

Finland's National Forest Programme 2010 Follow-up Report 2000

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Jaana Kaipainen and Pentti Lähteenoja

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Abstract	<p>On the 18th of November 1999 the Finnish Government made the decision on the implementation of Finland's National Forest Programme 2010 as a balanced whole, comprising the economic, ecological and social dimensions of sustainability. The implementation started in the beginning of 2000.</p> <p>The implementation of the programme is monitored by means of annual follow-up reports. The first report covers the period from the completion of the programme until the end of 2000, and it contains a description of the realised development as well as proposals for 23 further measures concerning the different aspects of the National Forest Programme 2010.</p>		
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Persons who have contributed to the preparation of the Follow-up Report 2000

Forestry Specialist *Pekka Airaksinen*

Expert on Wood Energy *Tage Fredriksson*

Senior Adviser *Heikki Granholm*

Research Manager *Juha Hakkarainen*

Senior Adviser *Matti Heikurainen*

Director *Eeva Hellström*

Senior Adviser *Marja Hilska-Aaltonen*

Information specialist *Harri Hypén*

M. Sc. (Forestry) *Bjarne Häggman*

Senior Officer *Hannu Jokiluoma*

Senior Scientist *Jukka-Pekka Jäppinen*

Executive Director *Juhani Karvonen*

Limnologist *Kaarle Kenttämies*

M. Sc. (Forestry) *Juhani Kokkonen*

Environment Manager *Kirsi-Marja Korhonen*

Head of Forestry *Jouko Kostamo*

Counsellor for Education *Aapo Koukku*

Senior Officer (For.) *Tapio Lehtiniemi*

Department Manager *Pertti Litmanen*

Senior Adviser *Helena Merisaari*

M. Sc. (Forestry) *Airi Matila*

Senior Adviser *Tapani Mäkinen*

Head of Quality Systems *Hannu Niemelä*

Counsellor for Education *Seppo Niinivaara*

Assistant Manager *Timo Nyrhinen*

Counsellor of Forestry *Jouko Paloniemi*

Senior Adviser *Kaisa Pirkola*

Marketing Manager *Ilari Pirttilä*

Counsellor of Forestry *Anders Portin*

Counsellor *Juhani Pöllänen*

Counsellor *Harri Rumpunen*

Counsellor, Nature Conservation *Pekka Salminen*

Government Counsellor *Matti Setälä*

Researcher *Tuija Sievänen*

Biodiversity Specialist *Suvi Raivio*

Counsellor *Erkki Uusitalo*

Rural Counsellor *Eero Uusitalo*

Counsellor *Markku Väre*

Central Union of Agricultural Producers and Forest Owners, Forestry Group

Forestry Development Centre Tapio

Ministry of Agriculture and Forestry

Central Union of Agricultural Producers and Forest Owners, Forestry Group

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Finnish Forest Industries Federation

Ministry of Agriculture and Forestry

Forestry Development Centre Tapio

Ministry of Agriculture and Forestry

Forestry Development Centre Tapio

Ministry of Education

Central Union of Agricultural Producers and Forest Owners, Forestry Group

Ministry of Agriculture and Forestry

Ministry of Agriculture and Forestry

Metsäliitto Group

Ministry of Agriculture and Forestry

Finnish Forest Industries Federation

Finnish Forest Industries Federation

Ministry of the Environment

Ministry of Agriculture and Forestry

Finnish Forest Research Institute Metla

Finnish Forest Industries Federation

Finnish Forest Industries Federation

Ministry of Agriculture and Forestry

Finnish Forest Industries Federation

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Foreword

The revision of the forest policy during the 1990s included a reform of the central forest legislation, and the principles, objectives and means of the revised forest policy were put down in Finland's National Forest Programme 2010. The programme was ratified by a Government Resolution of 4 March 1999, and according to a Government Decision of 18 November 1999, the programme will be implemented as a balanced whole, comprising the economic, ecological and social dimensions of sustainability. The National Forest Programme 2010 was based on Regional Forest Programmes, and updating these following the outlines set by the National Forest Programme is being completed. The programmes have been drafted in the spirit of open cooperation, which may not always be very easy in the forest sector. However, it is in the interest of all parties involved to maintain the constructive atmosphere in the programme implementation, both on the national and regional level. Efficient cooperation will ensure the employment and livelihood opportunities based on forests, diversity and viability of forests as well as recreation and other amenities provided by forests to all citizens.

The implementation of Finland's National Forest Programme 2010 started in the beginning of 2000, and for this purpose additional funds totalling 68 million Finnish marks were allocated to the main title of the Ministry of Agriculture and Forestry in the State budget for 2000. Most of the funds were directed to silvicultural and forest improvement measures, forest management planning, advising of forest owners and forest

ecosystem management. The private sector has also contributed to the implementation of the programme. In 2000 the output of the forest industry grew by about 5 per cent. One objective of the National Forest Programme 2010 is to increase the forest industry's annual use of domestic roundwood by 5-10 million cubic metres by 2010, and during the favourable stage in the trade cycle significant steps have been taken towards reaching the objective.

An ecological assessment of the need for forest protection in Southern Finland, the western parts of the Province of Oulu and Southwestern Lapland was completed in autumn 2000, and a broadly-based committee for drafting the objective, financing and action programme started its work in the beginning of 2001. Compared to the other countries the share of strictly protected forests is very high in Finland. Securing the biodiversity of forest ecosystems depends largely on the success in the wildlife management of commercial forests. The new recommendations and instructions for forest management, forest certification extending to the whole country as well as implementation of the forest acts will support the ecosystem management in commercial forests.

This first follow-up report of Finland's National Forest Programme was prepared at the Working Committee of the Forest Committee and ratified by the Forest Committee. The follow-up report is partly based on the project reports of the more than 30 projects included in the implementation and follow-up plan. I wish to thank all the persons and parties involved in the preparation of this report for their invaluable contributions to the job well done.

Kalevi Hemilä
Minister of Agriculture and Forestry

Helsinki 14 March 2001

Forest Committee: Further development needed in the forest and ecosystem management

The Forest Committee responsible for the guidance of the implementation and follow-up of Finland's National Forest Programme approved the first follow-up report 14 March 2001. According to the report, the programme implementation has got a good start. The decrease in silvicultural and forest improvement measures that continued through the 1990s has stopped, important steps have been taken towards increasing the annual use of domestic industrial roundwood by the forest industry, and ecological sustainability of forests has been promoted, among other things, by increasing the appropriation for forest ecosystems and nature conservation areas.

The follow-up report contains 23 proposals for further measures to support the programme implementation. These concern, in particular, promotion of silvicultural and forest improvement measures and marketing these to forest owners as well as study of the results achieved in ecosystem management and improving these. Further measures are also directed at camping, hiking and recreation services, innovative activities and vocational training in the forest sector.

In addition to an adequate and representative network of conservation areas, preserving the biodiversity of forests depends a great deal on the success in the ecosystem management of commercial forests. In recent years the organisations in the forest sector have revised their recommendations and instructions for forest management, and 95 per cent of the Finnish forests are certified. Increased awareness of forest ecosystem management and implementation of the new forest legislation support the management of forest environments. Through the further measures put forward in the follow-up report efforts will be made to secure adequate funding for

forest ecosystem management and study the results achieved so far. The marketing of the possibilities for funding directed at ecosystem management to the forest owners will be intensified. During the first year of programme implementation the appropriation for the management of forest ecosystems and nature conservation areas were raised in order to promote the ecological sustainability of forests.

The silvicultural and forest improvement measures are no longer on the decrease, and adequate measures are needed to reach the welfare effects put forward in the programme in the long run. The further measures presented in the follow-up report emphasise silviculture and forest improvement, for example, through the Tomorrow's Forests project, by increasing regional forest management planning and well as improving the efficiency in the use of State funds for the measures concerned. In 2000 the funds used for wood production were slightly higher than in 1999, about FIM 1.3 billion (€ 220 million). The target level set in the National Forest Programme is FIM 1.5 billion (€ 250 million).

In the development of the conservation of forests the emphasis is shifting to Southern Finland, which is in accordance with the National Forest Programme. An ecological assessment of the need for conservation was completed in autumn 2000, and a broadly-based committee for drafting the objective, financing and action programme started its work in the beginning of 2001. The implementation of the ratified conservation programmes for 1996-2007 has progressed in accordance with the financing programme ratified by the Cabinet Committee on Economic Policy in 1996.

By increasing the use of wood for energy the forest sector contributes to the efforts to slow down the greenhouse effect. The objective of the

National Forest Programme is to increase the annual use of wood for energy production by 5 million cubic metres by 2010. The use of chips is on the increase and the possibilities to utilise these will be improved under the Programme for Promoting Renewable Energy Sources of the Ministry of Trade and Industry as well as the Wood Energy Technology Programme (1999-2003). In recent years the forest industry has considerably increased the use of wood-based fuels for energy production.

Reaching the objectives of the National Forest Programme provides new employment opportunities especially in silviculture. In 2000 forestry employed about 27,000 people. The structure of forest sector employers has become fragmented, and it is increasingly dominated by small firms. The attractiveness of the sector and possibilities of the ageing employees to go on working are being improved through the joint Savotta 2000 project between the parties of the forest sector labour market and through other development programmes for working life.

Finland takes an active part in international processes and the work of international organisations in the forest sector. In the next few years the most important international forest policy issues will be the UN Forum on Forests (UNFF), Convention on Biological Diversity as well as the Northern Dimension of the EU. Finland emphasises the role of national forest programmes in promoting sustainable forestry.

The output of the Finnish forest industry grew by about 2.5 per cent in 1999 and 5 per cent in 2000. The growth in the output exceeded the average in sawn wood, plywood, fine paper as well as mechanical printing and writing paper. In 1999 the domestic consumption of sawn wood was more than 4 million cubic metres, and the per capita consumption in Finland is the highest in the world. According to the National Forest Programme, the annual use of domestic industrial roundwood by the forest industry should increase by 5-10 million cubic metres, and considerable progress has already been made towards reaching this objective.

Finland's National Forest Programme 2010 - Summary

Finland's National Forest Programme 2010 was prepared in the spirit of open and broad cooperation. A large number of interest groups were involved in the work groups preparing the programme, and almost 3,000 people participated in the public forums. The Government ratified Finland's National Forest Programme 4 March 1999, and according to a Government Decision of 18 November 1999, the Programme will be implemented as a balanced whole, comprising the economic, ecological and social dimensions of sustainability. 26 May 1999 the Government appointed a broadly-based Forest Committee for the implementation and follow-up of the National Forest Programme 2010.

By 2010 the forest industry's annual use of domestic industrial roundwood should be increased by 5-10 million cubic metres (to 63-68 million cubic metres), the value of wood industry's exports should be doubled to € 4.2 billion per year, and the annual use of wood for energy production should be increased from 800,000 to 5 million cubic metres. The Government will cooperate with companies and entrepreneurs to secure the preconditions for forest industry operations, such as competitive energy prices and adequate road networks as well as technology and development programmes needed for the development of wood industry and the use of wood energy.

In order to increase the production of industrial roundwood to the target level, the investments in silviculture and forest improvement need to be raised to the former level of about €0.25 billion per year. The forest owners will contribute about €67 million and the share of the State and the EU funding will be about € 17 million. The Government will concentrate its efforts particularly on forest management planning as well as advising and training of forest owners. The increase in the output is going to improve the employment in forestry and forest industry by 10,000-15,000 man-years, but due to the higher productivity the employment in the forestry sector is going to decrease from 95,000 to 80,000 man-years.

The ecological sustainability of forests will be preserved by developing the ecosystem management of commercial forests based on the Environmental Programme for Forestry of the Ministry of Agriculture and Forestry and Ministry of the Environment and the related follow-up. The appropriation for forest ecosystem management will be increased. The environmental load caused by forestry will be reduced in accordance with the Government Resolution regarding water protection. The ratified conservation programmes concerning privately owned land are carried out in 1996-2007 under a financing programme totalling € 0.6 billion. In addition, a broadly-based ad-hoc work group will be appointed to assess the need for forest conservation based on research results, as well as to draft an objective, financial and action programme for forest conservation comprising the economic and social aspects. The programme will be launched as soon as it is completed, and it concerns Southern Finland, western parts of the Province of Oulu and South-western Lapland.

Principally the increase in forest management will concentrate on the management of young stands (from 150,000 to 250,000 ha/year), first thinning (from 100,000 to 250,000 ha/year) and ditch cleaning and supplementary ditching (from 75,000 to 110,000 ha/year). In the case of forest roads the main emphasis will shift from the construction of new roads to improving the existing ones. The monitoring of the forest and environmental management and harvesting damages will be developed.

The multiple-use of forests comprises hunting, reindeer herding, picking of berries and mushrooms, landscape and cultural values, outdoor recreation and tourism, which will be taken into account and promoted in connection with the use and conservation of forests. Forestry know-how and innovative activities will be advanced through research, practical application of the research results and training. A Forum for Innovation will be set up to increase the interaction between the producers and users of information. The interests of Finland and sustainable forestry will be promoted through active participation in international forest policy, international forest research and training cooperation as well as efficient communication of issues relating to forests and the environment.

Good Prospects For The Forest Industry To Grow

Objectives

The aim of the National Forest Programme is to preserve competitive conditions for the forest industry in Finland and make it possible for the industry to increase its domestic consumption of wood by 5-10 million cubic metres by the year 2010. Another goal of the forest programme is to double export earnings generated by wood products by the year 2010.

Realised development

In 1999 the output of the forest industry grew by about 2.5 per cent, and the growth in 2000 is estimated at around 5 per cent. This clearly exceeds the long-term average annual growth of 2.8 per cent. The increase in the output has been due to the demand for forest industry products in the most important export markets. Hardly any new processing plants have been built, but the existing ones have been renovated and the capacity has grown. Thus the increase in the production is based on renewal and expansion investments as well as high used capacity of the plants.

The increase in the production volumes has led to an increase in the use of wood. In 1999 the forest industry used 57.1 million cubic metres of domestic roundwood and 13.2 million cubic metres of imported wood as well as processed 12.8 million cubic metres of chips and sawdust obtained from wood processing. The use of wood increased by about 2 per cent from the year before, and in 2000 it grew even more. The efficiency of the production has improved and growth has largely occurred in highly processed products, and thus the use of wood has grown less than the output. However, the increase in the use of wood exceeds that target level set in the National Forest Programme 2010.

In 2000 the output of sawmilling totalled about 13.3 million cubic metres, while a couple of years earlier it had been around 11.4

million cubic metres, i.e. the annual growth in the output was about 8 per cent. The growth rate in the production of plywood was about the same. As a result of new capacity, the production of softwood plywood grew considerably, but the production of particle board and fibreboard fell slightly.

The production of pulp has increased by 3-4 per cent annually. Almost all of the mechanical pulp is used as raw material in the domestic paper and paperboard industry, and about a fifth of the chemical pulp is exported.

The production of paper and paperboard grew by about 2 per cent in 1999 and by more than 5 per cent in 2000, when the output exceeded the limit of 13.5 million tonnes. In 1999 the production of fine paper increased by almost 10 per cent and in 2000 by about 5 per cent. In the production of mechanical printing and writing paper the growth was more than 10 per cent between 1999 and 2000. The production of newsprint has stayed at about the same level as earlier. Part of the paper production capacity has been converted into the production of more highly processed types of paper.

The increase in the production volumes of wood product industry found strong support from the positive economic development. The output of sawmilling and board industry grew considerably. The exports of planed timber and processing capacity of glued-laminated wood have almost doubled in the past two years. The domestic consumption of sawn wood grew from 2.4 million cubic metres in the early 1990s to more than 4 million cubic metres in 1999. The per capita consumption of sawn wood in Finland is the highest in the world.

The vision for the wood product industry formulated at the end of 1999 has harmonised the work of the different operators in the sector. Small and medium sized firms and the major forest industry companies have launched projects concerning the utilisation of the extensive international distribution network of the major

forest industry companies in the marketing of the products.

The joint sales promotion and research efforts of the wood processing industry (Finnish Timber Council and Finnish Wood Research Ltd) were combined into Wood Focus Oy at

the beginning of 2001. This contributes to the financing of the Centres of Excellence in the wood product sector, Wood Finland action programme, Timber 2000 sales promotion campaign as well as the most recent Wood Europe campaign on behalf of the wood processing industry.

Further measures

1. The Government maintains and promotes the preconditions for the wood processing industry through its policies, especially energy and traffic policy.
2. The relevant operators and authorities implement the Wood Europe project and Centres of Excellence in the wood sector as well as promote the networking of companies operating in the wood sector, especially small companies located in rural areas.

Forestry Is Profitable and Creates Employment

Objectives

The goal of the National Forest Programme is to increase the annual harvesting of industrial roundwood to between 63 and 68 million cubic metres by the year 2010 in such a way that the high level of silviculture and ecosystem management are sustained. Another goal is to increase the use of wood for energy by 5 million cubic metres per year.

Development of forestry

In 1999 the average net earnings of private forestry before taxes and liabilities were €100 per hectare of forest land, and due to the increase in commercial felling as well as in the prices for logs, in 2000 the earnings rose to about €112. There is considerable regional variation in the net earnings of private forestry.

According to an estimate by the Finnish Forest Research Institute for the different Forestry Centres, the maximum sustainable cut of roundwood is 69 million cubic metres per year. In 1994-1998 the harvesting in the whole country was about 80 per cent of the maximum allowable cut, and in the different

Forestry Centres the rate of utilisation varied between 57 and 92 per cent. The utilisation of the harvesting potential for spruce has increased especially in the territories of the Forestry Centres located in Central and Eastern Finland. The harvesting of spruce, in particular, had been clearly below the potential from the 1970s until the recent years.

In 1999 roundwood production totalled 60.9 million cubic metres, and the share of commercial felling was 91 per cent, i.e. 55.3 million cubic metres. About 5.5 million cubic metres of stemwood was used as fuelwood in dwellings and other buildings. The commercial felling from non-industrial private forests totalled 47.8 million cubic metres (Table 1), 3.1 million cubic metres were harvested from forests owned by forest industry companies and 4.3 million cubic metres from State forests administered by the Forest and Park Service.

In the commercial felling of 1999 the share of logs was 27.3 million cubic metres and that of pulpwood was 28 million cubic metres. Compared to the average of the preceding 10-year period the felling of logs was 24 per cent and that of pulpwood 15 per cent higher.

In 2000 commercial roundwood production grew by about 5 per cent from 1999, and the production was estimated at about 58 million cubic metres. The felling of logs grew by 6 per cent and that of pulpwood by 3 per cent. The harvesting area grew as well (Figure 1).

The gross stumpage earnings of private forests totalled € 1.6 billion in 1999, and in 2000 they rose to € 1.8 billion, which in real terms is the highest level reached per year. In the 1990s the earnings from the sale of logs accounted for 70 per cent of the gross stumpage price earnings. The most important species in terms of the stumpage price earnings is spruce, and in 1999 the share of earnings from the sale of spruce rose to 54 per cent.

In the case of private forests the share of wood production costs in the gross stumpage price earnings has been 10-12 per cent since the 1970s. There is considerable regional variation in the costs: at the level of Forestry Centres the costs may be as low as 5-6 per cent in Southern Finland, but in Northern Finland the total investments of private forest owners in wood production may account for 20-30 per cent of the gross stumpage price income.

The objective of the Programme for Promoting Renewable Energy Sources of the Ministry of Trade and Industry completed in 1999 is to increase the use of forest fuels for

energy by 5.2 million cubic metres by 2010. The Ministry of Trade and Industry has also launched an extensive Wood Energy Technology Programme for 1999-2003, aimed at the realisation of the objectives set for the use of wood for energy production by developing the technology for the manufacture, transportation and use of wood fuel and the related logistics. The EU Commission is preparing a Directive concerning the market access of the so-called green electricity produced by means of renewable energy sources.

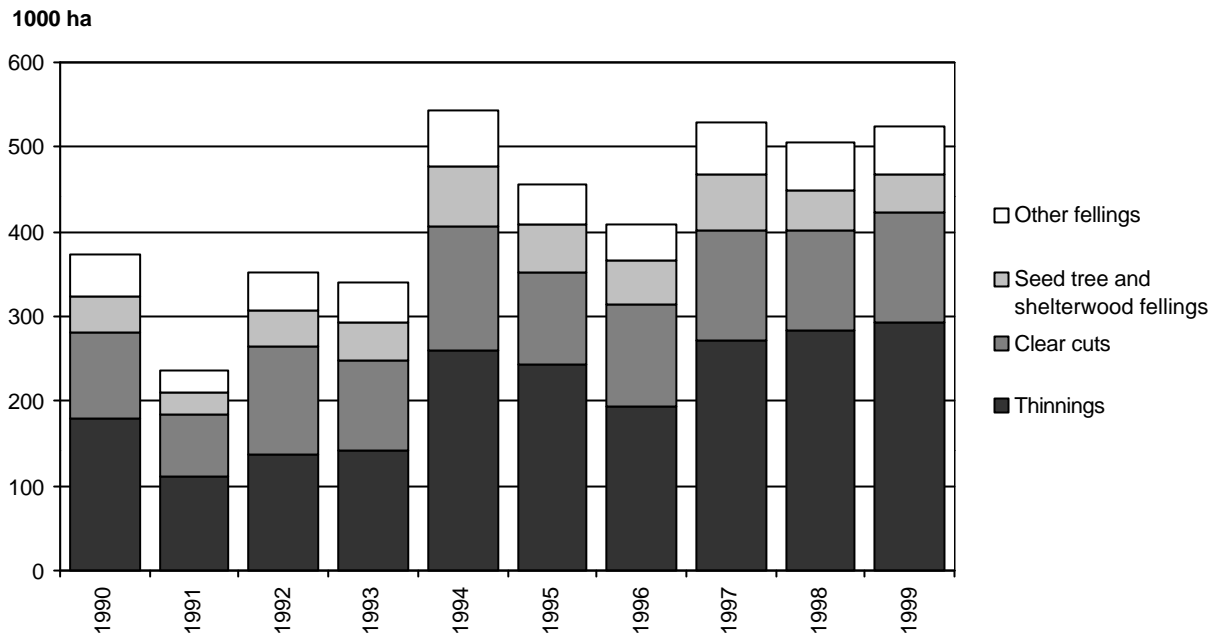
In December 1999 the support for the chipping of forest chips approved by the EU Commission for the years 2000-2002 was included in the Act on the Financing of Sustainable Forestry. Support may be paid only for whole-tree chips obtained from areas subject to the young stand management according to the Act on the Financing of Sustainable Forestry. It is estimated that 10-15 million cubic metres of usable raw material is left in the forests annually.

Owing to the increased capacity of the forest industry and, in particular, efficient utilisation of this, the targets set for the use of biomass included in the Programme for Promoting Renewable Energy Sources should be reached in the early part of the decade. According to the statistics, in 1999 the utilisation of forest chips totalled 747,000 cubic metres. The price of chips has fallen especially as a result of the more highly

Table 1. Commercial roundwood production by forest ownership category and wood imports in 1997-2000e (mill. m³). The amounts in 2000 are estimates.

	1997	1998	1999	2000e
Commercial felling, total,	53	55.1	55.3	57.9
of which				
- logs	27.2	27.7	27.3	29.0
- pulpwood	25.8	27.3	28.0	28.9
- non-industrial private	47.1	48.9	47.8	50.2
- forest companies	1.8	2.1	3.1	3.3
- Forest and Park Service	4.1	4.1	4.4	4.4
Roundwood imports	8.5	12.0	13.2	13.5

Sources: Statistical Yearbook of Finnish Forestry 2000 and Finnish Forest Sector Economic Outlook 2000-2001.



Source: Finnish Forest Research Institute

Figure 1. Forest areas treated with felling by type of felling in 1990-1999.

developed harvesting technology, and the average price for chips from logging residue has already decreased below the level of profitable utilisation, which is € 7.6/MWh. There is considerable variation in the quality and price of chips.

In the new Rural Policy Programme "Countryside for the People - rural policy based on will" submitted to the Government in November 2000 the forest sector is examined from the perspective of the rural population, with special emphasis on the links between the forest sector and other policy sectors, such as the energy, industrial and employment policy. The outlines presented by the Government on the basis of the Rural Policy Programme are likely to contain forest sector projects, such as allocation of resources to development networks of small enterprises in wood processing sector.

In 1999 regional forest plans were made for 743,000 ha and in 2000 for 860,000 ha, and the number of plans made at the level of individual forest holdings has also increased. The target set for the area to be covered by regional forest planning in 2001 is 914,000

ha. Forests owned by companies and associations are almost fully covered by regional forest plans. The work group for forest management planning strategy of the Ministry of Agriculture and Forestry is going to draw up a strategy for the forest management planning in private forests for 2001-2010. The most important objective of the strategy is to improve the efficacy of forest management planning.

The Forest and Park Service drew up regional natural resource plans for 1996-2000 for all State lands in its possession as well as 112 landscape ecological plans. A natural resource plan is a holistic plan concerning the use of State lands made for a relatively large area (0.5-2.5 million ha) in cooperation between various parties, taking into account the wishes and expectations of the local residents. The purpose of landscape ecological plans, which may comprise 20,000-100,000 ha, is to maintain the conditions for the preservation of the living organisms characteristic to each region in connection with forestry activities. Efforts are made to harmonise the social and cultural objectives with the economic and social ones. International evaluation of the landscape ecological planning started in 2000 and it will be completed in 2001.

The personal advising provided by the Forestry Centres is estimated to have reached 34,600 forest owners. The number of courses directed at forest owners was about 500, and 470 other advisory sessions for groups were organised. The number of forest owners who participated in these was 33,000. In 2000 the personal advising by forest management associations reached about 114,000 forest owners. In 2000 the Finnish Forest Research Centre launched a research programme concerning the impact of forest advising and planning on forestry activities, and during 2001 a work group appointed by the Ministry of Agriculture and Forestry is going to draw up a strategy for the advising of forest owners for 2002-2005.

Development of Employment

Forestry employed about 27,000 persons in 2000¹. The labour input of those employed in the forest sector totalled about 10,000 man-years, and about half of this was forest management work. In roundwood production motor-manual work accounted for about 1,500 man-years and use of forestry machines for 3,500 man-years in 2000. The transportation of timber employed about 3,000 persons, about a third of them self-employed. Both the felling and productivity of roundwood production are expected to grow, and thus the number of those employed should stay at about the current level.

The role of entrepreneurs has become increasingly important in the organisation of roundwood production. In 2000 the labour input of forestry entrepreneurs totalled about 7,300 man-years, where the share of forest machine entrepreneurs was 1,300 and that of forest owners 6,000 man-years. Altogether about 60,000 forest owners took part in forest work, the number of forest machine entrepreneurs is estimated at 1,200 and 500 entrepreneurs provide other forest services.

The most significant changes in the working conditions in the forest sector concern the share of entrepreneurs and persons employed by these in forest work. The employer structure has become fragmented and the role of small companies has increased. Besides the traditional forest machine and timber transportation entrepreneurs there are now self-employed forest workers and companies offering other forest-related services. The increase in different kinds of working and contractual relationships is reflected in the work arrangements, distribution of responsibility, communication, staff training as well as working conditions and occupational safety. The new quality and environmental systems provide a good basis for the development of working conditions as well, and the criteria for forest certification also contain requirements concerning staff training and employers' obligations.

In particular, the mental stress of the work of entrepreneurs and forest machine operators has increased, and various groups of managerial employees have also experienced problems relating to increased stress. Issues relating to mental welfare, such as control of the different aspects of work and working time, receive more and more emphasis in the development of working conditions and job satisfaction. With respect to the skills and job satisfaction it is of primary importance to offer further training after the basic degree in order to maintain and update the knowledge and skills of the workers. In the forest sector there are several development projects aimed at finding ways to ease the mental and physical stress in the work, and the occupational safety regulations for roundwood production are being revised.

¹ The figures for 2000 are estimates based on the labour study of Statistics Finland.

Further measures

1. In order to secure the favourable development of forests, the increase in felling should primarily be targeted at first thinning and peatland, and technology should be developed to promote the utilisation of these.
2. The Government, especially the Ministry of Trade and Industry, will continue to encourage the increase the production of wood-based energy through its energy tax policy.
3. The parties in the labour market will strive to increase the attractiveness of the forest sector among young people making their career choices and develop the forest labour statistics in cooperation with the Finnish Forest Research Institute.
4. The area covered by regional forest planning will be raised to about one million ha per year according to the goal set in the National Forest Programme 2010. During the programme period the are covered by the plans should increase to 75 per cent of the surface area of private forests.
5. The section on forestry in the Rural Policy Programme will be implemented according to the outlines set by the Government.

Ecological Sustainability Will Be Secured

Objectives

The aim of the National Forest Programme is to achieve and preserve a favourable standard of conservation of species and habitats in the forests by a combination of conservation areas and ecosystem management in commercial forests.

Implementation of Nature Conservation Programmes

Nature conservation programmes ratified by the Government have been implemented in accordance with the financial programme approved by the Cabinet Committee on Economic Policy of the first Government of Prime Minister Lipponen (Figure 2, Table 2).

In the State budget the appropriation for the management of the nature conservation areas for the year 2001 was raised from € 12.6 million to 13.5 million.

The Finnish proposal to the European Union concerning the conservation areas under Natura 2000 included 1,458 areas that were in accordance with the Birds Directive and Habitats Directive, and the total surface area of these is 4.8 million ha. 97 per cent of the land areas included in the proposal were already covered by a nature conservation programme or reservation. Based on the Commission requirement and a decision of a Cabinet work group in September 2000 it was proposed that the Natura 2000 network be supplemented by 295 new areas, comprising altogether about 11,200 ha. The Government makes the decision on supplementing the proposed Natura 2000 network in spring 2001, and the EU Commission makes the decision on the approval of the proposal according to the original schedule in 2004.

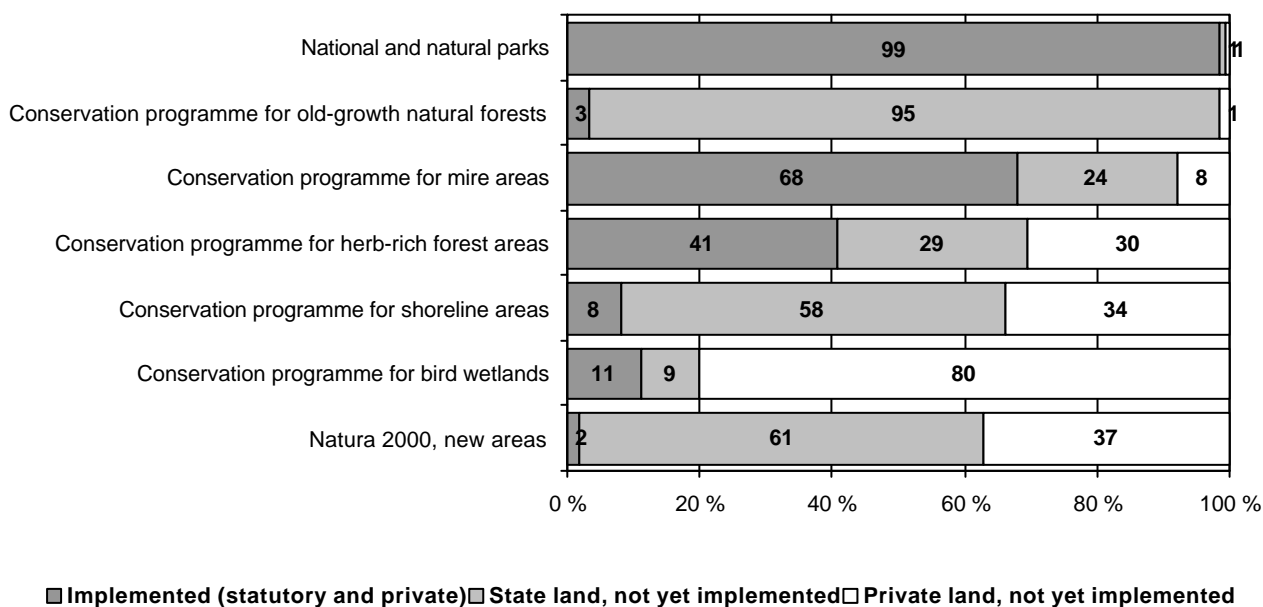
According to the report of the work group that examined the need for protecting the forests in Southern Finland and Ostrobothnia (published in Suomen ympäristö No 437), in these areas 1.1 per cent of the forest land, 1.6 per cent of the forest

and scrub land and 2.6 per cent of forestry land (forest, scrub and waste land) has been protected based on statutes or Government decisions. The work group estimated that all the endangered or declining species of plants and animals cannot be preserved in the existing conservation areas, and thus more strictly protected forests are needed. However, in the future the need for strictly protected areas will be reduced due to the appropriate planning and management of support areas and riparian zones under limited utilisation for forestry as well as the development of the ecosystem management in commercial forests, which according to the current instructions and regulations should reduce the total need for conservation areas. The work group noted the lack of adequate data on the current conservation areas and programmes and the impacts of the ecosystem management in commercial forests and proposed a long list of further studies and surveys.

The latest report of the work group for the follow-up of the endangered species was completed in 2000. It is estimated that every

tenth of the 15,000 species for which there are data available is endangered, and 37.5 per cent of the endangered species live in forests. The endangerment of the species living in forests seems to have slowed down in the 1990s, but in the old-growth forests in Southern Finland the likelihood for the disappearance of many species is still growing. The follow-up group proposed 19 measures directed at remedying the shortcomings in the research, monitoring, protection and management of endangered species.

The amount of carbon bound to the Finnish forests increased slightly in the 1990s. As a result of the changes in land use and forestry measures, the net carbon assimilation effect of the growing stock based on the calculated annual increment and realised felling in 1990-1999 varied between 9.7 and 38.2 million CO₂ tonnes. In 1999 the net carbon assimilation was 10.8 CO₂ tonnes (increment in the volume of growing stock 101.3 and drain 90.5 CO₂ tonnes). During the 1990s the emissions of greenhouse gases in Finland varied between 70.8 and 80.5 CO₂ tonnes. The Finnish plans in order to meet the obligations concerning the reduction in greenhouse gases according to



Source: Ministry of the Environment

Figure 2. State of implementation of conservation programmes 1 January 2001

Table 2. State of implementation of conservation programmes and other decisions 1 January 2001

	Established		Not yet established		Total surface area ha
	Statutory conservation areas ha	Private conservation areas ha	State land ha	Private land ha	
National parks ²	721 500	-	6 830	5 000	733 330
Natural parks ²	149 700	-	0	0	149 700
Mire areas	410 800	7 360	146 600	49 000	613 760
Bird wetlands ³	600	6 800	5 840	53 500	66 740
Shoreline areas	100	11 640	82 400	48 000	142 140
Herb-rich forest areas	1 230	1 440	1 900	2 000	6 570
Old-growth natural forests	9 600	1 430	330 170	4 900	346 100
Strict nature reserves	40 500	-	-	-	40 500
Other nature conservation areas on private land	-	17 020	-	-	17 020
Wilderness areas	1 379 000	-	-	-	1 379 000
Natura 2000, new areas ³		1 370	48 000	29 000	78 370
Total	2 713 030	47 060	621 740	191 400	3 573 230

Source: Ministry of the Environment

the Kyoto Protocol have been drafted in the different sectors, and the surveys for agriculture and forestry were completed during 2000. The accounts concerning the different sectors will be compiled into a report to be submitted to the Parliament during 2001.

Ecosystem Management in Commercial Forests

The survey of the natural features, especially the habitats of special importance listed in the Forest Act and protected habitats according to the Nature Conservation Act and other important habitats in the lands of different forest ownership categories is underway.

By the end of 2000 the Forest Centres had conducted special surveys and forest management planning projects including accounts of habitats of special importance and other valuable habitats established in the Forest Act in 55 per cent of the private forests, and the work is estimated to continue until 2003. Forest industry companies have conducted similar surveys on their own lands, and so has the Forest and Park Service in connection with the landscape ecological planning. The Finnish Environment Institute coordinates the survey of habitats protected under the Nature Conservation Act in the administrative sector of the Ministry of the Environment. Forest habitats have been surveyed in the territory of six Environment Centres, and altogether about 510 valuable habitats referred to in the Nature Conservation Act have been found.

² Includes the development programme for national and natural parks as well as subsequent Government decisions concerning the establishment or enlargement of national parks. The figures do not include the conservation programme for glacial fluvial esker formations (about 94,000 ha) because this is implemented mainly on the basis of the Act and Degree on Soil Type. For the part of the Natura 2000 network the table includes land areas implemented under the Nature Conservation Act that were included in the conservation programmes as a result of Natura 2000. Other Natura areas are included in the other programmes.

³ The areas reported are those where conservation is implemented under the Nature Conservation Act.

In the landscape ecological planning for State forests governed by the Forest and Park Service the area of protected habitats in commercial and recreational forest land is 130,000 ha, and the share of the so-called key habitats is about 101,000 ha. The surface area of protected habitats under the Forest Act and Nature Conservation Act is about 22,600 ha, and the rest is habitats of endangered species and ecological passages excluded from forestry activities. 205,000 ha of forest land is under limited utilisation as landscape, game and other special areas.

In accordance with the objectives of the National Forest Programme 2010, an appropriation of €4.2 million promoting the forest ecosystem management was included in the State budget for 2000. The appropriations for environmental support and ecosystem management projects and for the survey of key habitats based on the Forest Act were both raised by € 0.84 million. The environmental support for 1999 totalled € 0.76 million, the number of contracts was 74 and the area covered was 250 ha. In 2000 € 1.4 million was granted for environmental support, 132 contracts were made and the area covered totalled 1,584 ha.

The criteria for the environmental support for forestry were revised in 2000. In the pricing of the volume of the growing stock to be preserved and compensated for, the price of the tax cubic metre was replaced by the regional average stumpage price of the preceding three years, which raised the level of support by about 30 per cent. The support for the contract period is granted in three 10-year periods, instead of the earlier procedure in which the support was granted and paid in a lump sum for the whole contract period of 30 years.

The instructions for water protection measures, such as the riparian zones to be left when taking silvicultural measures, are included in the forestry recommendations and instructions of various organisations. The

results from the monitoring of the standard of ecosystem management in commercial forests show that in most cases the filter strips or riparian zones with trees left in connection with felling are wide enough, but further measures are needed in the case of small waters. The research results concerning water protection measures are still inadequate and somewhat contradictory, and further study is also needed on the timing and impacts of ditch cleaning and supplementary ditching.

Forest certification has established its position as a practical tool of sustainable forestry. By the beginning of 2001 95 per cent of the Finnish forestry land (forest, waste and scrub land), altogether 24.8 million ha, had been certified under the FFCS (Finnish Forest Certification System), and in the audits made by independent certification companies in 1999 and 2000 only minor deviations from the criteria were found. In May 2000 the FFCS gained the approval of the PECF (Pan European Certification System). The first products carrying the PEFC label came to the market last year. The FSC work group for Finland was appointed in October 2000, and the purpose of the work group is to draw up a national FSC standard adjusted to the Finnish conditions.

The Forestry Development Centre Tapio coordinates the annual monitoring of the ecosystem management in commercial forests. The results for 2000 show that there has been significant improvement in the quality of ecosystem management and roundwood production, but further development is needed in the management of particularly important habitats, such as groves, small waters and wilderness areas, under the Forest Act as well as in the protection of small waters.

An expert group "Research, follow-up and information" system was appointed by the Ministry of the Environment in order to draw up a follow-up programme for the state of biodiversity in the Finnish nature, and the compilation of data on the biodiversity of forests was included in the 9th national forest inventory.

Further measures

1. Nature conservation programmes will be implemented by 2007 according to the financial programme for conservation programmes ratified by the Cabinet Committee on Economic Policy.
2. Efforts will be made to raise the financing for the management of conservation areas at least to the level proposed in the National Forest Programme 2010. The proposed €16 million should be reached by 2003.
3. The Committee for the conservation of forests in Southern Finland appointed in December 2000 will draft a proposal for a target, financing and action programme for forest conservation in Southern Finland, western parts of the Province of Oulu and South-western Lapland by the end of June 2002.
4. The results achieved through the ecosystem management measures will be examined, including, for example, how well the habitats of special importance and other valuable habitats to be preserved support the preservation of endangered species in commercial forests.
5. Adequate funding for forest ecosystem management will be ensured. The marketing of ecosystem management and use of environmental support to forest owners will be intensified, especially in connection with advising and forest management planning.

The Forests Will Be Well Managed

Objectives

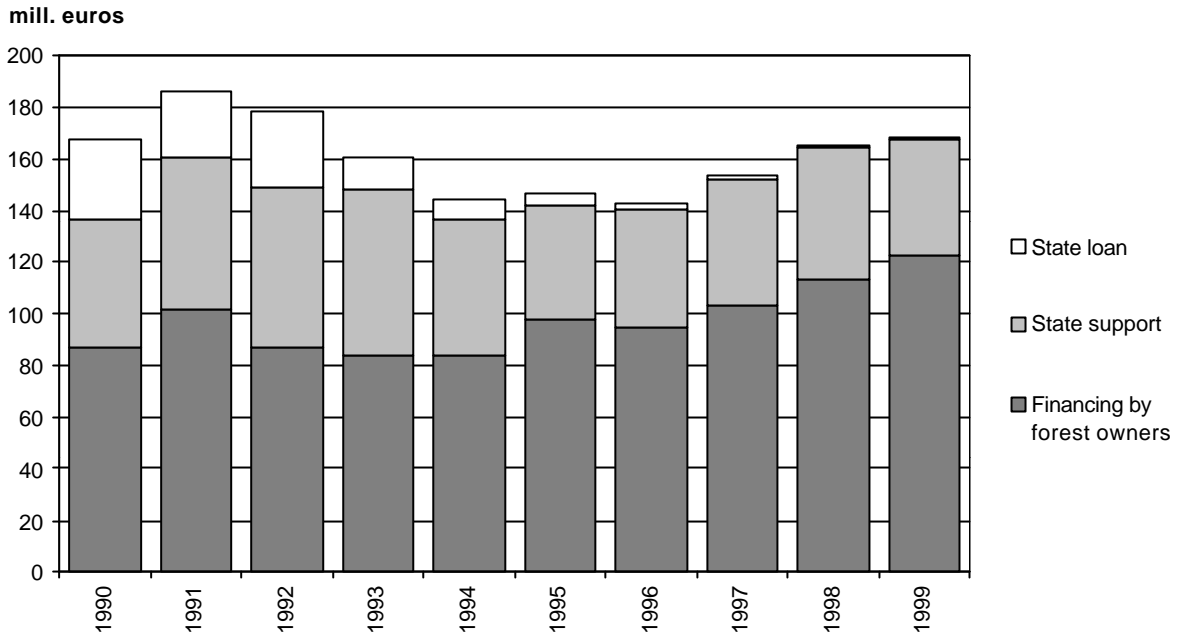
The aim of the National Forest Programme is to take care of silviculture and forest improvement work to the effect that the production of industrial roundwood, which will rise to 63-68 million cubic metres per year, will stand on a sustainable base. In order to achieve this, the total investments in wood production need to be raised to the earlier level of about €0.3 billion per year.

Realised development

The report of the work group for summer fellings (Work group report of the Ministry of Agriculture and Forestry 2000:8) was completed in March 2000. According to the work group, the possibilities to reduce summer fellings are limited, and all thinnings cannot be done in winter. The work group proposes that the thinnings of spruce and pine in areas where there is the risk of spreading

annosus root-rot be mainly done in winter, and in connection with fellings between the beginning of May and end of October on mineral soil the stumps are treated in risk areas. The support based on the Act on the Financing of Sustainable Forestry should also cover part of the labour cost, and a proposal for revising the Act accordingly has already been made. The work group also directs attention to the availability of skilled labour for fellings as well as need for further study of the impacts of summer fellings on forest ecosystems, especially the nesting birds.

In the State budget for 2000 the appropriation for the implementation of the National Forest Programme was raised by € 11 million. € 40 million were allocated for the forestry development and control organisations, 52 million for supporting sustainable roundwood production, 4.2 million for promoting forest ecosystem management and 0.3 million for loans for securing sustainable wood production.

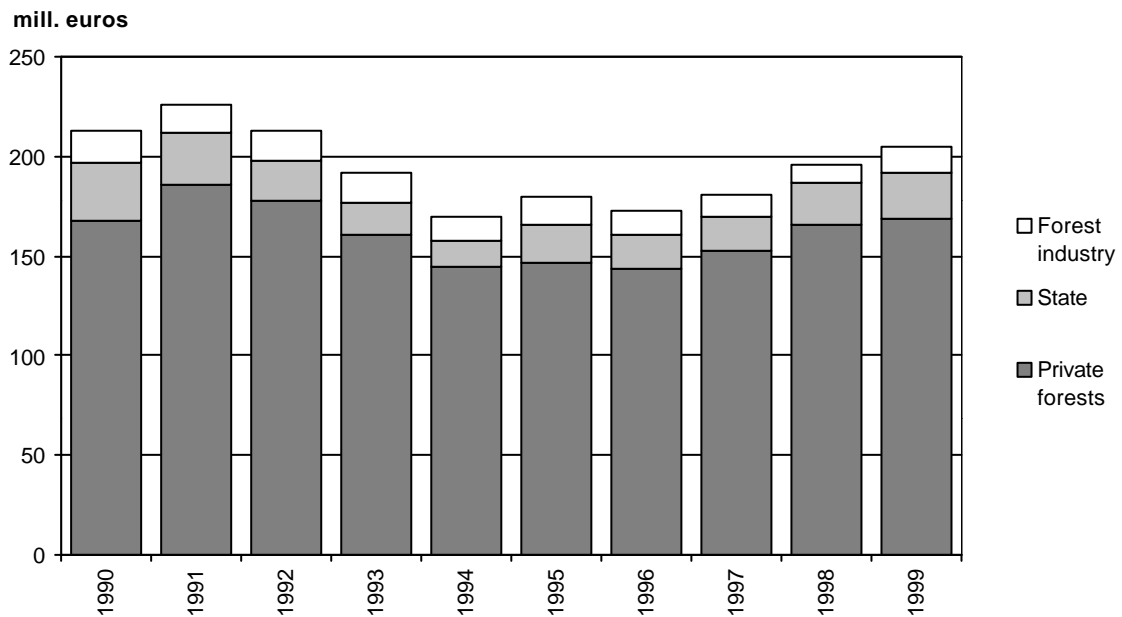


Source: Finnish Forest Research Institute

Figure 3. Structure of total costs of silvicultural and forest improvement work in private forests in 1990 - 2000.

In 1999 altogether about €168 million were used for silvicultural and forest improvement work in private forests. The share of forest owners in this was €122 million, and the State contributed 40 million (Figure 3). The costs of silvicultural and forest improvement

work in the forests of all forest ownership categories totalled €205 million (Figure 4). In 2000 the costs of silvicultural and forest improvement work were slightly higher than the year before. In recent years the data available for the compilation of statistics on the amounts of



Source: Finnish Forest Research Institute

Figure 4. Total costs of silvicultural and forest improvement work in 1990-2000.

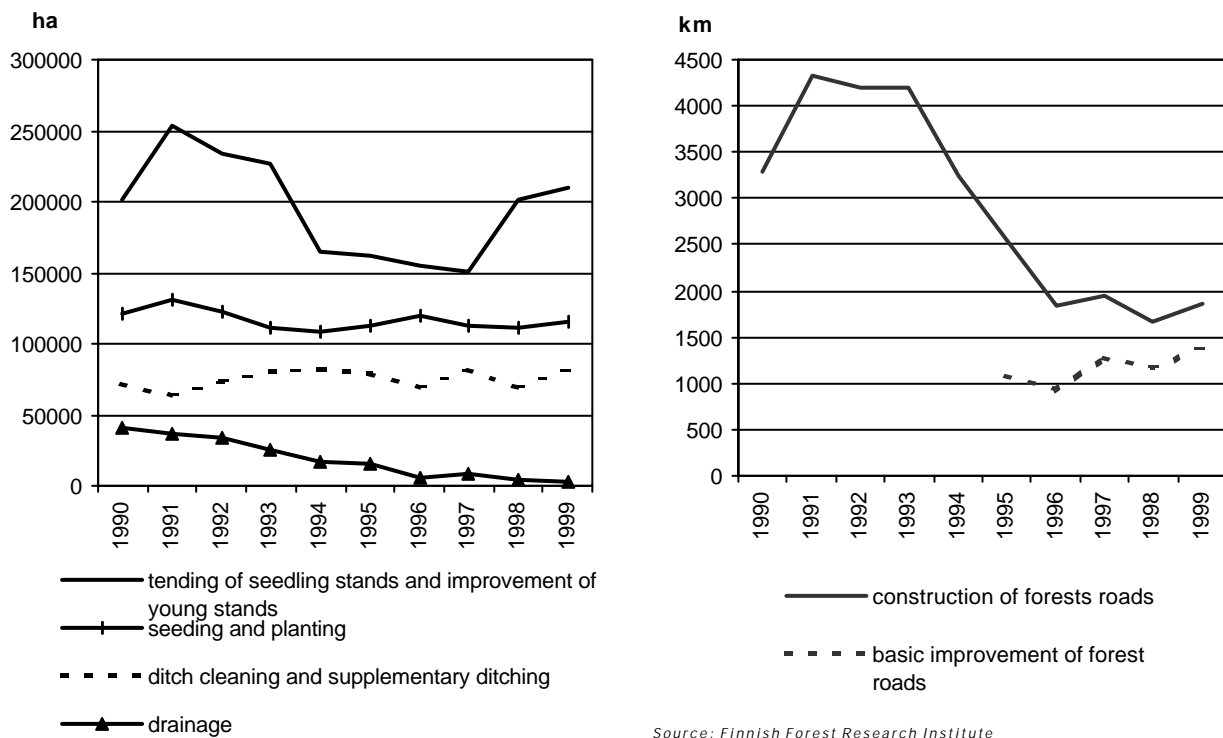
labour and costs in silviculture and forest improvement financed by the forest owners have become increasingly inadequate.

In 2000 the State support for measures based on the Act on the Financing of Sustainable Forestry totalled €44 million, which is much less than the level of €59 million set as the target in the National Forest Programme 2010. The actual silvicultural and forest improvement work has started even more slowly than the financing, and €23 million of the funds for supporting sustainable wood production and 2.7 million of the funds for loans were transferred from 2000 to 2001. At the end of 2000 the representatives of Forestry Centres and Forest Management Associations tried to find out the reasons for the underutilisation of the funds in recent years.

Based on the proposal of the forest organisations, the Ministry of Agriculture and Forestry prepared the revisions to the Act and

Decree on the Financing of Sustainable Forestry. According to the Government proposal, the management of young stands and harvesting of wood for energy production done as employment work could be financed from the funds allocated for securing sustainable wood production and part of the labour costs of preventing annosus root rot would be covered by State support. The concept of basic road improvement would be extended to cover roads other than private roads constructed by means of forest improvement funds. By a Government Decree the support level for regeneration was raised especially in Northern Finland and the support for basic improvement of forest roads was raised to a level which is clearly higher than the support for the construction of new forest roads.

In 2000 the Ministry of Agriculture and Forestry launched a project called Tomorrow's Forests, where efforts have been made to find out the factors that hinder the reaching of the objectives set for silviculture and forest improvement in the National Forest Programme 2010. In particular,



Source: Finnish Forest Research Institute

Figure 5. The most important silvicultural and forest improvement works in 1990-1999. In the case of forest roads the figures for 1990-1994 contain part of the basic improvements.

the project aims at increasing the labour input in silviculture and forest improvement and the activity of forest owners, mainly through communication. Special areas of focus include promoting regeneration and untended seedling stands and first thinning forests where seedling stands have been neglected as well as harvesting and chipping of wood for energy production in connection with these, improvement of ditching areas and improvement and maintenance of transportation connections needed in forestry as well as promoting forest ecosystem management.

The forest organisations have revised their recommendations and instructions for forest ecosystem management. The

recommendations for good forest management practices drawn up by the Finnish Forest Research Centre Tapio, in cooperation with various parties, were completed in autumn 2000, and the Forest and Park Service revised its instructions for silviculture during 2000. The Forest and Park Service and forest industries revise their instructions for forest ecosystem management regularly in accordance with the principle of continuous improvement of the environmental and quality systems. The Central Organisation of Agricultural Producers and Forest Owners has reformed its forest biodiversity programme, which contains recommendations for the preservation of biodiversity to forest owners and defines the values on which the forest policy of the organisation is based.

Further measures

1. Forestry Centres and Forest Management Associations together with the wood buyers market the silvicultural and forest improvement measures to forest owners. Marketing will be intensified through the Tomorrow's Forests campaign. The Ministry of Agriculture and Forestry monitors the progress of measures based on the Act on the Financing of Sustainable Forestry and tries to remove obstacles to the increase in the amount of accomplished work.
2. The actors involved in forestry adopt the revised recommendations and instructions for silviculture, taking into account the objectives for economically, ecologically and socially sustainable use of forests set in the National Forest Programme 2010.
3. Together with the other actors involved in forestry, the Finnish Forest Research Institute develops the statistics on silvicultural and forest ecosystem management measures and forest improvement.

Forests Provide Recreation And Nature's Products

Objectives

The National Forest Programme ensures that traditional forms of forest utilisation and the physical and spiritual benefits that the forests offer are honoured both in the use and protection of the forests. The commercialisation and marketing of environmental tourism are developed.

Realised development

In May 2000 the Ministry of the Environment appointed a work group (Vilmat work group) to draw up a programme for the recreational use of nature and environmental tourism, based on a survey of the objectives and means of the development of the use of nature for recreation and tourism as well as the measures of the

different administrative sectors as part of the development programme.

The results of the national inventory of the recreational use of nature coordinated by the Finnish Forest Research Institute and conducted in cooperation between several research institutes will be available in spring 2001.

The completion of the strategy for the use of natural resources and landscape ecological plans improved the preconditions for recreational use, natural economy industries and environmental tourism on State lands. Data were collected on game areas, special areas in terms of the picking of berries and other recreation, important areas for reindeer herding and natural economy industries as well as focal areas for environmental tourism. The planning also led to the establishment of recreational forests and landscape areas.

Towards the end of the 1990s the realisation of the objectives set for recreational use of nature and environmental tourism on State land became more difficult due to the drastic cuts in the State financing for the construction and maintenance serving hiking, camping and other recreation.

The focal areas of the development programme for the natural product sector for 2000-2006 drawn up by the theme group for the natural product sector operating in connection with the Rural Policy Committee

are skills and entrepreneurship, quality, cooperation as well as sustainable and diverse utilisation of nature. The proposals of the development programme concern e.g. developing the collection, processing and marketing of nature's products and the related skills and cooperation in the natural product sector, and the programme also raises needs for further research in the sector. The natural product sector will be promoted according to the outlines set in the Rural Policy Programme approved by the Government.

The national framework programme for environmental entrepreneurship was drawn up on the basis of a survey made at the Agricultural Research Centre and Helsinki University Institute for Rural Research and Training. This also formed the basis for the construction of a databank on environmental entrepreneurship.

In the assessment of the standard of ecosystem management in commercial forests in connection with felling landscapes are relatively well taken into account, even if the results show that there is room for improvement in the selection and location of landscape trees.

The methods for landscape management have been developed by including new landscape management instructions in forest management recommendations and by means of brochures. In order to preserve valuable landscapes a new form of conservation, landscape area, was included in the Nature Conservation Act. The criteria for forest certification also require the preservation of important landscape areas⁴.

Further measures

1. In the State budget adequate funds will be allocated to the construction and maintenance of hiking, camping and other recreation services on State lands.
2. The implementation of the proposals for measures supporting the realisation of the National Forest Programme and the Vilmat work group will be promoted.

⁴ Comprises the report "Valuable landscape areas 1-2" and areas included in the national inventory of traditional landscapes by the Finnish Environment Institute.

Forest Know-How Will Be Strengthened

Objective

The aim of the National Forest Programme is to improve forest-related know-how through a stronger innovation based on research, education and expanding internationalisation.

Realised development

According to the preliminary survey drawn up in 2000 for the Forum for Innovation in the forest sector, the primary aspects in the development of innovation are far-sightedness and involvement of various disciplines, creation and efficient utilisation of new skills, ability to take risks, culture favouring unprejudiced thinking, appropriate allocation of resources, as well as image based on know-how in order to improve the attractiveness of the sector. Based on the preliminary survey the launching of a project called Future Forest Halls (Tulevaisuuden Metsäsalit) was proposed, aimed at the recognition of the focal areas in the knowledge and skills in the forestry sector and development needs relating to skills and innovation as well as practical implementation of the research results through communication and projects.

Joint research projects and programmes have proven a highly appropriate way of combining the resources of various fields in the research and approaching the research problems from a wider perspective. The Wood Wisdom research programme for customer-oriented promotion of the competitiveness of forestry and forest industry through the whole production chain was completed at the end of April 2001, and the Sunare research programme concerning the sustainable use of natural resources will be launched during 2001.

The biodiversity research programme FIBRE (1997-2002) produces research data to be utilised in the protection of biodiversity and sustainable use of nature, and the BITUMI project launched in connection with FIBRE

provides research data on biodiversity for the decision-making of companies and other organisations as well as the administration. The research programme FIGARE (1999-2002) concerning global change tries to find ways of reducing the global changes due to human activity and to outline the possibilities for societies to adjust and find solutions to changes, together with an assessment of the related impacts.

The Centre for Excellence for the wood product sector started in 1999 aims to make sure that in the future the wood product sector will be based on even deeper and more extensive know-how, information is readily available and it is easy for the entrepreneurs to approach the experts. The programme will continue until 2006, and its general objective is to improve the efficiency of the research and development activities. Through the network of Centres for Excellence efforts are being made to construct new areas of expertise that are customer-oriented and innovative and deviate from the traditions.

The objective of the Savotta 2000 project (2000-2006) is to improve the forest sector image, which should increase the attractiveness of and interest in the sector. In 2000 the project concentrated on improving the wage systems in the sector and preparation of information material on forest occupations. Training of logging truck drives was started and basic training in forest machines was increased.

The decrease in the teaching of biology and geography at Finnish schools jeopardises the level of knowledge on forests among the Finnish pupils, and thus an operational model called "Learning Path for Forests" ("Metsän Oppimispolku") was drawn up in cooperation with the National Board of Education. The model forms the basis for the planning of the teaching in forests and use of wood from the pre-school until high-school at the municipal and school level. The 4H association launched similar experiments under the "Opportunities Lie in Forests" ("Metsissä mahdollisuus") model targeted at young people in three different areas in Finland.

By the end of 2000 the ecosystem management degree for professional foresters had been taken by about 900 people working in the sector. The more narrow degree forest work had been passed by 96 forest owners and 96 forest workers and forest machine

operators. The inputs into the training of the professional foresters will be continued under the project Ecosystem intended for forest owners, forest machine operators and others involved in practical Management Degree in the Forest Sector.

Further measures

1. The Ministry of Agriculture together with Forestry and the Finnish Forest Association will launch the Future Forest Halls project in connection with the Forest Forum for Decision-Makers.
2. Forest Centres will launch activities based on the Learning Path for Forests in their jurisdiction.
3. The Ministry of Education will appoint a work group to study what kind of knowledge and skills the education on forestry and wood production provides for international activities.
4. The basic funding for the Centre of Excellence in the wood product sector will be strengthened according to the outlines set in the Rural Policy Programme approved by the Government.
5. Increasing education in forest issues in the biology and geography syllabus at primary and secondary schools will be promoted.

Finland Takes an Active Part in International Forest Policy

Objectives

The aim of the National Forest Programme is to further sustainable development by taking an active part in international forest policy and by co-operative research and training programmes and by pursuing active media exposure.

Realised development

Since the Rio Conference in 1992 one important objective for Finland has been to draw up an international forest convention. In 1995-2000 the discussion on the forest convention was continued at the Intergovernmental Panel and Forum on Forests (IPF/IFF), but no decision to launch the negotiations on this was reached.

The International Forum on Forests held its last session in February 2000, and its work will be continued by the UN Forum on Forests (UNFF). The duties of the Forum include the coordination of the work related to forests undertaken by different organisations and conventions, and it convened for the first time in the early part of 2001. The Forum should act as an intergovernmental body on an annual basis and, when considered necessary, on the ministerial level. The forest convention will be dealt with within the next five years. The central UN organisations and other important international and regional organisations and institutions will be invited to set up the Collaborative Partnership.

In recent years forests have been in the foreground in the negotiations on international agreements and conventions, such as the

Framework Convention on Climate Change. The most significant meeting was the sixth meeting of the parties to the Climate Convention in the Hague in November 2000, when agreement should have been reached, among other things, on how the ability of forests to bind carbon should be taken into account when calculating the restrictions on emissions. No agreement has as yet been reached in the question concerning forests as carbon sinks.

Under the Convention on Biological Diversity, a work programme concerning the biodiversity of forests to be implemented in 1998-2007 was drawn up. A Finnish expert in forests and biodiversity will participate in the implementation of the programme in the secretariat to the convention. The expert group for the biodiversity of forests appointed in 2000 monitors the implementation of the forest programme in Finland and report on the progress at the sixth meeting of the parties to the Biodiversity Convention in 2002.

The Ministerial Conferences on the Protection of Forests in Strasbourg, Helsinki and Lisbon have been monitored under the guidance of the liaison unit operating in Vienna. A work programme for promoting the implementation of the decisions of the conferences was completed in 1999 and the realisation of this is monitored annually. Current topics in the monitoring include the national forest programmes, rural development as well as biodiversity and classification of the conservation areas. The preparations for the fourth European conference of the forest ministers to be held in Austria in 2003 are also underway.

Current topics in the international forest policy of Finland are forest cooperation in the adjacent areas and the Northern Dimension of the EU, where sustainable use of natural resources and sustainable forestry area among the most important issues. The forest sector programme of the Barents Euro-Arctic Council lays the foundations for forest cooperation as part of the Northern Dimension . The cooperation with Russia includes the implementation of a development programme for sustainable forestry and protection of biodiversity in 2001-2004, and the implementation of the Baltic 21 Forest Sector programme will be continued in the Baltic Sea Region.

The monitoring and processing of international forest issues in Finland has benefited from the appointments of forest experts at the Finnish embassy of Bonn in 1993 and at the London embassy in 1997. The forest experts act as representatives of the Finnish forest sector in the countries concerned and make the Finnish forestry better known internationally. The office of forest expert in the United Kingdom was abolished in 2001 and a new office will be established at the Finnish embassy in Moscow in August 2001.

Further measures

1. In the next few years the most important issues in the international forest policy will be the UN Forum on Forests (UNFF), forest issues in the Convention on Biological Diversity and the Northern Dimension. Finland takes an active part in international processes and the work of different organisations.

Organisation of the Implementation and Follow-Up of the Programme

Forest Committee and Working Committee

The Government appointed the Forest Committee for the implementation and follow-up of Finland's National Forest Programme 26 May 1999. The Forest Committee supports the Ministry of Agriculture and Forestry in extensive and important forest policy issues. The term of the Forest Committee comes to an end 31 March 2002. The chairman of the Committee is the

Minister of Agriculture and Forestry and the heads of the Department of Forestry, Directors-General Jan Heino (26 May 1999-31 December 1999), Sampsa Sihvonen (1 January 2001-31 January 2001) and Aarne Reunala (from 1 February 2001) have acted as vice-chairmen.

The members of the Forest Committee are:

Director, Nature Conservation **Ilkka Heikkinen**, Ministry of the Environment
Senior Officer **Turo Hentilä** (26 May 1999-22 August 2000), Ministry of Finance
Senior Officer, Legal Affairs **Seija Kivinen** (from 23 August 2000), Ministry of Finance
Senior Adviser **Marja Kokkonen**, Ministry of Agriculture and Forestry
Industrial Counsellor **Paula Nybergh**, Ministry of Trade and Industry
National Officer **Lauri Ainasto**, Wood and Allied Workers' Union
Agrologist **Lena Aschan**, Svenska Lantbruksproducenternas Centralförbund, SLC (Central Union of Swedish-Speaking Agricultural Producers in Finland)
Chairman **Timo Helle** (26 May 1999-11 February 2001), Finnish Association for Nature Conservation
Project Manager **Harri Hölttä** (from 12 February 2001), Finnish Association for Nature Conservation
Managing Director **Armi Korkeaniemi**, Woodmarketnet Oy
Director **Martin Lillandt**, Central Union of Agricultural Producers and Forest Owners
Chairman **Håkan Nystrand**, Union of Finnish Foresters
Managing Director **Matti Peltola**,
Agronomist, M. Pol. Sc. **Marjatta Pikkarainen**, Kainuu Regional Centre of Women's Advisory Organisation for the Development of Rural Areas
Managing Director **Jukka-Pekka Ranta** (from 3 May 2000), Finnish Sawmills
Field Executive **Liisa Sahi**, Suomen Partiolaiset – Finlands Scouter
Forester **Päivi Salpakivi-Salomaa**, Society of Finnish Professional Foresters
Secretary-General **Timo Tanninen**, WWF
Director **Hannu Valtanen**, Finnish Forest Industries Federation
Senior Adviser **Pentti Lähteenoja**, Ministry of Agriculture and Forestry, Secretary of the Forest Committee

14 October 1999 the Forest Committee appointed a Working Committee, which was complemented 19 January 2000 and acts as the secretariat of the Forest Committee. The

chairman of the Working Committee is the Head of the Department of Forestry of the Ministry of Agriculture and Forestry, Director-General Aarne Reunala. The members are:

Senior Officer **Hannu Jokiluoma**, Ministry of Social Affairs and Health
Senior Scientist **Jukka-Pekka Jäppinen**, Finnish Environment Institute
Director **Ilmo Kolehmainen**, Forestry Development Centre Tapio

Environment Manager **Kirsi-Marja Korhonen**, Forest and Park Service
Assistant Manager **Timo Nyrhinen**, Central Union of Agricultural Producers and Forest Owners
Research Centre Director **Heikki Pajuoja**, Finnish Forest Research Institute
Director **Matti Suihkonen**, Pohjois-Savo Forest Centre
Counsellor **Markku Väre**, Finnish Forest Industries Federation
Senior Adviser **Pentti Lähteenoja**, Ministry of Agriculture and Forestry, secretary

The broader composition of the Working Committee includes the representatives of work groups operating in connection with the Forest Committee as well as other experts when considered necessary.

The duties of the Working Committee are:

1. Preparation of the work of the Forest Committee. This is the main duty of the Working Committee. Matters to be taken to the Forest Committee are dealt with at the broad Working Committee. The Working Committee convenes about once a month.

2. Coordination of the work of ad-hoc work groups. The Working Committee establishes and maintains the necessary contacts between ad-hoc work groups. The Working Committee may draw up proposals to the Forest Committee concerning the measures to be taken based on the reports of ad-hoc work groups, and it may also propose the establishment of new work groups. The minutes of the Working Committee are forwarded to the members of the Forest Committee.

3. Drawing up follow-up reports. The annual follow-up reports monitor the implementation of Finland's National Forest Programme 2010, taking into account the economic, ecological, social and cultural dimensions of the sustainability of forests. The procedure is similar to that followed in the monitoring of the environmental programme for forestry.

Ad hoc Work Groups

Ad-hoc work groups may be appointed to develop the different aspects of Finland's National Forest Programme 2010 by the

competent Ministry. The work groups report to the Forest Committee on their work.

The following work groups have been appointed so far:

International Forest Policy Committee (7 May 1998-30 December 2000), (1 January 2001-30 December 2003)

Work Group for Environmental Impact Assessment (EIA) (12 March 1999-1 October 1999)

Expert Group for Environmental Impact Assessment (12 March 1999-17 September 1999)

Work Group for the Forest Protection in Southern Finland (2 June 1999-31 August 2000)

Summer Harvesting Work Group (21 July 1999-31 March 2000)

Support Group for Revision of Regional Forest Programmes (7 December 1999-30 March 2001)

14 December 2000 the Government appointed a committee to draw up a proposal for a target, financing and action programme for forest protection in Southern Finland, western part of the Province of Oulu and South-western Lapland. The term for the committee will come to an end 30 June 2002, and it reports to the Cabinet Committee on Economic Policy on the progress of its work.

All the ad-hoc work groups referred to in the programme report were appointed. In 1999 the work groups held altogether 32 meetings and in 2000 the number of meetings was 51. The groups have followed the principles of openness and cooperation in their work.

Participation and Cooperation

Finland's National Forest Programme 2010 is being implemented under the same principle of open participation as was followed in drawing up the programme. A large number of different

interest groups participate in the Forest Committee, Working Committee and ad-hoc work groups, and citizens' forums are being organised both nationally and regionally. In 2000 the National Forest Programme was discussed at altogether 46 citizens' forums, with the total of about 3,600 participants. Internet pages promote interaction between different parties, and the implementation of the programme is supported through efficient information and communication.

In general the implementation of the National Forest Programme 2010 has been realised in an open and interactive manner. For example, in the committee for the means and financing alternatives for forest conservation in Southern Finland there are 26 participants representing administration and civic organisations involved in the forest sector. Various interest groups have also participated in updating the regional forest programmes (regional forestry target programmes).

Coordination of the Implementation and Follow-Up of the Programme

The Forest Committee approved 27 September 2000 the implementation and follow-up plan for the National Forest Programme 2010 for 1 January 2000-31 March 2002. The plan comprises altogether 34 national projects (see Annex 1) coordinated by nine project groups, and the main points of contact between the different projects are accounted for in the plan. In each project group there is a representative from the Ministry of Agriculture and Forestry and from the Working Committee. The coordination between the projects has been dealt with in both the Working Committee and the Ministry of Agriculture and Forestry.

The implementation of the National Forest Programme 2010 is largely based on national projects. Some of the projects are still at the planning stage. There is the risk that some of the projects may progress too slowly relative to the objectives of the National Forest

Programme 2010. For the part of the public sector decisions on the resources for each project are made at the competent Ministry.

Regional Forest Programmes

The regional forest programmes (regional forestry target programmes) completed in 1998 provided important background data to Finland's National Forest Programme 2010. There has been considerable variation between the regions in the follow-up of the implementation of the regional forest programmes. After the completion of the National Forest Programme the Forestry Centres organised the revision of the regional forest programmes, and the revised programmes for 2001-2005 were completed in March 2001.

To support the revision process, a number of felling calculations were made, and new sustainable felling targets were set on the basis of these, taking into account the special features of each region. The description of the biodiversity of forest ecosystems was harmonised and increased in the programmes. The targets for silvicultural measures according to the Act on the Financing of Sustainable Forestry were derived from the available data in a harmonised way.

In connection with the revision of the regional forest programmes, support data for the impact assessment were drawn up in spring 2000, including both general principles and practical instructions for the evaluation. Economic and employment scenarios were also calculated for the Forestry Centres on the basis of different development alternatives. The scenarios estimate the direction, magnitude, extent and duration as well as likelihood of the impacts of the different alternatives. An account will be made on the assessment and realisation of the impacts.

Regional Forest Committees will be appointed as forums of cooperation to support the Forestry Centres in the implementation and follow-up of the regional forest programmes. These will also play a central role in the interaction between the National Forest Programme 2010 and the regional forest programmes.

Annex 2. Objectives for Sustainable Forestry in Finland in 2005 Set in the Environmental Programme for Forestry

1. Promoting ecologically sustainable forestry has been included as a central objective in the forest legislation.
2. The forestry practised promotes the preservation of the biodiversity of forest ecosystems and the realisation of environmental objectives as well as multiple use of forests.
3. Most of the forest area is covered by forest management planning involving natural and environmental values.
4. Silvicultural measures used are versatile and flexible as well as compatible with the various uses of forests and natural and environmental values.
5. Appropriate forest regeneration measures have been taken, forest management and use of wood have been increased and pollutants in the air have been reduced to secure the health, vitality and productivity of forests, which are highly important for both the national economy and private economies of forest owners.
6. Commercial forests are managed and used so that the stand grows as well as possible and forests bind carbon from the atmosphere efficiently in order to slow down the greenhouse effect.
7. Wood resources are used in a regionally sustainable way, taking into account the ecological aspects.
8. The use of domestic renewable energy sources has increased considerably, partly replacing the use of unrenovable energy sources
9. The business policy, location, product range and energy and water protection policy support the realisation of the objectives for environmental protection and sustainable use of natural resources.
10. Areas with low productivity that are of minor importance to forestry but valuable in terms of biodiversity have been left to their natural state.
11. Forest owners' own initiative in increasing biodiversity has been promoted through advising as well as economic means and other guidance.
12. Forest nature is still at the disposal of the citizens under everyman's right, which, in particular, guarantees the local residents the right of public access.
13. The number and surface area of different kinds of forest conservation areas are in accordance with the national need for conservation and internationally agreed objectives.
14. Nature conservation areas have been established with special emphasis on whole ecosystems.
15. Habitats of special importance in terms of the ecology and species have been protected.
16. Endangerment of living organisms in forests has stopped.
17. A network of conservation areas as well as areas under protection or restricted use has been created in order to preserve forest biodiversity.
18. Transfer of genes and subpopulations of living organisms between conservation areas has been promoted through the network of conservation and protected areas and forestry measures in commercial forests where forest biodiversity is taken into account.

19. The Nature Conservation Act and Forest Acts are in accordance with the obligations set by international agreements and objectives of nature conservation policy.

20. Research on nature conservation and forests produces diverse and extensive data on the forest biology, forest biodiversity and its development as well as impacts of forestry measures.

21. Finland follows national outlines of its own in land use planning within the framework of international agreements and recommendations.

22. Cooperation between forest organisations as well as environmental and zoning authorities has been increased, together with cooperation with civic organisations and local people.

23. Internationally approved criteria and indicators have been developed for the implementation and follow-up of ecologically sustainable forestry.

24. Internationally commensurable comparisons are made on a large scale.

25. Finland implements the international conventions concerning nature conservation and sets an example in taking measures to enhance biodiversity.

26. Finland takes an active part in international cooperation to promote ecologically sustainable use, management and protection of forests.

27. All the wood imported to Finland comes from regions where forestry is practised in a sustainable way.