

The proposals for action
submitted by
the Intergovernmental Panel on
Forests (IPF)
and
the Intergovernmental Forum
on Forests (IFF)

- in the Swedish context



Kajsa Nilsson
Swedish University of Agricultural Sciences

© The National Board of Forestry januari 2001

Facts

Kajsa Nilsson

Swedish University of Agricultural Sciences

Paper

brilliant copy

Reproduction

JV, Jönköping

Number of copies

350 ex

ISSN 1100-0295

PRODUCT NUMBER 1630

The National Board of Forestry

S – 551 83 Jönköping

Telephone + 46 36 - 15 55 92

The proposals for action
submitted by
**the Intergovernmental Panel on
Forests (IPF)**
and
**the Intergovernmental Forum
on Forests (IFF)**

- in the Swedish context



Kajsa Nilsson
Swedish University of Agricultural Sciences

A study initiated by
the National Board of Forestry
and elaborated with participation of
Ministry of Industry, Employment and Communications, Ministry of the Environment,
Ministry for Foreign Affairs, Swedish International Development Cooperation Agency,
Swedish Forest Industries Federation, Federation of Swedish Farmers and Forest Owners
and Swedish Society for Nature Conservation.

Table of contents

<i>Summary</i>	<i>1</i>
1. Introduction	3
1.1 The United Nations Conference on Environment and Development (UNCED)	3
1.2 The Intergovernmental Panel on Forests (IPF)	3
1.3 The Intergovernmental Forum on Forests (IFF)	4
1.4 The United Nations Forum on Forests (UNFF)	6
1.5 Purpose of the study	6
2. Material and method	6
2.1 Personal communication	6
2.2 Written sources	7
2.3 Structuring and analysing the proposals for action	7
3. Results	9
3.1 General	9
3.1.1 Structure of the IPF and IFF proposals for action	9
3.1.2 Review of the IPF and IFF proposals for action in general	13
3.1.3 The Swedish situation in general	14
3.2 Environmental issues (Subject field 1)	16
3.2.1 Review of the IPF and IFF proposals for action	16
3.2.2 The Swedish situation related to environmental issues	19
3.3 Assistance to developing countries and countries with economies in transition (Subject field 2)	23
3.3.1 Review of the IPF and IFF proposals for action	23
3.3.2 The Swedish situation	24
3.4 Legislation, policies, strategies and voluntary codes of conduct (Subject field 3)	26
3.4.1 Review of the IPF and IFF proposals for action	26
3.4.2 The Swedish situation	28
3.5 Forest management (Subject field 4)	31
3.5.1 Review of the IPF and IFF proposals for action	31
3.5.2 The Swedish situation	33
3.6 Specific groups of peoples (Subject field 5)	35
3.6.1 Review of the IPF and IFF proposals for action	35
3.6.2 The Swedish situation	37
3.7 Trade (Subject field 6)	38
3.7.1 Review of the IPF and IFF proposals for action	38
3.7.2 The Swedish situation	39
3.8 International cooperation (Subject field 7)	40
3.8.1 Review of the IPF and IFF proposals for action	40
3.8.2 The Swedish situation	42
3.9 Information, reporting, education, training, capacity building, research and analyses (Subject field 8)	43
3.9.1 Review of the IPF and IFF proposals for action	43
3.9.2 The Swedish situation	45
4. Discussion	48

4.1 The methodology used	48
4.2 Contents of the IPF/IFF Proposals of Action	48
4.3 The Swedish situation in relation to the Proposals for Action	49
5. <i>References</i>	51
5.1 Literature	51
5.2 Internet	52

Summary

At the United Nations Conference on Environment and Development in Rio de Janeiro, in 1992, forest-related issues were discussed and negotiated. The results of these discussions were, for example, the so-called Forest Principles and Chapter 11 of Agenda 21.

The UN Commission on Sustainable Development (CSD) set up the Intergovernmental Panel on Forests (IPF) for the continuation of the international forest policy dialogue. The IPF reached consensus on around 130 proposals for action during its mandate from 1995-97. The successor of the IPF, the Intergovernmental Forum on Forests (IFF), was established in 1997, and had reached consensus on a further 120 proposals for action when the IFF process was ended in 2000.

The proposals for action arising from the IPF and IFF processes are non-legally binding, but since they have been negotiated and agreed upon between nations, they are morally binding, or a so-called soft-law. The countries participating in these processes are under political obligation to implement the proposals for action.

The purpose of this study is to structure and analyse the IPF/IFF proposals for action from a Swedish point of view, and to compare the Swedish situation and way of working with the actions proposed by the IPF and IFF.

To obtain structure, and to facilitate understanding of the proposals, from a Swedish point of view, the IPF/IFF proposals for action have been classified in two different ways. The proposals for action were, in the first step, classified in four different categories.

Category A contains proposals for action that directly concern Swedish forests and forestry, and should be implemented within the country. Half of the proposals for action have been classified as Category A.

Category B proposals are those requiring international commitment by Sweden. These proposals for action will be implemented outside of Sweden. Of the proposals for action, 39% have been classified as Category B.

Category C contains proposals directed at other groupings than countries, and proposals not applicable in Sweden. These proposals for action require no direct initiative by Sweden. This category represents almost one-fifth of the proposals for action.

Category D consists of the proposals for action where consensus could not be reached, but still have been included in the reports of the IPF and IFF. Of the proposals for action, around 6% are Category D proposals.

The study has then been concentrated on the proposals for action in Categories A and B, since they are the most relevant for Sweden. The Category A and B proposals for action have been condensed into a more easily comprehensible form, and, in the next step, classified in eight subject fields.

The IPF and IFF proposals for action cover a wide range of issues, related to forests and forestry. Deforestation and forest degradation, assistance to developing countries and countries with economies in transition, traditional forest-related knowledge, policy-formulation, participation of all interested parties, and inventories of forest resources are some of the key issues in the proposals for

action. Other essential fields identified by the IPF and IFF are capacity building, international cooperation and coordination, environmentally sound technologies, criteria and indicators, environmentally fragile or critical areas, forest conservation, communities, trade in forest products and services from sustainably managed forests, information, and research.

There are some features of the Swedish situation and way of working that are of particular importance in relation to the proposals for action. This is for example the forest policy with its equally prioritised goals for production and the environment, the process of consultation and consensus in policy formulation, implementation of forest policy through information and training, and a long tradition of forest inventories.

Conclusions drawn from this study are that the Swedish situation and way of working correspond largely to the requirements of the proposals for action, although the measures have not been taken as a direct consequence of the IPF/IFF proposals. There are several fields where Sweden fulfils, or even is ahead of, the requirements of the proposals, but also some fields where further action can be recommended. Sweden is well ahead in, for example, policy formulation, capacity building, forest inventories and certification.

Matters in the proposals for action where further efforts can be recommended, include criteria and indicators, traditional forest-related knowledge, full-cost internalization, and inventories of non-wood values.

The contents and even the existence of the IPF/IFF proposals for action are relatively unknown in Sweden. Further work on disseminating information on the content of the proposals for action is now important.

1. Introduction

1.1 The United Nations Conference on Environment and Development (UNCED)

The so-called Forest Principles¹ and Chapter 11 of Agenda 21 were, among others, results of discussions and negotiations on forest-related issues during the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992 (Palo & Uusivuori, 1999).

The Rio Conference has acted as a catalyst for more global forest policies, and became a turning point in the development of international and national forest policies when widening the concept of sustainability to include the social, economic, environmental, cultural and spiritual aspects of forests.

1.2 The Intergovernmental Panel on Forests (IPF)

For the follow-up of the implementation of the decisions made at the UNCED in Rio, a Commission on Sustainable Development (CSD) was formed in 1993. An ad hoc open-ended Intergovernmental Panel on Forests (IPF) was set up by the CSD at its third session in 1995, to continue the intergovernmental forest policy dialogue.

The IPF mandate (1995-97) was to “pursue a consensus and formulate options for further actions in order to combat deforestation, and forest degradation and to promote the management, conservation and sustainable development of all types of forests” (IPF report, 1997). The actions proposed were to be multidisciplinary, at the international level, and consistent with the Forest Principles, the Rio Declaration on Environment and Development and Agenda 21. The proposals for action were, according to the IPF report, meant to complement, supplement and elaborate upon the above-mentioned instruments and to facilitate their implementation. Five interrelated categories of issues were to be considered by the IPF;

- I. Implementation of forest-related decisions of the United Nations Conference on Environment and Development at the national and international levels, including an examination of sectoral and cross-sectoral linkages
 - a) Progress through national forest and land-use programmes
 - b) Underlying causes of deforestation and forest degradation
 - c) Traditional forest-related knowledge
 - d) Fragile ecosystems affected by desertification and drought
 - e) Impact of airborne pollution on forests
 - f) Needs and requirements of developing and other countries with low forest cover

¹ The “Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests”

II. International cooperation in financial assistance and technology transfer

- a) Financial assistance
- b) Technology transfer and capacity building and information

III. Scientific research, forest assessment, and development of criteria and indicators for sustainable forest management

- a) Assessment of the multiple benefits of all types of forests
- b) Forest research
- c) Methodologies for the proper valuation of the multiple benefits of forests
- d) Criteria and indicators for sustainable forest management

IV. Trade and environment in relation to forest products and services

V. International organizations and multilateral institutions, and instruments, including appropriate legal mechanisms

The IPF held four meetings, and in addition to those, ten inter-sessional meetings were held. The outcome was about 130 proposals for action where consensus had been reached.

1.3 The Intergovernmental Forum on Forests (IFF)

After the endorsement of the outcome of the IPF by the fifth session of the CSD in April 1997 and by the 19th Session of the United Nations General Assembly (UNGASS) in June 1997, it was recommended that the intergovernmental forest policy dialogue should continue (United Nations URL). This recommendation was also given by the IPF in its final report. The Economic and Social Council of the UN (ECOSOC) decided to form an ad hoc open-ended Intergovernmental Forum on Forests (IFF), under the CSD, in July 1997. The mandate of the IFF consisted of three categories (IFF report, 2000);

- I. Promoting and facilitating the implementation of the proposals for action of the Intergovernmental Panel on Forests, and reviewing, monitoring and reporting on progress in the management, conservation and sustainable development of all types of forests
 - a) Promoting and facilitating implementation
 - b) Monitoring progress in implementation
- II. Matters left pending and other issues arising from the programme elements of the Intergovernmental Panel on Forests process
 - a) Need for financial resources
 - b) Trade and environment
 - c) Transfer of environmentally sound technologies to support sustainable forest management
 - d) Issues that need further clarification
 - 1. Underlying causes of deforestation and forest degradation
 - 2. Traditional forest-related knowledge

3. Forest conservation and protected areas
4. Forest research
5. Valuation of forest goods and services
6. Economic instruments, tax policies and land tenure
7. Future supply of and demand for wood and non-wood forest products and services
8. Assessment, monitoring and rehabilitation of forest cover in environmentally critical areas

- e) Forest-related work of international and regional organizations and under existing instruments

III. International arrangements and mechanisms to promote the management, conservation and sustainable development of all types of forests

The IFF held four sessions, the last being in February 2000, and eight inter-sessional meetings. The outcome was about 120 proposals for action where consensus had been reached.

The nature of the proposals for action

The creation of a global forest convention has been discussed, and will continue to be discussed in the future since no consensus has yet been reached in this matter (Nordanstig, 1999; Practitioner's Guide, 1999). The IPF and IFF proposals for action are non-legally binding, as are the Forest Principles, but since the proposals have been negotiated and agreed upon between nations, they are morally binding or a so-called soft law.

Participants in the IPF and IFF processes

The members of the IPF and IFF are the same as the members in the CSD, but representatives for other nations, and intergovernmental, non-governmental and other organisations also attended the sessions (United Nations URL). Altogether representatives from about 90 nations participated in the processes.

Government Led Initiatives

As there was not enough time for in-depth studies of the complex and politically sensitive issues of the IPF and IFF during the regular sessions, the expert meetings, "Government Led Initiatives", organised by countries between the sessions were of great importance (Nordanstig, 1999: United Nations URL). During these inter-sessional meetings, particular issues could be discussed and analysed before they were discussed in the IPF and IFF sessions.

The Interagency Task Force on Forests (ITFF)

An informal, high level Interagency Task Force on Forests (ITFF) was set up in Geneva after the establishment of the IPF in April 1995 (United Nations URL). The objective was to co-ordinate the inputs of international organisations to the forest policy process. The following members were included in the ITFF; Centre for International Forestry Research (CIFOR); Food and Agriculture Organization of the United Nations (FAO), International Tropical Timber Organization (ITTO), Secretariat of the Convention on Biological Diversity (CBD), United Nations Department for Social and Economic Affairs (UN/DESA), United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP) and the World Bank.

1.4 The United Nations Forum on Forests (UNFF)

The establishment of a new intergovernmental body, the United Nations Forum on Forests (UNFF), was recommended in the final report of the IFF and by the CSD, at its eighth session in May 2000, when endorsing the outcome of the IFF (United Nations URL). On October 18th, 2000, the UN Economic and Social Council (ECOSOC) established the UNFF as a subsidiary body of the ECOSOC. The main objectives of this new intergovernmental body are to promote the management, conservation, and sustainable development of all types of forests, and to strengthen the political commitment to that end. The principal functions to be performed by the UNFF include, among others, promotion of international cooperation on forest-related issues, and monitoring and assessment of progress. It was also decided that the Forum should consider the prospects of legal framework on forests within five years.

1.5 Purpose of the study

The purposes of this study are:

- To structure and analyse the proposals for action of the IPF and IFF processes from a Swedish point of view.
- To make a comparison between the Swedish situation and the actions proposed by the IPF and IFF.

2. Material and method

2.1 Personal communication

Meetings with organizations concerned with the work of the implementation of the IPF and IFF proposals for action also took place to discuss further the proposals for action and to exemplify measures taken by Sweden that correspond to the requirements of the proposals. Correspondence, before and after the meetings, was also used for this purpose. The input of these contacts has been of major importance for exemplification of measures taken by Sweden.

The organizations were as follows:

- Ministry of Industry, Employment and Communications
- Ministry of the Environment
- Ministry for Foreign Affairs
- Swedish International Development Cooperation Agency
- Swedish Forest Industries Federation
- Federation of Swedish Farmers and Forest Owners
- Swedish Society for Nature Conservation

The proposals for action and the measures taken by Sweden have also been discussed with persons at the National Board of Forestry and the Swedish University of Agricultural Sciences.

2.2 Written sources

The reports of the IPF and IFF have formed the fundamental source of information for the study. The search for information on forest policy and the measures taken by Sweden to implement the IPF/IFF proposals for action has been done continuously. The Internet has been an important source for acquiring the most recent knowledge. Publications from Swedish authorities, mostly the Forestry Administration, have also been used.

2.3 Structuring and analysing the proposals for action

To obtain a structure of the ca 270 proposals for action, and to identify the proposals relevant for Sweden, the proposals for action were, in the first step, classified in four different categories as follows:

- Category A** Proposals for action that directly concern Swedish forestry or forests.
- Category B** Proposals for action that require international commitment by Sweden.
- Category C** Proposals for action that are not applicable in Sweden, or do not require direct action or initiative by Sweden.
- Category D** Proposals for action where no consensus has been reached.

Proposals for action placed in Category A are those where the implementation should be in the Swedish forests or in Swedish forestry, such as IPF: 17a or IFF: 85b.

Proposals concerning assistance to developing countries and other international cooperation have been placed in Category B, for example IPF: 67b or IFF: 89.

Category C contains proposals for action directed to groupings other than countries, such as international organizations and non-governmental organizations, and proposals that are not applicable in Sweden, such as those regarding desertification. IFF: 98c and IPF: 46c are examples of Category C proposals.

The Category D proposals for action are simply those where no consensus could be reached but still are enclosed in the reports of the IPF and IFF, for example IPF: 129a and IFF: 31a.

Some of the proposals call for action that Sweden should take both within the country and internationally, and were consequently classified as both Category A and B.

The work was then concentrated on the proposals in Category A and B, since they concern Sweden directly by requiring action at national level. The Category A and B proposals for action were condensed into a more easily comprehensible version, and in the next step classified in eight subject fields.

The classification in Subject field 1-8 was made to facilitate the understanding of the proposals, and to make them more easily accessible for those implementing different fields of the proposals. The subject fields used for this classification of the Category A and B proposals were as follows:

- Subject field 1** Environmental issues
- Subject field 2** Assistance to developing countries and countries with economies in transition
- Subject field 3** Legislation, policies, strategies, and voluntary codes of conduct
- Subject field 4** Forest management
- Subject field 5** Specific groups of people
- Subject field 6** Trade
- Subject field 7** International cooperation (other than subject field 2)
- Subject field 8** Information, reporting, education, training, capacity building, research and analyses

Subject field 1 concerns environmental issues, which means issues such as air pollution, environmentally sound technologies and forest conservation. Deforestation and forest degradation are obvious environmental issues.

Subject field 2 consists of proposals for action on assistance, financial or other, to developing countries and countries with economies in transition.

Subject field 3 is extensive as it includes legislation, policies, strategies and voluntary codes of conduct, which are means for implementing the proposals. Both public and private sector actions are included and certification is seen as a sort of code of conduct.

In Subject field 4, proposals for action related to forest management have been placed. Since the proposals are not very detailed there are no exact recommendations on the management of forests, on silviculture, but the overall picture is affected by the proposals for action. Examples of issues related to forest management, and therefore classified as Subject field 4, are supply of, and demand for, a wide range of forest products and services, planted forests in relation to natural, and traditional resource use systems. This subject field is, of course, closely related to the environmental issues (Subject field 1).

Subject field 5 is about proposals that affect certain groups of people, for example indigenous people, women, local people, people who possess forest-related knowledge, forest owners and forest-dependent people are such groups.

Subject field 6, contains proposals for action concerning trade in forest products and services. Illegal trade and market access are examples of trade-related issues.

Subject field 7 consists of proposals for action that concern international cooperation, that is not about assistance to developing countries or countries with economies in transition, but about regional or global cooperation in areas such as research, protected forest areas, or information.

Subject field 8 is formed of three groups; a) information and reporting on, for example, the state of the forests and the progress in implementation of the proposals for action, b) training, education and

capacity building in, for example, sustainable forest management, and c) research on and analyses of, for example, underlying causes of deforestation and forest degradation, environmentally sound technologies, etc.

The proposals for action often represent more than one subject field and were consequently classified as one or more categories and one or more subject fields respectively.

In the next step, each proposal for action in Category A and B was looked into, and examples of measures taken by Sweden that correspond to the requirements of each proposal were investigated, and listed in a table (Appendix I and II). The aim was not to list all actions that have been taken, but to compile the most important examples that correspond to certain proposals for action.

To create a more explanatory text than the table (Appendix I and II), a review of the IPF/IFF proposals for action, and the Swedish situation, in general, was made. The proposals for action (with references to the corresponding proposals), and the Swedish situation, were also reviewed in eight sections corresponding to the Subject fields 1-8. The disposition in accordance with the eight subject fields was made to describe the different aspects of the proposals for action at an overall level and to make them more accessible for those implementing the proposals for action in the different fields. As a consequence of this disposition, several proposals have been reviewed more than once, but in different sections and from different points of view. This has thus resulted in the same information sometimes being repeated under different Subject fields. The advantage of this is that the reader can pick one field of interest and learn about the content of the proposals and/or the Swedish situation and way of working in the perspective of that particular field.

3. Results

3.1 General

3.1.1 Structure of the IPF and IFF proposals for action

The classification of the proposals for action into four categories, in the first step, has the aim to identify the proposals for action that are, and are not, applicable to the Swedish situation, and whether they call for action within or outside the country. The classification of the proposals for action that are relevant for Sweden (Category A and B) in eight Subject fields has the aim to compile the different aspects and contents of the proposals for action in different fields. The proposals for action are often related to more than one subject field and more than one category, and have consequently been classified as one or more subject fields/categories.

Slightly more than half of the proposals for action include actions to be implemented within Sweden (Category A) (See Fig 1 and Table 1). The proposals for action that require international commitment, in some way, by Sweden (Category B) constitute around 39% of the total number of proposals. These are to be implemented outside of the Swedish borders. The proposals for action that do not require direct action or initiative by Sweden or are not applicable in the Swedish context (Category C) constitute a considerable part of the proposals for action, particularly the IPF proposals, with a little less than one-fifth of the proposals in this category. The proposals for action where no consensus could be reached but still are enclosed in the reports of the IPF and IFF (Category D) naturally constitute the smallest part of the proposals, and are reduced in the IFF

process compared with the IPF. The Category D proposals constitute around 6% of the proposals for action.

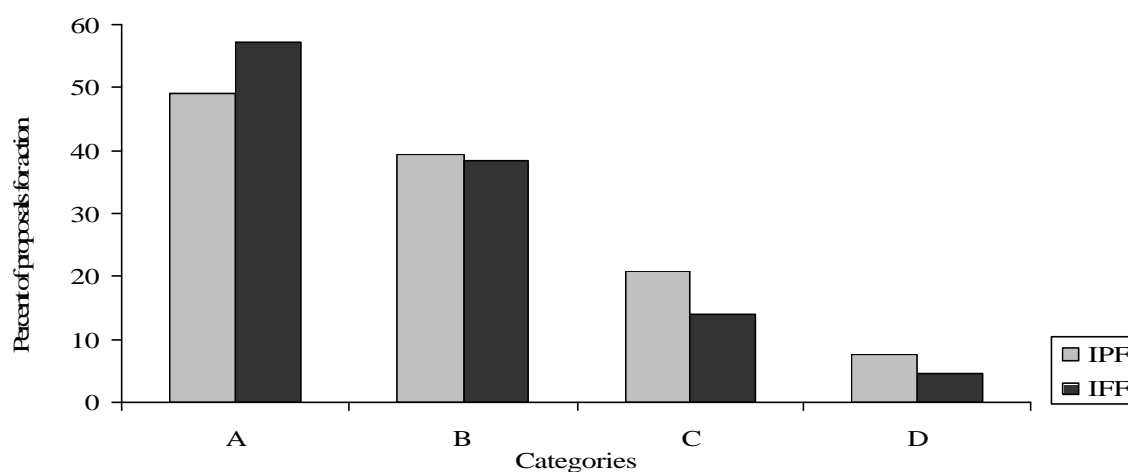


Fig 1. The percentage of the proposals for action, of the IPF and the IFF processes, classified in the four categories. Categories are defined in section 2.3, p 9.

Table 1. The number and percentage of the proposals for action, of the IPF and the IFF processes, in the four Categories. Some of the proposals for action have been classified as both Category A and B, and are counted in both Category A and B. Categories are defined in section 2.3, p 9.

Ca te go ry	IPF		IFF		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
A	71	49.0	73	57.0	144	52.8
B	57	39.3	49	38.3	106	38.8
C	30	20.7	18	14.1	48	17.6
D	11	7.6	6	4.7	17	6.2

The proposals for action that only include actions that are to be implemented within Sweden (classified only as Category A), constitute around 37% of the total number of IPF/IFF proposals (See Fig 2 and Table 2). This figure is larger for the IFF proposals, compared with the IPF proposals.

The proposals that require actions both within Sweden and internationally (classified as both Category A and B) are roughly the same for the two processes, and constitute around 15% of the total number of proposals.

The part of the proposals that only requires action at the international arena (classified only as Category B) constitutes slightly more than one-fifth of the proposals for action.

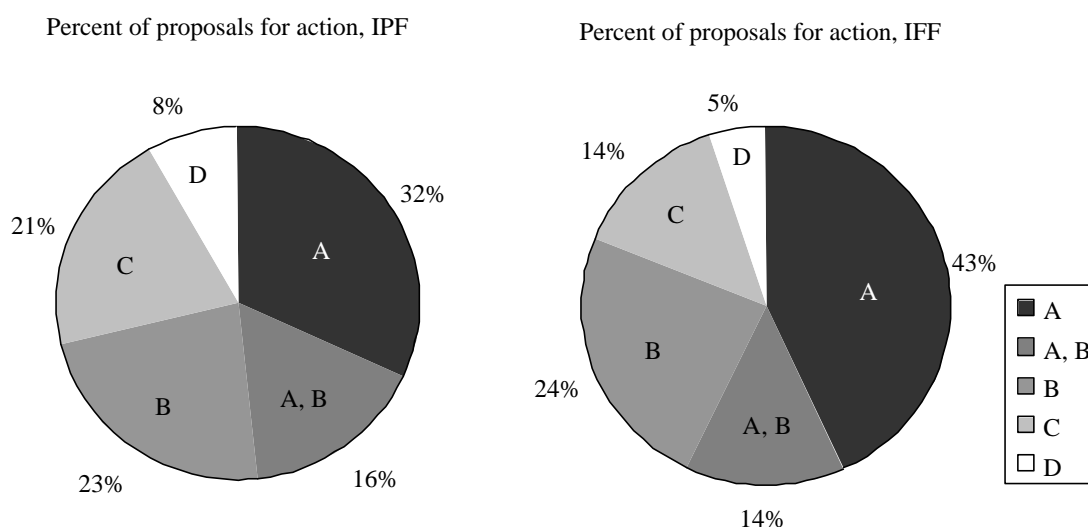


Fig 2. The percentage of the proposals for action, of the IPF and IFF processes, classified in the different Categories. The proposals for action classified as both Category A and B are represented by a separate part of the diagram. Categories are defined in section 2.3, p 9.

Table 2. The number and percentage of the proposals for action, of the IPF and the IFF processes, in the four Categories. Some of the proposals for action have been classified as both Category A and B, and are represented by a separate field. Categories are defined in section 2.3, p 9.

Category	IPF		IFF		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
A	47	32.4	55	43.0	102	37.4
A, B	24	16.6	18	14.1	42	15.4
B	33	22.8	31	24.2	64	23.4
C	30	20.7	18	14.1	48	17.6
D	11	7.6	6	4.7	17	6.2
Sum	145	100	128	100	273	100

The classification of the proposals for action, in Categories A and B, as one or more subject fields, shows that there are four dominating fields, the same for both the IPF and the IFF processes (See Fig 3 and Table 3). The major subject fields are Subject field 1 (environmental issues), Subject field 3 (legislation, policies, strategies and voluntary codes of conduct), Subject field 4 (forest management) and Subject field 8 (information, reporting, education, training, capacity building, research and analyses).

Almost 60% of the proposals for action are, more or less, related to environmental issues (Subject field 1). More than half of the proposals for action concern information, reporting, education,

training, capacity building, research and analyses (Subject field 8). Not as many proposals as related to Subject field 8, but still more than half of the IPF/IFF proposals for action, are related to legislation, policies, strategies and voluntary codes of conduct (Subject field 3). The fourth largest Subject field is that consisting of proposals related to forest management. A little less than half of the proposals for action are related to this subject field (Subject field 4).

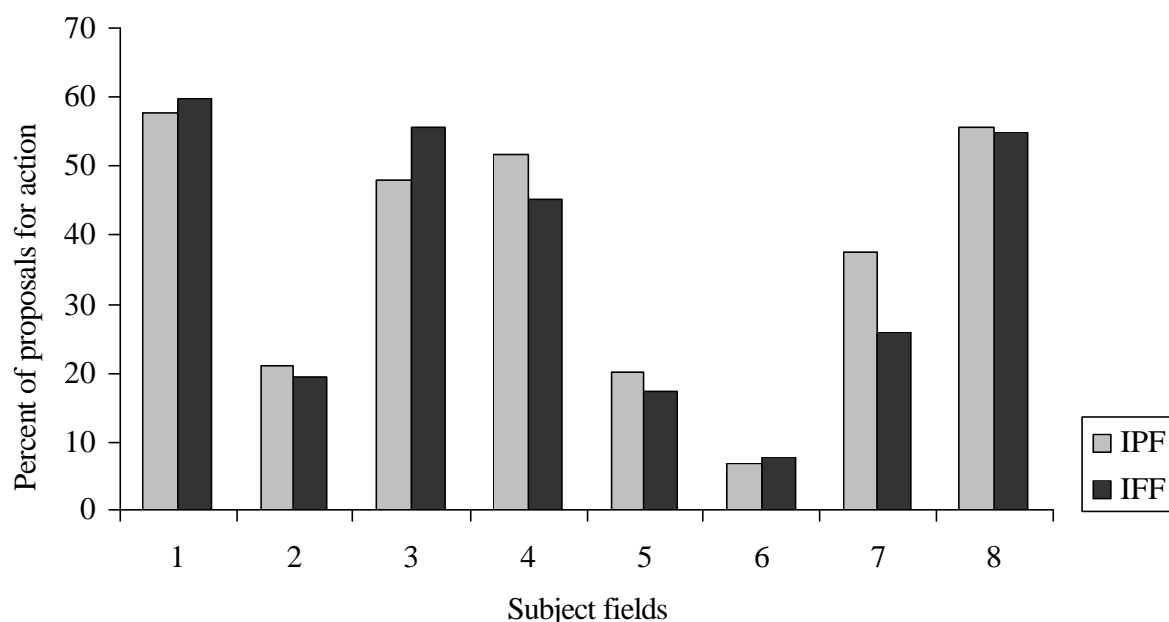


Fig 3. The percentage of the proposals for action, of the IPF and the IFF processes related to the eight Subject fields, respectively. Subject fields are defined in section 2.3, p 10.

Table 3. The number and percentage of the proposals for action of the IPF and IFF process related to the eight Subject fields, respectively. Subject fields are defined in section 2.3, p 10.

Subject field	IPF		IFF		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
1	60	57.7	62	59.6	122	58,7
2	22	21.2	20	19.2	42	20,2
3	50	48.1	58	55.8	108	51,9
4	54	51.9	47	45.2	101	48,6
5	21	20.2	18	17.3	39	18,8
6	7	6.7	8	7.7	15	7,2
7	39	37.5	27	26.0	66	31,7
8	58	55.8	57	54.8	115	55,3

3.1.2 Review of the IPF and IFF proposals for action in general

The IPF and IFF proposals for action cover a wide range of issues, related to forests and forestry. They are sometimes, as a consequence of tough negotiations, vague and the actual content a question of interpretation. In spite of this, several important issues can be distinguished.

Environmental issues

In the field of environmental issues, deforestation and forest degradation are identified as major and complex issues. Countries are encouraged to analyse and address the underlying causes of this problem. Environmentally fragile or critical areas are closely related to the deforestation and forest degradation problems, and the IPF and IFF stress the importance of taking measures to ensure a sustainable management and development of such areas. The use of environmentally sound technologies is of particular importance in environmentally fragile or critical areas, but the general use and development of such technologies is also emphasized.

Conservation and protection of forests, which should be complemented with other sustainable forest management activities, airborne pollution, where international cooperation is essential, and the use of wood fuels as an energy source, are all environmental issues identified in the proposals for action.

Assistance to developing countries

Both the IPF and IFF call for an increase in the resources for assistance to developing countries and countries with economies in transition. But cooperation and coordination of efforts within the donor community are also important in the field of development assistance. This can make the use of the available resources more effective and efficient. Transfer of environmentally sound technologies, support for policy formulation and implementation, capacity building, and assessments and information on forests are areas that should be emphasized in the assistance to developing countries and countries with economies in transition.

Legislation and policies

In the field of legislation, policies, strategies and voluntary codes of conduct, the first thing to mention is the national forest programme. Countries are encouraged to develop, implement, monitor and evaluate their national forest programme, which refers to a comprehensive policy framework. Policy formulation and the combination of regulations and economic instruments need to be examined and developed by countries. There are several other areas where the proposals for action call for development of policies, strategies and legislation. Land tenure, fair and equitable sharing, forest conservation, the role of the private sector and trade in forest products and services are examples of such areas.

Countries should also encourage their private sector to develop and implement voluntary codes of conduct, as which certification and labelling schemes may be regarded. This can be important for promoting sustainable forest management.

Forest management

The proposals for action related to forest management include issues such as the complementary roles of planted and natural forests, multiple functions and uses of forests, the use of environmentally sound technologies, and the role of the private sector in producing forest products and services. The field of forest management is, naturally, inter-linked with that of environmental issues.

Specific groups of people

Several of the proposals for action concern specific groups of peoples. This is often in the context of traditional forest-related knowledge, which is an issue of considerable weight in the proposals for action, land tenure and ownership, and the fair and equitable sharing of benefits from forests. Participation, involvement and cooperation are also areas identified as essential in the proposals for action related to groups, such as, local people, indigenous people, forest owners and women.

Trade

Trade in forest products and services, is a field where international cooperation is considered important, particularly in the issue of illegal trade. Countries are encouraged to improve market access for forest goods and services, study market behaviour, and to consider the mutually supportive relationship between sustainable forest management, trade and certification and labelling schemes.

International cooperation

International cooperation is important, or even necessary, for the implementation of many proposals for action. Transboundary phenomena, such as trade and airborne pollution are obvious fields for international cooperation, but other areas where this is desirable are deforestation and forest degradation, forest conservation, criteria and indicators, traditional forest-related knowledge and research.

Information, reporting, education, training, capacity building, research and analyses

In the field of information and reporting, the proposals for action identify the underlying causes of deforestation and forest degradation, airborne pollution, traditional forest-related knowledge, multiple roles of forests and environmentally critical areas, as important areas for collection and dissemination of information. Inventories, assessments and valuations of forests are important parts of sustainable forest management. Countries are also encouraged to share and exchange information retrieved, and to make it more available and accessible.

Criteria and indicators are to be used by countries to promote best forest practices and for facilitating sustainable forest management. Countries should participate in ongoing regional and international work on criteria and indicators, and develop national level criteria and indicators for sustainable forest management, based on those agreed at the international level.

In the proposals for action there is a call for analyses and studies in several fields, for example, of market behaviour, financial flows, full-cost internalization, full life-cycle analyses of forest products, and services, and their substitutes, and of the implications of use of forest by-products. Forest research in general, and the implication of its results, should be strengthened.

Capacity building is another field considered essential by the IPF and IFF. It should be made an objective of national forest programmes and an essential part of the assistance to developing countries and countries with economies in transition. Training and education are identified as important areas, particularly in the context of transfer of environmentally sound technologies.

3.1.3 The Swedish situation in general

Sweden is a sparsely populated country, with around 9 million inhabitants, and largely covered with forests (Ekelund & Liedholm, 2000). Around 23 million hectares, or 51% of the total area, is

productive forestland². Conifers, mostly Norway spruce (*Picea abies*, 45%) and Scots pine (*Pinus sylvestris*, 39%), dominate the Swedish forests. The standing volume has increased by more than 60% since the 1920s, due to improved forest management and a change in land use.

Forests and forestry are of great importance from many points of view. Forest products contribute to a considerable part of the Swedish export with around 14% of the total export. The sector is also important as a source of employment, and around 100,000 persons are employed in the forestry sector. The forest as a place for recreation is very important for Sweden. Hunting is for example a recreational activity for around 300,000 Swedes.

The majority of the forestland in Sweden is privately owned. Forest enterprises own around 39% of the forestland, and individuals or families own around 51%. Around 350,000 individuals, of whom one-third are women, own these 51% of the Swedish forest area.

The Swedish Right of Public Access allows people to move about freely on almost all land (Naturvårdsverket URL). The Right of Public Access, which has historically guaranteed access to forestland, defines certain public access rights, but also the obligations towards the environment and the landowner. It has been described as a culturally cooperative law, and is of great importance for recreation.

Environmental issues

The Environmental Code came into force in 1999 and thereby replaced 16 laws, among others the Natural Resources Act, the Nature Conservancy Act and the Flora and Fauna (Measures Relating to Protected Species) Act. The Code constitutes a coordinated, broadened and tightened environmental legislation, and is a framework legislation with few details stated. Concerning forestry, regulations governing different types of instruments for protection of forest land, have been brought together in the Environmental Code and aims, together with regulations regarding species protection, to preserve biodiversity.

Assistance to developing countries

The Swedish International Development Cooperation Agency (Sida) has identified three fields to be prioritized in the forest-related assistance to developing countries and countries with economies in transition (Celander, 1999). These fields are; Sustainable use of natural resources in rural areas, Development of policies and institutions, and Capacity building. These fields correspond to the proposals for action related to assistance to developing countries and countries with economies in transition.

Cooperation within the donor community is also an important matter, and about one-third of the Swedish development cooperation is channelled via the Ministry for Foreign Affairs through different multilateral organizations (Sida URL).

Legislation, policies, strategies and voluntary codes of conduct

The "Swedish model" is an expression used for the process of cooperation and consultation between interested parties with the aim to reach consensus (Nilsson, 1995). This model is used in policy formulation, of which Sweden has long tradition and experience. The consensus building among interested parties is important for the implementation of the forest policy, and for the flexibility of the continuously changing forest policy (Nilsson, 1995; van Kooten et al, 1999).

² The Swedish definition of productive forestland (forests that can produce an average yield of at least one cubic metre of stem wood per hectare per annum) is used in this report. According to international definitions of forestland, Sweden has around 27 million hectares of forests.

The current Swedish forest policy is from 1993, and it corresponds, among others, to the goals reflected in the Agenda 21 and the Forest Principles. The two goals of the new policy, one for the environment and one for the production should be equally prioritized in forest management.

A minimum of requirements have been formulated in the new Forestry Act, which is complemented by national inventories, limited environmental subsidies, and strong emphasis on extension services and training of forest owners and professional staff. It says in the first paragraph of the Forestry Act; "The forest is a national resource. It shall be managed in such a way as to provide a valuable yield and at the same time preserve biodiversity. Forest management should also take into account other public interests."

The Swedish forest sector is a world-leader in the field of voluntary certification and labelling (FSC Sverige URL; PEFC Sverige URL). Around half of the Swedish forestland is now certified. Certification is expected to be of considerable importance for the implementation of the forest policy goals. The Swedish position is that certification should be market driven (Ekelund & Liedholm, 2000). This means that the government and authorities encourage, but not actively participate, in the work on certification schemes.

The Forestry Administration consists of the National Board of Forestry and 10 County Forestry Boards. With around 100 Forestry districts throughout the country the organisation is highly decentralised. Extension services to, and training of, forest owners and others concerned with forestry, information to the forestry sector, media, schools and the public, follow-up and evaluation of the practical effects of the forest policy, and forecasts of trends in the forestry sector are some important parts of the work of the Forest Administration.

International cooperation

Sweden will continue to actively participate in ongoing international negotiations on sustainable forestry, and work to maintain national forest policies and for a better coordination of issues concerning forestry within the EU (Regeringens proposition 1997/98:158). The Nordic cooperation in issues concerning forests and forestry is considered to be urgent.

Information, reporting, research

The National Forest Inventory (NFI) has been undertaken since 1923, and is today carried out annually and covers the entire Swedish forest (Riksskogstaxeringen URL). The main purpose of the National Forest Inventory is to describe the state of and changes in forest resources in Sweden. However, there are numerous fields of application, and the NFI is an important resource, for example for environmental monitoring. Inventories of Swedish wetland forests and woodland key-habitats have been carried out through the national inventory of biological hot-spots, which was completed in 1998.

3.2 Environmental issues (Subject field 1)

3.2.1 Review of the IPF and IFF proposals for action

Deforestation and forest degradation

The IPF and IFF processes have emphasized deforestation and forest degradation as a major and complex problem. Countries are urged, through the proposals for action, to work on the issues related to deforestation and forest degradation on the national and international levels.

The underlying causes of deforestation and forest degradation should be addressed to prevent deforestation and forest degradation. The IPF and IFF proposals for action call for studies and analyses, from several perspectives and on all levels, of the underlying causes of deforestation and forest degradation. The results should form a basis for decision-making in these issues. Policies, economic instruments, capacity building, and the raising of awareness of the issues related to deforestation and forest degradation in society, are considered, by the IPF and IFF, to be among the most important means for addressing the underlying causes of deforestation and forest degradation. Countries should develop and apply such measures. According to the proposals for action, the measures to avoid deforestation and forest degradation, and to encourage the opposite, must not be limited to the forest sector since there are many factors outside the forest sector that affect deforestation and forest degradation.

Relevant proposals for action:

IPF: 27a, 27b, 27c, 28c, 29a, 30a, 30b, 31a, 31b

IFF: 64a, 64e, 64g, 64h, 115c

Environmentally fragile areas

Environmentally fragile or critical areas, including those affected by desertification and drought, are closely related to deforestation and forest degradation problems. IPF and IFF stress the need for actions to address these complex issues and to ensure sustainable management and development of these areas.

For the rehabilitation and sustainable management of environmentally fragile or critical areas, planted forests and environmentally sound technologies are central components stated by the IPF and IFF. Traditional lifestyles should also be an aspect when developing sustainable management systems with low pressure on these ecosystems.

International cooperation and coordination is called for in the proposals for action, as is assistance to developing countries where these problems occur. The transfer of environmentally sound technologies should be an obvious part of the assistance to developing countries.

Information on environmentally fragile or critical areas is needed, and countries should collect, analyse and disseminate such information.

Relevant proposals for action:

IPF: 46a, 46d, 46e, 46f

IFF: 41h, 56h, 56i, 129a, 129b, 129e

Environmentally sound technologies

Environmentally sound technologies and the issues related to this subject are of considerable weight in the IPF and IFF proposals for action related to environmental issues and as a part of sustainable forest management. Countries should encourage the use and development of environmentally sound technologies through the development of policies, legislation, incentives and institutional frameworks. The use of environmentally sound technologies is considered to be of particular importance in environmentally fragile or critical areas and in areas with low forest cover.

The IPF and IFF identify the transfer of environmentally sound technologies to developing countries and countries with economies in transition, as a central part of the assistance to these countries. The transfer needs to be promoted and facilitated through different concrete measures. International cooperation and coordination, and the corresponding know-how and extension services are stressed in the proposals for action concerning the transfer of environmentally sound technologies from developed to developing countries.

Relevant proposals for action:

IPF: 77a, 77b, 77d

IFF: 56b, 56c, 56d, 56e, 56f, 56h, 56i, 56l, 56m

Conservation and protection of forest land

Conservation and protection of forests is another essential environmental issue in, above all, the IFF proposals for action. It is underscored that a wide range of mechanisms should be used for the conservation of forests and for the protection of forest areas, and that the national circumstances should be considered. Protected forest areas is one mechanism, but, as stated in the proposals for action, they also need to be complemented with other sustainable forest management activities. For example, countries should plan and manage the forests on an ecosystem basis and consider linking protected areas with corridors and buffer zones.

Countries should, in the protection of forests, include all values and the multiple functions and uses of the forests. Environmental services and livelihood needs of indigenous and local people are to be considered in the context of protected forest areas. It is also pointed out that all interested parties should be given the opportunity to participate in the process of forest conservation and that private stewardship of protected areas needs to be recognized.

International cooperation is stressed in this matter, as in many other issues of the IPF and IFF proposals for action. Assistance to developing countries, coordination of policies and programmes, and transboundary protected forest areas are important parts of international cooperation in this matter.

Relevant proposals for action:

IFF: 85a, 85b, 85d, 85e, 85f, 85g, 86, 87, 88, 89, 90

Airborne pollution

Airborne pollution is another clear environmental issue in the IPF proposals for action. Countries should include the reduction of airborne pollution in their strategies for sustainable development. Countries are also recommended by the IPF to consider entering international agreements in this matter, for example the Convention on Long-Range Transboundary Air Pollution.

It is stressed, in the proposals for action, that new research on airborne pollution and its effects on forest health and on deforestation and forest degradation is needed. This research should be carried out through international cooperation. The IPF identifies monitoring of the impact of air pollution on forest health as an important matter. Existing regional programmes on such monitoring need to be continued and extended to new areas.

Relevant proposals for action:

IPF: 27c, 50a, 50b, 50d, 50e

Renewable energy sources

The use of wood energy is an environmental issue raised by the IFF. Wood energy and wood energy technologies are matters that, according to the IFF proposals for action, should be included in policies and planning within the forestry, energy and agricultural sectors. The use of wood-waste materials both from forest harvesting and wood processing as energy source is considered an important issue, and analysis of the implications of fuel wood collection and the use of by-products is needed. Countries should also make efforts in the field of environmentally sound technologies to achieve more efficient use of wood and non-wood by-products and wood energy.

Relevant proposals for action:

IFF: 56l, 56n, 122c

Voluntary codes of conduct

Voluntary codes of conduct, including certification, are considered one of the means for achieving sustainable forest management. The IPF proposals for action ask for actions by countries to encourage their private sector to formulate and implement voluntary codes of conduct for promoting sustainable forest management.

Relevant proposals for action:

IPF: 69a, 128c, 133a

Criteria and indicators

Criteria and indicators are important in the IPF and IFF proposals for action. Countries should use them as a framework for promoting best forest practices and for facilitating sustainable forest management. According to the proposals for action, the criteria and indicators should be used in many fields. For example, criteria and indicators should be used as a basis for reviewing, monitoring and reporting trends in the state of the forests and the progress in the management, conservation and development of forests, and in forest assessments. Countries should also use criteria and indicators in the process concerning national forest programmes.

Relevant proposals for action:

IPF: 17d, 40l, 89a, 115a, 115b, 115c, 115d

IFF: 17d, 19a, 85e

3.2.2 The Swedish situation related to environmental issues

Deforestation and forest degradation

Deforestation and forest degradation, in the sense of diminishing forest cover, cannot be considered a problem in Sweden. The standing volume has increased by more than 60% since the 1920s and the area of forested land has roughly been on the same level since the 1930s (Ekelund & Liedholm, 2000). The regeneration of forest is regulated by law and the Forestry Act states that new stands shall be established i/after felling, ii/when the site productivity is not utilized satisfactorily, and iii/when land is unused or when the state of the forest is clearly unsatisfactory. All forest owners also have to give notification of final felling to the County Forestry Board.

Historically, Sweden has had problems with deforestation and forest degradation, due to transformation of forest land to grazing and cultivated land, and cutting of forests for industrial purposes and for fuel-wood, building and fencing materials, often without regeneration measures (Ekelund & Dahlin, 1997). Sweden's first modern forest policy was established around one hundred years ago and extensive afforestation started at the same time.

Forest degradation, in the sense of decreased biodiversity due to loss of valuable habitats, is an issue in forestry, much more so during the past decades than today. The proportion of natural forests in relation to planted forests has drastically decreased during the last century (Ekelund & Liedholm, 2000).

Today, the Forestry Act states that forests shall be managed to provide a valuable yield and at the same time preserve biodiversity. This means that the goal for the environment and production are given equal priority.

The Action Plan for Biological Diversity and Sustainable Forestry, the Forest Sector Goals for the Environment, the Swedish Environmental Quality Objective "Sustainable Forests", different types

of protection of forests and the information and extension campaign “Greener Forests” are examples of means for preventing forest degradation from a biodiversity point of view.

The Swedish Threatened Species Unit works with biodiversity in Sweden and is the focal point for information on threatened species and biodiversity in Sweden (ArtDatabanken URL). This is also an important part of the work on biodiversity of the Swedish forests.

Environmentally fragile areas

There are no deserts in Sweden and no problems with desertification. Environmentally fragile or critical areas, such as mountain ecosystems and wetlands, as stated in the IFF report, exist in Sweden.

The forest in the proximity of high mountains is largely protected (Ekelund & Liedholm, 2000). About 50% of this area are protected through National Parks and Nature Reserves. On the rest of the forest area in the proximity of mountains, forestry is restrained by limited felling. The Forestry Act contains special regulations on these types of forests.

A nation-wide survey of forested wetlands, and of woodland key-habitats, which are also environmentally fragile areas, has been organized by the Swedish National Forestry Administration to create a basis for decisions concerning the management and conservation of these forests (Skogsvårdsorganisationen URL).

Environmentally fragile or critical areas are protected through different types of area protection, which is regulated in the Environmental Code (Naturvårdsverket URL). A large part of the forested wetlands are protected since they are not considered productive forest land, as defined in the Forestry Act, and therefore protected from felling.

The International Convention to Combat Desertification in Countries Experiencing Drought and/or Desertification, Particularly in Africa was signed in 1994 and ratified in 1995 (United Nations URL). Sweden has considered these issues important and has made considerable efforts in this field, for example through the chairmanship of the negotiations of the Convention. The Swedish International Development Cooperation Agency (Sida) has been cooperating with countries, particularly in Africa, for many years on programmes on land degradation and drought consistent with the principles of the Convention.

Environmentally sound technologies

Swedish forestry is highly mechanized and, as in many other fields of forestry, there has been a rapid development of the environmental aspects of the technologies used in forestry during the last decade. The mechanization of forestry, and the transporting of wood, has, of course, a larger impact on the environment than forestry without machines. The development of forest technologies during the last decades has decreased the environmental impact considerably. The use of environmentally sound technologies is largely market driven, through certification schemes and other voluntary codes of conduct. The use of environmentally sound technologies is a part of the equally prioritized goals, for the environment and the production, of the Swedish forest policy. Several of the 15 Swedish Environmental Objectives concern the use of environmentally sound technologies in forest management and wood processing, and the Environmental Code includes regulations in this matter.

Research on environmentally sound technologies is ongoing at, for example, the Forestry Research Institute of Sweden and the Swedish University for Agricultural Sciences (SkogForsk URL; Sveriges Lantbruksuniversitet URL).

The transfer of technologies is not highly prioritized in the Swedish development assistance. Features such as capacity building are considered more important. There is a considerable transfer of technologies, and corresponding know-how, through the private sector investments mostly in the Baltic region.

The Swedish International Development Cooperation Agency (Sida) concentrates on capacity building in the fields of sustainable use and technologies rather than actual transfer of environmentally sound technologies (Celanders, 1999).

Conservation and protection of forest land

The Swedish model is to use a combination of protected areas and other sustainable forest management activities on all forestland (Ekelund & Liedholm, 2000). Regulations concerning different types of area protection, such as national parks, nature reserves, biotope protection and nature conservation agreements, have been compiled in the new Environmental Code, which came into force in 1999. Around 4% of the productive forestland are protected according to the Environmental Code. A considerable part of the Swedish forests are protected since they are not considered productive forest land, as defined in the Forestry Act, and therefore protected from felling. The majority of the protected forest areas are found in the northern part of Sweden in the vicinity of mountains. The goal is to increase the area of protected forests during the next decade with a further 300,000 ha.

A large part of the Swedish forestland is protected voluntarily by forest owners, mostly within certification schemes, which is an important way for implementing the environmental goals of the Swedish forest policy. Conflicts between the requirements for protected forest areas and the economic interests of particularly smaller forest owners occur.

Sweden participates in Natura 2000, which is a network created by the European Union, to protect nature and wild flora and fauna (Naturvårdsverket URL). Protected areas, which are protected and managed by the member states, constitute Natura 2000.

Airborne pollution

Fifteen objectives for environmental quality have been established by the Swedish Parliament to describe the qualities of the environment and natural and cultural resources for ecological sustainability (Naturvårdsverket URL). The Swedish Environmental Quality Objectives "Clean air", "Natural acidification only", "Limited influence on climate" and "No eutrophication" all concerns the reduction of damaging air pollution in Sweden.

The Swedish Environmental Protection Agency has developed Environmental Quality Criteria for, among others, Forest Landscapes, where the effects of airborne pollution are included (Naturvårdsverket URL). These criteria for environmental quality assessments constitute a system of classification, which facilitates the interpretation of environmental data. The emission of airborne pollution is regulated through the Environmental Code.

The Swedish Forestry Administration and the National Forest Inventory conduct monitoring of the effects of airborne pollution on forest health (Skogsvårdsorganisationen URL).

The ASTA-programme - International and National Abatement Strategies for Transboundary Air Pollution - gives information on the effects of air pollution on forest ecosystems (National Board of Forestry, 1999). The objectives are, among others, to produce scientific material of importance for

international abatement strategies of transboundary air-pollution, and to develop tools for national strategies in sectors where transboundary air pollution is of importance, such as the forest sector.

Sweden participates in the programme ICP-Forest, and a corresponding programme within the European Union (Skogsvårdsorganisationen URL). ICP-Forest is an international cooperation programme, where producing common programmes and methods for assessments of the effects of air pollution on forest health is one of the main tasks. The National Board of Forestry is the Swedish focal centre in this matter.

Renewable energy sources

Renewable energy sources, such as bio-fuels (including wood-waste materials) should be important elements of the future energy supply in Sweden (Statens energimyndighet URL). According to the governmental bill from 1996/97, the Swedish energy supply should be secured through a energy system based on sustainable, preferably domestic and renewable, energy sources and an efficient use of energy (Ekelund & Liedholm, 2000). One of the objectives of the Programme towards a sustainable energy system is to increase the supply of electricity and heat from renewable sources (Näringsdepartementet URL).

The Swedish National Energy Administration is Sweden's national authority on issues regarding the supply and use of energy (Statens energimyndighet URL). The Administration's supports research on renewable energy sources and provides investment support for the development of renewable energy.

Bio-energy, which is dominated by forest fuels, provides almost one-fifth of the Swedish use of energy (Sveriges Lantbruksuniversitet URL). 45% of the total forest harvest is used to produce energy, out of which a large part is made up of processing by-products (Ekelund & Liedholm, 2000). The forest industry is using a large part of the by-products created by forest harvesting and wood processing (Statens energimyndighet URL). The removal of by-products created by forest harvesting is regulated through the Forestry Act (Skogsvårdsorganisationen URL).

One of the subprojects of SKA99, with the main objective to analyse and map the possible use and development of the forests in Sweden during the next 100 years, is on forest fuels (Skogsvårdsorganisationen URL). In the Subproject Forest fuels, the potential of collection of forest fuels has been analysed in relation to different levels of cutting and different levels of environmental protection. This Subproject has been carried out in cooperation between the National Board of Forestry, the Swedish National Energy Administration and the Swedish University of Agricultural Sciences.

Voluntary codes of conduct

The Swedish Forest Sector is a world-leader in the field of certification and labelling schemes. Around half of the Swedish productive forests have been certified, mostly according to the FSC and the PEFC standard (FSC Sverige URL; PEFC Sverige). The Swedish position is that certification should be market driven, and that the forest policy and forest certification are considered separate processes (Ekelund & Liedholm, 2000). This means that the government and authorities encourage, but do not actively participate in the work on certification schemes.

The Swedish International Development Cooperation Agency (Sida) provides training in some fields where Sweden is considered to be competitive. Forest certification is one of these fields (Celander, 1999).

Criteria and indicators

Sweden participates in the work on criteria and indicators within the pan-European process and has signed the resolutions on criteria and indicators from the Ministerial Conferences on the Protection of Forests in Europe. Six pan-European criteria and quantitative indicators form the basis for the European Union Life project "Demonstration of methods to monitor sustainable forestry", in which Sweden is participating (Skogsvårdsorganisationen URL). The project is designed to review, demonstrate and develop methods to monitor sustainable forestry as defined by the Third Ministerial Conference on the Protection of forests in Europe.

Fifteen objectives for environmental quality have been established by the Swedish Parliament to describe the qualities of the environment and natural and cultural resources for ecological sustainability (Naturvårdsverket URL). The Environmental Quality Objective, concerning the forest sector, is "Sustainable Forests". Indicators for the follow-up of the Environmental Quality Objectives are now being developed.

The Criteria for Environmental Quality Assessments constitute a system of classification that facilitates the interpretation of environmental data (Naturvårdsverket URL). One of these Environmental Quality Criteria is "Forest Landscapes", which includes, among others, old-growth forest, broad-leaved forest and deadwood.

3.3 Assistance to developing countries and countries with economies in transition (Subject field 2)

3.3.1 Review of the IPF and IFF proposals for action

Financial assistance

Both the IPF and the IFF have called for an increase in the resources for assistance to developing countries and countries with economies in transition to support the management, conservation and sustainable development of forest resources. This was made with reference to the Rio Declaration on Environment and Development, relevant chapters of the Agenda 21 and paragraph 10 of the Forest Principles where new and additional resources to developing countries are called for. The official development assistance is considered essential and urgent, but investments in sustainable forest management in developing countries and countries with economies in transition by the private sector are also called for. Developed countries should create incentives to encourage their private sector to do so.

Cooperation within the donor community is necessary, according to the proposals for action. The coordination between and within countries, international organizations and instruments should be made more efficient and effective, which is also true concerning the use of available resources for sustainable forest management.

Relevant proposals for action:

IPF: 58d, 67a, 67b, 69e, 71a

IFF: 9c, 19b, 30a, 30b, 87

Technology transfer

Transfer of environmentally sound technologies to developing countries and countries with economies in transition is one of the main issues in the IPF and IFF proposals for action related to assistance to these countries. Countries should promote, facilitate and finance such transfer of technologies. They should also consider this an integral part of the investment process and of

sustainable development. The IPF and IFF stress that the transfer of environmentally sound technologies needs to be combined with transfer of corresponding know-how, education, training and extension services.

Cooperation between countries should be strengthened to facilitate the transfer of technologies. Not only North-South cooperation is called for, but also South-South cooperation. Means to promote the sharing of environmentally sound technologies are also needed.

Relevant proposals for action:

IPF: 77a, 77c

IFF: 56c, 56d, 56e, 56f, 56g, 56i

Support to institutional development

Support for development and implementation of national forest policies and strategies, and national forest programmes, is one of the important fields for assistance to developing countries and countries with economies in transition mentioned in the IPF and IFF proposals for action.

Assistance in conducting analyses of policies should be emphasized in the work on national policy development and implementation. It is also stated in the proposals for action that developing countries need assistance in implementing these, through the framework of national forest policies.

Relevant proposals for action:

IPF: 30b, 70a

IFF: 9a, 9g

Forest assessment

Assessments and information on forest are considered vital parts of the work towards sustainable forest management, and therefore of the assistance to developing countries and countries with economies in transition. Support concerning creating reports and statistics on forests, analysing the results of forest assessments, the development of forest valuation methodologies, and monitoring of forests is asked for in the proposals for action.

Relevant proposals for action:

IPF: 58e, 89b

IFF: 17e, 107d

Capacity building

Other fields where the IPF and IFF state that support to developing countries and countries with economies in transition is important, are capacity building, forest research including new ways for mobilizing funding, work on certification and labelling schemes and on criteria and indicators, and improvement of wood processing.

Relevant proposals for action:

IPF: 70e, 131b115c133b

IFF: 97a, 97b

3.3.2 The Swedish situation

Financial assistance

There has been an increase in the Swedish total resources for development assistance during recent years, but the resources for forest-related assistance have not increased correspondingly (Pers. comm.). Sweden's support for forest-related activities is to a large extent dependent on country strategy processes in developing countries. This means that National Plans for Sustainable Forestry must be well integrated in each country's coordinated development efforts, in order for them to be included in bilateral agreements on development cooperation. The IPF and IFF call for an increase

in the resources for such assistance, but the importance of certain features of the assistance is also emphasized strongly.

The Swedish International Development Cooperation Agency (Sida) is the Swedish government agency dealing with bilateral international development cooperation and the major part of the cooperation with Central and Eastern Europe (Sida URL). Sida's long-term aim for forestry is to increase the contribution of forest- and tree-based activities to economically, socially and environmentally sustainable development for poor people (Celander, 1999). Three themes are prioritized in the forest-related assistance; Sustainable use of natural resources in rural areas, Development of policies and institutions, and Capacity building, which are also identified as important fields by the IPF and IFF. The Swedish International Development Cooperation Agency (Sida) concentrates on capacity building in the fields of sustainable use and technologies rather than actual transfer of environmentally sound technologies.

About one-third of the resources for the Swedish development cooperation is channelled via the Ministry for Foreign Affairs through different multilateral organizations (Sida URL). These organizations are mainly UN agencies, the World Bank Group and regional development banks. The European Union, of which Sweden is a member, is one of the major donors in the world. Sida's multilateral commitment has increased since entering the EU, and a small part of the Swedish development cooperation is channelled through the EU.

Institutional development

The Swedish International Development Cooperation Agency (Sida) provides training in some fields where Sweden is considered to be competitive. Development of national forest policies and strategies, and management of forests and wood industries are examples of such fields (Celander, 1999).

The National Board of Forestry can undertake international consultancy work in several fields, for example Forest Policy and legislation, Institutional capacity building, Silviculture and forest management, Inventories and surveys, Management planning for the protection of biodiversity and Extension and training (Skogsvårdsorganisationen URL).

The International Convention to Combat Desertification in Countries Experiencing Drought and/or Desertification, Particularly in Africa was signed in 1994 and ratified in 1995 (United Nations URL). Sweden has considered these issues important and has made considerable efforts in this field, for example through the chairmanship of the negotiations of the Convention. The Swedish International Development Cooperation Agency (Sida) has been cooperating with countries, particularly in Africa, for many years on programmes focussing on land degradation and drought consistent with the principles of the Convention.

The Swedish private forest sector is investing economically in the countries in Eastern Europe with economies in transition. This is largely market driven, but economic development in the Baltic region is also a prioritized and supported area by the Swedish government, for example through the Baltic Billion Funds (Utrikesdepartementet URL). Sida also provides financial support to Swedish companies starting projects in developing countries and countries with economies in transition (Sida URL).

3.4 Legislation, policies, strategies and voluntary codes of conduct (Subject field 3)

3.4.1 Review of the IPF and IFF proposals for action

National forest programmes

The first thing to mention about the proposals for action related to subject field 3, is the national forest programme. The term “national forest programme” is a generic term and refers to a comprehensive policy framework for the achievement of sustainable forest management, according to the proposals for action. The national forest programmes should be developed, implemented, monitored and evaluated in the national context, reflecting the varying circumstances of each country. Many of the proposals for action call for the use of national forest programmes, which should be used, for example, as a basis, for example for implementing the proposals for action, for international cooperation and for assistance to developing countries and countries with economies in transition.

Partnership, participation and coordination of all interested parties are important in the implementation of the national forest programmes, as well as in decision-making in forest management, according to the proposals for action. Mechanisms and concepts for this should be developed and established. Partnership, participation and coordination of all interested parties are important in the implementation of the national forest programmes, as well as in decision-making in forest management. Mechanisms and concepts for this should be developed and established. Capacity building is considered essential, for example in the development and implementation of national forest programmes, and should be made an objective of the programmes. Measures to protect traditional forest-related knowledge should also be included in national forest programmes. Countries should establish a focal point to guide and coordinate the implementation and assessment of the proposals for action.

Relevant proposals for action:

IPF: 17a, 17b, 17f, 17h, 17i, 40d, 40e, 77e

IFF: 9b, 9e, 9f, 9g, 30a, 64b, 85b, 85c, 85d, 74a, 74b

Policy formulation and development

In the proposals for action, countries are encouraged to develop mechanisms to improve the formulation of policies. An example of such a mechanism is environmental impact assessments. Opportunities for interested parties, for example scientists and policy-makers, to provide guidance in policy discussions and forest research, should be provided by countries according to the proposals for action. Countries are also encouraged to strengthen the linkage between forest policy and research, and to develop mechanisms for integrating multidisciplinary research into all stages of the planning cycle.

Relevant proposals for action:

IPF: 29b

IFF: 17e, 96c

The proposals for action state that to achieve the objectives of national forest policies a combination of regulations and economic instruments should be used. The potential scope and effective combination of economic instruments and tax policies should be assessed and recognized as a way to encourage engagement in activities that support sustainable forest management and avoid deforestation and forest degradation.

Relevant proposals for action:

IFF: 115a, 115b, 115c

IPF: 29a

Policies in the forest sector itself are not the only ones to be important, according to the proposals for action. Macroeconomic policies and policies in other sectors than the forest sector need to be developed by countries, as well as strategies and policies for the forest cover and for addressing the underlying causes of deforestation and forest degradation, with the aim to achieve sustainable forest management. Countries should also examine the role of forest policy failures and policies in other sectors as factors contributing to unsustainable forest management, deforestation and forest degradation.

Relevant proposals for action:

IPF: 29a

IFF: 115c, 115g

Policies need to be developed in several matters related to sustainable forest management, according to the proposals for action. Utilization of lesser-used species is such a matter. The use of these species should be promoted when consistent with sustainable forest management and when economically viable. Policies that aim to achieve trade in products and services from sustainably managed forests are also called for. These policies can concern both trade and sustainable forest management. Countries should develop their policy, legal and institutional framework so as to encourage both the public and the private sector to use, develop and invest in environmentally sound technologies for sustainable forest management.

Countries should also develop and implement policies for meeting increasing demand for forest products with sustainable forest management and for wood energy and related issues.

Relevant proposals for action:

IPF: 77d, 132b

IFF: 41a, 56b, 56h, 122a, 122c, 122d, 122e

Land tenure

Countries are encouraged through the proposals for action to develop policies and legislation that aim to secure the land tenure and rights, and the fair and equitable sharing of benefits from forests, for local and indigenous people. Mechanisms to improve the access to land and use of forest resources should also be developed. Local and community involvement and investments in sustainable forest management should be promoted and facilitated through policy and legal frameworks and through economic incentives.

Relevant proposals for action:

IPF: 29c, 40c, 40h, 40r, 70c, 77f

IFF: 56j, 64c, 64d, 64f, 64i, 74d, 115d

Policies on forest conservation

The IFF states that policies and programmes that affect forest conservation need to be coordinated, and that mechanisms for financing and encouraging forest conservation in a new way should be developed and implemented. Strategies for protection of the full range of forest values, for recognition of the multiple functions of forests and for planning and management of forests on an ecosystem basis should also developed and implemented by countries.

Relevant proposals for action:

IFF: 85b, 85f, 90

Role of the private sector

According to the proposals for action, the role of the private sector in producing forest products and services should be supported with a framework of policies, incentives and regulations. The private

sector should also be encouraged to formulate and implement voluntary codes of conduct for promoting sustainable forest management. Investments of financial resources, generated in forests, in actions that support sustainable forest management, and into the forest where those were generated, are other things that need to be encouraged in national legal frameworks.

Relevant proposals for action:

IPF: 69a, 69b, 69c, 128c

IFF: 30c, 122b

Certification

Voluntary certification and labelling schemes may be regarded as kind of a code of conduct. They can be important for promoting sustainable forest management, but the proposals for action identify the importance of working on enhancing comparability, transparency and non-discrimination of certification and labelling schemes. Countries should try to make sure that certification and labelling schemes are not used as a form of disguised protectionism or lead to unjustifiable obstacles to market access. The schemes should also work in accordance with national and international legislation and obligations.

Relevant proposals for action:

IPF: 133a, 133c, 133f

IFF: 41b

3.4.2 The Swedish situation

National forest programmes

Sweden uses the broader definition of the term “National Forest Programme”. The Swedish forest policy as a whole is considered and used as the National Forest Programme, well in line with the definition of term by the IPF.

The Swedish forest policy has two fundamental goals; one for the environment and one for the production (Skogsvårdsorganisationen URL). The goal for the environment contains various parts such as securing of biological and genetic diversity, protection of threatened species and nature types, and protection of cultural, esthetical and social values. The production goal contains parts, such as effective and responsible use of forests and forestland for a sustainably high yield, and an outline of production that gives freedom of action in the use of forest products. The environmental and the production goals are to be equally prioritized in forest management.

Sweden has developed a comprehensive policy framework for the achievement of sustainable forest management, with the Forestry Act, the Action Plan for Biological Diversity and Sustainable Forestry, the Swedish Environmental Quality Objective “Sustainable forests”, the Forest Sector Goals for the Environment and the Environmental Code as some essentials parts.

Policy formulation

Policy-making in Sweden is based on involvement of a large number of groups, and on much discussion and debate, that eventually leads to consensus (van Kooten et al, 1999; Ekelund & Liedholm, 2000). The “Swedish model” is an expression used for the process of cooperation and consultation between interested parties with the aim to reach consensus (Nilsson, 1995). The formal process for Swedish policy development includes several stages. The first stage after the raising of an issue is to decide on the terms of investigation and reference (Nilsson, 1995; Ekelund & Dahlin, 1997). There are several options for the form of the investigation. A Commission of Inquiry, consisting of a group of experts, a so-called “one man investigation”, or special investigations made by one or more central authorities are such options. The choice is depending on the size of the issue,

with a Commission of Inquiry for the more profound evaluations. The investigation is then carried out, a report produced and finally sent to a broad spectrum of interested parties, such as government agencies, organizations and NGOs, for consideration. Any individual may submit the view on the issue, since this is a process open to public inspection. After this process of consultation, with a thorough consideration of the report, the Government makes a decision on a Parliamentary Bill where the features of the policy are described. The policy is then further debated in the Chamber, sometimes including hearings of interested parties, and finally a parliamentary decision is made.

Concerning forest policy development Sweden has a long tradition and experience (Ekelund & Dahlin, 1997; Ekelund & Liedholm, 2000, Nilsson, 1995; van Kooten et al, 1999). Features such as, engagement and interest, participation of all concerned groups, consensus-building, continuous development and change, and high inventory levels as a basis for decisions characterize policy formulation in Sweden. The development of the forest policy is a constantly ongoing process, with more informal features (Ekelund & Dahlin, 1997; Ekelund & Liedholm, 2000). This flexibility is a major characteristic of the Swedish forest policy, and forestry institutions (van Kooten et al, 1999).

The government has commissioned the National Board of Forestry, to evaluate the forest policy on a regular basis. Such comprehensive evaluations will be made every fourth year, but the National Forestry Administration is also continuously carrying out follow-up and evaluation of the practical effects of the forest policy. The effects on biodiversity of the forest policy is evaluated in the project Effects on Biodiversity of the New Forest Policy – SMILE (National Board of Forestry, 1999).

There has been a change in the balance between the political instruments in the forest policy (Nilsson, 1995). Extension services are emphasized, at the expense of legislation and subsidies. The new Forestry Act is generally less restrictive than before, which gives the forest owners greater freedom, and responsibility, in their choices of actions. Whereas most of the basic requirements of the former Forestry Act have been retained, subsidies as a policy instrument have been reduced and are now only being used to promote the forest environment.

Capacity building is one of the major means for implementation of the forest policy. Extension services to, and training of, forest owners and other persons in the forestry sector are important fields for the National Forestry Administration (Skogsvårdsorganisationen URL). “Greener Forests” is a training and information campaign, carried out by the National Forest Administration, with the aim to build capacity among forest owners and others concerned with forestry on how to combine high economic production and yield with advanced environment benefits (Olsson, 1999). This is an essential part of the implementation of the new forest policy.

Land tenure

Land ownership in Sweden is clearly defined and protected within Swedish legislation. The majority of forestland in Sweden is privately owned. Forest enterprises own around 39% of the forestland, and around 350,000 individuals own around 51%.

The Sami are the indigenous people of Sweden. An important part of their culture is reindeer husbandry, which today is practised by 15% of the Swedish Sami population of about 17,000 (Ekelund & Liedholm, 2000). Sami people are the only ones allowed practising reindeer husbandry, on the basis of ancient rights. Reindeer husbandry is allowed on 40% of Sweden’s area, and it can be practised on both public and private land. This use is regulated in the Reindeer Husbandry Act. It is stipulated in the Forestry Act that the Sami village concerned shall be given the opportunity to participate in joint consultations before felling takes place in an area where reindeer husbandry is permitted throughout the entire year (Skogsvårdsorganisationen URL). This combined land use is

sometimes cause of conflicts between forest owners and Sami people. The consultations stipulated in the Forestry Act may not always work as desired.

The Swedish Right of Public Access allows people to move about freely on almost all land (Naturvårdsverket URL). The Right of Public Access, which has historically guaranteed access to forest land, defines certain public access rights, but also the obligations towards the environment and the landowner (van Kooten et al, 1999). It has been described as a culturally cooperative law, and is of great importance for recreation.

Policies on forest conservation

The Environmental Code came into force in 1999 and thereby replaced 16 laws, among others the Natural Resources Act, the Nature Conservancy Act and the Flora and Fauna (Measures Relating to Protected Species) Act. The Code constitutes a coordinated, broadened and tightened environmental legislation, and is a framework legislation with few details stated. Concerning forestry, regulations governing different types of instruments for protection of forest land, have been brought together in the Environmental Code and aims, together with regulations regarding species protection, to preserve biodiversity.

Role of the private sector

The private sector is by far the dominating forest owner in Sweden. 90 % of the forestland is owned by the private sector, out of which individuals or families own 51%, and forest enterprises 39%. These 51% of the forestland have around 350,000 owners. The public sector only owns 10% of the Swedish forested area. The private sector consequently plays a major role in the production of forest products and services, and has a major responsibility for fulfilling the environmental objectives of the forest policy (Nilsson, 1995).

The Forestry Act, and forest policy, concerns all forest owners and no distinction between forest owners of different categories are made. The two goals of the Forestry Act, one for production and one for the environment, are to be equally prioritized in forestry.

The Swedish Forestry Act demands reinvestment of forest revenues, for example through the demand for establishment of new forest stands by the forest owner after final felling (Skogsvårdsorganisationen URL). The two equally prioritized goals, for the production and the environment, of the Forestry Act requires investments in sustainable forest management activities by all forest owners.

Certification

The Swedish Forest Sector is a world-leader in the field of certification and labelling schemes. Around half the Swedish forestland has been certified according to the Forest Stewardship Council (FSC) standard, mostly owned by the larger forest enterprises (FSC Sverige URL). In addition to this the forest owners' associations, with around 90,000 members, are developing and implementing their own certification standards or certifying their members according to the PEFC standards (LRF Skogsägarna URL; PEFC Sverige URL).

The Swedish position is that certification should be market driven, and that the forest policy and forest certification are considered separate processes (Ekelund & Liedholm, 2000). This means that the government and authorities do not actively participate in the work on certification schemes. The certification schemes used in Swedish forestry all work in accordance with Swedish legislation, and certification is considered to be of importance for the implementation of the forest policy goals,

particularly the environmental goal (Skogsvårdsorganisationen URL). The National Board of Forestry follows up the development of forest certification in Swedish forestry.

The Swedish International Development Cooperation Agency (Sida) identifies “Development of policies and institutions” as one, out of three, prioritized fields in the forest-related assistance to developing countries and countries with economies in transition (Celander, 1999). Sida provides training in some fields where Sweden is considered to be competitive. Forest certification is one of these fields.

3.5 Forest management (Subject field 4)

3.5.1 Review of the IPF and IFF proposals for action

Many of the IPF and IFF proposals for action concern sustainable forest management and therefore have an impact on the forest management, at least at an overall level. Then, on the other hand, the proposals being global and not very detailed, few proposals contain requirements on the management of forests at an operational level. There are, however, some main outlines that are emphasized in the proposals for action.

Forest plantations

The proposals for action state that planted and natural forests have complementary roles in sustainable use of forest resources. Countries should recognize plantations as an important element of sustainable forest management. According to the proposals for action, planted forests should be used as a way to reduce the pressure on natural forests and environmentally critical areas, including those affected by desertification and drought, but also for establishing new forest resources and rehabilitating degraded lands.

Relevant proposals for action:

IPF: 28b

IFF: 64g

Multiple functions of forests

According to the proposals for action, it is important for countries to consider the multiple functions and uses of forests in sustainable forest management. The livelihood needs of communities should be considered, as should traditional forest-related knowledge. Traditional resource use systems that incorporate traditional forest-related knowledge should be supported, as well as the linkages between these systems and emerging sustainable forest management systems.

Relevant proposals for action:

IPF: 40h, 40i, 40l, 46e, 70c, 77f

IFF: 74a, 85b, 85c, 129d

Role of the private sector

The IPF and IFF states that the private sector should play an important role in producing forest products and services. The proposals for action call for a framework of relevant supporting policies, legislation and regulations. Countries should also encourage the private sector to act consistently with sustainable forest management, and to create and implement voluntary codes of conduct concerning the sustainable management of their forests. Reinvestments of revenues generated from forest goods and services into sustainable forest management and into the forests where they were generated are important fields in the proposals for action related to forest management. Reinvestments of this kind need to be encouraged within national legal frameworks.

Relevant proposals for action:

IPF: 69a, 69b, 69c, 128c

IFF: 122b

Environmentally sound technologies

Environmentally sound technologies are important for sustainable forest management, in the IPF and IFF proposals for action, especially for management of forests in environmentally critical areas. Countries need to promote the use of such technologies. In the context of environmentally sound technologies, corresponding know-how and extension services to end-users is essential according to the proposals for action.

Relevant proposals for action:

IPF: 77d

IFF: 56b, 56h, 56i

Public participation

The IPF and IFF are of the opinion that partnerships and participation of forest owners, indigenous and local people and communities are important parts of sustainable forest management. This, and the access to and use of forest resources, are matters to be considered by countries.

Relevant proposals for action:

IPF: 40g

IFF: 64b, 64d, 64e, 85b, 85c

Information on forest resources

Important parts of the work towards sustainable forest management, as stated in the IPF and IFF proposals for action, are research, policies, both in the forest sector and other sectors, incentives, economic and other, and capacity building. Countries should also prepare national information and reports on forest management. Assessments of the long-term supply of and demand for wood in the countries are also called for. Countries should meet increasing demand for wood through sustainable forest management.

Relevant proposals for action:

IPF: 28a

IFF: 17a, 17d, 41a, 41d, 41g, 96a, 115g, 122a, 122d, 122e

Forest conservation

The IFF considers that it is important that forest conservation and protection reflect the national circumstances. Countries should use both protected forest areas and other sustainable forest management activities outside protected forest areas in the field of forest conservation and protection. The planning and management of forests based on an ecosystem approach is an important sustainable forest management feature. Countries should include features such as participation of all interested and concerned parties, and stewardship of private forest owners or indigenous and local people in the management of protected forests.

Relevant proposals for action:

IFF: 85a, 85b, 85c, 85d

Wood energy

The IFF states that wood and non-wood by-products created by, among others, forest harvesting, should be given attention as energy sources and consequently need to be considered in the forest management and also in the use of technologies. Wood energy and related issues should be made a crucial part of the policy and planning exercises within the forestry sector.

Relevant proposals for action:

IFF: 14l, 122c

Criteria and indicators

Criteria and indicators for sustainable forest management should be prepared and implemented, according to the proposals for action. Criteria and indicators should be used by countries as a framework for promoting the best forest practices and for reviewing, monitoring and reporting on national trends in forest management.

Relevant proposals for action:

IPF: 17d, 89a, 115a, 115b

IFF: 17d

Assistance to developing countries

Both the IPF and IFF identify the need to assist developing countries and countries with economies in transition in the activities concerning sustainable forest management, and in some cases expansion of their forest cover. Donor countries are requested to increase the resources for this.

Relevant proposals for action:

IPF: 58d, 67a, 67b, 70e

IFF: 30a, 30b

Environmentally fragile areas

Environmentally fragile or critical areas, including those affected by deforestation and drought, and also problems related to deforestation and forest degradation, are to be particularly considered in sustainable forest management according to the proposals for action. Collaboration with local and indigenous people is important, and traditional lifestyles should be considered when managing and developing management approaches in areas affected by desertification and drought. Countries are urged, in the proposals for action, to develop strategies for addressing the underlying causes of deforestation and forest degradation, and to develop policies for national forest covers. This will affect the forest management at the national level.

Relevant proposals for action:

IPF: 29a, 46d, 46e

IFF: 129a, 129b, 129c

Lesser used species

A matter that directly affects the management of forests is the call by the IPF to promote the utilization of lesser-used forest species when consistent with sustainable forest management and economic viability.

Relevant proposals for action:

IPF: 132a, 132b

3.5.2 The Swedish situation

Planted forests

The share of natural forests in relation to planted forests has decreased drastically during the last century. Today, the absolute majority of the Swedish forests are intensively managed.

Around 90% of the Swedish harvested stands have been regenerated through planting or sowing before the new forest policy came into effect in 1994. Natural regeneration is a way for increasing biodiversity, and is increasingly employed in the Swedish forestry of today (van Kooten et al, 1999).

The Swedish model is to use a combination of protected areas and other sustainable forest management activities on all forestland (Ekelund & Liedholm, 2000). A large part of the Swedish protected forests are set aside voluntarily by forest owners, which is an important way for implementing the environmental goals of the Swedish forest policy.

Multiple functions of forests

Multiple-use forestry is increasingly emphasized in Swedish forestry. For example, in the Environmental Quality Objective "Sustainable forests" are multiple-use forestry identified as an important area (Naturvårdsverket URL). Multiple use is also one Subproject of SKA99, a project with the objective to analyse and map the possible use and development of the Swedish forests during the next 100 years (Skogsvårdsorganisationen URL). There are still efforts to be made in this field.

Role of the private sector

The private sector is by far the dominating forest owner in Sweden (Skogsvårdsorganisationen URL). 90 % of the forestland is owned by the private sector, of which 51% is owned by individuals or families, and 39% of forest enterprises. These 51% of the forestland has around 350,000 owners, out of which 1/3 are women. The public sector only owns 10% of the Swedish forested area. The private sector consequently plays a major role in the production of forest products and services, and has a major responsibility for fulfilling the environmental objectives of the forest policy (Nilsson, 1995).

The Swedish Forestry Act, and forest policy, concerns all forest owners and no distinction between forest owners of different categories are made. The two goals of the Forestry Act, one for production and one for the environment, are to be equally prioritized in forestry. The Forestry Act demands reinvestment of forest revenues, for example through the demand for establishment of new forest stands by the forest owner after final felling. The two equally prioritized goals, for the production and the environment, of the Forestry Act requires investments in sustainable forest management activities by all forest owners.

The Swedish forest sector is a world-leader in the field of certification and labelling schemes. Around half the productive forestland has been certified, mostly according to the Forest Stewardship Council (FSC) standard, but also through the Pan European Forest Certification (PEFC) (FSC Sverige URL; PEFC Sverige URL). The Swedish position is that certification should be market driven, which means that the government and authorities encourage, but do not actively participate in, the work on certification schemes (Ekelund & Liedholm, 2000).

Environmentally sound technology

Swedish forestry is highly mechanized and, as in many other fields of forestry, there has been a rapid development of the environmental aspects of the technologies used in forestry during the last decade. The mechanization of forestry, and the transporting of wood, has, of course, a larger impact on the environment than forestry without machines. The development of forest technologies during recent decades has decreased the environmental impact considerably. The use of environmentally sound technologies is largely market driven, through certification schemes and other voluntary codes of conduct. The use of environmentally sound technologies is a part of the equally prioritized goals, for the environment and the production, of the Swedish forest policy. Several of the 15 Swedish Environmental Objectives concern the use of environmentally sound technologies in forest management and wood processing, and the Environmental Code includes regulations in this matter.

Research on environmentally sound technologies is ongoing at, for example, the Forestry Research Institute of Sweden and the Swedish University of Agricultural Sciences (SkogForsk URL; Sveriges Lantbruksuniversitet URL).

Public participation

The Swedish model and tradition is to involve a large number of groups in the process of policy-making (Nilsson, 1995; Ekelund & Liedholm, 2000; van Kooten et al, 1999). Cooperation and consultation between interested parties is important, and aim to reach consensus in the issues discussed.

The participation and involvement of different interest groups, such as private forest owners, is well developed in Sweden. Involvement and participation of local people that are not forest owners, in forest management, is not particularly well developed, and further work could be put into this.

It is stipulated in the Forestry Act that the Sami village concerned shall be given the opportunity to participate in joint consultations before felling takes place in an area where reindeer husbandry is permitted throughout the entire year (Skogsvårdsorganisationen URL). This combined land use is sometimes the cause of conflicts between forest owners and Sami people.

Information on forest resources

The National Forest Inventory (NFI) has been undertaken since 1923, and is today carried out annually and covers the entire Swedish forest (Riksskogstaxeringen URL). The main purpose of the National Forest Inventory is to describe the state of and changes in forest resources in Sweden. However, there are numerous fields of application, and the NFI is an important resource, for example for environmental monitoring. Inventories of Swedish wetland forests and woodland key-habitats have been carried out through the national inventory of biological hot-spots, which was completed in 1998.

3.6 Specific groups of peoples (Subject field 5)

3.6.1 Review of the IPF and IFF proposals for action

Traditional forest-related knowledge

Almost every proposal for action naturally affects people, at least in an indirect way, but several of them directly concern certain groups of people. Indigenous people, women, local people, people who possess forest-related knowledge, forest owners, and forest-dependent people are such groups. They are often mentioned in the context of communities, for example local or indigenous.

Traditional forest-related knowledge is one of the big issues in the proposals for action related to specific groups of peoples. Countries are encouraged to protect and apply forest-related knowledge and to promote the fair and equitable sharing of its benefits among the people concerned. The IFF and IPF also encourage countries to make inventories of and store traditional forest-related knowledge and bring together experience of the traditional forest-related approaches that work in practice through collaboration with all interested parties, and to build local and indigenous capacity for this work. Policy and legislation frameworks for doing so should be developed by countries.

Relevant proposals for action:

IPF: 40b, 40c, 40e, 40g, 40h, 40j, 40r

IFF: 74b

Land tenure

Land tenure and ownership, the fair and equitable sharing of benefits from forests, and the rights for local and indigenous people are issues that both the IPF and IFF consider to be of importance and fields where actions need to be taken. Countries should develop policies and legislation with the aim to secure and define land tenure and ownership. They also need to recognize that it is a long-term and complex process to institutionalize land tenure and that interim measures therefore are called for. The proposals for action also call for policy and legislative formulation in the matter of fair and equitable sharing of all benefits from forests.

National forest programmes, or other relevant programmes, should be used by countries as a basis for involving indigenous and local communities, and women in the formulation and implementation of measures for protection of their rights and privileges.

Relevant proposals for action:

IPF: 29c, 40c

IFF: 56j, 64c, 66, 74b, 115d, 122d

Public participation

Participation by and involvement of communities, as well as consideration of the livelihood needs of communities, should be considered in all activities related to the planning and application of sustainable forest management, according to the proposals for action. Countries should promote the participation of local and indigenous communities through policies, legislation and incentives. Countries are also encouraged to enhance community financing of sustainable forest management and community-based processing and marketing of forest products, mainly in developing countries. The capacity building in communities with responsibilities in forest management is another issue considered to be important in the proposals for action related to specific groups of people.

Relevant proposals for action:

IPF: 29c, 70c, 77f, 131b

IFF: 64b, 64c, 64e, 64i, 64f, 85b, 85d

Equal opportunities for women

The IPF and IFF identify the need to undertake steps to ensure equal opportunities for women, and in particular indigenous and rural women, for example to become beneficiaries of environmentally sound technologies and related know-how and extension services. Outreach programmes targeted at women, concerning, among others, community development programmes and household use of wood, wood lots for fuel-wood and energy-efficient cooking, should also be strengthened.

Relevant proposals for action:

IFF: 56m, 56n, 56o

IPF: 66

The IPF states that it is of importance to cooperate with indigenous and local communities embodying traditional lifestyles in the sustainable management, with low pressure on these ecosystems, of areas affected by desertification and drought. This can provide important knowledge for the development of resource management that reduces the pressure on forests in these areas. Stronger linkages between traditional and emerging sustainable management systems should also be established through cooperation with communities.

Relevant proposals for action:

IPF: 40i, 46d, 46e

3.6.2 The Swedish situation

Traditional forest-related knowledge

Traditional forest-related knowledge is not a highly prioritized field in Sweden and Swedish forestry, corresponding to the importance it is given in the IPF and IFF reports. The Sami people, but also others concerned with forest, could possess this type of knowledge. Research in forest history may contribute to further insight in sustainable forest management practices. Further efforts in the field of traditional forest-related knowledge are desirable.

Some research in the field of traditional forest-related knowledge is being carried out in Sweden. Documentation of Swedish ethnobiology is an ongoing research project at the Swedish Biodiversity Centre, with the aim to collect information on the use of plants and animals in different epochs and cultures (Centrum för Biologisk Mångfald URL). At the Mid Sweden University a research programme on traditional knowledge of Sami people is ongoing (Mithögskolan URL). Research on forest history is carried out at the Swedish University of Agricultural Sciences (Sveriges Lantbruksuniversitet URL).

Land tenure

Land ownership in Sweden clearly defined and protected within Swedish legislation. The majority of forest land in Sweden is privately owned, by forest enterprises and by individuals or families. Around 350,000 individuals own 51% of the Swedish forest area.

Public participation

The Swedish model and tradition is to involve a large number of groups in the process of policy-making (Nilsson, 1995; van Kooten et al, 1999; Ekelund & Liedholm, 2000). Cooperation and consultation between interested parties is important, and aim to reach consensus in the issues discussed.

The participation and involvement of different interest groups, such as private forest owners, is well developed in Sweden, at least at a formal level and in larger issues, such as development of new forest policies. On a more practical level, further efforts can be made, and work is ongoing in this matter. For example, the consultations between forest owners and Sami people (stipulated in the Forestry Act) are sometimes considered to be non-constructive, and local people who are not forest owners have little influence on forest management planning.

The Sami people are the indigenous people of Sweden. An important part of their culture is reindeer husbandry, which today is practised by 15% of the Swedish Sami population of about 17,000 persons (Ekelund & Liedholm, 2000). Sami people are the only ones allowed practising reindeer husbandry, on the basis of ancient rights. Reindeer husbandry is allowed on 40% of Sweden's area, and it can be practised on both public and private land. This use is regulated in the Reindeer Husbandry Act. It is stipulated in the Forestry Act that the Sami village concerned shall be given the opportunity to participate in joint consultations before felling takes place in an area where reindeer husbandry is permitted throughout the entire year (Skogsvårdsorganisationen URL). This combined land use is sometimes the cause of conflicts between forest owners and the Sami people.

The Swedish Right of Public Access allows people to move about freely on almost all land (Naturvårdsverket URL). The Right of Public Access, which has historically guaranteed access to forest land, defines certain public access rights, but also the obligations towards the environment and the landowner (van Kooten et al, 1999). It has been described as a culturally cooperative law, and is of great importance for recreation.

In a country with about 23 million ha productive forest land, 56% of the land area, and a population of nearly 9 million, the forest plays a major role for many Swedes, for example as a place for recreation (van Kooten et al, 1999). The private sector is by far the dominating forest owner in Sweden (Skogsvårdsorganisationen URL).

3.7 Trade (Subject field 6)

3.7.1 Review of the IPF and IFF proposals for action

Trade and environment

The IPF and IFF point out that there can be a mutually supportive relationship between environment and trade and that such a relationship needs to be promoted and supported by, for example, policies, legislation and incentives. Countries should implement policies on trade and/or sustainable forest management, with the aim to achieve trade in products and services from sustainable managed forests. Countries are encouraged by the IPF to make sure that measures taken by countries that affect trade do not conflict with international obligations.

Development and implementation of policies to ensure that commercialization of forest goods and services contribute to improved management of forests, and fair and equitable distribution to the people providing them, are called for in the proposals for action. Countries should also recognize that appropriate prices of forest products and their substitutes could support sustainable forest management. Therefore they need to review policies that directly affect the prices of forest products and services.

Relevant proposals for action:

IPF: 128b

IFF: 41a, 122d, 122e

Illegal trade

In the proposals for action, illegal trade is identified as a field where countries need to take action. National-level actions to eliminate, or at least reduce, illegal trade in wood and non-wood forest products and services should be taken by countries, but international cooperation in this matter is also important. IPF and IFF call for assessments of the nature and the extent of illegal trade and that such information should be shared between countries.

Relevant proposals for action:

IPF: 135b

IFF: 41f

Market

There are several proposals for action, related to trade, that concern the market from different points of view. Long-term strategies for sustainable forest management are important when aiming to minimize the negative effects of short-term market changes, and countries are encouraged to develop such strategies. Market access is another important matter in the proposals for action and countries should take measures to improve market access for forest goods and services. Reduction of tariff and non-tariff barriers is an example of such measures.

Countries are encouraged to promote community-based marketing of forest products and services, especially in developing countries, and to facilitate market access for communities. Efforts to try to make sure that trade policies take community rights into account are also called for in the proposals for action.

Studies of market behaviour, and market and economic analyses of the implications of wood products and non-wood substitutes for sustainable forest management should be carried out according to the proposals for action.

Relevant proposals for action:

IPF: 128b, 128c, 131b, 134a, 135a

IFF: 41g, 64i, 122e

Trade and certification

There can be a mutually supportive relationship between sustainable forest management, trade and certification and labelling schemes. The proposals for action identify the importance of these schemes working in accordance with national legislation and not in conflict with international obligations. Countries should also try to ensure that the certification and labelling schemes are not used as a kind of disguised protectionism or lead to unjustifiable obstacles to market access.

Relevant proposals for action:

IPF: 133a

IFF: 41b

3.7.2 The Swedish situation

Trade and environment

The actors on the Swedish roundwood market include the wood consuming forest companies, the Forest Owners' Associations and a few private actors (Nilsson, 1995). The Timber Measuring Organizations (TMOs) are economic associations working with, and promoting, independent control of most of the wood sold on the Swedish timber market. These agencies are trusted by both sellers and buyers, and are important for the wood market. There are no barriers for Sweden's import and export of wood.

Illegal trade

Illegal trade in forest products and services is not a problem within Sweden today. Sweden has ratified the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) (CITES URL).

The Swedish forest policy aims for sustainable forest management and products from these forests should, consequently, be products from sustainably managed forests. Certification schemes are important in this matter.

Trade and certification

The Swedish forest sector is a world-leader in the field of certification and labelling schemes. Around half the Swedish forestland has been certified, mostly according to the Forest Stewardship Council (FSC) standard, but also through the Pan-European Forest Certification standard (FSC Sverige URL; PEFC Sverige URL). The Swedish position is that certification should be market driven, and the forest policy and forest certification are separate processes (Ekelund & Liedholm, 2000). This means that the government and authorities encourage, but do not actively participate, in the work on certification schemes.

The Swedish Forestry Act demands reinvestment of forest revenues, for example through the demand for establishment of new forest stands by the forest owner after final felling (Skogsvårdsorganisationen URL). The two equally prioritized goals, for the production and the

environment, of the Forestry Act require investments in sustainable forest management activities by all forest owners.

The work on full-cost internalization in Swedish forestry is still very much in an initial stage. Research in this field is ongoing at the Swedish University of Agricultural Sciences (Sveriges Lantbruksuniversitet URL). It is desirable that further efforts and development are made in this field.

3.8 International cooperation (Subject field 7)

3.8.1 Review of the IPF and IFF proposals for action

Coordination of international cooperation

For implementation of many of the proposals for action, international cooperation is important, or even necessary. The subject field “International cooperation” is about international cooperation that is not bilateral assistance to developing countries or countries with economies in transition. It is stated in the proposals for action that partnerships and coordination should not only take place between nations, but also with and between international organizations, instruments, institutions and major groups, and that the effectiveness of the international cooperation should be improved. Countries are encouraged to support the work of international and regional organizations and agencies on forest-related issues. According to the IPF, the mandates of such organizations and institutions should be clarified to improve integration and coordination of the efforts. Work to avoid duplication of efforts and to guide the activities to areas where they are most effective is also called for. Cooperation and coordination, between and within countries and organizations, of assistance to developing countries and countries with economies in transition, is essential to make the efforts more effective and efficient, as stated in the proposals for action.

Countries, and other concerned parties, are recommended to use national forest programmes as a basis for international cooperation on the management, conservation and sustainable development of forests.

Relevant proposals for action:

IPF: 17b, 17i, 67e, 58d, 71a, 146a, 146b, 146c

IFF: 9b, 19b, 129a

Cooperation on trade issues

Since trade can be, and often is, a transboundary phenomenon, this is an obvious field where international cooperation is needed. In the context of trade, IPF and IFF identify the work on enhancing market transparency and market access as important matters for international cooperation. Countries should also cooperate in developing an international database on trade in forest products and services.

Illegal trade and certification and labelling schemes are also issues where the proposals for action call for international cooperation. Actions at the international level should be taken to reduce or eliminate illegal trade, and work needs to be done on the comparability, transparency and non-discrimination of certification and labelling schemes.

Relevant proposals for action:

IPF: 135a, 135b

IFF: 41b, 41f

Fighting airborne pollution

Airborne pollution is another transboundary phenomenon where international cooperation is called for. The IPF calls for cooperation in building scientific knowledge on air pollution in relation to forest health. Monitoring the impact of air pollution on forest health is another important field for international cooperation pointed out in the proposals for action. Countries are also recommended to enter international agreements on the reduction of transboundary air pollution.

Relevant proposals for action:

IPF: 50b, 50c, 50e

Traditional forest-related knowledge

Traditional forest-related knowledge is another field where the IPF and IFF consider international cooperation to be of importance. The international understanding and protection of traditional forest-related knowledge and its role in the management, conservation and sustainable development of all forests should be promoted through different activities and in collaboration with people who possess such knowledge. Research is also needed and the proposals for action state that research on traditional forest-related knowledge should be promoted in regional institutions.

Relevant proposals for action:

IPF: 40a, 40b

IFF: 74c, 74d

Research

International cooperation in research should exist both through regional research centres, and through countries sharing their experiences and findings, according to the proposals for action. The capacity of regional research institutions should be enhanced or at least maintained and countries should examine the need to expand existing regional research centres and/or establish new ones.

Relevant proposals for action:

IPF: 50b, 94c, 134b

IFF: 97b, 115e

Deforestation and forest degradation

Deforestation and forest degradation and environmentally fragile or critical areas are major issues in the IPF and IFF processes, and fields where international cooperation is encouraged. International-level actions, and coordination of actions, related to forest conservation, environmentally critical areas, including those affected by desertification and drought, and deforestation and forest degradation are called for in the proposals. Efficient and coordinated programmes for international cooperation in these issues should be developed. The proposals for action also call for international cooperation in the studies of the underlying causes of deforestation and forest degradation.

Relevant proposals for action:

IPF: 27a, 27b, 46a, 46f

IFF: 129a, 129e

Criteria and indicators

Criteria and indicators is an obvious field for international cooperation according to the IPF proposals for action. Countries should participate in regional initiatives on criteria and indicators, and promote the use of the criteria and indicators that have been agreed at the international level. There is also a need for countries to make efforts to achieve a common understanding of the terminology related to criteria and indicators.

Relevant proposals for action:

IPF: 115b, 115c, 115d

3.8.2 The Swedish situation

Coordination of international cooperation

Nordic cooperation concerning forests and forestry is organized through the Nordic Council of Ministers (Proposition 1997/98:158). Issues of joint interest for the Nordic countries are discussed in a committee for agriculture and forestry. Issues addressed by certain working groups are, for example, coordination of the position of the Nordic countries in global forest-related issues, and regional issues, mostly concerning the Baltic countries. The Nordic Forest Research Cooperation Committee organizes cooperation in the field of research.

Cooperation within the donor community is also an important matter, and about one-third of the Swedish development cooperation is channelled via the Ministry for Foreign Affairs through different multilateral organizations (Sida URL).

Sweden is actively participating in global and regional negotiations concerning forests and forestry, and is supporting organizations such as the FAO.

Airborne pollution

Cooperation concerning forests and forestry within the European Union is ongoing, even though no common forest policy exists. An example of such cooperation is monitoring of the effects of airborne pollution on forest health and issues on biodiversity. The actions concerning forestry, taken in the EU, are handled within the agricultural or environmental policies.

Sweden participates in the programme ICP-Forest, and a corresponding programme within the European Union (Skogsvårdsorganisationen URL). ICP-Forest is an international cooperation programme, where producing common programmes and methods for assessments of the effects of air pollution on forest health is one of the main tasks. The National Board of Forestry is the Swedish focal centre in this matter.

Criteria and indicators

Sweden has participated in the work on criteria and indicators within the pan-European process and has signed the resolutions on criteria and indicators from the Ministerial Conferences on the Protection of Forests in Europe.

Six pan-European criteria and quantitative indicators form the basis for the European Union Life project "Demonstration of methods to monitor sustainable forestry" (Skogsvårdsorganisationen URL), in which Sweden is participating. The project is designed to review, demonstrate and develop methods to monitor sustainable forestry as defined by the Third Ministerial Conference on the Protection of Forests in Europe.

Sweden will continue to actively participate in ongoing international negotiations on sustainable forestry and work to maintain national forest policies and for a better coordination of issues concerning forestry within the EU. The Nordic cooperation in issues concerning forests and forestry is considered to be urgent.

3.9 Information, reporting, education, training, capacity building, research and analyses (Subject field 8)

3.9.1 Review of the IPF and IFF proposals for action

Collection and dissemination of forest information

There are several fields where the IPF and IFF consider it important to collect, provide and disseminate information. For example concerning the underlying causes of deforestation and forest degradation, on airborne pollution and its effect on forest health, on the multiple roles of forests, on traditional forest-related knowledge and environmentally critical areas. Countries are also encouraged to share and exchange the information retrieved and to assist the interpretation and dissemination of information to countries that have difficulties in accessing information. Making the information available and accessible is part of this work, as are reports on forests, sustainable forest management and the progress in the implementation of the proposals for action. To raise awareness and understanding in some matters, such as traditional forest-related knowledge, intellectual property rights, issues related to criteria and indicators, and the direct and indirect benefits derived from forests is also considered important by the IPF and IFF.

Inventories, assessment and valuation of forests are also considered important parts of sustainable forest management. Countries should carry out and strengthen research on, and develop their methodologies in, this field. It is pointed out in the proposals for action that the full range of forest values, also the important non-wood values, should be included in inventories and assessments, including traditional forest-related knowledge.

IPF and IFF call for assessment in several fields, for example assessments of the supply of, and demand for, wood, the technological requirements and capabilities, illegal trade and protected forest areas.

The fields of information, reporting, inventories and assessments should be prioritized in the assistance to developing countries according to the proposals for action.

Relevant proposals for action:

IPF: 17d, 17f, 27c, 28e, 30a, 40a, 40b, 40f, 40j, 40k, 40m, 40n, 50d, 58e, 77b, 77c, 78b, 89b, 89c, 104a, 115d, 133g, 135a, 135b

IFF: 9d, 9f, 17b, 17e, 19a, 19b, 56c, 74c, 88, 97c, 107a, 115a, 115c, 121a, 121b, 121c, 121d, 129a, 129d, 142a, 142c

Undertaking of analyses and studies

The proposals for action identify the need for conducting analyses and studies in different fields. Studies and analyses of market behaviour, financial flows and full-cost internalization are called for in the economic field. Further work on full life-cycle analyses of the environmental impacts of forest products and services and their substitutes, analyses of the implications of the use of by-products created by forest harvesting or wood processing and the collection of fuel-wood are studies needed in the environmental field according to the IFF.

Since deforestation and forest degradation is a major issue in the proposals for action in general, there is consequently a need for studies on the underlying causes of this on different levels and from different perspectives. Policies and their impacts also need to be studied and analysed, as well as the national forest programmes. Other fields where countries are encouraged to carry out studies and analyses are traditional forest-related knowledge, intellectual property rights systems, and the relationships between them.

*Relevant proposals for action:**IPF: 17d, 17f, 27a, 27b, 27c, 30b, 40p, 71b, 134a**IFF: 30d, 41c, 41d, 56l, 64a, 64h, 89, 122c, 122e, 122f**Strengthen forest research*

Countries are encouraged to strengthen forest research and the implementation of its results, particularly in sustainable forest management, and also to strengthen the links between research and implementation. New ways of mobilizing funding of forest research should be examined by countries and, for example, joint ventures between the public and private sectors should be fostered. Countries are encouraged to cooperate in the field of research. The need to expand existing or establishing new regional research institutions should be examined by countries according to the proposals for action. Forest research in developing countries should be supported, but it is also pointed out in the proposals for action that countries should ensure that research is undertaken with consent of the countries concerned.

On-site research is identified as important in the proposals for action related to research. Countries should enhance the prioritization and application of the results of such research. Research in forest valuation methodologies, forest inventory and monitoring techniques, traditional forest-related knowledge and environmentally sound technologies should be promoted.

*Relevant proposals for action:**IPF: 17e, 40k, 50b, 89c, 94c, 94d, 104c**IFF: 56h, 96a, 96b, 96c, 96d, 97a, 97b, 97d**Capacity building*

Capacity building is another field that is considered essential by the IPF and IFF. According to the proposals for action, capacity building should be a vital part of the assistance to developing countries and countries with economies in transition, and should be made an objective of the national forest programmes. Countries should build capacity, for example in the fields of traditional forest-related knowledge, participation, data gathering and analysis, and research. Capacity building in local and indigenous communities and people with responsibilities in forest management is considered to be of particular importance.

Training, education and extension is pointed out in the proposals for action as essential in the transfer and use of environmentally sound technologies.

*Relevant proposals for action:**IPF: 17g, 40g, 40j, 40k, 40l, 46d, 58e, 70e, 77e**IFF: 9g, 17a, 19b, 56i, 56d, 56f, 56h, 56m, 56n, 64e, 64i, 97b, 107d**Criteria and indicators*

According to the proposals for action, criteria and indicators should be used as a framework for promoting best forest practices and for facilitating sustainable forest management. National level criteria and indicators should be developed and implemented by countries based on those agreed at the international levels, and including recognition of traditional forest-related knowledge. The proposals for action identify clarification of the links between criteria and indicators at different levels to promote their compatibility as an important field for action. Countries are encouraged to participate in ongoing regional and international work on criteria and indicators. The criteria and indicators should be used as a basis for reviewing, monitoring and reporting trends in the state of the forests and the progress in the management, conservation and development of forests, and in forest assessments. They should also be used when developing, implementing, monitoring and evaluating national forest programmes.

Relevant proposals for action:

IPF: 17d, 40l, 89a, 115a, 115b, 115c, 115d

IFF: 17d, 19a, 85e

3.9.2 The Swedish situation

Collection and dissemination of forest information

Information on Swedish forest resources is obtained through the National Forest Inventory (NFI) that is carried out by the Department of Forest Resource Management and Geomatics at the Swedish University of Agricultural Sciences (Riksskogstaxeringen URL). The NFI has been undertaken since 1923, and is today carried out annually and covers the entire Swedish forest area. The main purpose of the National Forest Inventory is to describe the state of and changes in forest resources in Sweden. However, there are numerous fields of application, and the NFI is an important resource, for example for environmental monitoring.

The Swedish Survey of Forest Soils and Vegetation is carried out on the permanent plots of the National Forest Inventory (Ståndortskarteringen URL). Fundamental data on soils and on the vegetation of the forest floor is collected, and comprises an important part of the national environmental monitoring of forestland and vegetation.

Work is presently being done on developing new content and design of the National Forest Inventory and the Survey of Forest Soils and Vegetation, which will go through a big revision in 2003 (Riksskogstaxeringen URL).

Environmental monitoring is also carried out by the National Forest Administration on permanent observation plots throughout the country (Skogsvårdsorganisationen URL). Sweden participates in the programme ICP-Forest, an international cooperation programme where producing common programmes and methods for assessments of forest health and other measurements is one of the main tasks.

Research on environmental monitoring, forestry remote sensing, forest inventory, monitoring of non-timber forest resources, landscape monitoring, monitoring of forest ecosystems and inventory methods is ongoing at the Swedish University of Agricultural Sciences (Sveriges Lantbruksuniversitet URL).

The Swedish Statistical Yearbook of Forestry, annually published by the National Board of Forestry, covers most of the forest statistics available and its main purpose is to give a clear and easily accessible account of the existing statistics of importance (Skogsvårdsorganisationen URL).

Reports of the Swedish situation, ways of working and experiences are published by, for example, the National Board of Forestry. The Nordic countries have cooperated within the Nordic Council of Ministers when reporting on sustainable forestry in the Nordic countries (Woxholtt, 1997).

One of the important fields of work for the National Forestry Administration is information to the forestry sector, media, schools and the public (Skogsvårdsorganisationen URL).

Undertaking studies and analyses

The objective of the project SKA99, completed in 2000, was to analyse and map the possible use and development of the Swedish forests during the next 100 years (Skogsvårdsorganisationen URL). The calculations and analyses were based on a number of scenarios that differ with respect to

forest management, environmental considerations and logging activities. Mapping the current state and trends in forestry, Forest fuels, Carbon and nutrient balances, and Environment and multiple use are examples of Subprojects in SKA99. The project was initiated by the National Board of Forestry and carried out in cooperation with the Swedish Environmental Protection Agency, the Swedish National Energy Administration, the Swedish National Board for Industrial and Technical Development and the Swedish University of Agricultural Sciences.

The Swedish International Development Cooperation Agency (Sida), during several years, supported different activities concerning the inadequate knowledge of forest resources in different countries (Celander, 1999). The support concerns methods for forest inventories, forest production and capacity for analyses and information. Sida has cooperated with the Food and Agriculture Organization of the United Nations (FAO) on the Global Forest Resource Assessment during a long period of time.

The National Board of Forestry has undertaken consultancy work, for example in the field of inventories and surveys (Skogsvårdsorganisationen URL). Recent projects are for example Forest Resources Assessment in Armenia and Inventories of Key Habitats in Latvia.

Strengthening of forest research

Research and development is highly prioritized in Sweden, and Sweden is among the countries in the world that invest the most in research, in relation to the GNP (Utbildningsdepartementet URL). The majority of the government-financed research is conducted at the Swedish universities. Environment and sustainable development are prioritized fields of Swedish research.

Important actors in the field of forest and forestry research in Sweden are, for example, the Swedish University of Agricultural Sciences, the Swedish Council for Forestry and Agricultural Research (SJFR), which is a governmental organization under the Swedish Ministry of Agriculture, and the Forestry Research Institute of Sweden, which is financed both by the government and the private forest sector.

Collaboration and coordination of forest research between the Nordic countries is carried out by the Nordic Forest Research Cooperation Committee (SNS), which is financed by the Nordic Council of Ministers (SamNordisk Forskning URL).

The Swedish International Development Cooperation Agency (Sida) supports research in developing countries by providing support to improve capacity of the countries in this matter, and to research that can contribute to the solution of important development problems (Sida URL). Support to research related to natural forests and the management of forests in areas affected by desertification and drought, is prioritized by Sida (Celander, 1999). Sida also supports research networks, such as Regional Programme in Eastern Africa: Training and Research for Sustainable Livelihoods and international research institutions, such as the International Council for Research in Agroforestry (ICRAF) and the Centre for International Forestry Research (CIFOR).

Capacity building

Since the Swedish forest policy gives the forest owners a great amount of freedom in forest management, other means than legislation is needed to implement the policy (Ekelund & Liedholm, 2000). Extension services to, and training of, forest owners and other persons in the forestry sector are important fields for the National Forestry Administration (Skogsvårdsorganisationen URL).

Other similar campaigns have been carried out before the now ongoing “Greener Forests”, for example “A Richer Forest”, with the aim to establish an environmental approach to forest management amongst forest owners and other interested parties (Nilsson, 1995).

“Greener Forests” is a training and information campaign, carried out by the National Forestry Administration, with the aim to build capacity among forest owners and others concerned with forestry on how to combine high economic production and yield with advanced environment benefits (Olsson, 1999). The aim is to reach about 100,000 participants. Additionally special efforts will be made for the public and schools. Courses with only women as participants are also offered. “Greener Forests” is an important mean for implementing the Swedish forest policy.

The Swedish International Development Cooperation Agency (Sida) has identified capacity building as one of three prioritized field in forest-related assistance to developing countries and countries with economies in transition (Celander, 1999). Education, training, research and support to institutions in this field are important areas related to capacity building. An example of such assistance is the support and development of Forestry education in Ethiopia, which started in 1977 and is still ongoing, and education of counsellors in the Latvian forest authority.

Criteria and indicators

Sweden has participated in the work on criteria and indicators within the pan-European process and has signed the resolutions on criteria and indicators from the Ministerial Conferences on the Protection of Forests in Europe.

Six pan-European criteria and quantitative indicators form the basis for the European Union Life project “Demonstration of methods to monitor sustainable forestry” (Skogsvårdsorganisationen URL), in which Sweden is participating. The project is designed to review, demonstrate and develop methods to monitor sustainable forestry as defined by the Third Ministerial Conference on the Protection of Forests in Europe.

Fifteen objectives for environmental quality have been established by the Swedish Parliament to describe the qualities of the environment and natural and cultural resources for ecological sustainability (Naturvårdsverket URL). The Environmental Quality Objective, concerning the forest sector, is “Sustainable Forests”. Indicators for the follow-up of the Environmental Quality Objectives are now being developed.

The Criteria for Environmental Quality Assessments constitute a system of classification, which facilitates the interpretation of environmental data (Naturvårdsverket URL). One of these Environmental Quality Criteria is “Forest Landscapes”, which includes, among others, old-growth forest, broad-leaved forest and dead wood.

4. Discussion

4.1 The methodology used

The classification of the proposals for action into four categories has proved to be valuable. The definitions are clear, and assessing which proposals for action that are relevant is probably an adequate first step of the implementation for any country. A large part of the proposals for action are to be implemented outside of Sweden's borders.

The eight subject fields are not at the same "level". Some are more specific, for example that of Trade, when compared with, for example, that of Legislation, policies, strategies and voluntary codes of conduct. This has resulted in that more proposals for action have been classified into wider subject fields than into more specific ones. This in turn means that subject fields such as Trade may be larger issues than expressed in the number of proposals for action per subject field. There are also some fields, again the field of Trade is a good example, that have been very difficult in the negotiations between countries and have therefore resulted in fewer proposals for action where consensus has been reached. In spite of these difficulties the subject fields serve a purpose in identifying areas of concern for different authorities, organizations, etc.

The condensation of the Category A and B proposals for action could have been made more incisive and simplified. This could further facilitate the understanding. On the other hand, there is a risk involved when making the proposals too straightforward and simple. The content of the proposals for action is not very concrete and simple, and changing the text too much from the original, where each word has been the subject of negotiations, might lead to a change of the original intention.

It is also of importance to make use of the same terminology as that used in the proposals for action. This can be a problem when translating the proposals for action into Swedish, since the exact nuance of words can not be translated. The benefits of translating the proposals are probably larger than the small, possible changes in the meaning of the proposals. The use of a national interpretation and strategy for the implementation of the proposals, instead of letting the organizations and persons concerned with the implementation interpret the proposals on their own, can be recommended.

4.2 Contents of the IPF/IFF Proposals of Action

The IPF and IFF proposals for action cover a wide range of issues, related to forests and forestry. They are sometimes, as a consequence of tough negotiations, very vague and difficult to understand, and the actual content is a question of interpretation. The frequent use of words like "where applicable", "if necessary" and "as appropriate" makes it possible for the countries implementing the proposals for action to choose not to implement a particular proposal.

It is sometimes difficult to put the proposals for action into a Swedish context. But it is, though, important to consider them carefully and not immediately dismiss them as not applicable to the Swedish situation.

The contents, and even the existence, of the IPF/IFF proposals for action are today relatively unknown in Swedish forestry. Knowledge of the proposals for action must be a vital part of facilitating and promoting the implementation of the proposals for action. Further work on

disseminating information on the content of the proposals for action should be done in the near future. A translation into Swedish may be a valuable part of this work.

The identification of areas where further efforts can be recommended is an important step, as well as the assessment of the situation in general in relation to the proposals for action. But this study is only the first step and now is the time to start working on the implementation of the proposals for action. Following-up, and reporting, the progress is important throughout the whole process.

The National Board of Forestry is the focal point for the implementation of the proposals for action.

4.3 The Swedish situation in relation to the Proposals for Action

The Swedish situation, and way of working, corresponds to a large part of the requirements of the proposals for action. There are several fields where Sweden fulfils, or even is ahead of, the requirements of the proposals, but also some fields where further action is needed.

Fields where Sweden needs to take further action to implement the proposals for action include traditional forest-related knowledge, criteria and indicators, transfer of environmentally sound technologies to developing countries and countries with economies in transition, inventories of non-wood values of forests, and full-cost internalization. Fields where Sweden is well ahead include capacity building, policy-formulation, forest inventories and certification.

Traditional forest-related knowledge is a large issue in the proposals for action. Further efforts to put these proposals for action into a Swedish context are needed, as well as collection, storing and protection of such knowledge.

Inventories of non-wood values are another field where further actions can be recommended. Sweden has a long experience and tradition of forest inventories and carries out an annual national forest inventory, which covers all forestland. Collected information on non-wood values has increased in recent years, but can be further developed. The Swedish forests are used for multiple purposes and development of methods for planning of forest management in areas where production of timber is not, or should not be, the only objective, is therefore important. Concerning biological and cultural values, methods for forest management planning which include preservation of biodiversity, as well as preservation of cultural values in forests, has developed drastically during recent years. Concerning consideration to social values, such as recreational values, in forest management, methods have been developed to a certain extent, and such methods are also practised in some urban areas, but this field needs to be further developed. The large amount of private forest owners in Sweden makes such planning a more delicate issue than it would be if the public sector were a larger forest owner.

Sweden has participated in initiatives concerning criteria and indicators for sustainable forest management, and has also developed some criteria and indicators, for example the Environmental Quality Objectives, but still further efforts can be recommended. It might be valuable to point out the use of criteria and indicators more clearly. To use them in fields such as inventories and evaluations of policies, and to use them more actively, can also be recommended. Of course, it is important to use the criteria and indicators as means for promoting sustainable forest management, and not as an end in itself.

The objectives and prioritized fields of the Swedish forest-related assistance are well in line with fields identified as important by the IPF and IFF. However, the resources for forest-related assistance to developing countries and countries with economies in transition have not increased in pace with the total resources for development assistance. The transfer of technologies is emphasized in the proposals for action, but is not prioritized in the Swedish assistance. Capacity building within the countries is instead emphasized. Investments and transfer of technology, by the Swedish private forest sector are ongoing in the countries with economies in transition in the Baltic region. The Swedish government also encourages this. Still, this field could be given further consideration to respond to the requirements in the proposals for action in this important issue.

Sweden is a country with large experience and competence in the fields of forests and forestry, and this field could therefore be more emphasized in Swedish assistance to developing countries and countries with economies in transition. Then again, the assistance is decided after analysis of the situation in the country concerned and discussions with the authorities, and it is not to be decided by the donor country.

Full-cost internalization is a field that is in its initial stage in Sweden, and further work is recommendable. Research is ongoing, and should continue, but strategies for implementing the findings of research should now be created.

Participation and involvement of interested parties is currently being discussed and examined in Sweden. Participation is working well in a more formal perspective, for example when developing new forest policies, where consensus-building between all interested parties is an essential feature. On a more practical level, further efforts can be made, for example concerning consultations between forest owners and Sami people (stipulated in the Forestry Act). This issue is also currently being examined in Sweden. Concerning local peoples' influence on forest management decisions in their neighbourhood, this has been the subject of some pilot projects but is an important issue that should be further explored.

5. References

5.1 Literature

Celander, T. (Editor), 1999. Positions papper – Hållbart skogsbruk. Sammanfattning av Sidas erfarenheter inom skogssektorn. Styrelsen för internationellt utvecklingsarbete (Sida). Avdelningen för naturresurser och miljö. Stockholm.

Ekelund, H. & Dahlin, C-G. 1997. The Swedish case. Development of the Swedish Forests and Forest policy during the last 100 years. National Board of Forestry. Jönköping.

Ekelund, H. & Liedholm, H. 2000. Skog och skogsbruk i Sverige – en modell för hållbarhet. Skogsstyrelsen. Jönköping.

van Kooten, G.C., Wilson, B. and Vertinsky, I. (Editors), 1999. Chapter 7: Sweden. In Forest Policy – International Case Studies. CABI Publishing. New York.

National Board of Forestry, 1999. Survey. On projects related to the implementation of the Work-Programme on the Conservation and Enhancement of Biological and Landscape Diversity in Forest Ecosystems 1997-2000. Jönköping.

Nilsson, N. E. 1995. Management, conservation and sustainable development of forests. The case of Sweden. National Board of Forestry. Jönköping.

Nordanstig, G. 1999. The IPF/IFF and after – the possible outcome of the international forest policy dialogue. Currents No. 19/20 September 1999, pp. 64-67. Swedish University of Agricultural Sciences. Uppsala.

Olsson, A. 1999. “Greener Forests” – part of a success story. A short presentation of the Swedish project “Greener Forests”. National Board of Forestry. Jönköping.

Palo, M. & Uusivuori, J. (Editors), 1999. World Forests Volume I – World Forests, society and environment. Kluwer Academic Publishers. Finland.

Practitioner’s Guide to the Implementation of the IPF Proposals for Action. Prepared by the Six-Country Initiative in Support of the UN Ad-Hoc Intergovernmental Forum on Forests (IFF). Second Revised Edition. 1999.

Regeringens proposition 1997/98:158. Uppföljning av skogspolitiken. Regeringskansliet. Stockholm.

Report of the Ad Hoc Intergovernmental Panel on Forests on its fourth session, 1997. E/CN.17/1997/12. United Nations Economic and Social Council. New York.

Report of the Intergovernmental Forum on Forests on its fourth session, 2000. E/CN.17/2000/14. United Nations Economic and Social Council. New York.

Woxholt, S. (Editor), 1997. Sustainable Forestry in the Nordic Countries. Tema Nord 1997:581. The Nordic Council of Ministers. Ås, Norway.

5.2 Internet

Artdatabanken URL

<http://www.dha.slu.se/>, 11/13/00

Centrum för Biologisk Mångfald URL

Research

<http://www.cbm.slu.se/forskeng.htm>, 10/10/2000

CITES URL

<http://www.wcmc.org.uk/CITES/eng/index.shtml>, 10/10/2000

FSC Sverige URL

Statistics

<http://www.fsc-sverige.org/gron/statistik.cfm>, 11/12/2000

LRF Skogsägarna URL

<http://www.skogsagarna.se/html/skogsagarr.htm>, 11/12/2000

Mitthögskolan URL

TFRK

http://www.mh.se/forskning/forskningsorigo/aldre_samers_kunskap.html, 11/13/2000

Naturvårdsverket URL

Area protection

<http://www.internat.environ.se/index.php3>, 11/12/2000

Environmental Quality Criteria

<http://www.internat.environ.se/index.php3>, 11/13/2000

Environmental Quality Objectives

<http://www.internat.environ.se/index.php3>, 11/13/2000

Näringsdepartementet URL

Wood energy

<http://naring.regeringen.se/fragor/energi/omstallning/index.htm>, 11/11/2000

PEFC Sverige

<http://www.pefc.se/index2.htm>

Riksskogstaxeringen URL

<http://www-riksskogstaxeringen.slu.se>, 11/11/2000

<http://www-nfi.slu.se>, 11/11/2000

http://www-umea.slu.se/miljodata/diskforum/DF_RTsk.htm, 11/12/2000

SamNordisk Skogsforskning (SNS) URL

<http://www.sjfr.se/sns/welcome.htm>, 09/15/2000

Sida URL

About Sida

<http://www.sida.se/Sida/jsp/Crosslink.jsp/d,160/a,4123>, 11/13/2000

Research

<http://www.sida.se/Sida/jsp/Crosslink.jsp/d,396>, 11/12/2000

SkogForsk URL

<http://eng.skogforsk.se/>, 09/15/2000

Skogs- och jordbrukets forskningsråd (SJFR) URL

About SJFR

<http://www.sjfr.se/english/about-sjfr.htm>, 09/15/2000

Skogsvårdsorganisationen URL

Certification

<http://www.svo.se/mal/sus/utvsamm.htm>, 11/12/2000

Environmental monitoring

<http://www.svo.se/halsa/skogvak.htm>, 11/11/2000

Evaluation of the forest policy

<http://www.svo.se/mal/sus/utvsamm.htm>, 11/14/2000

Forested land

<http://www.svo.se/fakta/stat/default.htm>, 11/09/2000

International contractual services

<http://www.svo.se/eng/contract.htm>, 11/11/2000

Land ownership

<http://www.svo.se/fakta/stat/2struktur/2diagram.htm>, 11/10/2000

EU Life project

<http://www.svo.se/eng/life/default.htm>, 11/13/2000

SKA99

<http://www.svo.se/ska99/newpage21.htm>, 11/11/2000

SKA99 - Forest fuels

<http://www.svo.se/ska99/newpage4.htm>, 11/12/2000

Statistical Yearbook

<http://www.svo.se/fakta/stat/ska2/>, 10/10/2000

The Forestry Act

<http://www.svo.se/eng/englaw.htm>, 11/07/2000

The Forestry Administration

<http://www.svo.se/eng/about.htm>, 11/11/2000

Wetland forests

<http://192.165.43.9/>, 11/10/2000

Wood fuel

<http://www.svo.se/lag/985.htm>, 11/11/2000

Statens energimyndighet (STEM) URL

<http://www.stem.se>, 11/11/2000

Ståndortskarteringen URL

<http://www.sml.slu.se/sk>, 11/11/2000

Sveriges Lantbruksuniversitet URL

Research

<http://www.slu.se/forskning/amne/skogtra/index.html>, 11/12/2000

Wood energy

<http://www.slu.se/forskning/amne/bioenergi/energifranskog.html>, 11/12/2000

United Nations URL

Desertification and drought

<http://www.un.org/esa/agenda21/natlinfo/countr/sweden/natur.htm#desert>, 11/09/2000

IPF/IFF processes

<http://www.un.org/esa/sustdev/aboutiff.htm>, 06/28/2000

UNFF

<http://www.un.org/News/Press/docs/2000/2001018.ecosoc5934.d0c.htm>

Utbildningsdepartementet URL

Research

<http://utbildning.regeringen.se/ansvarsomr/forskning/index.htm>, 11/15/2000

Utrikesdepartementet URL

The Baltic region

<http://utrikes.regeringen.se/fragor/ostersjomiljard/index.htm>, 11/20/2000

Appendix I.

Condensed proposals for action, in Categories A and B, of the Intergovernmental Panel on Forests, with examples of corresponding measures taken by Sweden and the classification in categories and subject fields. Categories and Subject fields are defined in section 2.3.

I. Implementation of forest-related decisions of the United Nations Conference on Environment and Development at the national and international levels, including an examination of sectoral and cross-sectoral linkages.

I.A Progress through national forest and land-use programmes

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
17a	A	1, 3, 4	<ul style="list-style-type: none"> ▪ Develop, implement, monitor and evaluate national forest programme, which includes a wide range of approaches for sustainable forest management. 	<ul style="list-style-type: none"> ▪ The Swedish forest policy, which went through major changes in 1993, corresponds to the national forest programmes referred to in the IPF proposals for action. The Swedish forest policy was evaluated in 1998, four years after the new forest policy with its two equally prioritized goals for production and environment came into effect. The forest policy will be evaluated every fourth year. ▪ The Swedish National Board of Forestry and the Swedish Environmental Protection Agency continuously evaluate the effects of the new forest policy on biodiversity through the Smile-project - Environmental Effects of Forestry. ▪ The information and extension campaign “Greener Forests” is one important way of implementing the new forest policy through training and extension. ▪ “Forestry of the Future” is a system study describing

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
				<p>ways to achieve an environmentally adapted forestry carried out by the Swedish Environmental Protection Agency as a part of a future-study of a sustainable Sweden by the year 2021.</p> <ul style="list-style-type: none"> ▪ The Action Plan for Biological Diversity and Sustainable Forestry, elaborated in 1995, proposes measures to be taken for the preservation and sustainable use of forest resources and for the development of forestry practices based on ecological principles. ▪ The National Forest Inventory is carried out annually and covering the entire forest area of Sweden describes the state of and changes in forest resources in Sweden.
17b	A, B	1, 3, 4, 7	<ul style="list-style-type: none"> ▪ Use national forest programmes as a basis for improved international cooperation on the management, conservation and sustainable development of all types of forests. 	
17c	B	2, 7	<ul style="list-style-type: none"> ▪ Cooperate internationally in the provision of official development assistance (ODA), and possible new and additional funding for the development, implementation, monitoring and evaluation of national forest programmes. 	<ul style="list-style-type: none"> ▪ About one-third of the resources for the Swedish development cooperation is channelled via the Ministry for Foreign Affairs through different multilateral organizations, which contributes to further cooperation within the donor community.
17d	A	1, 3, 4, 8	<ul style="list-style-type: none"> ▪ Integrate criteria and indicators for sustainable forest management into the overall process of the formulation, implementation, monitoring and evaluation of the 	<ul style="list-style-type: none"> ▪ The Swedish Environmental Protection Agency has developed Environmental Quality Criteria for, among others, Forest Landscapes.

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
			national forest programme.	<ul style="list-style-type: none"> ▪ Indicators for the evaluation of the national environmental work have been developed, of which one concerns protection of forests. In addition to that, further work is being done on developing a system with indicators for follow-up of the Environmental Quality Objectives.
17e	A	3, 8	<ul style="list-style-type: none"> ▪ Develop, test and implement mechanisms for integrating multidisciplinary research in into all stages of the planning cycle. 	<ul style="list-style-type: none"> ▪ The objective of the ongoing research programme Heureka, at the Swedish University of Agricultural Sciences, is to develop a system that can be used as means of finding effective and sustainable ways for managing forests. The research is to be multidisciplinary and the system to be used as a basis for decision-making in forestry. ▪ The Swedish Foundation for Strategic Environmental Research, MISTRA, supports strategic environmental research in the form of a number of inter- and multidisciplinary programmes. The research supported shall be of importance for finding solutions to important environmental problems and for a sustainable development of society. ▪ Swecol, the Swedish Centre for Ecological Sustainability, is an authority under the Ministry of the Environment with the main objective to promote the linkage between scientists, industry, districts and authorities in Sweden, which was launched in 1999.
17f	A	3, 5, 8	<ul style="list-style-type: none"> ▪ Elaborate systems for planning, implementing, 	<ul style="list-style-type: none"> ▪ The process of cooperation and consultation between

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
			<p>monitoring and evaluating national forest programmes that identify and involve all interested parties.</p>	<p>interested parties with the aim to reach consensus is used in policy formulation in Sweden, and is referred to as the “Swedish model”.</p> <ul style="list-style-type: none"> ▪ Extension services and information to forest owners and others concerned with forestry are important fields for the Swedish Forestry Administration, and important means for the implementation of the forest policy where the forest owners have considerable responsibility.
17g	A	3, 8	<ul style="list-style-type: none"> ▪ Make capacity-building an objective of national forest programmes. 	<ul style="list-style-type: none"> ▪ The need for training, information, education and research is identified in the Swedish forest policy, and extension services and information to forest owners and others concerned with forestry are important fields for the Swedish Forestry Administration, and important means for the implementation of the forest policy where the forest owners are given considerable responsibility. ▪ The extension and information campaign “Greener Forests” is one of the important means for implementing the new Swedish forest policy, and aims to build capacity among forest owners and others concerned with forestry. ▪ In addition to this and other campaigns run by the National Board of Forestry, the Forest Owners Association offers similar capacity-building campaigns.
17h	A	3, 5	<ul style="list-style-type: none"> ▪ Establish coordination mechanisms or strategies among all interested parties to promote the implementation of the national forest programme. 	<ul style="list-style-type: none"> ▪ The extension and information campaign “Greener Forests” is an important part of the implementation of the Swedish forest policy, which corresponds to a national

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
				<p>forest programme, and involves forest owners and others concerned with forestry. The campaign is carried out in close cooperation with many partners, including the forest industry, forest owners associations and NGOs. Additionally, special efforts will be made for the public and schools.</p> <ul style="list-style-type: none"> ▪ The process of consultation and consensus-building in the Swedish forest policy formulation facilitates the implementation of the policies.
17i	A, B	3, 7	<ul style="list-style-type: none"> ▪ Develop the concept and practice of partnership at the national level and above in the implementation of national forest programmes. 	<ul style="list-style-type: none"> ▪ The extension and information campaign “Greener Forests” is an important part of the implementation of the Swedish forest policy, which corresponds to a national forest programme, and involves forest owners and others concerned with forestry. The campaign is carried out in close cooperation with many partners, including the forest industry, forest owners associations and NGOs. Additionally special efforts will be made for the public and schools. ▪ The process of cooperation and consultation between interested parties with the aim to reach consensus is used in the process of policy formulation and evaluation in Sweden, and is referred to as the “Swedish model”.

I.B Underlying causes of deforestation and forest degradation

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
27a	A, B	1, 4, 7, 8	<ul style="list-style-type: none"> ▪ Prepare in-depth studies of the underlying causes of deforestation and forest degradation at the national and international levels. 	<ul style="list-style-type: none"> ▪ The Swedish standing volume has increased by more than 1000 million m³ since the 1920s, the increment has also increased during the last centuries and the forest area has been on the same level since the 1930s (before that there had been an increase of the forested land). This shows that deforestation is not a problem in Sweden, a country with more than half of its land covered with productive forests (23 million ha). ▪ Research on forest management and biodiversity is ongoing at, among others, the Swedish University of Agricultural Sciences and the Forestry Research Institute of Sweden. ▪ Environmental monitoring, e.g. of the effect of airborne pollution on forest health is performed by, among others, the Swedish Forestry Administration and the Swedish University of Agricultural Sciences.
27b	A, B	1, 4, 7, 8	<ul style="list-style-type: none"> ▪ Analyse the historical underlying causes of deforestation and forest degradation in the world. ▪ Analyse international underlying causes of deforestation, including transboundary economic forces. 	<ul style="list-style-type: none"> ▪ Sweden has had problems with deforestation historically, but today it is no longer a problem. Research on forest history is ongoing at, among others, the Swedish University of Agricultural Sciences and experiences from such research can be of interest to other countries.
27c	A, B	1, 8	<ul style="list-style-type: none"> ▪ Provide new factual information on the significance of 	<ul style="list-style-type: none"> ▪ The National Forest Inventory includes an annual

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
			transboundary pollution to deforestation and forest degradation.	<p>inventory on the effects of airborne pollution on the health of the forest.</p> <ul style="list-style-type: none"> ▪ The Swedish Forestry Administration is monitoring the effects of airborne pollution on permanent observation plots. ▪ One of the goals of the ASTA-programme - International and National Abatement Strategies for Transboundary Air Pollution is to produce scientific material of importance for international abatement strategies of trans-boundary air-pollution. ▪ In the programme ICP-Forest the outlines of the monitoring of the effect of airborne pollution on forest health is determined. The European Union has introduced binding rules for the members to carry out monitoring of forest health according to ICP-Forest.
28a	A	4, 8	<ul style="list-style-type: none"> ▪ Assess long-time trends in the Swedish supply and demand for wood. ▪ Consider actions to promote the sustainability of the Swedish supply of wood and the means for meeting demand. ▪ Strengthen the institutions for forest resource and forest plantations management. 	<ul style="list-style-type: none"> ▪ The objective of the project SKA99 is to analyse and map the possible use and development of the Swedish forests during the next 100 years and contains an assessment of long-term trends in the Swedish supply of wood. ▪ One of the two equally prioritized goals of the Swedish forest policy, the production goal, is to promote the sustainable supply of wood.
28b	A	1, 4	<ul style="list-style-type: none"> ▪ Recognize and enhance the role of forest plantations as an important element of sustainable forest management. 	<ul style="list-style-type: none"> ▪ The Swedish model is to use a combination of protected areas and other sustainable forest management activities on all forestland, which today is completely dominated

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
				by planted forests.
28c	B	1, 4, 7	<ul style="list-style-type: none"> ▪ Support the convening of an international workshop on the underlying causes of deforestation and forest degradation. 	<ul style="list-style-type: none"> ▪ The Swedish International Development Cooperation Agency supported the Global Workshop on Addressing the Underlying Causes of Deforestation and Forest Degradation in Costa Rica in 1999.
29a	A	1, 3, 4	<ul style="list-style-type: none"> ▪ Formulate and implement Swedish strategies for addressing the underlying causes of deforestation and forest degradation. ▪ Define policy goals for Sweden's forest cover. 	<ul style="list-style-type: none"> ▪ The Swedish standing volume has increased by more than 1000 million m³ since the 1920s, the increment has also increased during the last centuries and the forest area has been on the same level since the 1930s (before that there had been an increase of the forested land). This shows that deforestation is not a problem in Sweden, a country with more than half of its land covered with productive forests (23 million ha). ▪ According to the Forestry Act notification of final fellings must be given to the County Forestry Board and regeneration must be started within a given time after final felling. This gives the Forest Administration the possibility to control deforestation. Further legislation concerning thinning, cleaning and regeneration in the Forestry Act is also a way to hinder forest degradation. ▪ Extension and training campaigns, such as Greener Forests, aim to give the people concerned deeper knowledge about forest management, both its production and environmental sides. This is a way to hinder forest degradation. ▪ One of the national Environmental Quality Objectives

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
				<p>“Sustainable Forests” and the Action Plan for Biological Diversity and Sustainable Forestry are policies aimed to promote the sustainable use of the forests.</p> <ul style="list-style-type: none"> ▪ Other Swedish Environmental Quality Objectives, such as “Clean air”, “Natural acidification only”, “Limited influence on climate” and “No eutrophication” are policies with impact on forest health and forest degradation.
29b	A	1, 3, 8	<ul style="list-style-type: none"> ▪ Develop mechanisms to improve policy formulation and coordination, e g environmental impact assessments. 	<ul style="list-style-type: none"> ▪ According to the Swedish Environmental Code decisions that affect, e g the environment and the use of natural resources, should be based on Environmental Impact Assessments. ▪ The new Swedish Forestry Act calls for analyses of the environmental impacts of forestry in some matters.
29c	A	3, 5	<ul style="list-style-type: none"> ▪ Formulate policies aiming at securing land tenure and the fair and equitable sharing of the benefits from forests for local communities and Sami people. 	<ul style="list-style-type: none"> ▪ The law on reindeer-husbandry secures the land use for the Sami people. ▪ According to the Swedish Forestry Act consultation about the forest management with the Sami people should be made in certain areas. ▪ In Sweden the Right to Public Access allows people to roam about freely in the forests, gathering berries, mushrooms etc. ▪ The possibilities for local stewardship of public-owned forestland is presently under examination. ▪ Land ownership in Sweden is clearly defined and protected within Swedish legislation. The majority of

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
				forestland in Sweden is privately owned, by forest enterprises and by individuals or families.
30a	A, B	1, 4, 8	<ul style="list-style-type: none"> ▪ Provide timely, reliable and accurate information on the underlying causes of deforestation and forest degradation and on the multiple roles of forests. 	<ul style="list-style-type: none"> ▪ The National Forest Inventory is carried out annually and covering the entire forest area of Sweden describes the state of and changes in forest resources in Sweden. ▪ The health of the Swedish forests is monitored by, e g The Swedish Forestry Administration and the Swedish University of Agricultural Sciences. ▪ In the Statistical Yearbook of Forestry most of the forestry statistics available are published for easy access. ▪ One of the parts of the project SKA 99, a national analysis of the present and future state, development and use of the Swedish forests, concerns the multiple use of forests. ▪ Research on the multiple use of forests is carried out by, e g the Swedish University of Agricultural Sciences and the Nordic Forest Research Cooperation Committee (SNS).
30b	B	1, 2, 3, 4, 8	<ul style="list-style-type: none"> ▪ Assist developing countries in promoting an integrated approach towards the formulation and application of national policy frameworks. ▪ Assist developing countries in conducting strategic analyses of political, legal and institutional policies that have affected deforestation and forest degradation. 	<ul style="list-style-type: none"> ▪ The Swedish International Development Cooperation Agency (Sida) identifies “Development of policies and institutions” as one, out of three, prioritized fields in the forest-related assistance to developing countries and countries with economies in transition, and such projects are supported in, e g Laos and Bolivia. ▪ Sida provides education in, e g the development of national forest policies and strategies.

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
				<ul style="list-style-type: none"> Forest Policy and legislation is one of the fields where the Swedish Forestry Administration undertakes international consultancy work.
31a	A	1, 4, 8	<ul style="list-style-type: none"> Undertake case studies using the diagnostic framework, which has been elaborated by the Secretary-General's reports to IPF, in order to: <ul style="list-style-type: none"> Identify the underlying causes of deforestation and forest degradation. Develop and test the usefulness of the framework, as an analytical tool in assessing options for utilization of forest and forest lands. Refine it, disseminate the results and apply it more widely. 	
31b	B	1, 2, 4, 8	<ul style="list-style-type: none"> Assist developing countries and countries with economies in transition in the activities mentioned in 31a. 	

I.C Traditional forest-related knowledge

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
40a	B	1, 4, 7, 8	<ul style="list-style-type: none"> Promote activities that aim to advance international understanding on the role of traditional forest-related 	

			knowledge in the management, conservation and sustainable development of all types of forests.	
40b	A, B	5, 7, 8	<ul style="list-style-type: none"> ▪ Collaborate with people who possess traditional forest-related knowledge, to promote an internationally acceptable understanding of traditional forest-related knowledge. ▪ Collaborate with people who possess traditional forest-related knowledge, in order to identify, respect, preserve and maintain traditional forest-related knowledge. 	<ul style="list-style-type: none"> ▪ Sweden participates in a European Union LIFE-project on methods for identifying and preserving the biocultural heritage in European Forests. ▪ Documentation of Swedish ethnobiology is an ongoing research project at the Swedish Biodiversity Centre, with the aim to collect information on the use of plants and animals in different epochs and cultures. ▪ At the Mid Sweden University a research programme on traditional knowledge of Sami people is ongoing. ▪ Research on forest history is carried out at the Swedish University of Agricultural Sciences.
40c	A	3, 5	<ul style="list-style-type: none"> ▪ Explore different options for the policy, institutional and legal frameworks that are required to support the application of intellectual property rights and/or other protection regimes for traditional forest-related knowledge, the fair and equitable sharing of its benefits and the possible development of formal agreements by which traditional forest-related knowledge can be accessed. 	
40d	A	3, 5	<ul style="list-style-type: none"> ▪ Include measures to rehabilitate and protect traditional forest-related knowledge in the national forest programme. 	
40e	A	3, 5	<ul style="list-style-type: none"> ▪ Promote and provide opportunities for the participation, 	

			inter alia, of indigenous people, forest-dependent people who possess traditional forest-related knowledge and forest owners in the planning, development and implementation of national forest programmes and national forest policies.	
40f	A	4, 5, 8	<ul style="list-style-type: none"> ▪ Bring together knowledge and experience of the traditional forest-related approaches that work in practice through collaboration with all interested parties. 	<ul style="list-style-type: none"> ▪ Sweden participates in a European Union LIFE-project on methods for identifying and preserving the biocultural heritage in European Forests. ▪ Documentation of Swedish ethnobiology is an ongoing research project at the Swedish Biodiversity Centre, with the aim to collect information on the use of plants and animals in different epochs and cultures. ▪ At the Mid Sweden University a research programme on traditional knowledge of Sami people is ongoing. ▪ Research on forest history is carried out at the Swedish University of Agricultural Sciences.
40g	A, B	1, 4, 5, 7, 8	<ul style="list-style-type: none"> ▪ Support efforts at the national level and above that enhance the capacity of participation of all concerned parties in agreements that apply traditional forest-related knowledge for sustainable forest management. ▪ Promote partnerships among all interested parties in these matters. 	
40h	A	1, 3, 4, 5	<ul style="list-style-type: none"> ▪ Recognize and support traditional resource use systems that incorporate traditional forest-related knowledge. ▪ Develop new instruments and mechanisms that enhance the security of forest-dependent groups. 	

40i	A	1, 4, 5, 8	<ul style="list-style-type: none"> ▪ Establish stronger linkages between traditional and emerging sustainable forest management systems through cooperation with communities. 	
40j	A	1, 3, 4, 5, 8	<ul style="list-style-type: none"> ▪ Identify ways to inventory, store, catalogue and retrieve traditional forest-related knowledge. ▪ Identify ways to support the effective protection and application of forest-related knowledge. ▪ Develop local and indigenous capacity in these matters. ▪ Examine the opportunities to apply traditional forest-related knowledge related to the management of a particular type of forest to other similar ecosystems. ▪ Work out a methodological framework of compatibility between traditional forest-related knowledge and new technologies. 	
40k	A, B	7, 8	<ul style="list-style-type: none"> ▪ Promote research on traditional forest-related knowledge in both regional and national institutions. ▪ Maintain and enhance the capacity of these institutions. ▪ Advance the understanding and use of the knowledge gained through the research. 	<ul style="list-style-type: none"> ▪ Sweden participates in a European Union LIFE-project on methods for identifying and preserving the biocultural heritage in European Forests. ▪ Documentation of Swedish ethnobiology is an ongoing research project at the Swedish Biodiversity Centre, with the aim to collect information on the use of plants and animals in different epochs and cultures. ▪ At the Mid Sweden University a research programme on traditional knowledge of Sami people is ongoing. ▪ Research on forest history is carried out at the Swedish University of Agricultural Sciences.

40l	A	1, 3, 4, 8	<ul style="list-style-type: none"> ▪ Incorporate traditional forest-related knowledge in forest management training. ▪ Emphasize the importance of recognizing traditional forest-related knowledge in developing national criteria and indicators for sustainable forest management and in forest certification schemes. 	
40m	A, B	5, 7, 8	<ul style="list-style-type: none"> ▪ Assist existing networks that are promoting the sharing of traditional forest-related knowledge on mutually agreed terms and the sharing of technology and profits arising from the use of such knowledge among concerned groups and institutions. 	
40n	A	8	<ul style="list-style-type: none"> ▪ Promote digital mapping using geographical information systems and geographic position systems combined with social mapping for assisting the establishment of forest holdings, planning and management partnerships and the storage of cultural and geographical information required to support the management, protection and use of traditional forest-related knowledge. 	
40p	A	3, 5, 8	<ul style="list-style-type: none"> ▪ Undertake pilot studies on the relationship between intellectual property rights systems and traditional forest-related knowledge. 	
40r	A	3, 5	<ul style="list-style-type: none"> ▪ Consider the development of mechanisms to ensure the fair and equitable sharing of benefits with local and Sami communities. 	

I.D Fragile ecosystems affected by desertification and drought

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
46a	B	1, 2, 4, 7	<ul style="list-style-type: none"> ▪ Undertake national and international action to address the complex issues related to dry land forest ecosystems in countries affected by desertification and drought. 	<ul style="list-style-type: none"> ▪ The International Convention to Combat Desertification in Countries Experiencing Drought and/or Desertification, Particularly in Africa was signed in 1994 and ratified in 1995 (United Nations URL). Sweden has considered these issues important and made considerable efforts in this field, for example through the chairmanship of the negotiations of the Convention. ▪ The Swedish International Development Cooperation Agency (Sida) has been cooperating with countries, particularly in Africa, in many years on programmes on land degradation and drought consistent with the principles of the Convention.
46d	B	1, 2, 4, 5, 7, 8	<ul style="list-style-type: none"> ▪ Support education, training, extension systems and participatory research that involve indigenous and local communities embodying traditional lifestyles in order to develop resource management approaches that will reduce the pressure on forests in fragile ecosystems affected by desertification and drought. 	<ul style="list-style-type: none"> ▪ The Swedish International Development Cooperation Agency (Sida) has been cooperating with countries, particularly in Africa, for many years on programmes on land degradation and drought consistent with the principles of the Convention to Combat Desertification in Countries Experiencing Drought and/or Desertification. ▪ Two of Sida's prioritized fields in the forest-related development assistance are sustainable use of natural resources in rural areas and capacity-building. ▪ Support to research related to natural forests and the management of forests in areas affected by desertification and drought, is prioritized by Sida.

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
46e	B	1, 2, 4, 5, 7	<ul style="list-style-type: none"> Strengthen and further develop partnerships and collaboration between all concerned parties in order to promote the sustainable management and regeneration of natural vegetation in ecosystems affected by desertification and drought. 	
46f	B	1, 2, 4, 7	<ul style="list-style-type: none"> Develop efficient and coordinated programmes of international cooperation and action on forests and related ecosystems affected by desertification and drought. 	<ul style="list-style-type: none"> The International Convention to Combat Desertification in Countries Experiencing Drought and/or Desertification, Particularly in Africa was signed in 1994 and ratified in 1995 (United Nations URL). Sweden has considered these issues important and made considerable efforts in this field, for example through the chairmanship of the negotiations of the Convention. The Swedish International Development Cooperation Agency (Sida) has been cooperating with countries, particularly in Africa, for many years on programmes on land degradation and drought consistent with the principles of the Convention.

I.E Impact of airborne pollution on forests

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
50a	A	1, 3	<ul style="list-style-type: none"> Adopt a preventative approach to the reduction of damaging air pollution in the Swedish strategies for sustainable development. 	<ul style="list-style-type: none"> The Swedish Environmental Code regulates the emission of airborne pollution. The Swedish Environmental Quality Objectives “Clean

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
				air”, “Natural acidification only”, “Limited influence on climate” and “No eutrophication” all concern the reduction of damaging air pollution in Sweden.
50b	B	1, 7, 8	<ul style="list-style-type: none"> ▪ Strengthen international cooperation for building scientific knowledge, and in activities related to the impact of airborne pollution on forest health. 	<ul style="list-style-type: none"> ▪ In the programme ICP-Forest the outlines of the monitoring of the effect of airborne pollution on forest health are determined. The European Union has introduced binding rules for the members to carry out monitoring of forest health according to ICP-Forest.
50c	B	1, 7, 8	<ul style="list-style-type: none"> ▪ Continue existing regional programmes monitoring the impact of airborne pollution on forest health and extend them to new regions. 	<ul style="list-style-type: none"> ▪ In the programme ICP-Forest the outlines of the monitoring of the effect of airborne pollution on forest health are determined. The European Union has introduced binding rules for the members to carry out monitoring of forest health according to ICP-Forest.
50d	A	1, 4, 8	<ul style="list-style-type: none"> ▪ Develop methods for the assessment and monitoring of national-level criteria and indicators for airborne pollutants in the context of sustainable forest management. 	<ul style="list-style-type: none"> ▪ Environmental monitoring, e.g. of the effect of airborne pollution on forest health is performed by, among others, the Swedish Forestry Administration and the Swedish University of Agricultural Sciences. ▪ The Swedish Environmental Protection Agency has developed Environmental Quality Criteria for, among others, Forest Landscapes, where effects of airborne pollution are included.

50e	B	1, 7	<ul style="list-style-type: none"> Consider entering international agreements on the reduction of long-range transboundary air pollution. 	<ul style="list-style-type: none"> Sweden has ratified The Convention on Long-Range Transboundary Air Pollution (CLRTAP) and its protocols and the United Nations Framework Convention on Climate Change.
-----	---	------	--	--

I.F Needs and requirements of developing countries and other countries with low forest cover

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
58d	B	1, 2, 4, 7	<ul style="list-style-type: none"> Improve the efficiency of and procedures for international cooperation to support the management, conservation and sustainable development of all types of forests in developing countries and countries with economies in transition with low forest cover. 	<ul style="list-style-type: none"> About one-third of the resources for the Swedish development cooperation is channelled via the Ministry for Foreign Affairs through different multilateral organizations, which contributes to cooperation within the donor community.
58e	B	2, 8	<ul style="list-style-type: none"> Facilitate and assist developing countries and countries with economies in transition with low forest cover in building capacity for data gathering and analysis to enable them to monitor their forest resources. 	<ul style="list-style-type: none"> The Swedish International Development Cooperation Agency (Sida) prioritizes capacity-building in the forest-related development assistance, and supports, e g Bolivia and Tanzania in projects related to data gathering and analysis. The Swedish Forestry Administration undertakes international consultancy work in the field of inventories and surveys.

II. International cooperation in financial assistance and technology transfer

II.A Financial assistance

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
67a	B	1, 2, 4	<ul style="list-style-type: none"> ▪ According to the Rio Declaration on Environment and Development and relevant chapters of the Agenda 21, as well as paragraph 10 of the Forest Principles, new and additional financial resources should be provided to developing countries to enable them to sustainably manage, conserve and develop their forest resources. 	
67b	B	1, 2, 4, 7	<ul style="list-style-type: none"> ▪ Increase the proportion and availability of the Official Development Assistance contribution to programmes supporting the management, conservation and sustainable development of forest resources in developing countries. 	
67c	B	2, 8	<ul style="list-style-type: none"> ▪ Work with developing countries to identify their needs for sustainable forest management, estimate the resources needed for financing such needs and identify the resources available for such purposes. ▪ Carry out this work through national forest programmes. 	<ul style="list-style-type: none"> ▪ Decisions on the assistance to developing countries and countries with economies in transition are made after analyses of the situation in the country concerned and discussions with the authorities, and are not to be decided only by the donor country.

67e	B	1, 3, 4, 7	<ul style="list-style-type: none"> Support increased and improved programmes promoting the management, conservation and sustainable development of all types of forests and related activities in international organizations and international financial institutions. 	<ul style="list-style-type: none"> Sweden is actively participating in international discussions on forests and forestry, and will continue to do so, and is also supporting forest-related international organizations and institutions.
69a	A	1, 3, 4	<ul style="list-style-type: none"> Encourage efforts by the private sector to formulate and implement voluntary codes of conduct aimed at promoting sustainable forest management. 	<ul style="list-style-type: none"> All larger forest enterprises and forest owners associations have already formulated strategies and policies for sustainable forest management. The forest sector has carried out environmental work that concerns all their activities, with ecological management plans, key-habitats set aside from forestry, management models that mimic natural processes as examples and recycling as examples. Today over 9 million ha of forest in Sweden is certified according to the FSC standards. Most of the FSC-certified land is holdings of the big forest enterprises. In addition to this, the forest owners associations are developing and implementing their own certification standards or certifying their members according to the PEFC standards.
69b	A	1, 3, 4	<ul style="list-style-type: none"> Explore mechanisms within the Swedish legal framework to encourage the private sector to act consistently with sustainable forest management and to invest financial resources from forest-based activities in actions that support sustainable forest management. 	<ul style="list-style-type: none"> The forest policy, with its two equal goals for the production and environment, promotes the sustainable management of forests and concerns all forest owners. The private sector plays an important role in the implementation of the goals of the forest policy. The Forestry Act contains regulations that require reinvestments of resources, e.g. the demand for regeneration after final felling.

69c	A	3, 4	<ul style="list-style-type: none"> Explore mechanisms within the Swedish legal framework to encourage the reinvestment of revenues generated from forest goods and services back into the forests where those revenues were generated. 	<ul style="list-style-type: none"> The Swedish Forestry Act demands reinvestment of forest revenues, e.g. through the demand for regeneration after final felling.
69e	A, B	1, 2, 3, 4	<ul style="list-style-type: none"> Formulate and create incentives, such as loan and investment guarantees, to encourage the Swedish private sector to invest in sustainable forest management in developing countries and in countries with economies in transition. 	<ul style="list-style-type: none"> The Swedish Development Cooperation Agency (Sida) can financially support Swedish smaller companies that are starting business projects in developing countries and countries with economies in transition. Economic development in the Baltic region is an area prioritized and supported by the Swedish government. A project on ecologically sustainable forest management is ongoing in Russia financially supported by Sweden through the Baltic Billion Funds.
70a	B	2, 3	<ul style="list-style-type: none"> Support national initiatives to create and apply national forest programmes and policy framework in developing countries. 	<ul style="list-style-type: none"> Development of policies and institutions is one of the fields prioritized by the Swedish International Development Cooperation Agency (Sida) in forest-related development assistance.
70b	A	1, 3, 4	<ul style="list-style-type: none"> Continue to develop and employ market-based and other economic instruments and incentives to increase rent capture and mobilize domestic financial resources in support of sustainable forest management. 	
70c	A	1, 3, 4, 5	<ul style="list-style-type: none"> Enhance community financing of sustainable forest management. 	

			<ul style="list-style-type: none"> Establish policy and programmatic mechanisms and instruments that facilitate local investments in sustainable forest management. 	
70e	B	1, 2, 4, 8	<ul style="list-style-type: none"> Support developing countries in their efforts of capacity-building in the management, conservation and sustainable development of their forests. 	<ul style="list-style-type: none"> Capacity-building is one of three fields prioritized by the Swedish International Development Cooperation Agency (Sida), in forest-related development assistance.
71a	B	2, 7	<ul style="list-style-type: none"> Enhance cooperation, collaboration and complementarity of activities within the donor community. 	<ul style="list-style-type: none"> About one-third of the resources for the Swedish development cooperation is channelled via the Ministry for Foreign Affairs through different multilateral organizations, which contributes to cooperation within the donor community.
71b	B	3, 8	<ul style="list-style-type: none"> Explore indicators for monitoring and evaluating the adequacy and effectiveness of forest programmes and projects. 	
71c	A	3	<ul style="list-style-type: none"> Explore the feasibility of innovative financial initiatives to support the implementation of national forest programmes. 	

II.B Technology transfer and capacity-building and information

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
77a	B	1, 2	<ul style="list-style-type: none"> Promote, facilitate and finance access to and the transfer of environmentally sound technologies and know-how to developing countries on favourable terms. 	
77b	A	1, 4, 8	<ul style="list-style-type: none"> Assess and identify Sweden's technological requirements and capabilities in order to achieve the management, conservation and sustainable development of the forests. 	
77c	B	2, 7, 8	<ul style="list-style-type: none"> Strengthen and/or promote North-South, South-South and trilateral North-South-South cooperation in forest-related technology transfer through public and private-sector investments, joint ventures, exchange of information and greater networking among forest-related institutions. 	
77d	A	1, 3, 4	<ul style="list-style-type: none"> Formulate policies and incentives that encourage all concerned to use and develop environmentally sound technologies. 	<ul style="list-style-type: none"> The Swedish private sector is using certification schemes and/or voluntary codes of conduct for environmental issues to a great extent. The Swedish Environmental Code and the Forestry Act regulates the use of different types of technologies. The Swedish forest policy and the Environmental Quality Objectives are policies promoting the use of environmentally sound technologies.

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
77e	A, B	3, 7, 8	<ul style="list-style-type: none"> Emphasize national and local capacity-building in the development and implementation of national forest programmes, in international cooperation programmes and in the development of mechanisms for the dissemination and adaptation of technologies to national and local conditions. 	<ul style="list-style-type: none"> The information and extension campaign “Greener Forests” is important for capacity-building among small forest owners and others concerned with forestry.
77f	A, B	1, 3, 4, 5	<ul style="list-style-type: none"> Consider supporting Sami people, local communities, other inhabitants of forests, small-scale forest owners and forest-dependent communities by funding sustainable forest management projects, capacity-building and information dissemination and by supporting direct participation of all interested parties in forest policy discussions and planning. 	<ul style="list-style-type: none"> The Swedish Government has financed Local Investment Programmes for ecological sustainability in the districts of the country. The Swedish Centre for Ecological Sustainability, Swecol, is a governmental authority, which supports sparsely populated districts financially and by transferring knowledge for ecological sustainability.
78b	B	1, 4, 7, 8	<ul style="list-style-type: none"> Establish mechanisms to assist the interpretation and dissemination of information relevant to the management, conservation and sustainable development of all types of forests to countries and interested parties who have difficulties in accessing internationally available information. 	

III. Scientific research, forest assessment and the development of criteria and indicators for sustainable forest management

III.A Assessment of the multiple benefits of all types of forests

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
89a	A	1, 4, 8	<ul style="list-style-type: none"> Integrate Swedish criteria and indicators for sustainable forest management in national forest assessments. 	
89b	A, B	2, 8	<ul style="list-style-type: none"> Improve Swedish forest resource assessment, forest statistics and the capacity to analyse and use the information derived. Support such initiatives in developing countries. 	<ul style="list-style-type: none"> Work is presently being done on developing new content and design of the annual National Forest Inventory, which will go through a major revision in 2003. A pilot study on forest assessment made through remote sensing is part of the development of the methodologies used in the annual National Forest Inventory. The project SKA 99 is a new national analysis of the present and future state, development and use of the Swedish forests, which was finished in 2000. Capacity-building is one of three fields prioritized by the Swedish International Development Cooperation Agency (Sida), in forest-related development assistance, and supports such projects, e g in Bolivia.
89c	A	8	<ul style="list-style-type: none"> Strengthen the research on forest inventory and monitoring techniques. Improved quality and expanded scope of forest assessments should be the result of the research mentioned above. 	<ul style="list-style-type: none"> Research on environmental monitoring, forestry remote sensing, forest inventory, monitoring of non-timber forest resources, landscape monitoring, monitoring of forest ecosystems and inventory methods is ongoing at, e g the Swedish University of Agricultural Sciences. Work is presently being done on developing new content and design of the annual National Forest Inventory,

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
				which will go through a major revision in 2003.
89h	A	8	<ul style="list-style-type: none"> Consult all interested parties at the national level and below in order to identify all benefits derived from Swedish forests. 	

III.B Forest research

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
94c	B	7, 8	<ul style="list-style-type: none"> Examine the need to expand the capacity of existing regional or sub-regional research institutions. Examine the need to establish new regional or sub-regional centres for research, development and extension. 	
94d	A	8	<ul style="list-style-type: none"> Extend on-site research Enhance prioritization and application of the results of on-site research in the planning, implementation, monitoring and evaluation of research. 	<ul style="list-style-type: none"> On-site research is an important part of the research conducted at the Swedish University of Agricultural Sciences.

III.C Methodologies for the proper valuation of the multiple benefits of forests

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
104a	A	3, 8	<ul style="list-style-type: none"> Make use of available methodologies when estimating the value of all forest goods and services, with special attention to the important non-wood values. Use these estimations in decision-making. 	<ul style="list-style-type: none"> Research on the non-wood values of the forest is an essential part of the research programme “Use of the boreal forest”. The project SKA99 a national analysis of the possible use and development of the Swedish forests is based on data from the National Forest Inventory and will be used in decision-making about, e g forest policies.
104c	A	8	<ul style="list-style-type: none"> Promote research to further develop forest valuation methodologies which suit Swedish conditions. 	<ul style="list-style-type: none"> Research on forest valuation methodologies is ongoing at, e g the Swedish University of Agricultural Sciences.

III.D Criteria and indicators for sustainable forest management

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
115a	A	1, 4, 8	<ul style="list-style-type: none"> Prepare, initiate and implement Swedish criteria and indicators for sustainable forest management. 	<ul style="list-style-type: none"> The Swedish Environmental Protection Agency has developed Environmental Quality Criteria for, among others, Forest Landscapes. Indicators for the evaluation of the national environmental work, of which one concerns protection of forests, have been developed. In addition to that, further work is being done on developing a system with indicators for follow-up of the Environmental Quality Objectives.

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
115b	A, B	1, 3, 4, 7, 8	<ul style="list-style-type: none"> ▪ Promote the use of criteria and indicators, agreed at the international level and below, as a framework for promoting best forest practices and in facilitating sustainable forest management. ▪ Encourage the formulation and implementation of criteria and indicators on a cross-sectoral basis and with participation of all interested parties. ▪ Include criteria and indicators in the national forest programme. ▪ Clarify the links between criteria and indicators at different levels and promote their compatibility. 	<ul style="list-style-type: none"> ▪ Sweden has participated in the work on criteria and indicators within the pan-European process and has signed the resolutions on criteria and indicators from the Ministerial Conferences on the Protection of Forests in Europe. ▪ The Swedish Environmental Protection Agency has developed Environmental Quality Criteria for, among others, Forest Landscapes. ▪ Indicators for the evaluation of the national environmental work, out of which one concerns protection of forests, have been developed. In addition to that, further work is being done on developing a system with indicators for follow-up of the Environmental Quality Objectives.
115c	B	1, 2, 4, 7, 8	<ul style="list-style-type: none"> ▪ Participate in ongoing international and regional initiatives on criteria and indicators. ▪ Provide technical and financial assistance to developing countries to enable them to participate in the work concerning criteria and indicators for sustainable forest management. 	<ul style="list-style-type: none"> ▪ Sweden has participated in the work on criteria and indicators within the pan-European process and has signed the resolutions on criteria and indicators from the Ministerial Conferences on the Protection of Forests in Europe.
115d	B	1, 4, 7, 8	<ul style="list-style-type: none"> ▪ Undertake efforts to achieve a common understanding on; <ul style="list-style-type: none"> - concepts, essential terms and definitions used in formulating criteria and indicators for sustainable forest management 	<ul style="list-style-type: none"> ▪ Sweden has participated in the work on criteria and indicators within the pan-European process and has signed the resolutions on criteria and indicators from the Ministerial Conferences on the Protection of European Forests.

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
			<ul style="list-style-type: none"> - indicators for forests in similar ecological zones - mutual recognition among sets of criteria and indicators as tools for assessing trends in forest management and conditions at the national level - transparent methods for the measurement of indicators and the collection, assembly, storage and dissemination of data. 	

IV. Trade and environment in relation to forest products and services

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
128a	A	1, 3, 6, 8	<ul style="list-style-type: none"> ▪ Study the environmental, social and economic impacts of trade-related measures affecting forest products and services. 	
128b	A, B	1, 3, 6	<ul style="list-style-type: none"> ▪ Undertake measures for improving market access for forest goods and services, including the reduction of tariff and non-tariff barriers. ▪ Promote a mutually supportive relationship between environment and trade. ▪ Avoid conflict between measures that affect trade in forest goods and services and existing international 	<ul style="list-style-type: none"> ▪ The private sector initiatives on certification and labelling schemes promote the mutually supportive relationship between environment and trade.

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
			obligations	
128c	A	1, 3, 4, 5, 6	<ul style="list-style-type: none"> ▪ Encourage efforts by the private sector to formulate and implement voluntary codes of conduct for promoting sustainable forest management so as to improve trade in forest products. ▪ Endeavour to ensure that external trade policies take community rights into account. 	<ul style="list-style-type: none"> ▪ The Swedish private sector is using certification and labelling schemes and/or other voluntary codes of conduct for environmental issues to a great extent. ▪ The Swedish position is that certification should be market driven. This means that the government and authorities do not actively participate in the work on certification schemes. ▪ The certification schemes used in Swedish forestry all work in accordance with Swedish legislation, and certification is considered to be of importance for the implementation of the forest policy goals, particularly the environmental goal.
131b	B	2, 5	<ul style="list-style-type: none"> ▪ Support the efforts by developing countries to increase their productivity and efficiency in downstream processing activities. ▪ Support community-based processing and marketing of wood and non-timber forest products in developing countries. 	<ul style="list-style-type: none"> ▪ The objectives of the Swedish International Development Cooperation Agency (Sida) for forestry, is to increase the contribution of forest- and tree-based activities to economically, socially and environmentally sustainable development for poor people. This includes processing of wood and the benefits for local people. Development of local participation and involvement is also to be prioritized. ▪ Capacity-building is a field prioritized by Sida in forest-related development assistance.

132a	A, B	1, 3, 4, 6	<ul style="list-style-type: none"> ▪ Intensify the efforts to promote lesser-used forest species in the domestic and international market, where increased use is consistent with sustainable forest management. 	<ul style="list-style-type: none"> ▪ The broad-leaf trees are given greater importance in the new Forestry Act than in the former legislation and there are incentives to promote the generation of new valuable broad-leaved forest. ▪ There are private initiatives on the promotion of broad-leaf trees, and their wood, which are lesser used than the completely dominating conifers in Sweden, e g The Hardwood Institute (Lövträinstitutet) and The Broad-leaf Trees Association (Lövträdsföreningen) ▪ The certification schemes and/or other voluntary codes of conduct of the private sector promotes the use of these lesser used species.
132b	A	1, 3, 4	<ul style="list-style-type: none"> ▪ Implement policies for sustainable forest management with lesser-used species. ▪ The lesser-used species should be economically viable. ▪ Implement policies for the utilization of economically viable lesser-used forest species that are compatible and consistent with sustainable forest management. 	<ul style="list-style-type: none"> ▪ The broad-leaf trees are given greater importance in the new Forestry Act, than in the former legislation and there are incentives to promote the generation of new valuable broad-leaved forest. ▪ The certification schemes and/or other voluntary codes of conduct in the private sector promote the use of these lesser-used species.
133a	A	1, 3, 4, 7	<ul style="list-style-type: none"> ▪ Consider the potentially mutually supportive relationship between sustainable forest management, trade and certification and labelling schemes operating in accordance with relevant Swedish legislation. ▪ Endeavour to ensure that such schemes are not used as a form of disguised protectionism and do not conflict with international obligations or Swedish legal frameworks. 	<ul style="list-style-type: none"> ▪ The Swedish position is that certification should be market driven. This means that the government and authorities do not actively participate in the work on certification schemes. ▪ The certification schemes used in Swedish forestry all work in accordance with Swedish legislation, and certification is considered to be of importance for the implementation of the forest policy goals, particularly the environmental goal.

				<ul style="list-style-type: none"> ▪ The Swedish private sector is using certification and labelling schemes to a great extent.
133b	B	2, 3, 8	<ul style="list-style-type: none"> ▪ Assist developing countries, financially and technically, in their efforts to enhance assessment capabilities in relation to voluntary certification and labelling. 	<ul style="list-style-type: none"> ▪ The Swedish International Development Cooperation Agency (Sida) provides international courses in, among others, forest certification.
133c	A	1, 3, 4	<ul style="list-style-type: none"> ▪ Support the application to certification schemes of such concepts as; <ul style="list-style-type: none"> - Open access and non-discrimination in respect of all types of forests and parties. - Credibility. - Non-deceptiveness. - Cost-effectiveness. - Participation of all interested parties. - Sustainable forest management. - Transparency. 	<ul style="list-style-type: none"> ▪ The Swedish position is that certification should be market driven. This means that the government and authorities do not actively participate in the work on certification schemes. ▪ The certification schemes used in Swedish forestry all work in accordance with Swedish legislation, and certification is considered to be of importance for the implementation of the forest policy goals, particularly the environmental goal.
133e	A, B	1, 3, 4, 8	<ul style="list-style-type: none"> ▪ Consider the relevance of the Centre for International Forestry Research (CIFOR) project on criteria and indicators for sustainable forest management to certification schemes. 	<ul style="list-style-type: none"> ▪ The two most important certification schemes in Sweden; the Pan European Forest Certification (PEFC) and the Forest Stewardship Council (FSC), are both comparable with the criteria of the Helsinki Ministerial Conference. The six main criteria of the PEFC standard directly corresponds to the criteria of the Helsinki Ministerial Conference and the content of the ten principles of the FSC is comparable with the criteria of the Helsinki Ministerial Conference.

133f	A, B	3, 7	<ul style="list-style-type: none"> ▪ Promote comparability among various voluntary certification and labelling schemes. ▪ Avoid duplication of efforts among various voluntary certification and labelling schemes. 	
133g	A, B	3, 7, 8	<ul style="list-style-type: none"> ▪ Make arrangements for exchange of information and experience on voluntary certification and labelling schemes in appropriate fora. 	
134a	A	1, 4, 6, 8	<ul style="list-style-type: none"> ▪ Explore ways and means to establish full-cost internalization of wood products and non-wood substitutes. ▪ Undertake market and economic analyses of the implications of wood products and non-wood substitutes for forest management and development costs and for sustainable forest management. ▪ Examine the potential cost and benefits of improved efficiency and sustainability at all levels of the forest industry. 	<ul style="list-style-type: none"> ▪ The project SKA99 is a new analysis of the possible use and development of the Swedish forests during the next 100 years, based on data from the National Forest Inventory. The calculations and analyses have been based on a number of different scenarios. The scenarios differ with respect to forest management, environmental considerations and logging activities.
134b	A, B	1, 3, 4, 7, 8	<ul style="list-style-type: none"> ▪ Share information on research findings and experiences concerning the implementation of full-cost internalization and its application to sustainable forest management, and policy mechanisms. 	
135a	A, B	6, 7, 8	<ul style="list-style-type: none"> ▪ Expand the work on market transparency for trade in forest products and services. 	

			<ul style="list-style-type: none"> Consider the development of a global database on trade in forest products and services. 	
135b	A, B	3, 6, 7, 8	<ul style="list-style-type: none"> Provide an assessment of illegal trade in forest products and services. Share relevant information on the nature and extent on illegal trade in forest products and services with other countries. Consider measures to counter illegal trade in forest products and services. 	<ul style="list-style-type: none"> Sweden has ratified the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES).

V. International organizations and multilateral institutions and instruments, including appropriate legal mechanisms

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
146a	B	7	<ul style="list-style-type: none"> Support the work on forest-related issues undertaken by international and regional organizations and agencies. 	<ul style="list-style-type: none"> Sweden is actively participating in global and regional negotiations concerning forests and forestry and is supporting organizations, such as the FAO, and will continue the international commitment.
146b	B	3, 7	<ul style="list-style-type: none"> Clarify the mandates of the relevant international institutions and organizations related to forest issues in order to improve integration and coordination of their efforts and to guide the activities to areas where they can be most effective. 	

146c	B	7, 8	<ul style="list-style-type: none"> Work to eliminate waste and duplication in international organizations and institutions. 	
146d	A	7, 8	<ul style="list-style-type: none"> Guide relevant international and regional institutions through the Swedish governing bodies to accelerate incorporation of the forest-related results of the United Nations Conference on Environment and Development and of further progress achieved since then and of the IPF's proposals for action into their work-programmes. 	
146e	A, B	1, 4	<ul style="list-style-type: none"> Support activities related to the management, conservation and sustainable development of all types of forests. 	<ul style="list-style-type: none"> Sweden is supporting activities related to the management, conservation and sustainable development of all types of forests, among others, through the Swedish forest policy, international cooperation and assistance to developing countries and countries with economies in transition.

Appendix II. Condensed proposals for action, in Categories A and B, of the Intergovernmental Forum on Forests, with examples of corresponding measures taken by Sweden and classification in categories and subject fields. Categories and Subject fields are defined in section 2.3.

I. Promoting and facilitating the implementation of the proposals for action of the Intergovernmental Panel on Forests, and reviewing, monitoring and reporting on progress in the management, conservation and sustainable development of all types of forests

I.A Promoting and facilitating implementation

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
9a	B	2, 3	<ul style="list-style-type: none"> Support national forest programmes in developing countries, including low forest cover countries and particularly the least developed countries. 	<ul style="list-style-type: none"> The Swedish International Development Cooperation Agency (Sida) prioritizes development of policies and institutions in the forest-related assistance to developing countries.
9b	A, B	3, 7	<ul style="list-style-type: none"> Promote an integrated approach, through national forest programmes and in collaboration with international organizations, to the implementation of the IPF's proposals for action and forest-related work as set out under the Convention on Biological Diversity, the United Nations Convention to Combat Desertification and the United Nations Convention on Climate Change. 	<ul style="list-style-type: none"> Sweden is actively participating in global and regional negotiations concerning forests and forestry and is supporting organizations, such as the FAO, and will continue the international commitment.
9c	B	2, 3	<ul style="list-style-type: none"> Create and/or strengthen initiatives, approaches and partnerships to encourage long-term political commitment, donor support and participation by the private sector and major groups in countries with low 	

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
			<p>forest cover and particularly in the least developed countries.</p> <ul style="list-style-type: none"> Recognize the special role of official development assistance (ODA) in meeting the needs of developing countries. 	
9d	A	1, 3, 4, 8	<ul style="list-style-type: none"> Systematically assess IPF's proposals for action and plan for their implementation in the context of the Swedish processes aimed at sustainable forest management. 	<ul style="list-style-type: none"> This report is part of the work on assessing and implementing the proposals for action
9e	A	3, 5, 8	<ul style="list-style-type: none"> Implement IPF's proposals for action in the context of the forest programme/national policy framework with participation of all interested parties. Review the policy framework continuously. 	<ul style="list-style-type: none"> The new Forestry Act, the new Environmental Code, the Swedish Environmental Quality Objective "Sustainable Forests" and the Action Plan for Biological Diversity and Sustainable Forestry are examples in the Swedish policy framework where measures have been taken that correspond to different proposals for action. The Swedish forest policy goes through a larger review every fourth year, and is also going through smaller evaluations and changes continuously.
9f	A	3, 8	<ul style="list-style-type: none"> Establish a focal point to guide and coordinate the implementation and assessment process of the IPF's proposals for action. 	<ul style="list-style-type: none"> The Swedish National Board of Forestry is, in cooperation with other authorities, the focal point for the implementation and assessment of the IPF's proposals for action.

9g	B	2, 3, 8	<ul style="list-style-type: none"> Further assist developing countries and countries with economies in transition in implementing IPF's proposals for action through the framework of national forest programmes. This support should particularly aim at capacity-building and creating participatory mechanisms and innovative financing arrangements. 	<ul style="list-style-type: none"> Development of policies and institutions, and capacity-building are fields prioritized by the Swedish International Development Cooperation Agency (Sida), in the forest-related development assistance.
----	---	---------	--	--

I.B Monitoring progress in implementation

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
17a	A	1, 4, 8	<ul style="list-style-type: none"> Prepare national information on the management, conservation and sustainable development of all types of forests. Make adequate financial resources available for capacity-building and implementation of national reporting initiatives. 	<ul style="list-style-type: none"> The National Forest Inventory is carried out annually and, covering the entire forest area of Sweden, describes the state of and changes in forest resources in Sweden. The National Inventories of Biological Hot-spots provide information on woodland key-habitats and wetland forests. National reports have been published in different forms, e.g. "Management, conservation and sustainable development of forests – the case of Sweden" and through the Nordic Council of Ministers "Sustainable Forestry in the Nordic Countries".
17b	A	1, 4, 8	<ul style="list-style-type: none"> Make forest-related information for reviewing, monitoring and reporting progress in implementation in sustainable forest management available and accessible to policy makers and all interested groups. Note the important role of sub-national levels of 	<ul style="list-style-type: none"> The National Forest Inventory is carried out annually and, covering the entire forest area of Sweden, describes the state of and changes in forest resources in Sweden. The National Inventories of Biological Hot-spots provide information on woodland key-habitats and wetland

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
			government and interest groups in contributing to assessment and information gathering.	forests. <ul style="list-style-type: none"> ▪ National reports have been published in different forms, e.g. “Management, conservation and sustainable development of forests – the case of Sweden” and “Sustainable Forestry in the Nordic Countries” through the Nordic Council of Ministers.
17c	B	8	<ul style="list-style-type: none"> ▪ Report on the implementation of IPF’s proposals for action when reporting on forests to the Commission of Sustainable Development at its eighth session. 	<ul style="list-style-type: none"> ▪ Sweden has reported to the CSD at its eighth session.
17d	A	1, 3, 4, 8	<ul style="list-style-type: none"> ▪ Further develop and implement criteria and indicators for sustainable forest management. ▪ Use these criteria and indicators as a basis for reviewing, monitoring and reporting national trends in the state of the forests and the progress on the management, conservation and sustainable development of all types of forests. 	<ul style="list-style-type: none"> ▪ Sweden has participated in the work on criteria and indicators within the pan-European process and has signed the resolutions on criteria and indicators from the Minister Conferences on Protection of the European Forests. ▪ The Swedish Environmental Protection Agency has developed Environmental Quality Criteria for, among others, Forest Landscapes. ▪ Indicators for the evaluation of the national environmental work, of which one concerns protection of forests, have been developed. In addition to that, further work is being done on developing a system with indicators for follow-up of the Environmental Quality Objectives. ▪ Sweden is participating in a European Union LIFE-project on methods to monitor sustainable forestry based on the six pan-European criteria.

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
17e	B	2, 8	<ul style="list-style-type: none"> Assist developing countries in preparing national information and reports on forests. 	
19a	A	1, 4, 8	<ul style="list-style-type: none"> Develop internationally harmonized, cost-effective and comprehensive formats for collecting and synthesizing national forest information. Incorporate information on relevant criteria and indicators for sustainable forest management in these reporting formats. 	<ul style="list-style-type: none"> The Swedish Statistical Yearbook of Forestry, where most of the forestry statistics is covered, and the Swedish National Inventory, which covers the entire area of Sweden, have been developed and improved during a long period of time. The project SKA99 is a new analysis of the possible use and development of Swedish forests during the next 100 years, based on data from the National Forest Inventory. Environmental monitoring of the Swedish forests is, e.g. carried out within the National Forest Inventory and by the Swedish Forest Administration on permanent observation plots.
19b	B	2, 7, 8	<ul style="list-style-type: none"> Improve the effectiveness of coordination and partnership within countries and with international organizations and instruments as a means of building capacity in developing countries for collection, review, synthesis and utilization of information related to sustainable forest management. 	<ul style="list-style-type: none"> About one-third of the resources for the Swedish development cooperation is channelled via the Ministry for Foreign Affairs through different multilateral organizations, which contributes to further cooperation within the donor community. Sweden supports the Forest Resource Assessment (FRA 2000).

II. Matters left pending and other issues arising from the programme elements of the Intergovernmental Panel on Forests process

II.A Need for financial resources

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
30a	B	1, 2, 3, 4	<ul style="list-style-type: none"> ▪ Increase financial resources and make or intensify efforts to improve the effectiveness and efficiency of available resources for sustainable forest management in developing countries. ▪ Use national forest programmes or other integrated programmes as the basis for channelling, prioritizing and increasing financial assistance to the forest sector in developing countries. 	
30b	B	1, 2, 4	<ul style="list-style-type: none"> ▪ Give special consideration to developing countries in financial cooperation to meet their needs for forest products and services sustainably, and sustainably manage their forests and in some cases for expanding their forest cover. 	<ul style="list-style-type: none"> ▪ The objectives of the Swedish International Development Cooperation Agency (Sida) for forestry, is to increase the contribution of forest- and tree-based activities to economically, socially and environmentally sustainable development for poor people.
30c	A	1, 3, 4	<ul style="list-style-type: none"> ▪ Provide a stable and transparent investment environment within an adequate regulatory framework that encourages private investments and re-investment of forest revenues in sustainable forest management. 	<ul style="list-style-type: none"> ▪ The Swedish Forestry Act demands reinvestment of forest revenues, e g through the demand for regeneration after final felling.
30d	A	8	<ul style="list-style-type: none"> ▪ Undertake activities for systematic collection and analysis of financial flows data in the forest sector. 	<ul style="list-style-type: none"> ▪ The Swedish Statistical Yearbook of Forestry, annually published by the National Board of Forestry, contains statistics on financial flows. ▪ The project SKA 99 is a new national analysis of the

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
				<p>present and future state, development and use of the Swedish forests, which was completed in 2000.</p> <ul style="list-style-type: none"> Statistics Sweden produces forestry statistics mainly on industrial production and consumption of raw material, foreign trade with forest- and forest industry products, transports of timber and stocks of timber, chips and sawn timber.
30e	A, B	1, 3, 4, 7	<ul style="list-style-type: none"> Explore the feasibility of operationalizing an investment promotion entity for sustainable forest management. 	

II.B Trade and environment

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
41a	A, B	1, 3, 4, 6	<ul style="list-style-type: none"> Contribute to achieving trade in wood and non-wood products and services from sustainably managed forests. Implement policies and actions on trade or sustainable forest management with the aim to achieve trade in products and services from sustainably managed forests. 	<ul style="list-style-type: none"> The private sector's initiatives on certification and labelling systems, with the high levels of certified forest land in Sweden, contribute to achieving trade in products and services from sustainably managed forests. The Swedish forest policy promotes the sustainable management of forests and consequently trade in products from sustainably managed forests.
41b	B	1, 3, 4, 6, 7	<ul style="list-style-type: none"> Undertake cooperative work on enhancing international comparability, transparency, non-discrimination and consistency with international obligations in the design 	<ul style="list-style-type: none"> The Swedish position is that certification should be market driven. This means that the government and authorities encourage but do not actively participate in

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
			and operation of voluntary certification and labelling schemes so as to promote sustainable forest management and not lead to unjustifiable obstacles to market access.	<p>the work on certification schemes.</p> <ul style="list-style-type: none"> ▪ The certification schemes used in Swedish forestry all work in accordance with Swedish legislation, and certification is considered to be of importance for the implementation of the forest policy goals, particularly the environmental goal.
41c	A	4, 6, 8	<ul style="list-style-type: none"> ▪ Undertake analyses of the implications of full-cost internalization on forest management and economic development. ▪ Implement full-cost internalization strategies for forest products and services and their substitutes. 	<ul style="list-style-type: none"> ▪ Research in the field of full-cost internalization is ongoing at, e g the Swedish University of Agricultural Sciences.
41d	A	1, 4, 8	<ul style="list-style-type: none"> ▪ Undertake further work on full life-cycle analysis of the environmental impacts of forest products and services and their substitutes. 	<ul style="list-style-type: none"> ▪ Research in this field is ongoing at, e g the Swedish Institute for Wood Technology Research.
41f	A, B	3, 6, 7	<ul style="list-style-type: none"> ▪ Consider national-level actions to eliminate or reduce illegal trade in wood and non-wood forest products. ▪ Promote international cooperation to eliminate or reduce illegal trade in wood and non-wood forest products. 	<ul style="list-style-type: none"> ▪ Sweden has ratified the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES).
41g	A	1, 3, 4, 6	<ul style="list-style-type: none"> ▪ Develop strategies for sustainable forest management with a long-term perspective to minimize negative effects of short-term market changes. 	<ul style="list-style-type: none"> ▪ The Swedish Forestry Act, the Swedish Environmental Quality Objectives, the Forest Sector Goals and the Action Plan for Biological Diversity and Sustainable Forestry are all strategies for a long-term sustainable

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
				forest management, and are parts of the Swedish forest policy.
41h	B	1, 6, 7	<ul style="list-style-type: none"> ▪ Recognize the importance of imports of forest products for countries with low forest cover and fragile ecosystems and small island states. ▪ Assist these countries in expanding their forest cover. 	

II.C Transfer of environmentally sound technologies to support sustainable forest management

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
56a	B	1, 2	<ul style="list-style-type: none"> ▪ Initiate actions towards the broadening and development of mechanisms and/or further initiatives to enhance the transfer of technology from developed to developing countries. 	
56b	A	1, 3	<ul style="list-style-type: none"> ▪ Develop an enabling policy, legal and institutional framework that encourages both public and private sector investments in environmentally sound technologies for sustainable forest management. 	<ul style="list-style-type: none"> ▪ The Swedish Environmental Code and the Forestry Act promotes the use of environmentally sound technologies. ▪ The Forestry Research Institute of Sweden, which is partially financed by the private forest sector, carries out research on the development of forest technologies. ▪ The Swedish private sector is using certification schemes and/or voluntary codes of conduct for environmental issues to a great extent, which consequently promotes the use and development of environmentally sound

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
				technologies.
56c	A, B	1, 2, 3, 7, 8	<ul style="list-style-type: none"> Support the strengthening of cooperation between institutions to facilitate the assessment of needs for adaptation and transfer of forest-related environmentally sound technologies through North-South and South-South cooperation. 	
56d	B	1, 2, 8	<ul style="list-style-type: none"> Recognize the importance of the transfer of technologies to developing countries and countries with economies in transition as an integral part of the process of investment and sustainable development. Recognize the importance of combining technology transfer with training, education and institutional strengthening. 	<ul style="list-style-type: none"> The Swedish private forest sector is investing in the countries with economies in transition in the Baltic region, which includes transfer of technology and corresponding know-how. This is encouraged by the government through, e.g. the Baltic Billion Funds. Capacity-building is a prioritized field by the Swedish International Development Cooperation Agency in forest-related development assistance.
56e	B	1, 2, 3	<ul style="list-style-type: none"> Take further concrete measures to promote and facilitate the transfer of environmentally sound technologies to developing countries on favourable terms. Mobilize further support for the development and application of technologies and corresponding know-how within developing countries. 	
56f	B	1, 2, 8	<ul style="list-style-type: none"> Use extension-services to promote the diffusion of environmentally sound technologies to end-users in 	

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
			developing countries.	
56g	A, B	1, 2, 3	<ul style="list-style-type: none"> Enhance partnerships and initiate, coordinate and cooperate in forest-related technical and financial assistance and capacity-building for the transfer, development and application of environmentally sound technologies. 	
56h	A, B	1, 2, 3, 4, 7, 8	<ul style="list-style-type: none"> Promote transfer of environmentally sound rehabilitation technologies for the sustainable management of forest ecosystems in environmentally critical areas. Develop means to promote sharing of environmentally sound technologies between and within countries. Promote the links between research, extension and implementation. 	<ul style="list-style-type: none"> Swecol, the Swedish Centre for Ecological Sustainability, is an authority under the Ministry of the Environment with the main objective to promote the linkage between scientists, industry, municipalities and authorities in Sweden, which was launched in 1999.
56i	B	1, 2, 8	<ul style="list-style-type: none"> Assist developing countries with low forest cover and those with fragile ecosystems in their efforts to build capacity that would facilitate the development and transfer of environmentally sound technologies. 	
56j	A	1, 3, 5, 8	<ul style="list-style-type: none"> Promote fair and equitable sharing of the benefits arising from the utilization of forest genetic resources and the results and application of research. Work on addressing issues on the origins of forest genetic resources within the systems for protection. 	

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
56l	A, B	1, 4, 8	<ul style="list-style-type: none"> ▪ Analyse the implications of the use of wood and non-wood by-products created by forest harvesting and wood processing. ▪ Pursue actions that facilitate the transfer, development and application of environmentally sound technologies for the use of wood and non-wood by-products. ▪ Give special attention to wood-waste materials as energy source. 	<ul style="list-style-type: none"> ▪ In SKA99 the effects of the use of by-products from forest harvesting is analysed in some scenarios for the future Swedish forestry. ▪ Wood-waste materials is of great interest as a Swedish energy source and research is carried out by, e g the Swedish University of Agricultural Sciences and the Forestry Research Institute of Sweden.
56m	A	1, 3, 5, 8	<ul style="list-style-type: none"> ▪ Undertake steps to ensure equal opportunities for women, in particular Sami and rural women, to become beneficiaries of environmentally sound forest-related technologies, know-how and extension services. 	<ul style="list-style-type: none"> ▪ Within the extension campaign “Greener forests” special courses with women as target group are offered.
56n	A, B	1, 2, 5, 8	<ul style="list-style-type: none"> ▪ Strengthen outreach programmes targeted at women in the areas of education, training and micro-credit related to community development programmes and household use of wood, wood lots for fuel-wood and energy-efficient cooking. 	<ul style="list-style-type: none"> ▪ Within the extension campaign “Greener forests” special courses with women as target group are offered.
56o	A	5, 8	<ul style="list-style-type: none"> ▪ Use data and information that are disaggregated by gender in sectoral surveys and studies used in the development of technologies for sustainable forest management. 	

II.D Issues that need further clarification

II.D.1 Underlying causes of deforestation and forest degradation

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
64a	A	1, 3, 4, 8	<ul style="list-style-type: none"> ▪ Further study and take practical measures to address the chains of causality of the underlying causes of deforestation and forest degradation in Sweden, including impacts of factors outside the forest sector. 	<ul style="list-style-type: none"> ▪ The Swedish standing volume has increased by more than 1000 million m³ since the 1920s, the increment has also increased during the last centuries and the forest area has been on the same level since the 1930s (before that there had been an increase of the forested land). This shows that deforestation is not a problem in Sweden, a country with more than half of its land covered by productive forests (23 million ha). ▪ One of the national Environmental Quality Objectives “Sustainable Forests” and the Action Plan for Biological Diversity and Sustainable Forestry are policies aimed to promote the sustainable use of the forests. ▪ Extension and training campaigns, such as “Greener Forests”, aim to give the people concerned deeper knowledge about forest management, both its production and environmental sides. This is a way to hinder forest degradation. ▪ Sweden has had problems with deforestation historically, but today it is no longer a problem. Research on forest history is ongoing at, among others, the Swedish University of Agricultural Sciences, and experiences from such research can be of interest to other countries.
64b	A	3, 4, 5	<ul style="list-style-type: none"> ▪ Create procedures to promote the effective participation of all interested parties in decision-making about forest management. 	<ul style="list-style-type: none"> ▪ The process of cooperation and consultation between interested parties with the aim to reach consensus is used in policy formulation in Sweden, and is referred to as the

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
				<p>“Swedish model”.</p> <ul style="list-style-type: none"> ▪ According to the Swedish Forestry Act consultation about the forest management with the Sami people should be made in certain areas.
64c	A	3, 5	<ul style="list-style-type: none"> ▪ Define land ownership and the rights of indigenous and local communities and forest owners clearly through land tenure laws and/or arrangements. 	<ul style="list-style-type: none"> ▪ According to the Swedish Forestry Act, consultation about forest management with the Sami people should be made in certain areas. ▪ The law on reindeer-husbandry secures the land use for the Sami people.
64d	A	1, 3, 4	<ul style="list-style-type: none"> ▪ Develop mechanisms to improve land access and use of forest resources on a sustainable basis. 	<ul style="list-style-type: none"> ▪ In Sweden the Right to Public Access allows people to roam freely in the forests, gathering berries, mushrooms etc. ▪ The Swedish forest policy, with its equally prioritized goals for the environment and production, aims at sustainable use of forest resources.
64e	A	1, 4, 5, 8	<ul style="list-style-type: none"> ▪ Support capacity-building in communities with responsibilities in forest management. ▪ Create awareness in society at large on the importance of issues related to deforestation and forest degradation. 	<ul style="list-style-type: none"> ▪ “Greener Forests” is an extension and information campaign on how to combine high economic production and yield with advanced environment benefits, with forest owners and others who deal with forestry as target groups. This is a way of supporting capacity-building in communities with responsibilities in forest management. ▪ In addition to this campaign, run by the National Board of Forestry, the Forest Owners Association offers similar capacity-building campaigns.

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
64f	A	1, 3, 4, 5	<ul style="list-style-type: none"> ▪ Support and promote community involvement in sustainable forest management through technical guidance, economic incentives and legal frameworks. 	
64g	A	1, 4	<ul style="list-style-type: none"> ▪ Promote maintenance and enhancement of forest resources through sustainable forest management. ▪ Promote the creation of new forest resources, e.g. through the establishment of planted forests or rehabilitation of degraded forests. 	<ul style="list-style-type: none"> ▪ The Swedish forest policy, with its equally prioritized goals for the environment and production, aims at sustainable use of forest resources. ▪ The regeneration of forest is regulated by law and the Forestry Act states that new stands shall be established i/after felling, ii/when the site productivity is not utilized satisfactorily, and iii/when land is unused or when the state of the forest is clearly unsatisfactory. All forest owners also have to give notification of final felling to the County Forestry Board.
64h	A	1, 3, 4, 8	<ul style="list-style-type: none"> ▪ Identify and measure internalization of externalities. ▪ Introduce positive incentives in the forest and non-forest sector that helps combating deforestation and forest degradation. 	<ul style="list-style-type: none"> ▪ The Swedish standing volume has increased by more than 1000 million m³ since the 1920s, the increment has also increased during the last centuries and the forest area has been on the same level since the 1930s (before that there had been an increase of the forested land). This shows that deforestation is not a problem in Sweden, a country with more than half of its land covered by productive forests (23 million ha). ▪ Extension and training campaigns, such as “Greener Forests”, aim to give the people concerned deeper knowledge about forest management, both its production and environmental sides. This is a way to hinder forest

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
				<p>degradation.</p> <ul style="list-style-type: none"> ▪ One of the national Environmental Quality Objectives “Sustainable Forests” and the Action Plan for Biological Diversity and Sustainable Forestry are policies aimed to promote the sustainable use of the forests.
64i	A	3, 5, 6, 8	<ul style="list-style-type: none"> ▪ Support local community programmes for capacity-building and credit facilities. ▪ Facilitate access to domestic and external markets of forest products and services. 	<ul style="list-style-type: none"> ▪ “Greener Forests” is an extension and information campaign on how to combine high economic production and yield with advanced environment benefits, with forest owners and others who deal with forestry as target groups. This is a way of supporting capacity-building in communities with responsibilities in forest management. ▪ The Swedish Centre for Ecological Sustainability, Swecol, supports sparsely populated districts financially and by transferring knowledge for ecological sustainability.
64j	B	1, 2, 7, 8	<ul style="list-style-type: none"> ▪ Request international financial institutions to analyse the impacts of foreign debt on deforestation and forest degradation. ▪ Request international financial institutions to explore innovative financial and approaches and schemes for helping countries to promote sustainable forest management. 	
66	A	3, 5	<ul style="list-style-type: none"> ▪ Use national forest programmes or other relevant programmes to involve Sami and local communities and 	<ul style="list-style-type: none"> ▪ According to the Swedish Forestry Act, consultation about the forest management with the Sami people

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
			women in the formulation and implementation of measures for protection of their rights and privileges in relation to forest land, traditional forest-related knowledge and forest biological resources.	should be made in certain areas

II.D.2 Traditional forest-related knowledge

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
74a	A	1, 3, 4	<ul style="list-style-type: none"> Implement effective measures to recognize, respect, protect and maintain traditional forest related knowledge in sustainable forest management. 	
74b	A	3, 5	<ul style="list-style-type: none"> Promote fair and equitable sharing of benefits arising from the use of traditional forest related knowledge, innovations and practices. 	
74c	A, B	7, 8	<ul style="list-style-type: none"> Work with international organizations to develop a common appreciation and understanding of the relationship between the intellectual property rights, sui-generis or other systems for protection and the Convention on Biological Diversity. Work on addressing issues of the identification of origins of traditional forest-related knowledge and of the knowledge that results from the use of forest genetic resources with a view to protect such knowledge. 	<ul style="list-style-type: none"> Sweden participates in a European Union LIFE-project on methods for identifying and preserving the biocultural heritage in European Forests.

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
74d	B	3, 5, 7	<ul style="list-style-type: none"> ▪ Develop or strengthen and implement legislation and policies to achieve objectives under articles 8j and related provisions of the Convention of Biological Diversity. ▪ Support efforts by international organizations and institutions regarding protection and application of traditional forest-related knowledge. 	

II.D.3 Forest conservation and protected areas

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
84	A, B	1, 5, 7	<ul style="list-style-type: none"> ▪ Implement the proposals for action of this programme element with the assistance of international organizations, donor countries and financial institutions and participation of governmental institutions, non-governmental organizations, community-based organizations, and indigenous and local communities. 	
85a	A	1, 3, 4	<ul style="list-style-type: none"> ▪ Commit to the protection, conservation and representativeness of all types of forests. ▪ Achieve this commitment through a range of conservation mechanisms, applied within and outside of protected forest areas, reflecting national circumstances and the complementary roles of protected forest areas and other sustainable forest management activities. 	<ul style="list-style-type: none"> ▪ The Swedish model is to use a combination of protected areas and other sustainable forest management activities on all forestland, which today is completely dominated by planted forests. ▪ In 1998 the Swedish Government passed a new Environmental Code which is a compilation of 16 former laws concerning the usage of natural resources and environmental issues. With this new code the legal basis

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
				<p>for protection of forestland is further improved.</p> <ul style="list-style-type: none"> ▪ The Swedish forest policy with the two equally prioritized goals for the environment and production aims for sustainable forest management.
85b	A	1, 3, 4, 5	<ul style="list-style-type: none"> ▪ Develop and implement strategies for: <ul style="list-style-type: none"> - The protection of the full range of forest values. - Recognition of the multiple functions and sustainable use of all types of forests. - Participation of communities and other interested parties. - Integration of Sami and local communities' livelihood needs. - Planning and management of forests on an ecosystem basis. 	<ul style="list-style-type: none"> ▪ These features correspond to the objectives for protection of forests and other sustainable management activities carried out in Sweden.
85c	A	3, 4, 5	<ul style="list-style-type: none"> ▪ Develop and implement forest management mechanisms that provide for partnerships and participation of forest owners, Sami people and local communities. 	
85d	A	1, 3, 4, 5	<ul style="list-style-type: none"> ▪ Develop financial support mechanisms to engage all interested parties in the planning and management of protected forest areas. ▪ Recognize protected forest areas under the stewardship of private forest owners or Sami and local communities. 	<ul style="list-style-type: none"> ▪ Protected forest areas under the stewardship of private forest owners are use in Sweden, through, e g protection of key-habitats.

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
85e	A	1, 4, 8	<ul style="list-style-type: none"> ▪ Develop and apply criteria for the adequacy, consistency and effectiveness of protected forest areas. ▪ Incorporate reserve design principles that identify need for new protected forest areas critical to the protection and maintenance of environmental services. ▪ Give consideration to linking protected forest areas with corridors and buffer zones. 	
85f	A	1, 3	<ul style="list-style-type: none"> ▪ Develop and implement innovative mechanisms for financing and encouraging forest conservation. 	
85g	B	1, 7, 8	<ul style="list-style-type: none"> ▪ Contribute to a global and regional assessment of the current status of protected forest areas, including total number, extent of each area, objectives of establishment, effectiveness of management, the World Conservation Union (IUCN) system equivalent category and basic biological and social information. 	
86	A, B	1, 7	<ul style="list-style-type: none"> ▪ Establish joint protected forest areas between countries that share ecologically important or unique transboundary forests. 	
87	B	1, 2, 4	<ul style="list-style-type: none"> ▪ Provide financial support and other resources to activities related to forest conservation and the implementation and management of protected forest areas in developing 	

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
			countries.	
88	B	1, 4, 7, 8	<ul style="list-style-type: none"> ▪ Cooperate with other countries, international organizations and institutions in developing methodologies for assessing the conditions of, and management effectiveness in. existing protected forest areas and their surrounding landscapes. 	<ul style="list-style-type: none"> ▪ Sweden is actively participating in international discussions on forests and forestry, and will continue to do so, and is also supporting forest-related international organizations and institutions.
89	B	1, 7, 8	<ul style="list-style-type: none"> ▪ Work with other countries, international organizations and institutions to further develop guidelines for consistency in the interpretation and use of the existing categories for protected forest areas developed by the World Conservation Union (IUCN) World Commission on Protected Areas. ▪ Work with other countries, international organizations and institutions to develop a global approach for assessing the effectiveness of protected forest area management in relation to relevant objectives. 	<ul style="list-style-type: none"> ▪ Sweden is actively participating in international discussions on forests and forestry, and will continue to do so, and is also supporting forest-related international organizations and institutions. ▪ Sweden participates in Natura 2000, which is a network created by the European Union to protect nature and wild flora and fauna.
90	A, B	1, 3, 7	<ul style="list-style-type: none"> ▪ Improve coordination, at national level and above, of policies and programmes that affect forest conservation. ▪ Address cross-sectoral policies, structural adjustment packages and mis-directed incentives. 	<ul style="list-style-type: none"> ▪ The Swedish Environmental Quality Objective “Sustainable Forests” and the Action Plan for Biological Diversity and Sustainable Forestry are examples of strategies that affect forest conservation. ▪ In 1998 the Swedish Government passed a new Environmental Code which is a compilation of 16 former laws concerning the usage of natural resources and environmental issues. With this new code the legal basis

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
				for protection of forestland is further improved.

II.D.4 Forest research

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
96a	A	1, 3, 4, 8	<ul style="list-style-type: none"> Improve Swedish efforts to strengthen forest research by formulating policies, programmes and strategies in order to identify research needs and priorities and to coordinate the implementation of research relevant to sustainable forest management. 	<ul style="list-style-type: none"> Research and development is highly prioritized in Sweden, and policies and strategies for research are formulated.
96b	A	8	<ul style="list-style-type: none"> Consider examination of new ways of mobilizing diverse sources of funding for forest research, including changes to the charters of research institutions and changes to research agendas. 	
96c	A	3, 8	<ul style="list-style-type: none"> Create opportunities for interested parties, e.g. policy makers, scientists and donors, to provide guidance to forest research and policy discussions in order to improve linkage between forest science and forest policy at the national level and below. 	<ul style="list-style-type: none"> The Royal Swedish Academy of Agriculture and Forestry and the Swedish University of Agricultural Sciences are examples of institutions where discussions between forest research and policy take place. Swecol, the Swedish Centre for Ecological Sustainability, is an authority under The Ministry of the Environment with the main objective to promote the linkage between scientists, industry, districts and authorities in Sweden, which was launched in 1999.

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
96d	A, B	8	<ul style="list-style-type: none"> Ensure that forest research is undertaken with prior consent of the country/countries concerned. 	
97a	B	2, 8	<ul style="list-style-type: none"> Contribute to fund forest research in developing countries. 	<ul style="list-style-type: none"> Sweden supports regional research networks, e.g. the African Academy of Sciences (AAS). Sweden supports international research institutes, e.g. International Council for Research in Agroforestry (ICRAF) and the Centre for International Forestry Research (CIFOR).
97b	B	2, 7, 8	<ul style="list-style-type: none"> Examine new ways for mobilizing funding for forest research in developing countries. Intensify efforts to strengthen research networks and build capacity at the national level and above. 	
97c	B	3, 8	<ul style="list-style-type: none"> Enhance access to forest-related information for all interested parties, using existing institutions, mechanisms and networks efficiently. 	<ul style="list-style-type: none"> The Swedish Statistical Yearbook of Forestry, annually published by the National Board of Forestry, covers most of the forest statistics available and its main purpose is to give a clear and easily accessible account of the existing statistics of importance.
97d	B	8	<ul style="list-style-type: none"> Foster joint ventures in forest research between the public and the private sector. 	<ul style="list-style-type: none"> Both the private sector and the Government finance the Forestry Research Institute of Sweden.

II.D.5 Valuation of forest goods and services

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
107a	A	1, 4, 8	<ul style="list-style-type: none"> ▪ Improve collection of quantitative data to enumerate and develop physical accounts of the full range of forest goods and services and impacts of changes in forest use on the environment. ▪ This should also be done for substitute wood and non-wood materials. 	<ul style="list-style-type: none"> ▪ The National Forest Inventory is carried out annually and, covering the entire forest area of Sweden, describes the state of, and changes in, forest resources in Sweden.
107b	A	8	<ul style="list-style-type: none"> ▪ Make further development of rapid and low-cost valuation methods for the full range of forest values. 	<ul style="list-style-type: none"> ▪ Work is presently being done on developing new content and design of the annual National Forest Inventory, which will go through a major revision in 2003. ▪ Research on forest valuation methodologies is ongoing at, e g the Swedish University of Agricultural Sciences.
107d	B	2, 8	<ul style="list-style-type: none"> ▪ Assist developing countries in building and promoting capacity for the development and application of forest valuation methods. 	<ul style="list-style-type: none"> ▪ Capacity-building is one of three fields prioritized by the Swedish International Development Cooperation Agency (Sida), in forest-related development assistance. ▪ The Swedish Forestry Administration undertakes international consultancy work in the field of inventories and surveys.

II.D.6 Economic instruments, tax policies and land tenure

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
115a	A	1, 3, 4, 8	<ul style="list-style-type: none"> ▪ Assess the potential scope and effective combination of economic instruments and tax policies as tools for promoting sustainable forest management as parts of the national forest programmes. ▪ This assessment should include, but not be limited to, collection of forest revenue from timber extraction. 	
115b	A	3	<ul style="list-style-type: none"> ▪ Recognize and use a combination of regulations and economic instruments to achieve the objectives of forest policies. 	<ul style="list-style-type: none"> ▪ The Swedish forest policy, with its two equally prioritized goals for production and environment, is implemented through different means. Training and information are emphasized and economic subsidies are used only in environmental issues. The Forestry Act is, of course, the base in this matter.
115c	A, B	1, 3, 4, 7, 8	<ul style="list-style-type: none"> ▪ Recognize the actual and potential impacts of economic instruments and tax policies as a way to encourage engagement in activities that avoid deforestation and forest degradation and that support sustainable forest management. ▪ Examine the role of forest policy failure and policies in other sectors as a contributing factor to deforestation, forest degradation and unsustainable forest management. ▪ Collaborate with international institutions in developing 	

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
			mitigating policies.	
115d	A	3, 5	<ul style="list-style-type: none"> ▪ Support land tenure policies that recognize and respect legitimate access and use and property rights in order to support sustainable forest management. ▪ Recognize that institutionalizing tenure is a long-term and complex process, which requires interim measures to address urgent needs. 	<ul style="list-style-type: none"> ▪ Land ownership is clearly defined in Sweden and Swedish legislation. ▪ The Right to Public Access allows people to roam freely in the forests, gathering berries, mushrooms etc.
115e	B	3, 7	<ul style="list-style-type: none"> ▪ Share the experiences in the area of forest revenue collection systems for the use of forest products and services with international organizations. 	
115g	A	1, 3, 4	<ul style="list-style-type: none"> ▪ Develop macroeconomic policies and policies in other sectors that support and contribute to sustainable forest management. 	

II.D.7 Future supply of and demand for wood and non-wood forest products and services

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
121a	A	8	<ul style="list-style-type: none"> ▪ Increase the extent, quality and comparability of inventory data on all aspects of forest resources. 	<ul style="list-style-type: none"> ▪ The National Forest Inventory is carried out annually and, covering the entire forest area of Sweden, describes the state of, and changes in, forest resources in Sweden. ▪ Work is presently being done on developing new content

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
				and design of the annual National Forest Inventory, which will go through a major revision in 2003.
121b	A	8	<ul style="list-style-type: none"> ▪ Give attention to collection and reporting on the use of a broad range of non-wood products. 	<ul style="list-style-type: none"> ▪ Work is presently being done on developing new content and design of the annual National Forest Inventory, which will go through a major revision in 2003.
121c	A	8	<ul style="list-style-type: none"> ▪ Systematically collect and report information on the source and use of wood fuels. 	<ul style="list-style-type: none"> ▪ The Swedish National Energy Administration is Sweden's national authority on issues regarding the supply and use of energy and provides information on the use and source of wood fuels.
121d	A	8	<ul style="list-style-type: none"> ▪ Provide timely, useful and comparable data on prices of wood and non-wood forest products and their substitutes. 	<ul style="list-style-type: none"> ▪ The Timber Measuring Organizations (TMOs) are economic associations working with, and promoting, independent control of most of the wood sold on the Swedish timber market. ▪ Price lists for wood are widely circulated and change according to market changes. ▪ Most of the forestry statistics available are published for easy access in the Statistical Yearbook of Forestry.
122a	A, B	1, 3, 4, 7	<ul style="list-style-type: none"> ▪ Promote policies to meet increasing demand for wood and non-wood forest products through sustainable forest management. ▪ Work towards an internationally agreed definition of planted forests. 	<ul style="list-style-type: none"> ▪ Both the production and the environmental goal of Swedish forest policy has the objective to use sustainable forest management as the way to meet the increased demand for wood and non-wood forest products. ▪ The Environmental goal "Living forests" and the Action

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
				<p>Plan for Biological Diversity and Sustainable Forest Management are also policies that have sustainable forestry as their main goal.</p>
122b	A	3, 4	<ul style="list-style-type: none"> ▪ Recognize the role of the private sector in producing forest products and services. ▪ Support the role of the private sector with a framework of policies, incentives and regulations. 	<ul style="list-style-type: none"> ▪ In Sweden, private owners and forest enterprises (of which two are completely owned by the state) hold 90% of the forest land. According to this, the recognition of the production role of the private sector is not an issue. The Swedish forest policy, including the Forestry Act, the Forest Sector Goals, the Action Plan for Biological Diversity and Sustainable Forestry etc, concerns all forests and forestry.
122c	A	1, 3, 4, 8	<ul style="list-style-type: none"> ▪ Incorporate the supply of fuel wood, wood energy and efficient wood energy technologies as a crucial part of policy and planning exercises within the forestry, agriculture and energy sectors. ▪ Develop pilot studies to assess more accurately the impacts of fuel wood collection on trees and forests. 	<ul style="list-style-type: none"> ▪ The project SKA99 has the main objective to analyse and map the possible use and development of the forests in Sweden during the next 100 years. The analysis of fuel from the forests is comprehensive and important in the different scenarios for forestry and will be used as a basis for decision-making and planning. The Wood energy is important in the policies for sustainable development in Sweden. ▪ The Swedish National Energy Administration is Sweden's national authority on issues regarding the supply and use of energy and is doing research on the environmental impacts of fuel wood collection in forests. ▪ Research on wood energy is carried out by, e g the Swedish National Energy Administration, The Swedish University of Agricultural Sciences and the Forestry

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
				Research Institute of Sweden.
122d	A	1, 3, 4	<ul style="list-style-type: none"> Develop and implement policies designed to promote sustainable production of wood and non-wood forest goods and services and to ensure that the benefits of commercialization of wood and non-wood forest goods and services contribute to improved management of forests and are equitable distributed to the people who protect and provide them. 	<ul style="list-style-type: none"> The goal for production of the Swedish forest policy states that forests and forestland should be utilized efficiently aiming at a sustainable and valuable yield.
122e	A	1, 3, 4, 6, 8	<ul style="list-style-type: none"> Review policies that have a direct effect on the price of forest products and their substitutes. Initiate studies on market behaviour. Recognize that appropriate prices can encourage and support sustainable forest management. 	
122f	A	1, 8	<ul style="list-style-type: none"> Undertake studies on the cost and benefits of using renewable wood and non-wood forest products as opposed to non-renewable substitutes. 	

II.D.8 Assessment, monitoring and rehabilitation of forest cover in environmentally critical areas

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
129a	B	1, 4, 7, 8	<ul style="list-style-type: none"> Cooperate with other countries, international 	<ul style="list-style-type: none"> Sweden participates in Natura 2000, which is a network

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
			<p>organizations and major groups to coordinate activities concerning forests and trees in environmentally critical areas.</p> <ul style="list-style-type: none"> Contribute to more systematic collection, analysis and dissemination of information concerning environmentally critical areas. 	<p>created by the European Union to protect nature and wild flora and fauna.</p> <ul style="list-style-type: none"> Information to the forestry sector, media, schools and the public is an important field in the work of the Forestry Administration.
129b	A	1, 3, 4	<ul style="list-style-type: none"> Give rehabilitation and sustainable management of forests and trees in environmentally critical areas a higher priority on the development agendas. 	
129c	A	1, 4	<ul style="list-style-type: none"> Use planted forests and other means as a way for rehabilitating degraded lands and as a basis for re-establishing natural forests. 	<ul style="list-style-type: none"> The Swedish model is to use a combination of protected areas and other sustainable forest management activities on all forestland, which today is completely dominated by planted forests.
129d	A	1, 4, 8	<ul style="list-style-type: none"> Engage in raising awareness of the multiple roles that planted and natural forests might fulfil in the rehabilitation and sustainable management of forests in environmentally critical areas. 	<ul style="list-style-type: none"> Information to the forestry sector, media, schools and the public is an important field in the work of the Forestry Administration.
129e	B	1, 4, 7	<ul style="list-style-type: none"> Strengthen the support to and collaboration with international programmes in particular concerning the role of forests, other wooded lands and trees in the Convention to Combat Desertification and Agenda 21, chapters 12 and 13. 	<ul style="list-style-type: none"> The International Convention to Combat Desertification in Countries Experiencing Drought and/or Desertification, Particularly in Africa was signed in 1994 and ratified in 1995 (United Nations URL). Sweden has considered these issues important and has made

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
				<p>considerable efforts in this field, for example through the chairmanship of the negotiations of the Convention.</p> <ul style="list-style-type: none"> ▪ The Swedish International Development Cooperation Agency (Sida) has been cooperating with countries, particularly in Africa, for many years on programmes dealing with land degradation and drought consistent with the principles of the Convention.

II.E Forest-related work of international and regional organizations and under existing instruments

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
140a	A, B	1, 3, 4, 7	<ul style="list-style-type: none"> ▪ Utilize the expertise provided by international and regional organizations and instruments in the formulation of national forest programmes to better integrate cross-sectoral linkages and all aspects of sustainable forest management into Swedish forest policy. 	
140b	A, B	3, 7	<ul style="list-style-type: none"> ▪ Establish and strengthen effective Swedish arrangements to provide coordinated and effective guidance to multilateral organizations. 	
142a	B	7, 8	<ul style="list-style-type: none"> ▪ Provide guidance to the governing bodies of international and regional organizations and instruments. 	<ul style="list-style-type: none"> ▪ NGOs, especially environmental NGOs, are involved in

Number	Category	Subject field	Condensed proposals for action	Examples of measures taken
			<ul style="list-style-type: none"> ▪ Encourage non-governmental organizations to cooperate in implementing activities to increase public awareness of the direct and indirect benefits derived from forests at the national level and above. 	policy development and in information campaigns run by the National Board of Forestry.
142b	A, B	3, 7	<ul style="list-style-type: none"> ▪ Encourage non-governmental organizations to cooperate in facilitating inter-institutional consultation on cross-sectoral forest policies, policy reforms and planning, and programmes for sustainable forest management 	
142c	B	7, 8	<ul style="list-style-type: none"> ▪ Encourage non-governmental organizations to cooperate in enhancing cost-effective data systems to allow preparation and dissemination of information of progress in sustainable forest management. 	

Av Skogsstyrelsen publicerade Rapporter:

- 1985 Utvärdering av ÖSI-effekter mm
1985:1 Samordnad publicering vid skogsstyrelsen
1985:2 Beskrivning i tallfröplantager
1986:1 Bilvägslagrat virke 1984
1987:1 Skogs- och naturvårdsservice inom skogsvårdsorganisationen
1988:1 Mallar för ståndortsbonitering; Lathund för 18 län i södra Sverige
1988:2 Grusanalys i fält
1988:3 Björken i blickpunkten
1989:1 Dokumentation – Storkonferensen 1989
1989:2 Bok, ek och ask inom svenskt skogsbruk och skogsindustri
1990:1 Teknik vid skogsmarkskalkning
1991:1 Tätortsnära skogsbruk
1991:2 ÖSI; utvärdering av effekter mm
1991:3 Utboträffar; utvärdering
1991:4 Skogsskador i Sverige 1990
1991:5 Contortarapporten
1991:6 Participation in design of a system to assess Environmental Consideration in forestry a Case study of the greenery project
1992:1 Allmän Skogs- och Miljöinventering, ÖSI och NISP
1992:2 Skogsskador i Sverige 1991
1992:3 Aktiva Natur- och Kulturvårdande åtgärder i skogsbruket
1992:4 Utvärdering av studiekampanjen Rikare Skog
1993:1 Skoglig geologi
1993:2 Organisationens Dolda Resurs
1993:3 Skogsskador i Sverige 1992
1993:4 Av böcker om skog får man aldrig nog, eller?
1993:5 Nyckelbiotoper i skogarna vid våra sydligaste fjäll
1993:6 Skogsmarkskalkning – *Resultat från en fyraårig försöksperiod samt förslag till åtgärdsprogram*
1993:7 Betespräglad äldre bondeskog – *från naturvårdssynpunkt*
1993:8 Seminarier om Naturhänsyn i gallring i januari 1993
1993:9 Förbättrad sysselsättningsstatistik i skogsbruket – *arbetsgruppens slutrapport*
1994:1 EG/EU och EES-avtalet ur skoglig synvinkel
1994:2 Hur upplever "grönt utbildade kvinnor" sin arbetssituation inom skogsvårdsorganisationen?
1994:3 Renewable Forests - Myth or Reality?
1994:4 Bjursåsprojektet - *underlag för landskapsekologisk planering i samband med skogsinventering*
1994:5 Historiska kartor - *underlag för natur- och kulturmiljövård i skogen*
1994:6 Skogsskador i Sverige 1993
1994:7 Skogsskador i Sverige – *nuläge och förslag till åtgärder*
1994:8 Häckfägelinventering i en åkerholme åren 1989-1993
1995:1 Planering av skogsbrukets hänsyn till vatten i ett avrinningsområde i Gävleborg
1995:2 SUMPSKOG – ekologi och skötsel
1995:3 Skogsbruk vid vatten
1995:4 Skogsskador i Sverige 1994
1995:5 Långsam alkalisering av skogsmark
1995:6 Vad kan vi lära av KMV-kampanjen?
1995:7 GROT-uttaget. Pilotundersökning angående uttaget av trädrester på skogsmark
1995:8 The Capercaillie and Forestry. Reports No. 1-2 from the Swedish Field Study 1982-1988
1996:1 Women in Forestry – What is their situation?
1996:2 Skogens kvinnor – Hur är läget?
1996:3 Landmollusker i jämtländska nyckelbiotoper
1996:4 Förslag till metod för bestämning av prestationstal m.m. vid själverksamhet i småskaligt skogsbruk.
1996:5 Skogsvårdsorganisationens framtidsscenarioer
1997:1 Sjövatten som indikator på markförsurning
1997:2 Naturvårdsutbildning (20 poäng) Hur gick det?
1997:3 IR-95 – Flygbildsbaserad inventering av skogsskador i sydvästra Sverige 1995
1997:4 Den skogliga genbanken (Del 1 och Del 2)
1997:5 Miljeu96 Rådgivning. Rapport från utvärdering av miljeurådgivningen
1997:6 Effekter av skogsbränsleuttag och askåterföring – *en litteraturstudie*
1997:7 Målgruppsanalys
1997:8 Effekter av tungmetallnedfall på skogslevande landsnäckor (*with English Summary: The impact on forest land snails by atmospheric deposition of heavy metals*)
1997:9 GIS-metodik för kartläggning av markförsurning – *En pilotstudie i Jönköpings län*

- 1998:1 Miljökonsekvensbeskrivning (MKB) av skogsbränsleuttag, asktillförsel och övrig näringskompensation
- 1998:2 Studier över skogsbruksåtgärdernas inverkan på snäckfaunans diversitet *(with English summary: Studies on the impact by forestry on the mollusc fauna in commercially uses forests in Central Sweden)*
- 1998:3 Dalaskog - Pilotprojekt i landskapsanalys
- 1998:4 Användning av satellitdata – hitta avverkad skog och uppskatta lövröjningsbehov
- 1998:5 Baskatjoner och aciditet i svensk skogsmark - tillstånd och förändringar
- 1998:6 Övervakning av biologisk mångfald i det brukade skogslandskapet. *With a summary in English: Monitoring of biodiversity in managed forests*
- 1998:7 Marksvampar i kalkbarrskogar och skogsbeten i Gotländska nyckelbiotoper
- 1998:8 Omgivande skog och skogsbrukets betydelse för fiskfaunan i små skogsbäckar
- 1999:1 Miljökonsekvensbeskrivning av Skogsstyrelsens förslag till åtgärdsprogram för kalkning och vitalisering
- 1999:2 Internationella konventioner och andra instrument som behandlar internationella skogsfrågor
- 1999:3 Målklassificering i "Gröna skogsbruksplaner" - betydelsen för produktion och ekonomi
- 1999:4 Scenarier och Analyser i SKA 99 - Förutsättningar
- 2000:1 Samordnade åtgärder mot försurning av mark och vatten - Underlagsdokument till Nationell plan för kalkning av sjöar och vattendrag
- 2000:2 Skogliga Konsekvens-Analyser 1999 - Skogens möjligheter på 2000-talet
- 2000:3 Ministerkonferens om skydd av Europas skogar - Resolutioner och deklARATIONER
- 2000:4 Skogsbruket i den lokala ekonomin
- 2000:5 Aska från biobränsle
- 2000:6 Skogsskadeinventering av bok och ek i Sydsverige 1999
- 2001:1 Landmolluskfaunans ekologi i sump- och myrskogar i mellersta Norrland, med jämförelser beträffande förhållandena i södra Sverige
- 2001:2 Arealförluster från skogliga avrinningsområden i Västra Götaland
- 2001:3 The proposals for action submitted by the Intergovernmental Panel on Forests (IPF) and the Intergovernmental Forum on Forests (IFF) - in the Swedish context

Av skogsstyrelsen publicerade Meddelanden:

- 1985:1 Fem år med en ny skogspolitik
1985:2 Eldning med helved och flis i privatskogsbruket/virkesbalanser 1985
1986:1 Förbrukningen av träbränsle i s.k. mellanskaliga anläggningar/virkesbalanser 1985
1986:3 Skogsvårdsenkäten 1984/virkesbalanser 1985
1986:4 Huvudrapporten/virkesbalanser 1985
1986:5 Återväxttaxeringen 1984 och 1985
1987:1 Skogsvårdsorganisationens årskonferens 1986
1987:2 Återväxttaxeringen 1984 – 1986
1987:3 Utvärdering av samråden 1984 och 1985/skogsbruk – rennärning
1988:1 Forskningsseminarium/skogsbruk – rennärning
1989:1 Skogsvårdsorganisationens årskonferens 1988
1989:2 Gallringsundersökningen 1987
1991:1 Skogsvårdsorganisationens årskonferens 1990
1991:2 Vägplan -90
1991:3 Skogsvårdsorganisationens uppdragsverksamhet
– Efterfrågade tjänster på en öppen marknad
1991:4 Naturvårdshänsyn – Tagen hänsyn vid slutavverkning 1989–1991
1991:5 Ekologiska effekter av skogsbränsleuttag
1992:1 Svanahuvudsvägen
1992:2 Transportformer i väglöst land
1992:3 Utvärdering av samråden 1989-1990 /skogsbruk – rennärning
1993:1 Skogsvårdsorganisationens årskonferens 1992
1993:2 Virkesbalanser 1992
1993:3 Uppföljning av 1991 års lövträdsplantering på åker
1993:4 Återväxttaxeringarna 1990-1992
1994:1 Plantinventering 89
1995:1 Skogsvårdsorganisationens årskonferens 1994
1995:2 Gallringsundersökning 92
1995:3 Kontrolltaxering av nyckelbiotoper
1996:1 Skogsstyrelsens anslag för tillämpad skogsproduktionsforskning
1997:1 Naturskydd och naturhänsyn i skogen
1997:2 Skogsvårdsorganisationens årskonferens 1996
1998:1 Skogsvårdsorganisationens Utvärdering av Skogspolitiken
1998:2 Skogliga aktörer och den nya skogspolitiken
1998:3 Föryngringsavverkning och skogsbilvägar
1998:4 Miljöhänsyn vid föryngringsavverkning - Delresultat från Polytax
1998:5 Beståndsanläggning
1998:6 Naturskydd och miljöarbete
1998:7 Røjningsundersökning 1997
1998:8 Gallringsundersökning 1997
1998:9 Skadebilden beträffande fasta fornlämningar och övriga kulturmiljövärden
1998:10 Produktionskonsekvenser av den nya skogspolitiken
1998:11 SMILE - Uppföljning av sumpskogsskötsel
1998:12 Sköter vi ädellövskogen? - Ett projekt inom SMILE
1998:13 Riksdagens skogspolitiska intentioner. Om mål som uppdrag till en myndighet
1998:14 Swedish forest policy in an international perspective. (Utfört av FAO)
1998:15 Produktion eller miljö. (En mediaundersökning utförd av Göteborgs universitet)
1998:16 De trädbevuxna impedimentens betydelse som livsmiljöer för skogslevande växt- och djurarter
1998:17 Verksamhet inom Skogsvårdsorganisationen som kan utnyttjas i den nationella miljöövervakningen
1998:18 Auswertung der schwedischen Forstpolitik 1997
1998:19 Skogsvårdsorganisationens årskonferens 1998
1999:1 Nyckelbiotopsinventeringen 1993-1998. Slutrapport
1999:2 Nyckelbiotopsinventering inom större skogsbolag. En jämförelse mellan SVOs och bolagens inventeringsmetodik
1999:3 Sveriges sumpskogar. Resultat av sumpskogsinventeringen 1990-1998
2001:1 Skogsvårdsorganisationens Årskonferens 2000

Beställning av Rapporter och Meddelanden

Skogsvårdsstyrelsen i ditt län
eller
Skogsstyrelsen,
Förlaget
551 83 JÖNKÖPING
Telefon: 036 – 15 55 92
vx 036 – 15 56 00
fax 036 – 19 06 22
e-post: sksforlag.order@svo.se
www.svo.se/forlag

I Skogsstyrelsens författningssamling (SKSFS) publiceras myndighetens föreskrifter och allmänna råd. Föreskrifterna är av tvingande natur. De allmänna råden är generella rekommendationer som anger hur någon kan eller bör handla i visst hänseende.

I Skogsstyrelsens Meddelande-serie publiceras redogörelser, utredningar m.m. av officiell karaktär. Innehållet överensstämmer med myndighetens policy.

I Skogsstyrelsens Rapport-serie publiceras redogörelser och utredningar m.m. för vars innehåll författaren/författarna själva ansvarar.

Skogsstyrelsen publicerar dessutom fortlöpande: Foldrar, broschyrer, böcker m.m. inom skilda skogliga ämnesområden.

Skogsstyrelsen är också utgivare av tidningen Skogseko.

From 1995 to the year 2000, international forest policy dialogue has been taken place within the United Nations Intergovernmental Panel on Forests (IPF) and its successor the Intergovernmental Forum on Forests (IFF). One of the outcomes of these two processes is around 270 negotiated proposals for action, covering a wide range of issues related to forests and forestry, that should be undertaken by countries and other actors to implement sustainable forest management on a global level.

In this report, the IPF/IFF proposals for action are structured and analysed from a Swedish point of view. The Swedish situation and way of working are compared with the actions proposed by the IPF/IFF and fields where Sweden fulfils the requirements, as well as fields where Sweden could take further action, are presented.