Evaluating Financing of Forestry in Europe



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Country-level report - The Netherlands

A description of the Dutch forest policy framework and financial instruments for forestry in the period 1990-199

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ABSTRACT

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The main idea behind the EU-project Evaluating Financing of Forestry in Europe (EFFE) is to find out how forest sector related financial policy instruments are handled in different countries. This report describes the Dutch policy framework and financial instruments for forestry in the period 1990-1999 and is used for further analysis by the principal contractors of the EFFE research team. In this report more insight is given in the finances (especially grant systems) for forestry. However, before making comparisons between types of ownership within the country or between countries it is necessary to have a better understanding of the cost structure and operational context for different types of forest owners. Without such detailed knowledge it is impossible to draw conclusions on financial support for (economically) sustainable forest management.

Keywords: forest policy, financing of forestry, EFFE, grant scheme, forest management, private forestry, public forestry.

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Preface

The main idea behind the project Evaluating Financing of Forestry in Europe (EFFE project) is to find out how forest sector related financial policy instruments are handled in different countries. For this purpose, the project is carried out by a network of researchers in close co-operation with policy makers.

The overall goal of the EFFE study is to investigate pre-sawmill forestry funding policies and programs in Europe. The achievements of this project will be to increase the understanding and transparency of the government actions in forestry to provide information for designing public intervention policies in forestry and to decrease the social costs by establishing policy recommendations in order to avoid intervention failures.

Fourteen partners, representing thirteen countries take part in this research project. Five of them are principle contractors and the others are assistant contractors. Principle contractors are responsible for making a framework for data collection, for collecting data in their home countries, for analysing all collected data, for making comparisons between different countries and for final conclusions and recommendations. The main task of assistant contractors is collecting data in their home countries. The Netherlands are an assistant contractor.

This report describes the Dutch policy framework and financial instruments for forestry in the period 1990-1999. Before writing this report we collected data according to a format written down in a database structure. The database must be considered as underlying information for this report. Therefore it is enclosed with this report.

Collecting data about financing of forestry seems to be an easy task. In practice it was not that easy. Five people have been busy with it for quite a long time. I would like to thank C.J.M. van Vliet, J.P.G. de Klein, M. Lusink, H. van Blitterswijk and E.J.M. Aertsen for their efforts in collecting the data.

C.J.M. van Vliet has been the Dutch co-ordinator of the EFFE project till May 2003. He was responsible for writing down the policy context and together we analysed the data and drew conclusions. Many thanks for his dedication to the project.

The aim of the EFFE project is to enforce the emphasis on the evaluation research of forestry funding in the EU and EFTA countries, as well as in selected Countries in Transition (CIT). I hope the Dutch contribution to the EFFE project will help to reach this aim.

Wageningen, December 2004

M.N. van Wijk Project co-ordinator

1 Introduction

1.1 The policy context

The Netherlands is very densely populated. Approximately 10% of land is covered with woodlands. With an average population density of approximately 465 persons per km², there is only 0.02 hectare of forest per capita. The total forest area in 1995 amounted to 339.000 ha and is rather unevenly distributed over the provinces. Gelderland, Brabant, Overijssel, Limburg, Drenthe and Utrecht have relatively large areas of forest within their territory.

The Netherlands can be classified as a decentralised unitary state in which responsibilities are distributed between national (state), regional (provinces and water boards¹) and local (municipalities) authorities.

The main responsibility for countryside, nature conservation and forestry related matters rest with the national government. Especially in the last quarter of the 20th century this resulted in an impressive flow of policy papers on these subjects. In the last decade a process of devolution started, resulting in a shift of authority from national to regional level. The provinces now have more executive powers in rural areas and play a more prominent role in regional policy formulation on countryside issues. They have also gained influence in implementing national laws and regulations for their territories. However, for reason of equality these tasks are being fulfilled under state control. In effect, a new balance of power is developing between the national and regional authorities, which require new instruments for allocation, coordination and control of responsibilities. Transparency and accountability are among the new values guiding this process.

Authorities relevant for forestry

The ministry of Agriculture, Nature and Food Quality² is the most important national government body in the field of forestry and nature conservation. One of its departments used to be the National Forest Service, being the largest single owner of forests and nature reserves in the Netherlands. As from January 1998 the National Forest Service has been given a more independent status, however it is still being financed from the government budget. The most important department where forest policy is concerned is the department "Nature". Another relevant department is the department "Countryside".

Furthermore, the Ministry of Economic Affairs is, among other things, responsible for wood supply, for the wood processing industry and for tourism. The Ministry of Regional Planning and Environment is also relevant because it is concerned with town and country planning, land use policy and environmental policy matters.

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¹ The water boards are not an important authority in the policy framework for forestry in the Netherlands, except for the Water board tax that forest owners have to pay (refer to 2.1.10).

² Until 2003 this Ministry was called Ministry of Agriculture, Nature Management and Fisheries.

In addition to the national government, the provincial authorities play an increasingly important role in countryside planning and related fields. Often they elaborate national policy plans for implementation in their own region, such as town and country plans, environmental plans, forestry and nature conservation plans. They may also have their own grant schemes to support activities of regional importance. In the last decade there has been a growing tendency at the provincial level towards a more integrated approach to policy making, particularly in the field of regional development and countryside planning.

The local authorities operate mainly within the framework of national and provincial policies, but they too have major competencies in certain fields. The most notable local powers are to be found in town and country planning. Every municipality has the authority and even the obligation to decide on detailed zoning schemes for its territory, which have a direct and binding effect concerning the use of private and public property. Rural land use and urban construction used to be the major focal points in zoning schemes, but environmental aspects have rapidly gained importance. In the field of forestry, the local council has special powers regarding all woodlands and trees within the built-up area of its territory. It is estimated that these powers cover an area of 43.000 ha where the national Forest Law gives way to local regulations such as felling permits and maintenance liabilities. Finally, the role of municipalities as forest owners has to be mentioned. Together they own 50.000 ha of woodlands, which make them a considerable factor in Dutch forestry.

Forest policy plans

The first comprehensive national forest policy plan was the Long-term Forestry Plan of 1986. Its main objectives were to conserve and develop the present forest area, to promote the performance of multiple forest functions, to expand the forest area mainly for recreation and production purposes and to achieve all this at a socially acceptable level of costs. It provided also a stimulus for provinces to work out the national policy into regional forest plans. In 1990 the national forest policy plan was supplemented by an action oriented Implementation Programme, following the example of the Nature Policy Plan that received a lot of political support. After evaluation in 1992, it was decided necessary to renew the plan in order to adapt to changing circumstances. This resulted in the Forest Policy Plan of 1994, which added some new priorities like environmental and countryside quality, involvement of other authorities and private organisations, focus on market approach and budget efficiency and contribute to sustainable forestry world-wide. In the past decade the importance of the social benefits of forestry and nature conservation continued to increase, as well as the involvement of a variety of public and private actors in policymaking. Together with the trend towards a more integrated approach to countryside policy, this culminated in a new policy document for nature, forest and landscape in the 21st century: "Nature for People, People for Nature" (2000).

Forestry support mechanisms

Under the 1962 Dutch Forest Act (and subsequent amendments) landowners are required to maintain their forests, principally by replanting after felling. Because of the limited economic viability of forestry, a Forestry Grant Scheme was introduced in

1966 in order to enable owners to fulfil these obligations. In the last decades, government policy documents such as the 1986 Long-term Forestry Plan and the 1994 Forest Policy Plan have emphasised the social benefits produced by forests. However, public financing of forestry has not been explicitly justified on the basis of the non-market benefits of forests.

Government financial support for forestry can be divided into direct incentives (grants, compensations, tax concessions) and indirect incentives (provision of services). Direct grants are available under several schemes run by the national and provincial authorities; a broad overview of the situation in 1992 is given in table 1. In subsequent years quite profound changes of the grant system have taken place which will be explained in more detail in the following chapters, especially chapter 4. Total expenditure for forest management grants to support private forest owners and municipalities over the years 1990-1999 amounted to 54 M Euro. In addition, 13 M Euro were spent on other grants for the same categories of owners, such as to promote co-operative structures in forestry and to mitigate the negative effects of acid deposition and lowering groundwater levels.

Table 1: funding structures for forestry and nature conservation in 1992

Ownership	Activity	Funding (% of costs)
State	Purchase, establishment, management	state 100%
National nature	purchase, establishment	state 50%; province 50%
conservation bodies		
"	management	state 30%
Provincial nature conservation bodies	purchase, establishment	state 50%, province 50%
"	management	state 27,5%, province 27,5%
Private owners	purchase forests/nature reserves	no funding
"	establishment of nature reserves	no funding
"	establishment and restocking of forests	state 75%
_ "	management of forests/nature reserves	state funding per ha (forest)

Fiscal incentives are also available under several schemes. Forestry and nature management revenues are exempt from income taxes and company tax.. Forest estates over 5 ha in size and fulfilling certain other conditions, such as high scenic value, can be exempted from property and capital tax and from a proportion of inheritance tax, provided that they are maintained in good condition for 25 years after a change of ownership. Furthermore, forest and nature areas owned by legal bodies can also be exempted from property tax. More details on these and other tax concessions will be provided in the following chapters. The total value of tax concessions is hard to estimate.

1.2 The institutional context

The multifunctional character of Dutch forestry is reflected in the diversity of actors or stakeholders being interested in one or more specific functions of forests. Three major categories can be distinguished who play distinct roles in policy formulation and implementation: forest owners, forest users and policymakers.

Forest ownership in the Netherlands is small-scale and diverse. Private persons and institutions own 41%, which is mostly very fragmented. More than 14.000 forest owners have less than 5 ha, 1321 own between 5 and 200 ha and only 41 private owners have more than 200 ha. In contrast the state owns 31% of the forest area in relatively large units, which are largely managed by the National Forest Service. Local authorities and other public bodies own 16% of mostly small woodlands, which are often regarded, as quite similar to private ownership from a forest management viewpoint. Finally a special and influential category of ownership is that of the non-governmental nature conservation bodies (national and provincial). They own 11% of the forest area and a considerable part of all nature reserves in the Netherlands. Formally these organisations are private associations or corporations, but their role and status have become quite similar to that of the National Forest Service (apart from financing). They have an impressive amount of members and supporters in Dutch society, which gives them more financial support and stronger political influence than other categories of forest ownership.

The forest owners, forestry trade enterprises and forestry labour organisations are officially represented in the Dutch Forestry Board ("Bosschap"). This is a non-governmental institution with specific public competencies, which officially represents the forestry sector towards the government and has regulatory powers within the sector.

Forest users have gained more influence over the last decades, especially in the public debate and policy making on forest management and nature conservation issues. Three major user groups can be distinguished according to the forest functions: the timber trade and wood industry, the outdoor recreation sector and the nature conservation and environmental groups. In addition, various utility companies such as water and electricity providers have become interested in the environmental functions of forests and may develop into a fourth user group.

Traditionally, the timber trade and wood industry are characterised by a multitude of relatively small companies, being only partly dependent on the Dutch forest area which provides for only 10% of total wood consumption. Consequently there has been no tradition of a strong and integrated forest-wood chain of enterprises as a coordination mechanism for the commercial sector.

The recreational sector is composed of several rather influential organisations, but most of them do not have formal links with the forest owners. The recreation function of forests is basically funded by government grants, not by private funding. The main organisation representing recreation interests to government and to landowners organisations is the so-called "ANWB", an association of motorists, cyclists, tourists and several other groups of outdoor activities.

The nature conservation and environmental sector is well organised and rather diverse. The membership of Dutch nature conservation organisations comprises more than 3 million people. Some of these organisations are mainly engaged in managing forests and nature reserves, but others act as lobby groups advocating biodiversity and environmental protection. Together these organisations have been quite influential in setting the public and political agenda.

Forest policymakers can be found mainly on national and provincial government level, as described in paragraph 1.1. In addition, some municipalities may also employ forestry officials, especially when they are in charge of a relatively large forest area. Forest policy used to be made by forestry professionals, especially when the National Forest Service was still authorised to deal with both forest management and forest policy matters (till 1988). Nowadays, forest policy has become largely integrated with nature conservation policy and countryside policy. This also resulted in policy makers being recruited from a much broader field of knowledge, including ecology but also economics, law, sociology and public administration.

1.3 The socio-economic context

Forestry in the Netherlands is only of minor economic importance. The contribution to the Dutch gross domestic product (GDP) was estimated at 36 M Euro in 1993 (which is less than 0,5% of the GDP for agriculture and fisheries). This is also due to the forest area being less than 10% of the total land area and because Dutch economy is mostly industry and services based. Employment in the forestry and wood-processing sector as a whole is relatively high, because large amounts of wood are being imported for processing. Relatively small contractor firms carry out most of the work in forest management and timber harvesting. In addition, the regional forestry groups (co-operatives) deliver practical services for their members. Their primary activities are the sale of timber, hiring and supervision of contractors and providing extension services. Membership amounts to more than 1000, mostly private but also public owners, covering 135.000 ha of forest and woodland.

The profitability of private forest firms larger than 50 ha is being monitored on a yearly basis from 1975 onwards (since 1992 including smaller firms of 5-50 ha). In the years 1986, 1990 and 1995 the larger firms managed to achieve some positive results, but over the whole range and for the smaller firms the financial results are consistently negative. In the last decade labour costs have considerably dropped, as did the revenues of timber sales (to a lesser extent). Other costs and revenues have increased. Subsidies continue to make up a substantial portion (40-50%) of the revenues. There have been considerable changes in the subsidy system over the years, which will be discussed in the following chapters, especially chapter 4.

2 Forestry and the tax system

2.1 Private forestry and taxes

Forest owners and owners of rural estates³ have to pay several taxes. In some of the tax legislation special facilities are made for the preservation of forests and rural estates. Most of those special facilities are applicable for the individual private forest owner. Others are applicable for the forest sector as a whole.

It is important to mention that only private forestry is taken into account here. Private forest owners can be divided in non-governmental nature conservation bodies (like for instance "Vereniging Natuurmonumenten") and other private owners. Special tax facilities for public forestry are not taken into account (except when regulations are applicable to the forest sector as a whole).

From a historical point of view, forestry and agriculture are tightly connected. This historical connection is one of the reasons why most of the tax legislation is applicable on agricultural land and enterprises as well as on forests and rural estates. Moreover, most of the tax legislation mentioned here is not restricted to forests but also applicable for other nature areas.

In this chapter a variety of tax regulations is described. The so-called Estates Act "Natuurschoonwet" plays a very important role in many forestry tax regulations. Therefore the Estates Act⁴ is generally described first.

2.1.1 Estates Act

The Estates Act ("Natuurschoonwet") pays attention to the nature and quality of the resource that it safeguards while the Forest Law ("Boswet") is mainly concerned with conservation of the forest area and its tree stock. The Estates Acts provides important tax incentives to landowners that undertake works to enhance the natural beauty of their estates and allow public access. The principal requirements for landowners to make benefit of the tax incentives of the Estates Act are:

- the estate should not have less than 30% woodland area;
- the total estate should not be less than 5 hectare;
- continuous management is applied.

When estates are freely accessible to the public there is a special regime which gives relief of certain taxes. Those and other taxes will be described below. Private forest owners play an important role in satisfying the demand for outdoor recreation in the countryside through the working of the Estates Act.

³ Forest owners and owners of rural estates will be jointly referred to as forest owners in this report (if a distinction between those two must be made it will be mentioned in the text).

⁴ The Estates act has been described in more detail earlier within the framework of the EFFE project. The article is included as appendix 4 of this country report.

2.1.2 Income tax

Income tax ("Inkomstenbelasting") is calculated over different sources of income. Two types of income are important for forest owners in relation to tax regulations:

- income from work and living;
- income from increment of property (wealth tax, "vermogensrendementsheffing")

Income from work and living

For forest owners the following regulations are of special importance in this respect⁵:

- forestry exemption ("Bosbouwvrijstelling");
- exemption for several forestry related grants.

Forestry exemption

No income tax is paid over profits from the forest enterprise. A basic assumption to be considered a forest enterprise is that the forest will be maintained for more than 15 years. The forestry exemption is aimed at maintaining and extension the forest area in the Netherlands. It provides some shelter for forest enterprises that are hardly profitable and prevents specific problems in valuing the standing stock as part of profit calculations. This regulation is seen as a good example of making the Dutch tax system more "green". The budgetary significance of the forestry exemption is estimated at 2 Million Euro per year. In comparison, the exemption for agriculture is estimated at 68 Million Euro.

When the profit consists of income from forests and other activities (for instance agriculture) the two 'types' of income must be separated and tax must be paid over the income from other activities. Using the forest exemption facility also means that a negative profit from the forest enterprise can not be discounted when calculating the profit of the (combined) enterprise.

Forest owners have an option not to use the forestry exemption regulation for a certain period (this is the so-called 'option regulation'). In that case negative profits from forest enterprises can be discounted from the total profit of the whole (combined) enterprise. Forest owners can only use the option regulation if the forest enterprise can generally be seen as a source of income for the forest owner.

Exemption for forestry related grants

No income tax is paid over (a certain percentage of⁶) income from several grants which are given to conserve forests and nature areas. The budgetary significance of this exemption is estimated at 4 Million Euro per year.

Income from increment of property

The forest owner does not have to pay property tax (wealth tax) for forests and nature reserves.

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⁵ Only those sources having special relevance or facilities for forest owners and owners of rural estates will be mentioned.

⁶ This percentage is 90% in 2002.

⁷ In some cases forest owners can get cheap loans for projects which are of great importance for the environment. This 'green' projects have to meet several requirements. The Green Fund, an organisation related to the government, provides the loans.

When a rural estate is registered under the Estates Act the owner does not have to pay property tax. An exception is made for the buildings on the estate.

2.1.3 Corporate tax

Forest enterprises, likewise as private forest owners, can use the facilities of the forestry exemption. However, those companies can not use the facilities for cheap loans as mentioned in footnote 4.

Forest enterprises that are registered under the Estates Act are, under certain conditions, exempted from corporate tax ("Vennootschapsbelasting"). Those enterprises are exempted from corporate tax when:

- the property of the enterprise consists of mainly (at least 70%) rural estates which are situated under the Estates Act;
- the activities of the enterprise consist of mainly (at least 70%) preservation of rural estates;
- other activities of the enterprise can not be seen as running a business. Public access to the rural estate is not a condition for exemption of corporate tax.

2.1.4 Dividend tax

Under certain circumstances the profits from an enterprise registered under the Estates Act are regarded as the profits from the individual stakeholders in the enterprise. The enterprise has no shares and owners of the enterprise are, fiscally, not seen as shareholders. Because there are no shares, dividend tax ("Dividendbelasting") is of no importance. The profits of the enterprise are of importance, though, for income tax regulations.

2.1.5 Transfer tax

In the Netherlands taxes have to be paid when becoming owner of immovable goods. An exemption is made for goods that are inherited. When goods are inherited then inheritance taxes have to be paid.

No transfer taxes ("Overdrachtsbelasting") have to be paid (under certain circumstances) when a transfer of agricultural (or forest) lands leads to a better agricultural (or forestry) structure of an estate.

When buying a rural estate that is registered under the Estates Act no transfer taxes have to be paid. In this case it is not important whether or not there is free public access to the rural estate. If the rural estate is, after being acquired, less than 25 years managed as required by the terms of the Estates Act, than transfer taxes still have to be paid. These exemptions apply to corporate bodies (nature conservation) as well as natural persons.

When bringing in immovable goods (for instance forestland) into a corporate body (under certain circumstances) no transfer tax has to be paid.

2.1.6 Capital tax

Capital tax ("Kapitaalsbelasting") has to be paid over shares that are brought together into a corporate body. When bringing in a rural estate which is registered under the Estates Act into a corporate body, no capital tax has to be paid. It is not important whether or not there is free public access to the rural estate. If the rural estate is, after being brought into the corporate body, less than 25 years managed as required by the terms of the Estates Act, than capital taxes still have to be paid.

2.1.7 Inheritance tax

A person who inherits or gets donated goods has to pay inheritance tax ("Recht van successie, schenking en overgang") over the rateable value. When a rural estate that is registered under the Estates Act with public access is inherited or donated, no inheritance tax has to be paid. When the same rural estate has no public access, inheritance tax has to be paid over part (50%) of the rateable value of the estate. The rateable value is estimated to be 80% of the economic (market) value, because of the restriction that the estate has to be maintained as such for at least 25 years.

Under certain circumstances, when a rural estate is inherited or donated that is not registered under the Estates Act, inheritance taxes can be avoided by bringing the estate under the Estates Act after it is hired or donated.

Inheritance taxes still have to be paid when, in a period of 25 years after inheritance or donation, the rural estate is not longer managed as required by the terms of the Estates Act, or if the estate is sold.

Corporate bodies have the same facilities when inheriting or getting donated a rural estate that is registered under the Estates Act.

2.1.8 Turnover taxes

In the Netherlands there are tree different rates for turnover tax ("Omzetbelasting; BTW", value added tax). A 19% rate, a lower 6% rate and a zero % rate. For most farmers and foresters goods and services the 6% turnover rate is applicable.

There are several exemptions from paying turnover taxes for farmers, forest owners and owners of rural estates. A very important one is the Agricultural regulation ("Landbouwregeling") for which the zero percent rate is applicable.

Rural estates that are registered under the Estates Act have the same facilities as mentioned above.

2.1.9 Taxes on immovable goods

When being the owner of immovable goods, taxes ("Onroerende zaakbelasting") have to be paid to the municipality in which the goods are situated. There are several exemptions from paying this tax for forest owners and owners of rural estates.

When a rural estate is registered under the Estates Act there are additional exemptions from paying this taxes (for the land base, not for buildings). Nature conservation bodies also are exempted from immovable good taxes for the land base of their nature reserves.

2.1.10 Water board tax

The water board tax ("Waterschapslasten") varies from board to board. All people who benefit from the facilities of the water board have to pay water board tax. The amount people have to pay differs from person to person (depending on several factors like for instance being the owner or the hirer of a house) and the local situation. Water board taxes also have to be paid for agricultural land and woodlands. Most water boards have lower tariffs for woodlands and nature areas. There are no special facilities for rural estates registered under the Estates Act.

2.1.11 Motor vehicle tax

Tractors and other special vehicles used in agriculture and forestry are exempted from motor vehicle tax ("Motorvoertuigenbelasting").

2.2 General conclusions on taxes

Various tax regulations have been described above, without detailed explanation. The Dutch tax system for forests enterprises, and especially for estates, is very complicated. When making decisions for estates, it is important to be informed in more detail and to take advice from tax experts.

In the Netherlands it is hard to estimate the budgetary significance of the tax regulations. At this moment research is carried out to get more insight in it, but no results are available yet.

Insight in budgetary significance of tax systems is only useful when comparisons can be made with tax systems for other sectors (for instance agriculture) or with other countries. The latter is only useful when countries within the comparison have more or less the same forestry situation.

The area of private individually owned forest has declined the last decades. One of the main reasons for this is that the costs of carrying on forestry, even with the tax relief and the grants offered (see the next chapter), are seen by many forest owners as too high.

3 Materials and methods

3.1 Data collection

The data collection framework that was developed by the EFFE project team guided the inventory and gathering of data for this research. Main features of this framework were the distinctions between private and public owners and between direct and indirect instruments. In addition, considerable attention should be paid to the instrument of taxation, including a qualitative description of the tax system for each country.

For the Netherlands, the collection of data proceeded in a practical way, using a step by step approach. This was necessary in view of the large amount of data and the limited availability that was expected for part of the data. The search of data was restricted to programs and schemes concerning the financing of forest property (forest management, reforestation, afforestation and forestland acquisition). As the study should cover the period 1990-1999, at first the available data for 1999 were compiled to get a global picture. Then data collection shifted to the earlier years, for which data were increasingly harder to get. Priority was given to the programs and schemes that were considered to be the most important (according to the total budget, the coverage of the target group and the priorities of policy). At a later stage, these programs were elaborated in more detail and completed with minor programs.

The data collection process worked out in the following three stages.

1 Orientation in literature

On the basis of earlier studies it soon became clear that many programs to support forestry were in operation in the nineties. This resulted in a broad picture of the scope and importance of these programs. Then the available sources of information for these programs were explored, for which three options appeared:

- a) through the government authorities that provide financial support;
- b) through the offices that implement or administer the support schemes;
- c) through the target groups that receive the support.

2 Data collection for the major programs

The larger part of the information was found at the national government. Especially the yearly budget for the Ministry of Agriculture, Nature management and Fisheries⁸ provided a lot of information, giving a good overview about the financing of private forestry. Information on the support mechanisms for the non-governmental nature conservation bodies, the national forest service and other public bodies needed additional research.

3 Elaboration into more detail

Data from the national budget were in several cases completed with information from "LASER", the government office in charge of the implementation of many support schemes on behalf of the Ministry of ANF. Thanks to the more detailed

⁸ Since 2003 this ministry is called Ministry for Agriculture, Nature and Food Quality

character of this information, it was possible to check and specify available data from other sources. In addition, much attention was given to directly approaching informants of the target groups in order to sort out confusing or inconsistent information and to fill the gaps in the data collection framework as far as possible. This was especially the case for more detailed information about the national forest service, several nature conservation bodies and some public bodies of the ministry of Finance and the Ministry of Defence. Provincial policy makers provided important information on regional forestry support schemes.

During all stages, additional information was gathered from many written sources like research reports, policy papers, articles and proceedings. This was necessary to gain a better understanding not only of the quantitative data, but especially about the policy context in which the information from this study should be used meaningfully.

3.2 Data analysis

The data in this country report and the underlying original database file "Database_Nldef.xls" have not been analysed in the sense of social and financial evaluation or cost-benefit analysis. The EFFE project team will undertake this kind of activities as far as the available data will allow. The data collected for the Netherlands have been checked for completeness, consistency and validity, as good as possible in view of the large amount of data, the multitude of sources and the complexity of the issues at hand. For this reason, a very detailed and comprehensive explanation has been compiled resulting in the accompanying word file "Explanation database_Nldef.doc". This explanation is essential to fully understand the scope and meaning of the data presented and will enable a valid interpretation of the results.

3.3 Limits of the study

This country report on the financing of forestry was limited to the situation in the Netherlands over the years 1990-1999. Data collection was restricted to the major support mechanisms concerning forest management, afforestation, reforestation and forestland acquisition. No attention was paid to additional supporting services like education, research and extension. Also not covered were accompanying measures such as genetic improvement, tree nurseries, crop protection, game management, public relations and fundraising, as far as these are not directly related to the forest management activities of the forest owners.

Other limitations of the study are directly linked to the availability of data. Information on names, budgets and beneficiaries of programs could be made available to a large extent. Information on general objectives, targets and results proved to be a lot harder to get. Data on private share, direct implementation costs and administrative costs were often not available or only for recent years. Finally, the most difficult to assess was the required information on the financial value of tax concessions, the private value and social value of output and a description of use and non-use values for each program. In view of the problems encountered in collecting the other data, these latter categories have remained unanswered in this report.

4 Presentation and preliminary analysis of the information collected

4.1 Private forestry sector

4.1.1 Forestry and landscape grant scheme

Formal Dutch title: "Regeling Bijdragen Bos- en Landschapsbouw 1991" (refer to database nr. 1 and 2) 9. The objective was to promote the maintenance of existing forests and woodlands (with respect to the production of timber, to outdoor recreation and nature conservation) as well as to promote establishment of new forests and to preserve landscape quality. In addition, social objectives are assumed to have been to support private forest ownership and to promote public access to forests. Additional ecological objectives would have been to promote proper forest management and to preserve the forest area by replanting after felling. The scheme consisted of two subdivisions: (A) a fixed yearly management grant per ha of forest for safeguarding and maintaining the forest area (on average 43 Euro per ha per year); (B) additional grants on request for specific measures such as replanting (1.900 Euro per ha), special forest maintenance and nutrient gifts. Beneficiaries were private forest owners, public bodies such as municipalities and until 1993 also the nongovernmental nature conservation bodies. Minimum area to qualify for the scheme was 5 ha. On average more than 3.000 forest owners and municipalities with a total forest area of 120.000 ha were supported each year. Total expenditure over the years 1990-1998 was 30,7 M Euro for the fixed grants and 16,7 M Euro for the additional grants (until 1995). Implementation costs for the total scheme are estimated at 3 M Euro. The scheme was gradually overtaken by other support mechanisms in the years from 1995.

4.1.2 Co-operative forest management grant scheme

Formal Dutch title: "Bijdrageregeling Beheer Samenwerking Bos 1993" (refer to database nr. 3) ¹⁰. The objective was to promote lasting co-operative structures between (mainly private) forest owners in order to improve forest management efficiency. The underlying social objective would have been to support private forest ownership. The scheme consisted of a fixed grant (nearly 5 Euro per ha per year) for forest property that was associated with a regional forestry group (co-operative). Minimum area to qualify for the scheme was 5 ha. Beneficiaries were mainly private forest owners and municipalities. In later years also some (units) of the non-governmental nature conservation bodies joined the forestry co-operatives. Now membership of the forestry groups amounts to more than 1.000 owners with 135.000 ha of forest and woodlands. Total expenditure over the years 1991-1999 under this scheme was

⁹ Boswet art. 11; Staatsblad 1961, nr. 256; Staatscourant 1990, nr. 226; 1991, nr. 90

¹⁰ Boswet art. 11; Staatsblad 1961, nr. 256; Staatscourant 1989, nr. 74; 1990, nr. 253; 1993, nr.143

3,4 M Euro. The scheme has been overtaken in 2000 by a new overall support mechanism.

4.1.3 Function endowment for forests and nature areas

Formal Dutch title: "Regeling Functiebeloning Bos- en naturaterreinen, onderdeel Bos" (refer to database nr. 5)¹¹. The objective was to promote the sustained maintenance of forests and nature areas, as well as to improve the functions that these areas fulfil for society. This refers to the functions nature conservation, outdoor recreation, timber production, landscape quality and environmental quality. In addition, the scheme aimed at providing public access to forest and nature areas. The scheme consisted of two subdivisions, of which only the subdivision regarding forests is discussed here. The conditions of the scheme were explicitly aimed to improve function fulfilment. It provided a basic grant per hectare and additional grants for valuable forest communities in designated areas, as will be explained below.

The function endowment scheme started in 1995 to replace the Forestry and landscape grant scheme (refer to 4.1.1) and was open for private owners and public bodies (mainly municipalities). As a consequence, the same social and ecological objectives are assumed to apply, with a stronger focus on the improvement of functions for society and on ecologically oriented forest management (e.g. integrated forest management, pro silva management).

Minimum area to qualify for the scheme was 5 ha. The traditional input oriented subsidies for reforestation and forest maintenance measures were abolished in favour of more or less output-oriented incentives. The fixed grant per ha ("basisbijdrage" = basic contribution) for private forests that are open to the public increased to 63,5 Euro per hectare. Forests of public bodies received only half of the regular subsidies, in view of the responsibilities and financial facilities that are considered to be intrinsic to public ownership. Forests that were not open to the public received only 25% of the basic grant ("bodembijdrage" = bottom contribution, only for private forests) or nothing at all (public forests). This reflects the major importance of the recreation function in Dutch forests. On top of this regular grant, a special grant ("toeslag" = bonus) of 18 Euro per ha was available for a limited number of specifically identified characteristic forest ecosystems (so called "A"-sites) in order to preserve these sites. This reflects the growing concern for biodiversity values. On average some 3.000 owners representing almost 120.000 ha were supported by the function endowment scheme each year. Total funding over the years 1995-1999 amounted to 23,4 M Euro, of which less than 16% was paid to public bodies. The scheme has been overtaken in 2000 by a new overall support mechanism.

4.1.4 Acquisition of land for nature areas

Formal Dutch title: "Regeling bijdrage particuliere natuurbeschermingsorganisaties, onderdeel verwerving natuurterreinen en reservaten" (refer to database nr. 6)¹². This is one of the grant

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¹¹ Boswet art. 11; Staatsblad 1961, nr. 256; Staatscourant 1994, nr. 163; 1995, nr. 81

¹² Staatscourant 1993, nr. 137; Nature Policy Plan "Natuurbeleidsplan", 1990

schemes for non-governmental nature conservation bodies. The objective of this subdivision of the acquisition scheme is to safeguard existing nature areas and designated reserves by subsidising the purchase of these lands for the major non-governmental nature conservation bodies. These are the national society for nature conservation ("Vereniging Natuurmonumenten") and 12 regional foundations for nature conservation (together known as "De Landschappen"). In addition, social objectives are assumed to have been to preserve landscape and cultural-historical values. Over the years, gradually more importance was given to aspects like human enjoyment, outdoor recreation and health effects related to nature. The underlying ecological objective, in addition to nature conservation and nature development, has been to realise the policy concept of the national ecological network ("Ecologische Hoofdstructuur").

The scheme consists of a 100% state subsidy for the purchase of designated land by the national society for nature conservation "Natuurmonumenten" or a 50% subsidy for the regional foundations (the provinces paying the other 50%, as has been formally agreed upon). The costs for buildings or other facilities connected to the territory have to be covered from the private funds of the nature conservation bodies; this private share is estimated at 10%. The total expenditure over the years 1990-1999 for this part of the scheme as far as forestland was concerned amounted to 76,8 M Euro. However, in this figure also the long-term financial liabilities of earlier acquisitions have been incorporated. So it should not be used to determine the net costs for the 1.703 ha of forestland that have been acquired over this period.

The full acquisition scheme (refer also to 4.1.5, 4.1.6 and 4.2.2) is an important instrument for realisation of the national ecological network which is a cornerstone of Dutch nature policy since 1990. The scheme has been internally evaluated in 1996.

4.1.5 Acquisition of land for nature development

Formal Dutch title: "Regeling bijdrage particuliere natuurbeschermingsorganisaties, onderdeel verwerving natuurontwikkeling" (refer to database nr. 7)¹³. This is one of the grant schemes for non-governmental nature conservation bodies. The objective of this subdivision of the acquisition scheme is to purchase agricultural land for nature development in order to add to the national ecological network. Refer to 4.1.4 for details on the financial arrangements. Over the years 1990-1999 an area of 5.879 ha has been acquired under this scheme by the nature conservation bodies. An unknown but very small part of this area may have developed into woodland. Therefore it has not been investigated for this study in more detail.

4.1.6 Land preparation for nature development

Formal Dutch title: "Regeling bijdrage particuliere natuurbeschermingsorganisaties, onderdeel inrichting natuurontwikkeling" (refer to database nr. 8)¹⁴. This is one of the grant schemes for non-governmental nature conservation bodies. The objective of this

¹³ Staatscourant 1993, nr. 137; Nature Policy Plan "Natuurbeleidsplan", 1990

¹⁴ Staatscourant 1993, nr. 137; Nature Policy Plan "Natuurbeleidsplan", 1990

subdivision of the acquisition scheme is to redevelop and prepare agricultural land purchased for nature development in order to add to the national ecological network. The financial arrangements for this subdivision may vary, according to the abiotic conditions and the ecological objectives for the area. Over the years 1990-1999 an area of 4.534 ha has been redeveloped under this scheme by the nature conservation bodies. An unknown but very small part of this area may have developed into woodland. Therefore it has not been investigated for this study in more detail.

4.1.7 Management of nature areas

Formal Dutch title: "Regeling bijdrage particuliere natuurbeschermingsorganisaties, onderdeel beheer" (refer to database nr. 9)15. This is one of the grant schemes for nongovernmental nature conservation bodies. The objective of this subdivision of the grant scheme was to safeguard mainly purchased nature areas (including forests and waters) by subsidising the management of these areas by the major nature conservation bodies. The underlying ecological objective was to safeguard and improve the functioning of the national ecological network. Total funding over the years 1990-1999 as far as forestland was concerned amounted to 28,8 M Euro, resulting in the management of on average 38.800 ha. The state subsidy per ha of forest varied over the years between 67 and 82 Euro for the national nature conservancy or half of this amount for the regional foundations (the provinces roughly paying the other half, showing somewhat variety). The private share for nature management costs is considered to be 70% for the national nature conservancy and 45% for the regional foundations. The state part of the nature management scheme has been overtaken in 2000 by a new overall support mechanism.

4.1.8 Set aside and afforestation of agricultural land

Formal Dutch title: "Regeling stimulering bosuitbreiding op landbouwgronden" (refer to database nr. 10)¹⁶. The objective of this grant scheme was to set aside (take out of agricultural production) 1200 ha of farm land each year and convert it into forestland (afforestation for a fixed period of 15-20 years or permanently). It was also an accompanying measure in the framework of the EU common agricultural policy. The scheme was designed to implement EU regulation 2080/92, aiming to set aside agricultural land and to diminish the shortage of forest products in the European Community. Beneficiaries can be farmers, other private persons, public bodies and nature conservation bodies. The scheme started in 1994 after an internal evaluation of a preceding ordinance. The financial support consists of a grant for afforestation and a compensation for loss of income. Total expenditure for the years 1994-1999 was 9,9 M Euro, of which 39% was granted for afforestation of 2.241 ha. The overall effectiveness of the various instruments promoting afforestation of agricultural land appears to be 33% (refer also to 4.1.9, 4.2.3, 4.3.3, 4.3.4 and 4.3.6, the other

¹⁵ Staatscourant 1993, nr. 137; Nature Policy Plan "Natuurbeleidsplan", 1990

¹⁶ Staatscourant 1993, nr. 224; Landbouwwet art. 15; PbEG L215

afforestation schemes). The scheme has been overtaken in 2000 by a new overall support mechanism.

4.1.9 Extension of forest area by public-private partnership

Formal Dutch title: "Regeling projectsubsidiëring bosuitbreiding Publiek Private Samenwerking (PPS)" (refer to database nr. 11)¹⁷. The objective of this grant scheme for projects was to realise an extension of the forest area by 3.000 ha in approximately 15 years. The scheme started in 1994 and is open for private persons and public bodies. Over the years 1994- 1999 a total expenditure of 2,5 M Euro has been applied to realise 543 ha of new forestland.

4.1.10 Private nature management

Formal Dutch title: "Tijdelijke regeling particulier natuurbeheer" (refer to database nr. 12)¹⁸. The objective of this temporary grant scheme was to promote the maintenance and sustained development of the forest and nature area in the Netherlands, partly in order to strengthen the outdoor recreation function. The scheme applied to the establishment of new forestland and nature reserves in designated areas and to the maintenance of all existing forest and nature areas. The underlying social and ecological objectives would have been comparable to programs 1 and 5 (refer to 4.1.1 and 4.1.3).

The scheme provided grants per hectare for forest/nature management, for the recreation function and for land preparation measures. The grants may vary according to the package of ecological objectives or recreation services that was aimed for and to the level of results that could be achieved in a specified period. It was a temporary scheme aimed at private forest owners in order to facilitate a pilot project for the introduction of a new overall support mechanism in 2000. Expenditure in 1999 was 135 k Euro.

4.1.11 Improving private forest and nature management

Formal Dutch title: "Besluit versterking natuur- en bosheheer bij bos- en landgoedeigenaren" (refer to database nr. 13)¹⁹. The objective of this decree was to increase the economic performance within the forestry sector and to improve forest quality. The underlying social and ecological objectives are assumed to have been to maintain private forest ownership, to promote co-operation, professionalism and ecologically oriented forest management (e.g. integrated forest management, pro silva management).

Grants were provided for the following aims: to improve the structure of forestry cooperatives; to establish several timber sales facilities; to improve consultation and education of owners; to develop a certification scheme; to improve ICT support; to

¹⁷ No legal reference found; Forest Policy Plan "Bosbeleidsplan" 1993

¹⁸ Staatscourant 1998, nr. 163

¹⁹ Staatscourant 1999, nr. 70

innovate products and services. It started in 1996 and was aimed at private forest owners and country estate owners by means of the forestry co-operatives (refer also to 4.1.2). The instruments used include project subsidies, other forestry subsidies and other expenses. Total expenditure over the years 1996-1999 was 2,1 M Euro.

4.2 Public forestry sector

4.2.1 Acquisition of land for nature areas

Formal Dutch title: "Rijksbijdrage ten behoeve van Staatsbosbeheer, onderdeel verwerving" (refer to database nr. 15)²⁰. The objective of this part of the government funding of the national forest service was to safeguard existing nature areas and designated reserves by subsidising the purchase of these lands for the national forest service "Staatsbosbeheer". There was no private share involved. The total expenditure over the years 1990-1999 for this part of the scheme as far as forestland was concerned amounted to 55,1 M Euro, resulting in the acquisition of 3.658 ha of forest and woodland. Refer also to 4.1.4 (program 6: acquisition for non-governmental nature conservation bodies) for more details on the underlying objectives.

4.2.2 Management of nature areas

Formal Dutch title: "Rijkshijdrage ten behoeve van Staatsbosbeheer, onderdeel beheer" (refer to database nr. 16)²¹. The objective of this part of the government funding of the national forest service was to safeguard nature areas and reserves by financing the management of these areas by the national forest service "Staatsbosbeheer". The total expenditure over the years 1990-1999 as far as forestland was concerned amounted to 176,1 M Euro, resulting in the management of on average 83.780 ha. Refer also to 4.1.7 (program 9: management grant for non-governmental nature conservation bodies).

4.2.3 Afforestation by the Ministry of Transport and Water management

Preliminary Dutch title: "Bosaanleg door het Ministerie van Verkeer en Waterstaat" (refer to database nr. 20)²². Not many details have been found for this scheme. The objective was afforestation and tree planting along roads, highways and waterways. An underlying social objective may have been to improve scenic quality. The total expenditure for the years 1990-1997 was 15,0 M Euro, resulting in 2.200 ha of new forest- and woodland.

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²⁰ No legal reference found; is part of government budget; compare to program nr. 5

²¹ No legal reference found; is part of government budget; compare to program nr. 8

²² No legal reference found; is part of government budget

4.3 Joint programmes for public and private owners

4.3.1 Mitigating measures in forests and nature areas

Formal Dutch title: "Regeling effectgerichte maatregelen in bossen en natuurterreinen" (refer to database nr. 4)²³. The objective of this grant scheme was to mitigate the detrimental effects of environmental hazards like acidification, eutrofication and groundwater depletion in forests and nature areas. The underlying ecological objective would have been to maintain and restore ecological communities in forests and nature areas. The scheme started in 1995 as part of the so-called 'Survival plan for Forests and Nature' and is open for all categories of forest owners. Mitigating measures include soil and foliage analysis and complementary mineral gifts to restore the nutrient balance, peat cutting in heath-lands and Pine forests, improving groundwater levels and several forestry measures to improve the vitality of the trees like structural thinning and urgent regeneration. Total expenditure over the years 1995-1999 for forest related support under this scheme was 6,9 M Euro, of which almost 64% was paid to private owners. The private share for beneficiaries varied from 10% (private owners) to 20% (municipalities).

4.3.2 National Parks and cross-border parks

Formal Dutch title: "Regeling subsidie nationale en grensoverschrijdende parken (i.o.)" (refer to database nr. 14)²⁴. The objective of this grant scheme was to establish a system of national parks and to facilitate its functioning as part of the national policy to safeguard a representative sample of large ecosystems in the Netherlands, in accordance with international obligations. In addition, social objectives have been to promote education, extension and research in and about national parks and to provide facilities for nature oriented recreation. Underlying social objectives would have been to improve public support for nature and political support for environmentally sound regional development. An additional ecological objective would have been to improve nature management in larger areas across ownership borders. The actual target is to establish a system of 17 national parks and one crossborder park by 2004. At the moment 14 parks have been established and 4 are in formation.

Direct beneficiaries of the scheme are all landowners within the borders of the park and some intermediary organisations. As far as forestland is concerned, the main beneficiaries are the national forest service "Staatsbosbeheer", the national society for nature conservation "Natuurmonumenten", most of the regional foundations for nature conservation, the private forest owners and public forest owning bodies. Indirect beneficiaries are the visitors of the parks and the regional population, enterprises and authorities. The share of forest and woodland within the parks varies widely. The structural funding from the state budget has to be considered as additional support to intensify nature management, to stimulate ecological and environmental education,

²³ Staatscourant 1995, nr. 246; 1996, nr. 243, nr. 250

²⁴ Staatscourant 1997, nr. 248; until 1998 this program was covered in the budget of the ministry without a separately documented formal scheme

to promote nature-oriented recreation and to encourage research and monitoring. Total expenditure for the years 1990-1999 as far as forestland was concerned amounted to 6,8 M Euro.

4.3.3 Acquisition and afforestation of agricultural land

Formal Dutch title: "Aankoop van landbouwgronden en bosaanleg in het kader van de Randstadgroenstructuur" (refer to database nr. 17)²⁵. The objective of this special scheme for the Randstad area was to purchase agricultural land for the establishment of forests, recreation and nature areas in order to improve the countryside quality in the "Randstad" urban area. An important underlying social objective was to provide more recreation areas for this heavily populated part of the Netherlands. Many of these areas will be transferred to and managed by the national forest service, but it is also possible to involve regional or local public bodies or private parties. The financial support consists of a grant for afforestation and a grant for the purchase of the land. The latter is essential because of the very high land prices in urban areas. If other parties than the national forest service are involved, this would typically require some arrangement for mixed financing. As this is not often the case, it has not been investigated for this study in more detail. Total expenditure from the state budget over the years 1990-1999 amounted to 50,9 M Euro, resulting in the afforestation of 1.370 ha. Refer also to 4.1.8, 4.1.9, 4.3.4 and 4.3.6 (afforestation schemes).

4.3.4 Redevelopment of the countryside with woodland

Formal Dutch title: "Landinrichting" (refer to database nr. 18)²⁶. The objective of this scheme under the Land Development Law was to improve the structure and functioning of the countryside, in accordance with the specific functions of the area. Underlying social objectives would have been to improve recreational facilities, landscape quality and living environment for the people in the region. Beneficiaries of the redevelopment activities can be farmers, forest owners, other private parties, nature conservation bodies, regional or local authorities or the national forest service. The financial support consists of a grant for establishment of trees and woodland and a grant for the purchase of the land. Total expenditure over the years 1990-1999 amounted to 63,7 M Euro, resulting in 2.608 ha of new woodland.

4.3.5 Management plans for nature reserves

Formal Dutch title: "Naturbeschermingswet" (refer to database nr. 19)²⁷. The objective of this scheme under the Nature Protection Law was to promote efficient and effective management of protected nature reserves. This would involve specific ecological objectives, depending on the characteristics of the designated area.

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²⁵ No legal reference found; is part of government budget

²⁶ Landinrichtingswet; no specific legal reference found; is part of government budget

²⁷ Natuurbeschermingswet, art. 14; Staatsblad 1967, nr. 72

Beneficiaries are mostly the non-governmental nature conservation bodies and the national forest service, but incidentally also private parties or public bodies may be involved. The financial support consists of a grant for the development of a proper management plan for each reserve. The total expenditure for the years 1990-1999 amounted to 2,3 M Euro, covering on average 83.217 ha of forest in 212 management plans.

4.3.6 Establishment of timber production plantations

Formal Dutch title: "Regeling bijdragen aanleg snelgroeiend bos" (refer to database nr. 21)²⁸. The objective of this scheme was to promote timber production in the Netherlands in the short term by providing an additional grant for the establishment of production plantations with fast growing species. The Ministry of Economic Affairs provided the grant for these high yield forests. The scheme was open for all categories of (future) forest owners. The total expenditure over the years 1990-1997 was 4,8 M Euro, covering 3.500 ha of plantations. Refer also to 4.1.8, 4.1.9, 4.2.3, 4.3.3 and 4.3.4 (afforestation schemes).

4.4 Provincial initiatives to support forestry

The first incentive for provinces to become more active players in the field of forest policy was the adoption of the Long-term Forestry Plan in 1986. Provinces were encouraged to develop regional forest plans in order to work out the national policy for their territory. Several provinces took up this challenge, especially the ones with relatively much forest in the region. However, there was no real devolution of power or instruments involved, so only a few provinces went as far as to make their own operational guidelines or regulations. The major achievements of this early period are explained below.

The second and more fundamental step towards devolution was marked by the socalled "Decentralisation Impulse" in 1996. This was a covenant between the national government and the twelve provinces about the devolution of staff, budget and powers for the implementation of several regulations in the field of forestry, nature conservation, landscape improvement and countryside development. This stimulated some provinces again to consider their role in forest policy and make arrangements for their territory. Also these later achievements are described per province.

4.4.1 Province of Overijssel

Overijssel was the first province to present a regional forest policy document in 1988. The main focus was on supporting and improving private forest management, which represents 62% of the forest area in the region. It was decided to appoint a full-time forestry official and provide budgets to stimulate and support private forest owners. The services that were provided for private forest owners concentrated on

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²⁸ Staatscourant 1988, nr. 207, 211

extension, education, consultation and demonstration facilities. Most initiatives were developed together with the regional forestry co-operative.

A joined initiative with the province of Gelderland was the production and distribution of a booklet on integrated forest management (a Dutch concept resembling pro silva and continuous cover forestry). Another initiative was the introduction of 'quality circles', aimed at improving forest management by sharing experiences and stimulating mutual learning among forest owners. Both initiatives were supported with a budget of 22.700 Euro each by the province of Overijssel.

A noteworthy strategy of the provincial authority was to develop a precursory and then supplementary arrangement to the national function endowment scheme (refer also to paragraph 4.1.3). This provincial scheme provided additional grants for integrated forest management, for the preservation of indigenous tree species, for trees with large diameters and for a quantity of dead wood. For these four categories a management grant of 22,7 Euro per ha per year was offered. It started with an experimental pilot of 150 ha. As this turned out to be successful, the scheme was extended with 400 ha and later again with 550 ha. Additional extension services and 'study circles' for integrated forest management supported the introduction of the preferred change in forest management. The regional forestry co-operative was closely involved in development, marketing and administration of the provincial function endowment scheme.

The total financial support until 1999 amounted to 477.700 Euro, of which 159.000 Euro was co-financed by the regional branch of the Ministry of Agriculture, Nature Management and Fisheries. It is estimated that the total regional support for forestry in Overijssel amounted to 0,75 M Euro, when also the salary costs for the forestry official and additional services are included.

4.4.2 Province of Gelderland

Gelderland was also one of the first provinces in developing a regional forest policy. It is the province with the largest forest area (96.000 ha), of which 38% is managed by private owners and 12% by municipalities. In 1989 a document on active provincial forest policy was presented and soon adopted by the provincial government. It concentrated on definite actions to support (private) forestry and the preservation of rural estates, but also to promote the social and ecological functions of forests.

In 1991 several existing support mechanisms were combined and extended into a major subsidy scheme for forest, nature and landscape. Total expenditure for this scheme was 2,27 M Euro per year. A relatively large portion of the budget was aimed at land acquisition and management of nature areas by non-governmental nature conservation bodies (co-financing by province, refer to paragraphs 4.1.4 to 4.1.7). Among many other target groups, almost 10% of the budget was available as subsidies for specific forest and nature management activities by private forest and estate owners. Typically 75% of the actual costs were refunded.

Another initiative originating from the policy document of 1989 was to establish a provincial advisory committee on forests and forestry. All major categories of forest owners and the regional forestry co-operative were represented in the committee, as

well as the Dutch Forestry Board, the timber trade and wood industry and the outdoor recreation sector. The committee proved to be rather influential in advising the provincial government on regional planning aspects and specific projects related to forestry.

A rather trend-setting forestry initiative of the provincial authority was the five-year project to promote and support the adoption of integrated forest management in Gelderland. The main objective was that at the end of the project in the year 2000, a considerable number of private forest owners and municipalities would have actively adopted the principles of integrated forest management. The target area was 12.500 ha (25% of this ownership category). In contrast to the province of Overijssel, no financial grants to forest owners were involved. Gelderland opted for a strong focus on extension, practical advice on management guidelines and demonstration facilities. The regional forestry co-operative was closely involved in the planning and implementation of the project, which was explicitly supported by monitoring and research activities. For example, eight of the demonstration objects in Gelderland took part in the national network of demonstration facilities on integrated forest management²⁹, which was administered and financed by the Information Centre on Nature Management of the Ministry of Agriculture, Nature management and Fisheries. In addition, research was carried out on several economic and managerial aspects of integrated forest management and on the change in perceptions and attitudes of the forest owners during the project. Finally, the public relations aspects of the project received due attention, by means of newsletters, brochures, reports and articles in journals and papers.

The total budget for the integrated forest management project is estimated to be at least 400.000 Euro, of which approximately 50% was co-financed by the regional branch of the Ministry of Agriculture, Nature Management and Fisheries. It is hard to estimate the total regional support for private forestry over the research period, but it may be well over 1,5 M Euro.

4.4.3 Province of Utrecht

Also the province of Utrecht presented a regional forest (policy) plan in 1988. Compared to Overijssel and Utrecht, this plan was more procedural in nature and had a strong focus on countryside planning aspects. The province of Utrecht was one of the first to support initiatives for regional forestry co-operatives, mainly to improve opportunities for the many small private owners. After 1990, attention shifted to nature conservation aspects like establishing a regional ecological network and preserving valuable nature areas (among which also forests and rural estates).

The provincial authority took modest initiatives for financial support of forestry (apart from co-financing national grant schemes). Some examples of forestry grants have been used, for instance to promote the conversion to nature-oriented forests or to support proper management of coppice and osier-thickets and better control of

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²⁹ Most provinces with a fair amount of forest within their territory take part in this national network with one or more demonstration objects. Extension supported by monitoring and research is the main objective. The regional forestry co-operatives are closely involved and play a major part in organising the extension activities (excursions, demonstrations, discussions).

Prunus serotina. For these purposes 13.500 Euro was available in 1999. Further information on budgets was not readily available.

4.4.4 Province of Brabant

The provincial authority of Brabant started to develop its nature policy in 1992, later followed by a regional forest policy (1998). This included a policy strategy and a five-year incentives framework for forests. Main feature was a grant scheme to promote integrated forest management, administered by the regional forestry co-operative (budget 204.000 Euro, target 2250 ha). Smaller budgets were available to stimulate co-operation of small owners (18.000 Euro), to improve marketing of forest products (22.700 Euro) and to promote learning and extension (27.200 Euro). Total regional support for forestry over the years 1998-1999 is estimated to be somewhat less than 100.000 Euro (not included the salary costs for the forest team at the provincial authority).

4.4.5 Province of Limburg

Before 1997, financial support for forestry in Limburg was only given on an ad hoc basis. The regional forestry co-operative received a starting subsidy of 45.400 Euro for 3 years and a pilot project for small owners was supported (later on a structural basis). Extension of the forest area was supported on a structural basis from 1997 onwards (60 ha per year). For this purpose a permanent function was established at the regional countryside office that turned out to be rather successful. In addition, specific grants are available for private forest owners to promote integrated forest management (22,7 Euro per ha; 2500 ha in 1999) and to preserve valuable forest sites (18 Euro per ha). Finally, the regional forestry co-operative is now supported on a structural basis by financing part of the salary costs of one off the staff-members. Total regional support for forestry in Limburg is hard to estimate.

4.4.6 Province of Drenthe

Forestry in the province of Drenthe is dominated by several large areas that are owned and managed by the national forest service. Still, there are some examples of support for private owners and municipalities. Grants are available to promote initiatives like afforestation and extension services (budget 22.700 Euro per year). In addition, much attention is paid to the establishment of rural estates including a portion of new woodland. For example, a specific initiative (240 ha) was supported with grants totalling 204.000 Euro from several schemes. Finally, the provincial authority is attentive to public relations for forestry and forest policy in Drenthe.

5 Results

5.1 Findings

The policy framework for forestry in the Netherlands involves three levels of government. The most specific regulatory powers and financial support mechanisms for forestry rest with the Ministry of Agriculture, Nature and Food Quality at national level. Provincial and local authorities have important additional powers in the field of town and country planning and environmental preconditions. Especially the provinces have gained more influence over the years and tend to get more actively involved in countryside matters like forestry and nature conservation. Most provinces with a fair amount of forest within their territory also provide financial support or advisory services for forest owners.

Dutch government has been rather ambitious in the field of forest policy planning over the last decades, resulting in a number of documents and support mechanisms. There has been an ongoing trend towards broadening of scope and integration with related policy fields such as nature conservation, outdoor recreation, environmental quality and countryside development. In addition, the social benefits of forests have been recognised more and more, although this was never explicitly documented as a valid argument for the public financing of forestry.

Nevertheless, it can not be denied that forestry in the Netherlands has a relatively important role in society, compared to the rather modest forest area and the limited economic significance. Population pressure is high and so is the price of land. As a consequence, there is strong competition for the use of land. Forest owners, forest users and policy makers each play their part in deciding which way forestry has to go. Forestry in the Netherlands is largely aimed at multiple functions, with a growing tendency towards the ecological and social functions. Forest ownership is small-scale and diverse, especially in the private sector. The nature conservation bodies, though having a private status, should be considered as a separate ownership category. In several respects they show much resemblance with the national forest service, which is the major landowner in the public forestry sector. At the same time, the municipalities and other small scale public bodies should be considered similar to private owners as far as forest management is concerned. These are some special features of Dutch forestry that should be taken into account when interpreting the findings of this study.

At first glance, the information collected on funding mechanisms for forestry in the Netherlands seems to be quite diverse and extensive. In order to get a more meaningful picture, some distinctions have to be made.

The first major distinction is between the following ownership categories: 1) private owners and municipalities; 2) non-governmental nature conservation bodies; 3) national forest service. In this study, twenty-one financial support schemes for forestry have been investigated (in addition to the relevant tax regulations and provincial initiatives). Of these schemes, eleven were aimed at the private forestry

sector (including municipalities and non-governmental nature conservation bodies), of which two were exclusively aimed at the nature conservation bodies. Three schemes were confined to the public forestry sector (mainly the national forest service) and six schemes were designed as joint programmes for public and private owners.

Another way of looking at the total field of government funding for forestry is by distinguishing between regular yearly management grants, specific project subsidies and investment funding for reforestation, land acquisition and afforestation.

In the following paragraphs, both ways of looking according to ownership category and type of funding are used to summarise the findings on the support mechanisms as described in chapter 4. Please refer to the project database and its explanation for more detailed information on programs and budgets.

For private forest owners (and municipalities), the main national government funding mechanism was the yearly financial support for regular forest maintenance (refer to database programs 1, 5 and 12), totalling 54,2 M Euro for the years 1990-1999 (the period investigated). These funds were used for the yearly maintenance of on average 122.500 ha of forest. The second major mechanism was funding for regular replanting after felling and for afforestation projects (programs 2, 10, 11 and 21), amounting to 32,3 M Euro. In addition, a mechanism of project funding was available for specific management measures (excluding replanting) and mitigating measures (programs 2 and 4), totalling 7,7 M Euro for private owners and municipalities. The amount of project funding for private owners regarding National Parks and management plans for nature reserves is considered to be negligible. Finally, an important mechanism was financial support for the improvement of forest management by means of the forestry co-operatives (programs 3 and 12), totalling 5,5 M Euro over the period investigated.

Table 5.1: national government funding mechanisms for private forest owners and municipalities 1990-1999

Program	Type of funding	Budget	Total budget
_		(x1000Euro)	(x1000Euro)
1 Forestry and landscape (fixed grants)	Regular grants	30.665	
5 Function endowment scheme	"	23.444	
12 Private nature management	"	135	
			54.244
2 Forestry and landscape (replanting)	Investment funding	15.056	
10 Set aside and afforestation	"	9.914	
11 Extension of forest area public/private	"	2.459	
21 Establishment of timber plantations	"	4.822	
			32.251
2 Forestry and landscape (other measures)	Project funding	1.626	
4 Grants for mitigating measures	"	6.048	
14 National Parks and cross border parks	"	p.m.	
19 Management plans for nature reserves	"	p.m.	
			7.674
3 Co-operative forest management	Grant/project funding	3.387	
13 Improving private forest management	Project funding	2.087	
			5.474

In addition to national support, also the major 'forest' provinces offered financial assistance to private owners and municipalities, mostly by way of grants or project funding. Although the picture is not complete, the total support by the six provinces as described in paragraph 4.4 is considered to be more than 2,8 M Euro. It should be noted that provincial support rarely is aimed at regular forest management. Instead, the provinces focus on directing the outputs of forest management (for instance by promoting integrated forest management or afforestation) or on improving the basic conditions for (private) forest owners (like by extension services or supporting the organisational structure of the forestry co-operatives). In this way, provincial support can be seen as complementary to national support, guided by the needs and aims that are felt to be the most important for that region. In the Netherlands data about grants private forest owners get are collected by Berger et al. From this data we can conclude that provincial grants for private forest owners on average amount to 5 Euro a hectare a year in the early nineties till 7 Euro a hectare a year in the late nineties. Provinces are also becoming more and more important in financing forestry.

For the special category of non-governmental nature conservation bodies, the government support for regular forest management amounted to 28,8 M Euro (program 9). These funds were used for the yearly maintenance of on average 38.801 ha of forest. In addition, 76,8 M Euro were received as support for forestland acquisition aimed at nature conservation (program 6). Finally, the nature conservation bodies were supported by funding for projects and specific management activities in National Parks (program 14) and management plans for nature reserves (program 19). The budget involved can be roughly estimated at 50% of the total budget for these programs, resulting in 4,5 M Euro. For the sake of completeness, also the forest and landscape grant scheme has to be mentioned (programs 1 and 2), because the nature conservation bodies were partly financed under this scheme in the years before 1993.

A special feature of these nature conservation bodies is that, according to the annual reports, a relatively large share of regular management activities is financed from private sources like membership fees, donations and legacies. This private share is estimated to be 61% (weighed average), amounting to 45,1 M Euro over the period investigated.

Table 5.2: government funding mechanisms for non-governmental nature conservation bodies 1990-1999

Program	Type of funding	Budget (x1000Euro)	Total budget (x1000Euro)
1 Forestry and landscape (fixed grants)	Regular grants	p.m.	
9 Management of nature areas	,,	28.848	
_			28.848
6 Acquisition of land for nature areas	Investment funding	76.812	
			76.812
2 Forestry and landscape (other measures)	Project funding	p.m.	
4 Grants for mitigating measures	,,	555	
			555
14 National Parks and cross border parks	Project funding	3.412	
19 Management plans for nature reserves	,,	1.137	
			4.549

In these figures, co-financing by the provinces for programs 6 and 9 has been included. In addition, most provinces have more or less close relations with 'their' regional nature conservation body, which may involve other examples of financial support. These have not been investigated in this research project.

The <u>national forest service</u> also received government funding for regular forest management (program 16), totalling 176,1 M Euro. These funds were used for the yearly maintenance of on average 83.780 ha of forest. In addition, 55,1 M Euro were provided as funding for forestland acquisition aimed at nature conservation (program 15). Finally, the national forest service also received its share of funding for National Parks and nature reserves (programs 14 and 19), roughly estimated at 4,5 M Euro.

Table 5.3: government funding mechanisms for the national; forest service 1990-1999

Program	Type of funding	Budget	Total budget
		(x1000Euro)	(x1000Euro)
16 Management of nature areas	Regular grants	176.127	
			176.127
15 Acquisition of land for nature areas	Investment funding	55.098	
•	O .		55.098
4 Grants for mitigating measures	"	255	
0 0			255
14 National Parks and cross border parks	Project funding	3.412	
19 Management plans for nature reserves	, ,	1.137	
	~		4.549

In addition to the support mechanisms for specific forest ownership categories, the Dutch government has been investing in several programs for afforestation, countryside development and tree planting (programs 17, 18 and 20). The resulting woodlands and plantations were mainly transferred to the ownership of the national forest service or one of the nature conservation bodies (small plots also to local or regional authorities). The total expenditure for these programs amounted to 129,6 M Euro over the period investigated.

Table 5.4 government funding mechanisms for mixed or unknown ownership 1990-1999

Program	Type of funding	Budget	Total budget
_		(x1000Euro)	(x1000Euro)
17 Acquisition & afforestation (Randstad)	Investment funding	50.903	
18 Redevelopment of the countryside	"	63.717	
20 Afforestation by Ministry of Transport	"	14.973	
			129,593

The amounts of money invested in land acquisition, afforestation and to a far lesser extent reforestation are rather high for all categories of ownership. This can be explained by a combination of high afforestation goals in the period 1990-1999 and very high prices of agricultural land that had to be bought and converted into forest land (especially in the densely populated 'Randstad' area). In the period 1990-1999 approximately 51% of all government funding was spent on forest area extension. The programs for afforestation had ambitious aims in hectares to be afforested. In

most cases those aims haven't been reached. Budgets associated with the afforestation programmes were restricting for reaching the aims.

Grant systems for forest maintenance in the period 1990-1999 have proved to be temporary. In the period taken into account two grant systems for forest maintenance (private forest owners) have been replaced by new ones (see paragraphs 4.1.1, 4.1.3 and 4.1.10). In 2000 the third one has also been replaced again by the so-called "Management Programme" (refer to the article in Annex 4). For private forest owners it is quite an effort to get proper insight into the conditions for applying for new grant systems.

In the early nineties, grant systems for private forest owners were (partly) based on financing forestry management measures (replanting, pruning etc.). This so-called input oriented system has changed during the nineties to a more output oriented system. In this output-oriented system, goals (output) are defined (in terms of type of forest in combination with recreation goals). The grant system no longer prescribes foresters how to reach these goals. Foresters are from now on responsible for reaching the goals. This system requires a good knowledge of forest management (for instance about forestry measures and the effects of measures on the forest ecosystems). The financial support for forestry co-operatives is aimed at improvement of forest management. Provincial grants in the nineties were also mainly aimed at improvement of forest management by private forest owners.

In the new grant system Management Programme ("Programma Beheer") the system of output oriented financing has been worked out further. Goals that have to be reached are described in more detail. At the same time there's more attention for transfer of knowledge to forest managers.

Forests fulfil multiple functions for society. In forest policy documents in the period 1990-2000 there has been a lot of attention for the multiple functions of forests. This multipurpose approach has not been worked out well yet in the financial instruments related to the forestry sector. In the new grant system Management Programme, first attempts are made to work this out. At this moment the Ministry of Agriculture, Nature and Food Quality prepares adjustments to the Management Programme which have to result in a system for financial support for so called 'green services' that nature managers provide for society.

In the Netherlands it is hard to estimate the budgetary significance of the tax regulations. In this report we described tax legislation mainly in a qualitative way. At this moment research is carried out to get more insight in quantitative aspects of tax legislation, but no results are available yet.

The area of private individually owned forest has declined the last decades. One of the main reasons for this is that the costs of carrying on forestry, even with the tax relief and the grants offered, are seen by many forest owners as too high.

During the period 1990-2000, forest policy and forest grant systems for extension of the forest area were mainly restricted to the national forest service and nature conservation bodies (apart from the special category of afforestation by farmers). Possibilities and financial support for forest extension by private forest owners (or private persons being no nature conservation bodies) were limited.

5.2 Conclusions

Forest policy in the Netherlands has been changing during the last decade and these changes will have consequences for the way we finance forest policy (forest management and forest area extension).

At first it should be noted that a process of devolution has been going on, resulting in a shift of authority from national to regional level. The provinces now have more executive powers in rural areas and play a more prominent role in regional policy formulation on countryside issues. In effect, a new balance of power is developing between the national and regional authorities, which requires new instruments for allocation, co-ordination and control of responsibilities. Transparency and accountability are among the new values guiding this process. This change will also have consequences for collecting data about financing of forests.

Secondly, a clear trend can be distinguished towards a more integrated approach to countryside policy making. Forest policy has become largely integrated with nature conservation policy and countryside policy. A good illustration of this trend is the new policy document for nature, forest and landscape in the 21st century "Nature for People, People for Nature" (MANF, 2000). As a consequence it will be more difficult to trace the finances for the separate policy fields in full detail. For instance, when a certain amount of money is allocated for countryside development, it is very difficult to define which part of the money will be used for forest management or forest extension.

Financial support mechanisms for forestry (or other fields of economic activity) are restricted by internationally agreed conditions and may be subject to approval by the European Commission. European economic policy is guided by several major principles: open competition, efficient allocation of resources, unity of the common market and compliance with international agreements. An important condition to prevent violation of the common market principles is that government support should imply an element of stimulation or should require some output in return from the beneficiary. This is also considered to mean that government support should contribute to development of the (economic) sector.

In the light of these principles and conditions, it can be concluded that most of the support mechanisms for forestry are explicitly aimed at stimulating specific objectives and/or require specific output in return. Not all programs as described in chapter 4 formulate such explicit objectives or outputs, but in these cases the rationale of the programs can be implicitly derived from policy documents or from the implementation practice. Therefore, the way in which forestry is supported in the Netherlands meets the requirements of the European Union.

A subject of discussion in assessing the support mechanisms may be to what extent the desired output can also be enforced by legislation or other policy instruments. From this point of view another subject of debate may be to what extent the funds for land acquisition with accompanying ownership transfer can be seen as an efficient allocation of resources for nature management. These issues have been in discussion among politicians, officials and individuals with a professional or personal interest, showing a lively involvement with the way forest and nature policy is evolving. As a result, the policy instruments and implementation practice are regularly reviewed and improved.

In this study, also the costs for implementation of grant schemes have been collected (annex 3; worksheet costs). It was not possible to get a complete overview of these costs. Several authorities make costs for implementation (including development of grant schemes and supervision), but data are usually not available for all the specific programs separately. Therefore no conclusions can be drawn from these data.

The importance of the social benefits of forestry and nature conservation continues to increase, as well as the involvement of a variety of public and private actors in policymaking. However, public financing of forestry has not been explicitly justified on the basis of the non-market benefits of forests yet. A new grant system, based on subsidies for so called 'green services', is under development at this moment.

Wood production is, on national level, not an important function of the Dutch forests. This is due to the small forest area (less than 10% of the total land area). Consequently there has been no tradition of a strong and integrated forest-wood chain of enterprises as a co-ordination mechanism for the commercial sector. However, the sale of timber is of importance for part of the individual forest managers.

Tax legislation is of major importance in the Dutch forestry sector. The tax system is complex and because of this it is hard to estimate the budgetary significance of tax regulations. Insight in budgetary significance of tax systems in forestry is only useful when comparisons can be made with tax systems for other sectors (for instance agriculture) or with tax systems in other countries. The latter is only useful when countries within the comparison have more or less the same forestry situation. Each comparison requires a thorough analysis of the institutional context and of specific aspects such as population pressure, competition for land use, productivity of land use and prices of land.

Annual grants per hectare for management of forests (mainly regular grants) for different types of ownership cannot be easily compared to each other. The grants for the National Forest Service, for instance, cover all management costs that the Forest Service makes. In contrast, private forest owners are only partly financed for forest management. The National Forest Service is not allowed to gain income from other sources for forest management while the nature conservation bodies are allowed or even stimulated to do so. For the National Forest Service, income from selling timber is deducted from the amount of money they yearly get while private forest owners and nature conservation bodies can invest income from the selling of timber and other products in their forest management.

The different types of owners also have different goals. For instance, part of funding for the National Forest Services has to be used for advisory tasks to the public. Private forest owners do not have such tasks.

5.3 Recommendations

Principles like transparency and accountability are becoming more and more important in financial instruments for forest and nature management, both on national and international level. Reliable data about financing of forests and nature, but also about ecological development in forest and nature areas are very important in this respect. The process of devolution, resulting in a shift of authority from national to regional level, will make monitoring of financing of forestry more complex. The more integrated approach to countryside policy that is now practised will have similar effects.

International nature policy, like for instance the European Bird and Habitat Directive, plays an increasingly important role in national forest and nature policy. At this moment these international nature policy directives are being worked out in legislation and decrees. It is evident that international nature policy will play an important role in national forest and nature management in the near future. More insight in the relationships between international nature policy and financial instruments to support forest management and forest extension is advisable.

The new grant system Management Programme offers additional financial opportunities for private persons (as compared to the non-governmental nature conservation bodies) for forest and nature area extension. Acquisition and redevelopment of agricultural land for forest and nature development (in order to add to the national ecological network) is no longer a privilege for the nature conservation bodies or the National Forest Service. It is important to provide private persons who have the intention to redevelop agricultural land into woodland with proper knowledge. The National Forest Service and the nature conservation bodies, having a lot of experience with redeveloping agricultural land into nature areas, can play an important role in the transfer of relevant knowledge to private owners.

In the Netherlands there is less insight in the effects of tax legislation on forest maintenance and forest extension. Tax legislation might be a good financial instrument to promote forest maintenance or afforestation. More insight in the effects of tax legislation on forestry and the budgetary significance of tax legislation is advisable.

At this moment, the grant system is based on the costs that forest managers make to manage the forests. In the Netherlands there is a discussion going on about this. Some experts think it is better to use the benefits that forests provide to society as a basis for grant systems. Meanwhile it is very difficult to value these benefits in economical terms. By the development of the above-mentioned system for 'green

services', this will also be taken into account. More research on valuation of benefits of forest and nature is desirable.

Forestry in the Netherlands has a relatively important role in society, compared to the rather modest forest area and the limited economic significance. As already mentioned before, a trend in which forest policy becomes part of a more integrated approach to countryside policy is clearly visible. Forest policy makers have to decide if insight in specific data about the forestry sector is still desirable in the near future.

In this study more insight is given in the financial support mechanisms (especially grant systems) for forestry in the Netherlands. Before making comparisons between types of ownership within a country or between countries it is necessary to have a better understanding of at least the cost structure and operational context for forestry. Without such detailed knowledge it is impossible to draw reliable conclusions on financial support for (economically) sustainable forest management.

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Appendix 1 Data collection framework

The data collection framework for the country-level reports that was developed by the EFFE project team is presented below in its most simple form. Main features of this framework were the distinctions between private and public owners and between direct and indirect instruments. In addition, special attention is paid to the instrument of taxation, including a qualitative description of the tax system for each country.

- Financial involvement aimed at private forest owners
 - o Direct instruments grants, compensations, tax concessions
 - Grants and compensations
 - Taxation related measures tax concessions
 - Description of relevant taxation system and available concessions
 - ♦ Concessions on direct taxes
 - ♦ Concessions on indirect taxes
 - o Indirect financial involvement by the government provision of extension services, management plans etc.
- Financial involvement linked to public forest property
 - o Type I Direct management of public forest land by the forest authority
 - o Type II Direct management of public forest land by public forest enterprise (in government budget structure)
 - O Type III Management of public forest land by separately established companies (independent of actual ownership of these companies)

For the qualitative part of the study, please refer to annex 2.

Appendix 2 Structure of qualitative questionnaires

The qualitative part of the country study for the Netherlands was based on interviews with representatives of the provinces that have a fair amount of forest within their territory. The interviews were prepared and completed with information from various written sources. The original structure for the interview questions is presented below. In practice, most forestry officials preferred to pick out the items that were most relevant to them and completed this with written documentation. In this way a more meaningful and detailed story arose than would have been possible with the original questionnaire.

- 1. How would you describe the situation for forestry in your province in the period 1990-1999? (Background, developments, context issues, policy framework)
- 2. Which provincial support mechanisms related to forestry were in operation during this period? (Aimed at private owners, municipalities, nature conservation bodies)
- 3. Did the provincial authority take special initiatives for forestry during this period? (For instance related to mitigating measures, management plans, afforestation and reforestation, countryside development, co-operation of small owners)
- 4. Please give specific details on the mechanisms and initiatives mentioned under answer 2 and 3. (Design of the regulation, objectives of program or project, available funds, implementation costs, output/results, evaluation; both quantitative and qualitative information is required)
- 5. Did the provincial authority participate in or contribute to the national Job Opportunities Scheme? (Way of participation, type and quantity of contribution)
- 6. To what extent did the provincial authority contribute to the acquisition of land for nature areas or nature development? (Area, land use and budgets involved)
- 7. What is your relation with or opinion on other actors that are involved in forestry in your province? (Private forest owners, regional forestry co-operative, municipalities, nature conservation bodies, other relevant actors)
- 8. Do you have any additional remarks or suggestions for other informants and/or written sources?

Appendix 3 Complete data sets

In the print version of the final report, the data sets that were gathered for this study will be incorporated. For this digital version, it was considered more convenient to refer to the original excel-file "Database_NLdef.xls" and the accompanying word-file "Explanation database_NLdef.doc".

Explanation of "Database_NL9.xls"

Click on worksheet of your choice in table of contents below to continue

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	Worksheet "Program"	Click here to return to: Contents			
1	The numbers in column B correspond with the list of 'management measures' below. This list of activities is taken from the "Sample Database" of the EFFE-project.				
	It should be noted that the attribution of activities to programs has been done in a global way.				
	 planning; nurseries; afforestation; supplies; reafforestation; stand improvement; infrastructure; conservation; recreation; 	 10) fire fighting, prevention; 11) marketing support (certification); 12) catastrophic events; 13) risk (support for insurance); 14) timber harvesting; 15) equipment; 16) road maintenance, construction; 17) extension services; 18) training. 			
2	Source: the source for the short description of most programs is the National Budget ("Rijksbegroting") of the Ministry of Agriculture, Nature Management and Fisheries (MANF); except for programs 15, 16 and 19, the description of these programs is derived from the denomination and from comparable regulations. With regard to program 18, information from the forest policy plan ("Bosbeleidsplan") has been used and the description of section 21 is taken from the information portfolio on the extension of woodland areas ("Informatiemap Bosuitbreiding") of the MANF information centre.				
	NB: It should be noted that the description of programs has been done in a global way. Please refer to the main text of the country report for more details. Translation of sources: <i>Staatsblad</i> = law gazette; <i>Staatscourant</i> = official newspaper; <i>Bosbeleidsplan</i> = forest policy plan; <i>Boswet</i> = forest law; <i>Landbouwwet</i> = law on agriculture; <i>Landinrichtingswet</i> = land development law; <i>Natuurbeleidsplan</i> = nature policy plan; <i>Natuurbeschermingswet</i> = nature protection				
3	law; <i>PbEG</i> = publication paper of the European Union. The categories of ownership distinguished in this text are: 1) private owners; 2) non-governmental nature conservation organisations; 3) public bodies; 4) national forest service & state domains.				
4	Where possible, the internal codes are the same as the section numbers of the national budget ("Rijksbegroting") of MANF.				
5	The non-governmental nature conservation bodies received grants under this scheme until 1993, when a separate scheme was introduced (program nr. 9)				
6	Source: forest policy plan ("Bosbeleidsplan").				
7	Source: information portfolio on the extension of woodland areas ("Informatiemap Bosuitbreiding") of the MANF information centre.				

	Worksheet "Beneficiaries"	Click here to return to: Contents		
1	If the term of a program starts or ends within the study period, it is indicated in this column. It is possible that payments are made even after expiry of a program. This is the so-called 'fading out' phase in order to comply with running obligations.			
2	In 1998, 1.568 private forest owners, with properties > 5 ha, as Board), owned 56.519 ha. This means an average area of 36 ha program "Regeling bijdragen bos- en landschapsbouw" (forestry and la dividing the total area, to which the program has been applied,	per owner. The number of applicants for the undscape grant scheme) has been estimated by		
	NB: Fluctuations in the number of beneficiaries over the years	may be caused by budgetary restrictions.		
3	The number of applicants in 1997 through 1999 of the categoriderived from the data of the Union of forestry co-operatives ("added each year by 14, in order to include the national forest se conservation bodies.	Unie van Bosgroepen"). This number has been		
	The number of applicants in 1995 and 1996 is estimated by usin 1997 through 1999 (this was € 3.857,- per applicant).	ng the average sum per applicant from the years		
4	The program "Regeling bijdrage particuliere natuurbeschermingsorganisaties" (grant scheme for non-governmental nature conservation bodies) exists since 1993. Until 1992 the various elements of this program were part of other funding programs.			
5	Annual reports of LASER (1997 through 1999) show that the average area involved in applications concerning this program is about 7 ha. With this information the number of applicants can be estimated.			
6	Source: Annual report LASER 1999. Concerns the estimate of	the number of accepted applications in 1999.		
7	The real number of beneficiaries cannot be determined and changes over the years. A very rough estimation might be calculated by means of the number of locations of forest extension, assuming an average of 58 ha per location. These 58 ha are the average surface of the afforestation projects yearly implemented or under implementation within the framework of the Randstad Green Belt Scheme, in the period 1990 through 1995 (Edelenbosch, 1996). This would result in an average number of beneficiaries of 2,4.			
8	The real number of beneficiaries cannot be determined and changes over the years. A very rough estimation might be calculated by means of the number of locations of forest extension, assuming an average of 40 ha per location. These 40 ha are the average surface of the afforestation projects yearly implemented or under implementation within the framework of "Landinrichting" (land development), in the period 1990 through 1995 (Edelenbosch, 1996). This would result in an average number of beneficiaries of 6,5.			
9	The real number of beneficiaries cannot be determined and changes over the years. As a rough estimation, the number of sites that register under the "Natuurbeschermingswet" (nature conservation law) could be used. This would result in a number varying from 40 till 70 (source: "Rijksbegroting").			
10	The real number of beneficiaries cannot be determined and changes over the years. As a rough estimation, the number of locations of forest extension could be used, on the basis of an average of 40 ha per location (see note 7 above). This would result in a number varying from 4,0 till 7,8.			
11	The real number of beneficiaries cannot be determined and chanumber of locations of forest extension could be used, on the loop point 5). This would result in an average number of 63.			

 1.2 In 1990 an incidental payment of € 4,34 per ha has been made, in connection with storm damage (in the qualifying areas) (source: "Rijksbagning" (national budget), Ministry of ANF). 3.1 Up to and including 1994 the program nr. 3 "Beheer Sumenwerking Bai" (co-operative forest management grant scheme) was part of program nr. 1 "Regeling hijdragen hose on landschapshoum" (forestry and landscape grant scheme). 3.2 Source: "Rijksbegroting" (national budget), Ministry of ANF. 4.1 Up to and including 1994 the program nr. 4 "Eifestgerichte Mautingelen" (grant scheme for mitigating measures) for private owners was part of the forestry and landcape grant scheme, subdivision B (program nr. 2) 4.2 Source: Union of forestry co-operatives ("Unie nun Bugnuppen"). The data from the "Rijksbegniting" (national budget) of the Ministry of ANF could not be used, because in the reports of 1996 through 1999 no distinction has been made between midpating measures for nature and forest areas. From 1997 through 1999 in the reports of the Union of forestry co-operatives, distinction has been made between private owners and municipalities. Therefore, the contribution to both groups for those years has been calculated separately. For 1995 and 1996 only collective figures are known. The separate contributions to private owners and municipalities in 1995 and 1996 have been estimated, using the average proportion of the contributions to each group during the period 1997 through 1999. 4.3 Source: "Staatsbasheker" (national forest service), contact person: mrs. Carlisa Nuis. 4.4 Concerning 1995, the total contribution for mitigating measures in forest areas to private owners, municipalities and the national forest service respectively is known through data from the Union of forestry co-operatives and the national forest service. The contribution to nature conservation bodies for the year 1995 has been calculated by reducing the total contribution (from the "Rijksbegniti		Worksheet "Funds"	Click here to return to: Contents		
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 Concerning 1995, the total contribution for mitigating measures in forest areas to private owners, municipalities, the national forest service and the non-governmental nature conservation bodies together was covered by the "Rijksbegroting" (national budget). The separate contributions under this scheme to private owners, municipalities and the national forest service respectively is known through data from the Union of forestry co-operatives and the national forest service. The contribution to nature conservation bodies for the year 1995 has been calculated by reducing the total contribution (from the "Rijksbegroting") by the contribution to private owners, municipalities and the national forest service. For the years 1996 through 1999 this calculation cannot be repeated, because the "Rijksbegroting" for these years makes no difference between nature and forest areas. In 1995 the contribution for forest areas to the nature conservation bodies amounted to 8,8% of the total contribution to private owners, municipalities and the national forest service together. Using this percentage, the contribution under this scheme to the nature conservation bodies for 1996 through 1999 has been calculated. 5.1 Source: "Rijksbegroting" (national budget), Ministry of ANF. 5.2 The amounts in this column refer to the totals of the basic contribution ("basisbijdrage"), the bottom contribution ("badembijdrage"), and the bonus ("toeslag") for opening up the forest to the public. 5.3 The amounts in this column refer to the totals of the basic contribution ("basisbijdrage"), and the bonus ("toeslag") for opening up the forest to the public. 5.4 From the "Rijksbegroting" (national budget) of the years 1995 and 1996 it is possible to extract the amounts that were paid separately to private owners and public bodies. From 1997 onward, only the total amount (paid to private owners and public bodies together) can be distinguished. The contribution to public bodies from 1997 through 1999 has been		From 1997 through 1999 in the reports of the Union of forestry co-operatives, distinction has been made between private owners and municipalities. Therefore, the contribution to both groups for those years has been calculated separately. For 1995 and 1996 only collective figures are known. The separate contributions to private owners and municipalities in 1995 and 1996 have been estimated, using the average proportion of the			
municipalities, the national forest service and the non-governmental nature conservation bodies together was covered by the "Rijksbegroting" (national budget). The separate contributions under this scheme to private owners, municipalities and the national forest service respectively is known through data from the Union of forestry co-operatives and the national forest service. The contribution to nature conservation bodies for the year 1995 has been calculated by reducing the total contribution (from the "Rijksbegroting") by the contribution to private owners, municipalities and the national forest service. For the years 1996 through 1999 this calculation cannot be repeated, because the "Rijksbegroting" for these years makes no difference between nature and forest areas. In 1995 the contribution for forest areas to the nature conservation bodies amounted to 8,8% of the total contribution to private owners, municipalities and the national forest service together. Using this percentage, the contribution under this scheme to the nature conservation bodies for 1996 through 1999 has been calculated. 5.1 Source: "Rijksbegroting" (national budget), Ministry of ANF. 5.2 The amounts in this column refer to the totals of the basic contribution ("basisbijdrage"), the bottom contribution ("badembijdrage"), and the bonus ("toeslag") for opening up the forest to the public. 5.3 The amounts in this column refer to the totals of the basic contribution ("basisbijdrage"), and the bonus ("toeslag") for opening up the forest to the public. 5.4 From the "Rijksbegroting" (national budget) of the years 1995 and 1996 it is possible to extract the amounts that were paid separately to private owners and public bodies. From 1997 onward, only the total amount (paid to private owners and public bodies together) can be distinguished. The contribution to public bodies from 1997 through 1999 has been estimated by calculating the ratio of private owners / public bodies in the years 1995 and 1996. The ratio between the contribution to priva	4.3	Source: "Staatsbosbeheer" (national forest service), contact person	n: mrs. Carlisa Nuis.		
 The amounts in this column refer to the totals of the basic contribution ("basisbijdrage"), the bottom contribution ("bodembijdrage"), and the bonus ("toeslag") for opening up the forest to the public. The amounts in this column refer to the totals of the basic contribution ("basisbijdrage"), and the bonus ("toeslag") for opening up the forest to the public. From the "Rijksbegroting" (national budget) of the years 1995 and 1996 it is possible to extract the amounts that were paid separately to private owners and public bodies. From 1997 onward, only the total amount (paid to private owners and public bodies together) can be distinguished. The contribution to public bodies from 1997 through 1999 has been estimated by calculating the ratio of private owners / public bodies in the years 1995 and 1996. The ratio between the contribution to private owners and to public bodies in 1995 and 1996 is 84,4: 15,6 on average. The non-governmental nature conservation bodies consist of the national society for nature conservation ("Vereniging Natuurmonumenten") and the twelve regional foundations for nature conservation (together known as "De Landschappen"). 	4.4	municipalities, the national forest service and the non-governmental nature conservation bodies together was covered by the "Rijksbegroting" (national budget). The separate contributions under this scheme to private owners, municipalities and the national forest service respectively is known through data from the Union of forestry co-operatives and the national forest service. The contribution to nature conservation bodies for the year 1995 has been calculated by reducing the total contribution (from the "Rijksbegroting") by the contribution to private owners, municipalities and the national forest service. For the years 1996 through 1999 this calculation cannot be repeated, because the "Rijksbegroting" for these years makes no difference between nature and forest areas. In 1995 the contribution for forest areas to the nature conservation bodies amounted to 8,8% of the total contribution to private owners, municipalities and the national forest service together. Using this percentage, the contribution under this scheme to the nature conservation bodies for 1996 through 1999 has			
 contribution ("bodembijdrage"), and the bonus ("toeslag") for opening up the forest to the public. The amounts in this column refer to the totals of the basic contribution ("basisbijdrage"), and the bonus ("toeslag") for opening up the forest to the public. From the "Rijksbegroting" (national budget) of the years 1995 and 1996 it is possible to extract the amounts that were paid separately to private owners and public bodies. From 1997 onward, only the total amount (paid to private owners and public bodies together) can be distinguished. The contribution to public bodies from 1997 through 1999 has been estimated by calculating the ratio of private owners / public bodies in the years 1995 and 1996. The ratio between the contribution to private owners and to public bodies in 1995 and 1996 is 84,4: 15,6 on average. The non-governmental nature conservation bodies consist of the national society for nature conservation ("Vereniging Natuurmonumenten") and the twelve regional foundations for nature conservation (together known as "De Landschappen"). 	5.1	Source: "Rijksbegroting" (national budget), Ministry of ANF.			
 ("toeslag") for opening up the forest to the public. 5.4 From the "Rijksbegroting" (national budget) of the years 1995 and 1996 it is possible to extract the amounts that were paid separately to private owners and public bodies. From 1997 onward, only the total amount (paid to private owners and public bodies together) can be distinguished. The contribution to public bodies from 1997 through 1999 has been estimated by calculating the ratio of private owners / public bodies in the years 1995 and 1996. The ratio between the contribution to private owners and to public bodies in 1995 and 1996 is 84,4: 15,6 on average. 6.1 The non-governmental nature conservation bodies consist of the national society for nature conservation ("Vereniging Natuurmonumenten") and the twelve regional foundations for nature conservation (together known as "De Landschappen"). 	5.2				
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("Vereniging Natuurmonumenten") and the twelve regional foundations for nature conservation (together known as "De Landschappen").	5.4	were paid separately to private owners and public bodies. From 1997 onward, only the total amount (paid to private owners and public bodies together) can be distinguished. The contribution to public bodies from 1997 through 1999 has been estimated by calculating the ratio of private owners / public bodies in the years 1995 and 1996. The ratio between the contribution to private owners and to public bodies in 1995 and 1996 is 84,4:			
6.2 Source: "Rijksbegroting" (national budget), Ministry of ANF.	6.1	("Vereniging Natuurmonumenten") and the twelve regional foundations for nature conservation (together known as "De			
	6.2	Source: "Rijksbegroting" (national budget), Ministry of ANF.			

	Worksheet "Funds"	Click here to return to: Contents		
6.3	The 1992 report "Naar een sluitende Groenfinanciering" (achieving a tallying budget for the green sector) of the "Commissie Financiering Natuurbeleid" (commission for the financing of nature policy) states that funds for acquisition for the non-governmental nature conservation bodies are provided for 50% by the State and for 50% by the Provinces. The expenditures of the provinces in this field are therefore equated with those of the State.			
6.4	The area development of the non-governmental nature conserunder forest and other natural vegetation has increased by about a third of the area extension of the non-governmental natural amount spent on the acquisition of forest areas has been estimated by the State and the provinces on land acquisition. This method and under other natural vegetation is the same. In fact this is not caution. Land prices vary not only with land use, but also with decisions. Therefore it was considered not feasible to work out	at 11.000 and 23.000 ha respectively. Thus about the conservation bodies concerns forests. The tated by taking a third of the total amount spent d assumes that the price for parcels under forest but the case, so these figures have to be used with time and region and as a consequence of policy		
7.1	Information from "Natuurmonumenten" and some "Landschappen nature conservation bodies have planted only several hectares of whether this limited plantation has taken place on the agricultur has nevertheless been included in the database to indicate its exa symbolic amount of 1 Euro has been attributed to it.	of forest each year. It is furthermore uncertain, ral parcels acquired in the 90's. The program		
7.2	Source: "Rijksbegroting" (national budget), Ministry of ANF.			
8.1	Source: "Rijksbegroting" (national budget), Ministry of ANF.			
8.2	Information of non-governmental nature conservation bodies shows that they planted only a few hectares of forest each year. The program has nevertheless been included in the database to indicate its existence. A symbolic expenditure of 1 Euro has been attributed to the scheme.			
9.1	Up to and including 1992 this program was part of the "Regeling bijdrage" (forestry and landscape grant scheme, subdivision A: fi			
9.2	Source: "Rijksbegroting" (national budget), Ministry of ANF.			
9.3	Source: Annual reports "Natuurmonumenten".			
9.4	The forest area of the twelve "Landschappen" has been calculated by reducing the total forest area of the non-governmental nature conservation bodies by the forest area of "Natuurmonumenten".			
9.5	Source: "Het Nederlandse bos in beeld" (Dutch forest into vision) be includes the joint forest area of "Natuurmonumenten" and the "Lin that year to 32% of the total area (forest and nature) of the nature forest area of the other years has been estimated by taking	andschappen" in 1999. This forest area amounted on-governmental nature conservation bodies.		

	Worksheet "Funds"	Click here to return to: Contents		
9.6	Concerning the management contribution of the State to the non-governmental nature conservation bodies, only the total yearly contribution is stated in the "Rijksbegroting" (national budget), for forest and nature areas together. The contribution per hectare of forest to the non-governmental nature conservation bodies has been calculated by using the method described in the work sheet 'Key' in 'Database_NL9.xls' on the basis of the direct management costs per type of terrain (from the Annual reports of "Natuurmonumenten").			
	The distributive code indicates the ratio between the management contribution to forest and to other natural vegetation as follows: forest / nature = $0.37 / 0.63$. With this ratio, using the following formula, the management contribution per hectare of forest can be calculated:			
	total contribution (forest + nature) = (forest area x contribution ha nature)	on/ha forest) + (nature area x contribution per		
	In this formula the ratio between contribution/ha forest and contrib	bution/ha nature is a constant 0,37 / 0,63.		
	Example for 1990: € 8.443.034.,- (total contribution (forest + 154,45 (contribution per ha forest) + 71.482 ha (nature area) * €			
9.7	In note 9.6 the average management contribution per ha of the conservation bodies has been calculated (i.e. for "Natuurmonum the "Landschappen" also receive management subsidies by the properties to "Natuurmonumenten" and the "Landschappen" is in this ratio into account, the average State contribution per ha (construction of "Natuurmonumenten" and the "Landschappen", the State contribution per ha (construction) and the "Landschappen", the State contribution per ha (construction) and the "Landschappen", the State contribution per ha (construction) and the "Landschappen", the State contribution per ha of the conservation bodies has been calculated (i.e. for "Natuurmonumenten" and the "Landschappen" and "Landschapp	enten" and the "Landschappen" together). Because rovinces, the ratio between the State tot 1:1, but it is 2:1. In column I and J, taking column H) and the forest area of		
9.8	This contribution of the provinces applies only to the "Landschappen". The report "Naar een sluitende Groensinanciering" of the "Commissie Financiering Natuurbeleid" (1992) shows that State contribution and the provincial contribution to the "Landschappen" is the same (50/50). The provincial contribution per ha to the "Landschappen" has therefore been equated to the State contribution per ha forest.			
10.1	Source: "Rijksbegroting" (national budget), Ministry of ANF.			
10.2	The 1999 data are derived from "LASER" (Ministry of ANF).			
11.1	Source: "Rijkshegroting" (national budget), Ministry of ANF.			
11.2	Part of this is also included in the so called Randstad Green Be	elt scheme ("Randstadgroenstructuur"), refer to 17.1.		
12.1	Source: "Rijksbegroting" (national budget), Ministry of ANF.			
13.1				
13.2	Source: "Rijksbegroting" (national budget), Ministry of ANF.			
14.1	Source: "Rijksbegroting" (national budget), Ministry of ANF.			
14.2	Source: various internet sites.			
14.3	Source 1999: "Kerndata 2000 Bos en Hout in Nederland" (core data 2000 forest and wood in The Netherlands) of the "Stichting Bos en Hout" (Forest and Wood Foundation). The forest area of the National Parks of other years has been calculated by using the average forest area per National Park in 1999. The average forest area per National Park in 1999 was about 1.613 ha.			
14.4	The total forest contribution per year has been determined on National Parks. For example 1990: 46% of € 1.361.341,- = € 62			
15.1				

Worksheet "Funds"		Click here to return to: Contents		
16.1	Of the years 1990 through 1997 the data referring to forest area of "Staatsbosbeheer" (national forest service) can be gathered from the Annual Reports. In the Annual Reports of 1998 and 1999 however, the forest area is not clearly stated. Assuming a forest area of 90.000 ha in 2002, the forest area of 1998 and 1999 has been estimated (source: Annual Reports "Staatsbosbeheer", internet site www.staatsbosbeheer.nl and "Rijksbegroting").			
16.2	This is the total area 'other nature' under management of "Staat which are owned but not managed by "Staatsbosbeheer", are not receive management subsidies for those). In 1998 and 1999 thi the total area nature terrain owned by "Staatsbosbeheer". This per qualifying for subsidies of the other years.	included (because "Staatsbosbeheer" does not s area is known and amounts to about 20% of		
16.3	Source: Annual Reports "Staatsbosbeheer" (national forest service through extrapolation, because data of 1990 could not be deter			
16.4	Contribution per ha forest has been calculated in the same way conservation bodies (refer to note 9.6). It should be noted that include contributions for several public services like outdoor refor disabled persons etc. and overhead costs for the forest serv costs and benefits between forest owner categories is a complication of the results from this study.	for the national forest service these figures ecreation, environmental education, accessibility ice organisation. Comparison of management		
17.1	The information concerning the area planted forest up to and including 1995 comes from "Ex-post-evaluatie van bosuitbreidingsbeleid in Nederland over de periode 1990-1995" (Ex-post-evaluation of forest extension policy in The Netherlands during the period 1990-1995) by N. H. Edelenbosch. This study shows that from the mid-eighties forest extension in the "Randstad" proceeds with more or less the same speed. Taking this as point of departure, the area of planted forest of the years 1996 through 1999 has been equated to the yearly average of the total planted area from 1990 through 1995.			
17.2	From 1990 through 1995, 822 ha of forest have been planted, (establishing national forestry areas) and 270 ha within the fran development projects). The contribution per ha has been based <i>Natuurbeleid</i> " (commission for the financing of nature policy), per ha forest plantation.	nework of "Landinrichtingsprojecten" (land d on the report of the "Commissie Financiering		
17.3	The land prices for 1996 and 1997 have been derived from "A (background of the nature balances 1998, P.J.W. Hinssen/ed.) in the provinces of Utrecht, Noord-Holland and Zuid-Holland office, a project bureau of the Ministry of Agriculture, Nature of the land prices of the other years, 1996 and 1997 have been Bureau voor de Statistiek" (central statistical office) show that from of agricultural land has on average stayed the same, for the Net the value of one hectare of agricultural land rose with a yearly a been taken as a basis for estimating, via the reference years 1990 agricultural land for the other years.	and refer to the prices paid for agricultural land by the "Dienst Landelijk Gebied" (countryside Management and Fisheries). For the calculation used as reference years. Data from the "Centraal in 1990 through 1995 the price for one hectare therlands as a whole. From 1995 through 1999 average of 15,8%. This price development has		
18.1	The information concerning the area of planted forest up to an van bosuithreidingsbeleid in Nederland over de periode 1990-1995" by I that from 1996 onwards the afforestation within the framework projects) has continued with the same speed.	N. H. Edelenbosch. We follow the assumption		
18.2	The contribution per ha has been based on the report of the "cassumes a state contribution of € 6.807,- per ha for afforestation			

	Worksheet "Funds"	Click here to return to: Contents		
18.3	The land prices for 1996 and 1997 have been derived from "Ad Hinssen/ed.) and refer to the average prices paid by the count provinces where land development has taken place. It has been afforestation within the framework of land development project example, Drenthe has a share of 30% of forest plantation, the ashare in the calculation of the average land price for the Nether the other years, 1996 and 1997 have been used as reference year that from 1990 through 1995 the price for one hectare of agricultural framework of the Netherlands as a whole. From 1995 through 1999 the value year with on average 15,8%. This price development has been to years 1996 and 1997, the price for one hectare of agricultural lands.	ryside office for agricultural land in the taken into account that in one province more ets has taken place, than in the other. If, for average land price in Drenthe is given a 30% rlands. For the calculation of the land prices of ers. Data from the national statistical office show ultural land has on average stayed the same, for e of one hectare of agricultural land rose every taken as a basis for estimating, via the reference		
19.1	Source: "Rijksbegroting" (national budget), Ministry of ANF.			
19.2	It is known for 1998 that at least 227.400 ha of the areas under act), are non-forest areas. These are: the Wadden Sea (205.000 "Oostvaardersplassen" (6.000 ha of lakes) (source: www.waddenzec nature areas are non-forest. For the other years, the share of fo (nature conservation act) has been estimated by taking 29% of	ha), various dune areas (16.400 ha) and the e.nl). This means that in 1998 at least 71% of rest falling under the " <i>Natuurbeschermingswet</i> "		
19.3	Source: "Rijksbegroting" (national budget), Ministry of ANF. Because the hectare-contribution of 1990 cannot be drawn from the "Rijksbegroting", for this year the hectare-contribution of 1991 has been used.			
19.4	This has been calculated by taking 29% (the provisionally estime "Natuurbeschermingswet" (nature conservation act) of the total experiments of the total experiments of the state of the st			
20.1	The information concerning the area of planted forest up to at van bosuitbreidingsbeleid in Nederland over de periode 1990-1995" by N the years 1996 and 1997 320 ha of forest plantations were plantagement. Since forest plantation up to and including 1995 targets for 1996 and 1997 have been reached. After 1997 no me Transport and water management.	N. H. Edelenbosch. This study shows that for ned by the Ministry of Transport and Water was ahead of schedule, we assume that the		
20.2	The cost price per ha has been equated to that of afforestation "Randstadgroenstructuur" and "Landinrichtingsprojecten" (ref the costs of land acquisition.			
21.1	This program was financed by the Ministry of Economic affair additional grant per ha for the use of fast growing timber species tablished should not be added to the total results of the scheme.	es. As a consequence, the amount of ha		
21.2	The number of hectares of (partly) financed plantations refers through 1997. The information about the total number of hect comes from "LASER" (Ministry of ANF).			

Worksheet "Public"		Click here to return to: Contents		
1	The state domain "Staatsdomein't Loo" (3.624 ha) is the only property of the department in charge of state domains, that lies within the research area of the EFFE-project (source: mrs. H. Pouwel of the state property department, Ministry of Finance.			
2	These are the cost for managing the state domain "Staatsdomein subsidies are received (source: mrs. H. Pouwel of the Ministry			
3	"Staatsdomein 't Loo" covers 3.624 ha. It is assumed that all of the stayed the same since 1990.	is area consists of forest and that the area has		
4	Source: mr. P. van Winden from the department of the Ministr management ("DWG&T").	ry of Defence that is in charge of property		
5	This refers to the yearly management costs paid to third parties (contractors and consultants). These amounts are excluding costs for own personnel. The department concerned ("DWG&T") was unable to calculate how many hours of their own personnel was spent on the management of the forests (source: mr. P. van Winden). According to him the Ministry of Defence does not receive any financial support from MANF.			
6	The "Naturrerkenning '97" (nature investigation 1997) shows the municipal areas of forest and nature for the year 1997. On the basis of the area development of municipal forests in The Netherlands (-1,0 % per year), the area of forest and nature of the other years has been estimated (see note 8).			
7	Source: "Naturverkenning '97". This source shows the total mumanagement for the years 1991 through 1995. The expenditure on these reference years. For 1996 through 1999 the amount of	es for the other years have been estimated based		
8	The forest area of the municipalities has been calculated as followsbown over 1998" (operating results of Dutch private forestry is and 1998 which part of the Dutch forests is municipal property 17,3% (1998). The area of municipal forests of, for example, 19 310.000 ha (estimated total forest area in the Netherlands). The years. For the years for which no data are given, the municipal /intrapolation.	n 1998) shows for the years 1991, 1993, 1995 y. The numbers vary from 18,6% (1991) to 991 has been estimated by taking 18,6% of ese 310.000 ha is also the basis for the other		
9	It should be noted that in this method of calculation the assumnature management and forest management are roughly the sar figures have to be used with caution. For lack of reliable data it better estimation.	me. In fact this will seldom be the case, so these		

	Worksheet "Share"	Click here to return to: Contents	
1	This is the total of all 'other measures' together.		
2	For municipalities and private owners applies an own contribut	ion of 20% and 10% respectively.	
3	3 "Natuurmonumenten" estimate that they have financed about 10% of the acquisitions over the past 10 year themselves (communication by mr. H. Siebel). The calculation of the 'own contribution' of non-governmental nature conservation bodies is based on the assumption that this is also the case for the "Landschappen".		
4	4 "Natuurmonumenten" and the "Landschappen" finance about 70% and 45% respectively of their area management themselves (source: "Commissie Financiering Natuurbeleid"). For the non-governmental nature conservation bodies this leaves a joint 'own contribution' to management of 61% (weighed average).		
For several programs it is not clear if a private share is required or to what extent; this is indicated by words 'no data'.		ired or to what extent; this is indicated by the	

	Worksheet "Costs"	Click here to return to: Contents	
1	These are hours spent by "LASER" on the implementation of programs or for surveillance have not been included in the availance reports of "LASER" for the years 1997 through 1999. I implementation costs are available, especially for the earlier years.	ilable figures. Sources (unless otherwise stated): For several programs no data on	
2	Calculation of the rate/hour in 1999: € 83.828,- (average costs per civil servant per year) / 1728 hours = € 22,-per hour (source: costs per civil servant: annual report "LASER" 1999 and 2001). For the years 1997 and 1998 the same rate has been applied.		
3	Concerns the total of forestry and landscape grant scheme, sub	divisions fixed grants and other measures.	
4	The data from 1990 through 1996 are derived from "Effectiviteit regeling Functiebeloning Bos en Natuurterrein" (effectivity of the function endowment scheme for forest and nature areas), which names the number of manyears, used by "LASER" for the implementation of the program. This is based on 1728 hours per man-year (see note 2).		
5	Total of the different parts of the grant scheme for non-governmental nature conservation bodies (programs 6-9).		
6	These hours have been spent for follow-up maintenance. For direct implementation costs no data were available.		
7	Source: "Achtergronddocument 3: Economische bestuurlijke evaluatie in natuurbeleid" (background document 3: economic administrative evaluation in nature policy) of the "Natuurverkenning '97". This document names total amounts, paid for forest and other nature together. Based on the area division between forest and other nature in the Netherlands, which amounts to 70: 30 (source: publication central statistical office; "De slag om de ruimte (the battle for land space)), the expenditures for forest are calculated (by taking 70% of the total amounts).		
	In the "Natuurverkenning" (nature investigation) only expenditures for the years 1991, 1993 and 1995 are included.		

Worksheet "Output"		Click here to return to: Contents		
1	This concerns the forestry and landscape grant scheme (subdivision A: fixed grants) and the function endowment scheme for forest and nature areas (subdivision forests).			
2	The decrease of the acreage in 1994 cannot be clearly explained (see also "Effectiviteit regeling Functiebeloning Bos en Natuurterreinen").			
3	Source: "Rijksbegroting" (national budget), Ministry of ANF.			
4	These numbers have been calculated by using the average production result per hectare of private forest for the years 1996 through 1998 (source: "Bedrijfsuitkomsten in de Nederlandse particuliere bosbouw over 1998" (production results in Dutch private forestry in 1998)). This shows that the average result per hectare (excluding subsidies) in these years was € 84,-, € 75-, and € 75,- respectively. The results for 1990 through 1995 and for 1999 are estimated based on these reference years as well as on the assumption of a decrease in the results from 1990 onwards of about 3% /ha/yr. This decrease has been calculated using data of the "Bedrijfsuitkomsten in de Nederlandse particuliere bosbouw over 1998". The result for 1999 has been equated to that for 1998.			
5	This refers to the following programs: other measures of the for operative forest management scheme (3), the decree to improve and the temporary private nature management grant scheme (1 measures in forest and nature areas (4) have not been included, for the Ministry of ANF, no difference has been made between areas.	e private forest and nature management (13) 2). Data for the grant scheme for mitigating because in the "Rijksbegroting" (national budget)		
6	Source: "Rijksbegroting" (national budget), Ministry of ANF. The "Rijksbegroting" shows the total area of forest and nature, acquired for non-governmental nature conservation bodies. The share of forest has been estimated by taking a third of this total. This is based on the fact that forests make up one third of the total area of the non-governmental nature conservation bodies.			
7	According to the "Meerjarenprogramma Natuur- en Landschapsbehon nature and landscape conservation 1988-1992) the targets for a estates for non-governmental nature conservation bodies amou Financiering Natuurbeleid", 1992). The target for forest acquisition amounts to 408 ha per year. This is based on the fact that forest non-governmental nature conservation bodies.	equisition of traditional nature areas, forests and ants to about 1.225 ha per year ("Commissie" has been put at one third of this, which		
8	This concerns only the State contribution to the non-governme 'achievement' we could use data from the "Rijksbegroting".	ental nature conservation bodies, so that for the		
9	In the "Rijksbegroting" the management contribution for non-go referring to forest and nature has not been budgeted separately "Funds", 22% of the total expenditures within the scope of for nature conservation bodies are destined for forest. To enable a actually paid amounts, in this column 22% of the total budgete	According to the calculations in worksheet rest and other nature of non-governmental comparison between the budgeted and the		
10	The composition of these revenues has been derived from the "Staatsbosbeheer" respectively (more detailed information is available the complex reality that lies behind these data and the assumption be used with great caution and should not be used for comparison.	able on request from the researchers). Due to ions that had to be made, these figures have to		
11	These are the programs: set aside and afforestation of agricultu private partnership (11), acquisition and afforestation of agricultured evelopment of the countryside with woodland (18), afforest management (20) and the grant scheme for the establishment of covered under the last program (21) has not been included because the area is already covered by one of the other schemes.	Itural land for the "Randstad" area (17), ation by the Ministry of Transport and Water of timber production plantations (21). The area		

	Worksheet "Output"	Click here to return to: Contents	
12	The "Bosbeleidsplan" (forest policy plan) states that the "Meerjarenplan Bosbouw" (long-range plan forestry) strives after afforestation of 18.000 ha, in the period 1986 to 1994. This is 2.250 ha per year. Late 1993 the "Commission Bosuitbreiding" (commission for forest extension) advised on possibilities for extra forest plantation from 1994 onwards. The advice comprised the possibility of planting at least 75.000 ha forest from 1994 onwards, during a period of 25 years. The advice has been taken over by the policy makers, bringing the forest extension target from 1994 onwards to 3.000 ha per year.		
13	The "Bijdrage Nationale Parken" (contribution for national parks) is based on the share of forest in the National Parks, which varies from 25% in 1998 to 46% in 1990 through 1993. The budgeted "Bijdrage Nationale Parken" for forest (from "Rijksbegroting") is calculated by using these percentages.		
14	According to the "Meerjarenprogramma Natuur- and Landschapsbehoud 1988-1992" the target for acquisition of traditional nature areas, forests and rural estates for "Staatsbosbeheer" (national forest service) amounts to about 500 ha per year ("Commissie Financiering Natuurbeleid", 1992). The forest extension target for "Staatsbosbeheer" has been calculated by taking 46% of the total extension target for the national forest service. These 46% is the average proportion of forest in relation to the total area of "Staatsbosbeheer" in the nineties.		
15	The budgeted contribution from the Nature protection law ("Naturrbeschermingswet") to forest has been estimated at 29% of the total budgeted contribution (source: national budget Ministry of ANF ("Rijksbegroting"). These 29% correspond with the forested part of all areas under the Nature protection law		

	Worksheet "Key"	Click here to return to: Contents	
Areas are derived from the annual reports of "Natuurmonumenten" (years 1991 through 1995 and 1997 through 1999). The distribution of forest in relation to other nature in the years 1990, 1996, 1998, and 1999 has been estimated based on the distribution of the other years. The total area forest and other nature in 1990, 1996, 1998, and 1999 refers to the real area (column D).			
2	2 Data are derived from annual reports of "Natuurmonumenten".		
The annual reports of 1998 and 1999 only show the total direct terrain management costs and not the division by terrain type, which had been the case before 1998. For calculating the values of the years 1998 and 1999, the numbers of the other years have been used.			

Code (num- ber)	Measure (number) (1)	Program Name (text) (2)	Short Program Description (text) (2)	Type of ow- nership (number) (3)	Law / Paragraph, Decree (text) (2)	Internal Code (text) (4)
		<u>for</u>	explanation of notes, please refer to "Explanation database_	NL9.doc"		
1	3, 5, 8, 9	Forestry and landscape grant scheme (subdivision A: fixed grants). (5)	To promote the maintenance of existing forests and woodlands (with respect to the production of timber, to outdoor recreation and nature conservation) as well as to promote establishment of new forests and to preserve landscape quality. Subdivision A concerns fixed yearly grants per hectare for safeguarding and manintaining the forest area.	1, 2, 3	Boswet art. 11; Staatsblad 1961, nr. 256; Staatscourant 1990, nr. 226; 1991, nr. 90	04.04.01a
2	3, 5, 8, 9	Forestry and landscape grant scheme (subdivision B: other measures). (5)	To promote the maintenance of existing forests and woodlands (with respect to the production of timber, to outdoor recreation and nature conservation) as well as to promote establishment of new forests and to preserve landscape quality. Subdivision B concerns grants on request for specific measures, mainly reforestation and special maintenance.	1, 2, 3	Boswet art. 11; Staatsblad 1961, nr. 256; Staatscourant 1990, nr. 226; 1991, nr. 90	04.04.01a
3	11	Co-operative forest management grant scheme.	To promote lasting co-operative structures between (mainly private) forest owners in order to improve forest management efficiency.	1, (2), 3	Boswet art. 11; Staatsblad 1961, nr. 256; Staatscourant 1989, nr. 74; 1990, nr. 253; 1993, nr.143	04.04.01b
4	6	Grant scheme for mitigating measures in forests and nature areas.	To mitigate the detrimental effects of environmental hazards like acidification, eutrophication and groundwater depletion in forests and nature areas.	1, 2, 3, 4	Staatscourant 1995, nr. 246; 1996, nr. 243, nr. 250	13.04.06

Code (num- ber)	Measure (number) (1)	Program Name (text) (2)	Short Program Description (text) (2)	Type of ow- nership (number) (3)	Law / Paragraph, Decree (text) (2)	Internal Code (text) (4)
		<u>for (</u>	explanation of notes, please refer to "Explanation database_N	NL9.doc"		
5	8, 9	Function endowment scheme for forests and nature areas, subdivision forests.	To promote the sustained maintenance of forests and nature areas, as well as to improve the functions that these areas fulfil for society. This refers to the functions nature conservation, outdoor recreation, timber production, landscape quality and environmental quality. In addition, the scheme aims at providing public access to forest and nature areas. The conditions of the scheme are ecplicitly aimed to improve function fulfilment. It provides a basic grant per hectare and additional grants for valuable forest communities in designated areas.	1, 3	Boswet art. 11; Staatsblad 1961, nr. 256; Staatscourant 1994, nr. 163; 1995, nr. 81	13.04.03a
6	8	Acquisition of land for nature areas (subdivion of the grant scheme for non-governmental nature conservation bodies).	To safeguard existing nature areas and designated reserves by subsidising the purchase of these lands for the major non-governmental nature conservation bodies. These are the national society for nature conservation "Natuurmonumenten" and 12 regional foundations for nature conservation "De Landschappen".	2	Staatscourant 1993, nr. 137; Nature Policy Plan "Natuurbeleidsplan", 1990	13.02.04
7	8	Acquisition of land for nature development (subdivision of the grant scheme for non-governmental nature conservation bodies).	To purchase agricultural land for nature development in order to add to the national ecological network.	2	Staatscourant 1993, nr. 137; Nature Policy Plan "Natuurbeleidsplan", 1990	13.02.05
8	3	Land preparation for nature development (subdivision of the grant scheme for non-governmental nature conservation bodies).	To redevelop and prepare agricultural land purchased for nature development in order to add to the national ecological network.	2	Staatscourant 1993, nr. 137; Nature Policy Plan "Natuurbeleidsplan", 1990	13.03.05

Code (num- ber)	Measure (number) (1)	Program Name (text) (2)	Short Program Description (text) (2)	Type of ow- nership (number) (3)	Law / Paragraph, Decree (text) (2)	Internal Code (text) (4)
		for e	explanation of notes, please refer to "Explanation database_N	NL9.doc"		
9	8, 9	Management of nature areas (subdivision of the grant scheme for non-governmental nature conservation bodies).	To safeguard mainly purchased nature areas (including forests and waters) by subsidising the management of these areas by the major nature conservation bodies.	2	Staatscourant 1993, nr. 137; Nature Policy Plan "Natuurbeleidsplan", 1990	13.04.04a
10	3	Set aside and afforestation of agricultural land (grant scheme).	To set aside (take out of agricultural production) 1200 ha of farm land each year and convert it into forest land (afforestation for a fixed period of 15-20 years or permanently). It is also an accompanying measure in the framework of the EU common agricultural policy. The scheme is designed to implement EU regulation 2080/92, aiming to set aside agricultural land and to diminish the shortage of forest products in the European Community.	1, 2, 3, 4	Staatscourant 1993, nr. 224; Landbouwwet art. 15; PbEG L215	13.03.06a
11	3	Extension of forest area by public-private partnership (grant scheme for projects).	To realise an extension of the forest area by 3.000 ha in approximately 15 years.	(1), 3	No legal reference found; Forest Policy Plan "Bosbeleidsplan" 1993	13.03.06b

Code (num- ber)	Measure (number) (1)	Program Name (text) (2)	Short Program Description (text) (2)	Type of ow- nership (number) (3)	Law / Paragraph, Decree (text) (2)	Internal Code (text) (4)
12	3, 5, 8, 9	Private nature management (temporary grant scheme).	explanation of notes, please refer to "Explanation database." To promote the maintenance and sustained development of the forest and nature area in the Netherlands, partly in order to strengthen the outdoor recreation function. The scheme applies to the establishment of new forest land and nature reserves in designated areas and to the maintenance of all existing forest and nature areas. The scheme provides grants per hectare for forest/nature management, for the recreation function and for land preparation measures. The grants vary according to the package of ecological objectives or recreation services that is aimed for and to the level of results that is achieved in a specified period. It was a temporary scheme aimed at private forest owners in order to facilitate a pilot project for the introduction of a new overall support mechanism in 2000.		Staatscourant 1998, nr. 163	13.04.04b
13	1, 6	Improving private forest and nature management (decree)	To increase the economic performance within the forestry sector and to improve forest quality. Grants are provided for the following aims: to improve the structure of forestry co-operatives; to establish several timber sales facilities; to improve consultation and education of owners; to develop a certification scheme; to improve ICT support; to innovate products and services.	1, (2), 3	Staatscourant 1999, nr. 70	13.05.02
14	1, 8, 9	National parks and cross- border parks (grant scheme).	To establish a system of national parks and to facilitate its functioning as part of the national policy to safeguard a representative sample of large ecosystems in the Netherlands, in accordance with international obligations. The actual target is to establish a system of 17 national parks and 1 cross-border park by 2004.	1, 2, 3, 4	Staatscourant 1997, nr. 248; until 1998 this program was covered in the budget of the ministry without a separately documented formal scheme	13.04.07

Code (num- ber)	Measure (number) (1)	Program Name (text) (2)	Short Program Description (text) (2)	Type of ow- nership (number) (3)	Law / Paragraph, Decree (text) (2)	Internal Code (text) (4)
		<u>for</u>	explanation of notes, please refer to "Explanation database_N	NL9.doc"		
15	8	Acquisition of land for nature areas (part of the government funding of the national forest service).	To safeguard existing nature areas and designated reserves by subsidising the purchase of these lands for the national forest service "Staatsbosbeheer".	4	No legal reference found; is part of government budget; compare to program nr. 5	
16	8, 9	Management of nature areas (part of the government funding of the national forest service).	To safeguard nature areas and reserves by financing the management of these areas by the national forest service "Staatsbosbeheer".	4	No legal reference found; is part of government budget; compare to program nr. 8	
17	3, 9	Acquisition and afforestation of agricultural land (special scheme for the Randstad area).	To purchase agricultural land for the establishment of forests, recreation and nature areas in order to improve the countryside quality in the "Randstad" urban area.	(1), 2, (3), 4	No legal reference found; is part of government budget	
18		Redevelopment of the countryside with woodland (scheme under the Land development law)	To improve the structure and functioning of the countryside, in accordance with the specific functions of the area. (6)	(1), 2, (3), 4	Landinrichtingswet; no specific legal reference found; is part of government budget	
19	1, 8	Management plans for nature reserves (scheme under the Nature protection law)	To promote efficient and effective management of protected nature reserves.	(1), 2, 4	Natuurbeschermingswet, art. 14; Staatsblad 1967, nr. 72	13.04.04c
20		Afforestation by the Ministry of Transport and Water management.	Afforestation and tree planting along roads, highways and waterways.	3, 4	No legal reference found; is part of government budget	
21	3	Establishment of timber production plantations.	To promote timber production in the Netherlands for the short term by providing an additional grant for the establishment of production plantation with fast growing species. (7)	1, 3	Staatscourant 1988, nr. 207, 211	

	Worksheet Beneficiaries									
Code (num)	Years (num)	Number of Beneficiaries (number)	Characteristics of beneficiaries / public owner (text)							
	<u>for</u>	explanation of r	notes, please refer to "Explanation database_NL9.doc"							
_	_	_								
1		Forestry ar	nd landscape grant scheme (subdivision A: fixed grants)							
(1)		(2)								
	1990	3,361	Private forest owners, non-governmental nature conservation							
	1991	3,361	bodies (until 1993) and public bodies							
	1992	3,361								
	1993	3,361								
end	1994	3,139								
	1995	1,250								
	1996	902								
	1997	875								
	1998	46								
	1999									
2		Forestry and	landscape grant scheme (subdivision B: other measures)							
		no data found	Private forest owners, non-governmental nature conservation bodies (until 1993) and public bodies							
3		C	Co-operative forest management grant scheme							
	1990									
start	1991	1,361	Private forest owners, non-governmental nature conservation							
	1992	1,444	bodies and public bodies							
	1993	2,222								
	1994	2,778								
	1995	1,667								
	1996	3,278								
	1997	2,518								
	1998	3,017								
	1999	2,451								
4		Grant sche	eme for mitigating measures in forests and nature areas							
		(3)								
	1990	-								
	1991									
	1992									
	1993									
	1994									
start	1995	314	Private forest owners, non-governmental nature conservation							
	1996	696	bodies, public bodies, national forest service							
	1997	257								
	1998	265								
	1999	246								
		<u> </u>								
5	F	-unction endowi	ment scheme for forests and nature areas, subdivision forests							

			Worksheet Beneficiaries
Code (num)	Years (num)	Number of Beneficiaries (number)	Characteristics of beneficiaries / public owner (text)
	<u>for</u>	explanation of r	notes, please refer to "Explanation database_NL9.doc"
		(2)	
	1990		
	1991		
	1992		
	1993		
start	1994	-	Private forest owners and public bodies
	1995	2,225	
	1996	2,496	
	1997	3,040	
	1998	3,209	
end	1999	2,191	
6-9	Gı	rant scheme for	non-governmental nature conservation bodies, all subdivisions
(4)			
	1990		
	1991		
	1992		
start	1993	13	National society for nature conservation and 12 regional
	1994	13	foundations for nature conservation
	1995	13	
	1996	13	
	1997	13	
	1998	13	
	1999	13	
10		Set asid	e and afforestation of agricultural land (grant scheme)
		(5)	
	1990		
	1991		
	1992		
start	1993	-	Farmers, private land owners, non-governmental nature
	1994	47	conservation bodies, public bodies
	1995	133	
	1996	70	
	1997	37	
	1998	14	
end	1999	20	
11	Ex	ktension of fores	t area by public-private partnership (grant scheme for projects)
	1990		
	1991		
	1992		
	1993		
start	1994	no data	Private land owners and public bodies
	1995		

			Worksheet Beneficiaries
Code (num)	Years (num)	Number of Beneficiaries (number)	Characteristics of beneficiaries / public owner (text)
	for	explanation of r	notes, please refer to "Explanation database_NL9.doc"
	1996		
	1997		
	1998		
	1999		
12			ate nature management (temporary grant scheme)
		(6)	
	1990		
	1991		
	1992		
	1993		
	1994		
	1995		
	1996		
	1997		
start	1998	-	Private forest owners
end	1999	10	
13		Improv	ving private forest and nature management (decree)
	1990		
	1991		
	1992		
	1993		
	1994		
	1995		
start	1996	no data	Union of forestry co-operatives
	1997		
	1998		
	1999		
14	1		onal parks and cross-border parks (grant scheme)
	1990	variable	National park consultative body and (indirectly) the landowners
	1991		within the park (mainly non-governmental nature conservation bodies, the national forest service and some private owners)
	1992		bodies, the national lorest service and some private owners)
	1993		
	1994		
	1995		
	1996		
	1997		
	1998		
	1999		
15, 16	l	ı	funding of the National Forest Service, both subdivisions
	1990	1	National forest service
	1991	1	

			Worksheet Beneficiaries
Code (num)	Years (num)	Number of Beneficiaries (number)	Characteristics of beneficiaries / public owner (text)
		explanation of r	notes, please refer to "Explanation database_NL9.doc"
	1992	1	
	1993	1	
	1994	1	
	1995	1	
	1996	1	
	1997	1	
	1998	1	
	1999	1	
17	Acqui		estation of agricultural land (special scheme for the Randstad area)
	1	(7)	
	1990	variable	National forest service, municipalities, other public bodies, private
	1991		parties
	1992		
	1993		
	1994		
	1995		
	1996		
	1997		
	1998		
	1999		
	1000		
18			e countryside with woodland (scheme under the Land development law)
18		(8)	
18	Rede		law)
18	Rede	(8)	law)
18	1990 1991	(8)	law)
18	1990 1991 1992	(8)	law)
18	1990 1991 1992 1993	(8)	law)
18	1990 1991 1992 1993 1994	(8)	law)
18	1990 1991 1992 1993 1994 1995	(8)	law)
18	1990 1991 1992 1993 1994 1995 1996	(8)	law)
18	1990 1991 1992 1993 1994 1995 1996 1997	(8)	law)
18	1990 1991 1992 1993 1994 1995 1996 1997 1998 1999	(8) variable	Municipalities, provinces, other public bodies
	1990 1991 1992 1993 1994 1995 1996 1997 1998 1999	(8) variable	law)
	1990 1991 1992 1993 1994 1995 1996 1997 1998 1999	(8) variable	Municipalities, provinces, other public bodies s for nature reserves (scheme under the Nature protection law)
	1990 1991 1992 1993 1994 1995 1996 1997 1998 1999	(8) variable anagement plan (9)	Municipalities, provinces, other public bodies s for nature reserves (scheme under the Nature protection law) National and regional government, non-governmental nature conservation bodies, national forest service, other public bodies,
	1990 1991 1992 1993 1994 1995 1996 1997 1998 1999	(8) variable anagement plan (9)	Municipalities, provinces, other public bodies s for nature reserves (scheme under the Nature protection law) National and regional government, non-governmental nature
	1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 Ma	(8) variable anagement plan (9)	Municipalities, provinces, other public bodies s for nature reserves (scheme under the Nature protection law) National and regional government, non-governmental nature conservation bodies, national forest service, other public bodies,
	1990 1991 1993 1994 1995 1996 1997 1998 1999 Ma 1990 1991 1992	(8) variable anagement plan (9)	Municipalities, provinces, other public bodies s for nature reserves (scheme under the Nature protection law) National and regional government, non-governmental nature conservation bodies, national forest service, other public bodies,

	Worksheet Beneficiaries										
Code (num)	Years (num)	Number of Beneficiaries (number)	Characteristics of beneficiaries / public owner (text)								
	<u>for</u>	explanation of r	notes, please refer to "Explanation database_NL9.doc"								
	1996										
	1997										
	1998										
	1999										
20			on by the Ministry of Transport and Water management								
		(10)									
	1990	variable	Ministry of Transport and Water management								
	1991										
	1992										
	1993										
	1994										
	1995										
	1996										
einde	1997										
	1998										
	1999										
21		E	Establishment of timber production plantations								
		(11)									
	1990	variable	Farmers, private land owners, public bodies, non-governmental								
	1991		nature conservation bodies								
	1992										
	1993										
end	1994										
	1995										
	1996										
	1997										
	1998										
	1999										

Co- de	Year		F	unds spent / by s	ource (local cur	rency in given ye	ar)		Total			
	for explanation of notes, please refer to "Explanation database_NL9.doc"											
_	_	_	_	_	_	_	_	_	_			
1				Forestry and lands	scape grant scher	ne (subdivision A:	fixed grants)					
		Source: National	government						Total grant			
	Year	Number of ha under the scheme (1.1)	Average grant per ha (euro's) (1.1 & 1.2)						(x1000)			
	1990	121,000	46						5,601			
	1991	121,000	43						5,216			
	1992	121,000	43						5,216			
	1993	121,000	41						4,942			
	1994	113,000	41						4,61			
	1995	45,000	52						2,348			
	1996	32,456	41						1,320			
	1997	31,498	43						1,344			
	1998	1,655	35						58			
	1999	-	-						-			
	90-98								30,669			
2			Fo	orestry and landsc	ape grant scheme	e (subdivision B: ot	ther measures)					
					National governme	•	,		Total grant			
			Reforestation		Intensive	Forest	Sample taking	Nutrient gifts	(x1000)			
	Year	Number of ha (1.1)	Grant per ha (euro's) (1.1)	Total grant (x1000)	maintenance (x1000) (1.1)	maintenance (x1000) (1.1)	in forests (x1000) (1.1)	(x1000) (1.1)				
	1990	1,785	1,906	3,402	-	463	-	-	3,86			
	1991	1,728	1,906	3,293	5	136	27	5	3,460			
	1992	2,100	1,906	4,002	32	227	32	109	4,402			

Co- de	Year		Fund	ds spent / by sour	ce (local currency	/ in given year)			Total
			for explar	nation of notes, plea	ase refer to "Explar	nation database_N	L9.doc"		1
	1993	1,452	1,906	2,767	227	-	32	23	3,049
	1994	835	1,906	1,591	227	-	18	65	1,902
	1995	-		-	-	-	-	-	-
	1996	-		-	-	-		-	-
	1997	-		-	-	-	-	-	-
	1998	-		-	-	-	-	-	-
	1999	-		-	-	-	-	-	-
	90-94	7,900		15,056	490	826	109	201	16,683
3				Co-operative fo	rest management (grant scheme (3.1)		
	,	Source: National	government				,		Total grant
	Year	Number of ha (3.2)	Grant per ha (euro's) (3.2)						(x1000)
	1990	-	-						-
	1991	49,000	5						222
	1992	52,000	5						236
	1993	80,000	5						363
	1994	100,000	5						454
	1995	60,000	5						272
	1996	118,000	5						535
	1997	90,633	5						411
		400.004	5						493
	1998	108,601	•						1
	1998 1999	88,240	5						400

Co- de	Year		ı	Funds spent / by s	source (local curr	ency in given year)		Total
			for ex	planation of notes,	please refer to "E	xplanation database_	NL9.doc"	1
				Total grant				
	Year	Private owners (x1000) (4.2)	Municipalities (x1000) (4.2)	National forest service (x1000) (4.3)	Nature cons. bodies (x1000) (4.4)			(x1000)
	1990	-	-	-	-			-
	1991	-	-		-			-
	1992	-	-	-	-			-
	1993	-	-	-	-			-
	1994	-	-	-	-			-
	1995	774	298	40	98			1,209
	1996	1,738	669	62	218			2,686
	1997	604	189	74	76			943
	1998	730	199	36	85			1,050
	1999	521	327	43	79			970
	95-99	4,366	1,682	255	555			6,858
5			 	 tion endowment so	 cheme for forests a	nd nature areas, sub	division forests	
			Source: National					Total grant
	Year	Private owners (x1000) (5.1, 5.2)	Public bodies (x1000) (5.3, 5.4)	Average grant per ha (euro's)	Total number of ha under the scheme (5.1)			(x1000)
	1990	-	-		-			-
	1991	-	-		-			-
	1992	-	-		-			-
	1993	-	-		-			-
	1994	-	-		-			-

Co- de	Year		Funds spent / by source (local currency in given year)									
	for explanation of notes, please refer to "Explanation database_NL9.doc"											
	1995	3,505	590	51	80,111			4,095				
	1996	3,646	735	49	89,845			4,381				
	1997	3,814	705	41	109,450			4,520				
	1998	4,468	826	46	115,519			5,294				
	1999	4,349	804	65	78,865			5,154				
	95-99	19,783	3,661					23,444				

6	Acquisition	n of land for nature	areas (subdivion	of the grant schen	ne for non-governr	nental nature cons	servation bodies) ((<i>5.1)</i>

		National government	Provincial government	State + Provinces	National government	State + Provinces	Total grant for acquisition of
Year	Number of ha acquired nature areas in total (6.2)	Average grant per ha (euro's) (6.2)	Average grant per ha (euro's) (6.3)	Total grant (x1000)	Granted interest + instalments (x1000) (6.2)	Total grant for acquisition of nature areas (x1000)	forest land (x1000) (6.4)
1990	229	7,034	7,034	3,221	12,797	16,018	5,286
1991	302	6,580	6,580	3,974	12,978	16,952	5,594
1992	237	4,084	4,084	1,936	14,113	16,048	5,296
1993	168	9,076	9,076	3,049	14,566	17,616	5,813
1994	=	-	-	-	14,975	14,975	4,942
1995	57	15,882	15,882	1,811	16,291	18,101	5,973
1996	1,724	5,445	5,445	18,776	17,198	35,974	11,87
1997	562	9,529	9,529	10,711	18,015	28,726	9,480
1998	657	9,983	9,983	13,118	18,514	31,632	10,439
1999	1,307	7,260	7,260	18,979	17,743	36,722	12,118
90-99	5,243			75,575	157,189	232,764	76,812

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					Worksheet Fu	ınds						
Co- de	Year		Funds spent / by source (local currency in given year)									
			for exp	olanation of notes,	please refer to "E	xplanation databa	se_NL9.doc"	-				
	Year	Number of ha acquired land in total (7.2)	State Average grant per ha (euro's) (7.2)	Provinces Average grant per ha (euro's) (7.2)	Percentage of forest in nature development			Total grant for acquisition of forest land (x1000)				
	1990	315	8,168	8,168	-			-				
	1991	530	6,807	6,807	-			-				
	1992	160	8,168	8,168	-			-				
	1993	170	9,076	9,076	-			-				
	1994	712	8,168	8,168	-			-				
	1995	321	8,622	8,622	-			-				
	1996	831	7,260	7,260	-			-				
	1997	1,424	5,899	5,899	-			-				
	1998	794	10,437	10,437	-			-				
	1999	622	13,160	13,160	-			-				
	90-99	5,879						0.001				
8		Land prepa				t scheme for non-g	governmental nature co					
			State	Provinces	State + Provinces			Total grant for forest				
	Year	Number of ha developed in total (8.1)	Average grant per ha (euro's) (8.1)	Average grant per ha (euro's)	Total grant for development (x1000)	Number of ha forest established (8.2)		establishment (x1000)				
	1990	490	2,269	2,269	2,224	-		-				
	1991	630	2,269	2,269	2,859	_		-				
	1992	775	2,360	2,360	3,657	-		-				

1993

361

1,634

1,634

-

1,179

Co- de	Year		Funds spent / by source (local currency in given year)										
	for explanation of notes, please refer to "Explanation database_NL9.doc"												
	1994	177	2,042	2,042	723	-		-					
	1995	208	4,311	4,311	1,793	-		-					
	1996	150	3,403	3,403	1,021	-		-					
	1997	474	3,403	3,403	3,226	-		-					
	1998	600	3,403	3,403	4,084	-		-					
	1999	669	3,358	3,358	4,493	-		-					
	90-99	4,534			25,260	-		0.001					

9		Manage	ement of nature are	eas (subdivision of	the grant scheme	for non-governme	ental nature conse	rvation bodies) (9.	1)		
			State					State			
	Year	Number of ha forest and nature (9.2)	Average grant per ha (euro's) (9.2)	Forest area national body (ha) (9.3)	Forest area 12 regionial bodies (ha) (9.4)	Forest area total nat. conserv. bodies (ha) (9.5)	Average grant per ha forest (euro's) (9.6)	Average grant per ha forest national body (euro's) (9.7)	Average grant per ha forest regional bodies (euro's) (9.7)		
	1990	105,121	80	21,182	12,457	33,639	54	67	33		
	1991	107,043	81	21,800	12,454	34,254	55	67	33		
	1992	110,560	83	22,200	13,179	35,379	56	69	34		
	1993	113,199	99	23,300	12,924	36,224	67	82	41		
	1994	119,350	97	23,640	14,552	38,192	66	81	41		
	1995	122,918	92	24,320	15,014	39,334	62	77	39		
	1996	127,112	91	25,836	14,840	40,676	61	75	37		

16,349

16,149

16,548

42,589

43,069

44,652

61

60

62

75

74

75

38 37

38

1997

1998

1999

90-99

133,090

134,591

138,995

90

88

91

26,240

26,920

28,104

Co- de	Year		F	unds spent / by s	source (local curr	ency in given yea	ar)	Total
			for exp	planation of notes,	please refer to "E:	xplanation databas	se_NL9.doc"	
		continued: Sc	heme 9					
	Year	Provinces Average grant per ha forest regional bodies (euro's) (9.8)	Total grant for forest management (x1000)					
	1990	33	2,244					
	1991	33	2,285					
	1992	34	2,440					
	1993	41	2,959					
	1994	41	3,102					
	1995	39	3,034					
	1996	37	3,046					
	1997	38	3,208					
	1998	37	3,166					
	1999	38	3,364					
	90-99		28,848					
10				Set aside and a Source: National of	fforestation of agri	cultural land (gran	t scheme)	
			Afforestation (10.1			me compensation	(10.1)	Total grant
	Year	Number of ha	Average grant per ha (euro's) (10.2)	Total grant for afforestation (x1000)	Number of ha (cumulative)	Average grant per ha (euro's)	Total grant compensation (x1000)	(x1000)
	1990	-	-	-	-	-	-	-
	1991	-	-	-	-	-	-	-
	1992	-	-	-	-	-	-	-

Co- le	Year		Fund	ls spent / by soui	ce (local currency	y in given year)		Total
			for explan	ation of notes, ple	ase refer to "Explar	nation database_I	NL9.doc"	
	1993	-	-	-	-	-	-	
	1994	326	1,697	553	326	635	207	76
	1995	930	1,512	1,407	1,256	635	798	2,2
	1996	487	1,770	862	1,702	636	1,082	1,9
	1997	260	1,944	506	2,934	426	1,249	1,7
	1998	97	2,709	263	2,030	640	1,300	1,5
	1999	141	2,074	292	2,053	680	1,396	1,6
	94-99	2,241		3,882			6,031	9,9
		(11.1, 11.2)	per ha (euro's) (11.1)					
			(11.1)					
	1990							
		-	-					
	1991	-	-					
	1992		+					
	1992 1993							
	1992 1993 1994	- - - 147	- - - - 6,807					1,0
	1992 1993 1994 1995	- - - 147 150	- - - 6,807 6,807					1,0
	1992 1993 1994 1995 1996	- - - 147 150 181	- - - 6,807 6,807 1,447					1,0 1,0 2
	1992 1993 1994 1995 1996 1997	- - - 147 150 181 10	- - - - 6,807 6,807 1,447 6,625					1,0 1,0 2
	1992 1993 1994 1995 1996 1997 1998	- - - 147 150 181 10 40	- - - 6,807 6,807 1,447 6,625 454					1,0 1,0 20
	1992 1993 1994 1995 1996 1997	- - - 147 150 181 10	- - - - 6,807 6,807 1,447 6,625					1,0 1,0 20 0

Worksheet Funds Co-Funds spent / by source (local currency in given year) Total Year de for explanation of notes, please refer to "Explanation database_NL9.doc" 12 Temporary private nature management grant scheme Source: National Total grant government (x1000)Grant (x1000) Year (12.1)1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 135 135 99-99 135 135 13 Improving private forest and nature management (decree) (13.1) Source: National Total grant (x1000) government Grant (x1000) Year (13.2)1990 1991 1992 1993 1994

Co- de	Year		F	unds spent / by s	source (local cur	rency in given yea	r)	Total
			for ex	planation of notes,	please refer to "E	Explanation databas	e_NL9.doc"	
	1995	-						-
	1996	635						635
	1997	454						454
	1998	454						454
	1999	545						545
	96-99	2,087						2,087
14				Grant schem	e for national pari	ks and cross-border	parks	
			Source:	National governme	ent			Total grant for
	Year	Number of parks (i.f.) (14.1)	Grant (x1000) (14.1)	Total area of national parks (i.f.) (ha) (14.2)	Forest area in national parks (ha) (14.3)	Share of forest in national parks (%)		forest area (x1000) (14.4)
	1990	8	1,361	28,025	12,907	46%		627
	1991	8	1,180	28,025	12,907	46%		543
	1992	8	1,361	28,025	12,907	46%		627
	1993	8	1,543	28,025	12,907	46%		711
	1994	9	1,316	34,125	14,520	43%		560
	1995	10	1,316	37,525	16,133	43%		566
	1996	10	1,679	37,525	16,133	43%		722
	1997	11	1,997	41,825	17,747	42%		847
	1998	14	3,086	90,625	22,587	25%		769
	1999	15	3,267	92,725	24,200	26%		853
	90-99		18,106					6,824

					Worksheet Fu	nds					
Co- de	Year		Funds spent / by source (local currency in given year)								
			for ex	olanation of notes,	please refer to "Ex	planation databas	e_NL9.doc"	-			
	Year	Area of forest and landscape (ha) (15.1)	Average grant per ha (euro's) (15.1)					Total grant (x1000)			
	1990	304	12,978					3,945			
	1991	403	15,111					6,090			
	1992	432	14,521					6,273			
	1993	227	16,472					3,739			
	1994	389	10,549					4,104			
	1995	413	12,769					5,274			
	1996	514	13,686					7,035			
	1997	413	16,350					6,752			
	1998	201	21,874					4,397			
	1999	362	20,690					7,490			
	90-99	3,658						55,098			
								<u>.</u>			
16						ervice, subdivision	nature management				
	Year	Forest area (ha) (16.1)	Nature area (ha) (16.2)	Grant for forest and nature (x1000) (16.3)	Grant per ha of forest (euro's) (16.4)			Total grant (x1000)			
	1990	77,400	82,240	47,753	220			16,997			
	1991	81,900	84,480	49,230	218			17,854			
	1992	82,400	87,600	51,052	220			18,161			
	1993	82,900	92,480	49,257	205			16,990			
	1994	82,300	97,840	50,557	203			16,713			
	1995	83,700	101,040	51,173	200			16,752			
	1996	86,100	108,800	52,509	193			16,659			

Co- de	Year		F	unds spent / by s	source (local curi	ency in given yea	ar)	Total
			for exp	olanation of notes,	please refer to "E	xplanation databas	se_NL9.doc"	<u>'</u>
	1997	86,300	110,880	57,967	211			18,193
	1998	87,000	114,200	59,447	211			18,387
	1999	87,800	110,300	60,997	221			19,421
	90-99			529,941				176,127
17	Year	Number of ha afforestation (17.1)	· ·	n and afforestation National governme Total costs for afforestation (x1000)	•	Total costs for land acquisition (x1000)	for the Randstad area)	Total costs (x1000)
	1990	137	6,807	933	25,639	3,512		4,445
	1991	137	6,807	933	25,639	3,512		4,445
	1992	137	6,807	933	25,639	3,512		4,445
	1993	137	6,807	933	25,639	3,512		4,445
	1994	137	6,807	933	25,639	3,512		4,445
	1995	137	6,807	933	25,639	3,512		4,445
	1996	137	6,807	933	29,723	4,072		5,005
	1997	137	6,807	933	38,208	5,235		6,167
	1998	137	6,807	933	39,978	5,477		6,410
	1999	137	6,807	933	41,748	5,719		6,652
	90-99	1,370		9,325		41,578		50,903
18			Redevelopme	ent of the countrys	ide with woodland	 (scheme under the	 e Land development law)	
				National governme		•	. ,	Total costs
	Year	Number of ha afforestation (ha) (18.1)	Costs per ha (euro's) (18.2)	Total costs for afforestation (x1000)	Costs per ha acquired land (euro's) (18.3)	Total costs for land acquisition (x1000)		(x1000)

Co- de	Year		F	unds spent / by s	ource (local curr	ency in given ye	ar)		Total		
			for exp	planation of notes,	please refer to "E	xplanation databa	se NL9.doc"				
	1990	261	6,807	1,775	14,612	3,811			5,586		
	1991	261	6,807	1,775	14,612	3,811			5,580		
	1992	261	6,807	1,775	14,612	3,811			5,58		
	1993	261	6,807	1,775	14,612	3,811			5,58		
	1994	261	6,807	1,775	14,612	3,811			5,58		
	1995	261	6,807	1,775	14,612	3,811			5,58		
	1996	261	6,807	1,775	16,926	4,414			6,18		
	1997	261	6,807	1,775	21,282	5,550			7,32		
	1998	261	6,807	1,775	23,869	6,225			8,00		
	1999	261	6,807	1,775	26,501	6,911			8,68		
	90-99	2,608	·	17,752		45,966			63,71		
19	Management plans for nature reserves (scheme under the Nature protection law) Source: National government										
	Year	Number of protected nature reserves (19.1)	Area protected nature reserves (ha) (19.1)	Included area of forest (ha) (19.2)		Total area of management plans (ha) (19.1)	Average grant per ha management plan (euro's) (19.3)	Total grant (x1000) (19.1)	Total grant forest area (x1000) (19.4		
	1990	177	229,228	66,476	40	2,000	259	517	150		
	 	191	226 204	68,554	40	3,500	259	905	263		
	1991	191	236,394	00,334	70	- /					
	1991 1992	202	238,764	69,242	45	4,000	227	908	263		
		_			_	<u> </u>	227 202	908 909	26:		
	1992	202	238,764	69,242	45	4,000					
	1992 1993	202 209	238,764 295,589	69,242 85,721	45 50	4,000 4,500	202	909	263 264		

1996

222

307,960

89,308

58

3,440

182

624

181

Co- de	Year		F	unds spent / by sou	ırce (local curreı	ncy in given yea	r)		Total
			for exp	lanation of notes, ple	ease refer to "Exp	lanation database	e_NL9.doc"		•
	1997	224	310,500	90,045	65	4,000	299	1,194	346
	1998	233	321,000	93,600	70	4,300	203	872	253
	1999	233	321,000	93,600	70	4,300	191	820	238
	90-99							7,838	2,273
20				Afforestation by the	 Ministry of Transp	oort and Water ma	anagement		
	,	Source: National							Total costs for
	Year	Number of ha afforestation (20.1)	Costs per ha afforestation (euro's) (20.2)						afforestation (x1000)
	1990	313	6,807						2,133
	1991	313	6,807						2,133
	1992	313	6,807						2,133
	1993	313	6,807						2,133
	1994	313	6,807						2,133
	1995	313	6,807						2,133
	1996	160	6,807						1,089
	1997	160	6,807						1,089
	1998								
	1999								
	90-97	2,200					-		14,973
21				Establishment	t of timber produc	tion plantations (2	21.1)		
	,	Source: National (government		, , ,		,		Total grant

		1						
Co- de	Year		F	unds spent / by	source (local cur	rency in given yea	ar)	Total
			for exp	lanation of notes	s, please refer to "E	xplanation databas	se_NL9.doc"	
	Year	Number of ha afforestation (21.2)	Average grant per ha (euro's)					(x1000)
	1990	438	1,378					603
	1991	438	1,378					603
	1992	438	1,378					603
	1993	438	1,378					603
	1994	438	1,378					603
	1995	438	1,378					603
	1996	438	1,378					603
	1997	438	1,378					603
	1998							
	1999							
	90-97	3,500						4,822

	Worksheet Tax											
Code (number)	Year (number)		Financial Value of Tax Concessions by receiver (text and number)						Total (sum of numbers)			
1												
	1991	no data							0			
	1992								0			
	1993								0			
	1994								0			
	1995								0			
	1996								0			
	1997								0			
	1998								0			
	1999								0			
	2000								0			
	2001								0			
		0	0	0	0				0			

]

				Worksheet	Public		
Year (num)		Annual (Costs in Public F	orest Budget (r	nln euro) (text and	number)	Total (sum of numbers)
		for e	xplanation of note	s, please refer to	o "Explanation datal	base_NL9.doc"	·
_	_	_	_	_	<u>-</u>	_	_
			Forest manag	ement royal don	mains (1)		
Year	Costs (x1000) (2)	Number of ha royal domains "Het Loo" (ha)	Costs per ha (euro's)				Total costs
1990	728	3,624	201				728
1991	569	3,624	157				569
1992	482	3,624	133				482
1993	492	3,624	136				492
1994	530	3,624	146				530
1995	587	3,624	162				587
1996	1,168	3,624	322				1,168
1997	598	3,624	165				598
1998	607	3,624	167				607
1999	348	3,624	96				348
90-99	6,109						6,109
			Forest manage	ement Ministry o	f Defence		Total costs
Year	Number of ha forest + heath (ha) (4)	Included area of forest (ha) (4)	Contractor costs forest + heath (x1000) (5)	Contractor costs forest (x1000)	Contractor costs forest per ha (euro's)		contractors
1990	no data found						
1991	for years						
1992	1990-1998						
1993							
1994							

				Worksheet	Public		
Year (num)		Annual C	Costs in Public F	orest Budget (ml	n euro) (text and	I number)	Total (sum of numbers)
		for ex	cplanation of notes	s, please refer to	'Explanation data	base_NL9.doc"	
1995							
1996							
1997							
1998							
1999	17,755	10,255	1,400	809	79		809
99-99			1,400	809			809
			Forest mana	agement municipa	lities		Total
Year	Number of ha	Expenses for	Expenses for	Included area			expenses for
	forest +nature	management	management	of forest (ha)			forest
	(ha) (6)	(x1000) (7)	per ha (euro's)	(8)			(x1000) (9)
1990	71,800	12,706	177	56,900			10,069
1991	71,100	13,795	194	57,500			11,156
1992	70,400	17,652	251	56,800			14,242
1993	69,700	19,467	279	56,000			15,641
1994	69,000	20,057	291	55,300			16,075
1995	68,300	20,012	293	54,500			15,968
1996	67,700	20,012	296	54,200			16,021
1997	67,000	20,012	299	53,800			16,069
1998	66,300	20,012	302	53,500			16,148
1999	65,700	20,012	305	53,000			16,143
90-99		183,736					147,533

Code (num)	Year (num)			Private	e taxes (number)	Public Forest Contribution (number)		
		%	(in euro's x1000)	%	(year currency)	%	(year currency)	
		for explan	ation of notes, pleas	se refer to	"Explanation datab	ase_NL9	O.doc"	
_	_	_	_	_	_	_	_	
1		Fo	restry and landscap	e grant so	cheme (subdivision)	A: fixed g	grants)	
	1990	0%	-					
	1991	0%	-					
	1992	0%	-					
	1993	0%	-					
	1994	0%	-					
	1995	0%	-					
	1996	0%	-					
	1997	0%	-					
	1998	0%	-					
	1999	0%	-					
	90-99		-					
							<u>'</u>	
2		Forest	try and landscape g	rant scher	me (subdivision B: o	ther mea	asures) (1)	
	1990	25%	966		,			
	1991	25%	866					
	1992	25%	1,100					
	1993	25%	762					
	1994	25%	475					
	1995	25%	-					
	1996	25%	-					
	1997	25%	-					
	1998	25%	-					
	1999	25%	-					
	90-94		4,171	0	0			
			·					
3			Co-operative	forest ma	anagement grant sc	heme		
	1990	0%	-					
	1991	0%	-					
	1992	0%	-					
	1993	0%	-					
	1994	0%	-			1		
	1995	0%	-					
	1996	0%	-			1		
	1997	0%	-			1		
	1998	0%	-					
	1999	0%	-					
	90-99		-	0	0			
4		Gra	nt scheme for mitiga	ating mea	sures in forests and	nature a	reas (2)	
	1990	10/20%	-					
	1991	10/20%	-					
	1992	10/20%	-					
	1993	10/20%	-					
	1994	10/20%						

Code (num)	Year (num)	Private	share (number)	Private	taxes (number)	Public Forest Contribution (number)		
		%	(in euro's x1000)	%	(year currency)	%	(year currency)	
		for explan	ation of notes, pleas	se refer to	"Explanation databa	se_NL9	.doc"	
	1995	10/20%	137					
	1996	10/20%	308					
	1997	10/20%	98					
	1998	10/20%	113					
	1999	10/20%	117					
	95-99		773	0	0			
5			n endowment schem	e for fores	sts and nature areas	, subdivi	ision forests	
	1990	0%	-					
	1991	0%	-					
	1992	0%	-					
	1993	0%	-					
	1994	0%	-					
	1995	0%	-					
	1996	0%	-					
	1997	0%	-					
	1998	0%	-					
	1999	0%	-					
	90-99		-	0	0			
6	Acq	uisition of			on of the grant sche rvation bodies)	me for n	on-governmental	
	1990	10%	529					
	1991	10%	559					
	1992	10%	530					
	1993	10%	581					
	1994	10%	494					
	1995	10%	597					
	1996	10%	1,187					
	1997	10%	948					
	1998	10%	1,044					
	1999	10%	1,212					

9	Mana	Management of nature areas (subdivision of the grant scheme for non-governmental nature									
		conservation bodies)									
		(4)									
	1990	61%	1,369								
	1991	61%	1,394								
	1992	61%	1,489								
	1993	61%	1,805								
	1994	61%	1,892								
	1995	61%	1,851								
	1996	61%	1,858								
	1997	61%	1,957								

Code (num)	Year (num)	Private	share (number)	Private	taxes (number)		ublic Forest bution (number)
		%	(in euro's x1000)	%	(year currency)	%	(year currency)
		for explan	ation of notes, pleas	se refer to	"Explanation databa	ase_NL9.	doc"
	1998	61%	1,931				
	1999	61%	2,052				
	90-99		17,597	0	0		
10			Set aside and affore	estation of	agricultural land (gra	ant schen	ne)
	1990	0%	-				
	1991	0%	-				
	1992	0%	-				
	1993	0%	-				
	1994	0%	-				
	1995	0%	-				
	1996	0%	-				
	1997	0%	-				
	1998	0%	1				
	1999	0%	-				
	90-99		-	0	0		
	-						
11			of forest area by pub	olic-private	partnership (grant s	scheme to	or projects) (5)
	1990	no data	-				
	1991	,,	-				
	1992	,,	-				
	1993	,,	-				
	1994	,,	-				
	1995	,,	-				
	1996	,,	-				
	1997	"	-				
	1998 1999	"	-				
	90-99	,,					
	90-99		-				
12			Drivoto noturo m	onogomo	nt (temporary grant :	oohomo)	
12	1990		r rivate riature III	anayeme	in (ι σ πιρυτατή grafit .	scriente)	
	1990						
	1992						
	1993						
	1994						
	1995						
	1996						
	1997						
	1998						
	1999	0%	_				
	99-99		-				
13			Improving private fo	rest and r	nature management	(decree)	(5)
	1990		, 0,		3		
	1991						
1			i		i		1

Code (num)) (num)		Private	e taxes (number)	Public Forest Contribution (number)		
		%	(in euro's x1000)	%	(year currency)	%	(year currency)
		for explar	nation of notes, pleas	se refer to	"Explanation databate	ase_NL9.	doc"
	1992						
	1993						
	1994						
	1995						
	1996	no data	-				
	1997	,,	-				
	1998	,,	-				
	1999	,,	-				
	96-99		-				
14		r	National parks an	d cross-bo	order parks (grant so	cheme) (5)
	1990	no data	-				
	1991	,,	-				
	1992	,,	-				
	1993	,,	-				
	1994	,,	-				
	1995	,,	-				
	1996	,,	-				
	1997	,,	-				
	1998	,,	-				
	1999	,,	-				
	90-99		-				
15, 16			unding of the Nationa ma		Service, subdivisions of nature areas	s acquisiti	on of land for and
	1990	0%	-				
	1991	0%	-				
	1992	0%	-				
	1993	0%	-				
	1994	0%	-				
	1995	0%	-				
	1996	0%	-				
	1997	0%	-				
	1998	0%	-				
	1999	0%	-				
	90-99		-				
4							
17, 18			schemes for the Rai	ndstad urb	oan area and under t	ne Land	development law
	1990	0%	-				
	1991	0%	-				
	1992	0%	-				
	1993	0%	-				
	1994	0%	-				
	1995	0%	-				
	1996	0%	-				
	1997	0%	-				

Code (num)			share (number)	Private	e taxes (number)	Public Forest Contribution (number)		
		%	(in euro's x1000)	%	(year currency)	%	(year currency)	
		for explan	nation of notes, pleas	se refer to	"Explanation databa	ase_NL9.	doc"	
	1998	0%	-					
	1999	0%	-					
	90-99		-					
19			ent plans for nature	reserves	(scheme under the	Nature pro	otection law)	
	1990	0%	-					
	1991	0%	-					
	1992	0%	-					
	1993	0%	-					
	1994	0%	-					
	1995	0%	-					
	1996	0%	-					
	1997	0%	-					
	1998	0%	-					
	1999	0%	-					
	90-99		-					
20			fforestation by the M	linistry of	Transport and Water	r managei	ment	
	1990	0%	-					
	1991	0%	-					
	1992	0%	-					
	1993	0%	-					
	1994	0%	-					
	1995	0%	-					
	1996	0%	-					
	1997	0%	-					
	1998	0%	-					
	1999	0%	-					
	90-99		-					
21			Establishme	ent of timb	er production planta	tions		
	1990	0%						
	1991	0%	-					
	1992	0%	-					
	1993	0%	-					
	1994	0%	-					
	1995	0%	-					
	1996	0%	-					
	1997	0%	-					
	1998	0%	-					
	1999	0%	-					
	90-97		-					

Worksheet Costs							
Code (number)		Working hours for implementation (number) (1)	Costs per hour for implementation (euro's) (2)	Direct Implemen- tation Costs (x1000)			
for exp	lanation of	<u>notes, please refer t</u>	o "Explanation data	base_NL9.doc"			
				1.0 (1.0)			
1 + 2	Forestry and landscape grant scheme (subdivision A and B, total (3)						
	1990	(3) 38,707	22	852			
	1990	31,450	22	692			
	1991	24,192	22	532			
	1992	17,971	22	395			
	1994	7,430	22	163			
	1995	6,221	22	137			
	1996	4,838	22	106			
	1997	3,217	22	71			
	1998	1,360	22	30			
	1999	423	22	9			
	90-99	135,809		2,988			
				,			
3		Co-operative fores	t management grant	t scheme			
	1990	•					
	1991	no data					
	1992	,,					
	1993	,,					
	1994	,,					
	1995	,,					
	1996	,,					
	1997	610	22	13			
	1998	732	22	16			
	1999	587	22	13			
	97-99	1,929		42			
4	Grant scheme for mitigating measures in forests and nature areas						
	1990						
	1991						
	1992						
	1993						
	1994						
	1995	no data					
	1996	no data	22	2.1			
	1997	1,563	22	34			
	1998	1,635	22	36			
	1999	1,361	22	30			
	97-99			100			
5	Euro	tion andowment ask	omo for foreste ens	I paturo areas			
3	5 Function endowment scheme for forests and nature areas, subdivision forests						
	(4)						
	1990	, ,					
	1991						
			1				

Worksheet Costs						
Code (number)	Year (number)	Working hours for implementation (number) (1)	Costs per hour for implementation (euro's) (2)	Direct Implemen- tation Costs (x1000)		
for exp	lanation of	<u>notes, please refer</u>	to "Explanation data	base_NL9.doc"		
	1992					
	1993					
	1994	6,739	22	148		
	1995	3,974	22	87		
	1996	3,110	22	68		
	1997	5,908	22	130		
	1998	9,194	22	202		
	1999	8,693	22	191		
	94-99	37,618		523		
		01,010				
6, 7, 8, 9			nmental nature cons odivisions (5)	eervation bodies, all		
	1990					
	1991					
	1992					
	1993	no data				
	1994	,,				
	1995	,,				
	1996	,,				
	1997	248	22	5		
	1998	193	22	4		
	1999	352	22	8		
	97-99	793		17		
	I.		•	•		
10		Set aside and affo	restation of agricult	ural land		
	1990					
	1991					
	1992					
	1993	no data				
	1994	"				
	1995					
	1996	,,				
	1997	2,403	22	53		
	1998	4,334	22	95		
	1999	3,637	22	80		
	97-99	10,374		228		
	01 00	10,014		220		
11	Extension		ublic-private partner or projects)	ship (grant scheme		
	1990					
	1991					
	1992					
	1993					
	1994	no data				
	1995	no data				
	1996	no data		<u> </u>		
<u> </u>			<u> </u>	L		

Worksheet Costs						
Code (number)	Year (number)	Working hours for implementation (number) (1)	Costs per hour for implementation (euro's) (2)	Direct Implemen- tation Costs (x1000)		
for exp		<u>notes, please refer t</u>	o "Explanation data	base_NL9.doc"		
	1997	-	22	-		
	1998	225	22	5		
	1999	125	22	3		
	98-99	350		8		
12		vate nature manage	ement (temporary gr	ant scheme)		
	1990					
	1991					
	1992					
	1993					
	1994					
	1995					
	1996					
	1997			-		
	1998	-	22	-		
	1999	923	22	20		
	99-99	923		20		
	1					
13	•	oving private forest	and nature manage	ment (decree)		
	1990					
	1991					
	1992					
	1993					
	1994					
	1995					
	1996	no data				
	1997	***				
	1998	-	22	-		
	1999	-	22	-		
	90-99	-		-		
14		-	oss-border parks (gra	ant scheme)		
	1990	no data				
	1991	,,				
	1992	"				
	1993	11				
	1994	,,				
	1995	,,				
	1996	"				
	1997	,,				
	1998	,,				
	1999	,,				
	90-99	-				
15, 16			National Forest Service of name of nam			

	Worksheet Costs						
Code (number)	Year (number)	Working hours for implementation (number) (1)	Costs per hour for implementation (euro's) (2)	Direct Implemen- tation Costs (x1000)			
for exp		notes, please refer t	o "Explanation data	base_NL9.doc"			
	1990	no data					
	1991	,,					
	1992	"					
	1993	,,					
	1994	,,					
	1995	,,					
	1996	,,					
	1997	,,					
	1998	"					
	1999	"					
	90-99	-					
17	Acquisitio	n and afforestation the R no data	of agricultural land (andstad area)	special scheme for			
	1991						
	1992	,,					
	1993	**					
	1994	"					
	1995	**					
	1996	"					
	1997	"					
	1998	**					
	1999	**					
	90-99	,,					
	00 00						
18	Redeve	opment of the coun the Land	tryside with woodlar development law)	nd (scheme under			
	1990	no data					
	1991	"					
	1992	"					
	1993	"					
	1994	,,					
	1995	"					
	1996	"					
	1997	"					
	1998	"					
	1999	,,					
	90-99	-					
19	Manage	ment plans for natur pro	re reserves (scheme tection law)	e under the Nature			
	1990	no data					
	1991	,,					
	1992	,,					
	1993	,,					
	1994	"					

		Workshee	et Costs	
Code (number)	Year (number)	Working hours for implementation (number) (1)	Costs per hour for implementation (euro's) (2)	Direct Implemen- tation Costs (x1000)
for exp		notes, please refer	to "Explanation data	base_NL9.doc"
	1995	,,		
	1996	,,		
	1997	,,		
	1998	,,		
	1999	,,		
	90-99	-		
20	Afforesta	ation by the Ministry	of Transport and W	/ater management
	1990	no data		
	1991	,,		
	1992	,,		
	1993	,,		
	1994	,,		
	1995	,,		
	1996	,,		
	1997	,,		
	1998			
	1999			
	90-99	-		
21		Establishment of t	imber production pla	antations
		(6)		
	1990	no data		
	1991	,,		
	1992	,,		
	1993	,,		
	1994	,,		
	1995	,,		
	1996	,,		
	1997	178	22	4
	1998	64	22	1
	1999	66	22	1
	97-99	308		7

				Worksheet	Output			
Code (number)	Year (number)	Quantity of Output (number)	Output Units (text)	Initial Target (number)	Actual Achievement (number)	Percent Achievement (number)	Private Value of Output (number)	Social Value of Output (number)
		for expla	nation of not	es, please refer to	"Explanation da	atabase_NL9.doc)" 	
1, 5		_	_	Fixed grants for	nrivate forest ov	 vners (1)	<u> </u>	_
., •		(2)		(3)	pirrate refeet of		(4)	
	1990	121,000	ha	106,000	121,000	114%	12,354	
	1991	121,000	ha	122,090	121,000	99%	11,970	
	1992	121,000	ha	122,000	121,000	99%	11,640	
	1993	121,000	ha	119,000	121,000	102%	11,256	
	1994	113,000	ha	121,000	113,000	93%	10,153	
	1995	125,111	ha	123,400	125,111	101%	10,900	
	1996	122,301	ha	116,000	122,301	105%	10,267	
	1997	140,948	ha	114,200	140,948	123%	10,553	
	1998	117,174	ha	115,128	117,174	102%	8,773	
	1999	78,865	ha	118,000	78,865	67%	5,905	
	90-99 avg	118,140		117,682	118,140	100%	10,377	
2, 3, 12,	1			Other grants for	private forcet ou	unoro (E)		
13				(3)	private forest ov	vileis (3)		
	1990	3,865	x1000 €	3,657	3,865	106%		
	1991	3,688	x1000 €	5,301	3,688	70%		
	1992	4,638	x1000 €	5,547	4,638	84%		
	1993	3,412	x1000 €	4,628	3,412	74%		
	1994	2,356	x1000 €	4,191	2,356	56%		
	1995	272	x1000 €	531	272	51%		
	1996	1,171	x1000 €	1,289	1,171	91%		
	1997	865	x1000 €	1,501	865	58%		
	1998	947	x1000 €	1,400	947	68%		
	1999	1,080	x1000 €	1,802	1,080	60%		

	Worksheet Output							
Code (number)	Year (number)	Quantity of Output (number)	Output Units (text)	Initial Target (number)	Actual Achievement (number)	Percent Achievement (number)	Private Value of Output (number)	Social Value of Output (number)
		for explar	nation of note	es, please refer to	"Explanation da	atabase_NL9.doc	<u>"</u>	
	90-99 sum	22,293		29,847	22,293	75%		
6	Acquisition	on of land for na	ture areas (s	ubdivion of the g	rant scheme for i	non-governmenta	al nature conserv	vation bodies)
		(6)		(7)				
	1990	76	ha	408	76	19%		
	1991	100	ha	408	100	24%		
	1992	78	ha	408	78	19%		
	1993	55	ha	408	55	14%		
	1994	-	ha	408	-	0%		
	1995	19	ha	408	19	5%		
	1996	569	ha	408	569	139%		
	1997	185	ha	408	185	45%		
	1998	217	ha	408	217	53%		
	1999	431	ha	408	431	106%		
	90-99 sum	1,730		4,083	1,730	42%		
9	Manag	nement of nature	areas (subd	ivision of the ara	nt scheme for no	n-governmental i	nature conserva	tion bodies)
	•	(8)	1	(9)			(10)	
	1990	1,829	x1000 €	1,947	1,829	94%	17,395	
	1991	1,871	x1000 €	1,915	1,871	98%	19,835	
	1992	1,989	x1000 €	1,966	1,989	101%	30,928	
	1993	2,433	x1000 €	2,080	2,433	117%	39,393	
	1994	2,514	x1000 €	2,301	2,514	109%	45,241	
	1995	2,453	x1000 €	2,471	2,453	99%	49,584	
	1996	2,493	x1000 €	2,561	2,493	97%	57,639	
	1997	2,588	x1000 €	2,744	2,588	94%	61,328	

			Worksheet	Output			
Year (number)	Quantity of Output (number)	Output Units (text)	Initial Target (number)	Actual Achievement (number)	Percent Achievement (number)	Private Value of Output (number)	Social Value of Output (number)
	for explar	nation of note	es, please refer to	"Explanation da	atabase_NL9.doc	,"	
1998	2,571	x1000 €	2,974	2,571	86%	76,727	
1999	2,749	x1000 €	2,902	2,749	95%	89,347	
90-99 sum	23,491		23,860	23,491	98%	487,416	
			Severals schen	l nes for afforestat	ion (11)		
			(12)				
1990	711	ha	2,250	711	32%		
1991	711	ha	2,250	711	32%		
1992	711	ha	2,250	711	32%		
1993	711	ha	2,250	711	32%		
1994	1,184	ha	3,000	1,184	39%		
1995	1,791	ha	3,000	1,791	60%		
1996	1,226	ha	3,000	1,226	41%		
1997	828	ha	3,000	828	28%		
1998	535	ha	3,000	535	18%		
1999	554	ha	3,000	554	18%		
90-99 sum	8,962		27,000	8,962	33%		
		Nation	nal parks and cro	ss-horder narks	(grant scheme)		
		, ration			(grain conomo)		
1990	627	x1000 €	` '	627	99%		
			· ·				
	1998 1999 90-99 sum 1990 1991 1992 1993 1994 1995 1996 1997 1998	(number) Output (number) 1998 2,571 1999 2,749 90-99 sum 23,491 1990 711 1991 711 1992 711 1993 711 1994 1,184 1995 1,791 1996 1,226 1997 828 1998 535 1999 554 90-99 sum 8,962 1990 627 1991 543 1992 627 1993 711 1994 560	(number) Output (number) Units (text) 1998 2,571 x1000 € 1999 2,749 x1000 € 90-99 sum 23,491 1990 711 ha 1991 711 ha 1992 711 ha 1993 711 ha 1994 1,184 ha 1995 1,791 ha 1996 1,226 ha 1997 828 ha 1998 535 ha 1999 554 ha 90-99 sum 8,962 Nation 1991 543 x1000 € 1992 627 x1000 € 1993 711 x1000 € 1994 560 x1000 €	Year (number) Quantity of Output (number) Output (number) Initial Target (number) for explanation of notes, please refer to 1998 1998 2,571 x1000 € 2,974 1999 2,749 x1000 € 2,902 90-99 sum 23,491 23,860 Severals schen (12) (12) 1990 711 ha 2,250 1991 711 ha 2,250 1992 711 ha 2,250 1993 711 ha 2,250 1994 1,184 ha 3,000 1995 1,791 ha 3,000 1996 1,226 ha 3,000 1998 535 ha 3,000 1999 554 ha 3,000 90-99 sum 8,962 27,000 **National parks and cross (13) **The color of the color o	(number) Output (number) Units (text) (number) Achievement (number) for explanation of notes, please refer to "Explanation of notes, please refer to "Explanation of 2,571 1998 2,571 x1000 € 2,974 2,571 1999 2,749 x1000 € 2,902 2,749 90-99 sum 23,491 23,860 23,491 Severals schemes for afforestate (12) (12) 1990 711 ha 2,250 711 1991 711 ha 2,250 711 1992 711 ha 2,250 711 1993 711 ha 2,250 711 1994 1,184 ha 3,000 1,184 1995 1,791 ha 3,000 1,791 1996 1,226 ha 3,000 1,226 1997 828 ha 3,000 535 1999 554 ha 3,000 554 90-99 sum	Year (number) Quantity of Output (number) Output (number) Initial Target (number) Actual Achievement (number) Percent Achievement (number) 1998 2,571 x1000 € 2,974 2,571 86% 1999 2,749 x1000 € 2,902 2,749 95% 90-99 sum 23,491 23,860 23,491 98% Severals schemes for afforestation (11) (12) 1990 711 ha 2,250 711 32% 1991 711 ha 2,250 711 32% 1992 711 ha 2,250 711 32% 1993 711 ha 2,250 711 32% 1993 711 ha 2,250 711 32% 1993 711 ha 2,250 711 32% 1994 1,184 ha 3,000 1,184 39% 1995 1,791 ha 3,000 1,791 60% 1996	Year (number) Quantity of Output (number) Output (number) Initial Target (number) Actual Achievement (number) Percent Achievement (number) Private Value of Output (number) 1998 2,571 x1000 € 2,974 2,571 86% 76,727 1999 2,749 x1000 € 2,902 2,749 95% 89,347 90-99 sum 23,491 23,860 23,491 98% 487,416 Severals schemes for afforestation (11) (12) 1990 711 ha 2,250 711 32% 1991 711 ha 2,250 711 32% 1992 711 ha 2,250 711 32% 1993 711 ha 2,250 711 32% 1994 1,184 ha 3,000 1,184 39% 1995 1,791 ha 3,000 1,791 60% 1996 1,226 ha 3,000 1,226 41% 1999 </td

				Worksheet	Output			
Code (number)	Year (number)	Quantity of Output (number)	Output Units (text)	Initial Target (number)	Actual Achievement (number)	Percent Achievement (number)	Private Value of Output (number)	Social Value of Output (number)
		for explar	nation of note	s, please refer to	"Explanation da	atabase_NL9.doc)" -	
	1996	722	x1000 €	1,151	722	63%		
	1997	847	x1000 €	1,218	847	70%		
	1998	769	x1000 €	859	769	89%		
	1999	853	x1000 €	1,030	853	83%		
	90-99 avg	682		1,042	682	66%		
15		Government fun	ding of the N		 ervice, subdivisio	on acquisition of I	and for nature a	reas
				(14)				
	1990	304	ha	230	304	132%		
	1991	403	ha	230	403	175%		
	1992	432	ha	230	432	188%		
	1993	227	ha	230	227	99%		
	1994	389	ha	230	389	169%		
	1995	413	ha	230	413	180%		
	1996	514	ha	230	514	223%		
	1997	413	ha	230	413	180%		
	1998	201	ha	230	201	87%		
	1999	362	ha	230	362	157%		
	90-99 avg	366		230	366	159%		
16		Government	funding of the	e National Fores	t Service, subdiv	ision manageme	nt of nature area	IS
							(10)	
	1990						17,847	
	1991						15,120	
	1992						16,676	
	1993						16,090	

Worksheet Output								
Code (number)	Year (number)	Quantity of Output (number)	Output Units (text)	Initial Target (number)	Actual Achievement (number)	Percent Achievement (number)	Private Value of Output (number)	Social Value of Output (number)
		for explan	ation of note	s, please refer to	"Explanation da	atabase_NL9.doc	<u>"</u>	
	1994						15,461	
	1995						17,453	
	1996						19,108	
	1997						18,824	
	1998						24,560	
	1999						31,398	
	90-99 sum						192,537	
19		Manage	ement plans	 for nature reserv	 res (scheme und	 er the Nature pro	tection law)	
				(15)				
	1990	150	x1000 €	75	150	200%		
	1991	263	x1000 €	232	263	113%		
	1992	263	x1000 €	263	263	100%		
	1993	264	x1000 €	296	264	89%		
	1994	158	x1000 €	329	158	48%		
	1995	158	x1000 €	263	158	60%		
	1996	181	x1000 €	237	181	76%		
	1997	346	x1000 €	190	346	183%		
	1998	253	x1000 €	233	253	108%		
	1999	238	x1000 €	309	238	77%		
	90-99 avg	227		243	227	94%		

Worksheet Refs

Code (number)	Program Name (text)	References (see list below)
1+2	Forestry and landscape grant scheme, subdivisions fixed grants and other measures	1, 21, 34
3	Co-operative forest management scheme	34
4	Grant scheme for mitigating measures in forests and nature areas	34
5	Function endowment scheme for forests and nature areas, subdivision forests	1, 7, 21, 34
6	Grant scheme for non-governmental nature conservation bodies, subdivision land acquisition for nature areas and reserves	2, 3, 6, 16, 34, 44
7	Grant scheme for non-governmental nature conservation bodies, subdivision land acquisition for nature development	2, 3, 8, 9, 16, 44
8	Grant scheme for non-governmental nature conservation bodies, subdivision land preparation for nature development	2, 3, 16, 44
9	Grant scheme for non-governmental nature conservation bodies, subdivision nature management	2, 3, 6, 11, 12, 13, 14, 15, 16, 17, 18, 24, 25, 26, 27, 32, 33, 34, 36, 37, 38, 41, 42, 43, 44, 45, 46, 47
10	Grant scheme to promote the set aside and afforestation of agricultural land	10, 23, 34
11	Grant scheme for projects to extend the forest area by public-private partnership	34
12	Temporary private nature management grant scheme	34
13	Decree to improve private forest and nature management	34
14	Grant scheme for national parks and cross-border parks	34, 40
15	Government funding of the National Forest Service, subdivision land acquisition	6, 8, 9, 16, 34, 39
16	Government funding of the National Forest Service, subdivision nature management	6, 16, 34, 39

Worksheet Refs

Code (number)	Program Name (text)	References (see list below)				
17	Acquisition and afforestation of agricultural land (special scheme for the Randstad area)	6, 10, 22, 35				
18	Redevelopment of the countryside with woodland (scheme under the Land development law)	6, 10, 22				
19	Nature protection law	34				
20	Afforestation by the Ministry of Transport and Water management	10				
21	Grant scheme for establishment of timber production plantations	10, 23				
	Literature sources per worksh	peet				
	Program	23, 34, 35				
	Benefic's	1, 10, 21, 23, 28, 29, 30, 31, 34				
	Funds	4 + see references per program above				
	Tax					
	Public	1, 20				
	Share	6, 21, 23				
	Costs	20, 21, 28, 29, 30, 31				
	Output	1, 6, 21, 34, 35				
	Key	44				
	Additional information (not used for database)	5, 19				
Ref (number)	List of literature sources					
1	Berger, E.P., J. Luijt & R.A.M. Schrijver, 2000. Bedrijfsuitkomsten in de Nederlandse particuliere bosbouw over 1998. Landbouw Economisch Instituut (LEI-DLO) Den Haag. Rapport 6.00.96.					
2	Brabants Landschap, 1991 t/m 1996 en 1998. Jaarrekening (van de jaren 1990 t/m 1995 en 1997). Haaren. [annual accounts]					

Work	shee	t Refs
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Code (number)	r) Program Name (text) References (see list belo						
3	Brabants Landschap, 1992. Jaarverslag 1991. Haaren. [annual report]						
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Worksheet Convert

Year (number)	Currency conversion rate (number)	Comments / Source of Info (text)
1990		
1991		
1992		
1993		
1994		
1995		
1996		
1997		
1998		
1999	2.20371	1euro=2,20371 Dutch guilders (Dfl)
2000		
2001		

Worksheet Out_type Code Non-Use values (text) Use values (text) (number) 1+2 no data, refer to country report no data, refer to country report ,, 4 ,, 5 ,, ,, 6 ,, 7 ,, ,, 8 ,, ,, 9 ,, 10 ,, ,, 11 ,, ,, **12** ,, ,, 13 14 ,, ,, 15 ,, ,, 16 17 ,, 18 ,, 19 ,, ,, 20

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Worksheet Key

Allocation of direct management costs (euro's) for forests and other nature areas at "Natuurmonumenten"

for explanation of notes, please refer to "Explanation database_NL9.doc"

Year	Type of area	Number of ha	Total area of	Ratio of forest	Total direct	Total direct	Direct mgt	Ratio of direct
		per area type	forest and other	and other	mgt costs for	mgt costs per	costs per ha	mgt costs per
		(ha) (1)	nature (ha) (2)	nature	forest and	area type	(euro) (3)	ha for forest
					other nature	(x1000) (3)		and other
					(x1000) (2)			nature (3)
1990	Forest	21,182	60,487	0.35	3,145	1,007	48	0.47
	Other nature	39,305	00, .0.	0.65	5,	2,137	54	0.53
1991	Forest	21,800	62,350	0.35	3,317	1,006	46	0.45
	Other nature	40,550	02,000	0.65	0,017	2,310	57	0.55
1992	Forest	22,200	63,600	0.35	3,462	867	39	0.38
	Other nature	41,400	03,000	0.65	3,402	2,596	63	0.62
1993	Forest	23,300	65,750	0.35	3,549	898	39	0.38
	Other nature	42,450	05,750	0.65	3,549	2,651	62	0.62
1994	Forest	23,600	68,250	0.35	3,821	912	39	0.37
	Other nature	44,650	00,230	0.65	3,021	2,909	65	0.63
1995	Forest	24,320	70,360	0.35	3,853	849	35	0.35
	Other nature	46,040	70,300	0.65	3,033	3,004	65	0.65
1996	Forest	25,322	74,475	0.34	3,730	812	32	0.35
	Other nature	48,639	74,475	0.65	3,730	2,918	60	0.65
1997	Forest	26,240	76,020	0.35	3,975	830	32	0.33
	Other nature	49,780	70,020	0.65	3,975	3,145	63	0.67
1998	Forest	26,459	77 000	0.34	4.520	636	24	0.31
	Other nature	50,902	77,822	0.65	4,520	1,415	28	0.69
1999	Forest	27,624	04 046	0.34	4.002	656	24	0.29
	Other nature	53,622	81,246	0.66	4,983	1,605	30	0.71
90-99	Forest							0.37
avg	Other nature							0.63

Calculation of management grant (euro's) per ha of forest for all nature consercation bodies using the key above

From the table above it turns out that the average ratio of direct management costs for forests vs. other nature areas is 0,37 to 0,63 By means of this key the forest management grant for all nature conservation bodies has been estimated, using the following formula:

Total management grant (forest and nature) = (nature area * nature grant per ha) + (forest area * forest grant per ha)

For example in year 1990 (based on area and grant data from worksheet Funds, scheme 8):

Eu. 8.443.035,-- = (71.482 ha * Eu. 93,--) + (33.639 ha * Eu. 54--)

N.B: in this formula the ratio nature grant vs. forest grant has to be fixed at 0,63: 0,37 for all years

In the following table, the forest management grant for each year has been estimated by means of the formula above.

		Nature area		Forest area	Forest grant /	
Year	Total grant	(ha)	Nature grant / ha	(ha)	ha	Formula
1990	8,443,035	71,482	93	33,639	54	- 2,995
1991	8,645,874	72,789	93	34,254	55	3,250
1992	9,180,881	75,181	96	35,379	56	- 6,971
1993	11,249,212	76,975	114	36,224	67	14,119
1994	11,589,547	81,158	112	38,192	66	- 21,006
1995	11,322,724	83,584	106	39,334	62	- 5,579
1996	11,536,001	86,436	104	40,676	61	21,426
1997	11,957,562	90,501	103	42,589	61	6,300
1998	11,848,201	91,522	102	43,069	60	- 25,812
1999	12,614,636	94,343	105	44,652	62	- 23,606

Appendix 4 Financial forest policy instruments in the Netherlands - two examples

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Abstract

In the Netherlands, the pressure on forest businesses is high: most businesses are struggling financially, but at the same time they are faced with an increasing demand from society for their products and services. Since Dutch woodlands are considered to be a major national asset, the Dutch government subsidises the woodland management through different financial instruments. Two important instruments are the Management Programme (*Programma Beheer*) and the Estates Act (*Natuurschoonwet*). The (recently introduced) Management Programme is a performance-related subsidy for combined management of nature, woodlands and landscape elements. The Estates Act provides favourable tax arrangements to estate owners for maintaining and managing their property. This article describes the two instruments and the experiences of Dutch forest managers with these instruments.

Keywords: Estates Act, forest policy, financial instruments, Management Programme, the Netherlands

1 Introduction

In the Netherlands only 339.000 hectares (10%) is covered with woodlands. With an average population density of approximately 465 persons per square km, this means that the per capita forest area is only 0.02 hectares (National Statistical Office, 2001). Despite the small area, these woodlands have a multiplicity of functions for Dutch society. The demands for the different products and services from the woodland have increased considerably in the last decades and are most likely to increase in the years to come (Hoogstra, 1999).

The policy document 'Nature for People, People for Nature' ('Nature voor Mensen, Mensen voor Natuur') of the Dutch Ministry of Agriculture, Nature Management and Fisheries (2000) reflects the importance of Dutch woodlands for society. The main objective is the sustainable use and sustainable management of our woodland areas. However, sustainable use and management also depend on economic sustainability. In the Netherlands many forest businesses are struggling financially. Woodlands larger than 200 hectares are sometimes self-financing, but areas smaller than 50 hectares usually require additional investments.

Everyone agrees that this situation has to change. On the one hand, ways are being sought to make users pay a contribution towards forest management. On the other hand, woodland is considered to be a major national asset and Dutch owners satisfy their social obligation, so the government subsidises the woodland management with different financial instruments. This paper describes two of these financial

instruments: the Management Programme (*Programma Beheer*) and the Estates Act (*Natuurschoonwet*). The information in this article is partly based on the results of a qualitative evaluation of policy instruments for the Dutch government.

2 Management Programme

2.1 Introduction

The Management Programme (Ministry of Agriculture, Nature Management and Fisheries, 2001a) is the new subsidy scheme for the management of nature, woodlands and landscape in the Netherlands, launched at 1 January 2000. This Management Programme includes the subsidy schemes for (1) agricultural nature management and (2) nature management.

This paragraph will focus on the latter scheme only. This scheme for nature management contains subsidies for (permanent) woodlands. In the following paragraphs first the principles of the new scheme and the reasons for introducing it are described (2.2). Subparagraph 2.3 goes into the scheme related to woodland management. The paragraph concludes with an overview of the opportunities and bottlenecks of the scheme experienced by woodland managers (2.4).

2.2 Background of the scheme

The Dutch government had a number of reasons for introducing a new subsidy system. The first reason was to give private owners of nature areas a more important role in the management. The previous subsidy scheme focused on the development of new nature areas by public organisations (e.g. nature conservation organisations). The new scheme gives private managers more opportunities to develop new nature areas and moreover it increases their opportunities in the management of existing nature areas.

The second reason was a change in the method of approach. The Dutch government wished to be able to control the effects of nature management. In the past, the government subsidised only the maintenance of an area, more or less regardless of the results. The present scheme pays for the results achieved and leaves it to the manager how to achieve the results. This means more freedom for the owners/managers, but it also implies a certain risk for them.

The third reason was that the government wanted to pay more attention to nature management outside the National Ecological Network. The National Ecological Network is a connected network of valuable natural areas, woodland and water areas and important landscape features which together form the backbone of Dutch countryside (Kuiper, 2000). Whereas the previous schemes focused on areas within the National Ecological Network, the new scheme also provides possibilities outside the network.

The new scheme is based on the following three principles (Ministry of Agriculture, Nature Management and Fisheries, 2001a):

- 1. Paying for results.
 - Subsidies are granted for fixed nature conservation targets. These targets specify the quality criteria to be met in order to receive the grant.
- 2. More responsibility for the manager.
 - In the new system a manager is free to deploy his own expertise and possibilities in order to achieve the nature conservation target.
- 3. Subsidising by fixed procedure.
 - In order to receive a grant a manager has to go through 3 stages:
 - the manager asks for a subsidy order (such an order lasts six years);
 - the manager receives a yearly loan;
 - the manager asks for settlement of the subsidy after six years and receives final payment.

2.3 Relevance of the scheme for woodland management

In the subsidy scheme nature managers receive subsidies for fixed nature conservation targets. The Dutch Ministry of Agriculture, Nature Management and Fisheries has specified targets for nature, woodland and landscape in close collaboration with the nature and forest sector. Each target has been translated into so-called working packages. A working package specifies the quality criteria to be met for the specific target. Criteria are for example the minimum area, the species of both flora and fauna and management prescriptions. A total of 45 working packages is defined, varying from swamp, bog, pool and lake to heather, grassland, drift sands, woodland, orchard and duck decoy.

Six of the packages focus on woodland:

- Basic package 'woodland'
- Plus package 'conversion to woodland with high nature values'
- Plus package 'woodland with high nature values'
- Plus package 'natural woodland'
- Plus package 'coppice and withy-ticket
- Plus package 'middle forest'

Example of working package

Plus package 'woodland with high nature values':

At least 70% of the area consists of one or more native tree species; at least 50% of the area is mixed forest; regeneration areas are at most 2 ha; areas with more than 80% exotic tree species are at most 2 ha; at least 70% of the area has per ha 4 (standing or lying) dead trees with a DBH of at least 30 cm (15 cm in the case of wet soils); instead of this latter condition: it is not allowed to remove trees or shrubs from 70% of the area.

The distinguishing characteristics of the packages are based on the percentage of native tree species, maximum area of exotic species, average number of dead trees per hectare. Table 1 gives an overview of these packages. A more detailed description is given in annex 1.

Table 1: Overview of woodland-packages

Working package	Minimum area (ha)	Subsidy (Euro/ha/y)	Management prescriptions
Basic package			
woodland	5	45	none
Plus package conversion to woodland with high nature values	5	62	none
woodland with high nature values	5	62	none
natural woodland	40/101	69	no removal of trees/shrubs from the area
coppice and withy-thicket middle forest	0.5 0.5	237/1284 ² 126	regeneration by coppicing regeneration coppice layer by coppicing

¹ 40 ha for soils without calcium, 10 ha for remaining soils

Each package has a fixed subsidy amount based on the (estimated) costs of management of that specific type of woodland. Subsidies range from Euro 45 per ha per year for the basic-package 'forest' to Euro 1284 per ha per year for the pluspackage 'coppice of willow, ash and alder' (see Table 1).

Accessibility requirements also form part of the subsidy conditions. The full sum of money is only granted if the woodland has open public access. On top of this, subsidies are available for maintaining the recreational aspects of woodland under certain conditions like minimum opening times. The subsidies are Euro14 per ha per year for areas with a low recreational rating or Euro 23 per ha per year for areas with a high rating. The latter subsidy however is only granted to a woodland area when it is situated in a national park or in certain municipalities with high population pressure (Kuiper, 2000).

2.4 Experiences with the new scheme

In general Dutch forest managers see the new subsidy scheme as a positive development and they find the intention of the scheme good (or at least an improvement compared to previous schemes). The scheme is carefully organised and has a firm juridical basis. On average, the forest managers support the scheme, which is probably also due to the fact that the forest sector actively participated in the realisation of the scheme. Nonetheless, some problems have occurred.

One of the main problems is the fact that communication and information are not optimal. Especially with a difficult scheme as the subsidy scheme for nature management communication should be well organised. Organisations like the nature conservation organisations, the State Forest Service and co-operatives of forest

² NLG 522 per ha per year for oak, NLG 2829 per ha per year for willow, ash and alder

owners/managers have more knowledge and experience to comprehend the scheme; hence extra attention should be paid to communication and information towards private forest owners.

Another problem is that it is not clear what will happen if a forest manager does not reach the target in the period of the subsidy order because of external circumstances (e.g. environmental pollution). For the time being, forest managers hope for a generous attitude of the government, but it is not a firm basis.

Although the subsidy scheme was intended for all managers of nature areas and woodlands, water companies (owning 1.5% of Dutch woodland) are excluded from the scheme. In the first evaluation this will certainly be a subject for discussion.

Furthermore, the scheme still discriminates between 'public' organisations (e.g. nature conservation organisations) and the 'private' owners. Especially the possibilities for private owners to develop new nature areas are much less than the possibilities for the public organisations.

Finally, some of the managers fear that the quality of nature will not improve because forest managers aim for lower nature targets in order to be certain to receive a subsidy.

So far the above mentioned problems are mainly considered as growing pains of the new system. The opinion is that the problems can be solved as long as persons and parties involved are willing to tackle these problems.

3 The Estates Act

3.1 Introduction

The Estates Act of 1928 gives owners of real estates tax reductions (e.g. inheritance tax, income tax, capital tax, corporation tax), provided that the estate is preserved and the natural beauty at the estate is supported. This paragraph describes first of all what an estate is and how it qualifies for the Estates Act (3.2). Subparagraph 3.3 goes into the management of the estate when it is under the Estates Act. The paragraph concludes with an overview of the experiences of forest managers with the Estates Act (3.4).

3.2 What is an estate?

To qualify for the Estates Act, an estate has to fulfil certain conditions. The Estates Act defines an estate as (Ministry of Agriculture, Nature Management and Fisheries, 2001b):

'A real estate (including buildings and structures belonging to the estate), situated in the Netherlands, entirely or partly covered with woodlands, which natural beauty is of such quality that existence of the estate in its characteristic form is desirable.'

The estate has to meet following conditions (Laser, 2000):

1. Minimum area of the estate

The minimum area of an estate is at least 5 hectares. Exceptions are made for ancient country estates, which should be at least 1 hectare. An ancient country estate is defined as an estate with a protected monument or with an historical garden or park of at least 1 hectare.

2. Percentage of woodland

At least 30% of the area of the estate has to be covered with woodlands (this does not apply for ancient country estates). If the area of the estate consists of nature areas for more than 50%, the percentage of woodland has to be at least 20%. Estates with a woodland percentage of more than 20%, but less than 30% and not more than 50% of nature areas can qualify if the owners intend to afforest.

3. Use of the estate

The use of the estate may not interfere with the natural beauty of the estate. Areas used or intended to be used for the following aims, are excluded: industrial aims, mining operations, cultivation under glass, car or motorsports, dumps, intensive recreation (e.g. playgrounds, amusement parks, sports fields), storage of goods other than goods from the estates' woodlands or farmland.

4. A continuous area

The estate consists of a continuous area and not of two or more different parts. Small roads, dikes, waterways, railways, etc. are allowed as far as they do not affect the natural beauty or the unity of the estate.

In order to qualify, the owner (or the long-lease tenant or the tenant for live) requests the Ministry of Agriculture, Nature Management and Fisheries and the Ministry of Finance to classify his estate under the Estates Act (Ministry of Agriculture, Nature Management and Fisheries, 2001b).

In 2001 the Estates Act will be adapted. The definition of an estate will be broadened, so more estates can qualify for the Estates Act. Next to this the conditions regarding the minimum area are accentuated (so combining smaller estates into a one estate in order to fulfil the conditions is not as simple as it is in the current act).

3.3 Management under the Estates Act

In order to remain qualified under the Estates Act the manager of the estate has to manage the estate in such a way that the character of the estate is not damaged. The act describes two ways that could damage the character:

- 1. Lack of maintenance, examples are the loss of avenues due to negligence and the growth of aggressive tree species in woodlands with high nature values.
- 2. Other circumstances, examples are the construction of a golf course or camping ground in the woodlands and reforestation with tree species other than the original species.

If this is observed, two sanctions are possible:

- 1. Final withdrawal of the estate from the Estates Act. During a period of 10 years the estate is not qualified under the Estates Act. After this 10 years the owner can submit a new request for qualification. Qualification is only possible if the damage is repaired. Qualification of the estate within the 10 years period is possible if the estate has a new owner.
- 2. Conditional withdrawal of the estate from the Estates Act. The damage is limited and can be repaired within a short period of time. The government withdraws the estate for a (temporary) period of time, with a maximum of 5 years.

3.4 Experiences with the Estates Act

At this moment about 1100 estates are classified under the Estates Act. Approximately 75% of these estates are in private ownership. The other 25% are in possession of the government, nature conservation organisations, investment companies and churches (Innovation Centre Wageningen, 2001).

The estates owners/tenants see the Estates Act as an important financial instrument. Next to this in some cases the estate owners see the act also as a status symbol.

In general the broadening of the definition of an estate (expected in 2001) is seen as a positive development. However the qualification of a combination of estates as one estate (in order to fulfil all conditions) will become more difficult. This is seen as a negative development, because a number of estates (that would have qualified under the current act) will not qualify for the revised act. In the adaptation of the scheme the involvement of representatives of the sector is limited.

4 Conclusions

Forest managers are content with the two financial forest policy instruments as discussed in this article. Especially the new subsidy scheme for nature management, an output oriented subsidy scheme, is seen as an improvement compared with former subsidy schemes. The fact that the new scheme is formulated in close cooperation with representatives of the forest sector, indicates again the importance of participation of stakeholders in policy development.

The (lack of) involvement of stakeholders in the adjustment of the Estates Act shows this once again: the support for the changes in the Estates Act is only for part of the changes.

The problems of the subsidy scheme also show the importance of communication and information towards the users of financial instruments. Important is that communication and information is adjusted to the expertise and knowledge of the users. This can vary greatly between forest owners/managers in the Netherlands.

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6 Description of the packages

Basic package 'woodland'

at least 90% of the area is woodland under the Forest Law; at least 5% of the area consists of one or more native tree species; regeneration areas are at most 2 ha; areas with more than 80% exotic tree species are at most 2 ha:

Plus package 'conversion to woodland with high nature values':

at least 90% of the area is woodland under the Forest Law; at the beginning of the subsidy order at least 20% of the area consists of one or more native tree species and at the end the area meets the conditions under A; or if at the beginning the area satisfies the conditions under A, at the end the area has to meet the conditions under B; or if at the beginning the area satisfies the conditions under A, at the end the area has to meet the conditions under C;

[A] at least 35% of the area consists of one or more native tree species; at least 25% of the area is mixed forest; regeneration areas are at most 2 ha; areas with more than 80% exotic tree species are at most 2 ha; at least 35% of the area has per ha 4 (standing or lying) dead trees with a DBH of at least 30 cm (15 cm in the case of wet soils).

[B] at least 52% of the area consists of one or more native tree species; at least 37% of the area is mixed forest; regeneration areas are at most 2 ha; areas with more than 80% exotic tree species are at most 2 ha; at least 52% of the area has per ha 4 (standing or lying) dead trees with a DBH of at least 30 cm (15 cm in the case of wet soils).

[C] at least 70% of the area consists of one or more native tree species; at least 50% of the area is mixed forest; regeneration areas are at most 2 ha; areas with more than 80% exotic tree species are at most 2 ha; at least 70% of the area has per ha 4 (standing or lying) dead trees with a DBH of at least 30 cm (15 cm in the case of wet soils).

Plus package 'woodland with high nature values':

at least 70% of the area consists of one or more native tree species; at least 50% of the area is mixed forest; regeneration areas are at most 2 ha; areas with more than 80% exotic tree species are at most 2 ha; at least 70% of the area has per ha 4 (standing or lying) dead trees with a DBH of at least 30 cm (15 cm in the case of wet soils); instead of this latter condition: it is not allowed to remove trees or shrubs from 70% of the area.

Plus package 'natural woodland'

at least 95% of the area consists of one or more native tree species; at least 70% of the area has at least 40 living trees with a DBH of 30 cm or more per ha (15 cm in the case of wet soils); management prescriptions have to be followed.

Plus package 'coppice and withy-thicket

at least 90% of the area is coppice, at least 60% of this coppice is older than 25 years; at least 80% of the area consists of one or more native tree species; the diameter of the shoots at 50 cm above the stool is at most 10 cm; the area is at least 30 m wide); management prescriptions have to be followed.

Plus package 'middle forest'

at least 90% of the area is actual or former middle forest, at least 60% of the coppice is older than 25 years; at least 70% of the area consists of one or more native tree species; there are at least 25 leave trees with a height of at least 15 m per ha; the area is at least 30 m wide); management prescriptions have to be followed.