

Interim evaluation of the National Forest Programme

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Abstract	The aim of the interim evaluation of the National Forest Programme (NFP) was to discover the extent to which the aims set for it had been achieved, and examine the way in which the NFP complies with the European Principles for national forest programmes. The evaluation resulted in proposals for the achievement of aims and the development of the NFP process. At the midway stage of the implementation of the NFP, what is noticeable is the significant progress that has been made in the achievement of the programme's aims. Among the main results that are clearly positive are the increase in the use of domestic roundwood and in the consumption of wood for energy, the forest biodiversity programme for Southern Finland (METSO), the public financing of silviculture and basic improvements to forests, the attention paid to the importance of the multiple use of forests, the Future Forum on Forests, and an active international forest policy. The main challenges regarding the achievement of results are connected with the value of exports in the wood product industry and the trend in the use of domestic roundwood. A wider range of measures is now needed to achieve aims and targets here. Other challenges include the implementation of the nature conservation programmes, nitrogen washout from forest land, the future of METSO, first thinnings and drainage reconditioning, the knowledge base and funding to support the recreational use of forests/nature, and the diversification of education and research in the forest sector. The programme process was found to be viable, and the European Principles were being complied with. The NFP provides guidance for the Regional Forest Programmes reasonably well, and the Regional Forest Programmes are taken into account satisfactorily in the drafting of the NFP. The NFP has enhanced interministerial co-operation and the Regional Forest Programmes have promoted the co-operation of stakeholder groups involved in regional level, the potential for having an impact on strategies and allocation of r		
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SUMMARY

This report presents findings of an interim evaluation of Finland's National Forest Programme 2010 (NFP). The objectives of the evaluation were

- To determine to what extent the targets set in NFP have been accomplished,
- To analyse how NFP complies with the European principles for national forest programmes and,
- To identify possible development needs and give recommendations on the further development of NFP.

Finland's National Forest Programme 2010

NFP aims at developing forest management and protection so that the forests will provide the Finns with as much work and sources of livelihood as possible, remain healthy, vital and diverse, and provide spiritual and physical recreation for the Finnish people.

Main targets of the programme include

- Increasing the forest industry's annual use of domestic roundwood by 5-10 million m³ by the year 2010,
- Doubling the value of wood product industry exports to EUR 4.2 billion per year,
- Increasing the production of industrial roundwood to 63-68 million m³ per year,
- Increasing the annual use of wood for energy production by 5 million m³,
- Securing the ecological sustainability of forests,
- Raising silvicultural and forest improvement investments to their former level of approximately EUR 250 million per year,

- Taking into account the multiple use of forests in conjunction with forest management and nature conservation, and promoting diverse forest-based material and spiritual well-being,
- Developing the nature-based tourism,
- Improving know-how within the forest sector by strengthening innovation processes based on research, education and internationalisation, and
- Promoting sustainable forest management by active international forest policy and cooperation in forest research and education, as well as by forest-related and environmental communication.

Main Results of Target Achievement Assessment

NFP is seen as an important tool for directing and promoting economically, ecologically and socially sustainable development in the forest sector. NFP can be seen as a continuation of the policy process and stakeholder co-operation, which has facilitated Finland to create one of the most competitive forest industry clusters in the world during the past 20 years.

In the midterm of the programme, considerable progress towards reaching the targets can be observed. However, most target areas also include specific sectors for which reaching the target by 2010 seems uncertain. The main reasons for this are changes in the operating environment and market conditions, which have lead to an insufficient selection of measures. Moreover, some of the targets (e.g. those related to recreation, forest know-how and international forest policy) are set on a very general level, which makes it difficult to evaluate the achievement of the targets.

The main positive developments include

Domestic roundwood consumption has increased from 53.4 million m³ in late 1990s to

57.0 million m3 in 2003 and annual fellings have increased accordingly.

- The consumption of energy wood has increased steadily to 2.5 million m3 in 2004.
- Forest Biodiversity Programme for Southern Finland 2003-2007 (METSO) has been launched and there have been considerable investments in biodiversity related research and inventories.
- Public financing for silvicultural and forest improvement works has increased according to targets set in NFP.
- Finland has been an active player in international forest policy and development co-operation.

Main challenges relate to the growth target for wood product industry's export value and, also, domestic roundwood consumption. Despite of the recent positive developments, the growth targets for domestic roundwood consumption and fellings will be challenging given the short term outlook of the industry. The availability and cost competitiveness of domestic round-wood will be threatened by the forthcoming completion of the forest tax reform. Increasing wood imports and changes in the wood product industry's operating environment are slowing down the demand for domestic wood. In order to achieve the targets, a broader selection of measures would be needed to improve the domestic roundwood availability and the competitive position of the Finnish wood product industry.

With regard to ecological objectives, it is evident that the target to reduce the leaching of nitrogen will not be achieved. In addition, NFP needs to pay attention to certain ecological measures such as the implementation of nature conservation programmes and improving nature conservation in Southern Finland as well as to some forestry works such as first thinnings, ditch cleaning and supplementary ditching. Additional measures are also needed in the field of recreation and development of nature based tourism.

A summary of targets, their realisation and main challenges are presented in the table below.

Table 1. Realisation of Targets and Main Challenges.

Target area	Targets realised by midterm	Main challenges
Growth opportunities for forest industry	Domestic roundwood consumption*	Wood product industry's exports, short term development of wood consumption
2. Profitability and employment from forestry	Energy wood, annual felling*	Short term development of fellings
3. Ensuring the ecological sustainability	Forest Biodiversity Programme for Southern Finland 2003-2007 (METSO), financing of research and inventories	Implementation of nature conservation programmes, leaching of nitrogen, decision on the need for a nature conservation programme for Southern Finland
4. Silviculture	Forest fertilisation, basic improvement of forest roads, improvement of young stands, state grants	First thinning, ditch cleaning and supplementary ditching
5. Multiple use and recreation	Paying attention to the multiple use of forests	Determining responsibilities, ensuring adequate funding for recreation, improvement of knowlegde base
6. Development of forest-related know-how	Future Forum on Forests	Diversifying and widening education and research, international communication, forward-looking research
7. Finland is active in international forest policy	Active participation and cooperation at international, EU and bilateral levels	Development cooperation funds

^{*} Domestic roundwood consumption and annual felling have increased according to the targets when comparing the current level with 1995-1999 average. However, harvest volume and domestic roundwood consumption have not increased since 1999 (after launching of the NFP).

Main Results of Process Assessment

The programme process was found functional. NFP directs the regional forest programmes rather well and the regional forest programmes have succeeded in implementing NFP. The regional forest programmes are taken into account by formulating NFP which enables presenting the regional viewpoints in regional forest programmes. On the other hand, there are some development needs related to NFP's possibilities to contribute to the implementation of the proposals for action presented in follow-up reports. Moreover, NFP was found to have limited possibilities to influence on industrial operators.

NFP has contributed to co-operation between ministries in issues related to the forest sector. Implementation of the regional forest programmes has also clearly contributed to co-operation between various stakeholders participating in regional development processes.

Moreover, the evaluation shows that NFP corresponds well to the European principles for national forest programmes both at the national and regional levels. According to a stakeholder survey, NFP has succeeded in elements such as public participation, collaboration, capacity building, consistency with national legislation and policies, and ecosystem approach.

The main development needs relate to developing mechanisms for conflict management, improving the effectiveness of NFP in terms of influencing on strategies and resource allocation in other sectors, improving long-term commitment by stakeholders to NFP, and developing knowledge management (e.g. utilisation of follow-up data, awareness raising).

Main Recommendations

In the short term, key focus areas and development needs are as follows:

- trengthen co-operation with other ministries and sectors in programme implementation
- Ensure financing for the Forest Biodiversity Programme for Southern Finland (beyond 2007), for finishing the implementation of na-

- ture conservation programmes, for nature management in commercial forests, for the management of recreational areas, and for biodiversity and recreation related research.
- Develop legislation¹ with regard to water protection, designation of habitats of special importance and landscape protection.
- Define roles and responsibilities of various stakeholders in the promotion of recreational use of forests and for the development of nature-based tourism.
- Improve certain terms and definitions used in NFP and carry out complementary research on the employment effects of the programme.
- Develop monitoring of research needs and future signals within and outside the traditional forest cluster (for example through the Future Forum on Forests by increasing interaction with various parties/stakeholders).
- Improve the follow-up of NFP by selecting a set of indicators, by continuous monitoring of development and research needs, and by strengthening the identification and implementation of measures.

In the long term, the main recommendations relate to improvement of programme-based approach as well as to target setting and selection of resources and means, as follows:

• Formulate NFP as a development programme, in which development needs, input, action, output and impact are clearly presented as a sequence of logical components, relationships and tasks. An active follow-up process shall be an inseparable part of the development programme. An active feedback system is also a prerequisite for the possible corrections and modifications during the process. The roles and tasks of the parties (various ministries, other public sector organisa-

¹ Act on the Financing of Sustainable Forestry

- tions, NGOs and private sector) participating in the process shall be clearly defined.
- Define and foresee changes in the operation environment of forestry and forest industry and, consequently, align the target setting and the selection of resources and means to reach the targets of NFP. The key issues in the development of NFP in a longer term relate to reconciliation of different forms of forest use (such as wood production, nature conservation and recreation) and ensuring favourable operation environment and competitiveness of the forest industry.
- Launch studies concerning alternative wood production, conservation and forest utilisation strategies and scenarios and their economic, social and ecological impacts in order to support the reform/updating of NFP.

In addition to the issues mentioned above, other studies on anticipated future changes in the operating environment of the forest sector should be initiated. They should cover issues such as securing the competitiveness of forest industry and developing the structure of sawmilling and panel industry, developing infrastructure especially in rural areas, securing/improving the cost and quality competitiveness of Finnish roundwood, securing the profitability of forestry, diversifying forestry practices and advice for the private forest owners, developing the allocation of subsidies, developing of forest and environmental communication and adapting of forest sector to the climate change.

LIST OF ABBREVIATIONS

CEI-Bois European Confederation of woodworking industries

CEPF Confederation of European Forest Owners

CEPI Confederation of European Paper Industries

ETFAG European Tropical Forest Advisory Group

FAO Food and Agriculture Organization

FM Finnish Ministry of Foreign Affairs

ITTO International Tropical Timber Organization

LIFE+ EU Financial Instrument for the Environment

LVVI National Outdoor Recreational Demand Survey

MESUVE Project for water protection integrated with forest planning

METSO Forest Biodiversity Programme for Southern Finland

Min. Ag. For. Finnish Ministry of Agriculture and Forestry

Min. Env. Finnish Ministry of the Environment

Min. Lab. Finnish Ministry of Labour

NFC National Forest Council

NFP National Forest Programme

RFC Regional Forest Council

RFP Regional Forest Programme

1. INTRODUCTION

1.1 SOME BACKGROUND

The National Forest Programme (NFP) is a programme approved by the Finnish Government in 1999. Its vision is to produce sustainable well-being courtesy of diverse forests.

The aim of the programme is to achieve the following by the year 2010:

- Increase the annual use of the forest industry's domestic roundwood by 5-10 million m³
- Double the value of wood product industry exports
- Increase logging outturn to 63-68 million m³ per year
- Increase the annual use of wood for energy production by 5 million m³
- Achieve and preserve a favourable standard of conservation through a successful combination of conservation areas and diversely exploited commercial forests
- Raise silvicultural and forest improvement investment to their former levels of approximately EUR 0.25 billion per year
- Take account of the multiple use of forests in conjunction with the use of forests and conservation, and promote wide-ranging material and spiritual well-being derived from forests
- Develop the launch and marketing of nature tourism
- Improve forest know-how by strengthening innovation in forestry based on research, education and internationalisation
- Promote sustainable forestry by means of an active, international forestry policy, co-operation in international forest research and education, and regular communications on the subjects of forestry and the environment.
 The programme is being co-ordinated by the

Finnish Ministry of Agriculture and Forestry, and is being implemented with the co-operation of several different administrative departments. The implementation is ultimately the responsibility of the Forest Council, with the support of a secretary general, a secretariat, and ad hoc work groups. Essential components of the programme also include the Regional Forest Programmes (drafted at regional level) and Regional Forest Councils, the Forest Biodiversity Programme for Southern Finland (METSO, 2003-7), and the Future Forum on Forests (2003-5).

The programme's implementation is monitored yearly and follow-up reports monitor the implementation of targets and objectives. The drafting of the programme and its implementation and monitoring has been undertaken in such a way that the forestry industry and stakeholder groups are as widely represented as possible.

1.2 MANDATE AND TARGETS

The interim assessment of the NFP was commissioned by the Ministry of Agriculture and Forestry. According to the mandate, the evaluation should be divided into two parts:

- 1) The evaluation of the results of the programme would examine how much progress has been made in achieving the main aims of the NFP. The evaluation would identify the principle defects in the implementation of the programme's main aims and the factors impacting on them, and assess whether they can be rectified.
- 2) A European frame of reference would examine how well the NFP conforms to the European principles defined for national forestry programmes in Resolution V1 of the Ministerial Conference in Vienna and the key criteria set forth in the COST E19 Programme. The evaluation would highlight the key areas, given existing conditions in Finland, where there is most room for improvement in the NFP process.

The goal of the evaluation is to produce proposals to achieve targets and improve the NFP process.

2.THE EVALUATION PROCESS

2.1 TASKS

According to the mandate, the evaluation can be seen as comprising two tasks:

- 1) An evaluation of results, which would examine the achievement of results in relation to
- the programme's aims and targets, and the methods used.
- 2) An assessment of the viability of the programme process, which would examine how well the NFP conforms to agreed principles and criteria relating to European national forest programmes.

These tasks are shown in the following diagram 2-1.

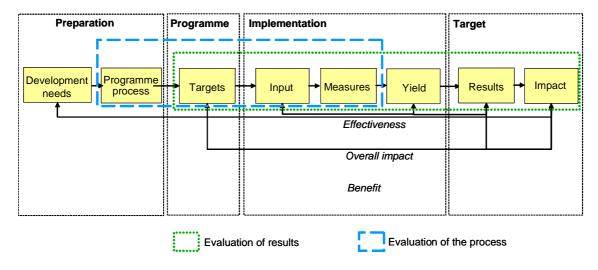


Diagram 2-1. Frame of reference for the evaluation and tasks involved.

2.2 EVALUATION FIELDS

The evaluation of results focused on the implementation of the NFP's quantitative and qualitative targets. The targets set are compared with the results achieved so far, and an assessment is carried out of the achievement of targets by the year 2010 at national level. At the same time, an examination of the rationale for targets and the sufficiency of the selected range of measures is conducted.

The evaluation of the process involves three evaluation fields.

Firstly, the NFP is assessed in relation to European forestry policy, as defined by the Vienna principles relating to forest programmes (Ministry of Agriculture and Forestry 2004c) and

the criteria set forth in the COST E19 Programme (Glück et al. 2003). The evaluation field is based on the notion that international policies, and pan-European policies in particular, impact on Finnish forestry policy.

The second evaluation field is to relate regional action to national action. In practice, this evaluation field is realised as an assessment of the interaction between regional and national players.

The third evaluation field, which at the same time acts as a frame of reference for evaluating the entire process, is the administration of the NFP as a whole. This evaluation field will hereafter be known as the evaluation of the NFP's programme viability.

2.3 METHODS AND SOURCES OF DATA

Evaluation of results

The evaluation of results made use of the NFP's interim reports and other programme documents, statistics, studies, interviews with stakeholder groups, and Jaakko Pöyry Consulting's own sector-related expertise. Lists of the people interviewed and the written materials used in the evaluation accompany this report.

Evaluation of the viability of the programme process

The basic procedures used in evaluating the process methods are: content analysis of documents, the crystallisation of the views expressed by identified players using gap analysis, and using the interpretation of interviews to compensate for perceived information deficits.

The published material is thus interpreted in relation to the process of programme development, areas of improvement in the process are highlighted in surveys, and information gaps are filled by means of interviews and, possibly, a new survey.

2.4 THE EVALUATION PROCESS

Evaluation of results

The interviews, face-to-face and over the telephone, regarding evaluation of results were conducted between January and March, 2005. The key questions it was hoped the interviews would provide answers to, were:

- How have the set targets been realised or started to be realised?
- What are the universal factors in the operating environment that have impacted on the realisation of the aims of the NFP?
- What are the potential problems and obstacles and other critical factors?

- What impact have the selected measures had?
- What has the NFP's value-added been?
- How can/should the achievement of targets be measured?
- How could the NFP be developed in the future?

Evaluation of the viability of the programme process

The first survey material for an evaluation of the process was obtained in February 2005. The survey would help put together a picture of the NFP's potential for responding to the current challenges of European forest policy. The survey also gave guidelines on the relationship between the regional level (Regional Forest Programmes: RFPs) and the national (NFP). Forty-five individuals/players took part in the survey.

In order to specify in greater detail the development needs and good practices of the programme process which were highlighted in the first survey, a second survey was conducted in March 2005 using the target group in the first survey (21 respondents).

The picture of the viability of the programme process obtained on the basis of written materials and the surveys was brought into sharper focus with interviews in March 2005 with nine individuals involved in the Northern Ostrobothnia RFP.

Final version of the report

Members of the steering group from the Ministry of Agriculture and Forestry commented on the nature of the evaluation report. The evaluations and its preliminary results were furthermore discussed at a seminar held for stakeholder groups (NFP Development Day, Helsinki) on 1 April 2005, before the final version of the report was produced.

3 REALISING THE AIMS AND TARGETS OF THE PROGRAMME

3.1 OPPORTUNITIES FOR GROWTH IN THE FOREST INDUSTRY

The NFP's aim is to keep the forest industry in Finland viable and competitive, enabling it to increase the annual use of domestic wood by 5-10 million m³ by the year 2010. Its aim is also to have doubled the value of wood product exports by the same year.

3.1.1 Selected measures

With regard to the wood product industry, the NFP mentions support for business and networking in respect of small and medium-sized enterprises (SMEs) in the wood industry by means of the 'Time for Wood' campaign and its related action programme 'Wood Finland'. In addition, the NFP's follow-up reports mention the 'WoodEurope' project. When these projects, which are jointly co-ordinated by the wood industry and the state, come to an end, it will be proposed that a new programme should be drafted that will support international co-operation in product standardisation, research and sa-

les promotion as well as networking between SMEs and the rest of industry. The development of a model for financing connected with this will also be proposed.

Other measures proposed in the NFP and its follow-up reports are just general measures to support opportunities for growth in the forest industry. Proposals for action mainly focus on the development of the wood product industry, but there are hardly any proposals for concrete measures to promote the use of the industry's domestic wood, apart from tripling state subsidies for the upkeep of private roads.

3.1.2 Achievement of targets

Use of domestic wood

In 2003, the use of the forest industry's domestic wood (roundwood) totalled 57.0 million m³. If this is compared with the average for the period 1995-1999 (53.4 million m³), the use of the forest industry's wood has clearly increased in line with NFP targets. During the NFP's programming period (1999-2003), that figure bare-

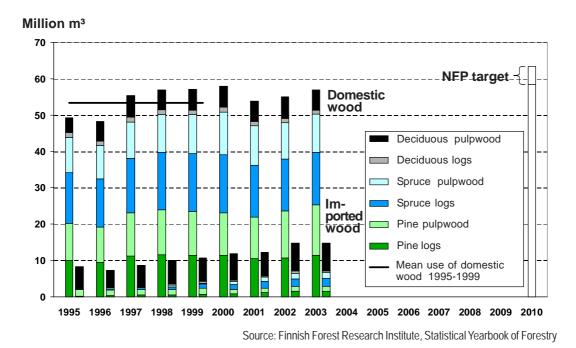


Diagram 3-1. Use of forest industry roundwood.

ly increased at all, however (Diagram 3-1). On the other hand, the use of imported wood in the forest industry grew dramatically. In 2003, use of imported wood (roundwood) in the forest industry stood at 14.8 million m³, which is 5.8 million m³ more than the average figure for 1995-1999. Relatively speaking, softwood (coniferous) logs and spruce pulpwood account for the greatest increases in imported wood. Chips, including the use of imported wood in the forest industry, grew by 6.7 million m³ in the period 1995-1999 and in 2003.

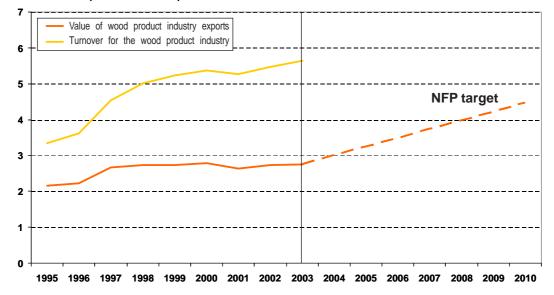
Wood product industry exports

The value of wood product industry exports has in real terms remained at the same level since 1997 (Diagram 3-2), although the euro value of pulp and paper industry exports dipped after 2000, as a result of unfavourable trends in the

economy and currency exchange rates. Turnover for the wood product industry, however, grew in real terms by EUR 1.1 billion in the period 1997-2003. The growth in the wood product industry was therefore mainly dependent on the domestic market.

The value of wood product industry exports has not increased in line with targets, and it will be an immense challenge to have doubled that value by the year 2010². It may even be difficult to maintain the present value of exports, owing, in particular, to poor levels of competitiveness in the sawn timber industry. A possible increase in timber construction in the future may, however, give a small boost to the sawn timber market in Finland.

Billions of euros (value in real terms)



Source: Finnish Forest Research Institute, Statistical Yearbook of Forestry

Diagram 3-2. Trends in the value of wood product industry exports and turnover.

²The NFP's target of a value of EUR 4.2 billion for exports (calculated as EUR 4.5 billion in real terms in 2003) corresponds to double the value of wood product industry exports as at 1996. The wood

3.1.3 Conclusions and proposals for development

Realisation of aim and targets

The use of the forest industry's domestic roundwood has grown in line with NFP targets, when use for the year 2003 is compared with the average for the period 1995-1999. During the NFP's programming period (1999-2003), that figure barely increased at all, however, although the total figure for the forest industry (including chips) increased by EUR 4.2 million m³ in the period 1999-2003, despite an unfavourable economic climate. The value of wood product industry³ exports has not increased in line with the NFP targets.

Sufficiency of selected range of measures

The measures proposed in the NFP to increase the use of domestic wood and the value of wood product industry exports have been correct in their approach, but insufficient to lead to steady growth with the above-mentioned targets in mind. On the other hand, any increase in the use of roundwood and the value of wood product industry exports is first and foremost dependent on general trends in the economy, in business and in the market, as well as how competitive the forest industry is. Consequently, the programmes and campaigns proposed in connection with the NFP, for example, to boost the wood product industry (including the wood product industry business policy programme, and the timber construction promotion programme), may be primarily regarded as measures to support the sort of development aspired to, and not so much measures leading to the development aimed at.

So far, most of the increase in the use of forest industry wood has hinged on imported wood. The main reasons for the increase in imports of wood have been the poor availability of Finnish

wood (especially birch pulpwood) and its high price (especially softwood logs). The increase in the value of wood product industry exports continued to be substantial until 1997, since when the figure has remained very much at the level it is today. The trend in the value of exports has been affected by the gentle decline in real terms of the prices for sawn timber, plywood and veneer, although, for example, the volumes of exports for plywood and veneer increased dramatically until 2003 (Diagram 3-3). Volumes of exports for sawn timber, however, hardly grew at all after 1998, which is mainly due to the poor competitiveness of the sawn timber industry compared to the main competing countries (traditionally Sweden and Central Europe, but now also Russia and Eastern Europe).

In the future the internationalisation of companies in the forest industry could weaken Finland's relative status in the strategic planning of companies' production and operations. An international comparison revealed that the availability of raw timber (roundwood) has become a more significant constraint than before on the dynamic growth of the forest industry in Finland. New investment in the industry and increase in production are concentrated in areas that have the best potential for increasing the availability of raw material (South America, East and Southeast Asia and Russia).

Despite fiercer competition, there is also excellent potential in the future for the chemical pulp and paper industry to maintain its strongly competitive position, thanks to high quality and modern production technology. Investment in the modernisation and improvement of current capacity will also increase the demand for pulpwood in the future, although growth will be considerably slower than it was in the 1990s.

Competitiveness in the wood product industry is being weakened by the growth in pro-

³product industry covers sawn timber, plywood, veneer, chipboard, fibreboard, wooden furniture, carpentry and wooden houses.

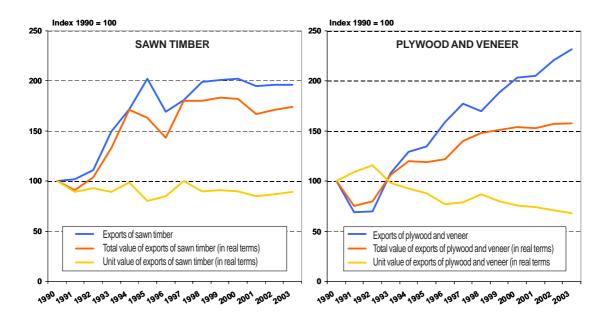


Diagram 3-3. Trends in exports of sawn timber, plywood and veneer, and the value of exports.

duction in the sawn timber and board industry, especially in Russia and Eastern Europe. The high investment risk has kept growth in the industry in Russia moderate until now, but growth is speeding up and may significantly increase competition in the Finnish forest industry's main markets in Western Europe. In the future conditions in companies in Siberia and Russia's Far East will be right for extending exports of high quality timber to Asia also. In recent years Asia has been a growing market for the Finnish sawn timber industry.

In the throes of a profitability crisis, the sawn timber industry will probably have to cut production in the short term, when the revision of forest taxation is finalised in 2005 and the number of log stands falls as a result, and the growing Russian sawn timber industry increases competition in the finished product market, using some of Finland's present imported logs. In the longer term, sawing capacity will fall to a level that must guarantee a viable market share, especially alongside the growing Russian industry.

Examined as a whole, the prospects for the industry's growth are considerably more moderate than they were in the 1990s and the Finnish forest industry's development can be regarded

as being at a significant point of discontinuity. Its opportunities for growth in Finland are closely linked to its competitiveness in international markets. At present, the Finnish forest industry's main competitive edge over, for example, Russia, Eastern Europe and South America, lies in its high quality technology, its stable social conditions, its advanced raw material maintenance facilities, its general infrastructure, and its high levels of expertise. These will also be important factors for the industry's viability in the future, but fiercer international competition and the falling trend in the prices of finished products will create pressures to improve productivity and lower production costs in order to keep competitive

Raw timber (roundwood) in Finland constitutes a remarkably large share of the forest industry's production costs compared to the major competing countries. The pressure to reduce the costs of raw materials has partly resulted in an increase in imports of competitively priced raw timber from Russia. The Finnish forest industry is partially dependent on imports of deciduous pulpwood and spruce logs, as demand for these timber products at present exceeds the country's logging capacity. Imports of other timber products partially substitute for the

country's supply of wood. In future, the forest industry's dependence on imported wood will increase and imports of wood are likely to grow to some extent until 2010.

Apart from its availability, it is the high price of wood that is the most significant barrier to increased use of domestic wood in Finland. The forest industry's wood supply chain is at present among the world's most efficient, so in future there will be more and more pressure on the stumpage price for raw timber and the development of pricing mechanisms. To maintain the industry's competitiveness and the profitability of private forestry, preconditions for lowering the production costs of raw timber should be evolved. Apart from maintenance of the rural infrastructure, this is the most crucial factor affecting the industry's potential for growth (both the use of the industry's domestic wood and the value of wood product industry exports) which the NFP can influence and which can be promoted by means of forest policy decisions.

Development proposals

Target	In connection with the aim of 'Opportunities for growth in the forest industry', the primary objective should be to strengthen the industry's viability and competitive potential.
	The target for the use of the forest industry's domestic wood should be tied to the price and quality competitiveness of Finnish wood. In addition, opportunities for growth in the forest industry are better represented by the increased overall use of wood than by increases in the use of domestic wood.
	The principle focus should be on aiming to increase turnover/value added rather than increasing the value of wood product industry exports.
Measures	In connection with the NFP process, it will be necessary to actively search for ways of reducing wood production costs in particular, and develop operational and pricing mechanisms (e.g. quality pricing) in the raw timber market.
	To boost the forest industry's viability and competitive potential, it will be necessary to specify measures the implementation of which will require co-operation with bodies outside the forestry sector (e.g. maintenance of infrastructure). The implementation of these measures should be assured by clarifying the share of responsibility and by strengthening commitment between the various bodies involved.
Monitoring/follo w-up	Targets for the use of wood and value of exports or the relevant comparison dates should be specified in greater detail.
	There should be a clearer definition of the term 'wood product industry'.
	The collection and monitoring of data on the measures implemented by administrative departments outside the Ministry of Agriculture and Forestry to promote the NFP should be made more efficient and standardised.
Additional remarks	Improve raw timber pricing strategies and development of the raw timber market
IGHIAINS	Development of the sawn timber and board industry (in addition to projects to increase value added, ways should be found to improve the viability of the traditional sawn timber industry).

3.2 FORESTRY IS PROFITABLE AND PROVIDES EMPLOYMENT

The NFP's aim is to increase annual logging outturn to 63-68 million m^3 by the year 2010, by ensuring at the same time that silviculture and forestry adhere to high levels of environmental protection. The aim is also to increase the annual use of wood for energy production by five million m^3 .

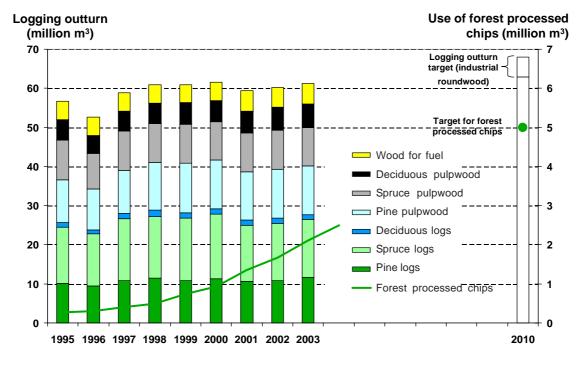
3.2.1 Selected measures

According to the NFP, if logging outturn is to be increased, silviculture should be carried out according to the recommendations. As a concrete measure to promote silviculture, the NFP proposes an increase in state subsidies of EUR 10 million for silviculture and basic improvements and an increase in state subsidies of EUR nine million for planning, education and guidance and advice, as a result of which forest owners would increase their own investment in silviculture and basic improvements by EUR 65 million.

3.2.2 Achievement of targets

When the NFP was being drafted during the period 1995-1999, logging outturn averaged 58.0 million m³ per year, of which commercial roundwood accounted for 53.3 million m3 and wood for fuel 4.7 million m3. The NFP's aim to increase logging outturn for roundwood to 63-68 million m³ by 2010 would mean an increase in the logging of roundwood of around 10-15 million m³, which conflicts with the target for use of domestic wood. Presumably, however, the NFP does not mean an increase in logging outturn for commercial roundwood but an increase in total logging outturn (including wood for fuel), in which case the target for logging outturn would correspond in quantitative terms to the target for use of domestic wood.

The total for logging outturn in 2003 was 61.1 million m³ (of which roundwood 55.9 and wood for fuel 5.2 million). When this is compared to the average for 1995-1999 (58.0 million m³), logging outturn has clearly increased in line with NFP targets. During the NFP's program-



Source: Finnish Forest Research Institute, Statistical Yearbook of Forestry

Diagram 3-4. Trends in logging outturn and the use of forest processed chips.

ming period (1999-2003), however, logging outturn barely increased at all (Diagram 3-4). The share of logging outturn for roundwood represented by pine pulpwood has remained at its current level, although the aim of the NFP is to change the logging structure more in the direction of pine pulpwood and peat lands.

The use of forest processed chips has grown steadily since the end of the 1990s, and is estimated to have reached a level of 2.5 million m³ in 2004. This favourable trend has meant that the target use of five million m³ for chips will be achievable on the whole if there is further investment in developing the production and use of forest processed chips in the future.

Employment trend

The number of those employed in the forest sector during the NFP's drafting phase in 1997 and 1999 was 95,000 (forestry 23,000 and forest industry 72,000, excluding those employed in forest improvement and timber transportation). According to the NFP, the Workforce 2017 programme committee predicts a forest sector workforce of 80,000 by 2010 (forest industry 60,000 and forestry 20,000). The NFP's aim was to slow down the fall in employment in the forest sector by 10,000-15,000 person work years, in which case the employment figure for 2010 would be 90,000-95,000 (assuming 1 employee = 1 person work year). In its follow-up surveys, however, the NFP's aim has been for an employment rate of 80,000 by 2010. The forest sector employed 89,000 in 2003, so the employment rate will have progressed in line with targets if the figure of 80,000 is maintained as the target figure.

Employment statistics for forestry and the forest industry are not very precise (to the nearest 1,000 employees) and are not necessarily very comprehensive, especially concerning wood product industry value added. This in turn makes it difficult to estimate employment trends in the short term. It should be realised, moreover, that the number of people employed in the forest

sector does not necessarily correspond to the volume of work measured in terms of person work years. For example, the predicted fall in the supply of labour in forestry work in the future could in theory lead to a decrease in the employment rate in forestry, even if the volume of work in forestry were not to fall.

3.2.3 Conclusions and proposals for development

Realisation of aim and targets

Total logging outturn has increased in line with NFP targets when use in 2003 is compared with the average for 1995-1999. During the NFP's programming period (1999-2003), however, logging outturn barely increased at all. The use of forest processed chips has grown in line with targets.

Sufficiency of selected range of measures

According to the NFP, if logging outturn is to be increased, silviculture should be carried out according to the recommendations. The proposed measures to increase state aid for silviculture and basic improvements, planning, education and guidance and advice have not as yet led to the desired trend in increased logging outturn. The factors impacting on the realisation of targets for logging outturn and the NFP's potential for contributing to the realisation of targets are mainly the same as in section 3.1.

The trend for wood for energy production has been in line with NFP targets, although no concrete measures to achieve the target are proposed, except for initial stage investment subsidies for SMEs purchasing and producing energy from wood. The increase in the use of forest processed chips has been boosted by factors such as an energy policy that favours bioenergy and energy from wood, research projects developing the production and use of chips, harvesting and haulage subsidies for wood sold for energy use in the management of young forests by virtue of the Finnish Act on the Financing of Sustainable

Forestry, and subsidies for the production of chips for energy.

The production of forest processed chips is at present a competitive option in the harvesting of logging waste which results from the final felling of spruce, but there is additional potential for increasing production of chips in stocks as well as young forest stands for improvement and first thinning. An increase in the use of chips also requires harvesting to be extended to more and more remote sites where production costs are less favourable. If the target for use of chips is to be reached, there will also have to be heavy investment in the future to promote their use and production. For the NFP and the Ministry of Agriculture and Forestry this will mean not only subsidising the harvesting and chipping of wood for energy but also investing in research and development projects promoting the viability of the wood chip market. In the future, EU and national energy policies that promote the use of biomass (emissions trading, possible green electricity certificates, energy taxation) will improve the competitiveness of forest processed chips compared to fossil fuels, which may in turn promote the viability of the wood chip market.

The NFP states that increased harvesting of wood for energy and enhanced value added in the wood product industry will have the greatest effect on employment. The increase in the use of wood chips has, for its part, had a positive effect on employment in forestry. If the aim of the NFP is kept at an employment rate of 80,000 in the forest sector by 2010, the employment rate will have developed in line with targets, even if tur-

nover in the wood product industry has increased only moderately. In this connection, it should be pointed out that enhanced value added in the wood product industry could increase employment in that industry, though not directly in logging, the transportation of timber or silviculture.

The NFP's effect on employment is discussed, for example, in the inspection report on the implementation of the National Forest Programme (State Audit Office 2004). According to the report, the programme, when implemented, could have a positive effect on employment in forestry, albeit clearly less pronounced than what was originally suggested in the programme. The programme's effect on employment has also given rise to a debate in other connections, and thus a comparative survey of NFP's effects on employment will be necessary (especially if the significance of employment in the NFP is highlighted later).

The aim to slow down the fall in employment is not wholly consistent with productivity in the forest industry, improved competitiveness and the aim of forestry profitability. On the other hand, the NFP / Ministry of Agriculture and Forestry could influence the volume of work in forestry, and therefore the employment rate, using subsidies for silviculture, forest improvement and the harvesting and chipping of wood for energy. However, it is mainly factors beyond the scope of the present NFP, such as general economic developments, competitiveness and trends in productivity, which will impact on employment in logging and the forest industry.

Development proposals

Target	In connection with the aim 'Forestry should be profitable and provide employment', the objective should be to maintain the potential profitability of private forestry partly by finding ways of cutting wood production costs.	
Measures	In order to promote forestry's profitability and reduce wood production costs, it will be necessary in future to focus attention on the diversification of silvicultural methods and show greater flexibility in the choice of wood production strategies.	
Monitoring/follo w-up	Employment targets in the forest sector should be brought into sharper focus a clarified (80,000 vs. 90,000–95,000 employees in 2010). Moreover, ways of measuri employment should be standardised, so that either the number of employed or to number of person work years is being measured (person work years as a means measurement is less ambiguous).	
	Employment statistics should be consistent with the methods which are followed (current statistics measure the number of employed). Employment statistics methods should also be improved with regard to further processing/upgrading/value added in the wood product industry.	
	With regard to logging outturn targets, the term 'roundwood' should be clarified (conflict between logging outturn target for roundwood and target for use of domestic wood).	
	Data collection and monitoring relating to measures to promote the NFP implemented by administrative departments outside the Ministry of Agriculture and Forestry should be made more effective and standardised, particularly in connection with wood for energy.	
Additional remarks	An examination of the NFP's impact on employment should be carried out.	
Terriarks	There should be improved viability of the forest processed chip market.	

3.3 SECURING ECOLOGICAL SUSTAINABILITY

The NFP's aim is by 2010 to achieve and preserve a favourable standard of conservation of species and habitats in forests through a successful combination of conservation areas and diversely exploited commercial forests.

3.3.1 Selected measures

The objective is to realise this aim in the NFP with particular reference to the Forest Biodiversity Programme for Southern Finland (METSO) approved by the Government in 2002. It consists of 17 measures, the implementation of which is the responsibility of the Ministry of Agriculture and Forestry and the Ministry of the Environment. In addition, the NFP and its follow-up reports propose the following measures: implementation of existing conservation programmes in accordance with the financing strategy for conservation programmes ratified by the Finnish Cabinet Committee on Economic Policy in 1996, and the Government decision in principle on water protection of 1998 to reduce the pollution load in forestry waters.

3.3.2 Achievement of targets

The realisation of aims and targets below is assessed on the basis of the interim evaluation of the Finnish National Action Plan for Biodiversity (Finnish Environment Institute 2005), as well as the implementation of key measures. Implementation of measures was evaluated on the basis of statistical data and information gathered in interviews.

Interim evaluation of the National Action Plan for Biodiversity

According to a study of endangered species in 2000, of the threatened forest species, 56% are herb-rich species, 32% are heath forest species, 4% are ridge forest species, and 5% are fire area species. The threat to forest species is thought to have slowed down in the 1990s

thanks to more effective conservation action. By 2010, however, the number of endangered forest species is estimated to rise with regard to all species except mammals and beetles. Furthermore, it is thought that the number of extinct species will increase with regard to several groups of species.

The most threatened species in bogs are to be found in fens. The number of threatened or extinct bog species is estimated to increase by the year 2010 because of changes in certain insect groups (the increase in endangered species in the period 2000-2010 is partly a technical phenomenon resulting from improved levels of knowledge, as there is now more information on species about which not much was known formerly, and completely new species are being discovered). The situation regarding vascular plants, lichens, and beetles is predicted to remain the same.

The major cause of species decline, threat and extinction is the decrease in the number of suitable habitats. The diminished volume of old forest and rotten trees has been a particularly noticeable phenomenon in Southern Finland, where the volume of forest comparable to natural forest and the volume of rotten wood have fallen to less than 1% and just a few per cent respectively of the natural forest total. In recent years there has been an attempt to promote the restoration of natural forest features to commercial forests, for example, by mapping out the especially important habitats defined in the Finnish Forest Act (Forestry Development Centre Tapio 2005a), by managing them, and by sparing rotten trees and living retention trees during logging operations. These recent measures and recommendations to increase volumes of rotten trees are seen to be correct in their approach, but a slow solution. An example calculation showed that these actions would have probably only had a slight impact by the year 2010, but would lead to double or triple the volume of rotten trees in commercial forests in 50 years' time.

An attempt has also been made to preserve the special features of forest habitats through the implementation of conservation programmes, restoration and voluntary forest conservation experimental projects. The report finds, however, that restoration actions have fallen behind the targets set by the restoration work group in 2003.

The decline in the surface area of natural forests has been aggravated by the fact that they have been broken up as a result of regeneration felling and the building of forest roads. This has reinforced the adverse impact of the decline in the total available area for natural habitats in the last 50 years. As the volume of clear felling grows, and the number of forest roads being built diminishes, the rate at which forests will be broken up/divided seems likely to remain pretty much at present levels until 2010.

The fact that there has only been modest conservation in the hemiboreal, southern boreal and central boreal forest zones is seen as a defect. In hemiboreal and southern boreal zones approximately 1% of the forested land has been protected and in the central boreal zone the figure is just over 2%. In the northern boreal zone 17% of forested land is protected.

Another defect mentioned with regard to biodiversity and conservation is that the rate of conservation of the especially important habitats mentioned in the Forest Act and the natural habitat types protected under the Nature Conservation Act is not as intense as in traditional nature conservation areas, but instead permits measures that jeopardise the preservation of the features of habitats. Similarly, a need is perceived to improve the definition and management of sites mentioned in the Forest Act and other valuable nature sites. Regarding the forest sector's modus operandi, the small share of financing to secure diversity comes in for criticism as does the fact that safeguarding diversity is part of forestry's quality assurance system and not a separate form of action that should be marketed to forest owners.

The Forest Biodiversity Programme for Southern Finland (METSO)

According to the Government's decision in principle of 2002, METSO is to be implemented

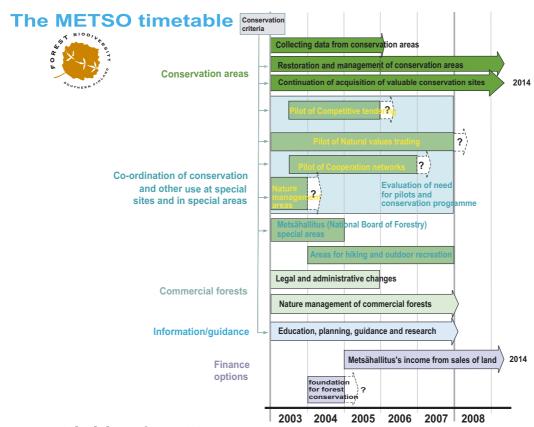


Diagram 3-5. Scheduling of METSO measures.

Source: http://www.mmm.fi/metso/

during the period 2003-2007 with measures targeted at, *inter alia*:

- Inventories, restoration and management of nature conservation areas
- Experimental projects, such as competitive tendering, natural values trading, cooperation networks, and nature management areas
- The nature management of commercial forests
- Research (Diagram 3-5).

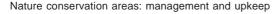
The programme was financed in accordance with the Government's decision in principle as far as the Ministry of the Environment was concerned, by the Ministry of Agriculture and Forestry's appropriation for nature management is, according to the draft state budget for 2005, EUR 275,000 less than the METSO target (Diagram 3-6). Metsähallitus has also had a

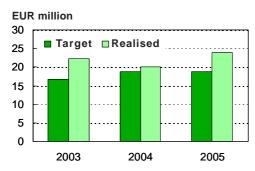
share in the METSO costs of financing by the two ministries as shown in the diagram.

The implementation and success rate of the programme's measures will be assessed separately in METSO's interim evaluation.

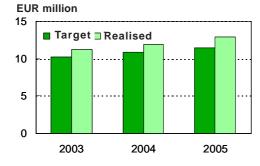
Interviews show that stakeholders by and large consider the diversification programme to be a success, in terms of its selected range of measures, start-up, and improved knowledge base. Furthermore, the opinion is that attitudes and co-operation between the various stakeholder groups have improved.

METSO's limited forecast impact on diversity comes in for criticism. Causes for concern were also ensuring sufficient financing for METSO from 2007 onwards and the cost-effectiveness of the project: the programme's machinery was felt to be unwieldy, and repeated, fixed-term conservation/protection was thought in the long run to be less economically viable than having the state acquire the land by compulsory purchase.

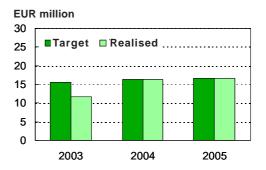




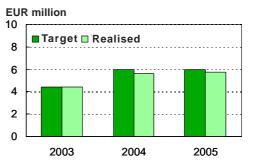
Development and planning



Compensation paid in connection with nature conservation

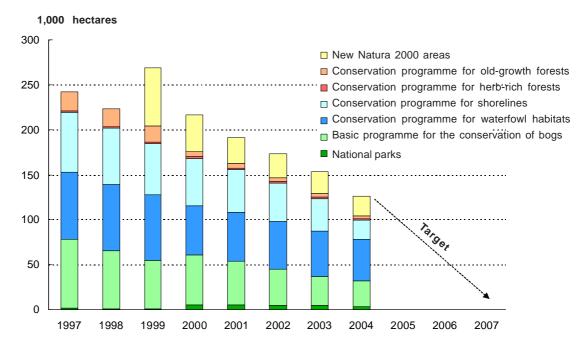


Promotion of management of forest nature



Source: State budgets 2003-2005

Diagram 3-6. Implementation of METSO's financing plan (Ministries of the Environment and Agriculture and Forestry). Note varying scale in diagrams.



Source: Finnish Forest Research Institute, Statistical Yearbooks of Forestry 1997-2004

Diagram 3-7. Unimplemented nature conservation programmes on private land.

Resources were also wanted in the following areas: for research into diversity in practical forestry and a synthesis of the existing results of research, for long-term monitoring of the impact of restoration on animal and plant species and the effectiveness of water protection, for research into the diversification of barren habitats, for advice and guidance for forest owners, for communications, and for monitoring of the impact on regional economies of the diversification programme.

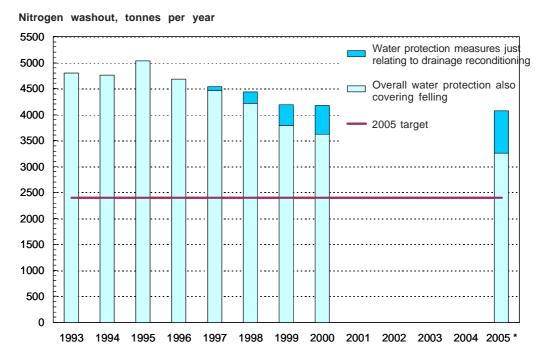
Implementation of nature conservation programmes

Diagram 3-7 below shows the progress made in the aim to implement the main bulk of the nature conservation programmes on private land by the year 2007. According to the Ministry of the Environment, however, areas covered by the West and Southwest Finland Regional Environment Centres lag behind targets. Most of the areas where implementation has not occurred are those involved in national programmes for the conservation of bogs, waterfowl habitats, shorelines, or the new Natura 2000.

Water protection

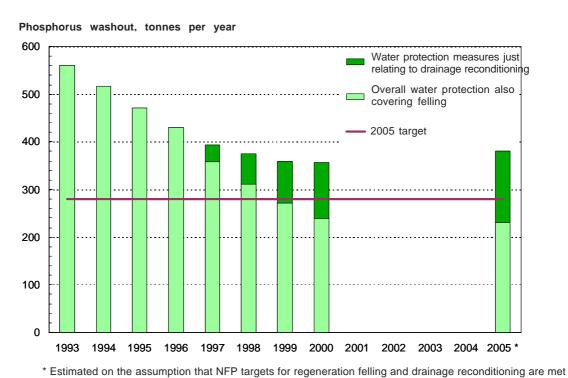
According to the programme of targets for water protection, the volume of nutrients from forestry flowing into internal waters and the Baltic Sea should be reduced by at least 50% of the estimated levels for 1993 by the year 2005. According to calculations made by Silpo et al. (2002), the fall in nitrogen washout will not proceed according to targets (Diagram 3-8). This will result in the gradual eutrophication of lakes affected by forestry. On the other hand, the reduction in phosphorus washout will probably have achieved target levels (Diagram 3-9).

The 2005 estimates produced by the Finnish Environment Institute have been made on the assumption that targets for regeneration felling and drainage reconditioning under the NFP would be realised. In fact, this did not happen, and washout has remained somewhat less than what was predicted. New figures for washout trends will be available as a result of an evaluation of the implementation of the programme of targets for water protection to commence in the summer of 2005.



^{*} Estimated on the assumption that NFP targets for regeneration felling and drainage reconditioning are met Source: Finnish Environment Institute

Diagram 3-8. Nitrogen washout resulting from forestry activity in Finland 1993-2000 and 2005 (estimated) and target for 2005.



Source: Finnish Environment Institute

Diagram 3-9. Phosphorus washout resulting from forestry activity in Finland 1993-2000 and 2005 (estimated) and target for 2005.

The following action has been taken to try and reduce forestry nutrient washout:

- Water protection in forest drainage areas has been improved in 114 forest nature management projects (Forestry Development Centre Tapio 2005a).
- A project by the Forest Centres, Forest Research Institute and Forestry Development Centre Tapio to reduce and monitor the water pollution load caused by forestry (2002-2004) had the aim of improving the quality of water protection measures in forestry by means of guidelines, leaflets and education. The project also established a model for procedures to do with providing information and delivering opinions regarding drainage reconditioning, in particular between the Forest Centres and the Environment Institute. The model will form part of the legislation in the complete reform of water legislation.
- Water protection projects integrated with Karjaanjoki Life and Forest Planning (ME-SUVE) are developing the notion of combining plans for water protection with regional forest planning and data on soil. The projects

will be completed in 2005.

The aim is to improve funding for water protection in connection with the total reform of the Finnish Act on the Financing of Sustainable Forestry begun in 2004. The intention is to present the Finnish Parliament with a Government Proposal on the reform in 2005. In May 2004, the work group on the Act set up by the Ministry of Agriculture and Forestry proposed that the Act on the Financing of Sustainable Forestry should be amended so as to include a forest nature management project whereby the costs of water protection measures undertaken on land outside the scope of the drainage reconditioning project could be entirely financed by means of a state subsidy and compensation paid in respect of the external farm for the area of land needed for surface irrigation, for example.

Water protection in forestry is also affected by the European Community Water Framework Directive that came into effect in December 2000. The directive was implemented in Finland with changes to water legislation at the end of 2004 (Act on the Organisation of Water Management 1299/2004, Act on the Amendment to the

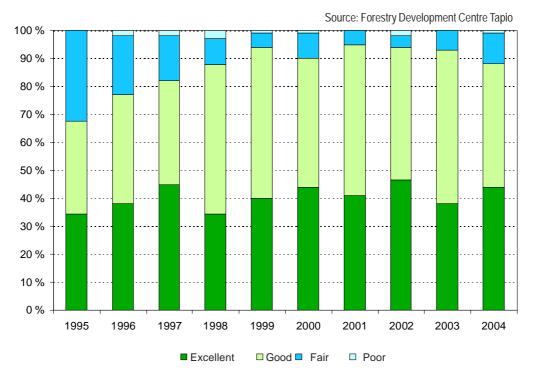


Diagram 3-10. Water protection in connection with soil cultivation.

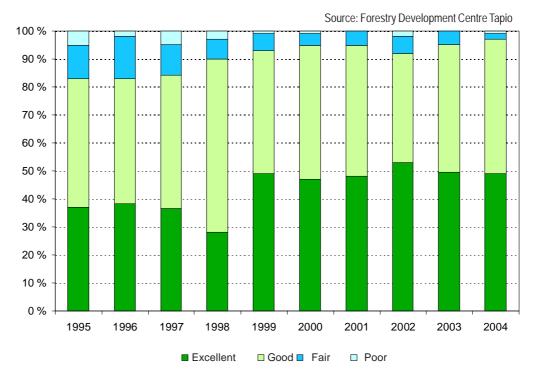


Diagram 3-11. Water protection in connection with logging.

Environmental Protection Act 1300/2004, Act on the Amendment of Chapters 2 and 16 of the Water Act 1301/2004, and the Act on the Entry into Force of Regulations Pertaining to the Legislative Field of the Protocol on Water Resources and Health under the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes 1302/2004). In the future, water protection will be controlled by such programmes as the water management and action programmes being drawn up regionally.

Information on the success of water protection in forestry is available in evaluations of the standard of natural management of commercial forests by the Forestry Development Centre Tapio. The diagrams below (Diagrams 3-10 and 3-11) show that standards of water protection appear to have improved compared to the situation 10 years ago. However, during the term of the NFP (1999-2004) there seems to have been no improvement: instead the standard of water protection in connection with soil cultivation has deteriorated in recent years and has remained the same in connection with logging.

3.3.3 Conclusions and proposals for development

Realisation of aim and targets

There has been progress in the aim of 'securing ecological sustainability' thanks partly to the measures under the METSO diversity programme, the implementation of the nature conservation programmes, and research. The impact these contributions have had on ecological sustainability will be conspicuous in the years to come.

According to the evaluation of the National Action Plan for Biodiversity, however, the target for favourable levels of conservation will not be realised in Finland. Targets are not being achieved here from all the points of reference examined; instead, the implementation of the conservation programmes is falling behind targets as is the reduction of nitrogen washout. Furthermore, regarding the target set in the NFP for the programme of targets, funding and action for forest conservation over the coming years in Southern Finland, the western part of the province of Oulu and Southwest Lapland, it has been suggested that no

decision regarding the need for a conservation programme should be taken until 2007.

Sufficiency of selected range of measures

The NFP has increased appropriations to promote conservation area and forest nature management. In particular, there has been massive investment in the establishment and management of nature conservation areas, inventories and research, and at the same time the knowledge base and selected range of measures have expanded significantly. The NFP has also had an important role to play in creating closer co-operation between the various bodies involved.

Additional input/investment is needed for water protection in forestry and the implementation of conservation programmes. In addition, in 2006 there should be an assessment undertaken of the

need for forest conservation in Southern Finland and a proposal concerning further action in accordance with the METSO diversification plan. Appropriations for forest nature management should also be increased to the levels corresponding to targets set in METSO.

Stakeholder groups regard the present measures as being correct in their approach, but they are seen as insufficient to achieve targets owing to defects in the conservation programme. On the other hand, there are also those who think Southern Finland has no need of new conservation areas from the ecological standpoint. Many players are worried about the scope of nature conservation area management and whether it can be sustained, whether there is adequate compensation available for nature conservation, whether there are sufficient appropriations in place to promote forest nature management, and the cost-effective aspects of METSO.

Development proposals

Target	In the configuration of targets it would be realistic to say that the impact of measures now being implemented will not necessarily be conspicuous during the programming period, but only in the longer term.
Measures	To achieve targets, there has to be continued implementation of identifiable measures under the NFP (implementation of conservation programmes, improved water protection, and the reform of the Act on the Financing of Sustainable Forestry), and additional measures should be contemplated (evaluation of the need for forest conservation in Southern Finland and a proposal concerning further action in accordance with the 2007 METSO diversification plan). Appropriations for forest nature management should also be increased to the levels corresponding to targets set in METSO.
Monitoring/ follow-up	In the monitoring of the NFP there should be more precise reports on how the implementation of measures has progressed, and what is still not completed. Reports should also include observations on the effectiveness of measures as soon as the information/data is available.
	It will also be important in future to monitor and report on METSO's cost-effectiveness. Then it would also be possible to show a breakdown of the sort of financial input that applies: salary costs, etc. and, on the other hand, investment.
Additional remarks	The various stakeholder groups at present have different opinions regarding the content of the aim and the action needed to achieve it. The situation is in need of having its scientific basis strengthened further and measures should be prioritised with reference to it. For example, there is a need for research into the impact on diversity of the treatment of commercial forests, and investment is required to do this.
	At national and regional level it will be necessary to examine new options regarding the co-ordination of wood production and forest conservation, and their economic, social and ecological impact.

Comments by stakeholder groups

The box below contains a selection of comments by stakeholder groups.

Aim: 'Securing ecological sustainability'

- There should be a clear aim in the NFP regarding the management of conservation areas and commercial forests. As the aim is unclear at present, there is no obvious long-term objective. The reports say that progress has been made, although it cannot be measured. Other quantitative targets are taken into account in the performance targets of the Forest Centres, and their implementation is therefore more effective and has a clearer goal in sight.
- Species-specific preservation plans should be implemented (in 1994 they were estimated to cover 5,000 hectares)
- There is demand for METSO's new measures and they should be introduced all over the country. Natural values trading and projects to promote networks of co-operation in the diversification of forest nature would seem workable solutions for the country as a whole.
- Recreational forests belonging to the municipalities, cities or local communities could
 have a bigger role to play in forest conservation than they do at present. There is not
 normally any yield requirement associated with them, and regional, ecological planning
 could be exploited in them (focusing attention on conservation values, increase in the
 volume of rotten wood).
- Between commercial forests and conservation areas there should be a less rigid category
 where it could be possible to achieve multiple-use and diversity targets (no clear felling).
 Guidance, advice and funding needed here.
- The definition and treatment of the especially important habitats mentioned in the Forest Act should be based on the management of nature and not minimising the financial/economic disadvantages.
- There need to be changes to the Forest Act and the Act on the Financing of Sustainable Forestry to include certain standing timber habitats (e.g. standing timber bogs, sunny hillsides) in the group of especially important habitats.
- There should be a proper assessment undertaken of the polluting effects of drainage reconditioning, and the authorities should consider whether a permit should be granted or not. In the case of final felling, there should be conservation zones, either laid down as guidelines or in the law.
- Money should also be spent on guidance for forest owners and communications with the general public (e.g. the importance to the diversification of commercial forests of deciduous trees, rotten wood, retention trees, and key biotopes).
- Progress in diversification in state forests should have occurred even without the NFP.
 Barely anything has happened in forests belonging to the municipalities, congregations or companies.
- METSO measures for state forests are voluntary. This should not be the case.

3.4 FORESTS SHOULD BE MANAGED WELL

The NFP's aim is to attend to the matters of silviculture and forest improvement in such a way that a logging outturn rate for roundwood rising to 63-68 million m³ annually is sustainable.

3.4.1 Selected measures

When discussing the NFP aim 'forestry should be profitable and provide employment', it was mentioned that for logging outturn to increase, silviculture would have to be carried out in accordance with recommendations. Furthermore, the amount of investment for silviculture and forest improvement as a whole would have to be raised to its former level of approximately EUR 250 million. In order to promote silviculture, an additional state subsidy of EUR 10 million is being proposed for silviculture and basic improvements, and, in addition, one of nine million for planning, education and advice/guidance, as a result of which forest owners would increase their own investment in silviculture and basic improvements by EUR 65 million.

With regard to the management of young stands, the programme proposes it will achieve its aim by means of the Young Stand Management Campaign in the period 1998-2002, after which young stands will be maintained through more effective guidance and the increased harvesting of wood for energy. Furthermore, the NFP follow-up reports propose that the 'Tomorrow's Forests' campaign should go ahead, the purpose of which is to boost the marketing of silviculture and basic improvements to forest owners.

3.4.2 Achievement of targets

The purpose of the additional state subsidy of EUR nine million proposed in the NFP was to use planning, education and guidance to increase the contribution to silviculture and basic improvements made by forest owners by EUR 65 million. According to figures in the Statistical Yearbook of Forestry, financing and the value of the work done by forest owners increased by EUR eight million in the period 1999-2001, after which that figure fell by more than EUR 30 million (EUR 98 million in 2003). On the other hand, state aid for organisa-

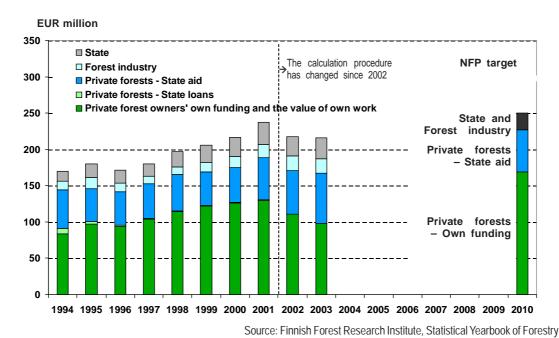


Diagram 3-12. The total costs of silvicultural measures in different forest owner types.

³ State aid for organisations promoting and supervising forestry stood at EUR 33.3 million in 1999, and the corresponding budgeted figure for 2005 is EUR 43.7 million. Subsidies to promote the sustainability of wood production stood at EUR 48.8 million in 1999, and the budget for 2005 is EUR 63.4 million.

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tions promoting and supervising forestry (guidance, planning, education) increased largely in line with NFP targets (nominal value of EUR 1.4 million over target), and subsidies to promote the sustainability of wood production increased by EUR 4.6 million above NFP targets (nominal value)³.

The criteria for calculating the costs of silviculture and basic improvements have altered since 2002, so measuring the achievement of aims and targets using compiled statistics for total amounts for silviculture and forest improvements will not necessarily give a true picture of how private forest owners' own contributions to financing and/or state subsidies have developed. Since 2002, costs have also included job-type related health and safety and site transportation costs, as well as costs to cover days when adverse weather conditions disrupt work, training days, days off sick and official leave. As a result of the changes to the criteria for calculating costs, it was expected that unit and overall costs for silviculture and forest improvement would increase between 2001 and 2002. However, there is no clear or consistent rise discernible.

After the changes to the criteria for calculating costs, overall costs for silviculture and forest improvements in private forests (including own contributions and the value of the work done by owners, as well as state loans and subsidies) fell by EUR 22 million in the period 2001-2003. The total cost of planting in private forests fell by EUR 12.4 million in the period 2001-2002 and that of the upkeep of forest roads by EUR 11.8 million in the period 2002-2003, which probably accounts for most of the decrease in costs. The fall in the total cost of planting in private forests is mainly due to the decrease in unit costs for planting for reasons which hitherto remain unexplained (EUR 689/hectare in 2001 and EUR 599/hectare in 2002). On the other hand, the current figure corresponds more to historical cost levels (e.g. in the period 1995-1998), because the unit costs of planting rose dramatically in the period 1999-2000. Moreover, the fall in total costs of the upkeep of forest roads in the period 2002-2003 results from the updating of unit costs to levels much lower than before.

The costs of silviculture and forest improvements carried out in private forests with self-fi-

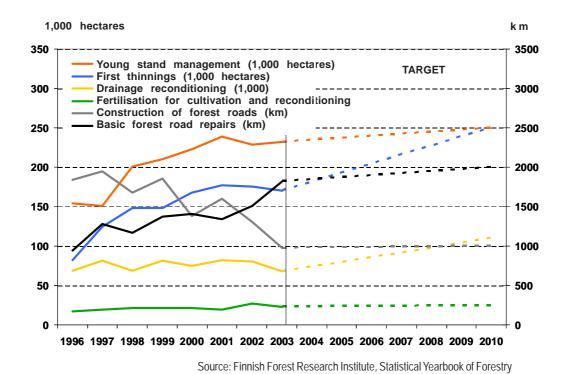


Diagram 3-13. Trends and targets for silviculture and basic improvements for 2010.

nancing are calculated by subtracting the figure for state subsidies and loans from the total for costs: what is left is the forest owners' contribution to silviculture and basic improvements. As a result, there is no real fall in private forest owners' contributions to financing after 2001, if the fall in overall costs is entirely due to changes to the criteria for calculating costs.

Owing to these changes, the achievement of the aim 'forests should be managed well' should be assessed in this connection on the basis of targets for volumes of work carried out insofar as these are set forth in the NFP. The programme does not set forth detailed targets for volumes of work for all job types, but it does state the needs and assumed trends which in the NFP follow-up reports, and thus also here, can be considered to be targets. Diagram 3-12 shows trends and targets for silviculture and basic improvements.

Young stand management grew dramatically in terms of area (by 80,000 hectares) from the time the NFP was being drafted in 1997 until 2003, when the area in which young stand management was being carried out measured 232,000 hectares. The fastest increase was in the period 1997-1999, when the area for young stand management increased by 60,000 hectares. During the NFP's programming period (1999-2003), the area for young stand management grew by around 20,000 hectares. Relatively speaking, young stand management increased most in forests owned by the forest industry, where it more than doubled in terms of area in the period 1997-2003. Furthermore, young stand management in state forests nearly doubled and in private forests it increased by 43%. Young stand management reached its peak in 2001 (239,000 hectares), after which it dipped slightly (232,000 hectares in 2003). To achieve NFP targets, the area of land in which young stand management is carried out must rise from its current level (2003) by around 20,000 hectares, which is quite a modest increase in terms of overall aims and targets.

The target in the NFP for first thinnings

would mean doubling the area of land where first thinnings are carried out in relation to levels when the first phase of the programme was being prepared in 1997. In 2003 first thinnings were carried out in 170,000 hectares, which is 45.000 more than in 1997. Around half of this increase occurred during the NFP's programming period (1999-2003). Relatively speaking, first thinnings increased most in forests owned by the forest industry, where they almost doubled in the period 1997-2003. In private and state-owned forests the figure for first thinnings increased by more than 30%. Volumes for first thinnings reached their peak in (177,000 hectares), after which they declined. To achieve NFP targets, annual volumes for first thinnings must rise from its current level by 80,000 hectares. The target will not be reached if the trend continues in the same way it has in recent years.

The surface area for drainage reconditioning has remained very much at the same level it was during the initial phase of the NFP, although in 2003 it fell to 68,000 hectares. To achieve NFP targets, the area for annual drainage reconditioning should be increased by more than 40,000 hectares. The target will not be reached if the trend continues in the same way it has in recent years.

Fertilisation for growing and reconditioning increased during the NFP's programming period. In 2002 the target of 25,000 hectares of surface area fertilisation was surpassed (27,000) and in 2003 around 23,000 hectares of forest were fertilised. The trend for fertilisation has been in line with NFP targets. In private forests the fertilised area has almost doubled in size, and the rise has also been dramatic in forests owned by the forest industry. The fertilisation rate in state-owned forests declined during the NFP's programming period.

The construction of forest roads has decreased and the main focus has switched to basic improvements to them, in line with NFP targets. Basic improvements to forest roads measured by kilometres have increased fairly steadily, with

the total figure for 2003 reaching 1,800 km. If the trend continues in the same way it has in recent years, the NFP target will be reached. Improvements have increased particularly in private forests, where the figure almost doubled during the NFP's programming period. The figure for basic improvements to roads in forests owned by the state and the forest industry barely increased during the programming period.

3.4.3 Conclusions and proposals for development

Realisation of aim and targets

Forest fertilisation, basic improvements to forest roads, and areas devoted to young stand management have increased quantitatively in line with NFP targets. Drainage reconditioning and first thinnings have fallen behind NFP targets. As a result of changes to the criteria for calculating the costs of silviculture and forest improvements, since 2002 it has been difficult to make a reliable estimate of the total investment in silviculture and forest improvements with financing from private forest owners. Until the changes to the criteria (2001) that figure had grown, mainly in line with NFP targets. During the NFP's programming period, the nominal value of state aid granted for organisations promoting and supervising forestry was very much in line with NFP targets, and subsidies to promote the sustainability of wood production somewhat surpassed NFP targets (year of comparison is 1999).

Sufficiency of selected range of measures

The increase in state subsidies for silviculture, basic improvements, planning, education and guidance has had a favourable impact on forest fertilisation, basic improvements to forest roads and young stand management. The trend in drainage reconditioning, however, has not been in line with targets, although state subsidies for silviculture and forest improvements as a whole have somewhat surpassed NFP targets. State

subsidies have mainly been responsible for the increase in the volume of work associated with subsidies under the Act on the Financing of Sustainable Forestry (e.g. prevention of heterobasidion annosum, basic forest road improvements, young stand management, and, in particular, young stand reconditioning and related harvesting and chip production for energy) and amendments/additions to the conditions for subsidies to be granted (e.g. basic improvements to forest roads, prevention of heterobasidion annosum).

The biggest challenges for achieving NFP targets for silviculture and basic improvements are how to increase volumes for first thinnings and drainage reconditioning. The trend for first thinnings has mainly followed that for domestic felling, so the reasons for the slow increase in first thinnings is largely due to the market situation prevailing at the time, which a policy programme like the NFP can hardly do anything about (although the boundary line between first thinning and young stand reconditioning can be blurred). The NFP follow-up reports maintain that the fact that drainage reconditioning has not achieved targets is partly due to the poor quality and problematic harvesting of wood that has grown in drained bogs, leading, therefore, to poor sales.

The NFP's aim 'forests should be managed well' follows the traditions of forest management standards and methods, which are primarily aimed at growing heavy timber. In the future the probable decline in production in the sawn timber industry will reduce the demand for sawn logs. The prospects for a sawn timber industry based on heavy timber will also be affected by the existence of engineered wood products manufactured from small-diameter logs and pulpwood, which are diminishing the market share for sawn timber. OSB (Oriented Strand Board), which is made from pulpwood, poses a similar threat to structural plywood. In addition, the pulp industry's use of wood continues to grow moderately, so in the future demand for wood in industry will focus more and more on small-diameter wood.

The focus of demand for wood in industry on small-diameter wood and the diminishing solvency of growing stock in industry as a result of the downward decline in prices for finished products may in the long term lead to a fall in stumpage revenue for private forest owners. In addition to sustaining the viability of private forestry, the aim for silviculture should be to consider the different goals that forest owners have (maximising yield on invested capital vs. maximising nature and conservation values), and thus the potential for forest owners to practise alternative silvicultural methods (e.g. more efficient wood production vs. natural silviculture).

Changes to the industrial operating environ-

ment, sustaining the viability of private forestry, and the different goals that forest owners have all suggest there is a need to modify current wood production strategies and silvicultural methods. The above-mentioned factors in silviculture that aims at efficient wood production will require increased thinning/improvement felling and/or shorter rotation periods. The need for change may of course be made rather less stringent if the industry can increase imports of pulpwood in the short term. After 2010, however, a possible new pulp mill in northwest Russia will make the situation regarding imported wood significantly tougher.

Development proposals

Target	In connection with the aim 'forests should be managed well', in the future consideration should be given to the impact that changes in the operating environment in the forest industry and forestry will have on wood production strategies and the need for different silvicultural methods.		
	With regard to this aim, in the future account should also be taken of the different silvicultural goals that forest owners have.		
Measures	With regard to silviculture and forest improvements, the priority should be to think about ways of lowering costs in these job types.		
	The target for drainage reconditioning and the necessary measures involved should be allocated more precisely by region.		
Monitoring/follo w-up	The target for investment by the state and private forest owners should be altered to reflect the changes in the criteria for calculating the costs of silviculture and basic improvements, so that the realisation of the target can be reliably monitored (or else the method for compiling statistics should be compatible with the target).		
Additional remarks	Develop wood production strategies and silvicultural methods to guarantee the profitability of forestry.		
	Improve the allocation of public subsidies for forestry.		
	Develop the management of forests in bog land and the possibilities of using wood that has grown in drained bogs.		

3.5 FORESTS FOR RECREATION AND NATURAL PRODUCTS

The NFP takes account of the traditional ways of exploiting forests in conjunction with their use and conservation, and promotes wideranging material and spiritual well-being derived from them. The productisation and marketing of nature tourism should be developed.

3.5.1 Selected measures

The aim will try to be achieved in the NFP and its following-up reports with particular reference to:

- The programme of measures drawn up by the Ministry of the Environment that relate to the recreational use of nature and nature tourism. The proposal for such a programme was made in 2002 and a Government decision in principle was taken on it on 13 February 2003.
- The earmarking of sufficient resources in the state budget for the creation and upkeep of hiking and other recreational services on state-owned land.
- The evolution of recommendations regarding silviculture and forest planning (landscape management, harmonisation of uses).
- The improvement of the knowledge base on multiple use and nature-based entrepreneurship.

The realisation of the aim will also be furthered by the 'Natural Product Industry Development Programme 2000-2006' and the 'National Development Programme for Nature-based Entrepreneurship'.

3.5.2 Achievement of targets

The achievement of targets can be partly evaluated on the basis of the demand for recreational services, data on visitor satisfaction, and the number of jobs based on nature tourism. What follows is an account of the implementati-

on of key measures in the light of statistical data and information compiled from interviews.

Demand for recreation and visitor satisfaction

According to the Finnish 'National Outdoor Recreational Demand Survey' (LVVI, 1997-2000), outdoor recreation is an important component of the Finnish way of life, as 97% of Finns take part in some such activity during the course of the year, and two-thirds engage in outdoor recreation every week. The most popular outdoor pursuits are walking, swimming in natural waters, staying in summer cottages, berry picking, cycling, fishing, boating, skiing, mushrooming, and sunbathing on the beach/shore. Outdoor recreation in the immediate vicinity of one's home is engaged in steadily throughout the year, for an average of 1.5 hours at a time. Three out of four Finns walk in the countryside exercising the Finnish public right of access to land, two out of five use municipal recreation areas, and one in five uses state recreation areas.

Approximately 40% of Finns go on trips to the country lasting an average of 4-5 days. They either go to stay in leisure time accommodation or often they also visit state recreation areas, especially in Northern Finland. Finns would rather spend their holiday in the countryside alone/just with their families than go on guided tours or be in the company of others. Travellers to the countryside (nature tourists) believe that an attractive natural site must have the necessary structures in place for outdoor recreation and hiking trails. Most have no need to hire equipment, although there is a demand for rowing boats, canoes, and slalom and snowboard equipment (LVVI survey).

With the aid of the LVVI survey follow-up, the possible changes in demand for recreational facilities could be closely monitored.

According to the data collected by Metsähallitus, the number of visitors to national parks and Nature Centres has been rising steadily (Diagram 3-13). The number of visitors to hiking areas and service points has remained the same

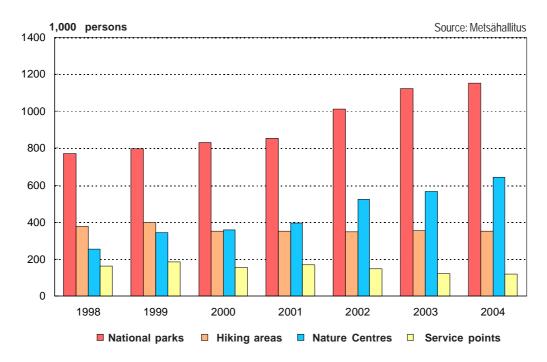


Diagram 3-13. Use of recreational facilities on state-owned land (numbers of visits, 1000 persons).

Table 3-1. Visitor satisfaction ratings for nature tourism and hiking destinations on state-owned land.

Source: Metsähallitus

	2000	2001	2002	2003
Visitor satisfaction rating for nature				
tourism and hiking destinations	4.3	4.4	4.3	4.3
(scale 1-5) *				

^{*)} Visitor surveys are conducted yearly in different destinations and the results shown are the average for each year

or fallen slightly. Changes in numbers of visits are partly the result of actual changes to visitor numbers in the areas and destinations, but they also reflect the fact that some national parks which were formerly under the control of the Forest Research Institute have come under the control of Metsähallitus, and also that new service points and Nature Centres have opened and some service points closed.

Customer satisfaction surveys show that the general public in Finland are very satisfied with the range of recreational services on offer and the structures that have been put in place to support them (Table 3.1).

Employment based on nature tourism and the recreational use of nature

The Vilmat work group (2002) estimated that the total employment rate in nature tourism and the recreational use of nature in 2000 was approximately 32,000 person work years. Of the total, the demand in Finland was estimated to account for 23,000 person work years and foreign demand for 7,500 person work years. The rate for those employed by the state or local authorities (municipalities) was estimated to be 1,500 person work years⁴.

⁴ These estimates can be regarded as guidelines and cannot be directly compared to the number employed in forestry. (The nearest comparable figure would be the number of those employed in the forest cluster.)

There is no available updated data on the employment trend in nature tourism and the recreational use of nature or numbers of enterprises in this sector.

Programme of measures for the recreational use of nature and nature tourism

The programme to develop the recreational use of nature and nature tourism (Min. Env. 2002) and the Government decision in principle on nature tourism of 2003 connected with it have as their target double the number of jobs relating to nature tourism by the year 2010 compared with now. The target will try to be achieved by means of 29 sector-related action proposals regarding the development of responsibilities, viability, productisation of tourist services, improved co-operation and demand, knowledge and skills.

There is still no follow-up data on the programme available, but the Ministry of the Environment has the impression that the action proposals have been implemented successfully, especially as far as land owned by the state is concerned. There is still room for improvement regarding the 'stray' proposals, which cannot be shown to be anyone's responsibility. These include questions of right of public access and the development of tourism across municipal borders.

The programme is mainly being implemented by reallocation of current appropriations. In addition, there was recognition of certain needs for the additional funding of nature conservation and recreational areas. Funding needs were also partly examined separately. The additional funding will be decided upon when the Ministry of the Environment's expenditure frameworks are drawn up.

Appropriations for hiking and other recreational services

The hiking and recreational services maintained by Metsähallitus are financed by the Ministry of Agriculture and Forestry, the Ministry of the Environment, and the Ministry of Labour (Table 3.2). During the term of the NFP, the Ministry of the Environment allocated an additional EUR two million in additional funding based on the Government decision in principle on nature tourism, although this additional funding was not received in 2004 and 2005.

In line with the Government decision in principle, Metsähallitus has drawn up programmes of measures relating to the recreational use of nature and nature tourism that extend up till 2010. The programmes describe the measures required for the sustainable development and growth of these two areas and what funds are needed to see it through. The realisation of targets stated in the Government decision in principle on nature tourism is thought to need an additional investment of around EUR 56 million during the seven-year period 2004-2010. Moreover, after 2010, this investment will result in a greater need for funding to maintain services.

Table 3-2. Implemented financing for the creation and maintenance of hiking and other recreational services on state-owned land (EUR millions)

	1999	2003
Min. Env.	11	18
Min. Ag. For.	4.0 – 4.5	4.0 – 4.5
Min. Lab.	4.0 – 4.5	4.0 – 4.5
Total financing, million euros	19 – 20	26 – 27

Source: Metsähallitus

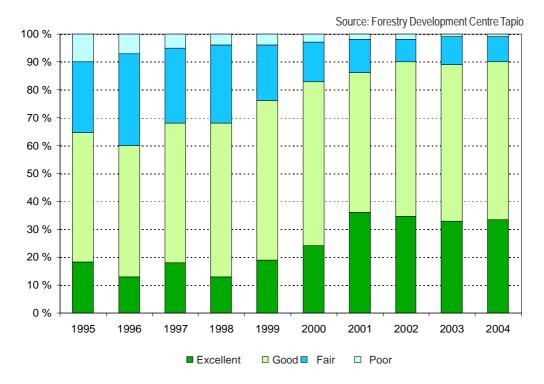


Diagram 3-14. Consideration of the landscape on regeneration felling sites.

Evolution of recommendations regarding silviculture and forest planning

With the accumulation of ecological data, an attempt has been made to channel the recommendations regarding silviculture made by different organisations in a direction that takes account of forest nature diversification. The conditions for multiple use have also been improved by increasing the number of landscape management guidelines and instructions in the recommendations for silviculture.

Metsähallitus has continually evolved its plan for natural resources and regional ecology. As a result, nature sites for conservation have been demarcated in commercial and recreational forests, and special landscape, game and other special sites have been included within the scope of restricted forest use. Since the start of 2005 the organisation has employed a Multiple Use Manager.

One standard for measuring preconditions for multiple use is the extent to which the landscape is taken into consideration on regeneration felling sites. According to an appraisal by the Forestry Development Centre Tapio, there have been considerable improvements in the trend in demarcating logging units and leaving trees that fit in with the landscape. There is nevertheless still room for improvement regarding the location and choice of retention trees that fit in with the landscape (Diagram 3-15).

In interviews with stakeholder groups there were comments made that it was felt that the opinions expressed by bodies responsible for current guidelines on silviculture and its planning were ignoring the different goals the forest owner community had in respect of forest ownership. Instead of a service based on the needs of forest owners, they seemed to be suggesting the same targets for wood production and forest handling guidelines for all. On the other hand, bodies closely involved in providing forest owners with practical advice and guidance felt that demand for anything but conventional guidance was nonexistent/minimal and that forest owners were unwilling to give up their share of revenue from sales of wood for the sake of other aims and targets.

Improvement of the knowledge base

Statistics on, and the monitoring of, nature tourism and recreational use are seriously lacking in data and unsatisfactory.

In recent years there has been progress in the production of information, mainly connected with the supply of services, and the following examples might be mentioned:

- Metsähallitus's 'Outdoors.fi' internet service
- The University of Jyväskylä's information system on recreational facilities in the countryside 'Luonnon virkistystarjonnan tietojärjestelmä' (www.sport.jyu.fi/lvvi/), which contains global reference data on recreational areas, trails and recreational spots in Finland
- The University of Helsinki's databank on nature-based entrepreneurship (www.luontoyrittaja.net), maintained by the Seinäjoki Institute for Rural Research and Training, which contains information on the supply of services plus other material relating to nature-based business.

In addition, the University of Lapland has established a temporary chair in nature tourism. The Forest Research Institute, meanwhile, prepares crop yield forecasts for wild berries and commercial mushrooms.

Stakeholder groups see a need for research in the following areas:

- Trends and changes in the supply and demand of the recreational use of nature
- Diversification of logging methods and research into silviculture that employs alternative procedures
- Evaluation of the benefits of forests that are not connected with wood production
- Compatibility of reindeer husbandry with forestry

It was also felt that access to research data was problematic in places.

3.5.3 Conclusions and proposals for development

Realisation of aim and targets

The aim of the recreational use of nature is so general that it is hard to evaluate the extent to which it has been realised. Furthermore, statistical data on the development of nature tourism is not widely available. It might be generally stated, however, that the multiple use of forests is being taken more and more into consideration in forest planning, in the guidelines and instructions on silviculture, and in the implementation of measures. Business based on nature tourism has grown faster than travel in general, and the sector has also become far more prominent, for example, in regional development projects.

On the other hand, it seems uncertain as to whether the aim relating to appropriations for recreational and hiking areas is being realised. In addition, in the knowledge base on multiple use, there is still a considerable lack of information on, for example, nature tourism and the recreational use of nature in terms of volume, supply and demand, and financial/economic impact.

It is the opinion of stakeholder groups that the aim is appropriate but needs to be updated and made more concrete as a result of the greater role nature tourism plays. It is felt, though, that progress has been made in realising the aim in recent years, particularly in Northern Finland.

Sufficiency of selected range of measures

The NFP would seem to have only played a minor role in the progress of realising this aim. The programme and its follow-up reports contain just a few details on concrete action, and nothing relating to financial input. Furthermore, some of the measures proposed have not been implemented.

In the future the NFP should focus attention on clarifying which bodies and agencies are responsible for developing the recreational use of forests and nature tourism and the planning and implementation of tangible measures. It is the administrative departments of the Ministry of Trade and Industry, the Ministry of Agriculture and Forestry, and the Ministry of the Interior which decide on the key measures and appropriations for developing the recreational use of forests and nature tourism, and the development of the sector should take more advantage of business, rural and regional development policy.

Stakeholder groups saw the Government decision in principle on the action programme to

develop the recreational use of nature and nature tourism (2003) and the development of operational approaches (e.g. consideration of the landscape in forest planning, Metsähallitus's new environmental guide) as positive moves. Room for improvement was seen in the need to make the sector's administration more accountable and the NFP's ability to respond to changes in social values and current areas of controversy (diversification of the use of forests to take account of other forms of land use, compatibility of reindeer husbandry with forestry). Some of the respondents were also concerned about the content and quality of training courses in travel and tourism.

Development proposals

Target	The configuration of targets should be brought into sharper focus and examined from the point of view of recent growth in nature tourism and its importance for the local economy.
Measures	The programme should describe in more detail what action needs to be taken to achieve targets. In the future measures should also be made more concrete in order to give clearer guidelines on the use of appropriations. The NFP should suggest that existing resources should be allocated appropriately from the point of view of demand for the recreational use of nature, and target additional resources on the basis of impact on the local economy. It is especially urgent to agree on which bodies and agencies are responsible for the development of the recreational use of forests and nature tourism.
	Regarding action proposed in the follow-up reports, appropriations for recreational and hiking areas and an improved knowledge base require additional investment (based on the development of recreational services according to demand and an evaluation of the need for research in the sector).
	The NFP should encourage discussion on alternative uses for different forests in guidance sessions for forest owners and on training courses for advisers.
	The NFP should have an influence on the evaluation of content and quantitative stands of training courses on nature tourism and the development of study programmes.
Monitoring/follo w-up	NFP monitoring should report in more detail on what progress has been made in the implementation of measures and what has still not been done. Reports should also include remarks on the effectiveness of measures as soon as the information is available.
	There should be more efficient collection and follow-up of data on measures implemented by administrative departments outside the Ministry of Agriculture and Forestry to promote the NFP and systems should be standardised.
Additional remarks	Evaluation of the need for research in the sector.

Comments by stakeholder groups

The box below contains a selection of comments by stakeholder groups.

Aim: 'Forests for recreation and natural products'

- Tourism and the recreational use of nature need have no effect on silviculture over a wide area, as demand for them is scattered and close to tourist centres and built-up areas.
- Multiple use and diversity should be more widely financed under the Act on the Financing of Sustainable Forestry (e.g. landscape management). They are important goals for society.
- Forest guidance should be developed to respond to the needs of nature entrepreneurs also. At the present, the forestry plan, for example, is not at all in the spirit of entrepreneurship.
- Areas that are important for multiple use are being treated as if they were commercial forests. For example, clear felling takes place in hiking areas and municipal recreational areas, even if there are no real wood production targets. However, section 6 of the Forest Act would allow using the forests for group selection felling, light selection felling or noncontemporaneous forest felling. The Forest Management Associations and Forest Centres do not these days recommend these alternatives to forest owners such as the municipalities.
- We need tools to sustain recreational values, while at the same time we want income from forest felling. Nowadays we either have to accept standard guidelines or do nothing. There is no area for compromise. The result is that there are forests untended by urban forest owners. We need guidelines and solutions with positive overtones and character. After felling we should be able to go to the forest and be pleased with the result.
- The forest management plan, in which the main objective is not wood production, will cost more than the traditional plans. There is no financial support available.
- The interface between the right of public access to land and a landowner's licensed business operation is blurred and needs clarifying: this is a potential area of conflict that needs discussing. It may be that there isn't any need for guidelines at all, but this matter should be checked in the NFP*.
- The Finnish Act and Decree on Metsähallitus by and large ignores the business and commercial development aspect.
- In Metsähallitus's target for results special legal status should be accorded to reindeer husbandry as a boundary condition of forestry.
- A concrete proposal by the monitoring work group for recreational values trading has been torpedoed by the Finnish Forest Council.
- Nature entrepreneurship will need reports and information on that sector of industry and a supply of special corporate services for that sector. In addition, a series of training courses to develop business and export know-how should be compiled for the industry.
- Areas that are very important for people's recreation and enjoyment of the countryside should also be selected for inclusion in Southern Finland's forest conservation programmes.
 In addition to areas that have endangered species, this way socially important areas could also be chosen.
- The Government should suggest uses for state forests taking different values into account, as well as tourist potential and long-term aims.
- An evaluation should be carried out of the need for the development of the national park network in Southern Finland over the next 20-30 years from the point of view of both nature conservation and multiple use.

^{*}The Min. Env. is discussing the need for an Act on the use of nature. The Act would, for example, give a guarantee to private forest owners that the load on the land resulting from rights of public access would remain moderate.

3.6 FOREST KNOW-HOW NEEDS TO BE STRENGTHENED

It is the NFP's aim to improve forest knowhow by strengthening innovation in the forest sector, based on research, education and internationalisation.

3.6.1 Selected measures

The NFP's most tangible measure to increase interaction between the producers and users of data is the establishment of a forum for innovation in the forest sector (the Future Forum on Forests). According to the NFP, the Forum's tasks are to specify the major development targets for the germination and realisation of innovative ideas, bring forest sector experts and clients together, and forecast future information needs. In addition, the NFP follow-up reports mention several projects to enhance levels of know-how, such as the Forest Centres' 'Metsän oppimispolku-hanke' ('Forest Learning Path' project), the WoodWisdom II research programme, the 'Puu-Suomi' ('Wood Finland') action programme, and closer co-operation and co-ordination between the networked Centre of Excellence for Wood Products and the Wood Europe campaign.

3.6.2 Achievement of targets

The NFP's aim for forest know-how is quite general in nature. There is no specific target for very concrete achievements in forest know-how: the objective is to improve current levels of expertise. Examined in general terms, know-how is already one of the Finnish forest industry's strengths. The achievement of the aim has been assessed here using interviews to map out the areas for development in research, education and internationalisation that would provide the basis for improving forest know-how. There is also a separate evaluation of the Future Forum on Forests and forest and environmental communications.

University education

Interviews reveal that at present there are adequate numbers of places on courses on offer in the forest sector (forestry and the forest industry) at university level, except with regard to the wood product industry and wood construction especially, which are areas where educational facilities should be improved. At present university education in the forest sector is rather biased in favour of courses providing basic technical, economic or biological knowledge. Furthermore, education focuses very much on the start of the production chain. Forest sector university education in these areas and the relevant expertise are of a high standard on the whole.

A more interdisciplinary approach should be encouraged in university education in the forest sector. Courses should be diversified, with the focus moving more in the direction of the end of the production chain, so that graduates are better qualified to work in the ever-changing operating environment of forestry and the forest industry. University education in forestry should cover a wider context and place greater emphasis on the social sciences, business and biology relating to nature conservation. In the wood product industry there should be more collaborations between wood construction, wood technology and architecture. Stakeholder groups also say that courses on design should be developed. University education for the pulp and paper industry should be developed in such a way that graduates would be better qualified to exploit chemical processes not only in the manufacture of pulp and paper but other products also.

Interviews suggest that university education in forestry and the forest industry should in general increase the number of courses preparing for management, project work and client orientation, so that graduates would be qualified in the early stages to develop new business and bring a new way of looking at things to the industry instead of just following traditional approaches. Moreover, collaborations with organi-

sations outside the universities should also be developed in the future for university/higher education in forestry to respond to the needs of the labour market as well as possible.

Vocational college education

The number of places on courses in forestry and the forest industry at vocational colleges was thought to be adequate to meet the needs of the labour market. In recent years vocational college courses have moved more in the direction of universities of science and technology, which has had an adverse effect on the recruitment of management both in forestry and the forest industry. Consequently, the educational trend here described does not necessarily serve the needs of forestry and the forest industry, as some think the difference between vocational college education and upper secondary education (schools and colleges) has become too great.

Upper secondary education

The availability of manpower for the forest industry is good at present, according to the interviewees, and, in the main, vocational training meets the needs of industry. On the other hand, that availability is a problem in forestry. It is difficult to fill courses on offer in some areas and a large number of forestry professional graduates leave the sector at some stage. The number of people of working age is likely to decline in the 2010s, so in the future forestry (and the forest industry too) will have to compete with other sectors of industry for a diminishing workforce.

Forestry is not such an attractive career move among the youth of today, so it will be more and more of a major challenge in the future to recruit a professional workforce. Forestry would do well to improve its image with young people as a prospective employer. To do that, positive communications are not enough: there must also be an attempt to improve working conditions in forestry and the forest industry, for example, by improving the resources and viabili-

ty of companies offering forest services. If the Finnish workforce is insufficient to solve the labour shortage in forestry, recruitment and training will need to take place beyond the country's borders, for example, in Russia and the Baltic countries.

Research

There has been more investment in research into forestry and the forest industry than in other countries, according to the interviews. At present, forestry and the forest industry are one of the best resourced areas of research in Finland, and the research is normally exhaustive and of high quality.

The NFP stressed the need for customer orientation in forest research. It was evident from interviews, however, that research is still based on the need for further research highlighted in earlier reports. Research is based on many researchers' own interests and personal aims, and not so much with reference to the practical needs and signals that have come from players in the industry. There should be improved cooperation with researchers, the business world and administrative departments in the planning of research so that research into forestry can serve practical needs more effectively.

Stakeholder groups say that research in forestry and the forest industry these days is biased towards different areas of the sector. Finland lacks a research strategy that covers the entire forest cluster and which would cover all the various areas of the sector multidimensionally, even extending to sectors outside forestry and the forest industry. A project developed in collaboration with major European forest organisations (A Technology Platform Initiative by the European Forest-Based Sector, published 15 February 2005) to promote the European forest sector is an example of a research strategy at European level that covers the entire sector and extends beyond it. The Ministry of Agriculture and Forestry and/or the NFP could take the initiative and develop a research strategy to cover the entire forest cluster.

Research in forestry should, as with education, be diversified, for example by augmenting the role played by research in socio-economics and social sciences. At the same time, resources should be allocated more clearly than at present to certain core areas of forest research. Interviews revealed that there is quite a bit of redundant overlap in forest research between both Finnish and also foreign research institutes. To promote synergy, the co-ordination of forest research resources and co-operation between the various research institutes and universities should be enhanced both at home and at international level.

The share of company turnover accounted for by research and product development in the forest industry is quite small compared to other sectors of industry. During the interviews it was proposed that business development, particularly in the chemical forest industry, is concentrated too much within the framework of existing production processes. The importance of predictive research that is geared to the future and the development of innovations that exploit raw timber should be emphasised more in forest sector research, especially in the chemical forest industry. In the wood product industry, projects aimed at developing new products and uses of wood should be kept going in the future.

Internationalisation

The strengthening of innovation based on internationalisation, which is contained in the aim relating to know-how, is quite a broad concept. Here, internationalisation in business has been excluded from this survey on internationalisation, and it is thus restricted to education and research in forestry and the forest industry.

With regard to education in the forest sector, there is much international activity at present, including university student exchanges. According to the interviewees, a major challenge in the promotion of internationalisation is how know-how can be exported in the shape of education in a way that improves on the current situation at university and vocational college level. The universities can act fairly independently in terms of internationalisation than can institutes at lower levels: with vocational colleges, international collaborations need input from the public authorities and intergovernmental co-

operation in order to develop. As cut-to-length logging becomes more common, especially in Russia and German-speaking areas, the need for skilled forest machinery drivers will increase, and there will be demand for Finnish training know-how, especially with regard to the mechanical harvesting of wood. International co-operation with regard to education and training should also be improved to recruit a foreign workforce for Finland, if the manpower shortage in forestry work gets any worse.

The quality of research in the forest sector is assessed mainly at international level, which in turn promotes internationalisation in research in the sector. Stakeholder groups say that Finnish researchers take quite an active role in international research projects, and there are also foreign researchers working in Finland in forest research. International co-operation on research should nevertheless be developed with Finland's neighbours in particular. For example, the similarities between the forest sectors in Sweden and Finland, and also Russia in some respect, could be exploited more in research in the forest sector.

Future Forum on Forests

The Future Forum on Forests developed from an idea in the NFP to establish a forum for innovation in the forest sector. By the spring of 2003, the main aim of the project that had started was forecasting rather than innovation. The Forum, examined from the international perspective, is a sort of pilot project, as no other similar model has been trialled elsewhere before.

The aim of the Future Forum on Forests is to support the development of national forest policy and other policy areas that are relevant to the future of the forest sector. The aim is also to provide forest players with new stimuli, materials and tools to support their own work and strategies in the future. The objective was to develop a tool closely tied to the development of the NFP, which would act as ongoing support for forest policy. According to some of those interviewed, the connection with policy has nevertheless re-

mained relatively loose, although this was originally what motivated the launch of the Forum. With regard to the strategic work of organisations, the Future Forum on Forests has also been involved in the development of the strategic work of Metsähallitus and the Forest Centres.

The original plan laid emphasis on the close and practical involvement of sector players in the work of the Forum. The Forum, however, started to be led by researchers and experts, and the role of stakeholder groups has been seen has marginal. It was also mentioned in interviews that the delay in the establishment of the Future Forum on Forests partly weakened the commitment of stakeholder groups and confidence in its function. Information on the work of the Forum and interaction with stakeholder groups has been pretty minimal, despite seminars and newsletters. Furthermore, it has been rather unclear as to who exactly has been active in the Forum's various work groups.

Areas of focus in the present structure of the forest sector were chosen as a basis for the Forum (forest technology, silviculture, the environment, the forest industry, and social sustainability), which is felt to be the factor limiting the Forum's work. With reference to the present model, the examination focuses on the development of the sector based on the forest industry and does not take sufficient account of the importance of the alternative uses of wood and other types of forest-based business. The interviews reveal that the current model will partly limit powers of prediction in the long-term and lead to an investigation of the forest sector from a limited viewpoint.

The interviewees generally felt that the creation of the Future Forum on Forests was a progressive, important measure for the entire forest sector, and, as a result, forest sector players have great expectations with regard to its work. Looked at it as a whole, it can be seen that there has been some increase in forecasting among organisations in the forest sector in recent years. In the future, the Forum and its work should be de-

veloped for it to be capable of serving the needs of the various forest sector players more effectively. According to some stakeholder groups, the resources of the Future Forum on Forests should be targeted more at finding areas of research into the future, and not so much at compiling reports.

Communications

The development of communications in the NFP has been incorporated in the area of forest know-how. In interviews it was emphasised that communications should be seen as a strategic goal of their own in the development of the NFP, and that goal would grow in importance in the future. Communication methods in the forest sector have also improved significantly in the last decade. To mention just one detail, Finland's position as a pioneer in the implementation of the NFP is often mentioned in international forums.

The interviewees say that it is decisively important for international forestry and environmental communications how well and at what level information between the Finnish forest industry and the marketing of forest industry products flows. Often the important communications interface for the marketing of forest industry products works in isolation from the roots of wood production. The way research and materials for publishing get to the end of the production chain needs to be improved in the marketing of forest industry products.

Stakeholder groups say that one of the major problems with communications in the forest sector is their biased nature. Often, forest communications are based on the forest sector's own standpoints. The message and the receiver do not make contact if the receiver is not interested in the message. Furthermore, communications often bear the hallmark of controversy and differences of opinion over details, which has an adverse effect on the importance of the main message behind communications in forestry and

environmental communications and the extent to which it is understood.

In interviews it was proposed that co-operation with other countries with regard to communications should be improved. Messages that different players have in common should be standardised to reinforce them. Standardised communications should be developed at EU level in particular, as in the future the EU will have a far more controlling role in forestry in the EU Member States.

3.6.3 Conclusions and proposals for development

Realisation of aim and targets

The aim regarding forest know-how is fairly general in nature, which to some extent makes any concrete evaluation difficult. Generally speaking, forest know-how is at a high level in Finland, and is one of the forest sector's main strengths. In connection with the aim, an attempt was made to map out those areas connected with education, research, internationalisation, the Future Forum on Forests and communications in the forest sector which should be developed further. Of these, the crucial ones are:

- The broadening and diversification of education and research
- Shifting the focus of education and research closer to the end of the production chain
- Increasing co-operation with the business world, research institutes in the forest sector and educational institutes, as well as administrative departments
- Developing the allocation and co-ordination of resources for research among both Finnish and foreign research institutes
- Linking the Future Forum on Forests more directly to the players that have a practical role to play
- Improving communications and information flow between the wood production industry and the finished product market

Sufficiency of selected range of measures

The aim relating to forest know-how concerns several different bodies and agencies in the forest sector, and the high standards of forest know-how are the result of the painstaking work of many different organisations (in both the private and public sector). The NFP has also influenced the work of some bodies connected with the aim regarding know-how. For example, at the Ministry of Education/National Board of Education, the NFP has promoted the development of the degree/diploma course in forestry. The main input by the Ministry of Agriculture and Forestry and the NFP in the development of forest know-how was the creation of the Future Forum on Forests, which has been active for around two years during the NFP's term of operation.

Generally speaking, the aim relating to forest know-how was thought to be a very important one under the NFP. However, an effort should be made to clarify the aim and, where possible/necessary, make it more concrete. Moreover, more thought should be given not only to education, research and internationalisation but other possible themes, which should be closely interwoven with the aim relating to know-how (e.g. new forest-based businesses).

Predicting the future was felt to be a key factor in the development of skills and know-how, and is closely connected with the work of the Future Forum on Forests. The major development needs of the Forum were considered to be improved levels of interaction with bodies outside the Forum and the long-term mapping out of research needs and future signals beyond the scope of the traditional forest sector. Interaction should be diverse in nature, covering players in both the public and corporate sector, at national and regional level, and in both the traditional forest cluster and in sectors outside it. It should be improved especially with regard to players in the private sector, at regional level and outside the traditional forest cluster.

Development proposals

Target	The aim 'forest know-how needs to be strengthened' should, where possible/necessary, be made more concrete. In connection with the aim, detailed targets relating to education, research and internationalisation (and other areas of forest know-how) and concrete measures to achieve them need to be specified to achieve these aims.
Measures	The NFP/Ministry of Agriculture and Forestry should take an active role in the strengthening of forest know-how, for example by developing and co-ordinating a research strategy to apply to the entire forest cluster and which extends beyond the traditional forest cluster.
Monitoring/follo w-up	The collection and monitoring of data on the measures implemented by administrative departments outside the Ministry of Agriculture and Forestry to promote the NFP should be made more efficient and standardised.
Additional remarks	-

Comments by stakeholder groups

The box below contains a selection of comments by stakeholder groups.

Aim: 'Forest know-how needs to be strengthened'

- The National Technology Agency of Finland (TEKES) card is still not being played in the forest sector, for example, in the development of forest services business.
- In Finland there are taboos in forest research, which must not be investigated. The results of research are hidden away if they do not suit the purposes of forestry.
- The development of products of the future will require diverse, multi-sector know-how.
- International co-operation must have an objective. There is much co-operation that is engaged in merely for the sake of co-operation.
- The basis of the Future Forum on Forests is considered to be the development of the forest sector and its pre-specified areas. Instead of this, there needs to be thought given to which clusters the forest could be part of in the future and what role the forest would have in these different clusters.
- Forest communications have up till now been reactive, whereas they ought to be proactive.
- The Indians teach their children that before they go hunting they have to learn how to think
 the way the prey thinks. This lesson should also be applied to communications in the forest
 sector.

3.7 FINLAND SHOULD BE ACTIVE IN INTERNATIONAL FOREST POLICY

It is the NFP's aim to promote sustainable forestry through an active international forest policy, co-operation in research and education, and communications in the fields of forestry and the environment. As research, education and communications were dealt with in the previous section, this section will concentrate on forest policy.

3.7.1 Selected measures

The aim is understood in such a way that Finland should participate actively in the work of international processes and organisations (the United Nations Forum on Forests, the Convention on Biological Diversity, the Framework Convention on Climate Change, conferences by European ministers responsible for forests, and the Northern Dimension), and EU forest policy, and engage in bilateral co-operation on forests with selected countries (Russia, China, Mexico, Brazil, and Indonesia). Importance is also attached to the communication of international forest policy to stakeholder groups, and listening to the views of such groups. In addition, it has been suggested that Finland's aim is to remain a significant contributor in the area of development cooperation relating to the forest sector.

3.7.2 Achievement of targets

In accordance with the aim, Finland has participated in international, EU level and bilateral co-operation and has financed processes and projects. Current issues are dealt with by the Advisory Committee on International Forest Policy, a group of ministers responsible for international forest projects, and a work group made up of civil servants. Information is also actively disseminated to the general public via publications on international forest policy (Min. Ag. For. 2002a, 2004b).

Put rather simply, Finland's position is as follows (Min. Ag. For. 2004b):

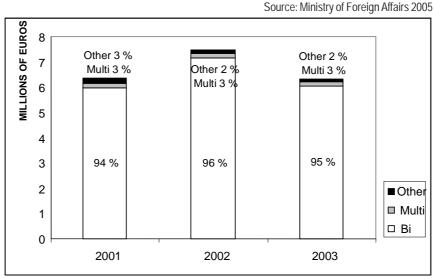
- United Nations Forum on Forests: Finland is in favour of commencing talks on a forest treaty and legally binding alternatives to it. If broad political consensus on the need for a forest treaty is not reached, Finland will work towards continuing and shoring up the work of the Forum.
- Convention on Biological Diversity: Finland has stressed the importance of utilising the results of existing criteria and indicator processes, and the role of national forest programmes in strategies for biological diversity. Finland takes the view that each country can decide independently how to implement its own recommendations for forests under the Convention on Biological Diversity, taking basic principles into consideration.
- Framework Convention on Climate Change: Finland's objective is a system that encourages the use of wood, the sustainable treatment of forests, the use of bioenergy, and using wood to replace less environmentally friendly materials.
- EU forest policy: Finland is aiming at better visibility and co-ordination of forest matters in the EU. Decisions on forest policy still need to be taken nationally in the main. Current EU forest issues are: the reform of the EU's forest strategy, the EU's position on global questions to do with forests, illegal felling and commerce, rural development and aid for forestry, forest matters as environmental issues (LIFE+), and the implementation of the plant protection directive.
- Co-operation with neighbouring regions:
 Finland is particularly interested in questions connected with Russia in the areas of forestry, the wood trade, and investment, and in the development of education in the forest sector in northwest Russia.

The following can be considered to be examples of achievements during the NFP's programming period.

- The successful management of the Finnish Presidency of the EU with regard to forest matters (1999)
- Active involvement in international dialogue on forest policy, including:
- Influence on the launch of the UN Forum on Forests and of policy processes
- Influence on the status of national forest programmes in the FAO and World Bank
- Financing and support using human resources of international and individual country initiatives
- Has achieved status of accredited forest expert country (indicated, for example, by Finns being given tasks of international responsibility, such as chairmanship of the UN Forum on Forests, and important positions in CEI-Bois, CEPI and CEPF)

- The organisation of the Forest and Poverty workshop (2002)
- Influence on the resolutions of the Ministerial Conference in Vienna (2003)
- Forest Academy Finland forums to improve co-operation in the European forest sector (2003-4)
- Active involvement in the European Tropical Forest Advisory Group (ETFAG)
- Finland is the sixth largest contributing country in development co-operation in the forest sector.

During the period 2001-2003, Finland supported the work of developing countries in the implementation of their commitments to the tune of something like EUR 6-7.5 million annually (Diagram 3-15), which is approximately 6.5% of all environmental financing and approximately 2% of all development co-operation payments made by the Ministry of Foreign Affairs.



Bi = bilateral financing, Multi= multilateral financing, and Other = research finan-

Diagram 3-15. Development co-operation financing by Finland to support the objectives of the UN Forum on Forests 2001-2003.

cing and payments of the costs of developing countries' participation.

3.7.3 Conclusions and proposals for development

Realisation of aim and targets

Finland has been active and conspicuous in international forest policy. A more detailed evaluation of results is difficult, however, especially with regard to international processes that run on the principle of consensus.

According to comments compiled from interviews, Finnish strengths in the forest policy dialogue are: extensive experience and know-how relating to sustainable forestry and private forestry, sharing this information in international arenas, adequate levels of human resources, and a general position that is consistent with goals for development. The weaknesses mentioned were that Finland is very defensive in matters of forest biodiversity and belongs to that dwindling group of countries that advocates a forest treaty, an idea it clings to stubbornly. Moreover, it was evident from comments that the respondents thought that a small country like Finland should be in the front line and act as part of the EU, for its opinions to have any meaning. On the other hand, it was also felt to be regrettable that the heterogeneous character of the EU often makes for watered-down EU positions and opinions.

In the future, it was hoped that Finland would continue mainly with its current measures. Proposals for development mentioned included listening to a broader range of views in formulating its own, assuming a higher profile in the ITTO, increased co-operation with the Baltic region and the countries of Central and Eastern Europe, and bolder formulation of an EU forest policy.

When one examines development co-operation, what is conspicuous is that appropriations for development co-operation will not evolve to a level of 0.7% of GNP by 2010 in accordance with the Finnish development policy programme. In 2004 they only stood at 0.34%. In addition, and according to observations by the Ministry of Foreign Affairs, development co-operation environmental financing (which covers forest financing) appears to be falling. This is at odds with the positive approach to the environment that the Finnish development policy programme shows (FM 2005).

Sufficiency of selected range of measures

International forest policy is the responsibility of the Ministry of Agriculture and Forestry and an official task of the Ministry of Foreign Affairs. The NFP has not brought with it additional resources for international action.

Development proposals

Target	It should be considered, within the framework of the NFP, whether targets for international forest policy can be set with regard to the results achieved and/or levels of action. One aim might be, for example, that Finland should provide know-how in international processes or that decisions in international forest policy processes should be taken account of at national level, where applicable. Setting targets for appropriations for development co-operation in the forest sector should also be considered.
Measures	-
Monitoring/follo w-up	Monitoring and follow-up should report not just on Finland's participation in processes and attendance at meetings, but also what influence the country has had (different subject areas, Finland's position on them, and results achieved) and what it has funded (processes, development co-operation projects).
	The follow-up process could also raise themes and questions that are believed will grow in importance in the future.
Additional remarks	-

Comments by stakeholder groups

The box below contains a selection of comments by stakeholder groups.

Aim: 'Finland should be active in international forest policy'

- Finnish forest policy is one of the most advanced in the world, and Finland is a good example to other countries of how matters connected with forests and forestry can be co-ordinated at national level.
- Much progress has been made in achieving the aim and Finland has been active in EU forest policy.
- Finland has its own interests to safeguard in EU forest strategy and policy. There should be more investment in this in the future.
- Finland's active involvement in EU forest policy has flagged considerably in recent years. It should now be preparing its forest agenda in time for the Finnish Presidency of the EU in 2006.
- Illegal felling should be on the NFP agenda.
- There will be no need for a forest treaty if the Convention on Biological Diversity goes ahead.
- What is expected of Finland is clear, accountable action and information on the practice and promotion of sustainable forestry internationally (e.g. company reports on social responsibility)
- Finland has much to offer in the shape of know-how relating to international forest programmes.
- One gets the impression that forest industry companies influence Finland's position.
- Environmental and social safeguards for investment in pulp mills and related export subsidies are claimed to be weak.
- In the future questions to do with forests and natural resources in development co-operation should be integrated with goals to reduce poverty.

4 PROCESSES AND PROCEDURES

4.1 BASIS FOR EVALUATING THE PROCESS

According to the task description, central to the evaluation of the work of the National Forest Programme is the extent to which it adheres to the principles and criteria agreed for European forest programmes (the so-called Vienna Principles). It should be noted that the NFP was produced in 1999 and the decisions to comply with the Vienna Principles were taken in 2003 (Min. Ag. For. 2004c). In terms of time, therefore, the evaluation applies to the implementation of principles decided later in the NFP process that had begun earlier. The other factor worthy of note in the evaluation is that the Vienna Principles are a tool for guidance on policy that extends from EU level to regional level. It is the assessment of the impact of guidance within this context that is one of the main tasks of the process evaluation.

The programme process evaluation also examines the NFP's viability from both the national and the regional point of view. Regional Forest Councils are the organisations that promote and implement the NFP regionally. The work and status of the RFCs as bodies of regional development were also assessed.

The evaluation made use of NFP documents, surveys distributed to key players, and interviews as material and data. The results of the surveys were partially analysed using the gap analysis technique, where respondents rate the themes mentioned according to their importance and their current situation. The numerical differential between importance and current situation indicates how wide the gap is between these two aspects of the whole. This evaluation uses a weighted gap analysis, in which the numerical differential between importance and current situation, as described above, is restated as a value of importance. The idea is to look for differential between these two looks are the second current situation.

rences in an otherwise very narrow distribution of responses.

First (section 4.2) the process evaluation examines the implementation of European guidance with reference to the Vienna Principles. The method used is gap analysis. In the second stage (sections 4.3 and 4.4) the more general progress the NFP has made is assessed.

4.2 THE NFP'S PROGRAMME VIABILITY AS PART OF EUROPEAN FOREST POLICY

According to the NFP's background documentation, the Finnish National Forest Programme is based on a nationwide guiding principle that aims to protect the forest, countryside and nature. To put it more succinctly, the National Forest Programme is guided by the principles of sustainable development. The basic notion behind the National Forest Programme, on the other hand, is to relate European/global forest policy to the Finnish environment. At the same time, it is the NFP's intention to provide examples of best practices in respect of Finnish forest policy at international forums, in order to contribute to the content of a global policy.

The NFP's political process has been a long one, and it has adhered to the conventional formula for creating international agreements. The follow-up and evaluation reports state that Finland has been ambitious and even pioneering in its involvement and work in the realisation of international targets and goals for forests.

4.2.1 The Vienna Principles

The following is a brief survey of the European principles for forest programmes under Resolution V1 of the Fourth Vienna Ministerial Conference in Vienna and the content of key criteria set forth in the COST E19 Programme. The principles are intended to be themes that pervade the entire NFP at national level.

1. Participation

Participation means a voluntary process whereby people, individually or through organised groups, can exchange information, express opinions and articulate interests, and have the potential to influence decisions of the outcome of the matter at hand.

2. Holistic and inter-sectoral approach

NFPs adopt a holistic and inter-sectoral approach that considers the impact of the forest sector on other sectors and the impact of other sectors on the forest sector.

3. Partnership for implementation

The implementation of forest policies in the framework of NFPs can benefit from co-operation between Governments, businesses and civil society.

4. Iterative process with long-term commitment

NFPs are long-term iterative processes that are continuously adapted to reflect new knowledge and changes in the natural, economic and socio-political environment.

5. Capacity building

An NFP process can profit from adequate competencies and skills of the actors involved provided that appropriate participatory models and techniques are applied.

6. Consistency with national legislation and policies

NFPs reflect national and/or sub-national needs and priorities and ensure consistency with national, sub-national or local legislation, policies and strategies.

7. Integration with national sustainable development strategies

In the NFP process, sustainable forest management in all its dimensions is considered in the context of overall sustainable development.

8. Consistency with international commitments recognising synergies between international forest-related initiatives and conventions

Forests are addressed by various international and regional initiatives and conventions needs in the framework of forest-related initiatives and conventions can be identified at three levels: the national, regional and international level. NFPs aim to strengthen consistency with and synergies between relevant initiatives and conventions in each country and identify the appropriate levels and requirements for cooperative efforts and activities.

9. Institutional and policy reform

Developing suitable conditions for sustainable forest management might also require institutional and forest/non-forest policy reform, including decentralisation and issues of land tenure arrangements as well as conflict resolution schemes.

10. Ecosystem approach

Developing, implementing, monitoring and evaluating national forest programmes takes into consideration the ecosystem approach.

11. Raising awareness

Forests contribute significantly to the overall well-being of society in rural as well as in urban areas. NFPs are important instruments to raise the visibility of the forest sector and to enhance public awareness and understanding of the multiple benefits of forests for society.

In the acquisition of data, these eleven principles were reworked in the form of approximately forty statements (an average of four statements for every principle; the emphasis, however, was on the first four principles). The respon-

dents indicated their opinion regarding the statements on a scale from 1 to 5.

4.2.2 NFP's international guidelines

The views of the representatives of players at **national level** (31 respondents) were clear with regard to the NFP's approach and the way it was responding to international challenges. They thought that the NFP showed consistency with international commitments. They also felt the theme was very important in the NFP process. At the same time, the respondents think that the theme has been dealt with so well in the NFP process that there is no need for development.

They also considered it important that the NFP was able to promote consistency with relevant initiatives and conventions at regional, national and international level. On the other hand, the satisfaction rating they indicated regarding the theme's current situation is one grade lower than that felt with regard to the NFP's ability to respond to international challenges.

Representatives of players at regional level (14 respondents) made much of the NFP's potential for promoting consistency with relevant initiatives and conventions at the regional, national and international levels. At regional level the theme became more important than at national level.

4.2.3 Implementation of the European principles in the NFP process

The surveys examined how appropriate and viable the Vienna principles cited above were in the current phase of NFP implementation. The questions were designed to discover whether the NFP process had kept up with changes in international policy.

The following table examines the implementation of the eleven Vienna Principles by category in the NFP process in the view of the respondents at national and regional level. It is worth noting that the principles are broad in scope and partly overlap.

Success has been achieved in the principles relating to participation, co-operation and partnership, skills and know-how, consistency with (inter)national commitments and the ecosystem approach.

The areas for improvement are to be found partly in the same areas where there has been success. They concern the principles to do with participation, co-operation and partnership, and the production of data.

No significant success was felt to have been achieved in the areas of legal progress, interaction with national sustainable development or policy reform, although no major needs for improvement were identified in these areas either.

Table 4-1. Summary of the views of respondents (Implementation of the Vienna Principles in the NFP process.

WIENNA			AREAS FOR
PRINCIPLE	VIEWPOINT	AREAS OF SUCCESS	IMPROVEMENT
1. Participation	National	Potential for participation and influence	Conflict resolution mechanisms
	Regional	Ability to benefit from research data, participation and influence structures, participation process	Conflict resolution mechanisms
2. Holistic and inter- sectoral approach	National	Co-operation mechanisms within forest sector	NFP's impact on policies in other sectors
	Regional	Co-operation mechanisms within forest sector	
3. Partnership for implementation	National		Targeting resources in line with NFP policies, exploiting the co-operation of different organisations in the NFP process
	Regional		Targeting resources in line with RFP policies
4. Iterative process with long-term commitment	National	Right scheduling of the NFP evaluation process	Exploitation of monitoring in managing the NFP, long-terr commitment of players, data collection for NFP's monitoring/follow-up
	Regional	Right scheduling of the NFP evaluation process, exploitation of data from evaluation in managing the NFP, use of predictive data in RFP process	Data collection for RFP's monitoring/follow-up, long-term commitment of players, long-term political commitment
5. Capacity building	National		
	Regional	Know-how exploitation mechanisms	
6. Consistency with national legislation	National		
and policies	Regional		
7. Integration with national sustainable	National		
development strategies	Regional		
8. Consistency with international commitments	National	NFP's consistency with international commitments	
	Regional		
9. Institutional and	National		
policy reform	Regional		
10. Ecosystem approach	National	Ecosystem approach is addressed in NFP	
	Regional	Ecosystem approach is addressed in RFP	
11. Raising	National		
awareness	Regional		RFP's ability to produce enough impartial data on forest policy and forest management

4.2.4 Conclusions and proposals for development

Conclusions

The international character and importance of the Finnish forest sector are well internalised in content policy at national level and the policy makers (at national level) can be said to have succeeded in this task.

At regional level, i.e. at implementation level, the response to direct international pressure is not seen as being so important. Besides, regional players (those with regional responsibility) see the co-ordination of the chain as a whole (region - Finland - Europe) as important. Evidently, regional players do feel the impact of policies originating at the level of Europe.

The main areas for improvement are to be found with regard to the following Vienna Principles and subject areas:

- Participation (conflict resolution mechanisms)
- Holistic and inter-sectoral approach (the NFP's impact on policies in other sectors)
- Partnership for implementation (targeting resources in line with NFP and RFP policies)
- Iterative process with long-term commitment (exploitation of monitoring data, longterm commitment of players)
- Raising awareness

Although there has also been success in these areas, in the future there should be special focus on resolving the challenges that can be found within the body of these principles.

Development proposals

The NFP should focus on promoting the five principles described above with the greatest development needs.

4.3 THE NFP'S PROGRAMME VIABILITY WITHIN THE CONTEXT OF FINNISH FOREST POLICY

4.3.1 The NFP's structure

The NFP's structure is such that the programme can in principle deal with the tasks it has been set: it combines international expectations with regional needs in such a way that political decision-making at national level is able to participate in the process. Furthermore, the NFP has created, and is continually strengthening, an approach that facilitates discussions between the regions and national level actors, i.e. those responsible for drafting policy. On the other hand, the programme's resources for improving the development and profitability of business in the production sector are very limited.

A future-oriented function (Future Forum on Forests) has been created to form a part of the NFP's process. Its task it is to predict the industry's future as a basis for decision-making and policy. Development projects have the task of discovering new information.

The METSO diversity programme acts as a development, trial and testing platform, and helps establish and justify new practices.

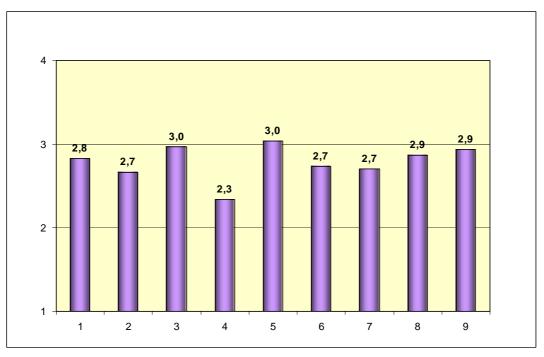
Policy decision-making is the task of the Forest Councils (referred to at national level as the Forest Council and at regional level as the Forest Councils). The Ministry of Agriculture and Forestry, which is responsible for co-ordinating the programme, periodically produces monitoring/follow-up and evaluation data.

The NFP's field of operations and responsibility is vast. Viewed through the processes, the biggest threat in the programme's implementation is the authenticity of its approach. Is the programme such a sound process that it ensures that the key players are adequately committed, that the monitoring of the process and results are real-time exercises, and that decision-making genuinely solves problems?

There again, it is to be understood that what is being dealt with here is the development of a vast and structurally unwieldy sector of industry (cluster), and a monitoring period of just a few years is not satisfactory considering the whole. There cannot be any large-scale aims in the short term. As a counterweight to this, the input required for the process needs to be examined. The NFP's target group is operating using its existing resources. The programme is an attempt to redirect functions, increase the sector's pool of knowledge by means of separate projects, and improve information flow and accessibility in decision-making.

4.3.2 The NFP in operation

The NFP's general viability, i.e. the smooth running of its processes, was measured in a survey consisting of nine statements. The respondents could also make proposals for improving the process. Their views are represented in the following chart.



- 1. The NFP's drafting process is viable
- 2. The NFP carries sufficient weight in relation to the national importance of the forest sector
- 3. The NFP process has promoted inter-ministerial co-operation in forest sector issues
- 4. The Forum on the Future of Forests is of crucial importance in the promotion of the NFP
- 5. METSO has a central role in the NFP
- 6. The NFP offers adequate guidance to the RFPs.
- 7. The RFPs implement the NFP satisfactorily
- 8. The RFPs are taken into account in the drafting of the NFP
- 9. The NFP allows special regional features and characteristics to be taken into account in the NFPs.

Diagram 4-1. The NFP's viability (Scale: 1 = completely disagree, 2 = partly disagree, 3 = partly agree and <math>4 = completely agree).

There was a positive response to the statements. The NFP's drafting process was thought viable and the programme is believed to carry reasonably sufficient weight in relation to the national importance of the forest sector. The respondents were clearly of the opinion that the process for implementing the NFP had promoted

inter-ministerial co-operation in forest sector issues.

At present the Future Forum is not seen as having any particular or marked importance in the promotion of the NFP. But METSO's role in the NFP was seen as central.

It was thought that the NFP offered guidance

on regional forest programmes reasonably well. The respondents also thought that the regional forest programmes were implementing the NFP fairly well. RFPs are taken into account in the drafting of the NFP satisfactorily, and the general opinion was that the NFP allowed special regional features and characteristics to be taken into account to an adequate extent in the RFPs.

4.3.3 The NFP's challenges and successes assessed at national level

Diagram 4-2 shows a list of priorities in the opinion of 31 respondents at national level regarding the most important and less important themes in the NFP process, and Diagram 4-3 the major developmental challenges and successes. The investigation sought to diversify the evaluation and highlight essential functional areas in

the development of the NFP/RFP process, without any direct connection with the Vienna Principles.

The respondents rated 41 statements in terms of their importance and current situation. The numerical ratings were reviewed in the light of analysis of the freely expressed responses in the survey.

In a part of the survey where any further comments could be made, another challenge mentioned was the need to highlight more clearly the values and economic benefits of forests. But in highlighting these, the need to be realistic was stressed.

Diagram 4-4 shows the statements where the 'gap' between satisfaction/viability and the importance of the theme is the greatest (red columns) and the narrowest (blue columns).

Most important themes

- Commitment of key players and political/functional commitment
- Compliance with legislation and commitments made (national and international)
- Creating a positive climate for the sector
- •Increased co-operation between players

Less important themes

- Development of work culture
- Civil impact
- Participation
- Evaluation of the operation

Diagram 4-2. The most important and less important themes in the NFP process in the view of the respondents.

Diagram 4-4 (right). The greatest and narrowest gaps in the national survey.

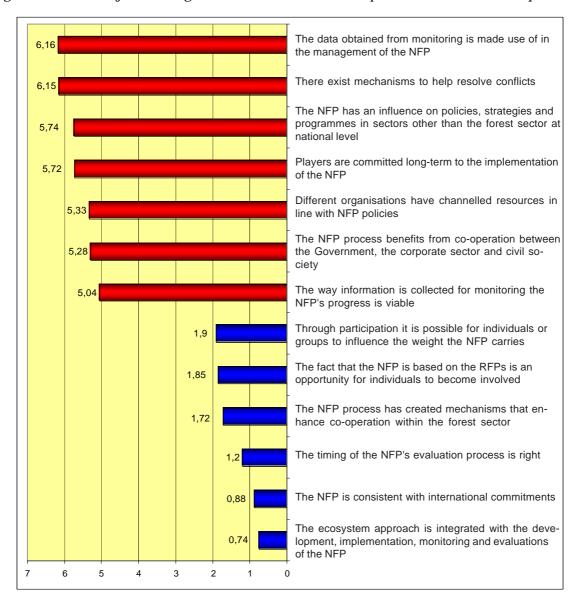
Major challenges

- Acquisition of data and monitoring/follow-up
 - Importance of looking to the future and more effective forecasting and use of research data, leading to the reinforcement of strategic approach
 - Drawing conclusions on the basis of the results of monitoring and greater use of experts
- Resolution of conflict situations
- NFP's impact on policies in sectors outside the forest industry
- Commitment of key players (developing the commitment of, and co-operation between, different administrative departments and stakeholder groups)
- Tripartite configuration of Government administration, business and NGOs

Themes in a satisfactory state

- Political commitment
- Participation
- Consistency of policy solutions with the law; legal balance
- Co-operation within forest sector
- Highlighting environmental thinking

Diagram 4-3. The major challenges and successes of the NFP process in the view of respondents.



4.3.4 Conclusions and proposals for development

Conclusions

The NFP's programme viability can be perceived as being quite viable, especially from the angle of international guidance.

When the processes are viewed in the light of national aims and targets, however, at least one disparity is noticeable. The programme has little direct impact on the industry. The commercial aims in the programme are, however, being realised thanks to the global competitiveness of industries that use wood. The NFP's indirect causal chain should be made more palpable in the programme.

Viewed at national level, the NFP is seen as a very positive and functional mechanism. In different ways, however, there were very clear conclusions regarding how the process could be improved. In brief, the conclusion is that the NFP should be purposefully developed in the direction of a development programme that is responsive and easily managed. This would underline the importance of strategic planning, progress in implementation, especially the production of predictive data, and, finally, the development of guidance mechanisms.

It is evident that the Future Forum on Forests is at present in a state of disarray. The Forum has been unable to live up to its role in the process of producer of data needed by the NFP, in particular for its guidance process, or as a maker of policy. It lacks the scenario-based strategic investigations which would allow the organisations involved in the NFP process to get their bearings.

Challenges to the NFP's successful outcome include acquisition of data, monitoring, the friction caused by the essentially tripartite nature of the programme, and the inadequacy of the sector's internal network mainly in the area of commitment.

Development proposals

The programme distinguishes between targets set clearly for the development of a global approach to sustainable development and targets for developing the Finnish forest sector.

In order to identify the influence the programme has on the forest industry, the programme's direct and indirect causal chains need to be clarified. Here the essential considerations are the interests of the industry and its opportunities and role in the implementation of the NFP.

Although the NFP is viable in terms of its arguments, it should be revamped as a development programme with clear goals, so that areas for improvement, input, measures, output, results and impact can be identified as separate logical entities in the process. This is also linked to a clear definition of the role and tasks of the organisations involved in the process.

An inseparable component in programmebased development is monitoring and the processing of conclusions drawn from its results, so that there is a satisfactory knowledge base and adequate criteria for making any necessary changes.

Monitoring data and combining it with predictive data are also key strategies from the point of view of the viability of the NFP's guidance process. Utilising predictive data particularly increases in importance when speaking of scenario-based surveys. Here the Future Forum on Forests needs to have a more central role in its task of strengthening the NFP's strategic involvement.

Comments by stakeholder groups

The box below contains a summary of a selection of comments by stakeholder groups on the subject of developmental challenges. The comments come from the replies of those taking part in the survey at national level.

Development of the NFP process

- Data obtained from monitoring exists for basic matters, but it is not being interpreted in such a way that what results is the need to make proposals for change. When the need for data on the forest industry is satisfied, active attempts to improve the system will cease. Although monitoring raises awareness of the need to make changes, it takes so long to make proposals and preparations that you get the impression things are grinding to a halt. Crucial monitoring data has also been partly unsatisfactory, for example in the area of social sustainability in the recreational use of nature.
- Conflict resolving mechanisms exist, but some agencies can wriggle out of them if they
 need to. We should be able to create a problem solution mechanism that is binding on all
 parties. It will be necessary in this connection to create our own separate processes.
 However, we need to define the 'level' of conflicts, i.e. what should be dealt with by the
 NFP and what in specifically defined separate programmes. In any case, we need open
 discussions and interaction to highlight this issue.
- The decisions taken by the NFP/Forest Council are not binding, even if the NFP's implementation is monitored. An influence may be had on policies in other sectors if there are good arguments and close involvement. However, the ministries take their decisions independently, with their own interests in mind. The result is that the NFP's impact is not at a satisfactory level. The NFP should reach the level of ministerial strategic planning, because this way it will be possible to have a real effect on the way resources are distributed. The NFP's impact would also be enhanced if special programmes were drawn up to support NFP policies.
- The best form of commitment to the implementation of the NFP is that shown by the Ministry of Agriculture and Forestry and the organisations that report to it. There is less commitment on the part of other groups. The degree of overall commitment to the programme policies is at present 'realistic'. Large-scale industry is very much a global player, which looks at what the most favourable options would be for itself worldwide and not at national level.
- The NFP policies have had a limited effect on the channelling of resources by different organisations. The ministries target resources mainly in line with their own strategic policies, and for them forest policy is just one consideration among others. The forest sector, as one that is basically private, works for its own interests. An ongoing drafting process for relevant special programmes could be a way to bring the channelling of resources on the part of different bodies more effectively in line with NFP policies.
- The NFP in itself is a workable frame of reference for co-operation. Co-operation between the various organisations should nevertheless be enhanced for levels of concrete action to be reached. Civil society is easily excluded from the realm of co-operation.
- We have to weigh up whether the NFP's focus of attention is on the creation and
 implementation processes involved in policy and special programmes, or on the search for
 new opportunities for development to serve as a basis for initiating development projects
 considered worthwhile by the Forest Council.

4.4 THE RFPS' PROGRAMME VIABILITY WITHIN THE CONTEXT OF FINNISH FOREST POLICY

4.4.1 The RFPs' structure

It is the task of the Regional Forest Programmes (RFPs) to implement the NFP. In accordance with normal programme processes, programmed regional or thematic development policy is formulated at international and national level, and measures are introduced at regional and local level. The RFPs in the NFP's implementation process are therefore of crucial importance.

The interpretation of the regional viewpoint must take account of the NFP's two-part structure.

- The NFP acts on the one hand as a tool for promoting a policy of sustainable development which is co-ordinated internationally
- The NFP also has the role of development tool for Finnish forestry and, partly, the Finnish forest industry. In the national development environment there is significant development input in the sector which passes the NFP by.

As far as overall development of forestry is concerned, regional action seems structurally sound. Regional programmes have been drafted and decision-making bodies set up for them (Forest Councils). The NFP was structured on the basis of information coming from these Forest Councils, and the NFP in turn responds to national needs and also to international pressure.

The dual role of the RFPs can be summarised thus:

- 1. The programmes have helped reinforce the importance of the sustainable development angle in the planning and practice of forestry; the tasks (areas of responsibility) of the regional players in forestry expanded when the programmes were introduced.
- 2. The programmes indicate key areas for development. Markedly new investment is clearly not available, however, and input depends on the priorities in effect at any one

time. New resources start to be used mainly via project-shaped action. The Regional Forest Programmes are therefore to some extent tools of guidance - action systems.

On account of its dual role, and especially the second one mentioned, regional players try to home in on genuine tools of regional development, such as objective programmes co-financed by the EU. Accordingly, the unavoidable situation arises where those responsible for implementing the forest programmes are forced to submit to two areas of guidance: that of the NFP and that of the RFPs. The data collected in the evaluation clearly exposes this dilemma. Regional players ensure that details of their own needs get passed on effectively to national level. At the same time, greater direct regional impact is needed.

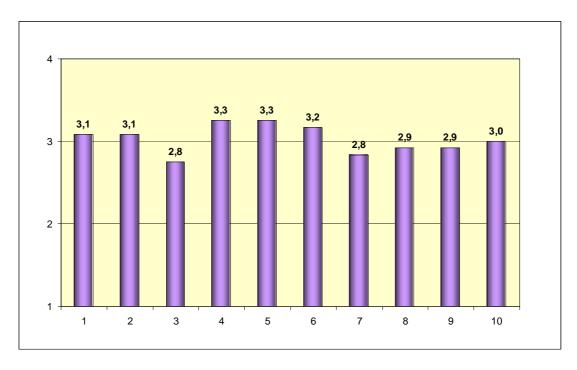
The tripartite guidance involved in the administration of the RFP process (mainly with respect to action) causes problems. Co-ordination of the needs and views of NGOs in particular adds to the demands of the system in operation.

4.4.2 The RFPs in operation

The viability of the process is examined with reference to that of the RFPs and RFCs as well as central themes, developmental challenges and successes. The NFP's relation to the Regional Forest Programmes and the viability of the RFPs, i.e. the smooth running of the regional process, were measured in a survey consisting of ten statements. The views of the respondents are represented in Diagram 4-5.

There was a positive response to the statements (to the NFP). Worth noting too is that there are very few differences in attitude.

The NFP's drafting process was considered viable as far as the regions were concerned. Furthermore, the general opinion was that the Regional Forest Programmes implemented the National Forest Programme satisfactorily. The respondents thought the RFPs were more or less sufficiently taken into account in the drafting of



- 1. The NFP's drafting process is viable as far as the regions are concerned
- 2. The RFPs implement the NFP satisfactorily
- 3. The RFPs are sufficiently taken into account in the drafting of the NFP
- 4. The NFP offers adequate guidance to the RFPs
- 5. The NFP allows sufficient leeway in consideration of special regional characteristics in the RFPs.
- 6. The RFP drafting process is clear
- 7. The NFP carries sufficient weight in relation to the regional importance of the forest sector
- 8. The RFPs have a clear role in overall regional development
- 9. RFPs provide sufficient guidance on regional project work in the forest sector
- 10. RFPs complement the regions' development programmes

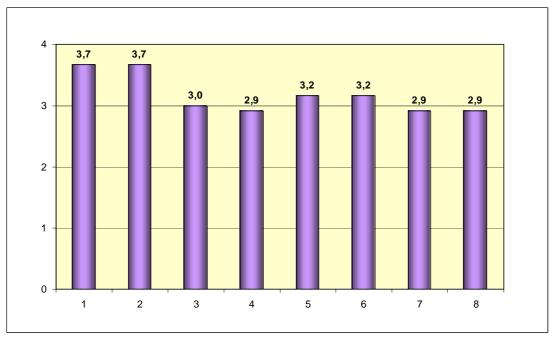
Diagram 4-5. Viability of the Regional Forest Programmes (Scale: 1 = completely disagree, 2 = partly disagree, 3 = partly agree and 4 = completely agree).

the NFP, and, at the same time, the NFP was seen to offer adequate guidance to the RFPs. In the opinion of the respondents, the NFP allows sufficient leeway in consideration of special regional characteristics and features. Moreover, the RFP drafting process was considered to be clear.

The respondents thought the National Forest Programmes carried sufficient weight to create a balance with the regional importance of the forest sector. The RFPs' role in overall regional development is also fairly prominent. They thought the RFPs provided pretty sufficient guidance on regional project work in the forest sector. The RFPs complement the regions' development programmes reasonably well.

As part of the survey on regional action, the

status of the Regional Forest Councils (RFCs) was also brought into sharper focus. The following is a condensed interpretation of the functional viability of the Forest Councils in the context of the Regional Forest Programmes (Diagram 4-6).



- 1. Key organisations in the region are involved in the drafting process of the RFP
- 2. Key organisations in the region are involved in the RFC
- 3. The RFC carries sufficient weight as one player involved in regional development work
- 4. The RFC has a clear role in regional development work
- 5. The RFC co-ordinates integration of the RFP with other regional programmes
- 6. The RFP process has enhanced co-operation among organisations involved in regional development work
- 7. The RFP is partly integrated with the regional scheme
- 8. The RFC has become a player that genuinely represents the entire forest sector

Diagram 4-6. Functional viability of Regional Forest Councils (Scale: 1 = completely disagree, 2 = partly disagree, 3 = partly agree and 4 = completely agree).

In this survey there was a positive response to the statements, and differences of opinion were slight.

The respondents feel that key organisations in their region have been involved in the drafting of the RFP and are represented on the Regional Forest Council. The role the RFCs play and the weight they carry in regional development generally, including the drafting of regional development programmes, are important.

The RFCs successfully co-ordinate the integration of the Regional Forest Programmes with other regional programmes. The process of implementing the RFP has clearly enhanced co-operation between the bodies involved in regional development. The integration of the RFPs with the regional schemes has succeeded, and the same is true of the extent to which the RFCs have become players that represent the entire forest sector.

4.4.3 The RFPs' challenges and successes assessed at regional level

Diagram 4-7 shows a list of priorities in the opinion of 14 respondents at regional level regarding the most important and less important themes in the NFP/RFP process, and Diagram 4-8 the major developmental challenges and successes. In this way the survey sought to diversify the evaluation and highlight essential functional areas in the development of the NFP/RFP process, without any direct connection with the Vienna Principles.

The respondents rated 40 statements based on their importance and in terms of their current standard of quality. The numerical ratings were reviewed in the light of analysis of the freely expressed responses in the survey.

Most important themes

- Positive climate for sustainable use of forests
- Influence of ordinary citizens, participation
- Influence of ordinary citizens, participation
- Commitment of key players and politicians
- Co-ordination of national and regional needs

Less important themes

- Policy
- Biodiversity, ecosystem thinking
- Development of work culture and partnership
- Production of new data and expertise

Diagram 4-7. The most important and less important themes in the NFP/RFP process in the view of the respondents.

Major challenges

- Player and political commitment
 - participation of different organisations in drafting and implementation of programme should be stepped up
 - the RFP should have a clearer role to play in regional development
- Monitoring of the process and acquisition of the relevant data; production of data generally
- Resources and how they are channelled
- Conflict resolution
 - there is still much to do to mediate in conflicts of interest between forestry, other approaches to the use of forests, and nature conservation
 - Players other than those connected with forestry should be included in the decisionmaking process
- More attention paid to the economic aspects and ecological sustainability were also subjects raised.
 There could be better use made of the media

Themes in a satisfactory state

- Interaction of other sectors with forest sector (potentially)
- Taking account of the sustainable development strategies
- Participation, opportunities for individual citizens to have an impact
- Internal (regional) networks

Diagram 4-8. The major challenges and successes of the NFP/RFP process in the view of respondents.

Diagram 4-9 shows the statements where the 'gap' between satisfaction/viability and the im-

portance of the theme is the greatest (red columns) and the narrowest (blue columns).

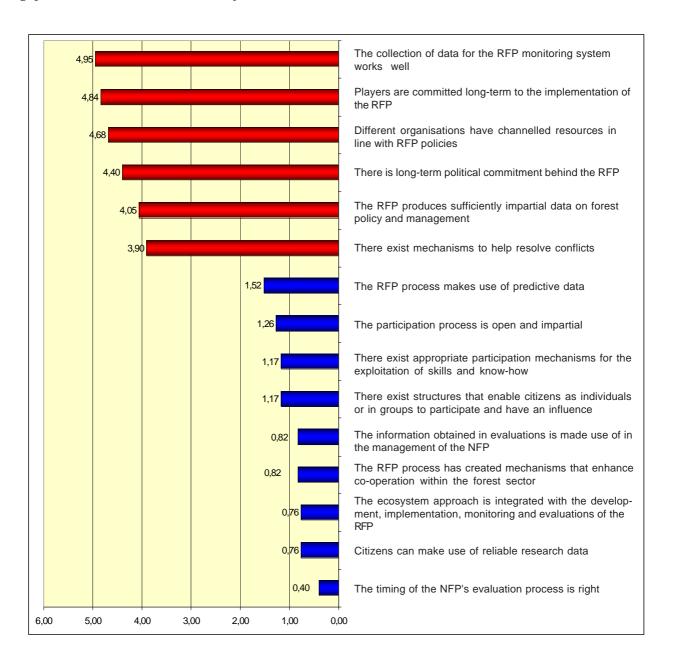


Diagram 4-9. The greatest and narrowest gaps in the regional survey.

4.4.4 Conclusions and proposals for development

Conclusions

The programme's structure from top to bottom is, in principle, along the right lines; the programme adheres to the pan-European development format. Its structure is such that its definition of needs, planning, implementation and guidance are, in principle, valid.

The way the NFP is structured is viable in terms of its arguments. Nevertheless, care has to be taken to ensure that the special characteristics and nature of the regions do not fade from view in the RFPs as a result of guidance (collection of data, reporting) from 'on high'.

From the point of view of the administration of the programme development process it is important that the players at executive level (regional) believe they are doing the right thing for the region and its economy. At the same time it is important that the issues considered most important in the regions receive the input and investment necessary for carrying them out.

Absolutely essential for the regional impact of the RFPs is how they can be integrated with programme-based development projects co-funded by the EU. Here the Regional Forest Councils have a decisive role to play. Although the role of the RFCs is quite clear in the field of regional development, there is a discernible need to improve their operational status.

The RFCs at present provide the various organisations involved with an excellent forum for co-operation and debate geared to broadening views. However, there is a need to move on to the next phase, which is concrete action. There are now signs of more tangible achievements, and these endeavours should be pushed further. The RFCs have already worked to make this possible.

The tripartite aspect of guidance involved in the administration of the RFP process causes problems. Co-ordination of the needs and views of NGOs in particular adds to the demands of the system in operation. One challenge is to establish problem-solving procedures that are binding on all parties. A fruitful system at regional level will depend on sufficient levels of social capital and trust and confidence among players.

The survey reveals that the viability of the RFPs and RFCs is sound; so sound that it causes some surprise. The responses show that the NFP's drafting process and implementation methods have succeeded well. Moreover, the RFCs have an important role and carry weight in their regions. It can therefore be deduced that, at the regional (implementing) level of the NFP process, the programme is regarded as a viably functioning entity in relation to the NFP's own aims and targets.

At regional level, aspects of sustainable development, the impact of civil action and the wider-ranging systems of interaction relating to the NFP process are regarded as very satisfactory. However, there are clear references to the need for tools and procedures to resolve conflicts.

Areas for improvements are also, clearly: player commitment, the resourcing of action, and the highlighting of economic values. The monitoring of the process and acquisition of sector-related data are also seen as areas for development in the regions.

Integration of the NFP with overall regional development is seen as a palpable challenge. Regional players would like development of key aspects of the economy and business to be a part of regional development at the same time. This objective is of course given support by the fact that the NFP has a 'shortage of resources', which makes forest sector players more interested in regional development programmes.

Development proposals

The RFCs must systematically aspire to achieving greater impact and more concrete results. This in practice means the planning, and above all, the implementation of projects that support the RFCs. The time lag between the planning of a project and its concrete implementation needs to be shortened.

The tripartite principle in the conflict resolving process adds to the demands of the system in operation. Of key importance is the creation of problem-solving procedures that are binding on all parties.

The tools and structures for resolving conflicts exist in principle. One problem is how to develop conflict solution mechanisms that will indeed be binding on all parties.

There is not a sufficiently high level of commitment among key players to the implementation of the RFPs. There needs to be action to encourage real commitment and mutual trust. One way to do this is to invest systematically in the implementation of concrete joint projects. This would also mean that resources for the various organisations would be channelled in line with RFP policies.

The forest industry must be involved more solidly in the RFP process.

The monitoring of the process and acquisition of sector-related data are seen as areas for development in the regions. The need mainly relates to the qualitative diversification of data needed in respect of industries other than the forest industry, e.g. the importance of forestry in terms of the regional economy, and its impact on it.

The RFPs have a very clear role to play in regional development. This position needs to be made stronger still by integrating the RFPs closely with overall regional development, in order to reinforce their role as programmes that steer project work.

4.5 NORTHERN OSTROBOTHNIA: CASE STUDY

4.5.1 Group interview with the Forest Council of Northern Ostrobothnia

The mandate stipulated that the evaluation should seek to establish the regional view in the NFP implementation process as a separate exercise. This happened on 18 March 2005 at a group interview session with the Forest Council of Northern Ostrobothnia, where a list of themes that had been previously sent to the interviewees was discussed. The following is a condensed version of the issues raised in the interview.

Theme 1. The work of the Regional Forest Council and its relationship with the National Forest Council

- There is quite good information flow between the Regional Forest Council and the National Forest Council
- The data produced by the regions serves as a basis for planning at state level
- Key aims and targets are defined at the upper level, but the regions themselves decide their programme's content; the content of the various regions' programmes is actually quite similar
- The forest industry's commitment to the RFP is fairly minimal, as the industrial institutions act in their own interests
- In practice we work on the industry's/market's terms.

Theme 2. The work of the Future Forum on Forests from the regional standpoint

- The work of the Future Forum on Forests can be considered to have an indirect effect on the region as somewhere that promotes the general viability of the forest sector
- Communications on the work and action taken have not been as successful as they might have been
- There should be a more regional angle with regard to the work
- The data produced by the Forum is too fragmented and general for it to be exploited in the region
- The Forum's work should be able to provide more educational benefits.

Theme 3. Viability of the tripartite principle (public organisations, the private sector and NGOs)

- The tripartite principle can help ease friction between different stakeholder organisations
- Controversial situations will remain acute in the future and at regional level we have to learn to live with this
- Co-operation and negotiation practices between the Regional Forest Council (RFC) and NGOs are positive and the procedures involved are here to stay
- The work of the NGOs is not entirely under parliamentary control, but, despite this, we must not cut the cord that leads to discussions
- There has been some convergence of views between the forest sector and the NGOs in certain matters.

Theme 4. The way the Regional Forest Programme relates to the National Forest Programme

- The RFP relates well to the NFP
- The RFP is a way of communicating with the NFP
- The NFP gives the regions leeway in its actions, but does it encourage them to discover special regional characteristics?
- It is crucially important that representatives of the NFP programme visit Regional Forest Councils to foster interaction between the RFP and the NFP.

Theme 5. Utilisation of research and monitoring data

- Data on forest assets and reserves is satisfactory
- Customised services/data regarding forest assets and reserves should be easier and cheaper to access (e.g. information and data channelled at different regional levels)
- The availability of basic data on forestry is more or less satisfactory, although there are information gaps in the area of entrepreneurship and nature tourism (the situation is improving)
- The importance of forestry to the regional economy is still a 'grey area'
- There is still room for improvement in the way the results of forest research are used

Theme 6. The role of the Regional Forest Council

- The RFC gets involved in useful and constructive discussion, but this should now move on to the level of concrete action
- Progress with regard to what is concrete is important, because the RFC's role and importance in the region are shaped on the basis of concrete action
- The weight the RFC carries in the region is unsatisfactory, because levels of commitment are not what they should be
- The RFC's outward visibility should be promoted
- There is a viable link between the RFP and EU programmes
- Regional projects have come about based on the RFP.
- But it takes so long to reach the stage where there is concrete project work in place that the
 importance of the RFP for the creation of projects is not visible when viewed from the
 'outside'

4.5.2 Conclusions and proposals for development

Conclusions

The relationship between the RFC and the NFC works very well. Central to fostering that relationship is personal contact between national and regional players. If the RFC's role is to be developed further it is important that levels of

concrete action keep being achieved, as this way the RFC will be able to redeem its position in regional development in general. A certain lack of commitment to the RFP in the forest industry is discerned as a reality, which has its roots in the fact that the industry operates in a global market. The RFP relates well to the NFP.

The Future Forum on Forests has not succeeded in communicating information about itself

and the benefits it offers to the region sufficiently well. In the region the general feeling is also that the usefulness to the region of the data it produces is fairly minimal, owing to its fragmented and very general nature. The tripartite principle is quite a workable system, and has come to stay in the region. Interaction has helped the various involved parties to understand one another's points of view and ease frictions accordingly.

The availability of basic data on forestry is moderately satisfactory, although its content could be improved, for example in the areas of entrepreneurship and nature tourism. Furthermore, more information is needed on the economic impact of forestry in the region. There is a need for customised data.

There is a viable link between the RFP and EU programmes and project work has got started based on the RFP. The time it takes to get to the stage where there is concrete project work in place is so great, however, that the connection between the RFP and the start-up of project work is not visible from the outside perspective.

Development proposals

In order to increase the RFP's regional impact and strengthen the role of the RFC there has to

be clear progress made to reach a position where concrete project work is being carried out.

The Future Forum on Forests needs to improve the way it communicate with the regions and be able to take better account in the future of their need for data and information. A collection of such needs could form whole subject areas, which would be of interest to the regions.

Despite its 'problems', the tripartite principle for resolving conflict is viable and necessary. The system needs to be developed in such a way that decisions taken are indeed binding on all parties.

Although the availability of basic data on forestry is satisfactory, there is a need to improve its content, in, for example, the areas of entrepreneurship and nature tourism. Furthermore, more information is needed on the economic impact of forestry in the region. The need for customised data is very evident.

In spite of the viable link there is between the RFP and EU programmes, the progress towards concrete project action is too slow: so slow that, seen from the outside, the RFP's connection with the creation of projects is not apparent. This is not a situation the RFC wishes to see because its credibility and the weight it carries are reinforced by concrete action. For this reason, efforts must be stepped up to generate concrete project action.

5 CONCLUSIONS

5.1 REALISATION OF THE PROGRAMME'S MAIN AIMS AND TARGETS

There was progress made in the achievement of aims and targets during the programming period in many areas, but with regard to almost all the aims there are areas where the aim or target seems unlikely to be achieved by 2010. For these, the range of measures available to the NFP should be extended.

Some of the aims ('Forests for recreation and natural products', 'Forest know-how needs to be strengthened' and 'Finland should be active in international forest policy') have been set at such a general level that a detailed evaluation of whether or not they have been realised is difficult.

Realised aims

With regard to the aim 'Opportunities for growth in the forest industry', the use of domestic wood has increased in line with targets compared to the period 1995-1999. In future any increase in the use of wood may constitute a challenge, however, owing to changes in the forest industry's operating environment.

With regard to the aim 'Forestry should be profitable and provide employment', the use of wood for energy has mainly increased in line with targets. Logging outturn has increased in line with targets compared to the average for 1995-1999, although in the future any increase in logging outturn may constitute a challenge if the use of wood does not grow substantially and wood imports remain at high levels or rise.

With regard to the aim 'Securing ecological sustainability', progress has been made, for example, in the drafting and implementation of the METSO diversity programme, by implementing nature conservation programmes and by financing research and analysis.

With regard to the aim 'Forests should be managed well', forest fertilisation, basic improvements to forest roads, and, in general, the management of young stands have increased in line with targets.

With regard to the aim 'Forests for recreation and natural products', it might be said that the multiple use of forests in forest planning, silvicultural guidance and instructions, and the implementation of measures has been taken into account to a greater extent. (Whereas, it is the view of some stakeholder groups that forest planning and guidance should be diversified further). The nature tourism industry has grown substantially in comparison with travel on average.

With regard to the aim 'Forest know-how needs to be strengthened', it might be said that forest know-how and expertise is at a high level in general in Finland. The establishment of the Future Forum on Forests has had a positive impact on forecasting in the forest sector.

In line with the aim 'Finland should be active in international forest policy', the country has participated in international, EU level and bilateral co-operation, and financed different processes and projects. Furthermore, Finnish experts in the forest sector hold important international posts.

Shortcomings in achieving aims

With regard to the aim 'Opportunities for growth in the forest industry', the value of exports of wood products has not evolved in line with targets, owing, among other things, to fiercer competition in the wood product industry. In addition, the use of domestic wood did not increase during the NFP's programming period. The main reasons for this are the availability/price competitiveness of Finnish wood, the rise in the use of imported wood, and changes in the forest industry's operating environment. In the

future, the NFP should find ways to enhance the competitiveness of the forest sector/ industry.

With regard to the aim 'Forestry should be profitable and provide employment', logging outturn did not increase during the NFP's programming period. The main reasons for this are the same as for the aim just mentioned. In future the NFP should actively seek to bring in measures to reduce wood production costs.

The aim 'Securing ecological sustainability' is behind in the implementation of conservation programmes and the reduction of nitrogen washout in forestry. Furthermore, the aim set in the NFP for a programme of targets, funding and action for forest conservation over the coming years in Southern Finland, the western part of the province of Oulu, and Southwest Lapland has not as yet been drafted. But plans for corrective action already exist. The Ministry of the Environment is making a proposal for the implementation of the conservation programmes in the autumn of 2005. Also in 2005, the reform of the Act on the Financing of Sustainable Forestry has as its objective the improvement of conditions that would favour water protection. A decision will also be taken in 2007 on the need for a new conservation programme. In the configuration of targets it would be realistic to say that the impact of measures now being implemented would not necessarily have been conspicuous during the programming period, but only in the longer term.

With regard to the aim 'Forests should be managed well', first thinnings and drainage reconditioning have not increased in line with targets. The main reasons with regard to first thinning are the increase in the use of imported wood and price competitiveness of domestic pulpwood, and with regard to drainage reconditioning, poor sales of wood grown in drained bogs resulting in a lack of financial incentives for forest owners. This particular aim should in future take into consideration the different silvicultural goals the forest owners have as well has the impact of changes to the operating environment in the

forest industry/forestry on wood production strategies and the need for different forest management methods.

With regard to the aim 'Forests for recreation and natural products', insufficient appropriations for recreational and hiking areas and an unsatisfactory knowledge base on multiple use are both apparent. Matters relating to responsibility/accountability for administration in the sector are still undecided. The reasons for the failings are: the fragmented/disunited nature of the sector, the lack of any clear division of responsibility, and the meagreness of the targets set and of the selected range of measures. In the future the NFP should establish exactly who is responsible for what and make concrete proposals for measures to develop the sector.

With regard to the aim 'Forest know-how needs to be strengthened', the main proposals for development are the diversification of training and research, with a broadening of their scope, better international communications on forest matters, and improved forecasting.

With regard to the aim 'Finland should be active in international forest policy', it is quite apparent that appropriations for development cooperation are not evolving in line with Finland's development policy programme.

5.2 COMPLIANCE WITH THE NATIONAL FOREST PROGRAMME PRINCIPLES

Survey participants have a very positive impression of the implementation of the eleven Vienna Principles in the NFP process, both at national and at regional level. There has been success in the areas of participation, co-operation and partnership, know-how and skills, compliance with (inter)national commitments, and the ecosystem approach.

The areas for improvement are partly contained within the same principles as the successes. The main needs for development were seen as: the development of conflict resolution mechanisms, heightened impact of the NFP (po-

licies in other sectors, channelling resources in line with NFP/RFP policies), the long-term commitment of players, and improvements in the production of data (exploiting monitoring data, better awareness of forest matters).

5.3 VIABILITY OF THE NFP PROCESS

The evaluation reveals that the NFP can be regarded as very successful in terms of its structure and modus operandi.

The drafting of the programme

The NFP's drafting process is considered to be viable on the whole and that for the Regional Forest Programmes reasonably clear. However, one possible area for improvement at regional level might be the way the region's own peculiarities and special features are taken into account.

Implementation of the programme

The NFP has had an effect on positive development, especially in the aims 'Securing ecological sustainability' and 'Forests should be managed well'. On the other hand, it has had little impact on business and the realisation of corporate aims (opportunities for growth in the forest industry, employment and nature tourism). With regard to these particular aims, ('Opportunities for growth in the forest industry', 'Forestry should be profitable and provide employment' and 'Forests for recreation and natural products'), the NFP's range of measures should in the future be broadened and its targets reviewed.

The interim evaluation revealed challenges in the commitment of the sector and key players to the programme. Nevertheless, the NFP has promoted inter-ministerial co-operation in forest sector-related matters. Similarly, the implementation of the Regional Forest Programmes has clearly enhanced co-operation between the organisations involved in regional development. The evaluation shows that the NFP might be regarded as having limited resources for promoting the implementation of proposals for action. The impact on guidance on the part of the Forest Council implementing the Forest Programme or the secretariat that prepares its work does not really extend to projects or overseeing the implementation of the programme. In future, additional resources are warranted to promote the implementation of proposals for action.

METSO's role was seen as central to the NFP. However, there is room for further development in that of the Future Forum on Forests in the promotion of the NFP.

The NFP provides reasonable guidance for the Regional Forest Programmes and these, furthermore, implement the NFP satisfactorily. The RFPs are taken account of to a satisfactory extent in the drafting of the NFP, and the NFP enables the RFPs to take special regional characteristics and features into account.

The NFP and Regional Forest Programmes may be seen as carrying reasonable weight in relation to the national and regional importance of the forest sector. The extent to which overall regional development takes account of the RFPs is also at a very satisfactory level. The Regional Forest Councils and Regional Forest Programmes provide reasonable sufficient guidance for regional project work in the forest sector. The RFPs complement development programmes taking place in the regions.

Monitoring

There have been partial failings in the following areas: predicting the needs for change and research in the programme, reacting to them, and monitoring the implementation of proposals for measures. This speaks in favour of making the monitoring process more straightforward: the collection of data for monitoring could be made more efficient by selecting a range of indicators (Table 6-1) that measure the achievement of the set aims, and the monitoring group could then concentrate on the production of proposals for measures.

6 RECOMMENDATIONS FOR DEVELOPING THE NFP

6.1 KEY CHANGES IN THE OPERATING ENVIRONMENT OF THE FOREST SECTOR

Significant changes have happened/are happening in the operating environment of Finnish forestry and the Finnish forest industry, and these present challenges to the development of the NFP and the work of the entire forest sector. The following trends can be identified as the main factors impacting on the forest sector:

- There are clear signs of discontinuity in the development of the forest industry. The growth in production and the use of wood in Finland will in future evolve substantially more slowly than in the 1980s and 1990s. The forest industry's dependence on imported wood will continue and imports of wood are set to increase, at least in the near future.
- The internationalisation of companies in the forest industry weakens Finland's relative role in the strategic planning of companies' production and operations. The Finnish pulp and paper industry's competitive position will remain strong until 2010, but the competitiveness of the wood product industry is adversely affected by production growth in Russia and Eastern Europe.
- Owing to falling prices for finished products and the diminishing solvency of growing stock in the forest industry, there will be growing pressure for a drop in prices for raw timber (roundwood), making it still more of a challenge to sustain the forest industry's profitability.
- Environmental values will continue to be immensely important, which will keep the

pressure up to improve the protection/conservation of forests.

- Nature tourism is growing in importance as a commercial means of exploiting the forest, and that will have a major impact on the local economy and employment.
- There is growing pressure to allocate public funds for forestry for purposes other than wood production.
- Structural changes to the forest-owning community will increase pressures to develop forest services and to make the forest service sector more competitive.
- The countryside is developing into a mosaic made up of pockets of rural success. In certain areas the move from remote locations to more built-up areas and centres of growth continues, reflected in the potential there is in relatively sparsely populated areas to run businesses, maintain an infrastructure, and provide services.
- The EU's influence on policy in the Member States is also increasing in matters to do with the forest. The importance of forest wood production in EU forest policy remains limited, however.

6.2 SHORT-TERM DEVELOPMENT PROPOSALS

Development proposals for the current programming period concern *closer co-operation*, funding guarantees, legislative developments, research and statistics, and the monitoring of the programme.

Closer co-operation

There should be closer inter-ministerial and inter-sectoral co-operation in the implementation of the programme, by means of, for example, projects jointly co-ordinated by different organisations.

Funding guarantees

The funding needs revealed in the interim evaluation are associated with the aims 'Securing ecological sustainability' and 'Forests for recreation and natural products'.

- Funding for the METSO diversity programme beyond 2007 should be guaranteed. Similarly, there should be provision made for commencing action as a result of the assessment of the need for forest protection/conservation in Southern Finland.
- The implementation of the conservation programmes should be brought to completion.
- Appropriations for forest nature management should be raised to levels in line with METSO targets. There should also be continued financing of research into the effects of the diversification of forestry.
- Appropriations for recreational and hiking areas should be guaranteed in line with targets set, and the financing of research into the recreational use of forests and nature tourism should be continued.

Legislative developments

The needs for legislative developments perceived concern the Act on the Financing of Sustainable Forestry and the development of the recreational use of the forests and nature tourism.

Those connected with the Act include improved water protection in forestry, the demarcation of especially important habitats, and support for landscape management.

In addition, the agencies with responsibility

for the development and monitoring of the recreational use of the forests and nature tourism should be named without delay.

Research/statistics

The interim evaluation revealed the following areas for improvement in the NFP knowledge base:

- Targets and/or reference levels should be clarified for logging outturn, use of wood, wood product industry exports and employment.
- There should be clearer definitions of roundwood, logging outturn and the wood product industry.
- A report examining the NFP's effects on employment in more detail should be drawn up.
- There should be continued practical research into the diversification of commercial forests.
- The METSO monitoring process should examine the programme's cost-effectiveness.
- The target for investment on the part of the state and private forest owners should be amended to correspond to the changes in the criteria for calculating the costs of silviculture and basic improvements, so that the implementation of aims and targets can be monitored reliably (or else the method for compiling statistics should be compatible with the target).
- The targets for drainage reconditioning and needed action should be set more specifically according to region.
- The needs for research into the recreational use of the forests and nature tourism should be examined and statistics methods improved.
- Future signals and the need for research that probes future trends and extends beyond the traditional forest cluster need to be mapped

out more effectively, with reference, for example, to the Future Forum on Forests, with increased interaction with players in the private sector and at regional level, as well as players outside the scope of the traditional forest cluster.

Monitoring of the programme

Monitoring needs to be made a more robust exercise by determining the variables that measure achievement of aims (Table 6-1). These variables should be monitored in the current programme.

The programme should be made more dynamic, with ongoing mapping-out of the needs for

change and research as the monitoring exercise proceeds.

The focus of the work of the monitoring groups should switch to progress in proposals for action. In place of the yearly follow-up reports there could be a report, for example, every other year, and the resources freed up in this way could be used to promote the implementation of proposals for action.

There needs to be strengthened commitment on the part of other administrative departments, and more efficient and standardised methods of collecting data on the measures implemented by administrative departments outside the Ministry of Agriculture and Forestry.

Table 6-1. Proposal for indicators to be used in the monitoring of the programme.

Aim	Indicators measuring realisation of aim
Opportunities for growth in the	Use of roundwood
forest industry	Value of exports (or turnover) in wood product industry
Forestry should be profitable and	Logging outturn
provide employment	Use of wood for energy
	Number of employed
Securing ecological sustainability	Implementation of the METSO diversity programme
Coouring coological cactalitability	Implementation of the nature conservation programmes
	Implementation of the decision in principle on water protection
	Other measures/achievements
Forests should be managed well	Number of jobs per job type
Forests for recreation and	Demand for recreation and visitor satisfaction
natural products	Jobs in nature tourism and recreation
	Implementation of programme of measures for recreation and nature tourism
	Appropriations for hiking and other recreational services
	Development of forest management (silviculture) and forest planning
	Improved knowledge base
Forest know-how needs to be strengthened	Measures taken and achievements in education, research, internationalisation, innovation and communications
Finland should be active in international forest policy	Channels of influence, the Finnish position, and financing (including development co-operation appropriations)

6.3 LONGER-TERM DEVELOPMENT PROPOSALS

Owing to the changes in the operating environment mentioned in section 6.1, it will take careful preparation to revise the NFP or update it comprehensively. This will not be possible to do quickly, so we recommend that the process aimed at improving the NFP should begin as soon as possible. During that process the current NFP would mainly be implemented in its current form.

The main longer-term development proposals concern greater programme viability, a review of aims and targets and extending the selected range of measures.

Greater programme viability

The NFP needs to be clearly structured as a development programme, in which development needs, input, action, output and impact form their own logical entities. Successful monitoring is an inseparable part of any development programme. A well-organised feedback system is a pre-condition for corrections and adjustments that might have to be made to the programme. The roles and tasks of the organisations involved in the programme process should be clearly stated.

Review of aims and targets and extending the selected range of measures

Changes in the forest sector's operating environment should in future be taken account of when the NFP's aims and targets are set and in the choice of action and measures designed to achieve them. The main issues in the longer-term development of the NFP concern the co-ordination of the different uses of the forests (e.g. wood production, nature conservation, recreation) and guaranteeing the competitiveness of the forest industry. The principle ways of achieving these aims are: development of alternative uses for forests, wood production strategies and silvicultural methods, and a reduction in the costs of wood production. It is also important to improve

know-how and skills for the long-term development of the forest sector and cluster, but also new forest businesses. This will mean, e.g. wide ranging education and research (which extends to the end of the production chain), a more interdisciplinary approach in education and investment in the development of new products.

The information/data needed to develop the programme

In support of the review/updating of the NFP there should be a comprehensive examination of alternative wood production, conservation and multiple use strategies and scenarios and their economic, social and environmental impact, whilst co-ordinating the aims of different programmes (NFP, biodiversity action programme).

As a basis for discussions there should also be other background surveys relating to changes in the operating environment in forestry and the forest industry and how those changes are forecast with reference to the following key strategic areas that impact on the NFP's aims and targets:

- Guaranteeing the viability of the forest industry and developing the structure of the sawn timber and board industry
- Maintenance/improvement of the infrastructure, especially in sparsely populated areas
- Maintenance/improvement of the price and quality competitiveness of Finnish raw timber (roundwood)
- Guaranteeing the viability/profitability of forestry
- Diversification of silvicultural methods and guidance (know-how)
- Improved allocation of subsidies for forestry
- Development of forest protection/conservation and co-ordination of aims and targets for land use
- Development of international communications on forests and the environment
- Adaptation of forest sector to climate change.

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Annex I. Persons interviewed for the purpose of evaluating results

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Bazill John European Commission, DG ENV

Borkowski Piotr MCPFE Liaison Unit

El-Lakany Hosny FAO Isoviita Pirkko Min. Env.

Halme Esa Regional Council of Päijät-Häme

Hakkarainen Juha Central Union of Agricultural Producers and Harkki Sini Finnish Association for Nature Conservation

Heikurainen Matti Min. Ag. For.

Hellström Eeva Finnish Forest Association

Hilska-Aaltonen Marja Min. Ag. For.

Karjalainen Harri World Wildlife Fund

Karvonen Juhani Finnish Forest Association

Kokkila Taneli Finnish Tourist Board

Kostamo Jouko Forestry Development Centre Tapio

Kuronen Ilpo Finnish Association for Nature Conservation

Niemelä Hannu Forestry Development Centre Tapio

Niemi Asko Central Union of Agricultural Producers and

Niskanen Anssi Future Forum on Forests

Nyrhinen Timo Central Union of Agricultural Producers and

Paavilainen Leena Wood Wisdom

Pajuoja Heikki Finnish Forest Research Institute

Pelkonen Kari Metsähallitus Portin Anders Min. Ag. For.

Päivinen Risto EFI (European Forest Institute)

Raivio Suvi The Finnish Forest Industries Federation Rutanen Juha Finnish Nature-based Entrepreneurship

Saarenmaa Liisa Min. Ag. For.

Sahi Antti Central Union of Agricultural Producers and

Savola Keijo Finnish Nature League

Schildt Ville Min. Ag. For.

Seppälä Matti Forest Centre of Southern Ostrobothnia

Sievänen Tuija Finnish Forest Research Institute
Suoheimo Jouni Finnish National Board of Education
Sutinen Reima Finnish Ministry of Trade and Industry

Tolonen Jyrki Metsähallitus Tuunanen Pekka Min. Env.

Valtanen Hannu The Finnish Forest Industries Federation

Virolainen Erkki Metsähallitus

Annex II. Results of the process evaluation

1. Statements at national level: their importance, the current situation pertaining to them, and their weighted gap arranged by gap

NATIONAL	Weighted gap	Importance/ significance	Satisfaction rating/viability
The data obtained from monitoring is made use of in the management of the NFP	6.16	4.40	3.00
There exist mechanisms to help resolve conflicts	6.15	4.10	2.60
The NFP has an influence on policies, strategies and programmes in sectors other than the forest sector at national level	5.74	4.10	2.70
Players are committed long-term to the implementation of the NFP	5.72	4.40	3.10
Different organisations have channelled resources in line with NFP policies	5.33	4.10	2.80
The NFP process benefits from co-operation from the Government, the corporate sector and civil society	5.28	4.40	3.20
The way information is collected for monitoring the NFP's progress is viable	5.04	4.20	3.00
The NFP takes account of the impact of other sectors on the forest sector	4.73	4.30	3.20
The NFP process has created mechanisms that enhance co-operation between different sectors and institutions	4.62	4.20	3.10
The NFP process makes use of predictive data	4.62	4.20	3.10
The NFP process makes use of the latest knowledge about different industries connected with the forest sector	4.30	4.30	3.30
The NFP has an influence on policies, strategies and programmes in sectors other than the forest sector at regional level	4.29	3.90	2.80
The collection of data for monitoring focuses on the right issues	4.10	4.10	3.10
There exist appropriate participation mechanisms for the exploitation of skills and know-how	4.10	4.10	3.10
The NFP creates a positive climate for the sustainable management and use of forests	4.05	4.50	3.60
The NFP is integrated with national strategies for sustainable development	3.87	4.30	3.40
The NFP enhances the visibility of the forest sector and awareness of its social benefits	3.87	4.30	3.40
Programmes/projects have been drawn up which different organisations have jointly financed	3.60	4.00	3.10
The NFP increases awareness of forest sector policies	3.55	4.20	3.55
New approaches have resulted from partnerships	3.42	3.80	2.90
A new working culture has emerged, one in which different organisations learn from one another	3.42	3.80	2.90
The NFP promotes consistency with initiatives and conventions at national, regional and international level	3.36	4.20	3.40
The NFP produces sufficiently impartial data on forest policy and management	3.28	4.10	3.30
The NFP promotes the development of intellectual, material and institutional resources	3.24	3.60	2.70
The data obtained from evaluations is made use of in the management of the NFP		4.00	3.20
The NFP takes account of sustainable development strategies	3.15	4.50	3.80
A new working culture has emerged that supports co-operation	3.12	3.90	3.10
The NFP has increased awareness in other sectors of forest policy programmes	3.01	4.30	3.60
The participation process is open and impartial	2.94	4.20	3.50
Citizens can make use of reliable research data	2.87	4.10	3.40
The NFP process makes use of the skills and know-how of those involved in planning and implementation	2.46	4.10	3.50
The evaluation process focuses on the right issues	2.40	4.00	3.40
There is long-term political commitment in support of the NFP	2.35	4.70	4.20
The NFP is in harmony with national legislation, operating principles and policy	2.30	4.60	4.10
There exist structures that enable citizens as individuals or in groups to participate and have an influence	2.22	3.70	3.10
Through participation it is possible for individuals or groups to influence the weight the NFP carries	1.90	3.80	3.30
The fact that the NFP is based on the RFPs is an opportunity for individuals to become involved	1.85	3.70	3.20
The NFP process has created mechanisms that enhance co-operation within the forest sector	1.72	4.30	3.90
The timing of the NFP's evaluation process is right	1.20	4.00	3.70
The NFP is consistent with international commitments	0.88	4.40	4.20
The ecosystem approach is integrated with the development, implementation, monitoring and evaluations of the NFP	0.74	3.70	3.50

2. Statements at national level: their importance, the current situation pertaining to them, and their weighted gap arranged by gap

REGIONAL	Weighted gap	Importance/ significance	Satisfaction rating/viability
The collection of data for the RFP monitoring system works well	4.95	4.5	3.4
Players are committed long-term to the implementation of the RFP	4.85	4.4	3.3
Different organisations have channelled resources in line with RFP policies	4.68	3.9	2.7
There is long-term political commitment in support of the RFP	4.40	4.4	3.4
The RFP produces sufficiently impartial data on forest policy and management	4.05	4.5	3.6
There exist mechanisms to help resolve conflicts	3.90	3.9	2.9
The RFP promotes consistency with initiatives and conventions at national and regional level	3.60	4.5	3.7
Programmes/projects have been drawn up which different organisations have jointly financed	3.51	3.9	3
The RFP process benefits from co-operation between regional administrative departments, the corporate sector and civil society	3.36	4.2	3.4
The RFP promotes the development of intellectual, material and institutional resources	3.36	4.2	3.4
The RFP creates a positive climate for the sustainable management and use of forests	3.29	4.7	4
The fact that the NFP is based on the RFPs is an opportunity for individuals to become involved	3.22	4.6	3.9
The RFP is in harmony with national legislation, operating principles and policy	2.70	4.5	3.9
The data obtained from monitoring is made use of in the management of the RFP	2.64	4.4	3.8
The RFP process makes use of the latest knowledge about different industries connected with the forest sector	2.58	4.3	3.7
The RFP takes account of sustainable development strategies	2.58	4.3	3.7
The RFP increases awareness of forest sector policies	2.58	4.3	3.7
The RFP has increased awareness in other sectors of forest policy programmes	2.52	4.2	3.6
Through participation it is possible for individuals or groups to influence the weight the RFP carries	2.46	4.1	3.5
A new working culture has emerged, one in which different organisations learn from one another	2.40	4	3.4
A new working culture has emerged that supports co-operation	2.34	3.9	3.3
New approaches have resulted from partnerships	2.28	3.8	3.2
The RFP enhances the visibility of the forest sector and awareness of its social benefits	2.20	4.4	3.9
The RFP has an influence on policies, strategies and programmes in sectors other than the forest sector at national level	2.10	3.5	2.9
The RFP process has created mechanisms that enhance co-operation between different sectors and institutions	2.10	4.2	3.7
The collection of data for monitoring focuses on the right issues	2.05	4.1	3.6
The evaluation process focuses on the right issues	2.05	4.1	3.6
The RFP has an influence on policies, strategies and programmes in sectors other than the forest sector at regional level	1.95	3.9	3.4
The RFP takes account of the impact of other sectors on the forest sector	1.68	4.2	3.8
The RFP is integrated with national strategies for sustainable development	1.68	4.2	3.8
The RFP process makes use of the skills and know-how of those involved in planning and implementation	1.64	4.1	3.7
The RFP process makes use of predictive data	1.52	3.8	3.4
The participation process is open and impartial	1.26	4.2	3.9
There exist structures that enable citizens as individuals or in groups to participate and have an influence	1.17	3.9	3.6
There exist appropriate participation mechanisms for the exploitation of skills and know-how	1.17	3.9	3.6
The RFP process has created mechanisms that enhance co-operation within the forest sector	0.82	4.1	3.9
The data obtained from evaluations is made use of in the management of the RFP	0.82	4.1	3.9
Citizens can make use of reliable research data	0.76	3.8	3.6
The ecosystem approach is integrated with the development, implementation, monitoring and evaluations of the RFP	0.76	3.8	3.6
The timing of the NFP's evaluation process is right	0.40	4	3.9

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1/2005	Ilmastonmuutoksen kansallinen sopeutumisstrategia ISBN 952-453-200-X
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