Nature Forest in society

Forestry and rural development in the Netherlands

Research results and policy implications of case studies in Ede and Stadskanaal

Birgit H.M. Elands & K.Freerk Wiersum

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'Nature Forest in Society' is the discussion paper and report series of the Forest and Nature Conservation Policy (FNP) Group at Wageningen University. In general, the Forest and Nature Conservation Policy Group focuses in research and teaching on political processes underlying the various relations between forests, nature and people. Political processes are thereby understood in a broad sense as the constrained use of social power in decision making processes of governmental, managerial or interest bodies from local to international level. The intention of the series is to provide insights into ongoing research activities at the group and thereby to stimulate the discussions on results, methods and approaches. More information and an overview of FNP publications can be found at: http://www.dow.wau.nl/fnp/

This issue focuses specifically on the Dutch synthesis results of the EU/FAIR funded research project 'Multifunctional forestry as a means to rural development' (Multifor.RD) which was co-ordinated by the FNP group. By publishing this Dutch synthesis report in the FNP discussion paper and report series, it is hoped that interested persons can have easy access into the Multifor.RD research activities and that this will stimulate interest in and discussions on the methods and approaches as well as results of this project. For more information on the Multifor.RD project see http://www.dow.wau.nl/multifor or contact the authors of this volume directly.

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Foreword

EU/FAIR research project: Multifor.RD

Forests are highly valued by European citizens. While in the past they were mainly appreciated for their productive potential and contribution to employment and income generation, at present they are increasingly valued for their amenity, environmental and nature values. Also their role in creating a sense of place is prominent. Because of their multifunctional character, during recent years the potential role of forestry in rural development is gaining political cloud.

In order to gain a better understanding of the nature and distribution of opinions on the exact role of forestry in the context of rural development, in February 1999 a EU/FAIR funded research project on 'Multifunctional forestry as a means to rural development, establishing criteria for region-specific strategies for balancing public demands and forest owners' objectives' (Multifor.RD) was started. Its aim was to assess how forestry can contribute to rural development. At the one hand forestry is considered to contribute to economic vitality and liveability in rural areas by providing production and income earning opportunities. At the other hand forestry should contribute towards the restructuring of rural areas by enhancing nature and recreation values as requested by an urbanising society. In order to assess how such perspectives are distributed over different types of rural areas ranging from remote areas to rural areas subject to peri-urbanisation comparative case studies were carried out in nine European countries, i.e. Austria, Denmark, France, Germany, Greece, Hungary, Ireland, the Netherlands and Spain. The study was co-ordinated by the Forest and Nature Conservation Policy group of the Department of Environmental Sciences, Wageningen University.

Research in the Netherlands

In each participating country two case study areas were selected, one representing a traditional forest area and one an area with recent afforestation. The selection of the case study areas was based on the principle that a range of rural and forest conditions in Europe should be represented rather than that the selected areas should be representative for a specific country. In the Netherlands the Forest and Nature Conservation Policy group, Department of Environmental Sciences, Wageningen University acted as the Dutch partner in the research. On the basis of prior experiences this group selected the communities of Ede and Stadskanaal as the Netherlands case study areas. In each of these study areas the research took place in four phases: (a) description and typological classification of case study areas, (b) qualitative interviews with members of different stakeholder groups, (c) quantitative survey among community inhabitants and landowners, and (d) synthesis and development of policy recommendations. As the research was part of a trans-European comparative study, the research was carried out in conformity with the harmonised research methodology, which was developed within the framework of the Multifor.RD project.

This national synthesis report focuses on the last phase of the research. It consists of the evaluation of the research findings in the context of policy implications. For this purpose, first an overview will be

given of Dutch forestry and rural development policy and of the main research findings of both qualitative and quantitative surveys. Next, policy implications will be elaborated on the basis of these steps.

Acknowledgements

During the whole research period, much assistance was received from the community administration of Ede and Stadskanaal. In Ede Ir. J. Lub (municipality service of spatial planning and management) acted as the liaison officer with the research group, and in Stadskanaal Drs. H. van der Wiel and Mr. A.H. Saman (municipality department of spatial planning and land affairs). The research also profited from the suggestions and comments of the members of a national advisory group. In addition to the representatives of the study areas the following persons were members of this advisory group: Ir. P. Bakker (State Forest Service), Drs. L.C.J. Hardus (Society for small villages Groningen), Mr. R. Nas (Dutch Forestry Board), Ing. J. Paasman (Expertise Centre Ministry of Agriculture, Nature management & Fisheries) and Ir. A. Willems (Dutch Union of Forest Co-operatives). The Dutch research team highly appreciates the valuable contributions of all members of the Advisory Group. It is also very grateful for the excellent assistance from the representatives of Ede and Stadskanaal in planning the research.

Besides, we are very grateful to the scientific staff of the Forest and Nature Conservation Policy Group that has contributed to the study in various ways. Especially, we would like to thank Henk Boerwinkel for his scientific contributions, creative ideas and inspirative thoughts, not only for the Dutch research but also for the overall European research; without his help the Multifor.RD study would not have been so well developed as is has been right now. In addition, we extend our gratitude to all the Dutch Multifor.RD research assistants Marije Veer, Maartje de Deugd, Maarten Roest Crollius, Alexander van der Meer and Femke Schimmel who have contributed to the methodology development, the field work, the analysis and the reporting phase.

Moreover, we extend our gratitude to all the Multifor.RD research partners for their theoretical and practical contribution to the study. The following collaborating research institutions were involved in data collection in various European countries: National University of Ireland Dublin, Ireland; CEMAGREF, France; Danish Forest and Landscape Research Institute, Denmark; NAGREF and University of Thessaloniki, Greece; State Forest Service, Hungary; University of Freiburg, Germany; Forestry Research Centre of Catalonia, Spain; University of Agricultural Sciences, Austria.

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Freerk Wiersum and Birgit Elands
Multifor.RD Project Co-ordinators

Executive summary

Project objective and hypotheses

In 1999 the research project Multifor.RD (Multifunctional forestry as a means to rural development; establishing criteria for region-specific strategies for balancing public demands and forest owners' objectives) was started with funding by the European Commission under the FAIR Programme. The main objective of the project is "*to make a comparative European study about the nature and dynamics of the landowners' and public's attitudes towards forests and forestry, and at developing criteria for distinguishing regional-specific strategies for multifunctional forestry to serve rural development".* Three hypotheses guided the research (see Table).

Table: Main hypotheses of the Multifor.RD project

1.	There exist important differences in perceptions, attitudes and practices regarding the role of forestry as a means to rural development amongst various stakeholder categories, e.g. forest owners, other landowners and other inhabitants of rural communities.
2.	There exist important regional differences between various European countries with respect to the perceived role of multifunctional forestry for rural development. These differences are caused by both bio-geographic, economic and socio-cultural conditions, such as degree of forest cover, forest history, forestry policy, level of income, degree of rurality/peri-urbanisation, etc.
3.	There are differences in opinions about the contribution of forestry to rural development between traditional forestry regions and regions in which dynamic changes in land-use including afforestation are taking place

The project involved 11 partner countries scattered throughout Europe. In the Netherlands, the Forest and Nature Conservation Policy group of Wageningen University acted as the partner of this programme; this group also co-ordinated the overall research programme. In all countries the research consisted of two case studies in a traditional forest area and an area with recent afforestation respectively. In the Netherlands the municipality of Ede was selected as representing a traditional forest area, and the municipality of Stadskanaal as representing an area with recent afforestation. The areas were selected on the basis of representing two contrasting Dutch rural conditions rather than being representative for a-priori defined rural and/or forestry conditions. In order to enable comparative analysis of data from the various countries, a common harmonized research methodology was used. The research consisted of three phases: (a) systematic description of the research area, (b) a qualitative survey amongst community inhabitants, landowners and policy makers, and (c) a follow-up quantitative survey amongst community inhabitants and landowners using a common European questionnaire. For this last survey, the total respondent population in Ede was 407 (255 community inhabitants, 152 landowners) and in Stadskanaal 440 (262 inhabitants and 178 landowners).

In this Dutch synthesis report the results of the study in the Netherlands are summarized and the policy implications of the research findings will be indicated. A more detailed overview of the

empirical results of the study in the Netherlands is provided in a companion report by Elands (2002). The report first summarizes the research methodology and the Netherlands policies in respect to rural development and forestry. Next the main research findings are summarized. In the final discussion and conclusion the main research hypotheses are evaluated and the main overall results and their policy implications are identified.

Synthesis of the main research findings in the Netherlands

In the report both the opinions on the role of forests in rural areas and on issues regarding forestry and rural development policies and programmes are summarized and their research implications are indicated. The following issues are discussed:

1. The impact of forests on rural identity and quality of life
2. Forests are meaningful to the people and to the locality
3. Forests represent a variety of functions, but have hardly any economic importance
4. Forest functions and management practices are contested
5. Forests are conceived as threatened by human activities
6. The future of forests depends on society's development needs
7. Forestry for rural development should be based on respect for local wishes
8. The present process of public involvement in forestry does not represent a balanced integration of local perspectives
9. Afforestation is desirable, but not likely to happen on a large scale
10. Reasonable support for public grants for land and forest management
11. Public access and financial support for recreation.

Differences between community inhabitants and landowners

A major focus of the research was to ascertain whether there exist differences in opinion on rural development and forestry between landowners and general community inhabitants. The research findings indicate that:

- The opinions on the most desirable functions of forests do not differ significantly between landowners and general community inhabitants. However, different opinions do exist with respect to the relative role of forests within the rural economy.
- In respect to rural development landowners are generally more strongly focused on agrarian modernization, while community inhabitants are more focused on rural restructuring. Landowners also have a generally lower positive opinion on the role of forests in the rural quality of life.
- Landowners feel less involved in discussions about forestry and rural development policies than the general community inhabitants. They also are more supportive to financial assistance for landowners' activities to maintain forests.

Thus, the opinions on the desired roles of forests do not differ much between landowners and other community inhabitants. However, if the position of forests is considered in the context of desired rural futures there do exist differences in opinion between community inhabitants and landowners. The

landowners more strongly favour an economically sound agrarian modernization, while community inhabitants are more favourably inclined towards a restructuring of the rural economy. Moreover, landowners often feel relatively neglected in the discussions on rural development policies.

However, within the category of community inhabitants significant differences exist in opinions regarding the scope of forests for rural development. These differences are related to different cultural orientations and lifestyles. These differences are reflected in the opinions on the role of forestry for rural development. Notably people with urban-oriented lifestyles have a low appreciation for the economic dimensions of forest management. The differences in lifestyles are also reflected in the degree of involvement in forestry issues. Also different opinions exist within the category of landowners with farmers being less positive and sometimes even negative about the role of forests, while forest owners are more positive.

Differences between the two study areas

Regarding the differences in opinions between the two study areas both the differences in general perspectives and the region-specific conflicting views between inhabitants and landowners were considered. Although the overall perspectives on the present and future role of forests in the quality of life is positive in both areas, there do exist some major differences between Ede and Stadskanaal regarding opinions on the rural development role of forests. In Ede forests are mainly considered as a component of nature rather than a component of a rural landscape. Whereas in Stadskanaal forests are conceived of as an integral component of the rural area. Moreover, in Ede people perceive overdevelopment as a major development problem and forests are mainly conceived of as a natural counterbalance to such overdevelopment. Whereas in Stadskanaal the need to further develop an attractive and diversified rural economy with good employment opportunities is considered as the main future challenge. Consequently, in Stadskanaal rural development is conceived as an integrated concept embracing both economic, social and ecological aspects, whereas in Ede social and ecological aspects dominate. Finally, in Stadskanaal the relative low economic importance of forests raises more concerns than in Ede; this is reflected in a less positive opinion than in Ede on the scope of forests within rural development. For a proper interpretation of these findings it is important to be aware of the fact that in Ede a large proportion of all forests are owned by (semi)public organisations such as the state forest service, the municipality and conservation agencies, while in Stadskanaal most forests are privately owned.

Policy implications

On the basis of the research findings, the following main policy implications are identified:

1. Need for attention to differentiation in administrative-oriented and experience-oriented policy formulation
2. More attention need to be given to the role of forests as a ‘green infrastructure’ giving meaning to local identity

3. Further stimulation is needed on stakeholder involvement in forestry development planning and implementation
4. More attention needs to be given to equitable distribution of costs and benefits of forest management
5. More attention needs to be given to the role of forests in the regional economy
6. Regional approaches towards forestry development should be further intensified
7. Need for development of EU policies for forestry and rural development in increasingly urbanised areas

Final conclusion

The Dutch rural development policy is based on the understanding that a balance must be sought between economic vitality and ecological quality, and that liveability is the touchstone of this aspiration. Liveability is considered to include social cohesion and participation, and a pleasant living environment with access to both social provisions and economic activities. Rural development should aim at retaining the liveability of the countryside and developing rural potential by introducing new economic activities, improving the level of provision, employment and social cohesion. The results of the Multifor.RD research are consistent with these ideas. They also indicate that an improved liveability is partly conceived of as a reaction on what is considered as 'overdevelopment' rather than underdevelopment.

The Dutch rural development policy puts also much emphasis on the need to improve the quality of nature and landscape. Once again, the Multifor.RD results show a clear support for this goal. The research also indicates that such aim should not be approached in isolation, but rather in interaction with other rural development goals such as development of the economic activities and improved liveability. The precise content of such development vary according to location-specific socio-economic and land-use conditions.

As indicated by the Multifor.RD data, forests are considered as having certainly a positive role to play in the present and future countryside. This role is foremost related to the role of forests in contributing towards a good liveability. The role of forest in creating a positive landscape quality is conceived as more important than its role to contribute towards ecological quality. The opinions on the role of forests to economic vitality are ambivalent; they foremost relate to the primary production function of forests and do not include the service role of forest to the regional economy.

The present Netherlands forestry policy is foremost focused on the role of forests in improving the quality of nature in a national context. Relatively little attention is given to the role of forests to improve landscape values and even less explicit attention is given towards the role of forest to improve liveability. The Multifor.RD data suggest that there is scope for a further elaboration of the Netherlands forestry policy, notably in respect to the role of forests in contributing to both economic vitality and improvement of local identity and social cohesion. In this context, the important policy questions that emerged from the Multifor.RD research are:

- How do you stimulate afforestation as an economic attractive land-use option when it is agreed that once established forests have primarily an aesthetic, landscape role rather than an economic production role?
- Who funds the management costs of forests which are primarily considered to have a role as 'green infrastructure' (landscape) and how can these best be distributed over public and private forests owners?

These questions indicate that increased attention should be given towards the economic and socio-cultural importance of forests in a regional context level rather than only at its ecological importance in a national context. This would require a further integration of forest and nature policies in regional development plans and a more attention towards the importance of forests and nature in an intersectoral context. The recent development of the Netherlands rural development policy which was based on a process of decentralised and intersectoral policy formation and implementation offers a good starting point for further integration of forestry issues in rural development programmes.

1. Introduction

1.1 Aim of this report

In 1999 the research project Multifor.RD (Multifunctional forestry as a means to rural development) was started with funding by the European Commission under the FAIR Programme. The main objective of the project is "*to make a comparative European study about the nature and dynamics of the landowners' and public's attitudes towards forests and forestry, and at developing criteria for distinguishing regional-specific strategies for multifunctional forestry to serve rural development*". The project involved 11 partner countries scattered throughout Europe. In the Netherlands, the Forest and Nature Conservation Policy group of Wageningen University acted as the partner of this programme; this group also co-ordinated the overall research programme. The research activities were discussed with a Dutch panel of advisors (Annex 1), who provided valuable feedback on the research ideas and results.

As a starting point for achieving these results, three main hypotheses were formulated (Table 1.1).

1. There exist important differences in perceptions, attitudes and practices regarding the role of forestry as a means to rural development amongst various stakeholder categories, e.g. forest owners, other landowners and other inhabitants of rural communities.
2. There exist important regional differences between various European countries with respect to the perceived role of multifunctional forestry for rural development. These differences are caused by both bio-geographic, economic and socio-cultural conditions, such as degree of forest cover, forest history, forestry policy, level of income, degree of rurality/peri-urbanisation, etc.
3. There are differences in opinions about the contribution of forestry to rural development between traditional forestry regions and regions in which dynamic changes in land-use including afforestation are taking place

Table 1.1: Main hypotheses of the Multifor.RD project

The overall results of this European study have been reported by Elands & Wiersum (2003). In this Dutch synthesis report the results of the study in the Netherlands will be summarized and the policy implications of the research findings will be indicated. A detailed overview of the empirical results of the study in the Netherlands is provided in Elands (2002). This report consists of the following elements:

1. Description of the research methodology;
2. Overview of Dutch forestry and rural development policy;
3. Synthesis of the main research findings in the Netherlands;
4. Identification of policy implications on the basis of the research findings.

1.2 Research methodology

General research approach

In view of the third general hypothesis of research, in each of the participating countries the research was focused on two case study areas, one representing a traditional forest area and one area with recent afforestation. In each case study area an intensive study was made about the perceived role of forestry in rural development. The research consisted of four phases (Figure 1.1): (1) description and typological classification of case study areas, (2) qualitative interviews with members of different stakeholder groups, (3) quantitative survey among community inhabitants and landowners, and (4) synthesis and development of policy recommendations. A detailed description of the research approach is given by Wiersum & Elands (2002).

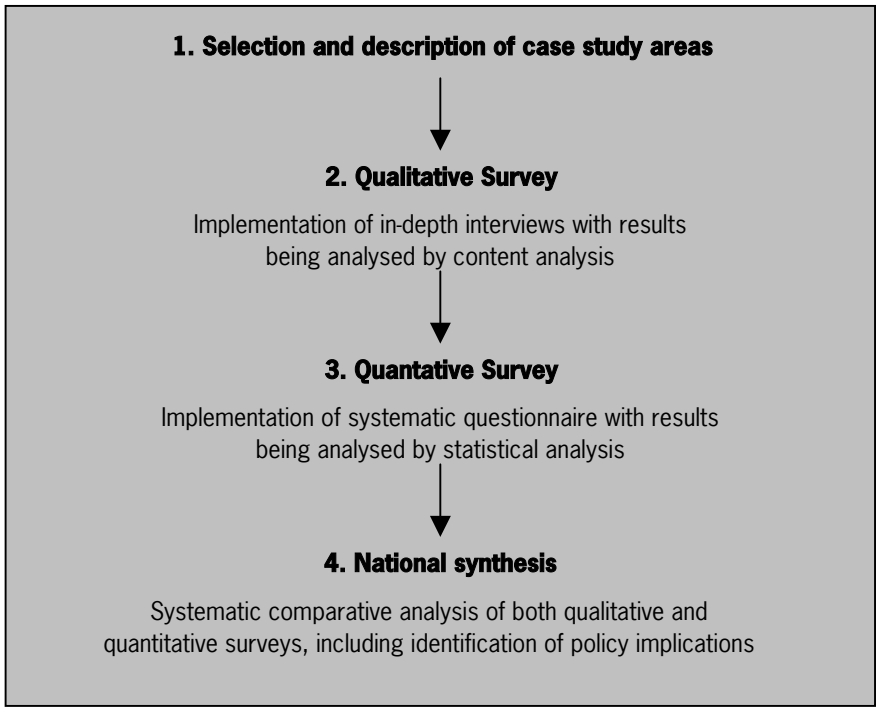

Figure 1.1: Four main research phases of the Multifor.RD Project

Selection and description of case study areas

The two Dutch case study areas that were selected for the Multifor.RD research are Ede (traditional forest area) and Stadskanaal (afforestation area). The location of both areas is depicted in Figure 1.2. A summary quantitative comparison of some key characteristics pertaining to both case study areas is presented in Table 1.2 (Elands & Veer, 2000).

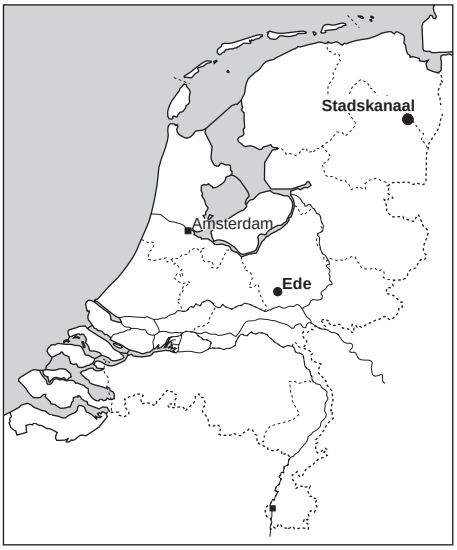

Figure 1.2: Location of Ede and Stadskanaal in the Netherlands

Table 1.2: Characteristics of study areas

Country	**Netherlands**	
Case study area	**Ede**	**Stadskanaal**
Area forest type	Traditional	Afforestation
Size (km^2)	319	121
Population	101,333	32,908
Density (pers/km^2)	318	274
Employed people (%)		
• Share primary sector	8	5
• Share secondary sector	19	37
• Share tertiary sector	74	55
Land use (%)		
• Share agriculture	39	86
• Share forest	35	3
• Share nature areas	20	1

The municipality of Ede is situated in the centre of the Netherlands. Ede is, according to Dutch standards, large (320 km^2) and contains as much as eight villages/towns (Ede, Bennekom, Lunteren, Ederveen, De Klomp, Harskamp, Wekerom and Otterlo; Figure 1.3). The municipality has over 100,000 inhabitants; most of those people live in the town of Ede. Ede counts more than 300 people per square kilometre. The percentage of people working in the primary sector is low, whereas almost three-quarter of the working population is working in the tertiary sector. Ede is a traditional forest area. The largest part of the rural area is reserved for forest and nature reserves; over 100 km^2 of forest and 60 km^2 of nature reserve area. Most forests and nature lands are situated within the

region ‘Veluwe’. Agricultural lands are responsible for one third of the total municipal area. The majority of the agricultural lands are situated within the region ‘Gelderse Vallei’.

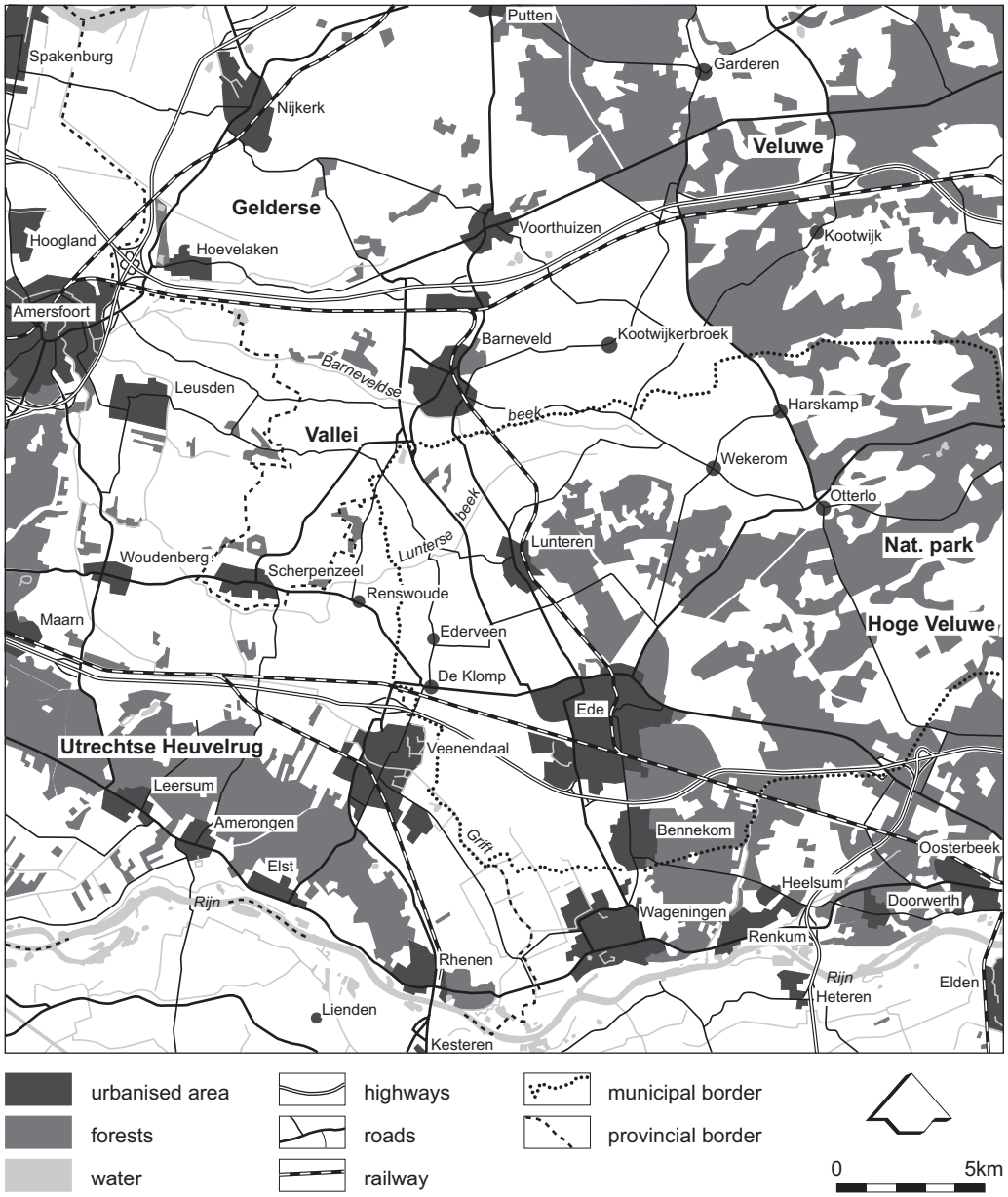

Figure 1.3: The municipality of Ede

Stadskanaal is situated in the Northeast of the Netherlands and covers an area of 120 km^2. The municipality includes 1 town and 4 villages: Stadskanaal, Musselkanaal, Onstwedde, Mussel and Alteveer (Figure 1.4). The area represents two landscape types, which reflect the occupational history. The brook valley landscape with small arable fields occurs on a small scale in the eastern part of the municipality. The undulating relief plays an important part in this landscape along with the scattered forest elements, which gives it a secluded (closed) character.

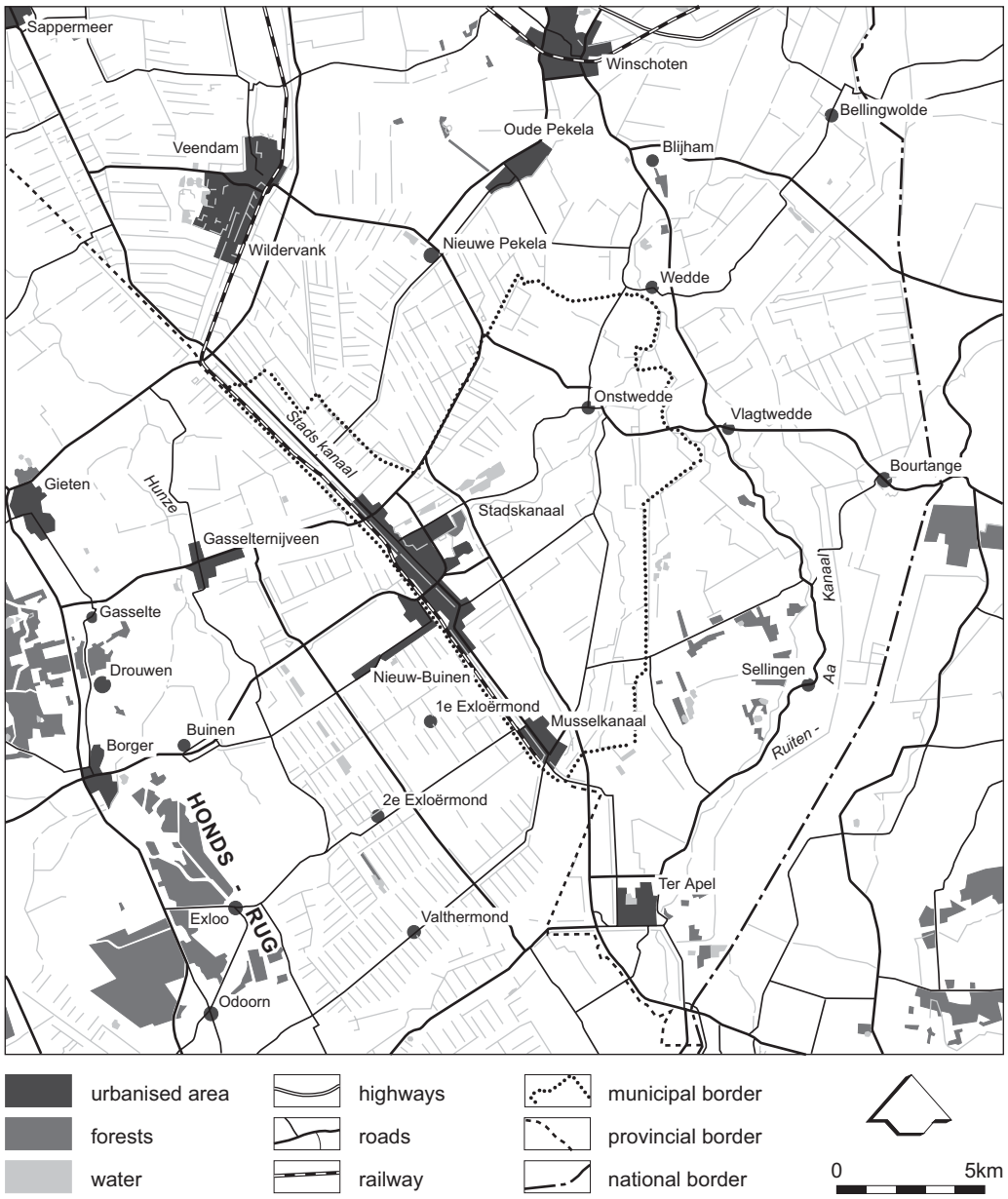

Figure 1.4 The municipality of Stadskanaal

The major part of the municipality consists of a fen-colonial landscape of rectilinear shape, expressing the rational reclamation of the fen area into arable land. It has elongated villages along the linear channels from which the cultivation of the land was started. Stadskanaal is relatively peripherally located and less densely populated than Ede; it has a total population of 32,908 inhabitants and a population density of 274 people per km^2. Though this number has been pretty stable for the last couple of decades, it is currently slightly decreasing. Agriculture is the main land use, although its share is decreasing in favour of employment in the secondary and tertiary sectors. Recently, several farmers within or nearby Stadskanaal have planted or intend to afforest former farming land. The

afforestation is limited to several hundreds of hectares, which are about 2% of the municipality surface.

Within the framework of the Multifor.RD project a European typology of rural areas characteristics of all study areas was developed on the basis of quantitative descriptors such as those included in Table 1.2 (De Deugd & Elands, 2001). On the basis of this typology, the two Dutch case study areas can be characterized as follows:

- *Ede - Rural area with urban characteristics* (areas with a developed tertiary sector). Agriculture is loosing importance and development towards urbanisation is and has been taking place. The economic structure is diversified and the tertiary sector has taken over the primary sector. The areas have a high population density and are situated not far from big cities. The municipality of Ede includes a town of approximately 70,000 inhabitants and surrounding agricultural and forest lands.
- *Stadskanaal - Diversified rural area (development of secondary and tertiary sector).* Stadskanaal is an area that is in development and appears to show signs of urbanisation. The population is increasing and a development towards a diversified economic structure is taking place. Agriculture is loosing importance and the secondary and tertiary sectors are taking over the primary sector. Agriculture is still dominating land use, but the importance of the secondary sector is high and the tertiary sector is developing.

Qualitative survey

In the two case study areas a qualitative survey was undertaken to get insight into the variety of discourses regarding the role of forestry in rural development. A discourse consists of a set of arguments which people use to communicate their understanding and explanations about the meaning of certain phenomena in their everyday lives. In order to get insight in local discourses on uses, experiences and values that local people attribute to forests in their rural area a phenomenological approach was used as basis for the interviews. As elaborated in the manual for conducting the qualitative survey (Le Floch et al., 1999) phenomenology may be defined as "*the precise and accurate description and account of the phenomena we encounter in the world, without the distorting influence of a priori and unclarified assumptions*". Phenomenology is based on the notions that (i) there exists no objective reality, (ii) each of us can only experience certain aspects of the real world, (iii) relevance is not inherent in nature as such, and (iv) the construction of reality, or the attribution of meanings to objects, is socially determined. The use of the phenomenological principles during the in-depth interviews had several implications. This approach presumes that the interview proceeds from pure consciousness without presupposing an existing world. Next, the interview is a co-construction (the discourse is itself reflexive). The objects of inquiry cannot be specified a priori: the researcher sets the stage and the interviewee makes the script. It is important to recognize that all meanings or values are legitimate. The interviewer must have an empathic attitude. Finally, the interview starts from the daily experience in order to let the interviewee settle in his/her own world of reference. These principles were followed as much as possible for conducting the qualitative surveys in all study areas.

A conceptual framework for general guidance of the interviews and a detailed research protocol was developed (Le Floch et al., 1999). The conceptual framework consisted of a simple descriptive model illustrating the various aspects to be considered during the interview. This model served as a guide to the interviews by providing a systematic framework for the principal research questions, which were formulated as follows:

- what general impressions do people have of the rural area they live in?
- are forests of any significance (personal or otherwise) to the actors using the area?
- how are forests and forestry experienced within the area, how did forests develop in the past, and how do people perceive that forests will develop in the future?
- what meanings and values do actors attribute to forests?

65 Interviews have been carried out with representatives of:

- *producers* (farmers, forest owners/managers, tourist-recreational entrepreneurs and wood company): 14 in Ede and 11 in Stadskanaal;
- *consumers* (inhabitants, recreationists and tourists): 7 in Ede and 9 in Stadskanaal;
- *decision makers/interest groups* (local/provincial policy makers, national policy makers: Ministry concerned with rural development and Ministry concerned with afforestation and land use, municipal environmental education centre, tourist office, environmental organisation, agricultural union, game management, association 'maintenance cultural heritage and/or local liveability', association of 'wood culture'): 11 in Ede and 13 in Stadskanaal.

The results of this qualitative survey have been reported in Elands (2002).

Quantitative survey

Whereas the qualitative survey was aimed at getting insight in the diversity of perceptions and attitudes of different stakeholders with respect to the role of forests in rural areas, the quantitative survey was aimed at assessing the distribution of these perceptions and attitudes in 9 European countries. The objective of the quantitative survey was (Elands et al., 2000):

- to make a comparative trans-European study of the practices and attitudes of landowners and community inhabitants with respect to (a) the role of forests and forestry in rural development, (b) multifunctional forestry and (c) to forestry policies and programmes.

On the basis of the overall research objective and the results of the qualitative survey, the following main research questions were identified (Elands et al., 2000):

- What are the practices[1] and attitudes of landowners and community inhabitants regarding (a) the present and potential role of forests and forestry in the rural area, (b) multifunctional forest management, and (c) locally relevant forestry policies and programmes?
- What are the (dis)similarities in practices and attitudes between (a) landowners and community inhabitants, (b) afforestation and traditional forest areas, (c) between types of rural areas, and (d) between countries?

[1] The practices were divided in: (i) management practices of landowners with respect to forestry and agriculture and (ii) experiential practices of community inhabitants with respect to the local forests and to the local area.

In order to allow a consistent transformation from the results of the qualitative interviews (socially constructed meanings of actor groups with respect to local forests) to behavioural concepts to be assessed quantitatively two main activities were carried out (Elands et al., 2000). In the first place, a theoretical exploration of the key words in the research (i.e. rurality, rural development, and multifunctional forestry) was made. In the second place, the results of the qualitative survey in respect to the identified discourses and the criteria and indicators were integrated. The results of the theoretical considerations as well as the empirical results of the qualitative survey allowed the research team to develop a common analytical framework indicating conceptual linkages between forestry and rural development (Wiersum & Elands, 2002). The methodological background, development of questions and concepts behind each question in the quantitative survey is described in the 'Survey Manual' (Elands et al., 2000, see also Wiersum & Elands, 2002: 14-18).

The methodology for the survey was jointly developed with the Multifor.RD partners. Two separate questionnaires have been developed: (i) for community inhabitants, consisting of people living inside the case study area who do not own agricultural and/or forested land, and (ii) for landowners, consisting of people owning agricultural land and/or forested land in the municipality, these do not need necessarily to live in the municipality itself. Both groups had to answer a basic set of questions; for the landowners the questionnaire comprised a separate section of questions.

In the Netherlands, we have used the telephone book as a sampling frame to select community inhabitants, as access to the municipal population register was restricted due to privacy-legislation. The land registration office (Kadaster) has generated a list of owners (selection of owners with parcels farm- and/or forest land). People owning less than 1 hectare were excluded in view of the risk of them managing 'a big garden'. Given that a postal questionnaire method was to be used, considerable effort was invested in ensuring a positive first impression for respondents. Accordingly, a covering letter of the municipality administration emphasizing the relevance of the study to the future development of the locality was included. The questionnaire itself was made in a stapled booklet and pre-paid envelopes were used.

In total 2041 questionnaires have been sent out in the beginning and finally 847 have been returned (see Table 1.3). The response rate was 41%. Reasons for this relatively low response rate are: (i) a general decrease in response rate on surveys and (ii) due to the foot and mouth disease the original plan of 'personal delivery and collection' as a reminder procedure could not be realized.

Table 1.3: Distribution of target groups and case study areas (N=847)

	Ede		**Stadskanaal**		**Total**	
Community inhabitants	255	63%	262	60%	517	61%
Landowners	152	37%	178	40%	330	39%
Total	407	100%	440	100%	847	100%

The coding and analysis has been done within the statistical programme SPSS. As the distribution of our sub-samples (community inhabitants and landowners) does not represent the real distribution of

both groups within the locality, a weighting formula was developed for drawing conclusions on a case study area level. The results of the quantitative survey are described in Elands (2002).

National Synthesis

The last phase of the research consisted of the preparation of a country synthesis. This synthesis should evaluate the research findings in the context of policy implications. This evaluation involved three activities:

- Preparation of an overview of Dutch forestry and rural development policy.
- Preparation of a synthesis of the research findings of both qualitative and quantitative surveys.
- Identification of policy implications on the basis of the research findings. The identification of the policy implications was done in three steps. First, a preliminary identification of the policy repercussions of the research findings was made and presented to an advisory group consisting of representatives of various Dutch forestry and rural development organisations. For the conclusions of this discussion see Annex 2. Next, the tentative conclusions on policy repercussions were presented to the other European research groups and compared with their tentative conclusions. On the basis of the outcomes of these two discussions policy implications were formulated. These were subsequently compared with the contents of the Dutch policies regarding forestry and rural development.

1.3 Legitimisation of research approach

According to the aims and the approach of the research, the Multifor.RD study did not intend to give a representative overview of opinions in the whole of the Netherlands on the contribution of forests and forestry to rural development. Rather its objective was to present information from two contrasting areas regarding rural and forestry conditions within a broader European context. In considering the representativeness of the research findings and of the relevance of the policy conclusions in a Dutch context the following aspects should be considered:

- The study did not aim at making an 'objective' assessment of the role of forestry for rural development, but rather aimed at obtaining an understanding of how different categories of people living under different rural conditions perceive the present and future role of forests in respect to the perceived quality of life in the study area (Elands & Wiersum, 1999).
- Within the regional perspectives as applied by the Multifor.RD project, Ede and Stadskanaal differed in respect to two major variables, i.e. rural conditions and forestry conditions. In respect to rural conditions, Ede was classified as a rural area with urban characteristics and Stadskanaal as a diversified rural area. And in respect to forestry conditions, Ede was selected as representing a traditional forest area and Stadskanaal as representing an area with recent afforestation). Within the context of the Netherlands, the differences in results between Ede and Stadskanaal should not be considered as typically representing views from traditional and afforestation areas, or between a rural area with urban characteristics and a

diversified rural area. Rather, the differences provide an example of how contextual factors impact on opinions regarding the role of forestry in rural development.

- During the past years several studies regarding the opinions of Dutch people on forests have been made (Wiersum & Van Vliet, 2002). The Multifor.RD study contributed towards a further understanding of the already existing knowledge of the Dutch perspectives on forests by looking specifically at two aspects that hitherto received little attention in earlier studies. These aspects are the opinions on the role of forest within the context of rural development, and the distinction between the opinions of consumers and producers.

Consequently, the study results should not be considered as providing prescriptive information on how to forests can best contribute towards rural development, but rather as descriptive and evaluative information on major opinions regarding the role of forests as contributors to the quality of life. This information adds to the already existing data base of information regarding the perspectives of Dutch people on forests. Against this background the Multifor.RD results can well be used for the identification of major conceptual areas which deserve policy attention.

A second factor influencing the representativeness of the study results relates to its statistical reliability. Such reliability depends on the representativeness of the sample groups included in the study as well as the sampling procedures followed. With respect to the qualitative survey, the selection of the sample used a purposive and snowball procedure that aimed at obtaining a broad and realistic array of opinions, attitudes, perceptions and practices of different people involved in forestry and rural development in both areas. However, it might be that -due the quantity of and diversity of interests of actor groups in each area and to restricted time- not each actor group has been interviewed in its entire variety. Open interviews were used to obtain a pluralistic and unbiased view of all the gathered opinions.

Concerning the quantitative survey, attention was paid to get a representative sample of both target groups in each study area. Within available sample frames random sampling has been applied. Besides, weighting was used to increase the representativeness of the sample. Finally, the response rate (on average 41%) was reasonable. Of course, there is still a majority that did not return the questionnaire and there is no background information of this group available. In a pilot-survey, the questionnaire has been tested on the understanding of the questions (do the questions measure what they intend to measure?). The final questionnaire, therefore, was filled in satisfactory.

1.4 Structure of the report

In Chapter 2, a short introduction into Dutch forest policy and programmes will be given. Chapter 3 presents the main conclusions of the studies in Ede and Stadskanaal, which can be drawn from both the qualitative survey and the quantitative survey. It also indicates which policy implications can be drawn from each of these conclusions. In Chapter 4, the conclusions are further discussed and the final overall policy implications of the research findings in view of the current Dutch forest policy are identified.

2. Policy framework for forestry and rural development in the Netherlands

2.1 Introduction

In this Chapter the Dutch policy regarding forestry and rural development will be summarized. First, the general features of the Dutch rural policy development are described giving attention to both the rural conditions and trends and to the official government policy to stimulate rural development. This policy aims at an integrated approach, including development of sustainable agriculture, improved management of water, nature and landscape, promotion of new economic activities such as recreation and tourism, and promotion of rural liveability. Forest and nature development are an integral part of the Dutch rural development policy. In the second part of this chapter the forestry policy is further detailed. After presenting the general features of Dutch forestry, the legal and policy frameworks regarding forestry are described.

2.2 Characteristics of rural development in the Netherlands[2]

Until the late 20th century, in the Netherlands there did not exist an integrated policy document providing an overview of different policy measures for stimulating rural development. Rather, rural development was conceived of as the outcome of an amalgamation of more specific policies regarding, amongst others, the development of the agricultural and forestry sector, land-use zonation and land re-allotment. This situation changed under the influence of the EU policies. In 1999 new agreements were made concerning EU- structural funding within the framework of the Agenda 2000. In the Netherlands this provided the impetus to launch an EU-Rural Areas Programme.

2.2.1 Rural conditions and trends

The Netherlands consists for about 80% of rural forms of land-uses in the form of meadows, crop fields, forests, and nature areas. These areas are not only of importance for primary production, but also for nature conservation and recreation. The interrelationship of agriculture, environment, wildlife and the natural landscape is considered as a main feature of the Dutch countryside. Rural development in the Netherlands therefore means the development of an optimal balance between the different functions of the rural areas. The search for such a balance is influenced by the ongoing

[2] The description on the Dutch policy on rural development is based on Ministry of Agriculture, Nature Management and Fisheries (2000) Rural development programme The Netherlands 2000-2006. Summary. The Hague.

processes of social dynamics such as urbanisation, ageing and development of new economic activities in rural areas.

Urbanisation and increasing demand for space

The Netherlands is a small and very densely populated country with a high level of urbanisation. This greatly affects the nature, significance and use of the countryside. The entire territory of the Netherlands covers a land area of 33,873 km^2, 70% of which is used as agricultural area, 13% for building development and transport and 14% for forest or woodland and nature areas. This indicates that agriculture is a major player in the countryside. However, the countryside accommodates many other forms of use and numerous economic activities besides agriculture.

The pressure on rural areas is increasing, as people need both rest and relaxation and sufficient space for life, work and water management to continue. The countryside is moving towards becoming a public domain for a predominantly urban society. One of the consequences of this pressure on rural areas is the heavy demand for land; on the one hand for urban growth and expansion of infrastructure, and on the other for nature development and creation of recreational areas. Agriculture also needs more land, in view of the need to farm more extensively.

Ageing of population

Around 55% of the overall Dutch population lives outside the 20 main urban agglomerations. Only a limited proportion of the 55% work in agriculture, and this proportion will decrease further in the coming years. At the same time non-agricultural workers will continue to migrate into the countryside. The coming decades will see a strong increase in the ageing of the population, in both urban and rural areas. The ageing of the agricultural workforce is keeping pace with the national average. There are regional differences in the distribution of age groups. In the north and north-east there is already a certain ageing of the population, while in other parts of the country age groups are slightly more evenly distributed. These developments impact not only on urban, but also on rural areas. A relatively older population, for example, leads to strong demand for recreational and tourist facilities.

Changes in rural economy

Traditionally, the rural economy was dominated by agriculture with the dairy sector having the most holdings and horticulture taking second place. Arable farming is important in marine clay areas and intensive livestock farming is practised in the east and south. The total number of holdings is expected to decrease. Agribusiness is also expected to account for a smaller proportion of national income. The area of land under cultivation will decrease as a result of further urbanisation and the growing need for nature, wildlife and recreational areas. In the east and south the great concentration of intensive livestock farms affects the environment and the quality of the region. In the west of the country glasshouse horticulture is squeezed between urban areas. In the peat lands in the north, arable farming is vulnerable due to its heavy dependency on potato growing for the processing

industry. Dutch forest and woodland is predominantly multifunctional in character. Government policy aims to increase the area available for recreational use of natural forest and woodland.

Recently several new rural economic activities are arising, such as recreation and tourism. The decrease in agricultural activity has led to a decline in provisions in the countryside, particularly in the north. The increase in other activities can compensate for this lack of provision. The countryside, with its characteristic peace, space and local identity is increasingly important to urban centres and urban dwellers.

While the quality of the rural environment has improved in recent times, partly thanks to efforts made by agriculture to control the use of fertilizers and manure, further improvement is still required. The past few decades have seen a severe loss of nature values and a levelling of the landscape. The achievement of the national ecological network must prevent further degradation of valuable nature areas and unique landscapes. In addition to maintaining existing nature areas, new areas are also being created in agricultural areas through appropriate management. Climate change, rising sea levels, subsidence and other developments mean that adjustments must be made to water management systems. Efforts are focused on making water systems more resilient and durable, capable of withstanding extreme wet and dry conditions. Particular attention is being paid to river widening, and the problems of increasing sea water intrusion and salt water seepage in the west of the Netherlands, and water depletion in sandy areas.

Regional differentiation

These processes are not evenly spread over the country. Important regional variations in the rural situation are:

- the Randstad conurbation in the west of the country is far more densely populated than the rest of the country, so the pressure on land in this area is greater than average;
- in the north and centre of the country there are many contiguous woodlands and natural areas, offering opportunities for large-scale nature development;
- in the south of country major many new economic activities are being planned, placing heavy demands on land;
- in the north of the country there is relatively little urbanisation pressure, this part of the country is characterised by typical rural areas with specific rural problems and opportunities.

Conclusion

The Dutch countryside is very much in a state of flux. Urbanisation, nature and landscape development and developments in agriculture and horticulture are changing the face of the countryside. Adjustments are necessary to give each of the different uses an appropriate place and to guarantee or even improve planning quality. Some of the implications for the future of rural areas are:

- agriculture will have to adapt to meet social requirements and will have to comply with limiting environmental, nature and landscape conditions: in some cases sectors will need to be restructured to guarantee the sustainability of the sector;
- there is a need for more and better nature and landscape areas;
- the water system approach must incorporate changes aimed at water conservation and safety;
- the improvement of economy and liveability are also important factors in rural areas.

2.2.2 Rural development policy

Main strategy

The description of the rural conditions indicates that the Dutch countryside is considered as having multiple functions as well as facing significant change. The Dutch policy regarding rural development is based on a view of rural areas in which different uses co-exist in a broadly consistent way. It aims to achieve a new, sustainable balance between all the functions of the countryside, by means of an integrated approach. The overall objective of rural development is to maintain the countryside and develop the key qualities. Therefore, the basic strategy guiding rural development programmes is:

- to prepare the countryside for the 21st century by working towards a new sustainable balance between economic functions and the functions of nature, landscape, water and environment: functions which each claim their own space;
- to strive to achieve economic, social and ecological sustainability by means of an integral approach to the problems;
- to develop the function of the countryside from primary production into more multiple use, among other things by effecting a shift from separation of functions to attracting new functions.

The rural development strategy is thus based on the combined principles of the need for restructuring agriculture for the future and on the need to launch new initiatives in rural areas, partly to make the countryside more attractive to users.

The implementation of this strategy should be based on the principle of co-operation with rural dwellers and farmers organisations. It is recognized that such local groups often take initiatives for rural development, and that rural development should be based on a local approach involving both local administrations and residents as much as possible in implementation. The renewal of rural areas should be achieved by an integrated approach with contributions from all the parties concerned. Such an approach takes maximum account of the specific characteristics and development opportunities of the areas concerned.

Operational goals

The strategy has been elaborated into six major goals for rural development in the Netherlands:

- development of sustainable agriculture;
- improving the quality of nature and landscape;
- conversion to sustainable water management;
- promoting diversification in economic activity;
- promoting recreation and tourism;
- promoting liveability.

The specific considerations underlying each of these goals will be shortly described.

Developing sustainable agriculture

Agriculture in the Netherlands is facing developments which will bring radical changes to the sector. The most significant are:

- European policy, which is directed towards better balance on the agricultural markets and the reduction of agricultural surpluses; the reduction of fixed price guarantees for agricultural produce is an important measure in this respect;
- liberalisation of world trade, arising from GATT/WTO negotiations;
- public (consumer) expectations that agricultural products will be produced in an environmentally and animal-friendly way and that these products will not pose any threat to health;
- the need to redress the balance between agriculture and the environment, in which
- agriculture reverts to clean production and provides for an ecological sustainability in rural areas.

The agricultural developments bring with it the need for a further restructuring and intensification of agriculture in order to achieve an economically and ecologically sustainable condition. Furthermore, agriculture will increasingly have to be based on an integrated approach that is adjusted to local problems.

These developments present agri-businesses with a choice of different directions for development. Those who wish to continue working in agribusiness can opt for economies of scale, conversion from supply to demand-led production or a high degree of specialisation. Farmers, who opt for alternative future perspectives, can look for opportunities for alternative or supplementary income, such as organic farming and agri-tourism activities. Finally, some farmers might want to stop their agricultural practices. Farming business closures affect the liveability of small centres; consideration must be given to change of use of former agricultural buildings and to boosting the dynamism of rural areas.

Improving the quality of nature and landscape

In order to increase the vitality of the countryside there is a need to greatly improve the quality of nature and landscape. This entails, for example:

- taking measures to preserve and develop the intrinsic value of nature and landscape
- improving the amenity value of nature for the public

- establishing the planned cohesive, high-quality ecological structure (national ecological network).

The latter measure plays a central role in Dutch nature policy. There is steady progress in increasing the area of the national ecological network, but the decline in biodiversity as a result of amongst others fragmentation and decreasing water tables has not yet been halted. More attention will therefore be devoted to improve the quality of nature areas over the coming period. An important precondition is to achieve the environmental quality necessary for optimum nature development. Measures are also being taken to improve the quality of the landscape, aimed at preserving characteristic landscape and heritage values. Local identity, peace, quiet and vastness are essential features of the landscape. Measures will also be taken to restore and preserve the rural cultural heritage.

Multi-functional use of space can contribute to the desired quality of nature and landscape. Measures will be taken to stimulate the planting of woodlands on agricultural land and private management and maintenance of woodlands for the development of nature and landscape values. The desired improvement in quality should make the countryside more attractive for tourism and recreation, increasing the interest of the countryside for urban-dwellers and holiday-makers.

Conversion to sustainable water management

In order to secure the water supply and provide long-term flood protection there is a need for a water management system which is linked to natural processes. The point of departure within the rural development policy is that water will play a significant role as a regulatory principle. This means that planning developments in agriculture, recreation, nature, urban areas and infrastructure will be better attuned to the specific requirements of sustainable and resilient water management. There should if possible be an integrated regional approach for each area, in which the water system is seen in the context of its surroundings.

The restoration of former wetlands in nature areas must as far as possible be linked to water storage or water conservation for agriculture, so that sufficient fresh water is available for the irrigation of agricultural crops (particularly in marine clay areas). Where feasible and worthwhile, agricultural land can also be used for water collection and retention. The national effort is aimed at restoring the resilience of water systems. That means that water is given more space and catchment areas are as self-sufficient as possible, partly through the reinforcement of their water-retaining capacity.

Promoting diversification in economic activity

The rural economy can only continue to function properly if there is significant broadening of economic activities, both in the agriculture sector itself, and in combination with other sectors.

Market trends and environmental and planning restraints mean that some people working in agriculture need to earn alternative supplementary incomes. Currently around 10% of farmers in the Netherlands earn additional income by broadening their activities. Increased diversification is possible and offers potential for both farmers and the countryside. The form of diversification chosen will depend heavily on local requirements and the local situation. A pre-requisite is that the ‘diversified

activities' comply with the economic rules of the relevant sector, and do not detract from the quality of the countryside. This requires professionalisation and quality.

In addition to diversification in agriculture there is also a need for strengthening the economic base of rural areas, for example through the establishment and development of new rural manufacturing enterprises or new rural services.

Promoting recreation and tourism

The Dutch countryside must meet a greater and still growing demand for recreation and tourism; a further restructuring and strengthening of the sector is required to achieve this. Shared recreational use of the countryside based on the unique features in the different regions offers good prospects for additional economic activity for agriculture. Holiday business (tourism) in rural areas is also increasing. To aid further development of recreation and tourism in rural areas there is a need to strengthen the competitive position of theses new activities. Attention needs also to be given to maintain or improve environmental quality (clean water, clean air, quiet), which is a precondition for good recreation and tourism development.

Businesses already catering to the holiday (overnighting) and day-tripper trade with sufficient prospects for development must invest in quality: environmentally-friendly operation, development of the chain, alliances with agriculture and nature organisations, image enhancement, development of new product-market combinations to provide a varied range of recreational options.

Improving liveability

Quality of life and welfare are important goals of rural policy, and in this respect a balance is sought between economic vitality and ecological quality. Liveability is the touchstone of this aspiration. Aspects affecting liveability include social participation, social contacts, individual involvement in the living environment, social cohesion, access to social provisions, residential climate and the level of services. A regional approach is aimed at retaining the liveability of the countryside and developing potential by introducing new economic activities, improving the level of provision, employment and social cohesion.

Rural developments efforts should aim at the maintenance of at least the current level of provision for education, health and care for the elderly. In areas with an actual or anticipated low population density, and where there are many elderly residents, provisions need to be reinforced. Also sufficient and more diverse employment opportunities make a considerable contribution to the quality of life in the countryside and in small centres. It is important to maintain levels of care provision, to reinforce residential and traffic provisions and to introduce new activities into rural areas.

Because the population is scattered over the countryside, cars are still the main means of transport. Traffic safety projects for country roads are therefore important in reducing the number of accidents. However, there is also a need to improve public transport to increase accessibility for non-car-owners. Both the accessibility of facilities and the need to reduce commuting by car, require appropriate public transport or collective demand-dependent transport.

2.3 Characteristics of Dutch forestry[3]

2.3.1 Forest area and functions

Forest area

The Netherlands is one of the most densely populated areas in Europe with an average population density of about 460 persons per km^2. The forest area is 341,000 ha, or only about 10% of the total land area (exclusive water surface). This means that per person $200m^2$ of forest area is available[4]. The forests are relatively young. Due to overexploitation and conversion of forest to agricultural land, around 1880 there remained only 220,000 ha of forests. Thanks to major plantation efforts, the forested area has since increased by 50%. This increase is still continuing with an annual increase of about 1,000 ha. The Dutch government aims for a forest area of 400,000 ha by 2020 (Ministry of ANF, 2002).

The present cover of 341,000 ha of forests consists of[5]:

- 25% nature protected forests (83,600 ha)
    - forested nature reserves: 3,000 ha
    - forests within National Parks: 24,200 ha
    - other types of protected forests: 56,400 ha
- 75% of multifunctional and production forests (257,400 ha).

In addition to forested area, the Netherlands has an area of about 140,000 ha of other nature area such as wetlands and heath lands (CBS-website, data 1996). The close interaction between forest and nature areas is reflected by the fact that about 50% the area managed by the State Forest Service consists of nature areas other than forests. Several nature conservation organisations also manage large tracts of forests.

Forest functions

In the beginning of the 20th century forests served a limited number of functions: wood production, stabilisation of sand dunes and soil improvement, and -for a small group of wealthy estate owners- prestige and hunting. Since the 1950s forest functions have gradually diversified and at present the forests have a multiplicity of functions for Dutch society (Wiersum & Van Vliet, 1999; Schmidt et al., 1999):

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[3] The contents of this chapter is mainly based on:

- Wiersum, K.F. and C.J.M. van Vliet (1999). Context and content of national forestry programmes in the Netherlands. Glück, P., G. Oesten, H. Schanz and K.R. Volz (eds). *Formulation and implementation of national forest programmes. Vol II: State of the art in Europe*. EFI Proceedings No. 30, p. 175-189.
- Schmidt, P., E. Kuiler, F. Wiersum & B. Filius (1999). The Netherlands. In: P. Pelkonen et al. (eds), Forestry in changing societies in Europe. Part II Country Reports. SILVA Network, University of Joensuu, Finland, p.229-253.

[4] To compare: the Danes have $1000m^2$ per caput and the French $2300m^2$ per caput

[5] Data derived from www.sbh.nl (November, 2002). Source: Bosdata.

- Wood production is obvious one of the forest functions. Annually ample 1 million m^3 of wood is harvested; this wood supplies 6.4% of the domestic wood consumption (1999). About 42,500 people are employed in forestry and wood trade and processing (including that of imported wood)[6]. The annual value of wood trade and processing is approximately Euro 7 billion. However, due to the demands of often urban-based people, other forest functions are much more important than the timber production function.
- Annually about 200 million people visit forests for recreational activities; the average number of visitors is 600 persons/ha/year, but this number may increase to 10,000 /ha/year for the most intensively visited forests. In the early 21st century, however, the growth in forest recreation has stagnated.
- Nature functions of forests are highly valued. This is reflected by the fact that 25% of the total forest cover has a protected nature status and 14% of the non-protected forests are owned by private nature conservation organisations. Most other forests are managed according to the principle of multifunctionality with attention being given to timber production, recreation and nature protection.
- The environmental functions of forests are increasingly acknowledged and sometimes also financially rewarded. For instance, in the 1990s electricity companies have selectively started funding afforestation as a means to sequester carbon-dioxide. Similarly, a water supply company has started a trial to compensate forest owners for switching from coniferous to deciduous species in order to decrease evaporation and thus to reduce parching.
- Another function of increasing importance is the improvement of the living environment of housing areas. In some areas, the proximity of green areas increases the value of real estate property (average semi-detached house with garage) with 7%. If there are forests in the wider vicinity as well as close by, the value of the same house is 14% higher (Stichting Probos, 2000).

2.3.2 Main actors related to Dutch forestry

The multifunctional nature of the forest in the Netherlands is reflected by the fact, that there are several groups of stakeholders who are interested in one of more specific functions of forests. Three major categories of stakeholders may be distinguished who play a role in policy formulation and implementation (Wiersum & Van Vliet, 1999), i.e.:

- forest owners and forest managers;
- forest users;
- policy makers.

[6] Data derived from www.sbh.nl (November, 2002).

Forest owners and forest managers

In the Netherlands forest ownership is rather diverse. The forests are owned by:

- the State Forest Service (37%)
- private owners (31%)
- nature conservation organisations (18%)
- and local authorities and other public bodies (14%).

At present half of all Dutch forests (51%) are publicly owned. Most of these public forests (37%) are owned by the State Forest Service, which used to be a state company, but is now a semi-autonomous forest management agency. The remaining 14% is owned by municipalities, provinces and public bodies, such as water supply companies.

Around 1940 the area of forests owned by private owners was much larger (65%) than at present. However, due to the long production cycles as well as the multiple functions of forests of which many cannot be financially rewarded through market mechanisms[7], both the state (now the State Forest Service) and the nature conservation organisations have taken over many of the private forests being sold by their owners. Since the 1980s, the national government provides financial support to private nature conservation organisations as well as to the State Forest Service for obtaining additional forest and other nature areas. Recently, private forest ownership is somewhat increasing, due to the afforestation of farmlands.

In contrast to the relatively large tracts of forests owned by the state and nature conservation organisations, the forest plots owned by private persons are characterised by their small size. About 45% of the private forests are between 0.5 - 5 ha in size; only 18 private owners have a forest area of over 500 ha. For most private owners forestry is not their main means of livelihood, rather forests are kept as part of estates, as ancestral lands, or outdoor recreation area for the family. Especially for small private landowners the motives to maintain forests are mostly amenity and conservation reasons rather than productive and financial reasons (Van der Ploeg & Wiersum, 1996).

Forest users

The Netherlands is densely populated and predominantly urbanised. People's attitudes to forests are predominantly shaped by the perception of forests as antipoles to urban areas characterized by naturalness and quietness. The main users of the forests are recreationists and tourists, who visit the forests, and inhabitants, who appreciate the proximity of forests that ameliorate their living conditions.

A lot of Dutch people are member of an organisation for nature conservation and/or recreation. For instance, over 1 million persons are member of the Dutch nature conservation organisations. Some of these organisations are predominantly engaged in managing nature reserves (including forests). The most prominent nature conservation organisation, in this respect, is Natuurmonumenten (Nature

[7] The financial results op private forest owners are mostly negative during the last decades. The business loss of owners with more than 5 ha of forest is about 70 Euro's per ha (www.sbh.nl, November 2002).

Monuments). This association was started in 1905. Momentarily, they have over 900.000 members (6% of the Dutch population) and manage in total 78,000 hectares of forest and nature area. Other nature organisations act as lobby groups advocating more attention to environmental protection and nature values. The latter are rather critical to the former times prevailing plantation forest management practices, and have been very influential in stimulating discussion on new approaches to forest management.

Minor users of the Dutch forests are the wood companies. Most Dutch wood is used for bulk production (first mine props, at present industrial wood) rather than high-value special products (wooden shoes being an exception). Both timber trade and timber manufacturing are characterized by a multitude of relatively small companies.

Still another category of forest users with an increasing influence on forest management and policy are various utility companies such as water and electricity supply companies.

Relations between forest owners and forest users

The relations between various categories of forest users and forest owners can be summarized as follows. Traditionally the forest - wood chain is rather weakly developed. As a consequence of the government policy to subsidise forest owners for providing basic recreational facilities (see section 2.4.3), no forest - recreation chain with structural relations between forest owners and the recreation industry has developed. Recently a start was made to develop chain relations between forest owners and utility companies, with the latter paying a kind of function endowment for the environmental services of forests. By far the most important influence of forest users on forest management and forest policy is effectuated through a multitude of non-governmental organisations. Especially the environmental and nature conservation organisations, backed by a large constituency of members, have been influential in setting the policy agenda on how to develop forest management. Thus, social attitudes rather than market forces have been most influential in steering forest policy processes in the Netherlands.

Policy makers

The Netherlands can be characterized as a decentralised unitary state in which policy responsibilities are distributed between national (state), regional (provinces) and local (municipalities) level. The national government is traditionally responsible for forestry related matters (Van Vliet, 1993). The main responsibility with respect to forestry policy rests with the Ministry of Agriculture, Nature and Food Quality. But the responsibility for the timber industry rests with the Ministry of Economic Affairs. Due to this split responsibility, in the Netherlands no strongly developed policy towards stimulating an integrated forest - wood manufacturing chain has developed. In addition, forestry policy is influenced by the Ministry of Spatial Planning, Housing and the Environment which holds responsibility for town and country planning and environmental policy matters. Of special relevance are the regulations on regional planning, which are based on a system of local (community) decision-making with respect to

land-use zoning. Especially in case of afforestation of agricultural lands these regulations have sometimes been used by farmers to oppose afforestation of lands adjacent to their fields.

As a result of the Dutch decentralization policy, provincial authorities play increasingly an important role in countryside planning as well as forest management. The local authorities do not have a specific role with respect to forestry policy formulation, but they exert an important influence on the implementation of the policies. Especially through their authority to decide on detailed land-use zoning they have an important role in regulating the use of private and public property. Furthermore, as indicated above, some municipalities are also a forest owner, which makes them a considerable factor in forestry policy.

2.4 Legal and policy framework for forests

2.4.1 Short history

Government involvement with forestry as we know it today has its origins in the late 19th century. The social and economic benefits of forests were gradually acknowledged and there was a growing support for government action in sustaining the forest resource. Through the State Forest Service (founded in 1899) public funding started for the purchase of woodlands and nature reserves and for the afforestation of unproductive land. In addition, financial support and advice was given to public bodies for similar purposes. The first *Forest Law* was enacted in 1922 to safeguard the forest land base and to protect the natural beauty of forests and woodlands. Fiscal measures were taken to alleviate the financial burden for private forest enterprises and afforested country estates.

In the second half of the 20th century outdoor recreation and ecological functions grew more important than timber production. Closing down of the coal mining industry (a major outlet for inland timber) aggravated the financial situation of forest owners. The Industrial Board for Forestry (a non governmental organisation representing the forest sector) urged government to start giving financial support to forest owners on a regular basis. Moreover, the same organisation presented some thorough proposals for a Dutch forestry strategy, putting forestry firmly on the political agenda. The Ministry of Agriculture and Fisheries took up its responsibility and issued in 1977 a sector study on forests and forestry as a contribution to the national rural planning debate (Ministry of Agriculture and Fisheries, 1977). This started a learning process of national forest policy making.

Two major milestone documents were published by the Ministry of Agriculture, Nature Management and Fisheries (note that the name of this ministry was changed in 1990 to include nature management), the *Long-term Forestry Plan* of 1984 and the *National Forest Policy Plan* of 1993. Each plan is a reflection of society's understandings of how to deal with forestry. The first Long-term Forestry Plan was formulated as a contribution to the national rural planning debate. On basis of an evaluation of the results of this plan a new National Forest Policy Plan was formulated. This new National Forest Policy Plan (1993) recognises:

- that conservation and ecological development of forest ecosystems are essential
- that forests fulfil multiple functions (nature, wood production, recreation, landscape quality, environmental quality)
- that the management should be sustainable and cost-efficient
- that expansion of the Dutch forest area is necessary
- that it contributes to sustainable forestry world wide, and
- that involves other authorities and private parties.

The Forest Policy Plan is influenced by the concept *National Ecological Network* (Ecologische Hoofdstructuur) as introduced in the *Nature Policy Plan* (Natuurbeleidsplan) of 1989. This network aims to connect valuable natural areas, woodlands, water areas and important landscape features, which together form the backbone of the Dutch countryside. This concept was and still is very influential in the present policy with respect to forests, nature and landscape.

In the 1980s and 1990s several important changes in thinking about how to deal with forestry took place. Three major strategic changes with respect to formulating the plans, their content and instruments for their implementation took place:

- a change from a sectoral to a more integrated approach, especially with respect to the nature and environmental value of forests
- a change from state supremacy in dealing with forest policy and management issues to a more decentralized approach
- a change from a process based on professional expertise to a more participatory process involving a multitude of stakeholders.

Finally, in the year 2000 the restructuring of the forest policy came to its as yet final stage by becoming integrated in the more general nature policy.

2.4.2 Present forest policy framework

The most recent policy framework with respect to the future, functions and meaning of the Dutch forests is formulated in the document '*Nature for People, People for Nature'* (Natuur voor Mensen, Mensen voor Natuur), published by the Ministry of Agriculture, Nature Management and Fisheries[8] (2000). Although this Ministry is main responsible, three other Ministries have signed the ideas expressed in this document: the Ministry of Spatial Planning, Housing and the Environment, the Ministry of Transport, Public Works and Water Management, and the Ministry of Development Co-operation.

This document integrates all issues related to forests, nature and landscape. As demonstrated by the fact that forestry development is included in this nature conservation policy document, forests in the Netherlands are mainly considered from a nature oriented perspective. The main objective for Dutch nature conservation policy is: "*to make an essential contribution to a liveable and sustainable society*

[8] In 2003 the name of this Ministry has changed iinto Ministry of Agriculture, Nature and Food Quality

through the conservation, restoration, development and sustainable use of nature and landscape" (Ministry of ANF, 2000b: 3).

The concept of nature is broadened to make this integration possible:

- nature has, apart from its intrinsic value, also amenity and commodity values;
- nature is not limited to the established Nature Reserves and Parks, but starts right at our doorstep;
- nature conservation is a responsibility of the whole of society and should have a broad base of support.

The present Dutch nature conservation policy objectives closely resemble the earlier indicated nature-related objectives of the rural development policy. This is due to the fact that the nature conservation policy was formulated prior to the formulation of the rural development policy and thus formed one of the building blocks of this rural development policy. The objectives of the Dutch nature conservation policy are (Ministry of ANF, 2000b: 21):

- *The Grand Plan for Nature*: the continued establishment and further strengthening of the National Ecological Network;
- *Water:* stimulating optimal use of opportunities for characteristic wet landscapes;
- *Rural Areas*: strengthening the quality and identity of the rural areas by stimulating countryside stewardship and a better utilisation of biodiversity in production systems;
- *Urban Areas*: establishment of urban green space networks in and around cities.

These objectives have been further operationalized in the following policy targets:

- the national ecological network is to be complete in 2018 and will then be extended with 250,000 ha to 700,000 ha.; around 200,000 ha of the national ecological network will have high ecological value;
- in 2018 15,000 ha of new wet landscape will be established of which 7.000 ha along riverbanks and 8,000 ha in the southern delta region and the central lowlands of the Netherlands;
- Ii 2020 there will be established 75,000 ha of new afforestation areas. Of the existing woodlands 20% should be over 80 years of age, 40% should consist of mixed woodlands and 20% should consist of natural habitat woodlands.

Within the 'Nature for People, People for Nature' policy plan, forestry development is foremost considered within the frameworks of the development of the national ecological network and the establishment of urban green space networks. Regarding the more specific forestry issues, this new nature policy mainly integrates the forest policy as formulated in the National Forest Policy Plan of 1993. The present policy aims at the following general forestry issues:

- a long-term conservation of woodlands;
- an optimum use of woodlands for recreation, timber production, landscape, nature conservation and environmental objectives;
- a further expansion of forested area to more than 400,000 ha in 2020.

The more specific policy issues include:

- establishment of an additional 10,000 ha of green space around the cities. This will raise the forested area beyond the targets laid down in the Structure Plan for the Rural areas;
- with respect to the additional woodlands to be created outside the National Ecological Network, the Government shifts its focus from rural areas in general to urban green space networks around the cities;
- the Government will address the problem of continuing steep rises in land prices which is delaying the development of additional woodland;
- the earlier identified national target for annual timber production, in order to enlarge the self-sufficiency degree of wood consumption from 6.4% to 20-25% was abandoned. However, the Government is of the opinion that the country should not be completely dependent on foreign wood production. Therefore, the Government ensures that sustainable timber production at similar levels to those of recent years will remain possible in 70% of the Dutch forest area.

2.4.3 Policy tools

The tools for the implementation of the Forest Policy Plan of 1993 and the Nature for People, People for Nature Plan of 2001 fall within three major categories:

- legal framework;
- financial framework;
- communicative framework.

Legal framework

In 1922, the first Forest Law was enacted. This law has been influential in conservation of the existing forest area; it ensures that no forest area is lost by stipulating the obligation to reforest cut forest areas. Subsequently, also fiscal measures were taken to alleviate the financial burden for private forest owners.

The *Nature Protection Act* (Natuurbeschermingswet) aims at stimulating nature and landscape conservation through acquisition and management obligations. This law also protects certain flora and fauna species.

Another influential law is the *Estates Act* (Natuurschoonwet), which stimulates forest management and afforestation on estates to ensure aesthetic and recreational values. It gives estate owners tax reductions, such as inheritance tax, income tax, capital tax, and corporation tax. Roughly spoken, an estate should be at least 5 ha and have a forest coverage of at least 30%. Exceptions are made for historical estates and/or estates with at least 50% of nature areas.

The *Flora & Fauna Law* (Flora & Fauna Wet) of 2002 replaces the former Hunting Law (Jachtwet) and aims at the protection of plant and animal species. Two means of protection are distinguished: by forbidding practices that are harmful for protected animals or plants and by designating specific

areas or objects as protected living environment. This law also stipulates regulations concerning hunting practices and the management of wildlife.

Furthermore the *Land Use Planning Act* (Landinrichtingswet) stipulates regulations concerning land-use planning, including measures for land-use zoning for forestry, nature, outdoor recreation and cultural history. The implementation of these laws and the policy used to be the responsibility of the state but is evolving towards a provincial and municipal task.

Financial framework: the Management Programme

The management of forest areas is in most European countries to some extent dependent on public financing. In the Netherlands, about 50% of the total revenues of private forestry enterprises are accounted for by subsidies (Blum & Schanz, 2002: 16). In 2000, the subsidy system has been changed radically from an input-oriented system to an output-oriented system, with less attention to the production function and more to the nature, landscape and recreation functions of forests. In the past, as the maintenance of a forest was subsidised regardless its results, the government had no control over the management practices of forest owners (Hoogstra & Van Blitterswijk, 2002). This was a major reason to switch from a subsidy system for specific management practices to an output-oriented function endowment scheme for payment of specified outputs of forestry goods and services.

This new subsidy system -the so-called '*Management Programme'* (Programma Beheer)- (Hoogstra & Van Blitterswijk, 2002) aims at:

- development of a national network for forest and nature management;
- further integration of the management of forests, nature and landscape;
- stimulation of both 'agricultural nature management' and '(professional) nature management';
- stimulation of different owners of forest and/or nature areas.

The '*nature management' scheme* is based upon the following principles:

- it provides payments for fixed nature and landscape conservation and recreation targets by predefined means of working packages. In total 45 working packages of nature and landscape ecosystems are defined of which 6 focus on forests. Subsidies for recreation are provided if accessibility criteria are met; they vary from 14 Euro/ha for areas with basic recreational facilities to 27 Euro/ha for areas in National Parks or urbanised municipalities;
- it creates more responsibility for the manager to bring his/her own expertise into action;
- it follows a fixed procedure, any landowner can apply for.

Generally, Dutch forest managers experience the new management system as positive compared to the unequal and complicated former system (Hoogstra & Van Blitterswijk, 2002).

The *'agricultural nature management' scheme* applies to private landowners, who own agricultural land. Most of them are farmers. This means that public owners (e.g. municipalities) and nature conservation organisations are excluded from this scheme. The scheme aims at the development and conservation of nature at farming land, such as pasture, grassland and cropland. Farmers should

manage their land in a more nature friendly way. As this can be applied in different ways, the scheme distinguishes different types of working packages:

- packages for the development or conservation of nature, such as flora, herbs and breeding grounds for (migratory) birds. The amount of subsidy depends on the nature aim and the soil type;
- packages for the development of temporary forest on agricultural land (fast growing broadleaf or coniferous tree species);
- landscape packages for the development of landscape elements, such as shrubs, linear tree planting, small stands of woodland and ponds. The amount of subsidy depends on the achieved quality level.

Financial means are also still available for *reforestation of agricultural lands*. However, these activities have been incorporated into more general programmes for the extension and improvement of the landscape quality in rural areas and for development of a 'green infrastructure' in urbanised areas respectively.

Communicative framework

Communicative instruments include education, research and advice, assisting forest owners and the forestry sector at large. In the past, state authorities were responsible for forestry extension. But since the introduction of the Long-term Forestry Plan in 1984 this task was decentralized to provincial authorities. These were encouraged to develop regional forestry extension plans.

2.5 Conclusion

In the Dutch rural development policy, the improvement of the quality of nature and landscape (and the related conversion to sustainable water management) stands on equal footing with the development of sustainable agriculture. Explicit attention is also given to the development of new economic activities through diversification in rural activities and promotion of recreation and tourism. The liveability in rural areas should be assured by creating a balance between economic vitality and ecological quality. Obviously, due their role in contributing both towards ecological quality and economic diversification (including development of the recreation and tourism sector) forestry can play a role in such rural development. However, in the specific forest-related policy documents forestry is foremost considered within the framework of nature conservation policies, and relatively little attention is given towards the role of forests in the restructuring of the rural economy.

3. The rural meaning of forests: conceptual areas and policy implications

3.1 Introduction

This chapter integrates and summarises the main findings of the second and third research phase of the Multifor.RD project, the qualitative and quantitative survey. The full empirical results are published in '*The rural meaning of forests: perspectives of landowners, inhabitants and policy makers'* (Elands, 2002). The results can be summarised in several conceptual areas, grouped around the main themes of the research:

- The role of forests in rural areas
  - Forests, identity and quality of life
  - Forests are meaningful to the people and to the locality
  - Forests represent a variety of functions, but have hardly any economic importance
  - Forest functions and management practices are contested
  - Forest are threatened by human activities
- Forestry and rural development policies and programmes
  - Rural development: the future of forests lies within society's needs
  - Forestry and rural development: respect for local wishes
  - Public involvement does not automatically bring about a balanced integration of local perspectives
  - Afforestation is desirable, but not likely to happen
  - Reasonable support for public grants for land and forest management
  - Public access and financial support for recreation

In this Chapter, the research conclusions regarding each of these issues will be described and their policy implications will be indicated.

3.2 The role of forests in rural areas

3.2.1 Forests, identity and quality of life

Research conclusion

Both Ede and Stadskanaal are predominantly considered as rural. People from Ede make a clear distinction between on the one hand forest and nature areas and on the other hand the agricultural area. The large forest and nature areas belong to the Veluwe region, which is the most important nature area of the Netherlands, whereas the smaller forest parcels, such as hedgerows, thickets, etc.

belong to the countryside. In Stadskanaal, where man has created the landscape as a result of peat extraction, agriculture still is the main land use. All the forest and nature areas –either small or large- belong to the countryside.

Ede has a more varied rural identity than Stadskanaal has, as it is associated with nature and wilderness, tourism, business activities, peri-urbanity, and agriculture. Stadskanaal is only identified with business activities and agriculture. Far more landowners acknowledge agriculture as a characteristic of the area than community inhabitants do. In Ede, inhabitants perceive nature & wilderness and tourism more often as being typical for the area than landowners do. Production forestry is not acknowledged as a major identity feature of both areas. However, non-productive forests, in terms of nature & wilderness, are considered to be an important feature of Ede. In Stadskanaal, neither production forestry nor nature is dominating the area identity.

Table 3.1: The role of forests in the local identity and quality of life in Ede and Stadskanaal

	Ede	**Stadskanaal**
Forests – rural area	Forests and nature area (Veluwe region) ≠ agricultural area (Gelderse Vallei)	Forests and nature area are part of the rural area (= non-built area)
Identity in general	Business activities, Agriculture	
	Nature & wilderness, tourism, urbanity	–
Identity: forests	≠ production forestry	
	Non-productive forest functions	–
Quality of life	Very attractive landscape (≠ forests)	
	Forests, nature, wildlife, landscape	Rurality (tradition, community spirit, sparse population)

The quality of life in both areas with respect to the attractive landscape is positively perceived. In Stadskanaal, forests are not considered within this perspective. The forests of Ede are valued in relation to the beautiful landscape scenery and the richness in nature and wildlife. Stadskanaal is highly valued for its rurality (community spirit, tradition, sparse population).

Policy implication

The study results from Ede and Stadskanaal indicate two trends in public appreciation of forests. In Ede forests are mainly conceived as part of a nature area and distinct from the rural area dominated by farming, whereas in Stadskanaal forests are foremost considered as a component of the rural area. This demonstrates that the identity of the area determines to a large extent the present attitude of local people with regards to forests and forestry. This implies that the implementation of the national forest policy should always take the existing local identity into consideration, and that the policy should enable to develop location-specific aims and instruments. If forest policy is formulated too general and does not take the local context seriously, it can meet with local resistance at the local level.

Identity, however, is neither a static concept nor a homogenous concept. Different people can think differently about the local identity. This depends on the background of a person, his bond to the territory and his basic attitude towards environmental changes. In general it can be stated that the longer someone lives in the area, and/or the stronger the bond to the land (either in terms of agriculture or ancestors who have cultivated the land), and/or the less flexible his attitude towards changes, the more fixed their ideas about landscape identity are.

Landscape is an extremely important component of the local identity. In Ede there is common sense that forests are an essential part of the landscape. In Stadskanaal, this is only the case for particular groups. Forests are primarily valued as a major landscape component rather than as an area of primary production. The traditional policy approach of considering forestry as a specific economic sector should therefore be adapted towards a policy approach including forests, nature and landscape aspects in an integrated manner. The new policy document 'Nature for People, People for Nature' is fulfilling this largely. The ecological approach should, however, not dominate, but be equally important to a more socio-cultural approach that serves the strengthening of local (landscape) identity.

3.2.2 Forests are meaningful to the people and to the locality

Research conclusion

There is quite a big difference between the appreciation of forests of Ede and the forests of Stadskanaal. In Ede, the forests play a significant role since centuries, have a more full-grown structure and natural appearance and are well equipped for recreation activities. Consequently, the local people are unanimously highly attached to their forests. This is not the case in Stadskanaal. As the forests in Stadskanaal are relatively new in the area, their role is much less significant than in Ede, although it is gradually increasing. More and more people are highly attached to the local forests. There are still some groups who have a neutral attitude or are even antagonistic towards the new forests.

Three basic attitudes towards the forests contributing to the locality can be distinguished: forests are beneficial, forests are harmful and forests have nothing to offer. In general, respondents in both areas agree with the beneficial aspects of forests (economy, landscape, historical value, protection, etc.), disagree with the harmful aspects (threat for other land uses, against local wishes, cause isolation, not attractive, etc.) and disagree with forests having nothing to offer (biodiversity, few recreation opportunities, etc.). This positive attitude is most strong in Ede.

Table 3.2: Meaning of forests in Ede and Stadskanaal

	Ede	Stadskanaal
Physical appearance	Ancient and large areas of deciduous, mixed and pine forests, natural appearance	Young and –compared to Ede- relatively small areas of mainly deciduous forests, some still have plantation look
Accessibility	Extensive infrastructure for walking, cycling, horse riding, etc. and recreational facilities	The availability of infrastructure and facilities is reasonable
Rooted in the locality	Significant since centuries, culturally and historically rooted	The forests are not really rooted yet, though their significance is certainly growing
Attachment	Unanimously highly attached	Divided: highly attached, neutral and antagonistic
Forest quality dimensions	Forests are beneficial (68% agree), harmful (2% agree), have nothing to offer (3% agree)	Forests are beneficial (51% agree), harmful (8% agree), have nothing to offer (11% agree)
Forest Opinion Groups	Enthusiasts + Positive Realists = 80% Community Inhabitants > Landowners	Positive Realists + Sceptics = 65% Community Inhabitants > Landowners 24% landowners are adversaries: deterioration open landscape character, conflict agriculture, against wishes local people

When the respondents are grouped according to their basic attitudes to forests, four groups arise: the enthusiasts, the positive realists, the sceptics and the adversaries. The positive realists are the biggest group among both areas as well as among community inhabitants and landowners. Not surprisingly, people of Ede are far more positive than those of Stadskanaal. In Ede, most respondents belong to the enthusiasts and positive realists, whereas in Stadskanaal the majority belong to the positive realists and sceptics. Landowners –especially farmers- had a somewhat lower opinion than inhabitants on the benefits of forests and, conversely, see more harmful aspects of them, or consider forests to fail in contributing in any way to rural development. The landowners of Stadskanaal, of which one fourth is adversary to the local forests, have the least positive opinion of forests. The balance in opinion is in all these groups still in the direction of a positive opinion.

Policy implication

In general, forests are appreciated by almost everyone. This conclusion is in accordance with other research results regarding opinions on forests in the Netherlands (e.g. Reneman et al., 1999). This positive opinion becomes more shaded when the local situation, the user group or the integration into the local landscape are taken into consideration:

- In a traditional forest area, such as Ede, forests are almost unanimous highly appreciated. Consequently, land use changes that possibly effect the present forests are critically observed by most local people. In areas with limited forest tradition, such as Stadskanaal, forests are not firmly rooted in the local culture and landscape identity. In the same way as in Ede, land use changes (such as new forests) that possibly effect the present landscape, are also critically observed by the local people. For this reason, it seems logical that local people do not embrace the idea of new forests immediately. Present forest policy does not always

pay attention to these regional differences. Such local meanings of forests deserve more attention in forest policy.

- Certain user groups, such as farmers, have a strong bond to the traditional territory and landscape. In Stadskanaal, ancestors of (farming) landowners have reclaimed the land. Landowners sometimes feel that their role in creating a landscape that is meaningful to rural dwellers and visitors is insufficiently recognised in forestry development policies. They feel distrust towards the local/national government, which, in their opinion, is giving more attention to the wishes of forest users rather than to the livelihood options for rural producers. This results in a feeling that forests have nothing to offer or are even harmful to one's livelihood. In order to overcome such adverse reactions, it is important that plans for stimulating forestry in the context of rural development are based on involvement of local land owners in the planning process.
- In certain areas with characteristic open landscapes the establishment of new forests is sometimes considered harmful to the landscape identity. In such cases adverse opinions regarding afforestation on agricultural lands may be overcome by limiting afforestation to carefully selected landscape zones. In Stadskanaal quite positive experiences were obtained with such an integrated approach combining landscape zoning and afforestation (Van der Knaap, 1996).

3.2.3 Forests represent a variety of functions, but have hardly any economic importance

Research conclusion

With respect to the desired forest functions, all respondents give the ecological (= protective and nature conservation) and aesthetic (= landscape) functions of forests high priority. The people in Ede are more in favour of the ecological and aesthetic functions of the forests than the people in Stadskanaal, while the reverse is true for recreation and business activities. Forests are not valued as an area of primary production.

Table 3.3: Forest functions in Ede and Stadskanaal

	Ede	Stadskanaal
Functions	1) Landscape, ecology, 2) recreation Community Inhabitants = Landowners	
Management objectives forest owners	Accessible nature, own purpose nature	Diversified management objectives, landscape & economic functions
Economic importance of forests	Low	Non-existent

According to forest owners, the most important functions are related to ecology (protection, biodiversity) and landscape aesthetics. Recreation comes only after these functions. The economy related objectives, such as income from wood or non-timber goods and services, are relatively unimportant. The owners of Stadskanaal have more diversified management objectives and are more directed towards landscape and economic functions than the owners of Ede do. The forest owners of Ede more often want to create either 'accessible nature' or want to use the forests for their own purposes (hunting and nature).

Economic viability is one of the key issues in rural development. The most important activity that is perceived as contributing substantially to the local economy is commercial trade. In Ede, the second one is tourism, followed directly by farming and industry, whereas in Stadskanaal, industry is considered as important as commercial trade, and farming is the third important sector. The economic importance of the forestry sector is relatively low in both areas, however, in Ede more important than in Stadskanaal where it is almost non-existent. As soon as people appreciate the economic value of forestry, they appreciate the economic value of tourism as well. It seems that to these people forests have only economic value in relation to tourism purposes.

Policy implication

The results indicate that forests are primarily valued for their non-productive functions rather than as an area of primary production. This is understandable in a highly densely populated country as the Netherlands is. The Dutch policy of considering forestry in an integrating manner giving attention to both ecological, landscape and recreation aspects and of stimulating multifunctional forest management is in accordance with these public perceptions.

However, it is astonishing that the economic spin-off of forests, by means of providing jobs and income from tourism and recreation and attractive landscape setting for houses and business companies, is hardly acknowledged by inhabitants and landowners. The Dutch policy should give more attention to how the links between the traditional forestry sector and the housing and tourist/recreation sector respectively could be further strengthened as well as to how the profits from non-traditional economic functions of forests could be used as an incentive for forest management. In this respect several recent initiatives have been taken (Van Vliet & Wieman, 1998; Gaasbeek & Wieman, 2000), but more attention should be given to options to let forest owners profit from the forest-based financial gains in regional incomes (Berends et al., 2001).

3.2.4 Forest functions and management practices are contested

Research conclusion

In principle, there is not much difference between inhabitants and forest owners' objectives with respect to multifunctional forests: ecology comes first, followed by landscape, and thirdly comes recreation. Sometimes the possibility to combine these functions is not recognized. Moreover, the

concept of nature is interpretable in different ways. Consequently, forest functions are partly contested, notably as regards how to deal with them in actual forest management. The debate about forest functions and subsequently best management practices differs between Ede and Stadskanaal. In Stadskanaal it is focused mainly at priorities for forest functions at a more general level. In Ede it is focused at management practices at an operational level. Three debates regarding forest functions can be distinguished.

The first debate concerns inhabitants, landowners and decision-makers. In this debate two categories of people favouring forests can be distinguished, i.e. the ecological-oriented forest lovers and the gardened forest lovers. The ecological-oriented forest lovers prefer forests with dead trees and wood, deciduous trees and with limited human intervention in the forest. Recreants consider the dead wood in the forest as a well-appreciated sign of wilderness. Or they consider it positively because it stimulates ecological processes by providing a substrate for fungi, food for insects, shelter for animals and by contributing towards a varied forest structure. The gardened forest lovers prefer to recreate in a 'clean' and structured forest, with deciduous and exotic tree species, and (mostly) with extensive recreational facilities. Others are of opinion that the more natural forest management is looking messy and neglected. Some farmers and people with an agricultural background are of opinion that the current forest- and nature management, and especially nature development (often on old agricultural fields), also leads to unattractive brushwood with a lot of thistles and stinging nettles. However not all farmers share this opinion.

Table 3.4: Conflicting forest functions

Conflicting functions (all respondents)	
Gardened forest lovers Forests serve needs human beings Controlled forest management Park or garden look: tidied up and clean paths/trails Varied forest with combined tree species	*Ecological-oriented forest lovers* Forests serve nature needs Folding chair management: let-nature-develop-itself Nature-look-alike forest: leaving behind of dead trees and branches Deciduous species
Conflicting functions (forest owners)	
Integrated forest management All functions are equal Serves all forest lover user groups Controlled forest management Flexible use of spatial zoning of functions Preference for deciduous species, less rigid removal of exotic species	*Nature forest management* Ecology function dominant Serves ecological-oriented forest lovers Folding chair management: let-nature-develop-itself Strict spatial zoning of functions Only deciduous species belong here, removal of exotic species
Own purposes Attractiveness minor importance Not accessible to the public	*Society's purposes* Attractiveness very important Accessible for recreation

The second debate takes place only amongst forest managers. This debate concerns the issue of integrated forest management versus nature forest management. Despite the fact that the present policy on multifunctional forest management is broadly supported, there is still considerable discussion about the nature of nature: does nature have an intrinsic value or is its value related to human practices? It is a discussion between ecological forest management and integrated forest management. For large nature conservation organisations owning forests the value of nature is the most important. Recreation is supported as long as it does not disturb nature, it is welcome as so far as it concerns 'quiet recreation focused on nature'. So, recreation is only allowed within restricted areas, with limited accessibility and according to strict rules, and it is aiming notably at the 'ecological-oriented' visitor. Forest owners who apply integrated forest management argue that the disturbing effect of recreation is overestimated and that restricting recreation is not feasible in a highly populated and urbanised society as the Netherlands is. Consequently, they believe that the interests of several groups of recreationists should be accommodated. The discussion on the role of recreation in forests features especially in Ede. The municipality of Ede considers recreation very important: the municipal forests are for the local people. Besides, wood production and nature are important functions. Consequently, they apply integrated forest management. In Stadskanaal, where many forests are still young, this discussion on how to manage forests for recreation is not taking place.

The third debate amongst forest owners concerns the question 'forest for own purposes versus society's purposes' ? This conflict in private versus public perspectives features especially in Stadskanaal. The first afforestation activities by farmers were mainly aimed at wood production. These forests are not highly valued by the inhabitants, as they are neither very attractive nor accessible for recreation. Although in the more recent afforestation projects more attention is given to aesthetic and recreational aspects, owners are still of the opinion that the rewards they get for planting trees in an attractive and accessible way are hardly worth the efforts and loss of income (decrease of property value) they pay for it. In Ede, some owners don't want to 'open' their forest as they use it for hunting or for nature development.

We can conclude that different terrain owners give different accents of functions to their forests and they are aware of this. However, differences in management objectives are relatively minor, and it does not stand in the way of co-operation between the different owners.

Policy implication

The present national forest management policy is mainly multifunctional oriented with a relatively great emphasis on integrated forest management and nature functions. Although the present emphasis on developing the nature values of forests further is in general agreement with the opinions of many people on the future role of forests, it does not meet with all expectations regarding rural development. Notably the wishes of landowners regarding income generation and employment generation are often not sufficiently recognized. It would be worthwhile to give explicit attention to the question of whether the present policy on integrated forest management is not too restrictive, and whether new experiments could be stimulated to develop new (agro)forest types which combine

production, landscape and recreation functions. Also the opinions of what we called the gardened forest lovers are not recognised in the national policies. Nonetheless, it could be argued that their preferred forest type is still represented in actual forest management. Notably in many forest areas near urban areas some kind of park forest structure is created, e.g. nearby main entrances and parking lots.

In the national forestry policy little attention is given to the question of how different objectives and management styles of forest owners (Wiersum & Van Vliet, 2000) can best be accommodated. Notably more attention needs to be given to the question what policy measures are most effective in stimulating small private forest owners who basically maintain forests for their own private purposes to give more attention to public objectives in their management regimes. The experiences with co-operatives of small forest owners in Limburg (Nyssen, 2001) indicate the need for to give further attention to the question of how to include small forest owners in national forestry development programmes.

3.2.5 Forests are threatened by human activities

Research conclusion

The respondents perceived three major threats to forests. The two most important threats derive from human activities: urban development and pollution. People from Ede are more concerned about these threats than those from Stadskanaal, and inhabitants more than landowners. Ede is a fast growing town and more and more the countryside is 'confiscated' by residential areas, infrastructural works as well as tourist accommodation. Although the official expansion policy is not oriented on the forest and nature areas, these areas are thought to be affected as well. Especially, the expansion of country houses is a great concern of local people. In Ede, the landowners –mainly the farmers, but also the large nature conservation organisations- perceive a third threat, namely bad forest management. The farmers think that present day forest management is too 'ecological', while the large nature conservation organisations think that the smaller owners could improve their practices.

Table 3.5: Forest threats in Ede and Stadskanaal

	Ede	**Stadskanaal**
Threats	Urban development, pollution Ede > Stadskanaal, Community Inhabitants > Landowners	
	Landowners in Ede: poor forest management	–
Problem of the area	Over-development	Few employment opportunities
Role of forests	Forests are most threatened by (over-) development	Forests are a canvas for housing development and industry (jobs) Forests can ameliorate the beauty of the landscape

These perceived threats are related to the perspectives on the weaknesses in the quality of life. People in Ede are concerned with over-development issues, such as an increase of urban and industrial areas, whereas people in Stadskanaal are concerned with weak economy issues, such as employment opportunities and income level. The role of forests is perceived in relation to these perspectives. The fact that an area has little to offer with respect to forests, nature and wildlife is in Stadskanaal predominantly associated with a weak economy perspective. Apparently, economic weaknesses are to some extent associated with a lack of environmental quality, and forests are considered as providing a favourable green environment for housing development and industry. The association about the relation between economic and environmental condition does also exist in Ede, but here it is expressed in a different manner. People in Ede are worried that as a result of over-development some forests are becoming sacrificed for new residential areas, infrastructure and leisure parks.

Policy implication

Human activities in the form of urban development and pollution are considered to be most important threat for the existence of forest areas. People feel that present rural and nature area policy is not strong enough or not willing to protect forest and nature areas in the Netherlands. Apparently not enough knowledge regarding the national policy for forest protection exists. The policy includes both regulations prohibiting the permanent removal of any forests with obligations to establish compensation forests in case that forests need to be removed for the sake of great public interests, as well as measures to mitigate the effects of pollution on forests. However, the public is either not aware of theses policies or believes them to be inefficient. The communication of the forest and nature policy should be furthered strengthened in order to react better to locally-perceived threats to forests.

3.3 Forestry and rural development policies and programmes

3.3.1 Rural development: the future of forests lies within society's needs

Research conclusion

Rural development deals in essence with possible futures for rural areas. However, the ways in which a rural locality should develop is highly dependent on the commitment of the people who have an interest in it. There exists no single future concept; therefore rural development and the future role of forests are contested subjects. This is demonstrated both in Ede and Stadskanaal.

Opinions of community inhabitants and landowners

As a result from an increasing post-modern development attitude, in Ede environmental issues play an important role in the preferred future. In Stadskanaal, on the contrary, economic prosperity plays an important role. There are no major differences between inhabitants and landowners' future wishes, although the inhabitants relatively favour more nature and forests, whereas the landowners relatively favour more intensive factory farming and strong bonds and friendship with neighbours. Notably in Ede relatively many landowners would like more togetherness. Apparently, developments in Ede have so far negatively affected the typically rural and traditional community structure of the landowners. The community inhabitants in Ede have more the characteristics of newly bred city dwellers. They worry more about the availability of services than landowners do.

An increase in the amount of forests is not a main future priority in both areas, even if both inhabitants and landowners support it to some extent. Especially, the inhabitants of Stadskanaal, and a bit less the ones of Ede, ask for more forests, together with an increase in the amount of nature and wildlife areas and landscape beauty.

The rural development options can be summarised in three main discourses: (i) 'nature development', stressing nature, wildlife, forest, landscape beauty, and a -for some people- organic farming, (ii) 'economic development', accentuating employment opportunities, industrial activities and visiting tourists, and (iii) 'organic rurality development', emphasising employment opportunities, organic farming, and strength of bond & friendship with neighbours, while some of them mention the availability of services.

Table 3.6: Future development for the rural areas Ede and Stadskanaal by community inhabitants and landowners

<table>
<tr><th></th><th>Ede</th><th>Stadskanaal</th></tr>
<tr><td rowspan="2">General</td><td>Environment → anti-development
(nature, wildlife, landscape beauty, organic farming)</td><td>Economy
(employment)</td></tr>
<tr><td colspan="2">Inhabitants: forests, nature
Owners: intensive factory farming, strong bonds and friendship with neighbours</td></tr>
<tr><td>Role of forests</td><td colspan="2">Only within the perspective of nature and landscape</td></tr>
<tr><td>Nature development</td><td colspan="2">Nature, wildlife, landscape beauty
Forests as ecological infrastructure and scenic beauty
Community Inhabitants > Landowners</td></tr>
<tr><td>Economic development</td><td colspan="2">Employment, industry, tourism
Forests for attractive housing estates and business parks
Landowners > Community Inhabitants</td></tr>
<tr><td rowspan="2">Organic-rurality development</td><td colspan="2">Employment, organic farming and traditional values (preservation of cultural-historical agricultural practices, broadening agriculture)
Small-scaled forests integrated in farming practices</td></tr>
<tr><td>Landowners > Community Inhabitants</td><td>Landowners = Community Inhabitants</td></tr>
<tr><td>Dominant discourse</td><td>Nature development (49% of respondents)</td><td>Nature development (37%) and economic development (36%)</td></tr>
</table>

In Ede, the nature development discourse is dominant, while in Stadskanaal the nature development and economic development discourses are more or less equally represented. The quest for nature development unites both areas, but also divides them by a slight difference, as Ede -and particularly inhabitants- wish it more than Stadskanaal -and landowners there least. On the other hand, it is the wish for economic development that divides both areas, and target groups within the areas. Stadskanaal puts more emphasis on it -particularly the landowners-, while Ede shows a meagre support of it -inhabitants in particular. While organic rurality development attracts, in general, slightly more supporters from Ede than from Stadskanaal, only the landowners in Ede put particular stress on this issue. Probably, the latter group deplores particularly the disintegration of traditional rural structure -both in social respect and as far as agriculture are concerned.

Opinions of policy makers

The different opinions on the desired type of rural development are reflected in the opinions about the future of forests. Whereas future forestry developments in Ede are predominantly considered as forming part of nature development, in Stadskanaal, future forestry developments are mostly related to socio-economic rural developments.

In Ede the local concerns of the policy makers are mainly about maintenance of the present forest cover in the Veluwe region and improvement of the nature quality. In addition urban forests are developed as part of the expansion of residential areas. In the rural farming area of Ede there is no place for large forest complexes, as the open character of this area should be preserved. Yet, there is place for landscape elements that have both an ecological and recreational function, act as a green corridor between major nature areas and decorate the landscape.

Table 3.7: Municipal rural development and forest policy in Ede and Stadskanaal

	Ede	**Stadskanaal**
Rural development and forest policy	1) nature development for the Veluwe area	1) Socio-economic rural development
	2) rural development = no development in the agricultural area	2) integrated nature development
	3) urban development	–

In Stadskanaal forestry is considered by policy makers much more explicitly within the context of rural development. The north-eastern part of the Netherlands, where Stadskanaal is located, is facing several difficulties such as a decrease in population and a negative image. Therefore, socio-economic development is considered very important. Forestry should be supportive to rural development in the sense of improving "liveability" in both socio-cultural terms as in economic terms.

Policy implication

As discussed in Chapter 3.2.1 the appreciation of forests depends on the local identity of an area. The opinions on local identity also influence the opinions on the future of the forests. The contrasts

between Ede and Stadskanaal illustrate that important local variations exist in this respect. Such regional variations in the perceived role of forests are hardly considered yet in the Dutch forestry policies. In these policies forests are foremost conceived of as a natural phenomenon. Whereas much emphasis is given to the incorporation of forests in the ecological network, much less attention is given to the role of forests in creating an economically viable countryside and developing new forms of integration between forests and other rural components other than nature areas. The research findings suggest that this policy approach is consistent with the prevailing opinions of local inhabitants in areas where peri-urbanisation prevails. However, in rural areas that are still stronger influenced by agriculture, such an approach is not in accordance with the opinions of several groups of inhabitants. There is a need for further development of an intersectoral forestry policy which is equally focused on concerns regarding nature and environmental development and on maintenance and improvement of rural liveability.

3.3.2 Forests and rural development: respect for local wishes

Research conclusion

The study focused not only on opinions regarding rural conditions and futures, but also about development prospects. As rural liveability includes social cohesion, an important question was to what extent people feel they are taken seriously by policy makers with regards to decisions on future conditions, such new forests or new residential areas. The people of Ede indicated a relatively negative attitude towards authorities (distrust, they feel not respected or proper consulted), whereas the people of Stadskanaal are generally satisfied with the authorities. In view of the fact that afforestation is relatively controversial in Stadskanaal, it was initially expected that the people here would be the most negative one, but this was found not to be the case. This can be explained by the fact that in Stadskanaal afforestation proceeds at a relatively small scale and is only allowed in specifically assigned landscape zones (Van der Knaap, 1996). This policy limits negative opinions on the role of the authorities. The relative negative attitudes in Ede might be explained by the fact that during the research period several local controversies regarding the management of the municipal forests (Lub, 2000) and establishment of a new large residential area existed.

Table 3.8: Attitudes on the relation between local people and forest policies in Ede and Stadskanaal

	Ede	**Stadskanaal**
Forest & land use policies	Distrust and no involvement of locals	Neutral
	Involvement of non-owners in land use decision-making, strict environmental rules → Community Inhabitants > Landowners	

Even if people feel in general comfortable with local authorities, this does not mean that no negative opinions on the rural policies exist. Overall, community inhabitants are more in favour than landowners

of broad public involvement in land use decision making and strict environmental regulations on planting and management of forests. It is also to be expected that those landowners who are most affected by strict land-use regulations reject them more than others. In Stadskanaal there is a clear example of such negative opinions of specific groups of people: a relative big group of landowners belongs to the group of forests adversaries. They do not see the advantages of forests in their area and they claim –amongst other things- that the forests are established against the wishes of local people (see also section 3.2.1 on local identity).

The more positive people are about the local forests –especially the people who adhere the nature development discourse-, the more they are in favour of public involvement, respect for the local voice, and strong control with respect to the planting and management of the forests. The more negative people are about the local forests –especially the group expressing the economic development discourse-, the more strongly they are against authoritarian practices. They are against any influence by local governments or public involvement that limits their freedom to move (see also Chapter 3.3.3).

Policy implication

The results of Ede and Stadskanaal indicate that although existing forests are generally favoured, afforestation is often contested as it involves far-reaching land use transformations. Issues regarding the management of existing forests are less subject to contestation. Land-use transformations, such as afforestation, need careful planning of local and regional policy makers. The national policy process has to create space for careful tuning of the national objectives to regional and local conditions (Doremaele, 1998). Such fine-tuning process requires the following prerequisites:

- Local people should be involved in the decision-making process, preferably in an interactive planning process. It should be noted that as different rural development discourses exist amongst the local people, different ideas with respect to the function of the local forests will exist.
- Policy makers have to accept that changes in landscape identity need long time horizons and should proceed in a carefully planned manner.
- Planning should occur at several levels of time and space: first of all at landscape planning level, secondly at forest area level in terms of forest type and forest function, and thirdly at management level. At each level, local people should be involved.

It should also be considered that farmers often feel to be dominated in policy discussions by the opinions of urban-focused inhabitants. The Netherlands rural development policy includes the aim of improving rural liveability; such liveability should include social participation and contacts and individual involvement in the living environment. These principles are not yet clearly operationalised in the forestry policy as the policy goals predominantly reflect opinions of urban-oriented community inhabitants rather than those of landowners.

3.3.3 Public involvement does not automatically bring about a balanced integration of local perspectives

Research conclusion

On the basis of intensity of recreational use of local forests and the wish to be involved in decision-making regarding local use of land, four participatory groups can be distinguished (Elands & Uwimana, 2002):

- *Involved, intensive visitor* (39%): these people visit the local forests at least once a month and would like to participate in local decision-making regarding forest and nature areas
- *Involved, incidental visitor* (23%): although these people visit the local forests not so regular, they still would like to participate in municipal decision-making,
- *Not-involved, intensive visitor* (19%): these locals visit the forests once a week, but do not want to be involved in local decision-making
- *Not-involved, incidental visitor* (19%): these residents neither visit the local forests, nor have participatory needs.

All groups are more or less equally represented in Ede and Stadskanaal. The only difference is that people of Stadskanaal visit the local forests less frequently.

Table 3.9: Participatory groups and future wishes in Ede and Stadskanaal

<table>
<tr><th></th><th>Ede</th><th>Stadskanaal</th></tr>
<tr><td>Local involvement and forest use</td><td colspan="2">More than one third of the locals visit the local forests intensively and would like to be involved in land use decision-making processes</td></tr>
<tr><td>Future functions forests</td><td colspan="2">Involved, intensive visitors: higher priority to nature, landscape, environmental functions and recreation
Not-involved, incidental visitors: higher priority to business activities</td></tr>
<tr><td rowspan="2">Future development area</td><td colspan="2">Nature development for involved, intensive visitors (56%) ←→ economic (41%) or organic-rurality (38%) development for not-involved, incidental visitors</td></tr>
<tr><td>More nature development for involved, intensive visitors (63%), more organic-rurality development for not-involved, incidental visitors (55%)</td><td>Less nature development for involved, intensive visitors (50%), more economic development for not-involved, incidental visitors (47%), all groups equally interested in organic-rurality future (27%)</td></tr>
</table>

The involved and intensive visitor is not particularly an average local. (S)he is an intellectual and well-to-do inhabitant, who does not own any land and is highly attached to the local forests. He gives priority to the environmental and landscape functions of the forests, although recreation is also considered to be important. Moreover, this participatory group prefers predominantly a nature oriented future development for the local area. This is in sharp contrast to the not-involved, incidental visitor, who prioritizes economy for both the local forests and area. This economic orientation can be directed either towards a more classical economic approach (economic development), in which an

increase of employment opportunities, intensive factory farming as well as secondary sector is preferred, or towards a restructuring approach in which organic farming, traditional rural values and employment opportunities are highly valued. This attitude is also reflected in future benefits of the forests, as they would like to see more business activities as an outcome of local forests. The main difference between Ede and Stadskanaal is that in Ede the involved, intensive visitor is even more focused on nature development and that in Stadskanaal the not-involved, incidental visitor is even more strongly focused on local economy development.

Policy implication

The research results indicate that a large proportion of inhabitants of both areas are willing to participate in local land use planning processes. They choose for a 'joint decision' participation model. This is in sharp contrast to (semi-)public forest owners, who respect the local voice by means of 'consultation' or 'information' of local people' (Elands & Uwimana, 2002). In the prevailing participatory approach, authorities mostly focus on the involved inhabitants, and the perspectives of the non-involved inhabitants are often not considered. In contrast to the large, (semi-) public forest owners, smaller private forest owners do not see why and how they should involve local people. It can be concluded that the prevailing forms of participation in (semi-)public forest management do not reflect a process in which the voices of all community inhabitants are equally represented. This observation should not be interpreted as belittling the inputs of involved inhabitants. Rather, it shows that in forest policy at both national and local level further attention should be given to how to solve the communication gap that exists between different groups of forest users and forest owners. Notably the large (semi)public forest owners should carefully consider how they can base multifunctional forest management on a communication process with multiple opinion groups.

Policy makers should be aware of the fact that the presently prevailing process of participation of local people in forest and nature management does not automatically mean that they will get a good insight into the variety of local perspectives. People who are mostly involved prefer predominantly an ecological oriented future, in which the local forests and nature areas are an important focus as well as landscape aesthetics. If policy makers want to start participation from an efficiency point of view, this a-representative picture is not really a problem. However, if participation is meant as to be developed from an emancipatory point of view, all local parties should be able to express their ideas about liveability of their locality and the role of forests in it.

3.3.4 Afforestation is desirable, but not likely to happen

Research conclusion

In the traditional forest area Ede most respondents think that the present forest cover is okay like it is, and only a small part would like to see more forests. More than half of the people in Stadskanaal, on the contrary, wish an increase in the amount of forests in their locality: inhabitants more than landowners.

Afforestation or allowing land to return to nature is not highly considered by Dutch farmers as it is not financially attractive enough, land is too productive (especially mentioned in Stadskanaal), there is enough forest in the locality already (particularly mentioned in Ede). Also there is a lack of knowledge and a low awareness of forestry. Only the smaller landowners (less than 5 ha), who are expecting decline for their farming activities, are more likely to plant forests and allow some land to return to nature.

In contrast to forest owners, farmers often express negative attitudes towards forestry as they think they are conflicting forms of land use and that farming is of more value to the society than forests are. It is considered unacceptable to plant fertile land with forest as well as that providing grants to forestry leads to an unfair competition with agriculture. In Stadskanaal, most foresters and forest-farmers are in favour of afforestation if agriculture loses importance. This is a big contrast to the opinions of farmers of Stadskanaal, who disagree largely with it.

The prevailing negative opinions of farmers about afforestation are reflected in a general belief among landowners there would be no afforestation without grants or subsidies. Landowners who are familiar with the grant system think the grants are insufficient, the process of getting grants is too complicated and there are too many regulations. There is a fairly high awareness among landowners (more than half) with farming land about existing schemes that encourage tree planting on farmland. In line with the scepticism as to grants and subsidies regulations as revealed above, however, the same group of landowners does not appear to be much interested to become involved in afforestation.

Table 3.10: Afforestation in Ede and Stadskanaal

	Ede	**Stadskanaal**
Amount of forest (all respondents)	Majority: it's okay like it is	Too little: > 50% Community Inhabitants > Landowners
Afforestation by farmers: options for farming land **No afforestation: motivations**	Either afforestate land or let land return to nature (each option about 11% of the farmers) Not financial attractive, land too productive, enough forests, lack of knowledge/awareness	
Conclusion	Afforestation is in balance	Too little afforestation
Relation agriculture - forestry (opinion landowners)	Grants unfair for agriculture, conflicting land uses: Farmers >Foresters More forests if agriculture decreases: Foresters > Forest-farmers > Farmers	
Grants and regulations for afforestation (opinion private landowners)	No afforestation without grants, grants insufficient, process complicated, too many regulations planting/management 2/3 knows of schemes, 15% is interested	
Conclusion	Land mobility is low, the end of afforestation is to be expected	

In conclusion: whereas in Ede there is a balance between inhabitants" wishes and landowners' future plans, in Stadskanaal there is a strong wish for more forests, but a low willingness among landowners to realise them. As there is a strong competition between land uses and as farming land is more profitable, it will not come easily available for less profitable forms of land use. And as the grant system is complicated and insufficient, little progress in afforestation can be expected.

Policy implication

Regional conditions determine the strength of the wish of society for more green areas such as forests. Especially in areas with little public accessible green infrastructure, local people often desire more forests. However, there is a low willingness of landowners –in particular farmers- to abandon agriculture and afforest their lands. Recently, several policy measures have been taken to further stimulate afforestation, e.g. by extra financing through CO_2 certificates and by new extension programmes (Jansen, 2003). Nonetheless, in stimulating afforestation, notably by farmers, several major hindrances should still be taken away by the following measures:

- With involvement of local people local afforestation plans should be prepared from a landscape point of view (Van der Knaap, 1996).
- The social standing and financial position of private forest owners should be further stimulated
- Efforts need to be undertaken to re-establish trust in the relation between government and landowners, amongst others by adjusting rigid environmental and nature regulations. This should prevent that landowners are afraid that due to new environmental legislation in the end forestry practices will limit their farming practices.

3.3.5 Reasonable support for public grants for land and forest management

Research conclusion

Concerning public financing for activities of private landowners, one can observe that most respondents agree with the provision of grants and subsidies to landowners for both farming and forestry activities. Particularly, when management activities are required that are not directly related to the core business of farming, such as nature conservation and landscape enhancement. However, some 40% of the inhabitants think that private forest owners do not need any subsidies. Obviously, landowners are always more in favour of financial support than inhabitants are. There is a reasonable support of the general public for specific forestry practices, management/protection of existing forests and afforestation. There is only moderate support for financing of measures to create recreation opportunities in the forests.

Table 3.11: Financial support for land use activities in Ede and Stadskanaal

	Ede	Stadskanaal
Financial support	Majority support grants to landowners. Highest support for landscape amelioration (± 86%), least for farming activities (± 56%) Landowners > Community Inhabitants Moderate support forestry (management/protection + afforestation) and recreation by inhabitants	

Policy implication

As local people support the public financing of private land activities with positive external effects, such as the maintenance of the regional landscape, the present policy on public payments for management outputs as formulated in the Programme Management (see section 2.3.3) is in principle generally approved.

The fact that several inhabitants think that private forest owners do not need any subsidies seems to imply a feeling that private forest owners are rich people, who can afford to maintain their forests as a hobby, which they fund themselves. Forest users are generally unaware that private forests owners loose money on forest management. More attention should be given to reconcile the very positive attitude of users towards forests and the funding of private forests management. Relevant policies (incl. communicative tools) should not only be developed at state level, but also at local (municipality) level. One representative from a municipality admitted that the local policy is predominantly based on the ideas expressed by inhabitants and that the municipality had often less attention for the position of landowners. This lack of interactive land-use policy processes at local level is partly caused by the notion that agricultural and forestry policy arrangements are decided upon on national or even European level. Thus, a better coordination between land use policies at various levels of administration is needed, and a more careful consideration of the question how forest policies and stimulative tools for improved forest management and afforestation should be distributed over various administrative levels.

3.3.6 Public access and financial support for recreation

Research conclusion

Regarding public access to forests for recreation, a higher proportion of all actor groups feel there should be open access to state forests (± 97%) than to private forests (± 54%). Inhabitants in both case study areas agree more than landowners that there should be freedom of access to private forests. As noted in Chapter 3.3.5, with respect to opinions regarding public grants for forest management, there is a relatively low support for paying forest owners for providing public access to forests, especially amongst inhabitants. A discrepancy exists between inhabitants' wishes and their understanding of landowners' economic position. In a European context it can be concluded that

although inhabitants from urbanised areas such as Ede are the most willing to support grants for forest recreation opportunities, still only half of them - and even less in the other rural area types - consider that landowners need financial support for providing recreational facilities (Elands & Wiersum, 2003).

Table 3.12: Public access and financial support for recreation in Ede and Stadskanaal

	Ede	Stadskanaal
Public access to forests	Almost 100% agreement that public owned forests and ample half of the respondents think that also private owned forests should be free accessible Community Inhabitants > Landowners	
Financial support landowners for recreation	Moderate financial support for landowners allowing people to visit their forest for recreation Landowners > Community Inhabitants	

Policy implication

The financial aspects of forest recreation should be further considered. At present both landowners and inhabitants do not consider payments for visiting forests as believe that free accessibility is natural and obvious. This opinion is not, however, reflected in the national forest policy, as the Programme Beheer includes a financial remuneration for forest owners who allow visitors (on the paths) in their forests. However, this remuneration relates only to the basic recreational infrastructure, and does not include payments for extra recreational facilities. Payments for such extra facilities should be obtained through the market (Van Vliet & Wieman, 1998; Gaasbeek & Wieman, 2000). In view of the fact that most forest users do not see that forest management costs money, or that they consider forests as a free access landscape element, the aspect of financial support for forests as a recreational object deserves more policy attention. As forests are greatly appreciated as a green rural infrastructure and open-access space, more policy attention, including raising of awareness, about the question 'who is going to pay for them' is relevant. As recreation and tourism have a great impact on the regional economy (Berends et al., 2001), such policy development should not only be considered at a national level, but even more so at he regional and local level.

4. Final discussion and conclusion

4.1 The project hypotheses revisited

4.1.1 Introduction

As mentioned in the introduction, the Multifor.RD project was based on three hypotheses (Table 4.1). When considering the results of the Dutch studies, the first hypothesis regarding differences in opinions between different categories of rural people is of direct relevance. However, the second and third hypothesis should be amended to a more general hypothesis regarding the impact of regional differences on opinions regarding the role of forestry in rural development.

Table 4.1: Main hypotheses of the Multifor.RD project

1.	There exist important differences in perceptions, attitudes and practices regarding the role of forestry as a means to rural development amongst various stakeholder categories, e.g. forest owners, other landowners and other inhabitants of rural communities.
2.	There exist important regional differences between various European countries with respect to the perceived role of multifunctional forestry for rural development. These differences are caused by both bio-geographic, economic and socio-cultural conditions, such as degree of forest cover, forest history, forestry policy, level of income, degree of rurality/peri-urbanisation, etc.
3.	There are differences in opinions about the contribution of forestry to rural development between traditional forestry regions and regions in which dynamic changes in land-use including afforestation are taking place

In the following first the main differences between regions and next the main differences between different stakeholder categories are discussed. Finally, the region-specific conflicting views between inhabitants and landowners are summarized.

4.1.2 Differences between regions

At the European level, focused attention was given to possible differences in opinions regarding the role of forestry in rural development between different regions. In this assessment two main variables were considered, i.e. differences in rural conditions, and differences between traditional forest areas and areas with recent afforestation (Elands & Wiersum, 2003). As discussed in Chapter 1.3, Ede and Stadskanaal do not only differ in respect to the forestry conditions (with Ede representing a traditional forest area and Stadskanaal an area with recent afforestation), but also in respect to their rural conditions. Consequently, within the context of the Netherlands, the differences in opinions between Ede and Stadskanaal should not be considered as typically representing views from traditional and afforestation areas, or between a rural area with urban characteristics and a diversified rural area. Rather, the differences provide an example of how contextual factors impact on opinions regarding the role of forestry in rural development.

Regarding the general perspectives on the role of forestry to rural development between Ede and Stadskanaal some important differences in perspectives can be distinguished (Table 4.2).

Table 4.2: Summary of perspectives on the role of forests related to quality of life in the two case study areas

	Ede	**Stadskanaal**
Area characteristics	Rural area with urban characteristics Traditional forest area	Diversified rural area Afforestation area
The role of forests in rural areas (identity, quality of life, functions, qualification, amount)	Mixture of urban-based business, agriculture and nature & tourism Attractive forest/nature landscape Forests as nature distinct from rural production area having low direct economic importance Most people (very) enthusiast or positive realist about local forests Present forest area all-right	Business activities and agriculture Attractive rural landscape and enduring rurality-based social traditions Forests as green infrastructure ameliorating landscape having no direct economic importance, but canvas for housing development and industry Most people positive realists or sceptics about local forests Increased forest area preferred
Forestry and rural development policies and programmes (development problem, the role of forests within future development, forest & land use policies, grants / regulations)	Over-development (industry, roads, houses) Most people choose for nature development (antipode to urban development) and organic-rurality future perspectives. Forests are considered within nature development Afforestation is in balance with inhabitants' wishes Distrust towards local authorities	Few employment opportunities Most people choose for economic development as well as nature development. Forests are considered within landscape development and indirectly within economic development Too little afforestation, regarding inhabitants' wishes Neutral attitude, more respect for local authorities

Ede is characterised by being a relatively urbanised area, but people living in this community still perceive it as being rural. However the quality of life is threatened by over-development, notably the effects of pollution and urbanisation. The municipality has a well-established forest area, which is foremost considered as a nature area rather than forming part of the rural landscape. These forests are highly valued because of their nature and landscape functions rather than for their economic values. They are considered as a major contributor to the quality of life. Forests form an antipode to the highly developed agricultural and built-up areas, but are not perceived as having economic importance. This is due to the fact that the income generated through forest related recreation and tourism or increased real estates prices are not recognised. The contribution of forests to recreation and tourism is acknowledged, but the people obviously consider these activities foremost as leisure activities rather than as activities providing income and employment. This reflects the relatively strong hedonistic attitude of the respondents. Forests are mainly considered within a nature development perspective. As Ede has already large forest and nature areas, people are more concerned about the preservation of the present area in stead of expansion. Consequently, afforestation is not a real issue.

Local government supports further urban development. As people feel that the area is already partly overdeveloped, this causes distrust among local people towards local authorities.

Stadskanaal is characterised as being a diversified rural area in which farming still plays an important role next to business activities. Also in this municipality forests are perceived as contributing to the quality of life. This is caused by forests providing attractive living conditions and assuring a positive environment for housing as well as agriculture. Forests are valued here foremost as a means to improve the landscape qualities of the area. Although forests are not perceived as providing direct economic benefits, as a result of their positive landscape values they contribute towards improved economy and employment. However, establishment of new forests competes with land for farming, and consequently about one third of the respondents is sceptic or even adverse to forests. Especially farmers have a negative attitude towards forestry and it cannot be expected that many farmers will afforestate (partly) their agricultural lands. Consequently, regarding the local demand for more forests too little afforestation is likely to happen.

4.1.3 Differences between categories of rural people

A major focus of the research was to ascertain whether there exist differences in opinion on rural development and forestry between landowners and general community inhabitants. The main differences as found in the Netherlands are summarized in Table 4.3. Overall, two major conclusions can be drawn:

- The opinions on the most desirable functions of forests do not differ dramatically between landowners and community inhabitants. However, different opinions exist with respect to the preferred future for the locality and the perceived role of forests within the locality and the rural economy.
- The different opinions are not only caused by whether people own land or not by different types of land ownership, but also by different cultural orientations and lifestyles. Notably people with urban-oriented lifestyles have a low appreciation for the economic dimensions of forest management. Moreover, as discussed in Chapter 3.3.3 the differences in lifestyles are also reflected in the degree of involvement in forestry issues. In respect to differences in land ownership important variations in opinions between farmers and forest owners were found. Consequently, we can conclude that neither community inhabitants nor landowners are a homogeneous group and that due to differences in lifestyles and types of land ownership there are several important within-group variations in opinions on the role of forests in rural development.

Community inhabitants highly value the nature and landscape features of forests and mainly for this reason that they are attached to the local forests. This appreciation steers also their attitude regarding future developments of the area. Many inhabitants consider that an increase in the forest cover stimulates nature development which is essential as an antipode to urban development as well as a facilitator of recreation opportunities. A majority of the inhabitants is in favour of participatory forestry planning and management and wishes to control more strictly land use practices of

landowners regarding environmental effects. Although they want to access the local forests for recreation, less than half of them support financial grants for private landowners to make their forests accessible for recreation.

Table 4.3: Main differences between community inhabitants and landowners on the role of forests related to quality of life in the two case study areas

	Community inhabitants	**Landowners**
Stakeholder characteristics	Heterogeneous groups	
	Differences depending on cultural orientation & lifestyle characteristics	Differences depending on type of landowner (farmers, forest-farmers or foresters) and cultural orientation & lifestyle characteristics
The role of forests in rural areas (identity, quality of life, functions, qualification, amount)	Inhabitants emphasise the rural and/or nature character of the area, which is an important quality of life factor Most important forest functions are nature & landscape aesthetics as well as recreation. Inhabitants are very enthusiast about the local forest and they belong predominantly to the positive side of the spectrum 'enthusiasts-adversaries'. In general, they would like to have more forests	Landowners stress more often the agricultural character of the area, as well as the rural and/or nature character. To them, both identity features contribute to the quality of life. Most important functions are nature & landscape aesthetics, but to some landowners business activities are also important. Landowners have mixed feelings about the local forests: both enthusiasts and adversaries. Farmers relatively often belong to the group of adversaries. Both farmers and foresters are worried about bad forest management but from a complete different point of view The majority of landowners think the present amount of forests is okay.
Forestry and rural development policies and programmes (development problem, the role of forests within future development, forest & land use policies, grants / regulations)	Over-development, including agro-business practices, is perceived as a major threat for the area. Consequently, most inhabitants prefer a nature development future in which more forests are included Inhabitants often want to be involved in land use decision-making practices as well as they prefer strict environmental rules for land use practices. The majority supports grants for landowners, however not very convincing. Wish for public access for recreation, low financial support	Depending on the type of landowners they are more concerned about (agricultural) industrial development issues. Many landowners wish economic development with room for agro-industrial development. Moreover, landowners are much more in favour of organic-rurality development options. Only exclusively foresters are predominantly focused on nature development Private landowners want to keep the decisions about their management activities by themselves, freedom of practices

Landowners, on the contrary, are more strongly in favour of an economically sound agrarian modernisation. Landowners thus put relatively more emphasis on economic and/or organic-rurality development than on nature and landscape development. Within this perspective, in comparison to community inhabitants landowners have a generally lower positive opinion on the role of forests in the

rural quality of life, while they are more supportive to financial assistance for landowners' activities to maintain forests. Most landowners, except for the exclusively forest owners, would like to prevent involvement of local people in forestry and rural development policies.

4.1.4 Region-specific conflicting views between inhabitants and landowners

As discussed above, landowners are generally less positive about forests than community inhabitants and put relatively more emphasis on economic and/or organic-rurality development than on nature and landscape development. Nonetheless, when looking at the results from Ede and Stadskanaal individually, it appears that landowners' perspectives on the role of forests differ from that of the community inhabitants in a relative rather than absolute sense. Consequently, within the two study areas there exists essentially a similar opinion about the role of forests. In both cases forests are predominantly valued for their contribution to quality of life and local identity rather than to primary economic production and income generation. The differences in the perspectives on forests can predominantly be related to differences in rurality characteristics of the two study areas. People in the highly-urban influenced community of Ede consider that both agricultural and urban developments are threatening the quality of life, and they highly value forests as providing an antipode to such over-development. People in the diversified rural area of Stadskanaal still consider farming to form an essential component of the local identity. Consequently, they value forests as an enrichment of the living environment, but forests should not unduly compete with agricultural production and thus change the local rural identity.

In conclusion, although the overall perspectives on the present and future role of forests in the quality of life is positive in both areas, there do exist some important differences between Ede and Stadskanaal regarding opinions on the rural development role of forests. Already in the first phase qualitative survey it was noted that forests in Ede were considered as a component of nature rather than a component of a rural landscape, whereas in Stadskanaal forests were conceived of as an integral component of the rural area. The results of the quantitative survey underscore this regional differentiation in opinions on the role of forests. In Ede people perceive overdevelopment as a major development problem and forests are mainly conceived of as a natural counterbalance to such overdevelopment. Whereas in Stadskanaal the need to further develop an attractive and diversified rural economy with good employment opportunities is considered as the main future challenge. Thus, rural development is conceived in Stadskanaal as a more integrated concept involving economic, social and ecological aspects than in Ede, where mostly social and ecological aspects were indicated. Consequently, the relative low economic importance of forests raises more concerns in Stadskanaal than in Ede; this is reflected in a less positive opinion than in Ede on the scope of forests within rural development. For a proper interpretation of these findings it is important to be aware of the fact that in Ede a large proportion of all forests are owned by (semi)public organisations such as the state forest service, the municipality and conservation agencies, while in Stadskanaal most forests are privately owned.

4.2 Relation of Multifor.RD findings to other Dutch studies

During recent years, several studies on the opinions of Dutch people on forests and nature have been made (Wiersum & Van Vliet, 2002). The main studies concerned a series of studies made within the framework of the preparation of the periodic national Nature balance (former Nature outlook) (Bervaes, et al., 1997; Buijs & Volker, 1997; Boer & Schulting, 2001) and a study in preparation for the new government policy on 'Nature for People, People for Nature' (Reneman et al., 1999). These studies focused specifically on the social support for forests and nature. The Multifor.RD research added to the knowledge-base that was created by these studies by focusing not on the appreciation on and expected roles of forests (or nature) as isolated objects, but rather by focusing on opinions regarding their role within the context of rural development. Moreover, whereas in most studies opinions were mostly differentiated according to demographic and educational criteria, in the Multifor.RD project attention focussed specifically at assessing opinions of consumers and producers. Through cluster analysis, different opinion groups were identified. Finally, the Multifor.RD focused specifically on assessing regional variation in perspectives on forests.

Overall, the Multifor.RD results are in agreement with earlier studies on the positive appreciation of forests and their important function for providing space for rest and recreation and for contributing towards an appreciated landscape. However, the study also indicated that there are sceptics and even adversaries about the contribution of forests to quality of life. By placing forestry in the context of rural development, it also became clear that in comparison to other aspects of rural development forestry aspects score relatively low. Moreover, by looking at forestry in the context of rural development rather than by focusing on it in isolation (or even as a nature component in contra-junction to areas under land husbandry) it became clear that forests are foremost favoured as a landscape component. This indicates a need to strengthen efforts to approach forestry development from the point of view of intersectoral development rather than from the point of view of a sector-oriented forestry or nature conservation perspective.

A second major feature distinguishing the Multifor.RD research from earlier forest opinion research in the Netherlands concerned the focused attention on identification of possible differences in opinions between different stakeholder groups (see Chapter 4.1). In the earlier studies, mostly statistical descriptions of opinions on desired features of forests were given. This last research approach could be interpreted as suggesting that either policy makers should formulate the right mix of measures in order that the forests fulfil the greatest common denominator of opinions, or that forests should be managed as a type of 'supermarket' providing the right mix of products and services to satisfy the public. In contrast, the Multifor.RD research tried to highlight how perspectives on the role of forests vary between (different categories of) producers and consumers. The identification of different stakeholder groups is based on the understanding that policies should not be based on the professional balancing of different public demands, but rather on negotiation of interests amongst different stakeholders. Such negotiation is only possible by first recognizing specific stakeholder groups and by identifying the relative importance of different stakeholder groups. The relevance of such an approach is demonstrated by the fact that landowners often expressed their idea that in

planning forestry development the wishes of users were mostly taken into consideration and that little attention is being given to the specific conditions of the landowners.

The third major feature distinguishing the Multifor.RD research from earlier Dutch forest opinion research is the focus on assessing and explaining regional variation. This focus is consistent with the present efforts at decentralisation in both rural development and forestry development programmes in the Netherlands. As summarized in Chapter 4.1 the Multifor.RD data indicate that within the Netherlands important regional differences in opinions regarding the scope of forestry in the context of rural development exist. These differences are related to both differences in rural conditions and differences in forest and land-use history. The study therefore underscores the relevance of region-specific approaches towards forestry development.

4.3 Main policy implications

Considering the results of the Multifor.RD research, the following overall policy implications can be identified.

Differentiation in administrative-oriented and experience-oriented rural development policy

The main aims of the Netherlands strategy for rural development (see Chapter 2.2.2) are:

- to work towards a new sustainable balance between economic functions and the functions of nature, landscape, water and environment,
- to strive for economic, social and ecological sustainability by means of an integrated approach, and
- to develop the functions of the countryside from primary production into a more multiple use and a shift from separation of functions to attracting new functions.

Amongst others this should be accomplished by developing sustainable agriculture, improving the quality of nature and landscape, promoting the diversification in economic activity and improving liveability. The Multifor.RD results indicate that this strategy is generally supported by the respondents in Ede and Stadskanaal.

Nonetheless, when considered in more detail, the Multifor.RD data suggest that further attention should be given towards a further clarification in the hierarchy of the aims and operational goals. In the official policy no overarching principle for rural development has been identified, but rather a set of aims and goals which are apparently assumed to contribute towards rural development in an equal manner. This may be due to the fact, that the policy is based on a policy-oriented administrative approach that focused on the identification of policy plans for stimulating a new balance in rural functions and new intersectoral activities and arrangements. However, as demonstrated by the Multifor.RD data, when rural development is approached from an experience-oriented approach rural development is foremost equated with an improvement of the quality of life, and changes and developments in rural sectors are valued on the basis of this overarching principle. The Multifor.RD data suggest that it would make sense (at least for local communities) to identify the improvement of

liveability as the main goal of rural development, and then to assess how various sectoral activities could contribute towards this goal. From such a point-of-view it can be concluded that although in the Netherlands rural development strategy the need for intersectoral development is stressed, in practice this principle is not systematically elaborated. For instance, multifunctionality is mostly stressed in relation to farming development and less in relation to development of forest and nature management.

The Netherlands forest and nature conservation policy demonstrates a still-lingering sectoral development approach. The policy foremost emphasizes the need for incorporating forests in the national ecological network and for establishing an urban green space network in and around cities. It does not explicitly address how forestry could contribute towards the strengthening of the quality and identity of rural areas by stimulating countryside stewardship. The officially-identified need to establish a new balance between economic functions and the functions of nature, landscape, water and environment in the countryside, is operationalised in the forest and nature policy in aims in respect to establish an ecological infrastructure and to develop new forests and other nature areas. Little attention is given towards the question how this new ecological infrastructure could assist in strengthening the liveability of rural areas by increasing the labour and income generation potential of the countryside, or in creating new forms of social participation. Or how this new ecological structure could assist in creating new rural production systems. As indicated by the Multifor.RD data, such liveability concerns are central in the perceptions of local communities regarding rural development.

More attention for the role of forests as a 'green infrastructure' giving meaning to local identity

The results of the Multifor.RD survey in the Netherlands indicate that forests are primarily valued as a major landscape component rather than as an area of primary production. The idea that forests are primarily valued as 'green infrastructure' rather than as areas of economic production is widely held by inhabitants (forest users) and existing forest owners (producers) alike. Notably the inhabitants (forest users) are very positive about this role of forests. Several people explicitly relate a poor forest situation to weak economic conditions, thus implicitly demonstrating the notion that forests provide for attractive (high-priced) living conditions and attract quality business enterprises. This notion is reflected in the expressed ideas that rural conditions in the Netherlands are threatened by 'overdevelopment' of intensive farming, industrialisation and ever extending housing estates. From a policy point of view this means that new approaches towards generating funds for forest management on the basis of their 'infrastructural' roles should be developed. Examples should be looked at in the sphere of funding of other 'infrastructural' resources such as water (water tax) and roads (road tax) rather than in the sphere of rural production processes.

Further stimulation of stakeholder involvement

As forests are very important for giving meaning to local identity, relevant policies (incl. communicative tools) should not only be developed at state level, but also at local (municipality) level. One representative from a municipality admitted that the local policy is predominantly based on the

ideas expressed by inhabitants and that the municipality had a 'blind eye' for the position of landowners. This lack of interactive land-use policy processes at local level is partly caused by the notion that agricultural and forestry policy arrangements are decided upon on national or even European level. Thus, a better coordination between land use policies at various levels of administration are needed, and a more careful consideration of the question how forest policies and stimulative tools for improved forest management and afforestation should be applied at different administrative levels.

Equitable distribution of costs and benefits of forest management

The Multifor.RD data indicate a strong feeling of forests providing a sense of place, but also that there seems to be a feeling that private forests owners are rich people, who can afford to maintain their forests as a hobby which they (partly) fund themselves and who do not need subsidies. Forest users are generally unaware that private forests owners loose money on forest management. More attention should be given to reconcile the very positive attitude of users towards forests and the funding of private forests management.

Although opinions on the important landscape and nature role of existing forests are generally positive, opinions in respect to the establishment of new forests is more complex. Although a majority of people favours afforestation and feels it to be beneficial, others are more sceptic or even adverse to it. Two major policy issues arise. In the first place some people find that the new forests may negatively affect the existing rural landscape and is not always beneficial to biodiversity. Therefore, in stimulating afforestation policies should not only be focused on measures to stimulate land owners, but also on measures for landscape zonation and biodiversity conservation. In the case of the Stadskanaal case-study area afforestation was only allowed in designated landscape zones and measures had been taken to enable land exchange schemes for farmers wanting to afforest on lands outside the forest zones; the Multifor.RD results indicated a positive opinion towards the way afforestation was stimulated. In the second place policies should address the low economic profitability of afforestation. In the Netherlands no 'waste' lands are present anymore, and afforestation takes mainly place on former agricultural lands. Obviously, financial considerations are important in the farmer decision-making process whether to afforest or not. It is generally agreed that forests give lower financial returns than agriculture (some farmers even regretted having afforested their lands after agricultural prices rose again), and such differences need to be compensated. The Multifor.RD data indicated a great public acceptance (notably of users) of government subsidies for stimulating establishment of new forests as well as for public payments to farmers for forest and nature management activities which are not the core business of these farmers.

More attention to role of forests in regional economy

As demonstrated by the overarching importance attributed by local communities to liveability as the yardstick for rural development, in considering the role of forestry in rural development it is important to look at the contribution of forestry to the regional economy rather than to the traditional forest and wood sector only. Recently, a start has been made in the Netherlands in studying the role of forestry

to the regional economy (Wiersum & Van Vliet, 2000; Berends et al., 2001). As indicated by the Multifor.RD data, such an approach towards valuing the role of forests is not yet commonplace. Even though the role of forests in tourism and recreation development is generally appreciated, hardly any respondents explicitly indicated that this would bring with it an increase in labour and income generation. Notably during the phase of the qualitative survey it appeared that most respondents relate forest-derived labour and income generation to activities within the traditional forestry sector and not to activities in other economic sectors. The same lack of recognition of the impact of forests on the regional economy was also apparent when discussing the financial aspects of paying for forest management. Only the traditional dichotomy of private financing versus government subsidies were mentioned, and no examples of novel arrangements of marketing forest products and services on the basis of intersectoral benefits (Hansman et al., 1999; Gaasbeek & Wieman, 2000) were indicated. The new policy initiatives to develop innovative forms of payments of forest-derived benefits outside the traditional forestry sector that have recently been taken need to be further extended. Also, new communication instruments to extend such schemes need to be developed.

More attention to regional approaches towards forestry development

As indicated by the Multifor.RD results, the opinions of the role of forests to the quality of life and local identity are quite location-specific. Depending on the local situation quite different approaches to strengthening the role of forests in the desired local futures are possible. For instance, in Ede, where forests are foremost considered as a natural area distinct from rural areas, options for better integration of forestry with the recreation and tourism sector could be envisaged. Whereas in Stadskanaal, where forests are considered a rural component, options for optimal integration of forestry and farming should receive more attention. Such a regional approach towards forestry development also provides optimal conditions for stimulation of stakeholder involvement and for arranging optimal economic interactions between the forest owners and enterprises which derive economic benefits from forests. At present the Netherlands forestry policy is partly decentralized to the provinces. As suggested by the Multifor.RD data, such decentralized approaches towards forestry development could further be expanded to explicitly involve municipalities as well.

Need for development of EU policies for rural development in increasingly urbanised areas

At European level rural policies (e.g. the LEADER programme) still predominantly focus on the goals of poverty alleviation and employment generation through stimulating rural production processes. This is also reflected in the existing European forest policies which focus predominantly on forestry as an alternative option to modernization of rural production. As indicated by the Multifor.RD results, within the more urbanised areas of Europe quite different problems regarding rural development exist. Here the questions are how to restructure the traditional economy based on rural production processes into an economy which reflects the service role of rural areas for urban agglomerations. This requires a new set of rural development policies and innovative approaches towards developing policy tools to stimulate the increasingly green-infrastructure-oriented roles of forests in these areas. As the Netherlands is a predominantly peri-urbanised country, the Netherlands government should bring the need for an extended rural development and forestry policy, which addresses not only

problems of rural decline but also problems of urban-rural interfaces, to the attention of the European policy makers.

4.4 Final conclusion

As discussed in Chapter 2.2.2, the Dutch rural development policy is based on the understanding that a balance must be sought between economic vitality and ecological quality, and that liveability is the touchstone of this aspiration. Liveability is considered to include social cohesion and participation, and a pleasant living environment with access to both social provisions and economic activities. Rural development should aim at retaining the liveability of the countryside and developing rural potential by introducing new economic activities, improving the level of provision, employment and social cohesion. The results of the Multifor.RD research are consistent with these ideas. They also indicate that an improved liveability is partly conceived of as a reaction on what is considered as 'overdevelopment' rather than underdevelopment.

The Dutch rural development policy puts also much emphasis on the need to improve the quality of nature and landscape. Once again, the Multifor.RD results show a clear support for this goal. The research also indicates that such aim should not be approached in isolation, but rather in interaction with other rural development goals such as development of the economic activities and improved liveability. The precise content of such development vary according to location-specific socio-economic and land-use conditions.

As indicated by the Multifor.RD data, forests are considered as having certainly a positive role to play in the present and future liveability of the countryside. This role is foremost related to the role of forests in contributing towards a good liveability. The role of forest in creating a positive landscape quality is conceived as more important than its role to contribute towards ecological quality. The opinions on the role of forests to economic vitality are ambivalent; they foremost relate to the primary production function of forests and do not include the service role of forest to the regional economy.

The present Netherlands forestry policy is foremost focused on the role of forests in improving the quality of nature in a national context. Relatively little attention is given to the role of forests to improve landscape values and even less explicit attention is given towards the role of forest to improve liveability. The Multifor.RD data suggest that there is scope for a further elaboration of the Netherlands forestry policy, notably in respect to the role of forests in respect to economic vitality and improvement of local identity and social cohesion. In this context, two main policy questions which emerged from the Multifor.RD research are:

- How do you stimulate afforestation as an economic attractive land-use options when it is agreed that once established forests have primarily an aesthetic, landscape role rather than an economic production role?
- Who funds the management costs of forests which are primarily considered to have 'green infrastructure' (landscape) role and how are these distributed over public and private forests owners?

These questions indicate that increased attention should be given towards the economic and socio-cultural importance of forests in a regional context level rather than only at its ecological importance in a national context. This would require a further integration of forest and nature policies in regional development plans and a more attention towards the importance of forests and nature in an intersectoral context. The recent development of the Netherlands rural development policy which was based on a process of decentralised and intersectoral policy formation and implementation offers a good starting point for further integration of forestry issues in rural development programmes.

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Annexes

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Annex 2 Remarks on policy implications by Netherlands panel of Multifor.RD advisors

1. The results of the Multifor.RD survey in the Netherlands indicate that forests are primarily valued as a major landscape component rather than as an area of primary production. The traditional policy approach of considering forestry as a specific economic sector should therefore be adapted towards a policy approach including forests, nature and landscape aspects in an integrated manner.
2. The idea that forests are primarily valued as 'green infrastructure' rather than as areas of economic production is widely held by inhabitants (forest users) and existing forest owners (producers) alike. Notably the inhabitants (forest users) are very positive about this role of forests. Several people explicitly relate a poor forest situation to weak economic conditions, thus implicitly demonstrating the notion that forests provide for attractive (high-priced) living conditions and attract quality business enterprises. This notion is reflected in the expressed ideas that rural conditions in the Netherlands are threatened by 'overdevelopment' of intensive farming, industrialisation and ever extending housing estates. From a policy point of view this means that new approaches towards generating funds for forest management on the basis of their 'infrastructural' roles should be developed. Examples should be looked at in the sphere of funding of other 'infrastructural' resources such as water (water tax) and roads (road tax) rather than in the sphere of rural production processes.
3. Although the Multifor.RD data indicate a strong feeling of forests serving rural infrastructure, in practice there seems to be also a feeling that private forests owners are rich people, who can afford to maintain their forests as a hobby which they (partly) fund themselves and who do not need subsidies. Forest users are generally unaware that private forests owners loose money on forest management. More attention should be given to reconcile the very positive attitude of users towards forests and the funding of private forests management. Relevant policies (incl. communicative tools) should not only be developed at state level, but also at local (municipality) level. One representative from a municipality admitted that the local policy is predominantly based on the ideas expressed by inhabitants and that the municipality had a 'blind eye' for the position of landowners. This lack of interactive policy processes at local level is partly caused by the notion that agricultural and forestry policy arrangements are decided upon on national or even European level. Thus, a better coordination between land use policies at various levels of administration are needed, and a more careful consideration of the question how forest policies and stimulative tools for improved forest management and afforestation should be distributed over various administrative levels.
4. Although opinions on the important landscape and nature role of existing forests are generally positive, opinions in respect to the establishment of new forests is more complex. Although a majority of people favours afforestation and feels it to be beneficial, others are more sceptic or even adverse to it. Two major policy issues arise. In the first place some people find that the new forests may negatively affect the existing rural landscape and is not always beneficial to biodiversity. Therefore, in stimulating afforestation policies should not only be focused on measures to stimulate land owners, but also on measures for landscape zonation and biodiversity conservation. In the case of the Stadskanaal study area afforestation was only allowed in

designated landscape zones and measures had been taken to enable land exchange schemes for farmers wanting to afforest on lands outside the forest zones; the Multifor.RD results indicated a positive opinion towards the way afforestation was stimulated. In the second place policies should adjust the low economic profitability of afforestation. In the Netherlands no 'waste' lands are present anymore, and afforestation takes mainly place on former agricultural lands. Obviously, financial considerations are important in the farmer decision-making process whether to afforest or not. It is generally agreed that forests give lower financial returns than agriculture (some farmers even regretted having afforested their lands after agricultural prices rose again), and such differences need to be recompensated. The Multifor.RD data indicated a great public acceptance (notably of users) of government subsidies for stimulating establishment of new forests.

5. Thus, in conclusion two major policy question emerge from the Multifor.RD research results in the Netherlands:
    a. How do you stimulate afforestation as an economic attractive land-use option when it is agreed that once established forests have primarily an aesthetic, landscape role rather than an economic production role?
    b. Who funds the management costs of forests which are primarily considered to have 'green infrastructure' (landscape) role and how are these distributed over public and private forests owners?
6. Finally, it was considered that at European level rural policies (e.g. the LEADER programme) still predominantly focus on the goals of poverty alleviation and employment generation through stimulating rural production processes. This is also reflected in the existing European forest policies. It should be acknowledged that within highly urbanised European countries quite different problems regarding rural development exist. Here the questions are how to restructure the traditional economy based on rural production processes into an economy which reflects the service role of rural areas for urban agglomerations. This requires a new set of rural development policies and innovative approaches towards the developing policy tools to stimulate the increasingly green-infrastructure-oriented roles of forests in these areas.