (Forest Service)
S.B.B. (Foundation for Forest Management & Forest Control)

Indicative division of the forest by the various destinations

§ 5.1 Land use planning and land tenure

§ 5.1.1

Use (planning)

Given the high percentage of land covered with forest, forest use planning is one of the most important components of spatial organization of our country. The significance of the forest area is not only considerable in terms of space, but it is also considerable in the development of various sectors and the economy. Forestland and forests can be used for many purposes. The forest area of Suriname has a size and quality that is sufficient to meet the diversity of demands, including the conversion of forest to other land use such as agriculture and mining, assuming that the soil is suitable for the other land use.

A "suitability map" for the forest area could be an effective aid allowing insight into the actual use and the options for use, including conversion, and their effects on the national economy and the welfare of the inhabitants of our country. However, our country does not have the availability of data in such detail and quality as is required for making such a map. In this respect, the project "Geographic and Land Information System" (GLIS), that is started, offers perspectives for the future. Since there is no suitability map, it is all the more important to design good transparent procedures for the designation of land and the granting of tenure.

The agricultural use of the forest is confined mainly to shifting cultivation in particular. In the NIMOS "Climate Change Country Study" draft report, this area is estimated at 250,000 ha. The traditional use was gradually intensified. Here and there shifting cultivation takes place with a rotation cycle of only five years. In a few places this has led to soil degradation. Of late, an increasing need for conversion to permanent agricultural land has arisen. For this purpose, deserted land should be used first. In combination with research specifically aimed at this, there seem to be possibilities here for rehabilitation of degraded land and improvement in the use of agricultural plots. Also outside the forest communities there is a growing demand for permanent agricultural land. In order to meet this demand, we should

first look into the possibilities degraded land has to offer. After mining activities the land is usually left fallow, with the risk of erosion and further degradation. Recently a mining company has started rehabilitation activities on a small scale. The mining of raw materials and the inexpert construction of roads threaten the supply and quality of fresh water. Uncontrolled gold mining affects the ecosystems and leads to soil and water contamination, thus endangering health. Illegal logging undermines the strive for sustainable forest management and is harmful to bona fide companies and the national economy. Poaching is harmful to the practical value of the forest for the forest communities and to the biodiversity.

The allocation of the various land uses calls for regulation and an integral appraisal and for a transparent and just decisionmaking. In this decision-making clarity about tenure is a precondition. In practice conflicts arise that have to do with rights, real or fancied, poor consultation and overlapping licenses for incompatible land. The formal basis for conversion is often unclear or is lacking. In the case of conversion, the value of the standing timber is often not capitalized.

§ 5.1.2 **Tenure**

The government grants land tenures for various purposes to private individuals, private enterprises and organizations, and to communities. An important form of tenure is the timber concession (1.5 million ha.) that is elaborated in chapter 4.2.1 on timber production.

A considerable part (435,000 ha.) of the state forests has been issued as communal wood cutting license (HKV) and since the Forest Management Act 1992 as communi-

The last few years about 20% of the national commercial wood production comes from HKV's and community forests. To achieve a sustainable contribution, to the income generation of the community as well as to the industrial demand for timber, it is important that also in HKV's and community forests the harvesting be done in a sustainable man-

The lack of a democratic form of management - the HKV is issued in the name of the village captain who can make deals with third parties without consulting the memA "suitability map" for the forest area could be an effective aid allowing insight into the actual use and its possibilities.

bers of the community - results in a situation where not all members of the community get their fair share of the communal right. This is acknowledged in some areas and a beginning has been made with experiments towards a more democratic decision-making concerning the use of the forest and the distribution and spending of the communal income.

In some cases, the community forest is situated at a large distance from the village center so that subsistence use is hampered. Judging from what we see in practice it is not clear what the criteria were/are for determining the size and the location of the HKV's that are already issued and the communal forests that are not issued yet. Such arbitrariness causes tensions. Lack of clarity about the boundaries of HKV's and communal forests and

inadequate delineation give rise to conflicts with other forest users and the gov-

Deeper into the interior, where the influence of the market is not very significant, the use of the forest is arranged exclusively by the traditional authorities. However, this does not mean that the people there are not preoccupied with the resolution of the land rights issue, as everywhere else. So far, a structured dialogue between the government and the people of the interior that holds the prospect of a resolution has not yet come about. However, the government is aware of the importance of this issue. The lack of clarity and conformity partly hampers the participatory development and implementation of policy regarding the natural resources.

POLICY GOAL

Land use planning and Land tenureTo realize an optimal land use and transparent issuance of land tenure that is more in agreement with the sense of justice of all stakeholders.

STRATEGIC ACTION ITEMS

- Establish a central information system for storing and consulting data concerning the issuance of land and land tenure (cadastre).
- Produce a framework, guidelines and procedures, complying with the process of decentralization of administration already started in order to improve the effectiveness, transparency, participation and justice of the designation and re-categorization of the forest (land) use. These will be produced in a coherent whole with the development of conditions and procedures for issuance and consolidation of land tenure.
- Produce guidelines and procedures in order to

- prevent issuance of simultaneous, conflicting land tenure on the same forest area.
- Draw guidelines in order to capitalize valuable timber of conversion forests.
- Prevent expansion of the degraded land area resulting from traditional uses of agricultural plots and rehabilitation of degraded land.
- Redress the proliferation of illegal practices, such as illegal gold mining activities, illegal tim- - See to it that, when ber harvesting, theft of plants and animals.
- relevant government departments and institutes to ensure that environmental policies,

- Work closely with the

- geared toward preventing and/or mitigating environmental problems, are consistent with the Forest Policy and include mandatory rehabilitation plans for all mining activities occurring in or near forests.
- Promote democratic management of HKV's and community forests and an equitable distribution of the proceeds of tenure among all the members of the community.
- issuing community forests, the location and size are in accordance with the purpose of these forests, that is to say, that they should be as close as possible to the village center and

- be of a size that is in proportion to the number of the members of the community living in the village. The government will, in consultation with the communities, establish clear boundaries and supervise a clear delineation.
- Promote that commercial logging in HKV areas and communal forests is in tune with sustainable management, as is required for forest concessions.
- Contribute to national processes for settlement of pending matters and conflicts concerning land rights and land tenure.

§ 5.2

Contribution to the economy and social development

The forest contributes to the economy and social development through self-sufficiency and the market, notably timber and nontimber forest products, and through the fulfillment of crucial functions such as erosion control, water storage and flow, which are essential for further social development.

§ 5.2.1

Timber production

The forest is under-utilized in respect of timber production. The sustainable production potential of the forest is a few times larger than the current production level of 150,000 m³ even within the present area issued for exploitation. Moreover, expansion of the area of tree plantations, outside the Guiana Shield, could increase the production potential considerably.

According to international standards, the national timber production and wood processing is small-scale and obsolete according to international standards. A domestic well-equipped wood processing industry aiming at exporting quality products and meeting the local demand, would give a surplus value to the national resource.

Foreign investors can contribute to a higher degree of utilization of the production forest if they bring with them investment capital, knowledge of international markets, the capacity to manage large companies and train local personnel. These aspects will play a role when admitting foreign companies into the country. The foreign investors now operating in Suriname do not fully meet the above-mentioned qualifications. Presently, nine companies from Southeast-Asia have the disposal of a total concession area of more than 800.000 ha.

The forest belt was made accessible by LBB through the construction of more than 1,000 km of main access roads and several bridges. LBB was in charge of the maintenance of the infrastructure.

Transporters of wood paid the government a small fee to use the public forest roads. The construction and maintenance of roads giving access to a timber concession is the responsibility of the concessionaire concerned. During the war in the interior in

the eighties, a large part of the road maintenance equipment of LBB was lost. Since then the maintenance of the main access roads has left much to be desired.

In the nineties the maintenance of the forest access roads and bridges and the further opening up of the hinterland was taken over by the Ministry of Public Works. Recently a Road Authority has been established, which is in charge of the construction and maintenance of primary roads in urban areas and will gradually take over the maintenance of the forest access roads.

Owing to the present lack of financial means, the maintenance does not come up to the mark and the quality of the infrastructure in the forest suffers greatly from heavy transport, such as the transport of gravel and wood. Consequently, the transport facilities of the local people are also limited. The government has established a committee to prepare legislation for heavy road transport, putting a limit to, for example, the axle-weight. In addition to this, the possibility of transporting more of the heavy logs via rivers should be looked into.

Availability of credit facilities is essential for the development of the wood sector. Various companies in the sector have problems getting investment loans. In Suriname, the granting of credits is linked to the possession of immovable property. But even companies with sufficient immovable property in relation to the credit required, seem to have difficulties. The business community thinks that the way in which banks handle their credit applications is not constructive. From the viewpoint of securing the provision of raw materials, a concession could have a positive influence on the granting of credits. In practice this does not seem to make any difference. A factor in the difficult process of granting credits is also the uncertainty with regard to safety in the interior.

The sector needs a more adequate levy-system. Levies should be a reflection of the value that the natural resource has for the community as a whole and they are the price one has to pay for the use of the forest. The government should see to it that the value of the forest is reflected in the levies. For the business community the levies are a cost component. In their opinion, there is a need for lower levies on balance and they plead for the rescindment of the retribution (stampage fee) which is to be paid in advance. However, they agree with the government that a higher per ha. levy is imposed because the phenomenon of sleeping concessions could be tackled in this wav.

The past few decades were characterized by a stagnant home market and the lack of access to world markets. Traditionally the world market offers sales potential for just a limited number of known species for specific uses, and this only in sufficient and regular supplies. Information about the properties of lesser-known species may increase their acceptance. Certification can become important for the development or consolidation of export (niche) markets.

The initiatives from both government and private enterprise open up perspectives for a more effective and socially more responsible wood production.

Further development of the wood production policy will have the greatest chance of success in a partnership between the government and the private sector.

The government has the key to create the conditions in which the private sector can optimally develop and thus contribute fully to the strengthening of the economy and the government income from the natural resource.

The most important government instrument with regard to wood production is the concession. This instrument must be formed in such a way that it promotes the quality of the timber harvesting and/or the forest management and the increase of wood production.

The concession policy should therefore meet clear criteria. For example, it should be attractive to investors and it should promote wood production, ecologically sound forest management, social justice (sharing in the proceeds, safety, opportunities for large and small enterprises alike), cooper-

ation, and capacity building. This can be achieved by making the right choice with regard to the concession attributes, such as the size and shape (delineation), length, regulations for management, levies, conditions to potential concessionaires (management capacity, competence of staff, disposal of equipment), and transparent issuance procedures. These attributes must be seen in combination with each other and the choice of one or more combinations will be argued in the light of the above-mentioned criteria. The way in which the commercial logging in community forests is carried out will also be considered in the decision-making about that. Transparent procedures should also include transparent and impartial handling of complaints about decisions made by the proper authorities. In that respect the establishment of a complaints-committee or a board of appeal is desirable.

The current concession policy and the implementation thereof do not fully meet the criteria mentioned. In practice it turns out that many concessionaires do not make full use of their rights. The competent authorities may revoke the concession when the operations have not started, as they should, within a year after the license was granted. Since SBB has become operational, steps have been taken leading to the revocation of a number of large sleeping concessions. Nevertheless, there remains a large area, which is under-utilized of not utilized at all, and serious applications cannot be honored. The little interest of trade and industry for concessions in the hinterland also plays a part.

A picture of the concessions issued, shows a right-angled patchwork quilt with a large variety in size and duration. In the past, the topography and forest composition did not play an important role in determining the boundaries. An overall but just reorganization seems necessary to create a basis for an adapted concession policy, which can stand the test of above-mentioned criteria.





A worker at a sawmill. Local wood processing creates extra employment.

Round wood at the port site, intended for export.

POLICY GOAL

Wood production - To enhance the contribution of the wood industry to the national economy, including foreign currency, government income, employment and the welfare of the people. To realize this the wood production, the added value of the wood processing industry, and the export will be increased

STRATEGIC ACTION ITEMS

- Increase the wood production for example by:
 - * Supporting the cooperation among the local entrepreneurs and the cooperation between them and third parties, in order to increase investments in the sector, and to promote local experience with regards to production and marketing. Promoting the development of an effective processing capacaccount the demands of the market as well as the (local) development possibilities.
 - * Promoting the interest of finance sources that are attractive to the private sector.
 - * Carrying out a just reorganization of the issued concessions,

- in order to promote an increased but sustainable wood production.
- Elaborate and implement a concession policy that meets the criterion that it promotes for example:
 - * Willingness to invest
 - * Wood production
 - * Ecologically sound management
 - * Social justice (sharing in the proceeds, safety, opportunities to large and small enterprises alike)
 - * Cooperation and capacity building
 - * Good entrepreneurship
- Adapt the levies as part of the concession system, in order to meet the criteria for concessions, to optimize the income of the state

- from the wood sector, and to minimize the burden of administration and control.
- Draw guidelines concerning the procedure for lodging objections (admissibility), including making the legal provisions for a transparent, impartial handling of complaints and appeals.
- Promote the construction of plantations with fast-growing commercial tree species.
- Also in view of certification, develop a national standard (criteria and indicators) for sustainable forest management and a Code of Practice containing guidelines for crucial aspects of sustainable forest management (for example,

- planning and inventory, timber harvesting, water and soil conservation, conservation of biodiversity and game management).
- Promote the application of international standards for product classification (grading), phytosanitary requirements and certification.
- " Promote the development of an adequate infrastructure and of measures to ensure a responsible use of it.

§ 5.2.2

Non-timber forest products

Apart from the practice of self-sufficiency of the communities living in the interior, non-timber forest products are also marketed to a limited extent. At the moment there is little reliable information regarding the quantity and value of these traded products. Locally the sale of non-timber forest products constitutes an important source of income. The potential of this income source should be further investigated.

On January 1, 2003 a new Game Law was put in place. This decree restricts the intensity and the duration of the hunting season, giving less consideration than before to the traditional use rights. This causes tensions among the people living in the interior. Furthermore, the grievances of these people with regard to the use of the forest by other hunters still exist. The same is true for fishing.

Bio-prospecting is an activity that holds prospects for income generation. The

Convention for Biological Diversity, in which Suriname is party to, creates the framework for the procedures for bioprospecting. The Biodiversity Study Group (1998) has already put down a few thoughts on this point and some other strategic aspects of sustainable use and conservation of biological diversity, which can be included during further elaboration.

The harvesting of non-timber forest products and timber exploitation do not exclude one another from the very start, but they do require a coordinated approach. For this purpose, prior consultation and consent based on fully open information (the Convention for Biological Diversity dubs this "prior informed consent") concerning the nature and effects of any intended timber harvesting activity is essential. Research and monitoring should give the necessary insight into the effects of timber harvesting on the availability of non-timber forest products.

POLICY OBJECTIVE:

Non-timber forest products - To enhance the material, but especially the financial, contribution of non-timber forest products to the national economy, to the income of the people living in the interior and of the government and to the welfare of the citizens by increasing the commercial supply of non-timber forest products harvested in a sustainable manner.

STRATEGIC ACTION ITEMS:

- Support appropriate income generating activities in the field of nontimber forest products and ecological functions.
- Intensify information about hunting and fishing, taking into account the traditional use by the people living in the interior, elaborate a quota-system for recreational and commercial fishing and hunting.
- Develop and apply procedures for participation by local communities in intended commercial harvesting activities in their daily surroundings, in order to ensure that these activities are carried out in good harmony and for the benefit of - Design a protocol for all parties involved.
- Promote and support research and monitoring of effects of commercial
- logging on the availability of non-timber forest products and effective registration of the extent and the value of the commercially traded non-timber forest products.
- bioprospecting with the objective to promote this activity and to acquire a fair share from (future) proceeds.

§ 5.2.3

Ecological functions

Globally our forests contribute to the conservation of biodiversity and climate control, for example CO2 sequestration. Unfortunately, the international community does not commit enough financial consequences to this interest. At a national level the forests regulate the water balance and maintain the water quality, maintain soil fertility and a habitat for the communities living in the forest. The scenic qualities of the forest have a national as well as an international significance. Intended activities in the forest will have to be tested on the effect they have on these important functions (environmental impact assessment).

In the utilization of the forest for other reasons than timber or non-timber forest products, activities such as management, supervision, research, education and recreation take place. These activities have the potential to generate revenues and are often supported by foreign financing. "Conservation concessions" is a concept that deserves attention.

Ecotourism is marginally developed but has a potential to grow, provided the requirements for competitive supply and international standards can be met. Within the framework of outdoor recreation, a license system for hunting and fishing should also be developed in consultation with users of the forest areas concerned.

The significance of the forest for the economy as a source of a continuous supply of fresh water and of high-quality drinking water will probably become clear in the long run, also in economic respect. Awareness of the dependency on water for the functioning of the society is growing while worldwide the availability of water, and in particular clean water, is decreasing. In this respect, the forests of our country fulfill a crucial role for the coastal area as well as for the hinterland. The mining of minerals, the construction of roads and large-scale agriculture require an environmental impact study in order to prevent endangering the sustainability of this function. The necessity for protecting water collection areas is growing.

Based on the elaboration of the Kyoto protocol (Convention on climate change) there are possibilities to capitalize CO² sequestration through forests by means of issuing and selling certificates. These are still complicated constructions that set high standards for reliability of measuring data and the maintenance of forests. Nevertheless, some meaningful transactions have been concluded between some large international enterprises. Also, international environmental organizations represented in our country have included components in their programs concerning climate change that can support knowledge and protocol development.

POLICY OBJECTIVE

Ecological functions - To enhance material and financial contributions of the ecological functions of the forest to the national economy, the income of the people living in the interior and of the government and the welfare of the citizens by capitalizing these functions.

STRATEGIC ACTION ITEMS

- Make studies of the value of the products and services the forest provides to forest users
- " Support innovative finance sources based on (commercial) use of the ecological functions of the forest, especially where these involve benefits for the local communities living in the forest, and with special attention for the following items:
- * stimulate and facilitate research and education
- * utilize the possibilities given by the market to issue "conservation concessions".
- * support ecotourism and recreational use of the forest, for example by granting licenses, promoting adequate infrastructure, etc.
- * do research and make use of the possibilities provided by the Kyoto

- for generating income from CO² sequestration.
- * develop concepts that show the economic significance of our forests as a sustainable source of fresh water and a regulator of the water balance in the market mechanism.
- Establish water collection areas.

Protocol and the market - Stimulate the international community to express its responsibility for and interest in the conservation of the environment in more financial support.

§ 5.3 **Environmental protection and** protected areas

The conservation of ecological functions is of crucial importance as already stated in paragraph 4.2.3. In view of this, we need to utilize the whole forest area with care. After all, these forests too, designated as production forests are indispensable for the maintenance of the water regulation. They are also an important reservoir for CO² sequestration and complement the network of protected areas as a habitat for plants, animals and people.

In 1979 a study into the expansion of protected areas in the lowlands was carried out. This has led to intensified protection of vulnerable and valuable nature areas in the coastal and savanna zones. No systematic study has been made into the extent to which the great biological diversity in the remaining part of Suriname (the Guiana Shield) is covered by protected forest areas. Consultation among the three

Guyana's has started in order harmonize the allocation and management of protected areas. This process is supported by the "Guiana Shield Initiative" of the IUCN and the wwf "Forest Conservation Project".

Presently the financing of the management of protected areas and game management is not in proportion to the extent of the tasks that have to be carried out. The consequence is weak management, pressuring the realization of the objectives of these protected areas and jeopardizing Suriname's reputation in this matter. At the same time, however, this is also a proof of the discrepancy between the commitment to Agenda 21 and its actual realization by industrialized countries.

The willingness of international organizations such as wwf, Conservation International (CI), UNDP/GEF, IDB and IUNC, to make a financial contribution to the national efforts is an important first step towards a broader financing that is in proportion to the global interest of the ecological functions.

POLICY GOAL

Environmental protection and protected areas - Conservation of biodiversity and the crucial ecological functions by a responsible expansion and sustainable management of a network of protected areas, which is representative for the biological diversity of the forests in Suriname.

STRATEGIC ACTION ITEMS

- Evaluate to what extent all relevant and different ecosystems occurring in Suriname are represented in the cluster of already existing protected areas, with the intention to realize protected areas, where relevant, in addition to the existing ones, in particular in the Guiana Shield.
- Establish protection forests and protected units within production forests, where relevant.
- Carry out environmental

- impact studies for intended activities that can have an impact on the ecological functions of the forest, with attention to fragmentation, water-flows, storage of drinking water, etc.
- Mobilize the community to improve management of protected areas.
- Promote regional cooperation, integration and harmonization in legislation in the field of biodiversity and protected areas.
- Enter into alliances with international partners to support the financing of the management of our forests in general, and the management of protected areas in particu-
- Stimulate the international community -within the relevant international relations of Surinameto express its responsibility for and interest in the conservation of the environment in a greater financial contribution

§ 5.4 Capacity building: information, education, training and research

The lack of sufficient capacity in both the private and the public sector is one of the most pressing problems that need to be resolved. Capacity building to improve management is required not only for the wood production sector, but also for the community forests and the management of protected areas. Information and awareness of the different roles of men and women in management could improve effectiveness and quality. Better insight in and understanding of forest management will enable the public and the stakeholders to play their part and enable them to participate as equal partners in the development of the sector.

The people living in the interior also have an increasing need for training and education, in order to manage the forests they have been entrusted with in a sustainable manner and to earn a living from them. Many of the approximately 2,000 people working in the primary forest sector have had little formal education and training in the skills necessary for the functioning of a modern forest sector. The private sector needs additional education and training at all levels, from managers to supervisors and operators. The concept of sustainable forest management and the technology, such as "reduced impact logging" are still insufficiently mastered and hardly applied. It is not only a matter of quality but also of quantity.

There is a great lack of well-trained forest workers and forest guards. Elementary vocational training, in particular the Lower-level Technical School (LTS) provides the basis on which specialized education for the forest sector rests. Professional and technical training in a broad range of skills enables forest workers to increase their productivity, work safer and cope with the increasing demands that are placed upon them. Thanks to this support that the Jan Starke Opleidings en Ontspanningscentrum (JSOOC) received in the past few years, it is able to contribute to this educational process again. The industry, represented in the Platform Houtsector Suriname, has taken the initiative to set up a professional grinding shop that also serves as a

training center. This is an important development for the sawmills in our country.

Within the sector, the use of modern technoligies such as Global Positioning System (GPS) has increased of late. Moreover, with regard to the public sector, great progress has been made with the development and application of gis for facilitating and control. But here as well the quantity of well-trained staff is a bottleneck for the adequate execution of tasks pertaining to public and private law.

The lack of higher and middle-level staff is felt throughout the sector. However, the demand for such personnel is limited, due to the small scale of the industry and the limited means of the government.

Capacity building is largely dependent on availability of good training. Unfortunately, here, too, is a lack of manpower to develop and implement full curricula at secondary and academic level. The Nature Technical Institute (NATIN) offers a four-year vocational forestry course at secondary level. In the last few years the institute has been able to turn out a modest number (1 - 5) of graduates. However, most of these graduates do not end up in the sector, but find employment elsewhere. Judging from the number of forestry students, the demand for academic courses in forestry is very small in Suriname. It is obvious that we shall have to seek regional cooperation.

The faculty of technology of the ADEKUS works in close cooperation with celos. Like education, research is also an important supporting element for the development of the sector. Research provides the fundamental and applicable information on which sustainable forest management is based and supports the development of methodologies and technology for application in the sector. A few decades ago, celos had a leading position in the field of tropical forest research. Forest research in Suriname is now suffering from a lack of funds and an inadequate number of researchers. A broadly based national forest research agenda is lacking. The development of such an agenda is also the responsibility of the agencies in charge of the preparation and implementation of the forest policy. It is expected that expansion of international cooperation will bring about a change in this situation and give a new impulse to research and training of higher staff.

While the theoretical demand for highly skilled and academically trained foresters is great, this is not reflected in the demand, and forestry students have no prospects. This vicious circle of supply and demand can be broken when the image of the sector improves.

POLICY GOAL

Capacity building: information, education, training and research -Develop and improve the professional and technical skills of all employees and parties involved in the forest and wood sector and strengthen the scientific basis for forest management. Promote capacity building in the training and research institutes.

STRATEGIC ACTION ITEMS

- Establish one (semigovernmental) forest management organization for the execution of the core tasks of forest management, including the implementation of the national forest
- Give information and instruction to members of the communities living in the forest and exchange experiences and information with regard to sustainable forest management also giving special attention to the role of the woman in this process.
- Promote attractive professional career possibilities
- Organize workshops and seminars on a regular basis to enhance the competence of the professional actors in the sector.

- Improve safety and health in the forest sector by training forest workers and supervise the enforcement of safety regulations.
- Stimulate the disengagement of lower-level personnel for further professional training by specialized institutes and courses.
- Seek regional cooperation for example in the organization of courses, training and workshops and in the development of modules for vocational training and curricula for higher and academic - Develop a research education. This is to enhance the professional skills of forest workers and to achieve the development of full higher education and academic degrees in forestry within the
- Support further training Develop and apply a of (young) staff at BSc, MSc and PhD levels by entering into cooperation with international organizations and educational institutes and by an effective scholarship program.
- Implement a flanking policy by promoting scale-up, for example by taking advantage of cooperation among local entrepreneurs, thus enhancing the chances of recruitment and further training of personnel at all levels.
 - agenda aimed at supporting the forest policy and the forest management and based on the need for insight, information, methodologies and technology felt by the stakeholders in the forest sector.
- protocol for foreign researchers ensuring that they work in partnership with Surinamese institutions, that the research data and knowledge acquired is made available in Suriname, that works are published on joint responsibility and that the intellectual property rights of Suriname on the research results are secured.

§ 5.5 Institutional framework

The institutional framework is the total of institutions, organizations, structures and procedures in the public sector, the private sector, the "civil society" and the relations and linkages in between. This framework should be tuned to the goals that are to be realized and the tasks resulting from them. Certain structures and organizations such as communities living in the forest, unions and ministries already exist. Other institutions and structures can be established or adapted especially to take on responsibilities and carry out tasks, for example, a forest management organization, a nature conservation organization or the recently established Platform Houtsector Suriname. The separate elements (institutions, organizations, structures and procedures) thus play a decisive role in (but can also be determined by) the distribution of responsibilities and tasks. First, there is the distribution among the government, the private sector and the civil society, and secondly, the distribution within these groups.

In chapter 4 'Main Objective', it was elaborated that the formulated objectives can only be achieved by joint efforts of all actors in the forest sector. Every one has his own responsibility and role. In order to be able to say more about the desirable structure of the government institutions, the responsibility and the tasks of the government should be clear.

When the Dienst Bosbeheer was established in 1947, the role reserved for the government regarding the forest management was considerably larger than the prevailing view. Initially the starting point was that the government would carry out all the management tasks. At that time, there was little structure and capacity within the private sector. Nowadays the government considers its core responsibility to be the creation of the conditions and the making of the legal provisions within which the other parties can take up the executive tasks. In order to give shape to this responsibility, the government aims at the following core tasks:

Policy development, this is a continuous participatory process where issues regarding forest conservation, forest utilization, land tenure and capacity building are central.

- Laws and regulations in order to create conditions and determine rules for the realization of the policy.
- Monitor and control the enforcement of these laws and regulations.
- Assist the business community by putting data and information at their disposal

In the last few years the trend of giving up tasks has set in. It is likely that this trend will be continued until a new balance is found, whereby the private and the civil society must be sufficiently equipped to take over tasks, while it is also possible that some tasks will completely disappear. The adaptation of the government machinery, that is taking place now, is aimed at that development. Here it is not only a matter of re-distribution among government, private sector and civil society, but also a matter of assigning responsibilities and tasks within the government, where a start has been made with the decentralization of administration. This also brings into focus the structures that are characteristic of the traditional authorities.

The point of departure for adaptation of institutes and structures is of course the existing situation, described in detail in chapter 2 "Description of the forest sector". With regard to the Ministry of Natural Resources, which is responsible for the management of the forest estate, including the nature reserves, this concerns:

- The SBB, which is in charge of the management of the production forests, especially regarding the supervision and control of logging.
- LBB, which still has policy responsibility for nature conservation and the management of the nature reserves, in collaboration with STINASU.

Given the relationship of the components of the forest policy and the balance that has to be found in the designation of the various forest use areas, it seems obvious that the preparation of planning and forest policy takes place within one forest management entity. However, it is desirable that the input of the different interests such as nature conservation, production and traditional uses should come from separate departments. Bundling of tasks with regard to the enforcement of the Forest Management Act, the Nature Conservation Act and the Game Law, can

contribute to efficiency improvement. Arrangements with regard to the distribution of tasks resulting from international treaties on nature and environment will be made with the Ministry of ATM and the Nationale Milieuraad (Environment Council).

The current separation of responsibilities between preparation of policy and execution by executing services on the one hand, and policy and decision-making regarding politically sensitive issues by the Minister on the other hand, will also be maintained in the new structure.

The development and reinforcement of independent entities offers the best prospects for an efficient and financially wise management of the protected areas.

In such forms of cooperation in which the government, as the responsible owner, participates out of its core responsibility and tasks, local communities, private sector, research and NGO's can join forces.

The government will benefit from one strong and well-quipped forest management organization. One bottleneck of the current institutes and departmental divisions is the lack of funds. When a new structure is established, the administration is strong on an adequate financial basis for the executing service so that it can carry out its tasks, such as the collection of levies. Apparently, this can best be realized by periodically putting aside a fixed amount for that purpose, coming from the forest management income.

POLICY GOAL

Institutional framework - Enhance the effectiveness and efficiency of the national forest management structure and ensure continuity of financing to execute the tasks

STRATEGIC ACTION ITEMS

- Establish one (semi-governmental) forest management organization for the execution of the core tasks of forest management, including the implementation of the national forest policy.
- Take administrative measures so that the forest management
- organization will receive a periodic financial contribution from the proceeds of forest utiliza-
- Stimulate the development and reinforcement of relevant forms of cooperation among local communities, private sector, scientific institutions, and
- (inter)national NGO's or other entities, to carry out the day-to-day management of the forests, independently and financially wise, in accordance with their specific purposes.
- Identify the tasks to be decentralized and design procedures to support their execution.



6. SUPPORTING MEASURES

n order to execute the strategic action items successfully, the administration shall also undertake supporting measures as part of the forest policy.

§ 6.1 Land rights

A satisfactory resolution of the land rights issue within an acceptable period of time, is in the interest of the whole nation. For this purpose activities such as these shall be undertaken:

- Make a study of the resolutions that have been reached with regard to this issue, notably within the region.
- Realize a structured consultation between the government and the people living in
- Implement the legislation, policies and directives on land use as established by the Government.

§ 6.2 Laws and regulations

The execution of the strategic action items shall be supported by revision of the existing laws and regulations regarding forest management, which do not adequately reflect the objectives of the forest policy that is currently being formulated. The revision includes among other things:

- An integral amendment of the laws with regard to forest and nature conservation in order to adapt them to the present-day demands and to effect better mutual agreement.
- Stimulate amendments in policy and legislation outside the forest sector that may hamper the adequate execution of the forest policy.

§ 6.3 Policy coordination

The administration shall see to it that its forest policy remains in harmony with the national development and environmental goals. The effect of the policy and the programs of other departments and government services will be evaluated on a regular basis. This will take place by means of, for example:

- Continuation of the inter-departmental consultation that was started as part of the formulation of the forest policy by at least one annual Forest Policy Advisory Board meeting.
- Making studies, at the advice of the advisory board, into the effects of policy, programs and projects of other departments and government services on the forest sector.

§ 6.4 Information

Timely delivery of accurate and reliable information is crucial to the development of the sector and the implementation of this policy. The administration shall see to it that such information is gathered, analyzed and delivered in time to all parties. This will involve a number of the following

- The development of criteria and indicators for sustainable forest management at a national level and the collection and dissemination of information regarding the indicators.
- Make statistical reports with active input of other actors in the sector and submit them to the international organizations to whom Suriname is commit-
- The Forest Authority will make an annual report.



For the effective monitoring of the logging activities, felled trees must be labeled with a polythene tag with a unique number.

§ 6.5 **Partnership**

The administration shall continue the dialogue that was started with all the stakeholders and parties involved in order to ensure that the implementation of the policy equitably serves the interests of all and continues to have a broad social basis.

- Periodic consultation with stakeholders to reach consensus regarding specific issues on the elaboration and implementation of this forest policy.
- Regular consultation with international partners in order to receive their technical, financial and political support for the implementation of this forest policy.

§ 6.6 Strategic plan and monitoring

Implementation of this forest policy requires further elaboration. The continuation will be closely monitored and the forest policy itself will be periodically evaluated and, where necessary, adapted. This means:

Elaboration of action items in strategic plans and their execution

Monitoring of the progress of the implementation of this policy

§ 6.7

Financing

The national effort to draw and execute strategic plans will benefit from financial contribution of the international community. It will be necessary to create conditions so that potential support is converted into actual support. For that purpose the administration shall:

- Establish a forest fund to channel international funds meant for the support of the implementation of this forest policy.
- Promote the financing of capacity building and investments to the private sector by development banks

Paramaribo, 28 March 2003

ABBREVIATIONS AND DEFINITIONS

A: ABBREVIATIONS

ADEKUS Anton de Kom University of Suriname

ATM Ministery of Labor, Technological Development and Environment

BSc Bachelor of Science

BSH Bruynzeel Suriname Houtmaatschappij CBD Convention on Biological Diversity

CELOS Center for Agricultural Research in Suriname

CI Conservation International

Convention on International Trade of Endangered Species CITES

FII European Union

FAO Food and Agriculture Organization of the United Nations

GEF Global Environmental Facility GIS Geographic Information System GPS **Global Positioning System** HKV Communal Wood Cutting License

Inter-American Development Bank IDB International Tropical Timber Organization ITTO

IUCN International Union for the Conservation of Nature

JS00C Jan Starke Vocational Training Center

LBB Forest Service

Elementary Technical School LTS

Master of Science MSc NATIN Nature Technical Institute

NB Nature Conservation Division of LBB NGO Non-Governmental Organization

NIMOS National Institute for Environment and Development in Suriname

PhD Doctor of Philosophy

PLOS Ministry of Planning and Development Cooperation

RO Ministry of Regional Development

SBB Foundation for Forest Management and Production Control

STINASU Foundation for Nature Conservation

UNCCDD United Nations Convention to Combat Degradation and Desertification

UNFCCC United Nations Framework Convention on Climate Change

USD United States Dollar VN United Nations

\\/\\/F World Wide Fund for Nature

B: DEFINITIONS

Sustainable forest management)*: The process of managing forests to achieve one or more clearly specified objectives of management with regard to the production of a continuous flow of desired forest products and services without undue reduction of its inherent values and future productivity and without undue undesirable effects on the physical and social environment.

^{)*.} This definition (one of many) is from the International Tropical Timber Organization (ITTO).