Nature Forest in society

Forestry and rural development in Europe

Research results and policy implications of a comparative European study

Birgit H.M. Elands and K. Freerk Wiersum

Forest and Nature Conservation Policy Group
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Forestry and rural development in Europe

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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 European 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 European synthesis report in the FNP discussion paper and report series, it is hoped that interested persons can have easy access into the ongoing 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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EU/FAIR research project 'Multifor.RD': Multifunctional Forestry as a means to Rural Development (FAIR6 - CT98 – 4223)

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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. The role of forestry in rural development can be highly diverse. 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 urban influences a series of comparative case studies were carried out in nine European countries, i.e. Austria, Denmark, France, Germany, Greece, Hungary, Ireland, the Netherlands and Spain. Specific attention was also given to the differences in perspectives between landowners and community inhabitants. The study was co-ordinated by the Forest and Nature Conservation group of the Department of Environmental Sciences, Wageningen University.

This European synthesis report provides an overview of the research approach, a summary of the comparative research findings and an evaluation of the research findings in the context of policy implications.

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Agricultural Sciences, Austria, Finish Forest Research Institute, Finland; Eidgenössische Technische Hochschule Zürich, Switzerland; and Wageningen University, the Netherlands.

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Freerk Wiersum and Birgit Elands
Multifor.RD Project Co-ordinators
Forest and Nature Conservation Policy Group, Wageningen University (NL)

Executive Summary

Navès, Spain (Gloria Domínguez Torres, Spain)

Research objective

In 1999 the research project '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 with funding by the European Commission under the FAIR Programme. The project involved partners in 11 countries scattered throughout Europe, of which 9 were research partners and 2 research advisors.

The study was based on the following considerations. Rural development concerns the strengthening of the liveability in rural areas by means of improving and/or restructuring the rural economy and by improving the rural identity. Forestry can contribute towards rural development by either contributing improved or innovative production processes or by providing an ecological infrastructure for an attractive rural landscape. An important aspect for consideration in the development of a European policy for sustainable and multifunctional forestry is the great regional variation in both rural and forestry conditions, and thus in the possible roles of forestry in rural development. Consequently, it is not possible to develop one uniform approach to multifunctional forestry for rural development. Rather, depending on local conditions, there is a need to develop region-specific approaches to the optimisation of the multiple role of forests and forestry within rural development. In developing such region-specific approaches attention should be given towards the specific roles of forestry under different conditions of rurality. Attention should also be given to the way in which various interest groups experience local rural areas and how they perceive its desired future, as well as how they perceive that forests and forestry can contribute towards the desired rural development.

Against this background, the main objective of this research was:

> *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 expected scientific and policy results of the study were as follows:

1. Better understanding about the variable opinions of different stakeholder categories (forest- and landowners, forest users and the public) on the role of forestry in rural development and about options for dealing with conflicting stakeholder demands.
2. Improved understanding about the role of forestry in rural development under different regional conditions regarding rurality and forestry, and about the major geographic and socio-economic factors affecting this.
3. Improved understanding about the need for and perceived effects of public measures with respect to stimulating multiple use of forests and its contribution to rural development.
4. A set of criteria for better understanding of the options and constraints of forestry serving rural development under region-specific conditions, and a typology of different European conditions regarding the role of forestry for rural development.

5. Recommendations on factors to be considered in formulating a general EU-policy framework on multifunctional forestry for rural development.

In addition, the project was also expected to contribute towards improved scientific co-ordination between participating institutes in studying questions of European forest policy. The planned results of the development of scientific cooperation were as follows:

1. Development of a common methodology for comparative European research in the field of forest policy;
2. A set of prototype questionnaires for carrying out quantitative and qualitative studies regarding perceptions and attitudes of different stakeholder groups towards multiple-use forestry.
3. Establishment of a common database on Internet with prototype questionnaires and research data.

This report presents the final synthesis of the study. It focuses on all three main outputs of the research. Firstly, the development of the common methodology for comparative studies will be highlighted. Chapter 2 presents the description of the key concepts that were used in the study, and Chapter 3 describes the integrated research methodology which was developed for making a comparative study at European level. Secondly, an overview of the main empirical results at European level will be given. These results consist of the characterization and comparative typology of the research areas (Chapter 4), the results of the initial qualitative survey (Chapter 5), and the main comparative results of a quantitative survey (Chapter 6). Finally, in Chapter 7 the main conclusions of the study will be presented. The following topics will be dealt with: (i) scientific results, including the relevance of the rural typology as developed by the project for representing different European conditions regarding the role of forestry for rural development, (ii) criteria for understanding options and constraints of forestry serving rural development, and (iii) and the policy implications at European level.

Harmonised research methodology

Basic concepts

As indicated by the research objective, a specific feature of the research was that it did not focus on forests and forestry in a sectoral perspective, but rather in a rural development perspective. Both with respect to the interpretation what constitutes a rural area and what is the meaning of rural development different interpretations exist. At the one hand, rural areas may be considered as ‘objective spaces’ characterized by a set of socio-economic characteristics. In this interpretation rural development is considered as the improvement of certain a-priori defined rural conditions. This descriptive approach towards defining rurality and rural development is normally used in policy discussions. At the other hand, rurality and rural development can be considered as a representation of how rural people themselves understand and explain their living conditions and what expectations they hold regarding future living conditions respectively. The aim of the research was to ascertain such local opinions and to interpret the policy relevance of such opinions. Thus, at the one hand it was considered that in order to assess local perceptions and attitudes towards forestry for rural

development, it would be logically to take local representations as a starting point for characterising rurality and rural development. At the other hand, it was considered that the research was expected to result in the identification of criteria for region-specific strategies for balancing public demands and landowners' objectives. Consequently, in the study both the 'social representation' and the 'objective space' approach was used. This would allow to assess whether specific local opinions on the scope of forestry within the context of rural development options are related to areas with specific socio-economic conditions.

Development of common methodology

For the research a common harmonized research methodology was used. This methodology included the following key principles:

- *A comparative case study approach*
  In order to understand location-specific perspectives on the role of multifunctional forestry within the framework of rural development a series of comparative case studies at the level of local communities would be made.
- *An actor-oriented approach*
  The study would address the perspectives of different actor-groups, notably rural producers, local consumers in the form of general community inhabitants, and local administrators and politicians.
- *A combination of qualitative and quantitative data collection*
  As only scattered prior information was available about the different ways in which various actor groups perceive of forests within the context of rural development, it was planned that data collection would proceed in two phases. During the first phase qualitative information would be collected about what kind of mental modes of representation people have of the study area and its future, as well as the role forests play in it. In the second research phase an assessment would be made about the quantitative distribution of these representations.

In the operationalization of these principles two challenges had to be faced:

- How to systematically proceed from qualitative to quantitative data collection?
- How to consistently analyze case-study data in a trans-European context?

The challenges were addressed through an integrated approach in which two types of analysis were used interactively. The integrated research approach consisted of the following components:

1. Selection and descriptive characterization of rural areas. In each of the participating country two case-studies areas were selected, in a region representing a traditional forest region and a region with newly evolving forestry condition due to ongoing afforestation respectively.
2. Qualitative interviews to assess the nature and variety of perspectives on the role of forestry on rural development. In 6 countries in the two case-study areas about 30 persons per area were interviewed using a phenomenological approach. These data were analyzed through systematic content analysis.
3. Quantitative survey to assess the distribution of perspectives on the role of forestry on rural development. In 9 countries a total of 4845 community inhabitants and 2801

landowners were interviewed using a standard questionnnaire (in France a locally adapted questionnaire was used). These data were statistically analyzed.

4. Synthesis of research findings by cross-checking of research findings and definition of research implications

At the one hand this research approach enabled a gradual up-scaling of case study information through a step-wise analysis going from case study level to country level and subsequently to European level. At the other hand it enabled to make a comparative analysis of the combined data base. In each phase of the research these two types of analyses proceeded simultaneously and their results were cross-checked. As a result of this reiterative dual approach a repeated and focused evaluation of the transversal consistency and reliability of different types of research data could be made. By comparing the results of the qualitative and quantitative surveys also an analysis of the internal consistency and reliability of research findings at the case-study level was made. And finally the integrated approach allowed an optimal assessment of the case area, country and regional specific contexts of the results of the surveys. This enabled the identification of both theoretically founded and empirically based region-specific characteristics of the rural development role of forestry, which can be objectively be applied for policy formulations.

Overview main empirical results European level

Development of rural area typology

All research areas were described by a set of common denominators representing demographic, land use and economic conditions and trends with respect to rural areas in general as well as to forestry in particular. Through statistical analysis of these data and cross-checking with results of the qualitative surveys, the following typology for the research areas was developed:

- *Rural areas with urban characteristics*. In these areas agricultural practices are in decline while urban related development is growing. In this category, areas are confronted with a decline in the primary sector and the tertiary sector has taken over the primary sector. The study areas included in this group are densely populated and are located in close proximity to urban centres. A sizeable part of the land is forest but the economic contribution of forestry to local livelihood is small.
- *Diversified rural areas*. The main land use is agriculture; forest land does not occupy a significant part of the rural territory. 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. Especially the secondary sector is high and the tertiary sector still developing.
- *Growth areas depending on agriculture*. The areas are located favourably in relation to urban centres. They have not suffered from depopulation over the last decades; moreover, the population is still increasing.
- *Decline areas dependent on agriculture*. The economic viability of these areas is dependent on agricultural practices. The population density is low and the areas are situated relatively far from cities. In the past they have suffered from depopulation.
- *Remote areas*. These areas are dependent on agriculture, are remote, mountainous and sparsely populated. They still suffer from depopulation.

Main conclusions of the surveys

The research was based on three main hypotheses, see Figure 1.1. The conclusions regarding these hypotheses are shortly presented.

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-urbanization, 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

Figure 1.1: Main hypotheses guiding the Multifor.RD project

Regional differences in perspectives on forestry and rural development

Both the comparative results of the quantitative survey and the statistical analysis of the results of the quantitative survey indicated that between the different research areas several important differences in the opinions on the role of forestry and rural development exist. Although in several respects differences between individual countries and Euro-zones were found to be significant, overall the differentiation in rurality classes as used by the project was found to be the main variable explaining variations in perspectives systematically. Thus, different degrees of rurality are of great significance in respect to the role which forests can play in the context of rural development. The regional differentiation in perspectives was found to relate to both the overall opinions on rural futures and the role of forests therein and to the opinions of landowners regarding the future of their rural enterprises.

Differences in stakeholder perspectives

As indicated by the results of both the quantitative and qualitative survey, in general the perspectives of community inhabitants (considered in this study as rural consumers) and landowners (considered as rural producers) on the rural values of their locality and on the role which forests play within the locality show similar trends. However, the opinions of community inhabitants on the role of forests are overall more positive than those of landowners. Community inhabitants were also more optimistic than forest owners about the economic benefits of forests. The variation in opinions was largest in the peri-urban areas. Within the category of landowners several important differences in perspectives were found between farmers and forest owners. Notably farmers are much more negative regarding the role of forests than forest owners, while the perspectives between forest owners and community inhabitants were found to be relatively similar.

This finding can be related to the differences in outlook on the future of their enterprises of farmers and forest owners. In general, farmers tend either to try to increase the size of their farming enterprises or to shift to alternative employment opportunities and sell their lands. Forest owners more often can be characterized as hobby forest managers, who are primarily

engaged in other economic livelihood activities. Forest owners are much more often than farmers inclined to maintain their forest property when becoming engaged in non-primary production activities. Thus, forest owners tend to be relatively often engaged in non-traditional rural activities and tend to adhere to modern lifestyles. In contrast, farmers more often tend to modernize their traditional rural production activities. In view of this contrast in the development trends of farm ownership and forest ownership, it is not surprising that the differences in opinions between community inhabitants and of forest owners regarding the rural values and preferred rural futures are more similar than between community inhabitants and farmers.

In the quantitative survey still a third stakeholder category was considered, i.e. decision makers on forestry and rural development. In some countries a clear differentiation was found in a policy-oriented discourse and an experience-oriented discourse. The first discourse prevails amongst politicians, civil servants / public administrators and representatives from different civic organisations. Whereas the second prevails amongst the rural inhabitants. Although in some countries no distinct differentiation in these two kinds of discourses were found, in other (notably France) they were clearly differentiated in respect to both the type of terms and arguments which were used. The difference between countries seem to be related to differences in policy styles. Different national policy styles exist in respect to the degree of communication between politicians/decision makers and the general public, as well as differences in the degree of participatory policy development in forestry and rural development issues.

Differences between traditional forest areas and areas with emerging afforestation

In general, no major differences were found in rural values and future perspectives between traditional forest areas and areas with afforestation. Thus, differences in rural values and opinions on rural development can mainly be explained by differences in rurality rather than by the forest situation. However, traditional forest areas and afforestation areas were found to differ clearly in respect to the opinions about the satisfaction about the amount of forests and the attachment to forests. People in traditional forest areas tend to feel that the amount of forests is medium to high, and they are generally satisfied about the amount of forests. In the afforestation areas the perception is that the forest cover is only medium and there is a tendency to be slightly dissatisfied with the low amount of forests. In the traditional forest areas the attachment to forest is higher than in afforestation areas and the opinioins about forests are more positive. Especially in case that afforestation takes place on abandoned agricultural lands or in characteristically open landscapes such as peatlands, people may feel that it threatens the local landscape identity. Especially in the case where afforestation comprises mostly commercial plantations owned by external companies and in case that these plantations replace former open-access landscapes, this may be perceived as a loss of rural quality of life.

Other major research findings

Most studies on public perceptions and forest owners attitudes towards forestry have untill now mainly focussed on the forests as a specialized object. When considering the desired futures, attention was thus focused on the future of the forestry sector. The Multifor.RD

project enlarged the scope of studies on perceptions and attitudes regarding forests and forestry by placing it within a rural development perspective. Consequently, rather than the roles of forests and forestry per se their relative role was the central point of attention. Within this context, it was found that concerns regarding forests do indeed feature in the preferred futures of rural inhabitants. This concern is clustered with other concerns regarding ecological development such as an increase in organic farming, nature areas and landscape qualities. Within this cluster, a desire for the extension of forests is of lesser importance than an increase in nature and wildlife areas. Moreover, rural people showed greater concerns for other future developments such as secondary sector economy development, tourism development, agri-business development and organic-economy development.

In respect to rural development, the majority of the respondents was in favour of a rural restructuring rather than only a rural modernisation. Forests can play an important role in such restructuring. This is reflected by the fact that the benefits of forests are foremost conceived as the protection of air, water and soil, followed by their contribution to a nice landscape, nature conservation, and recreation respectively. The role of forests to business activities was least considered as a benefit of forests. These opinions on the benefits of forests are reflected in the opinions of forest owners that nature and landscape functions are very important forest functions. These findings clearly indicate that forests are foremost conceived of as contributing towards environmental and landscape identity rather than as productive resources. The functions of forests are therefore not only related to the forest as a form of land-use, but also to forests as a component of the rural landscape.

When considering the economic role of forests, the respondents only mentioned the traditional production functions of forests. During the quantitative survey no references were made to the fact that forests may make a significant contribution to the rural economy as a result of forest-derived benefits in, for example, the tourism sector. The Multifor.RD results thus indicate that although non-productive benefits of forests are well-recognized, people do still perceive economic benefits of forests as being restricted to labour and income generation within the traditional forest sector. Thus, the local opinions on forests show an important contrast: at the one hand forests are primarily perceived as contributors to rural identity and ecological structure, but at the other hand the economic benefits of forests are conceived of as referring to the traditional forestry sector rather than to the regional economy.

Main policy implications

On the basis of the research findings a set of principles, criteria and key indicators for planning programmes for multifunctional forestry serving rural development were developed. The main principles that were identified, are presented in Table 1.1.

Table 1.1: Basic considerations and principles for multifunctional forestry serving rural development

Basic consideration	Principle
Forestry policies should change from a sectoral approach to a quality of life approach	• Forestry policies should enlarge its focus from a traditional sectoral approach to an approach in which the qualityt of life is central focus point • Forestry programmes aimed at rural development should not be interpreted as solely referring to rural modernization, but should incorporate the need for rural restructuring • In planning multifunctional forestry development the traditional sector-oriented approach must be extended into a multi-sectoral approach
Forestry development policies should respect differences in rural conditions and trends	• Rural development oriented forestry development programmes should take differences in rural conditions and trends into account
Forestry development policies should be based on respect for different perspectives of stakeholder groups	• Rural development oriented forestry development programmes should take differences in stakeholder opinions regarding rural conditions into account • In planning multifunctional forestry development within the framework of rural development the changing position of private forest owners need to be taken into account

In addition the following main policy implications at European level were identified:

1. The Multifor.RD results show that social and environmental quality aspects are the main concerns regarding forestry in a rural development context. This challenges the dominant European policy concerns about forestry development as focusing predominantly on the improvement of the production function of forests thereby generating income and employment. Instead of focusing on the traditional rural development approach of forestry contributing towards modernisation increased attention should be given towards the role of forests in restructuring rural areas and improving its quality of life. Measures to stimulate multipurpose forestry should be positively related to and even enhance the role of forests in shaping regional identity and landscape. Measures to stimulate afforestation should foremost be based on a landscape development approach. In many cases afforestation can be used to enhance the landscape identity, but in other cases afforestation may destroy much appreciated open spaces.
2. When considering options for forestry development within the context of a rural restructuring approach, attention should not only be given to productive and environmental issues, but also to social issues. The following social issues merit specific attention: the role of forests in contributing towards rural identity (including possible negative perceptions) and the position of forests as an open-access rural space. For instance, afforestation as a means towards producing industrial resources in non-accessible, externally-owned, high production units is generally disfavored and policy measures to stimulate such a sectoral approach will often result in rural discontent or even outright conflict.
3. Within the context of stimulating the role of forests in restructuring rural areas, more attention needs to be given towards strengthening the social roles of forests. In this context European forest policies should identify quality criteria regarding interactions (including negotiation of conflicts) between forest owners and community inhabitants, as well as regarding measures for fulfilling the role of forests in respect to local identity. In

this context, more emphasis should be given towards the proper organisation of forest management by (often small-scale) forest owners rather than to afforestation and forest protection measures only.

4. In formulating policies to stimulate multipurpose forestry for rural development in an European context, attention needs to be given to the variety of rural conditions in Europe rather than only towards the variety of forestry conditions. In order to meet the requirements of finding a proper balance between European level and local-level concerns, policies for forest protection and forestry development should be based on the following principles:
   - Policies should be based on a regionalised set of forestry stimulation actions which can be implemented in accordance with the principle of subsidiarity
   - Policies should identify common standards for inter-sectoral co-ordination and local involvement in the planning of location-specific forestry development measures.
5. At present within EU rural development policy is mainly focused on remote areas. However, under influence of the ongoing urbanization process, many traditionally more favored areas are increasingly faced by a loss of identity and subsequent problems of rural restructuring. This is notably the case in areas with rural/urban interfaces. Forests can play a significant role in the restructuring of such peri-urban areas. The EU forestry development policy should therefore not be solely focused on stimulating forestry in traditional rural areas characterized by rural production processes, but explicitly also on the role of forests in areas with rural/urban interactions in which important discrepancies exist between requirements of community inhabitants and actions of landowners.
6. At present a major proportion of EU forestry policies are focused on the stimulation of afforestation of abandoned agricultural lands. Although there are certainly rural areas where such afforestation can contribute towards a better quality of life as perceived by local people, this is not everywhere the case. However, as indicated by the Multifor.RD data the locally perceived forestry problems are often not primarily the amount of forests, but proper management of existing forest with due respect for environmental and social values. Attention needs to be given towards the formulation of European policies for stimulating the development of novel arrangements for multifunctional forestry based on the principle of an equitable distribution of the multiple forest benefits at community level.
7. Policy measures to stimulate multifunctional forestry for rural development should be cognizant of the perceived role of forests as an open access landscape component. Policy measures to stimulate multipurpose forest management should therefore not only focus on improving the financial returns of forest production as a private good, but also on improving forest-derived incomes within the regional economy. In order to assure that such forest-based regional incomes are at least partly reinvested in forest management, novel financing mechanisms need to be developed and implemented.

1 Introduction

Weinviertel, Austria (Eva Kvarda)

1.1 Aim of this report

In 1999, the research project '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 with funding by the European Commission under the FAIR Programme. The main objective of the project was "*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 partners in 11 countries scattered throughout Europe, of which 9 were research partners and 2 research advisors. For the composition of the research team, see Annex 1. In the Netherlands, the Forest and Nature Conservation Policy group of Wageningen University co-ordinated the research programme; this group also acted as one of the research partners.

In this report, the final synthesis of the study will be given. The aim of the report is:

- To describe the key concepts that were used in the study;
- To describe the integrated research methodology which was developed for making a comparative study at European level. This methodology consisted of four main phases: (a) selection and comparative characterisation of research areas, (b) a comparative qualitative survey, (c) a follow-up comparative quantitative survey, and (d) an assessment of policy relevance of research findings;
- To present the main results of the three phases of data collection in the context of the research objectives and hypotheses;
- To discuss the policy implications, which can be derived from the study.

1.2 Problem statement

In order to meet the declining liveability and to stimulate the economic vitality of rural areas as well as to address the multiple demands for forest products and services, the European Union developed policies to optimise the role of forestry to rural development. When the research was initiated, these policies predominantly aimed at restoring existing woodlands and establishing new forests on suitable land including former agricultural land, as well as at developing sustainable and multifunctional forest management (e.g. Council Regulations (EEC) Nos: 2085/88, 4256/88, 1610/89 and 2080/92). During the lifetime of the project additional attention became focused on the options to stimulate more multifunctional farming systems and to use EU agricultural subsidies for paying farmers for landscape management and nature conservation activities.

Rural development may be defined as the strengthening of the liveability in rural areas by means of improving and/or restructuring the rural economy and by improving the rural identity. Forestry can contribute towards rural development by either contributing improved or innovative production processes or by providing an ecological infrastructure for an attractive rural landscape. An important consideration in the development of a European programme for sustainable and multifunctional forestry is the great regional variation in both rural and

forestry conditions, and thus in the possible roles of forestry in rural development. Consequently, it is not possible to develop one uniform approach to multifunctional forestry for rural development. Rather, depending on local conditions, region-specific approaches need to be developed.

In developing such region-specific approaches, attention should be given towards the specific roles of forestry under different conditions of rurality in respect to both geographic and social characteristics. Attention should also be given to the way in which various interest groups in different regions experience local rural areas and how they perceive its desired future, as well as how they perceive that forests and forestry can contribute towards the desired rural development.

1.3 Objectives and expected results

In view of the ongoing discussions on the role of forestry within the context of rural development, the main objective of this research was:
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.

This objective was further elaborated into the following specific objectives:

1. To define what multi-functional forestry consists of in 9 European countries and how it is considered to contribute towards rural development.
2. To identify in 6 European countries how different stakeholder categories evaluate the role of multifunctional forestry for rural development:
   (a) To identify (i) the perceptions and attitudes as well as practices of forest owners, and (ii) the perceptions and attitudes of other landowners concerning forestry, especially with respect to multifunctional forest management
   (b) To identify the perceptions and attitudes of members of rural communities towards forestry and afforestation as a means to provide material and non-material goods and services for rural development[1].
3. (a) To assess the quantitative distribution of the perceptions and attitudes of different stakeholders to multifunctional forestry in 9 European countries, and
   (b) To identify major factors with respect to (i) rural land ownership and farming conditions, (ii) the development policies of rural municipalities, and (iii) forestry policies, including measures for dealing with conflicting stakeholder demands, which influence the potential and willingness of rural landowners to practice multi-functional forestry.

[1] Originally, it was planned also to include the opinions o visitors to the selected communities in the study. Because of practical reasons (field research took place outside the main holiday season and difficulties with obtaining a reliable overview of contact addresses of visitors) this group of stakeholders was finally not included in the study.

4. (a) To compare interregional differences between European countries with respect to perceptions and attitudes to multifunctional forestry for rural development, and
   (b) To identify major region-specific factors which influence specific types of multifunctional forestry and its possible contribution to rural development.
5. To develop criteria for region-specific strategies for forestry to serve rural development and the identification of new development strategies.

The expected scientific and policy results of the study were identified as follows:

1. Better understanding about the variable opinions of different stakeholder categories (forest- and landowners, forest users and the public) on the role of forestry in rural development and on willingness to pay for different forest products and services, as well as about options for dealing with conflicting stakeholder demands[2].
2. Improved understanding about the role of forestry in rural development under different regional conditions regarding rurality and forestry, and about the major geographic and socio-economic factors affecting this.
3. Improved understanding about the need for and perceived effects of public measures (incentives, taxes, regulations) with respect to stimulating multiple use of forests and its contribution to rural development.
4. A set of criteria for better understanding of the options and constraints of forestry serving rural development under region-specific conditions, and a typology of different European conditions regarding the role of forestry for rural development.
5. Recommendations on factors to be considered in formulating a general EU-policy framework on multifunctional forestry for rural development based on the principle of subsidiary, and on policy options and practical development measures for application of research results.

As a starting point for achieving these results, three main hypotheses were formulated, see Figure 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-urbanization, 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

Figure 1.1: Main hypotheses guiding the Multifor.RD project

[2] On the basis of the results of the first phase of research which indicated that opinions about forest production played a much smaller role than opinions on the role of fortests in the quality of life, the original objective to collect information on willingness to pay for forest products and services was changed into an objective to collect information on opinions regarding subsidies and grants for forest management.

In addition, the project was also expected to contribute towards improved scientific co-ordination between participating institutes in studying questions of European forest policy. In this context, the project give considerable attention towards the planning and implementation of a comparative European study using a common methodological framework. The expected results of the development of scientific co-operation were identified as follows:

1. Development of a common methodology for comparative European research in the field of forest policy;
2. A set of prototype questionnaires for carrying out quantitative and qualitative studies regarding perceptions and attitudes of different stakeholder groups towards multiple-use forestry.
3. Establishment of a common database on Internet with prototype questionnaires and research data.

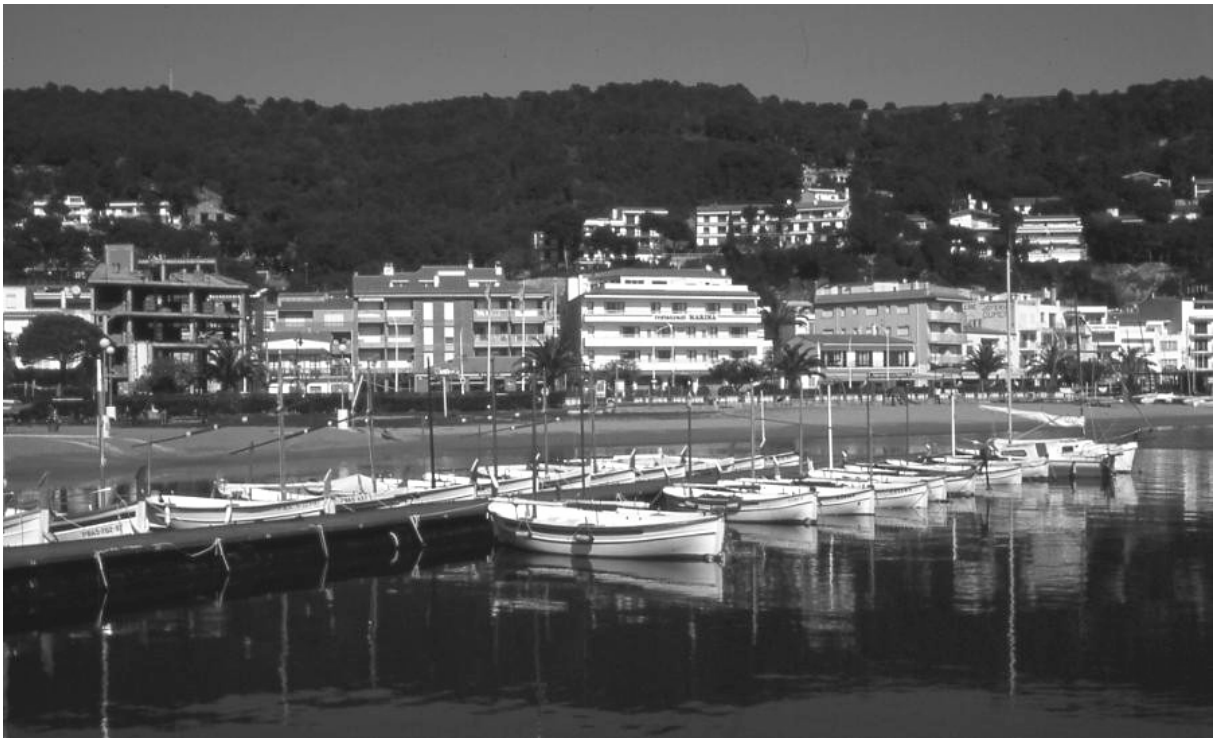
1.4 Structure and content of the report

In this synthesis report both the results with respect to forest policy development and to scientific co-ordination development will be presented. The report is focused specifically on the relevance of the Multifor.RD research on European level. The research also contributed significantly towards new country specific information. The relevance of the Multifor.RD research on country level has been reported in a separate set of country reports, for an overview of these reports see Annex 2. Further information on the scientific results of the study has also been provided in a series of scientific articles; for an overview of these scientific outputs see Annex 3. These publications as well as project working papers and questionnaires have been assembled in the common database of the project, which is accessible on Internet[3].

The report is structured as follows. In Chapter 2 the theoretical approach and main concepts as used in the study will be presented. Next in Chapter 3 the integrated research methodology will be described. This will be followed in Chapter 4 by a description and classification of the research sites. In Chapter 5 and 6 the main results of the study results at European level will be given. Chapter 5 will present the results of the initial qualitative survey and Chapter 6 the results of the subsequent quantitative survey. In Chapter 7 the main scientific conclusions and policy implications of the research at European level will be indicated.

[3] http://www.dow.wau.nl/multifor

2 Basic concepts on forestry and rural development



Torroella di Montgrí, Spain (Eduard Plana Bach, Spain)

2.1 Introduction[4]

During the last decade the potential role of forestry in rural development is gaining political prominence (Hyttinen & Flies, 1999; Buck, 2000; Ottitsch & Palahi, 2001). In the Agenda 2000 forestry development is considered to be an integral part of future European Union policy on rural development; this was also recognised in the 'European Union's Forest strategy' formulated by the European Parliament. Much attention is focused on the need to further adapt the management of the existing forests in order that these can contribute optimally towards the maintenance of economic vitality, social attractiveness and ecological integrity of rural areas. Moreover, the importance of forestry in the diversification of the countryside is stressed, for instance by restoring existing woodlands and establishing new forests on marginal lands including former agricultural land (Burgess, et al. 2000). As a result, during the last decade increased attention has been given to study how these policies can be implemented and to clarify how forestry can best contribute towards rural development (Glück & Weiss, 1996; Koch & Rasmussen, 1998; MCPFE, 2000; Slee & Wiersum, 2001). This chapter will describe how the concepts of multifunctional forestry, rurality and rural development were operationalised for the purpose of the study.

2.2 Multifunctional forestry

First of all, we need to define what we understand about forestry. According to Schanz (1999) "*stands the frequent use of the term 'forestry' in glaring contrast to the very different interpretations and perspectives of the different authors*". Forestry –as a first and foremost human activity- cannot be separated from society; it exists only by the grace of human decision-making and intervention. Forestry, therefore, concerns all aspects of human activities in respect to the controlled use and conservation of forest resources for human benefits. Out of this perspective forestry can be looked at as an integrative part of people's interaction with their environment of which forests are part of.

Forests can provide many products and services to mankind, such as timber and other wood products, non-wood products such as foods and medicinal products, fodder for livestock, environmental protection such as erosion control and hydrological regulation, and space for recreation and nature enjoyment. Historically, forestry science was focused mainly on timber production and environmental management, but since the 1950s increased attention has been given towards other forest functions and services as well. At present the concept of multifunctional forestry in the sense of a forest management approach that aims at a harmonious blend of forest resource conservation and production of sustained yields of water, timber, recreation, forage and wildlife harmoniously in order to meet the needs of the greatest number of people regularly features in policy programs and action plans throughout Europe.

[4] This chapter is based on information in Elands, B.H.M. et al. (2000). *Research manual*. Multifor.RD Working paper, Wageningen University, the Netherlands, and Elands, B.H.M. and K.F. Wiersum, 2001. Forestry and rural development in Europe: an exploration of socio-political discourses. *Forest Policy and Economics* 3: 5-16.

As a result of the multiple functions of forestry, there exist many different groups of stakeholders advocating specific functions. Each of these groups has their own specific attitudes and perceptions towards forestry. Consequently, in recent studies on multifunctional forestry, the focus has shifted from the need to obtain a good understanding of its various dimensions to a focus on understanding how different functions are appreciated by different stakeholders (Hytonen, 1995). It is now recognised that multifunctional forestry has as a logical corollary multiple stakeholders. For instance, Niesslein (1985) refers to multifunctional forestry as the relationship between the multiple functions of forests, on the one hand, and the expectations of various interest groups in society, on the other. A similarly societal orientation is proposed by Kellomaki (1984) who emphasises that the use and management of forests should aim to "holistically, impartially and consciously satisfy the changing needs of society". This understanding formed the foundation of the Multifor.RD research questions which focused on the perspectives of different groups of people with respect to the multifunctional role of forestry in rural development.

Two major categories of stakeholders may be distinguished, i.e. forest and other land owners on the one hand, and forest users on the other hand. In the 1990s much research has been done to obtain a better understanding of the perspectives of these different stakeholder groups on forestry (Terrasson, 1998; Wiersum, 1998a). Most of this research focused on the perspectives on the nature and benefits of multifunctional forest management as a specific form of land-use. Much less attention has yet been given towards studying the perspectives of the role of forestry in the context of rural development (Solberg, 1996; Slee, 2000; Kusel, 2001). Consequently, when the Multifor.RD project started, an important task was to assess what was meant by the concept of rural development, and to define how this concept should be used within the framework of the project.

2.3 The changing nature of rural areas

According to the European Commission (1997) about 80% of the territory of the European Union can be called 'rural'. This European countryside is quite heterogeneous as a function of differences in socio-economic, demographic and biophysical conditions. They include a great variety of cultures, landscapes, nature and economic activities that shape a palette of rural identities.

Originally, a common denominator of all these rural areas was the interaction of man and nature. Traditionally, rural areas were bounded at the one hand by urban areas, characterised by the lack of human-induced reproduction of natural resources. And at the other hand they were bounded by wilderness areas characterised by a lack of impact of human civilisation (Van der Ploeg, 1997). In the rural areas humans were constantly using and reproducing natural resources. As a result of this, a rural area is traditionally characterised by the presence of a specific set of agricultural and other natural resource production processes. But the nature of rural areas contains more than production artefacts, namely also a specific culture: *"the ongoing encounter between man and nature produced (and was supported by) a particular culture in which the prerequisites, the mechanisms as*

well as the outcomes of co-production are specified and highlighted" (Van der Ploeg, 1997, p. 43).

However, at present many rural areas are subject to major transformations. Primary production is not any longer the obvious pillar of the countryside, and the certainties of agricultural production as the traditional mainstay of rurality are giving way to a much more polyvalent rural scene (e.g. De Haan and Long, 1997). This is due to both internal causes, such as overproduction and increased attention for free-market politics, as well as the impact of external causes such as urbanisation, a growing concern with environmental issues, individualisation, (Huigen et al., 1992; Slee, 2000). Notably as a result of the impact of urbanisation a further diversification in rural cultures occurred. Many rural areas are rapidly changing as a result of the advent of the secondary and tertiary sector. Increasingly, people in rural areas are not necessarily employed anymore in the primary sector; they even may commute to their urban-based income-generating activities. Moreover, in many places urbanisation resulted in an extension of residential areas. This brought with it an influx of rich middle class newcomers having urban-oriented lifestyles, who required new rural services, e.g. in respect to recreation and tourist facilities.

The impact of these transformations on the European countryside is quite variable. In some areas, the lure of city life including well-paid jobs in industry or service sector attracted an increasing number of young people, which led to a decline in the economic vitality of the countryside. As a consequence, several remote rural areas experienced a decline in liveability and became increasingly marginalised (e.g. Baldock et al., 1996). On the contrary, other areas are getting more prosperous. First of all, in areas adjacent to metropolitan areas urbanisation is taking possession of the countryside and citizens are imposing their lifestyles and values upon the rural communities. The opinions on rural values of the people engaged in such non-traditional rural activities are often rather different than the traditional rural dwellers. In many cases these people value rural areas for their landscape and amenity functions rather than for their rural production functions (Elands & Wiersum, 2001). Secondly, amenity-rich peripheral areas became more popular as location for different types of industries. These type of areas possess qualities of their own that can serve as a base for economic development, especially regarding to the increasing importance of tourism as rural employer (Caalders, 2002).

As a result of the ongoing changes in rural areas, also the role of forestry is changing. In the past, most attention was focused on the primary production function of forests as a means to contribute to the economic advancement of rural areas by providing income, employment and raw materials. At present the role of forestry is gradually changing with greater emphasis being given to its role to maintain and to (re)create ecological and amenity services as a means to contribute towards environmentally-attractive living and leisure areas for a growing urbanised population.

2.4 Rurality

Due to the great diversity in rural conditions and cultures and the lack of clear definition of what is considered to be rural and what not, discussions on the future of rural areas often lack transparency. In order to remedy this unclarity, at present new conceptual parameters are being sought for characterising the diversity in rural conditions and for understanding the roles and development trajectories of different rural areas (e.g. Halfacree, 1993; Hoggart et al., 1995; Frouws, 1998). Because of the historically grown diversity in rural conditions it is almost impossible to formulate one all embracing single objective definition of rurality. Halfacree (1993) distinguishes four types of approaches to define 'the rural': descriptive, socio-cultural, locality and social representations definitions. The first three approrach the rural as space, the latter one approaches the rural as social representation. The approaches will be shortly described in the following.

Descriptive defintion

The first approach for defining rurality is based on socio-spatial parameters such as land-use, population density, employment, et cetera. These descriptive definitions are primarily focused on the selection of the most appropriate spatial descriptors for the rural environment, but do not provide much insight into the nature of it. This method "*involves trying to fit a definition to what we already intuitively consider to be rural*" (Halfacree, 1993, p. 24). For instance, the frequently quoted definition of rurality based on population density criteria as used by the OECD is a typical example of this type of definition. Besides, an EU classification of rural areas (integrated rural areas, intermediate rural areas and remote rural areas) based upon socio-economic trends, such as population growth, land use change and employment conditions (European Commission, 1988), belongs to the descriptive definitions.

Social-cultural defintion

Secondly, Halfacree (ibid.) identifies socio-cultural definitions, which are based on the idea that rurality represents a specific way of life which is different from the urban way of life. For example, urban people are having a hurried and hectic life, whereas the life or rural people is relaxed and easy-going. This deterministic approach has been criticised, because "*the sociological characteristics of a place could not simply be 'read off' from its relative location on a continuum"* (Halfacree, 1993, p.25). The rural-urban continuum is used quite often. This approach seems to be suggested in the classification of rural areas by Glück (1998), in which five categories of rural areas were distinguished, i.e. remote rural areas, areas dominated by the primary sector, rural areas used for mass tourism, rural areas with a diversified economic structure and rural areas adjacent to agglomeration centres (peri-urban areas).

Rural locality definition

In the third group of definitions Halfacree rural areas are conceived as representing localities characterised by a specific interrelation between spatial and sociological characteristics. It is considered that 'space is produced' and that it is not correct to presuppose a kind of spatial determinism, as is often the case when using empirical or socio-cultural definitions. The rural locality definitions suppose that at the local level specific social structures are active, which

clarify the distinction between rural and urban. Social structures, however, go beyond the locality level; most of them traverse the rural-urban distinction (Halfacree, 1993).

Social representation definition

Whereas these three definitions approach the rural merely as objective space, the fourth approach assumes that the experience of the rural is too a large extent dependent on personal perceptions and interpretations of everyday reality. For instance, for 'urban newcomers' rural areas represent beauty and naturalness where urban people can relax from the stress of urban live, whereas for farmers and the autochthonous population rural areas predominantly represent farming practices. These different representations do not always go hand in hand indisputably.

The theory of social representations stresses the "*words and concepts understood and used by people in everyday talk"* (Halfacree, 1993, p. 29). It assumes that that rurality is a 'symbolic shorthand' for giving meaning to a specific area. The symbolic meanings attached to the countryside may differ significantly for individuals, irrespectively of its socio-physical attributes. Meanings are not inherent in the nature of objects, but are allocated by their observers (Greider and Garkovich, 1994). Each individual builds its own mental construct of the countryside, which is feeded by our norms and values, former experiences and personal interests. These mental constructs can be called 'social representations'. The theory of social representations tries to make clear "*how people understand, explain and articulate the complexity of stimuli and experiences emanating from the social and physical environment in which they are immersed*" (Halfacree, 1993 p. 29). Social representations are used in both understanding the things we encounter in our life world and managing our responses and behaviour towards it (Halfacree, 1993); thus they have both referential and anticipatory meaning.

Important is to emphasise the social character of a representation. The construction of meaning is not an individual process, but it is fundamentally socially derived: it is the social construction of the world (Schutz, 1971). In our interactions with other people we continuously negotiate on the meanings of objects. As a representation evolves within social practices it is specific both in time and space and culturally founded (Torfing et al., 1999; Terluin, 2003). Therefore, a social representation is a dynamic concept, but it has a certain persistence that gives it a long-term continuity (Frouws, 1998; Greider and Garkovich, 1994).

Social representations of the rural are expressed and passed on through discourse. In that sense they are linked to communication processes because they require an agreed code for communication (Potter and Wetherell, 1987, in Halfacree, 1993). The concept of discourse refers to the process of communication through which intentional and incidental meanings are expressed and constructed (Jones, 1995). Thus, a discourse can be considered as an organised set of social representations (Frouws, 1998). In the Multifor.RD project, prevailing discourses on the local meaning of forests, expressed by community inhabitants, landowners and decision-makers/interest groups, are subject of investigation.

2.5 Rural development

The different approaches defining 'the rural' do not only imply different interpretations of how to identify rural areas but also how to characterise rural development. In general, the term rural development can be characterised as referring to the desired futures of the countryside and the process of strengthening of the liveability in rural areas. However, such a definition does not clarify whose opinions about the desired future are at stake. When considering this question, in analogy to the differentiation of defining rural areas, also in defining rural development an 'objective space' and a 'social representation' approach may be distinguished (Elands & Wiersum, 2001).

Within the context of rural areas as an objective space, rural development may be used as referring to desired future situation in respect to specific rural conditions. In this context often descriptive socio-economic parameters for rural development are used, such as increased production, increase in (regional or household) income, or increase in labour opportunities. Increasingly also descriptive socio-cultural parameters such as strengthening of liveability, good socio-cultural infrastructure, or attractive landscape for housing and leisure activities are mentioned. In most policy discussions amongst decision-makers, administrators and professional people such socio-economic and socio-cultural interpretations prevail.

According to Frouws (1998) the following elements characterise rural development discourses based upon a social representation approach: the main social, cultural, economic and/or ecological conception of rural areas, the perceived problems of the countryside, and the future that is taken into consideration as well as the wish for political intervention to realise this hypothetical future. In the social representation approach, the term rural development is given meaning by all people with an interest in the area expressing their concerns about problematic present conditions and articulating their ideas on desired future conditions in respect to rural liveability. Important is to emphasise the social character of their concerns and ideas. As different groups of people perceive rural areas differently, they develop dissimilar ideas about the future of rural areas. It concerns (land owning) local people on the one hand and politicians, interest groups and decision makers on the other hand. Such expressions of laymen (cf. Jones, 1995) on desired rural futures are often distinct from the policy perspectives on rural futures. Consequently, the desirable development of rural areas has always been and will always be contested.

A second main consideration when reflecting on the meaning of rural development is that this concept comprises two dimensions, i.e. the contents dimension and the process dimension. According to Slee (2000) the two dimensions are hardly equally considered in rural development studies: mostly rural development is focused on as either an end state or a process, whereas the former is more theoretically oriented and the latter one more often derived from practice.

The contents of rural development concerns the implementation of a large variety of measures aiming at improvement of the rural economy, the quality of life of the community, the landscape identity, the protection of the environment, and the attractiveness of rural

areas as places for domicile (ECRD, 1996; Papageorgiou et al., 2000; Slee, 2000; Elands and Wiersum, 2001).

Regarding the process dimension of rural development, a major aspect to be considered is the renewal of rural institutions, procedures and culture and their impact on the rural space. Institutional renewal should enable innovating processes and practices to be applied to the use of the rural space. In this context much attention is given to community participation and involvement in rural development efforts. Often two ideal-typical processes are distinguished, i.e. exogenous development and endogenous development (Van der Ploeg and Long, 1994; Lowe et al., 1995). Exogenous development is conceived as a process in which rural development is the result of forces emanating from outside rural areas. Such forces consisted of both economic market forces and (inter)national government policy measures. In contrast, endogenous development is conceived as a process in which rural development is the result of local initiatives. These two processes are often characterised as being 'top-down' and 'bottom-up' respectively. Traditionally, the exogenous model dominated the thinking concerning rural development. However, at present a major concern regarding the process of rural development is the need to strengthen endogenous development by stimulating local community initiatives and bottom-up planning processes (Van der Ploeg and Long, 1994). Moreover, it is important to use the specific rural features as a form of endogenous capital of each area, and to develop innovative processes and new organisations to effectively employ such endogenous capital and skills.

2.6 Conclusion

The aim of the Multifor.RD project was to obtain a better understanding of the various perspectives regarding the role of forestry for rural development. It was considered that as a result of rural change, also the roles that forests can play for society are gradually changing. Therefore, it is important to have a good understanding of the various perspectives of different stakeholder groups regarding the changing role of forestry under different rural conditions. In order to define specific rural conditions, it is important to be aware that different interpretations exist with respect to the definition of rurality and the interpretation of the meaning of rural development. At the one hand, rural areas may be defined as 'objective space' and and rural development as the improvement of certain a-priori defined rural conditions. This descriptive approach towards defining rurality and rural development is normally used in policy discussions. At the other hand, rurality and rural development can be considered as how rural people themselves understand and explain their living conditions and what expectations they hold regarding future living conditions respectively. The aim of the Multifor.RD research was to ascertain such local opinions and to interpret the policy relevance of such opinions. Consequently, in the study a concentrated effort was made to combine the 'objective space' and 'social representation' approach. At the one hand it was considered that as the project focused on ascertaining local perceptions and attitudes towards forestry for rural development, it would be logically to take local meanings as a starting point for characterising rurality and rural development. At the other hand, it was considered that the research was expected to result in the identification of criteria for region-

specific strategies for balancing public demands and landowners' objectives. The research findings should therefore be analysed in respect to identifying different development options in areas characterised by specific socio-economic conditions.

3 Methodology

Multifor.RD research group visiting South Leitrim, Ireland (Ashley Selby, Finland)

3.1 Introduction[5]

In planning the research it was decided that a common harmonised research methodology would be used. This methodology should include the following key characteristics:

- *A comparative case study approach*
  In order to understand location-specific perspectives on the role of multifunctional forestry within the framework of rural development a series of comparative case studies at the level of local communities would be made.
- *An actor-oriented approach*
  The study would address the perspectives of different actor-groups, notably rural producers, local consumers in the form of general community inhabitants, and local administrators and politicians.
- *A combination of qualitative and quantitative data collection*
  As only scattered prior information was available about the different ways in which various actor groups perceive of forests within the context of rural development, it was planned that data collection would proceed in two phases. During the first phase qualitative information would be collected about what kind of mental modes of representation people have of the study area and its future, as well as the role forests play in it. In the second research phase an assessment would be made about the quantitative distribution of these representations.

This Chapter will describe how these principles for research were elaborated into a systematic research framework and methodology.

3.2 General methodological approach

Comparative research with multiple aims

As the project concerned a comparative trans-European research, in developing the overall research approach special attention was given to the question of how to achieve effective comparability and harmonisation of information, and how to assure consistency in data analysis. According to Bennett (1996) the benefits from a comparative analysis of case studies, which focus on clarifying regional characteristics and on providing guidelines for policy formulation, are threefold. They provide:

- *descriptive information*. By looking 'abroad', culturally determined generalisations can be avoided.
- *causal relations*. By comparing e.g. social perspectives on the present and potential role of forestry in rural areas in different national settings, a better understanding of the range of social, economic, cultural and institutional variables that account for any variation can be obtained.

[5] This chapter is based upon Wiersum, K.F. and B.H.M. Elands (2002). The integraded Multifor.RD research approach. In: Wiersum, K.F. and B.H.M. Elands (eds), *The changing role of forestry in Europe, perspectives for rural development*. Nature Forest in Society 2002-2, Wageningen University, Wageningen, The Netherlands, p 1-24.

- *evaluative information on policy implications*. A better understanding of the different circumstances under which a particular problem has emerged, can give an insight in the conditions in which they might be transplanted from one country to another.

The Multifor.RD project aimed at all three types of results. In order to accomplish these multiple aims, a lot of attention has been given to the development of an integrated research approach applicable in a cross-cultural context.

Research approaches and steps

This research is about the interaction of people with their environment. The aim is to find out what perceptions and attitudes landowners, inhabitants, and policy makers with an interest in the area have about local forests in order to give the European Commission information to develop region-specific forest policies. In order to create an arena in which both the subjective interpretations of people as well as objective characterisations of rural areas coincide in a comparative European context, it was necessary to develop a common methodology. Therefore, the descriptive definition approach and the social representations approach were combined in an integrated research design. The descriptive definition approach enabled the researchers to collect location-specific information of the case study areas. For the social representations approach, as discussed in Chapter 2, a phased process towards using qualitative and quantitative research methods was developed. At first, insights about the mental models of representation that people have of each study area and the role that forests play in it, were collected through a qualitative approach with data being gathered by means of in-depth interviews. This information was subsequently used (i) to assess the distribution of these perspectives and opinions regarding the role of forestry in rural development by means of a quantitative survey and (ii) to ascertain the causal relations between these opinions and socio-economic criteria from the descriptive definition approach. These data were subsequently upgraded into more systematic information to allow trans-European comparison of data leading to the identification of causal factors explaining differences in the role of forestry for rural development under different conditions. Finally, an evaluation of the policy repercussions was accomplished by comparing the opinions of community members and local politicians and decision makers at the one hand, and by comparing the country-level and European level outcomes of study with the prevailing (inter)national forest policies at the other hand. Table 3.1 summarizes the overall research approach.

Table 3.1: Summary of integrated research approach

Main research approach	Main research steps	Method
Descriptive approach	Step 1: selection and descriptive characterisation of rural areas	Desk research
Social representations approach	Step 2: nature and variety of perspectives on the role of forestry on rural development	Qualitative interviews
	Step 3: distribution of perspectives on the role of forestry on rural development	Quantitative survey
Synthesis approach	Step 4: synthesis of research findings	Cross-checking and gradual up-scaling of research findings
	Step 5: definition of research implications for development region-specific forest policies	Literature review of national and European policy

Use of conceptual models and step-wise analysis

As rural and forestry conditions within Europe are very diverse, as discussed in chapter 2, the findings in the various countries are highly context specific. Consequently, to be able to do comparative research at the trans-European level, it is required to assure a certain amount of unanimity on concepts and standpoints out of which can be compared (Bennett, 1996). This was achieved on the one hand by structuring the concepts in each research phase and on the other hand by applying a step-wise analytical process. Within each research phase a conceptual model has been constructed that formed the input for the data collection. Dependent on the selected method this model acted as a rough guide for the fieldwork or a more fixed framework with a common developed instrument. The analysis of each research phase consisted of two phases: stepwise spatial up-scaling of the analysis and linking up to the research objectives. In the first phase, the analysis was executed across three different spatial levels:

- In order to stay as close as possible to the location-specific conditions the start of the analysis took place at the case study area level.
- Next, in each country a national analysis was made by comparing the results of the two individual case studies. This analysis focused on assessing major similarities and differences between the two case studies.
- Finally, using data from both the case study analyses and country analyses a comparative European analysis was made aiming at ascertaining the main criteria and indicators which can be used to assess the role of forests on rural development.

In the second phase, the analysis was focused on a country-level and European level answering the research questions with respect to multifunctional forestry and its role in rural development.

3.3 Selection and description of case study areas

Selection of research areas

In each of the 9 participating countries two study areas were selected with different rurality and forestry conditions, i.e. one traditional forest area and one area with recent afforestation (see Figure 3.1). These research areas mostly consisted of the smallest administrative districts ('communities') in a country, they ranged from 65 to 346 km^2 in size. The selection of these areas was based on the consideration that the areas should illustrate the variety of rural conditions found in Europe rather to represent prior-identified 'typical' conditions at either national or European scale. The areas cover a large range in rurality and forestry conditions within Europe. For instance, the population density ranges from 2 to 318 persons/km^2 and the percentage forest cover ranges from 3 to 82%. The selection of the case study areas in each country was made by the research group involved; in several cases areas were selected where prior research had already taken place. Such a familiarity with several research locations facilitated efficient data collection and interpretation.

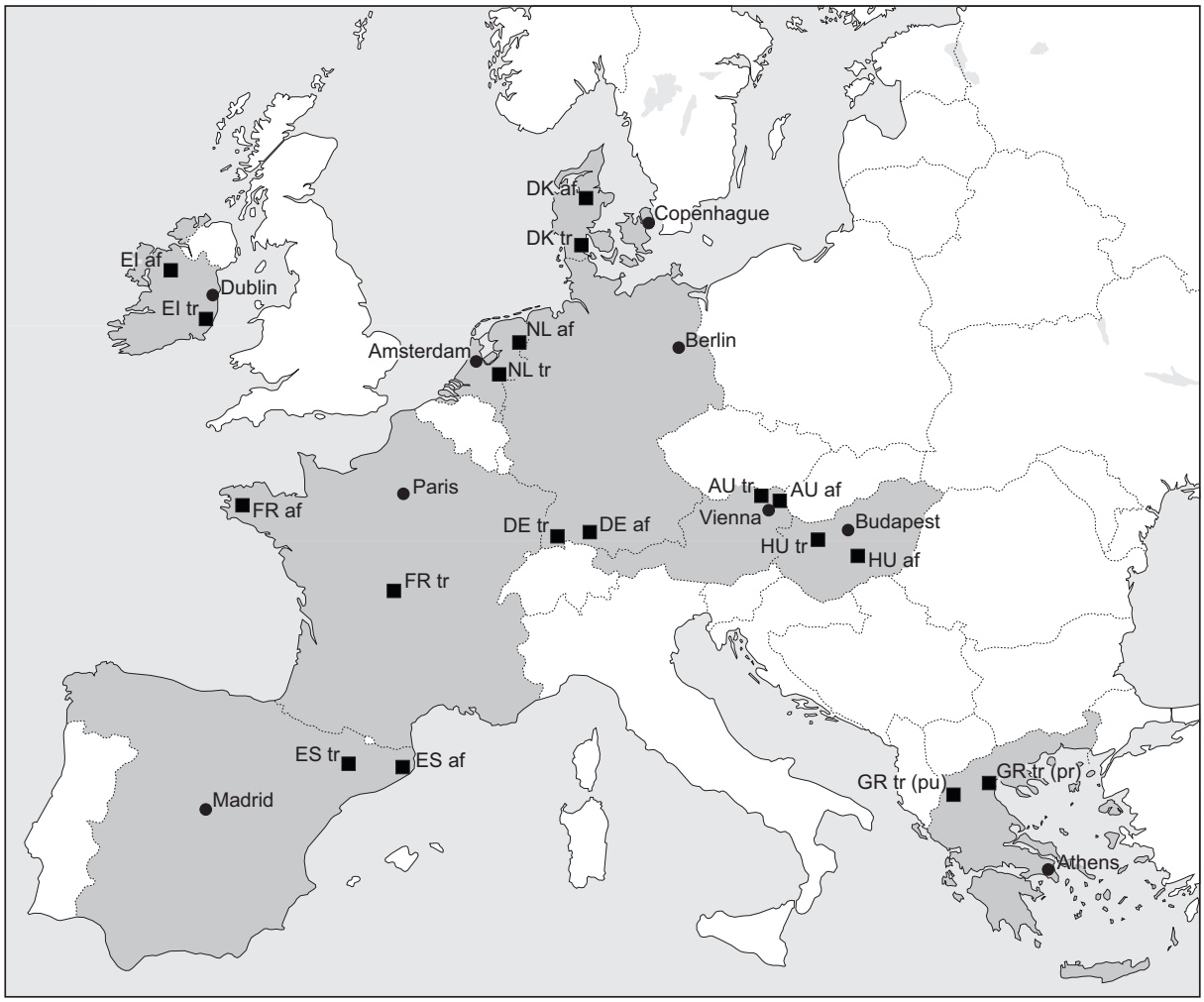


Figure 3.1: Location of the 18 research areas within 9 countries in Europe (tr=traditional forest area, af=afforestation area, pu=public owned forests, pr=private owned forests)

Description of research areas

In order to classify these areas in a comparative way, a list of descriptive parameters representing major rural and forestry characteristics was developed. This list of descriptors included information on demographic, land use, and economic conditions and trends of the areas. As a basis, a list previously developed by the Forest Resources for Work Opportunities and Regional Development (FORWARD) project (Niskanen & Lin, 2001) was used. This list was further adopted. Firstly, rather than absolute figures relative figures were identified as being most appropriate (e.g. rather than expressing forest area in hectares it was expressed in % of land area). In the second place, the list was extended by not only including information on wood production, but also on other forest functions such as recreation, forest grazing, etc. In the third place, the data to be collected were categorised into two pairs of dimensions: i.e. rurality and forestry on the one hand and conditions and trends on the other hand (Table 3.2) (Hoggart et al., 1995; Klundert et al., 1994).

Table 3.2: Structure of rurality and forestry descriptors

	Conditions	**Trends**
Rurality • Demography • Land-use • Economy	*Rurality condition descriptors*	*Rurality trend descriptors*
Forestry • Demography • Land-use • Economy	*Forestry condition descriptors*	*Forestry trend descriptors*

Two aspects of the collected data should be considered: *availability* and *reliability.* Availability of the data appeared to be a major problem due to the following causes:

- First of all, each country did not have the same access to (national) official statistical sources. Notably there was a lack of information on the economic spin-off of forests in respect to employment and income generation in forest-derived activities such as recreation and tourism or housing estate development[6].
- Not all the descriptors are measured in each country, which implies that some descriptors are covered well by the countries, some descriptors have partial missing values, and other descriptors have a lot of missing values. We have asked the different partners to estimate the missing values but this was not possible for several descriptors as there was a complete lack of decision criteria to make a profound estimation.
- As this project focuses on the local level, the statistical data should refer to the localities involved. This causes extra problems as the available data often relates to the national and/or regional level.

[6] This lack of statistical information on the non-traditional and indirect financial benefits of forests and prevalence of only statistical information on the traditional forest and timber sector is a major hindrance towards making an integrated assessment of the multifunctional role of forestry for rural development. Consequently, the existing comparative European studies on forest related perspectives on regional development (Hyttinen et al., 2002; Selby & Petäjistö, 2002) are only based on information of the traditional forestry sector, and neglect the important forest-derived economic impacts in other economic sectors.

Reliability of the data was a second major problem. This problem occurred mainly due to different interpretations of the descriptors. Forestry as a land use is understood by some national statistic sources as all land planted with trees, whereas in other sources certain categories of land covered by trees may be considered as grazing area. These diverging interpretations of some basic concepts have been discussed and solved as much as possible.

Data analysis

The analysis consisted of statistical analysis combined with qualitative interpretation. The set of descriptors that have been used for the statistical hierarchical cluster analysis were: population density, distance to cities, share of active population, share of forest, agriculture, wilderness and built-up land and share of employment in primary, secondary and tertiary sector (De Deugd & Elands, 2001). These descriptors all belong to the rurality condition descriptors. Initially, the cluster analysis classified the rural areas in three main categories: rural areas with urban characteristics, rural areas with a diversified economic structure, and rural areas dominated by agriculture. Additional qualitative interpretation by means of forestry conditions as well as rurality and forestry trends has led to a subdivision of the latter category.

3.4 Qualitative survey

A phenomenological approach

In 6 countries (Denmark, France, Greece, Hungary, Ireland and the Netherlands), a qualitative survey was undertaken in the two case study areas to get insight into the variety of social representations regarding the role of forestry in rural development in each locality[7]. According to the theory of social representations it is vital to make clear "*how people understand, explain and articulate the complexity of stimuli and experiences emanating form the social and physical environment in which they are immersed*" (Halfacree, 1993). It is important to emphasize the social character of a representation which evolves within social practices in given time and space. Therefore, social representation is a dynamic concept, but it has a certain persistence that gives it a long term continuity (Frouws, 1998). Such social representations are expressed through discourses. 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 areas a phenomenological approach was used as basis for the interviews. Walmsley and Lewis (1993) define phenomenology 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*". Four basic principles upon which phenomenology is based can be distinguished (Le Floch et al. 1999, Schutz 1971). The first one is the idea that reality is a construction. Secondly, people are not independent of the world they live in; there exists no objective reality, because in order to "know" our world, we attribute a meaning to it (Schutz,

[7] A shortened version of this qualitative survey focusing on policy and decisions making persons only was made in Austria, Germany and Spain.

1971). Besides, according to Schutz (1971), each of us observe only certain aspects of the real world; relevance is not inherent in nature as such (i.e. some things are relevant to us, others are not). The construction of reality, or the attribution of meanings, is not an individual process, but is fundamentally socially determined: it is the social construction of reality. Schutz thus refers to the 'intersubjective world', and not to the 'subjective (or individual) world'.

Much attention was given to a consistent use of the phenomenological approach within the scope of a comparative study. At the one hand, as discussed above, a basic consideration of this approach is that the construction of reality is a fundamentally intersubjective and contextually determined phenomenon (Schutz, 1971). At the other hand, the Multifor.RD research was aimed at making a comparative analysis between areas on opinions on forestry and rural development. Consequently, the phenomenological approach should be implemented in such a way, that basically subjective meanings could objectively be compared. The reconciliation of these two requirements was accomplished through a careful process with two major features:

- Joint development of a conceptual frame, which assured identical approach to data collection in the various research areas.
- A phased approach to data analysis in a process of gradual up-scaling in a reiterative process of comparative analysis and checking results for consistency with the primary data.

In order to assure that the common research approach was consistently followed in the various research teams, a training meeting was held to acquaint researchers with how to conduct the interviews and consistently analyse the results.

Conceptual framework

To assure commonality in a phenomenological interview approach, a conceptual framework for general guidance of the interviews and a detailed research protocol was developed (Le Floch et al., 1999). The conceptual framework (Figure 3.2) consisted of a simple descriptive model illustrating the various aspects to be considered in the study. This model served as a guide to the interviews by providing a systematic framework for the principle research questions, which were formulated as follows:

- What meanings and values do actors attribute to forests? Are forests of any significance (personal or otherwise) to the actors using the area?
- What meanings and values do actors attribute to the rural area they live in? What impressions do people have of the rural area they live in?
- 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? How are meaning and experiences shape by the influence of internal and external forces?

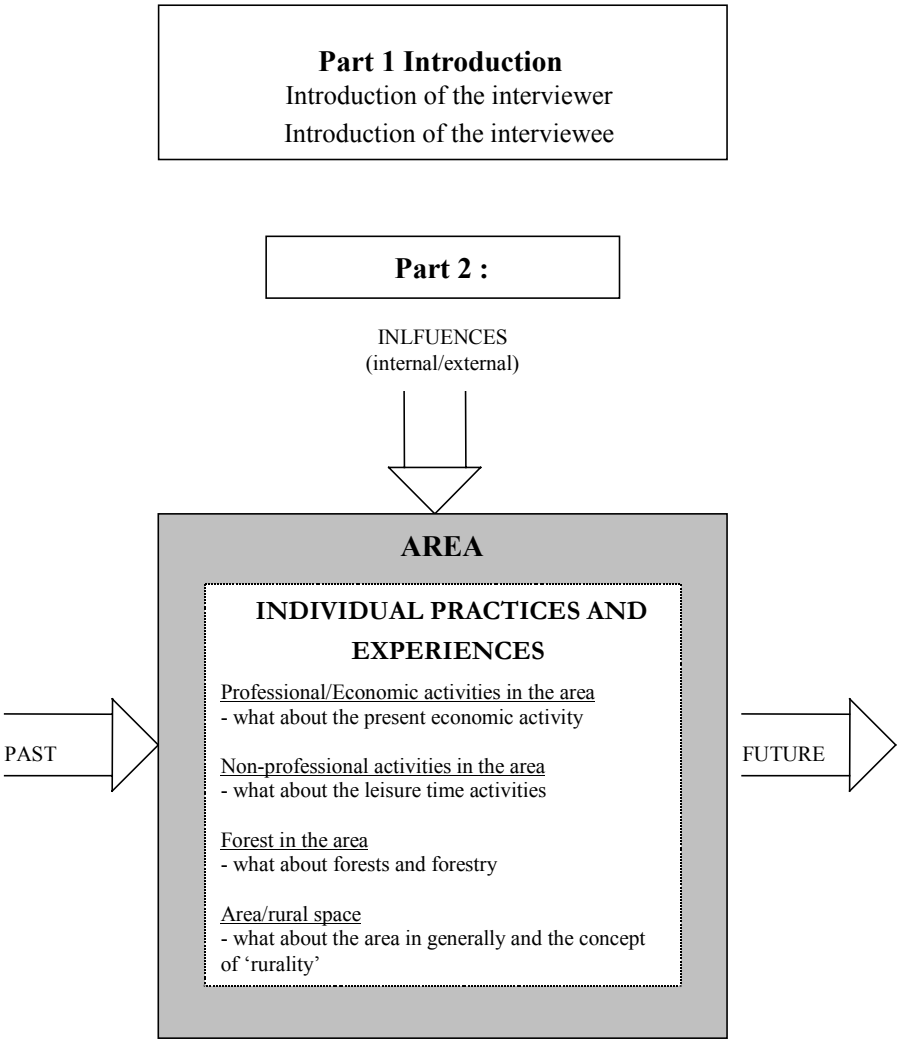


Figure 3.2: Conceptual model serving as general reference for the qualitative interviews

Data collection

The conceptual model and research questions served as a reference for assisting the interviewers in checking whether all relevant aspects were covered during the interviews. The questions were focussed upon in guided open interviews, in which respondents were allowed to follow as much as possible their own train-of-thoughts and to express their own opinions. 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 (Le Floch et al. 1999, Walmsley & Lewis, 1993). These principles were followed as much as possible for conducting the qualitative surveys in all study areas. In six countries around 30 interviews were conducted in each case study with respondents representing three main actor groups:

- *Actor group 1 "Producers"*, including actors having an economic and productive land use activity in the area;
- *Actor group 2 "Consumers"*, consisting of inhabitants not related to land use activities as well as recreationists and tourists;
- *Actor group 3 "Decision makers/interest groups"*, comprising actors that are involved in policy making at a local or regional level.

These three actor groups were discerned in order to comprehend what different categories of actors do, think and feel about forests in their locality. The survey research was conducted in parallel in the six countries from December 1999 to April 2000. In the other three participating countries (Austria, Germany, Spain) this qualitative survey was subsequently repeated, but only amongst representatives of the third actor group, i.e. decision makers/interest groups.

Data analysis

As a consequence of the use of the phenomenological approach for conducting the qualitative survey the study findings in the various countries are highly context specific. As discussed earlier, comparative analysis requires a certain amount of unanimity on concepts out of which can be compared. To accomplish this, the analysis of the interviews was carefully phased. The initial phase of analysis was done interview by interview. First of all, a content analysis was performed in which the main subjects of the interview were identified. Besides, the qualifications of the subjects and the used oppositions and associations to structure the discourse were noted. Finally, a transverse analysis of all the interviews on the different discourse subjects was performed. In the second phase, a country-level analysis focused on assessing major similarities and differences between the two research areas. In this within-country comparison the principle research questions formed the main focus of attention. In the final phase, using data from analysis at the case study area level as well as the country level, a comparative European analysis was made. This analysis, performed by the research co-ordination team in co-operation with the project members, proceeded in a reiterative process of systematic comparison and checking for consistency of interpretations:

- First of all, a rapid assessment was made of the main emerging discourses regarding forestry and rural development;
- Next, a more detailed comparison was made on the basis of the principles as laid down in the original conceptual scheme for analysis. These two types of initial assessment were performed by separate researchers;
- Thirdly, in a joint discussion of all research groups the results of both the rapid and the more detailed and systematic assessments were compared and inconsistencies and unclear aspects checked. On the basis of the results of this comparison the initial draft tables were modified and amended. The discussion has led to two main results:
  (a) The development of a typology of prevailing discourses in rural areas in Europe
  (b) The development of a categorisation of main criteria and indicators on the role of forestry for rural development.

Dominant discourses on forestry and rural development

The results of the qualitative survey were used to identify the dominant representations of the people in the research areas regarding the nature of the area and the role of the forests

therein. Through the identification and comparison of the main emerging features of these representations four different regions with different perspectives on the role of forestry in rural development could be distinguished (Elands et al., 2001):

- Areas dominated by forestry (Plateau de Millevaches, Konitsa, Waldviertel, Navès)
- Areas dominated by agricultural production processes and highly-valued rural identity (Monts d'Arrée, South Leitrim, Weinviertel, Pfullendorf)
- Rural areas exposed to urban impacts (Szentgál, Kolindros, East Wicklow, Kerekegyháza, Toroella de Montgrí)
- Peri-urban (fringe) areas with mixed economic structure (Hvorslev, Haderslev, Stadskanaal, Ede, Staufen)

This categorisation was subsequently cross-checked with the descriptive characterisation of the study areas. As discussed already in Section 3.3 the combined information was used to develop the final area categorisation.

The contribution of forests to the quality of life in rural area: criteria and indicators

The results of the qualitative survey also indicated that the problem of rural areas as perceived by people has everything to do with the quality of life in the area, the benefits and disbenefits of living in a rural area. This quality of life can be examined for the locality in general as well as in respect of the question how forestry and forests contribute to the quality of life in the locality. From the results from the interviews it was deduced that the quality of life can be assessed by means of four criteria, which can be both positively and negatively valued by people (adapted from Papageourgiou et al., 2000, see Table 3.3).

The following criteria are distinguished:

- *Community benefits*: this criterion deals with the impacts of forests on personal and community values to sustain the well being of community members (e.g. respect for their distinctive rural lifestyle);
- *Economic welfare*: this criterion is related to the possible impact of forests on daily existence and livelihood and welfare of the locality;
- *Landscape identity*: this criterion examines the implications of forests on landscape aesthetics, the image and the cultural-historic values of the landscape;
- *Environmental and nature quality*: this criterion is about the impact of forests on the environment and on nature areas.

These criteria were further sub-divided in specific indicators.

The interaction between forests and the locally perceived quality of life was rather distinct in the various research areas. Moreover, within one area different ideas about the (dis-)benefits of the local forests to the quality of life did exist, dependent on the interest and background of the involved actors. So, feelings and opinions on 'forestry as a means of rural development' are dependent on the type of area as well as on the attendant actor groups.

Table 3.3: Criteria and indicators used to illustrate the impacts of forest on the quality of life (adapted from Papageourgiou et al., 2000)

CRITERIA and indicators	Interpretation
COMMUNITY BENEFITS	
Recreation potential	It examines the potential of forested land to be used for recreation purposes.
Community cohesion	It measures the impact of forest on community bonds and social interactions between community members (e.g. neighbourhood isolations as a result of blocking views).
Quality of living environment	It assesses the implication of forest in creating an attractive environment for living in terms of personal sense of well being
Social equity and autonomy	It measures how forest practices affects the self-governance and self-determination of local communities.
ECONOMIC WELFARE	
Income from goods and services	It measures the income withdrawn from forestry out of the roduction of (non-) timber products (direct use) as well as services such as tourism and recreation (indirect use).
Employment creation	It examines the potential of new forests in providing employment opportunities either at a primary production level or at trade, manufacturing and tourism.
Economic sustainability	It assesses the possibilities and opportunities of forest resources to sustain the livelihood of community members in the long run (development and distribution of economic sources and the local control over the economy)
LANDSCAPE IDENTITY	
Aesthetic quality	It is referred to people's emotional reactions on forests as part of the rural landscape as regards to aesthetics, visual quality attributes. Openness versus enclosure, landscape diversity, sensitivity and rate of change.
Image/uniqueness	It assesses how forest impacts the image and the uniqueness of the landscape
Cultural and historical associations	It examines the impact of forest on local culture and history marked in the landscape (heritage, traditions, narratives, archaeological values, static versus dynamic landscape).
ENVIRONMENTAL AND NATURE QUALITY	
Impact on natural resources	It examines the ecological implication of forestry on environmental parameters including soil, water, air etc.
Contribution to biodiversity	It examines the role of forested areas to enhance the ecological integrity of forest resources and provide habitat to a variety of floral and faunal species.

3.5 Quantitative survey

From qualitative survey to quantitative survey

The results obtained during the qualitative survey were used to develop a quantitative survey to investigate the distribution of perceptions and attitudes in a more systematic manner. Much attention was given to the discussion how the results of the qualitative survey could best be used for developing a questionnaire for comparative quantitative survey, and how the

internal coherence of the subsequent phases of the research would best be assured. Two major questions received considerable attention:

- How should the research move from the qualitative-oriented phenomenological approach to a quantitative comparative approach? In the phenomenological approach social constructivist terms such as meanings, experience, constructs and relevance play an important role, whereas in a quantitative comparative analysis behaviourist terms such as perceptions, attitudes and opinions are central. In other words, whereas the qualitative survey primarily focused on emic properties, the quantitative survey should primarily be based on etic properties.
- Can the results of the qualitative survey from the various countries be used to construct one common questionnaire for all research areas? Or are the differences between research areas so large, that the contextual differences would be unduly affected by up scaling of the results of the qualitative survey to a common questionnaire at European scale?

From emic to etic phenomena

In order to allow a consistent transformation from emic (locally constructed meanings) to etic (systematically defined meanings) properties as a basic focus of research 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 surveys in respect to the prevailing 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. Two main issues were identified:

- The perceived quality of life in the area, and the role of forests in it (see also Table 3.3)
- Social values and the degree of attachment to the rural area.

These issues were further elaborated in a set of key terms: i.e. attitudes, values, attachment, experiential practices, management practices, and socio-demographic and economic characteristics. These key terms formed the basis for the construction of a conceptual model for the quantitative survey (Figure 3.3). This analytical model served as a means to consistently link the various phases of research and to systematically redirect the research from a focus on emic phenomena to a focus on etic phenomena rather than as a representation of a detailed theoretical construction. Nonetheless, the theoretical considerations, which were used in its construction, assisted in giving the model a robust theoretical underpinning.

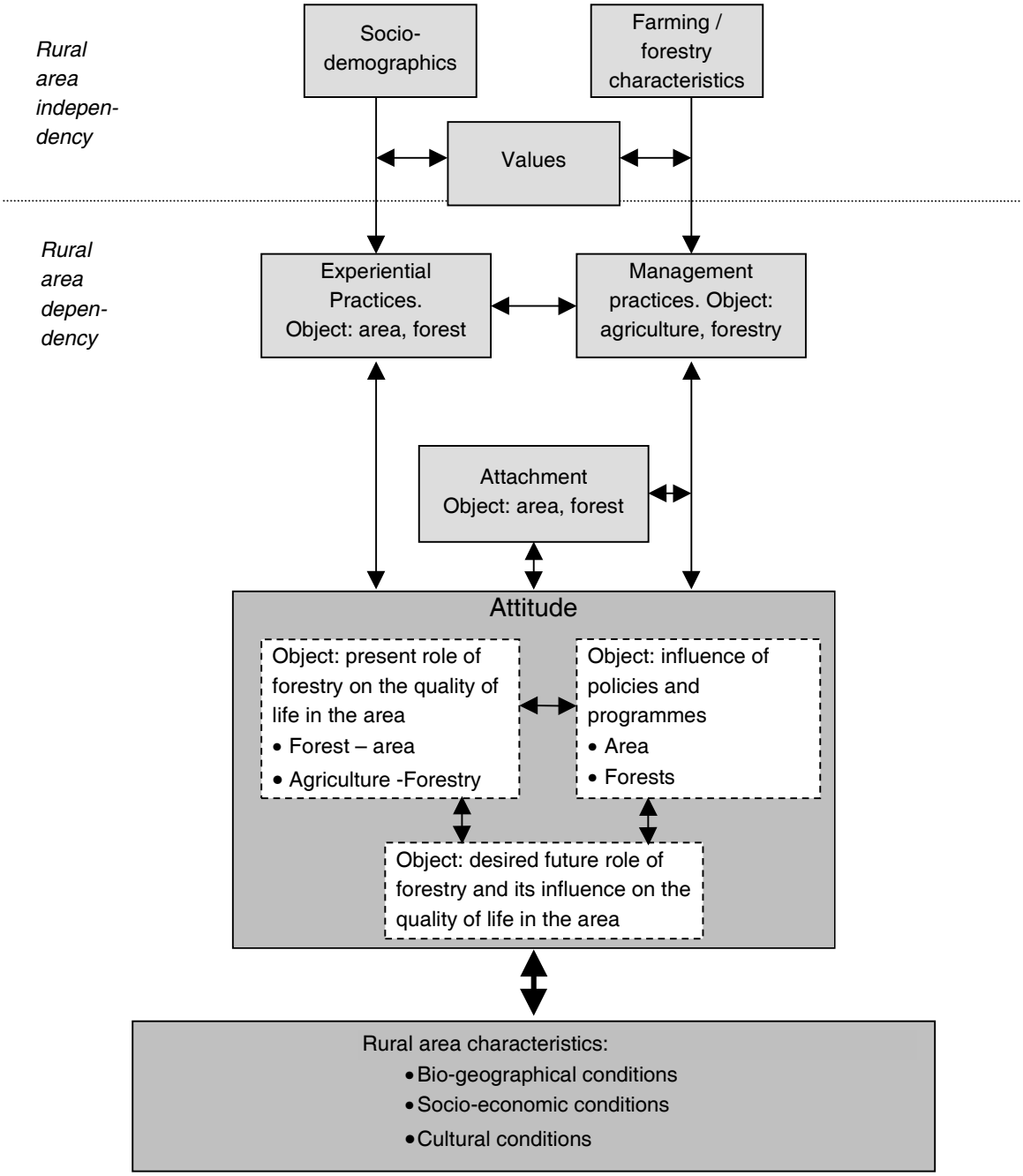


Figure 3.3: Conceptual model for quantitative survey

Up-scaling of level of research

A second point of discussion in considering how to proceed consistently from the qualitative survey to the quantitative survey concerned the question of what would be the best approach in the process of up-scaling from case-study area level to European level. At the one hand, it was considered that the graduated approach used in the collection and analysis of the qualitative data would provide an optimal opportunity to verify quantitatively area and country-specific concerns in the survey. The results of country-specific surveys could subsequently be analysed at in a comparative descriptive way at European level. At the other hand, it was considered that the aim of the quantitative survey was primarily to obtain

information on causal relations and policy implications at European level rather than more systematic descriptive information. In order to accomplish this aim, it would be essential to use a common questionnaire in all research areas, as such an approach would allow the collection of information, which could be statistically compared at a European level. Thus, rather than a graduated approach as used in the qualitative survey, the quantitative survey should be based on a common approach.

After careful consideration it was decided that in view of the research aim, it would be most logical to develop a common questionnaire in order to optimise the possibility to make a trans-European comparative study. Whenever relevant, each research team could add country-specific questions to the common questionnaire. However, in France it was considered that the perspectives on forestry and rural conditions were so specific, that the use of the common European questionnaire would not be effective. Moreover, using a country-specific questionnaire would allow adjustment of the research optimally to the ongoing policy discussions in this country about the need to readjust the forestry policies.

Data collection

On the basis of the analytical model a detailed common questionnaire (Annex 3) was prepared in a reiterative process with all the research teams. The conceptual development of the common questionnaire has been elaborated in the Survey Manual (Elands et al., 2000), in which also the process for selection of samples (definition of population, sampling frames, sample design and sample size), the protocol for data entry and analysis in a harmonised data base as well as reliability and validity issues of doing cross-cultural research (especially problems in relation to language differences) are stipulated.

The quantitative survey targeted two population groups, namely community inhabitants and landowners. The population of community inhabitants was defined as consisting of people living inside the case study area, but who were not landowners. The landowners were defined as consisting of people owning agricultural and/or forested land in the locality. They do not need necessarily to live in the area itself. In case of long term tenancy, state (forest) ownership, community owned land or other forms of joint land owning (e.g. nature associations, monasteries), the managers of such lands were included in the category of landowner. The survey design consisted of a postal questionnaire method. As the expected response rate was estimated to be not very high and variable from country to country, considerable effort was invested in encouragement measures. Such measures varied between the various countries; they included a letter emphasising the relevance of the study to the future development of the locality and a lottery ticket or a voucher. Also, a careful reminder procedure was set up and implemented.

Special attention has also been given to the validity of the questionnaire in relation to the variety in languages and cultures. Two types of bias had to be avoided, construct and method bias. The former is the dissimilarity of concepts across cultures. The latter refers to dissimilarities of samples frames, of acquaintance with instruments, of knowledge of administrative aspects of doing research and of translation (Van de Vijver & Tanzer, 1997; van de Vijver, 1998). To avoid such biases, in all countries a pilot-survey was held. After

translation and crosschecking of the translated texts with the original English text, in each of the countries between 10 to 30 trial interviews were held. In general it appeared that the questions and scoring tools worked well and that only minor clarification was required[8].

The survey research was conducted in parallel in all countries from February to April 2001. The response rate varied from 25% in Spain to 82% in Hungary. In general, the response rate was about 50%, which is reasonably high for this type of cross-cultural research[9]. The respondent numbers of both target groups are indicated in Table 3.4. In addition, using a locally-adapted questionnaire, in France 90 inhabitants and 199 landowners in Plateau de Millevaches (remote area) and 117 inhabitants and 196 landowners in Monts d'Arrée (decline area dependent on agriculture) responded to the survey. The overall sample size consists of more than 7,000 respondents.

Table 3.4: Number and percentage of respondents per case study area

	Case study area	Traditional or Afforestation area	Community inhabitants		Landowners		Total
			N	%	N	%	N
Rural area with urban characteristics	Ede (NL)	Traditional	255	63	152	37	407
	Haderslev (DK)	Traditional	359	58	256	42	615
	Staufen (DE)	Traditional	293	86	48	14	341
	Torroella de Montgrí (ES)	Afforestation	194	59	136	41	330
Diversified rural area	Hvorslev (DK)	Afforestation	354	59	242	41	596
	Kerekegyháza (HU)	Afforestation	144	36	260	64	404
	Konitsa (GR)	Traditional	319	85	56	15	375
	Stadskanaal (NL)	Afforestation	261	60	175	40	436
	East Wicklow (EI)	Traditional	476	91	46	9	522
Growth area dependent on agriculture	Pfullendorf (DE)	Afforestation	155	58	111	42	266
	Weinviertel (AU)	Afforestation	423	74	147	26	570
Decline area dependent on agriculture	Kolindros (GR)	Traditional	277	57	207	43	484
	South Leitrim (EI)	Afforestation	413	75	136	25	549
	Szentgál (HU)	Traditional	229	59	161	41	390
	Waldviertel (AU)	Traditional	437	68	203	32	640
Remote area	Navès (ES)	Traditional	49	41	70	59	119
	Total		4638	66	2406	34	7044

Data analysis

The results of the quantitative survey were analysed in a dual approach. In the first place, each country team prepared a descriptive statistical analysis of each of the case-study areas and compared the results of the two areas per country. In the second place, on the basis of the overall European database a more detailed comparative statistical analysis was made. In

[8] Only in France it was found that a further adopted questionnaire was needed

[9] This reasonably high response rate might be explained by the favorable reaction to the subject of the survey. This positive attitude was also reflected by many follow-up telephone calls to the research teams and the inclusion of positive comments and even poems with the returned questionnaires.

order to check the reliability and consistency of research findings, the results of both types of analysis were cross-checked.

For the comparative European analysis some corrections were made to allow for differences in sampling rates (Hair et al., 1998). The sample sizes of both community inhabitants and landowners do not necessarily reflect the real distribution of both target groups. A first weighting factor has therefore been developed and used in order to correct for over- and under-sampling. Further, the completion of a pre-determined number of questionnaires was not equally successful in the diverse case study areas (sample sizes ranged from 119 to 640 respondents). This can strongly influence results. Therefore, to correct for dissimilar sample sizes, a second weighting factor was constructed. It turned out that the weighting of the target groups did not change the results substantially. The weighting for the different sample sizes in case study areas, however, did indeed influence results -depending on the specific question from marginal to substantial- and was applied where necessary.

In the European-level analysis, apart from descriptive statistics, also multivariate analysis techniques were used to assess differences in respect to respondent characteristics as well as in area characteristics were expected as well. In order to account for possible differences between countries and types of areas in terms of rurality and forest history, the following groupings of areas were established: country (k=8), rural typology (k=5), traditional versus afforestation (k=2) and Euro-zones (k=3). The ‘rural typology’ has been derived from a classification of the case study areas based on a list of parameters (see section 4). The ‘Euro-zone’ refers to a geographical grouping of the countries into three European zones: Atlantic (DK, EI, NL), Central European (AU, DE, HU) and Mediterranean (ES, GR).

3.6 Research synthesis and identification of policy implications

The synthesis of the various types of research data consisted of two activities. In the first place, at case study, country and European level the results of the qualitative and the quantitative surveys were compared. In the annex an example of the outcome such comparison is given. This comparison indicated that the results supported each other with the qualitative results being illustrative and illuminating and the quantitative results providing objectivity and statistical weight. Without the quantitative research, the conclusions of the qualitative interviews could be open to criticism on the basis of being non-representative and/or subjectively interpreted. And without the qualitative survey the quantitative survey might have been based on ill-founded (political) assumptions rather than on the experiences of local inhabitants. And the final comparison of the research results allowed the checking of consistency in data interpretation.

In the second place, the results of the qualitative surveys provided valuable information for specific contextualisation of the results of the quantitative survey. In the absence of the results of the qualitative interviews the results of the quantitative survey could not have been assessed rigorously. Thus, the combined information of both surveys provided added

understanding and insights, which would not have been obtained by the results of the individual surveys.

These insights were of special significance in considering the results of the research in connection with the need to identify at European level region-specific characteristics, which significantly impact on the role of forestry in rural development. From the synthesis analysis it was concluded that the research findings could be interpreted in relation to three main types of conditions:

- Specific case area conditions: in several cases local stories on specific recent events influencing forestry, such as the process of land privatisation in Hungary, the heavy storm damage in France, or local protestations over the establishment of a nature park in Denmark coloured the data.
- Forest history in respect to whether forest were a well-established or relative newly emerging landscape element in the study areas and to the nature of the national forestry institutions (forestry legislation, prevalent pattern of forest ownership)
- Geographic conditions in respect to the rurality conditions and the culturally determined general land-use traditions in various European regions.

Although several location and country specific conditions impact on the rural development role of forestry, on the basis of both theoretical considerations and the combined evaluation of the qualitative and quantitative data, it was decided that the rural area typology could effectively be used as the major framework for presentation of research results. The rural area typology provides a good framework for defining objective region-specific forest policies.

Identification of policy implications

The last phase of the research consisted of the evaluation of the research findings in the context of policy implications. Also for this research phase a dual process was used in which within-country evaluation and evaluation at European level proceeded in a simultaneous process. At first a common checklist of items to be considered in the evaluation was prepared. On the basis of this list, each country team formulated country-specific draft conclusions. These were discussed with the national advisory groups and/or to forest policy organisations. The draft and later final conclusions formed a basis for the identification of conclusions at European level. A second basis for European-level conclusions consisted of a separate study on the European forest policy process (both at the level of the European Union and at the level of the Pan-European Conference on the Protection of Forests) as well as a study comparing the results of the quantitative survey with specific forestry regulations of the EU. The initial results of the overall study were also presented at an International Forest Policy Research symposium. During this symposium not only the research results, but also its policy implications were discussed with forest policy makers and forest policy researchers. In addition also a special project workshop was held to compare and harmonise the gradually emerging conclusions of both country-level and European-level evaluations.

3.7 Conclusion

During the Multifor.RD research process two main challenges had to be faced:

- How to systematically proceed from qualitative to quantitative data collection?
- How to consistently analyse case-study data in a trans-European context?

The challenges were addressed through an integrated approach in which two types of analysis were used interactively. In the first place a gradual up-scaling of case study information was achieved through a step-wise analysis going from case study level to country level and subsequently to European level. These analyses were made by the individual country teams. In the second place a comparative analysis of the combined database was made by the co-ordination team. In each phase of the research these two types of analyses proceeded simultaneously and their results were cross-checked in joint team meetings (Table 3.5). As a result of this reiterative dual approach a repeated and focused evaluation of the transversal consistency and reliability of different types of research data could be made. By comparing the results of the qualitative and quantitative surveys also an analysis of the internal consistency and reliability of research findings at the case-study level was made. And finally the integrated approach allowed an optimal assessment of the case area, country and regional specific contexts of the results of the surveys. This enabled the identification of both theoretically founded and empirically based region-specific characteristics of the rural development role of forestry, which can be objectively be applied for policy formulations.

This integrated research approach required intensive and concentrated teamwork in order to ensure that data collection was done in a similar manner as well as to cross-check information. Rather than the originally planned four project workshop, five general and two special workshops were held. These workshops were rotated over the participant countries. Whenever possible, they were held in the case study areas or combined with field visits. This allowed the members of the research team to get a ‘flavour’ of the specific conditions in each case area. It provided a team-level understanding about the wide range of forestry and rural conditions involved in the study. Consequently it enabled an experience-based discussion during the joint comparisons of research data.

The excellent team spirit in the research group and the dedication of all research partners made it possible to adjust the original project plan and to actively participate in the gradually evolving integrated research strategy.

Table 3.5: Interactive dual approach to data analysis

	Gradual up-scaling through step-wise analysis	**Comparative analysis at European level**	**Results and evaluation**
Characterisation research areas	Comparative characterisation of case areas on basis of results qualitative survey	Statistical analysis of case area descriptors	Comparison of results Final distinction of five rurality classes
Analysis of qualitative survey	Country-level comparison of results of content analysis of case area data	Identification of across-country general issues	Cross-check on consistency in data interpretation. Identification of key parameters as basis for quantitative survey
Analysis of quantitative survey	Case-level check on consistency of results of both qualitative and quantitative surveys. Country-level comparison of descriptive statistics of case-area data	Statistical analysis of combined European data base	Cross-check on consistency and reliability of data interpretation on country and European level
Synthesis	Case-study area comparison of results of qualitative and quantitative survey followed by country-level check on consistency in data interpretation	Specific contextualisation of case area data with results of qualitative survey	Final interpretation of overall research results
Identification of policy implications	Identification of policy implications at national level by focusing on national forest policy debate	Identification of policy implications at European level by focusing on European-level forest policy debate	Cross-checking of issues. Identification of implications regarding forest policy processes in general

4 Description and typology of research areas

Hvorslev, Denmark (Kjell Nilson, Denmark)

4.1 Introduction[10]

As discussed in Chapter 3, in each of the participating country two case study areas were chosen, one in a traditional forest region and one in a region with newly evolving forests. The study areas cover a great amount of landscape zones from the Mediterranean region and high Alps to the intermediate mountain zone in Middle Europe and the western Europe lowlands (see Figure 3.1).

The selection of both areas in each country was based on the assumption that areas with traditional forestry and areas with afforestation will differ from one another. Not only in respect to the economic role of forests, but also in the perceptions and attitudes of the inhabitants towards forestry. It was assumed that in the qualitative and quantitative survey differences in perceptions between traditional forest areas and afforestation areas will appear and that the policies to enhance rural development have to be adjusted for the various regional conditions.

It has to be taken into account that differences in conditions and perceptions will not only occur between traditionally and afforestation areas. Variation in other conditions such as for instance degree of forest cover, population density, relative role of primary sector in comparison to secondary and tertiary economic sector, also determine the role of forestry in rural areas. In order to account for these different factors, the selected case-study areas were classified according to the nature of the rural conditions. For this classification demographic, land use and economic descriptors were used. This chapter will describe the principles and research methods used in developing the final typology of the study areas.

4.2 Theoretical considerations

Rurality: a descriptive approach

As discussed in Chapter 2, four types of approaches to define rural areas can be distinguished: descriptive, socio-cultural, locality and social representations definitions (Halfacree, 1993). The first three approach the rural as space; the latter one approaches the rural as social representation. Each definition has its strong and weak points. An exclusive focus on social representations makes interregional analyses difficult, whereas a sole descriptive focus denies the perceptions and interests of different social groups. In order to create an arena in which both the subjective interpretations of people as well as objective characterisations of rural areas coincide in a comparative European context both approaches were combined in an integrated research design. As discussed in Chapter 3, for the purpose of the characterisation and comparison of the case study areas, the descriptive definition approach was mainly used.

[10] This chapter is based upon De Deugd, M. and B.H.M. Elands (2001). *Comparative characterisation of case study areas*. Working paper Multifor.RD research project, Wageningen University, Wageningen, the Netherlands.

Descriptive definitions define the rural areas according to socio-spatial characteristics, such as 'population density' and 'land use'. This approach is primarily focused on the selection of the most appropriate observable and measurable spatial descriptors for the rural environment. The parameters merely reflect what intuitively is considered to be rural (Halfacree, 1993). For instance, the frequently quoted definition of rurality based on population density criteria as used by the OECD (Dox, 1996) is a typical example of this type of definition. In forestry literature the following classification of areas has been frequently used: remote rural areas, areas dominated by the primary sector, rural areas used for mass tourism, rural areas with a diversified economic structure, rural areas adjacent to agglomeration centres (Glück, 1998).

Use of descriptors

In the literature a great amount of descriptors for characterising rurality and forestry conditions can be found. The question is which set of descriptors will give a good description of the study areas and enables the comparison of them. According to Prabhu et al. (1996) the usefulness of descriptors consisting of criteria and indicators can be judged by the following attributes: relevance, unambiguously related to the assessment goal, precisely defined, diagnostically specific (indicators have to provide information that allows direct interpretation of the fulfilment of the criteria), easy to detect, record and interpret, reliability, provides a summary or integrative measure over space and/or time, and appealing to users.

The descriptors will be used for comparing different areas in Europe with differences in definitions of for example forests and differences in availability of statistical information. Therefore, criteria that are relevant and precisely defined and related indicators that are measurable, easy to gather and reliable are of great importance. The goal of describing the areas has also to be taken into account: it is focused on the classification of rural areas in Europe in order to assess similarities and differences regarding rurality and forestry aspects. Consequently, the descriptors have to be focussed not only on rural conditions and development, but also on the role forests play in the area. A list of descriptors is composed that will give a uniform characterisation of the different rural areas. To identify the development of the areas it is obvious that together with the conditions of the area, trends have to be taken into account. Three main sets of parameters are crucial to the development trajectories of rural localities: demographic, land use and economic parameters (Van der Klundert et al., 1994; Hoggart et al., 1995; Niskanen & Lin, 2001). For characterisation of the case study areas both the conditions and trends regarding these three main criteria were used (Table 4.1). In Section 4.3 the descriptors with respect to rural conditions and trends will be elaborated, whereas in Section 4.4 the attention will be directed towards forestry conditions and trends descriptors.

Table 4.1: Structure of rurality and forestry descriptors

	Conditions	Trends
Rurality • Demography • Land use • Economy	*Rurality condition descriptors*	*Rurality trend descriptors*
Forestry • Demography • Land use • Economy	*Forestry condition descriptors*	*Forestry trend descriptors*

4.3 Rurality descriptors

For each of the criteria with respect to rural conditions and trends several specific descriptors were selected, see Table 4.2. The reasons for selecting the descriptors are shortly explained in this paragraph.

Demographic criteria

Population density is often used as an indicator for rurality (Hoggart et al., 1995; Dox, 1996; European Commission, 1997; Niskanen & Lin, 2001). Population information is of interest as to envision the human dimension of socio-economic questions, as regards to their scale and relative importance (Niskanen & Lin, 2001). Population density on itself is not enough, because it says little about the variety in socio-economic trends, as well as experiencing or encountering dissimilar development processes and pressures (Hoggart et al., 1995; European Commission, 1997).

Socio-economic trends reflect in the *population change*. In the early decades migration to urban areas took place, whereas recently migration flows towards rural areas occur although there are still areas where depopulation can be signalised (European Commission, 1997). Changes in population have different implications for recipient communities and future rural development (Hoggart et al., 1995).

Population changes can give an indication of the migration but does not provide information on the group of people that come or leave. The *share of the population* in the working age can give an indication of the economic perspectives of the rural area. In areas with poor economic prospects and less work migration of people has taken or will take place and the share of elderly people will rise (Van der Klundert et al., 1994; Hoggart et al., 1995).

Table 4.2: List of rurality descriptors

	Conditions	**Trends**
Demo-graphy	Present population: number of persons living in case study area	Population change in 1980s (in %/year)
	Population density (persons/km²)	Population changes in 1990s (in %/year)
	Distance to nearest city (km) Of > 10.000 persons Of > 50.000 persons Of > 100.000 persons	
	Share of population from 15 until 60 years old (% of total present population)	
Land use	Share agricultural land (% of total land area). Includes: crop fields, fruit orchards, pasture and meadows (grass dominated)	Change in agricultural area (%/year)
	Share forest land (% of total land area) (forest as vegetation type and not as legal land use type). Includes: range land (land with a significant percentage of woody vegetation)	Change in forest area (%/year)
	Share degraded/wilderness areas (only in case when differentiation with forest land is needed, specify areas)	
	Share built-up area (% of total land area)	Change in built-up area (%/year)
	Share “else” area (% of total land area)	
	Tourism sector: Sleeping places (number of sleeping places) Spent nights (number of spent nights/year) Spent nights in % of inhabitants	Change in status tourism sector (spent nights) (estimate in %/year in % classes: <0%, 0-1%, 1-5%, 5-10%, 10-25%, over 25%)
Economy	Share employment* primary sector (% of total employment)	Change in employment primary sector (in %/year over last ten years)
	Share employment secondary sector (% of total employment)	Change in employment secondary sector (in %/year over last ten years)
	Share employment tertiary sector (% of total employment)	Change in employment tertiary sector (in %/year over last ten years)
	Relative employment in tourism sector: estimate employment in % of total employment (cllasses: less 0.5%, 0.5-2.5%, 2.5-5%, 5-10%, over 10%)	
	Present unemployment situation (% of total work force**)	Change in unemployment (in %/year over last ten years)
	** Employment is the actually total employed people* *** Work force is the actually employed people and people looking for employment*	

In urban-centred rural areas the pressure for urban growth generate quite different forces for change, with demands for rural residences amongst city workers often emphasising social inequities, lack of access to housing, changing priorities for service provision and the evolving character of new job opportunities. The images of ‘rurality’ and rural problems differ

as well (Hoggart et al., 1995). Distance to the nearest city and the size of the city can be used as a parameter because of the impact and regional function it will play in the development of the rural areas. Distance and size measured by inhabitants are direct measurement and is therefore uniform and practical to use. The disadvantage is that it tells nothing about the real distance (mountains/no roads), whereas distance in terms of travelling time (Hoggart et al., 1995) and infrastructure (Van der Klundert et al., 1994) better show the impact the city can have.

Land use criteria

In the past the land use of the rural areas was primarily agricultural use. In the development of rural areas functionality of the land is diversifying and nature, recreation and residential areas of urban workers are increasingly important. Four main land uses can be distinguished; *agricultural land, forest land, built-up areas* and land used for *recreation and tourism.*

Shift from land use (land use trends), for instance urbanisation through migration of city-dwellers (counter-urbanisation) and the development of nature reserves on former agricultural land take place Afforestation of farmland is even encouraged by the EU. Council regulation (EEC) No 2080/92 instituted a Community aid scheme for forestry measures in agriculture, the aim is to control agricultural production and contribute to long-term improvement in forest resources (European Commission, 1997).

Recreation and tourism are important land uses but difficult to express in land area as they mainly make use of other area types, such as forest land. It is easier to express recreation in the amount of visitors and tourism in the amount of overnight stays. However, the different countries have different measurement methods for counting recreation visitors. As the figures are difficult to compare, they will be roughly estimated. Tourism is easier to gather and can be expressed in the amount of spent nights. This will indicate the importance of this land use.

Economic criteria

Gross Domestic Product per capita is often used as an indicator for economic development (European Commission, 1997; Niskanen & Lin, 2001). As these figures are not available on a regional scale, only employment descriptors are used.

Employment figures can detect the relative importance of the individual sectors and employment shifts give an indication of the economic situation and development of the rural areas (Hoggart et al., 1995). An indicator of rurality is the dominant share of the primary sector in the economy. A shift can be noticed from production function to a consumption and residence function (rustic living). The tertiary sector grows and recreation and tourism attracts companies to invest. Not only investors from outside the rural area take their share in the tertiary sector, also farmers enlarge their work field by pluri-activities, off-farm activities as providing services for tourism or management of nature and landscape.
If areas can maintain or create jobs it means development of rural area and an impact on the *unemployment* rate. Unemployment figures are depending on processes and character of economic change. Migration of population is strongly related to the employment trends. In

some areas the population declines due to weaker rural economic performances. Migration to places where jobs are easier to get can be signalised. In the past there was a shift to urban area, but now there are areas experiencing growth, such as expansion of employment and population due to tourism (Hoggart et al., 1995).

4.4 Forestry descriptors

The above discussed descriptors are related specifically to rural characteristics and development. However, as the research was focused on the role of forestry for rural development not only rural conditions, but also forest conditions should be considered for describing the case study areas. Rural characteristics determine the conditions in which forests/forestry should or could develop. Forest conditions are in general already incorporated and expressed in the land use conditions. But forestry conditions are still relevant for the description of the case-study area, especially in order to understand the attitudes of inhabitants on forestry. The most important descriptors will be described here (Table 4.3). Unfortunately, often no systematic statistical data on forestry conditions are collected at regional level (see Niskanen & Lin, 2001) and therefore it was decided to estimate the order of magnitude of several of the selected descriptors.

Table 4.3: List of forestry descriptors

	Conditions
Demography	Percentage forest owned by inhabitants in research area (in 10% classes)
Land use	Share forest land (% of total land area) (forest as vegetation type and not as legal land use type). Includes: range land (land with a significant percentage of woody vegetation)
	Average size forest ownership (subdivide if relevant for overall average and average of private forest owners
	Percentage forest with no wood-production function (in 10% classes)
	Percentage forest with no recreation function (in 10% classes)
	Percentage forest integrated with farming activities in the form of offering grazing facilities, farm woodlots (in 10% classes)
	Percentage forest with environmental function such as nature reserve and watershed protection forests (in 10% classes)
Economy	Share forest related employment (% of general primary sector employment)
	Share forest related employment (% of general secondary sector employment)
	Share forest related employment (% of general tertiary sector employment)

Demographic criteria

A descriptor that can be estimated relatively easily is the descriptor *forest owned by inhabitants*. This descriptor will give an indication of the willingness and the attitude of people towards forests. Owners will be more concerned and have more binding with the land then when it is state owned property and the chance on professional forestry is higher.

Land use criteria

The contribution of forests to rural development is difficult to measure. Forests contribute to income and employment, but also have an increasing ecological and social value (Slee, 2000). Forests are multifunctional and its role is not limited to a specific type of rural production. Different roles of forests are reflected by the common distinction in productive and service functions of forests (Wiersum, 1998b). Areas differ in respect of the emphasis on certain *forest functions*. Wood production can still play a significant role whereas in other places wood production is forbidden due to preservation of nature. Forests have a multiple character and for each case-study area an indication on the role forests play should be given.

Economic criteria

The multifunctional character of forest play nowadays implicated a chance in *employment in the forestry sector* with a shift towards tertiary sector employment. Forest related tourism and recreation is increasing in importance. Descriptors of employment give an indication of the emphasis on a certain sector in each area.

Unfortunately these two descriptors are difficult or impossible to estimate for the case study areas. These descriptors will be taken into account based on descriptive information and will not be expressed in numbers.

4.5 Rural area typology

All research areas were systematically described by the selected descriptors. For a summary of the characteristics of the research areas, see Annex 4. It appeared that it was not possible to collect information on all descriptors, see Chapter 3.3. Notably information on the selected descriptors were often not available on forestry conditions and developments and on rural trends. Finally, ten demographic, land use and economic descriptors remained (see Table 4.4).

On the basis of the final set of rural condition descriptors, the case study areas have been grouped by means of a cluster analysis. The results of this analysis were compared with qualitative information derived from the case study areas, see Chapter 5. The analysis resulted in the five main categories of rurality:

- rural area with urban characteristics
- diversified rural area
- growth area dependent on agriculture
- decline area dependent on agriculture
- remote area.

Table 4.4: List of descriptors used for statistical analysis of the case study areas

	Rurality conditions
Demography	Population density (inhabitants/km²)
	Distance to nearest city of > 50.000 inhabitants (km)
	Share of population from 15 until 60 years old (% of total present population)
Land use	Share agricultural land (% of total land area)
	Share forest land (% of total land area) (forest as vegetation type and not as legal land use type)
	Share built-up area (% of total land area)
Economy	Share employment* primary sector (% of total employment)
	Share employment secondary sector (% of total employment)
	Share employment tertiary sector (% of total employment)
	Present unemployment situation (% of total work force**)

The case study areas belonging to each category are indicated in Table 4.5. Not every rural area type has both traditional and afforestation areas. The growth areas that are dependent on agriculture only include afforestation areas, whereas the remote areas only consist of traditional forest areas.

Table 4.5: Case study areas grouped according to rural area type and traditional versus afforestation area

	Rural area with urban charac-teristics	**Diversified rural area**	**Growth area dependent on agriculture**	**Decline area dependent on agriculture**	**Remote area**
Traditional forest area	Staufen (GE) Haderslev (DK) Ede (NL)	Konitsa (GR) East Wicklow (EI)	--	Waldviertel (AU) Szentgál (HU) Kolindros (GR)	Plateau de Millevaches (FR) Navès (ES)
Afforestation area	Torroella de Montgrí (ES)	Hvorslev (DK) Stadskanaal (NL) Kerekegyháza (HU)	Pfullendorf (GE) Weinviertel (AU)	South Leitrim (EI) Monts d'Arrée (FR)	--

In the next paragraphs each rurality type will be described according to its main rural characteristics and trends as well as the role of forests in it. Table 4.6 summarises the mean value of several descriptors per rural area type. The presented descriptors are either used for the cluster analysis or were statistically significant in discriminating the five rural area types. The comparative characteristics between the rurality types are further illustrated in Figures 4.1 to 4.11. In these figures the 18 case-study areas are classified according to their position into the urban-rural continuum, starting with the most urbanised areas and finishing with the remote areas.

Table 4.6: Summary of main descriptors per rural area type

	Rural areas with urban characteristics	Diversified rural areas	Growth area dependent on agriculture	Decline area dependent on agriculture	Remote area
Demography					
Population density (inh./km^2) *,**	168	101	74	30	4
Population 15-60 years (%) *,**	61	61	58	55	48
Distance to a city *,**	17	33	34	62	60
Population change 80-90 (%/year) **	0.8	-0.2	0.6	-0.7	-1.6
Population change 90-00 (%/year)**	0.9	0.7	1.3	0.2	-0.7
Land use					
Agricultural area (%) *	45	71	63	50	25
Forest area (%) *	39	17	27	33	64
Built-up area (%) *,**	5.9	4.4	7.1	3.8	1.6
Economy					
Primary sector employment (%) *,**	11	10	46	31	48
Secondary sector employment (%) *,**	23	37	23	31	17
Tertiary sector employment (%) *,**	66	50	31	37	35
Unemployment (%) *	7	12	7	8	12
Tourism: spent nights/ inhabitant #, **	3.8	2.0	2.0	2.0	4.0

** = descriptor used in cluster analysis*
*** = descriptor that is significant for the rural area types*
 # = the used classes are: (1) less than 90; (2) in between 90 and 350; (3) in between 350 and 1,000; (4) in between 1,000 and 10,000 (5) more than 10,000 nights/inhabitant

4.6 Description of each rural area type

4.6.1 Rural area with urban characteristics

Rural conditions

All case study areas in this category are characterised by a high population density and cities nearby (Figures 4.1 and 4.3). In two areas, Ede and Haderslev, a city of more than 10,000 inhabitants is situated. The working population is variable and comparable to the other groups (Figure 4.2). Staufen has lower percentage of population between 15-60, but the others all have compared to the other groups a high share of population between that age. The land use is variable, agriculture is not dominant and compared to the other groups forests are taking in a relatively big amount of the land. An exception to this is Haderslev, which has a large agricultural and small forest area (Figure 4.4). The areas in this group

have a large tertiary sector, the primary sector is relatively small and the secondary sector is average (Figure 4.5). The unemployment is not low, but there is no area with an exceptional high unemployment rate like in the other groups (Figure 4.6). Tourism is especially important for Torroella de Montgrí, but also in the other areas it is not insignificant.

Rural trends

The population has been growing over the last two decades (Figure 4.7). Especially Ede and Torroella de Montgrí show a high growth in population. The land use trends show that this group has a positive change in built-up area, the agricultural area is decreasing and the forest area is slightly increasing (Figure 4.8). The employment trends show a small increase in the tertiary sector and decrease in the primary sector (Figure 4.9). These changes are for both sectors not major compared to the increase in tertiary sector in the agricultural areas (groups 3 to 5) and the decrease of the primary sector in diversified areas. Haderslev has a growing secondary sector, whereas in Ede this sector is declining. In general, the unemployment has decreased significantly (Figure 4.10)

Forestry conditions and trends

In this group the amount of forest is in general more than the amount of agricultural land. This is not surprising, as the areas were -with exception of Torroella de Montgrí- all chosen because they were traditionally forested. Most of the forests are owned by others than the local inhabitants. The economic meaning of forest for the locality is less and the function of the forest is multifunctional. Functions as nature, recreation and protection play an important role.

4.6.2 Diversified rural area

Rural conditions

The employment structure of the case study areas in this group focuses on the secondary and tertiary sector, the primary sector is low. Compared to the other groups the secondary sector plays an important role in these areas. The situation in Konitsa is slightly different, as the area shows an urban-like employment structure with above half of the active population working in the tertiary sector. Unemployment is variable and extremely high in Konitsa, Wicklow and Stadskanaal. The population density is not as high as in group 1, but higher than in the other groups. One exception is Stadskanaal with a highly dense populated area, which is specific for the Netherlands. The distance to the nearest city is variable, but less than in the more rural groups. The main land use is agriculture and forests play a minor role. Tourism is in general not an important sector in this group, but in some case areas growing.

Figure 4.1 Population density

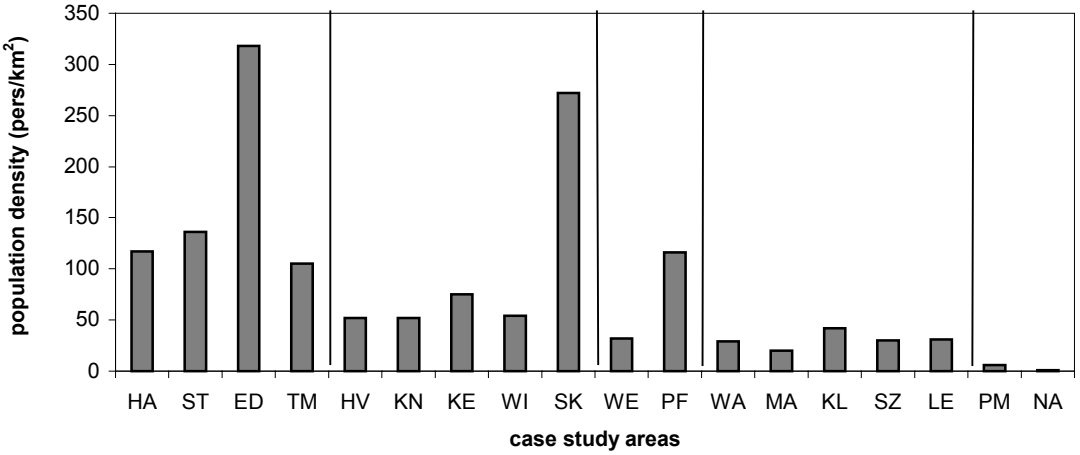


Figure 4.2 Share of working population (between 15-60 years)

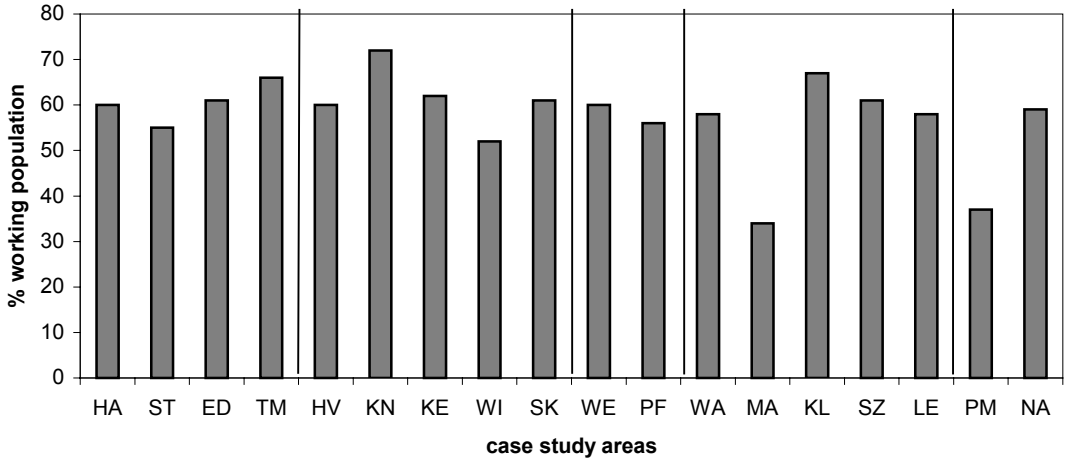
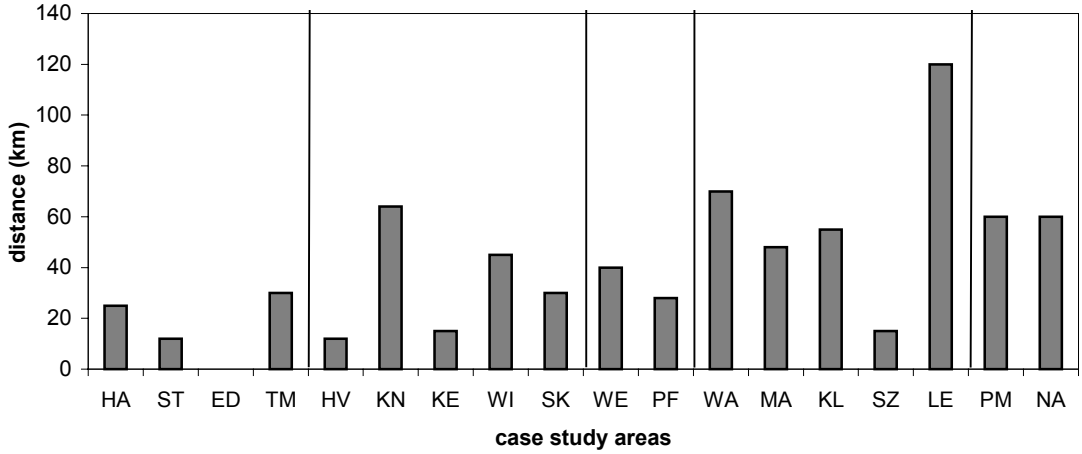


Figure 4.3 Distance to the nearest city of > 50,000 inhabitants



Rural trends

A clear trend can be seen in the population change over the last two decades. In 1980-1990 the areas were suffering from depopulation, but in the period 1990-2000 the population is rising again (especially for Wicklow). The change in land use shows that the amount of agricultural land has been decreasing, while the forestland has been growing. In some places this increase has been very much, mostly due to the fact that there was almost no forest at all in those areas. The decrease in the primary sector is very clear and the development of the secondary sector can be signalised in the employment trends as well. There has been a decrease of unemployment in most of the areas.

Forestry conditions and trends

Konitsa and Wicklow are traditionally forested areas, but the others are all areas where afforestation has been taken place recently. The forested area is small and therefore forestry play a minor economic role for the locality, but in Kerekegyháza and Wicklow timber production is still important and Christmas trees provide some income for Hvorslev. In Stadskanaal, forest has only planted since the last two decades and still has to be developed. Forest ownership is divided between private owners and State owned property.

4.6.3 Growth area dependent on agriculture

Rural conditions

The areas are characterised by a medium population density and a medium distance to cities. Both areas are not as remote and sparsely populated as groups 4 and 5. Farming land occupies two third of the area. Although both areas are afforestation areas, the amount of forestland is not small. The share of built-up area is, compared to the population density, relatively high, which might be caused by different national interpretations of this descriptor. Employment in the primary sector is dominating. Secondary and tertiary sector employment is almost equally important and low compared to the other groups. Tourism is not really important.

Rural trends

Both areas have for two decades a growing population. Pfullendorf has a high population density that is increasing and there are cities nearby. Weinviertel is influenced by the presence of Vienna and has not suffered from depopulation, but is growing instead. The share of built-up area has expanded and there has been some diminution of agricultural land. With respect to employment trends, a growing tertiary sector and decreasing primary sector can be signalised.

Figure 4.4 Land-use

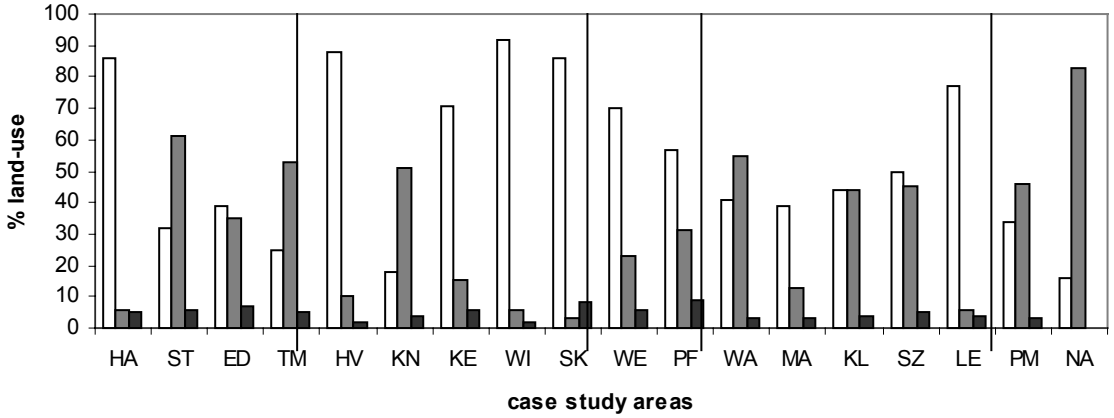


Figure 4.5 Employment

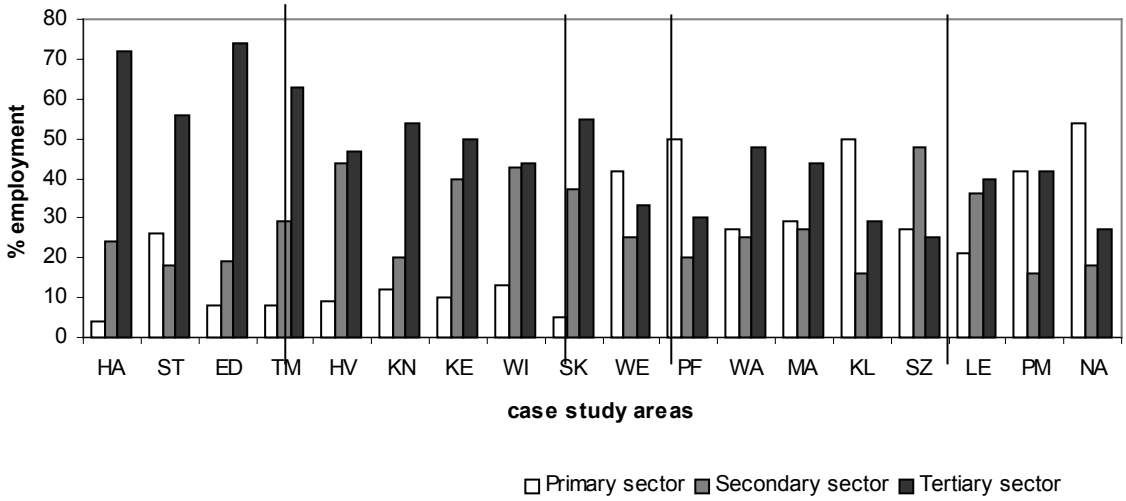


Figure 4.6 Unemployment

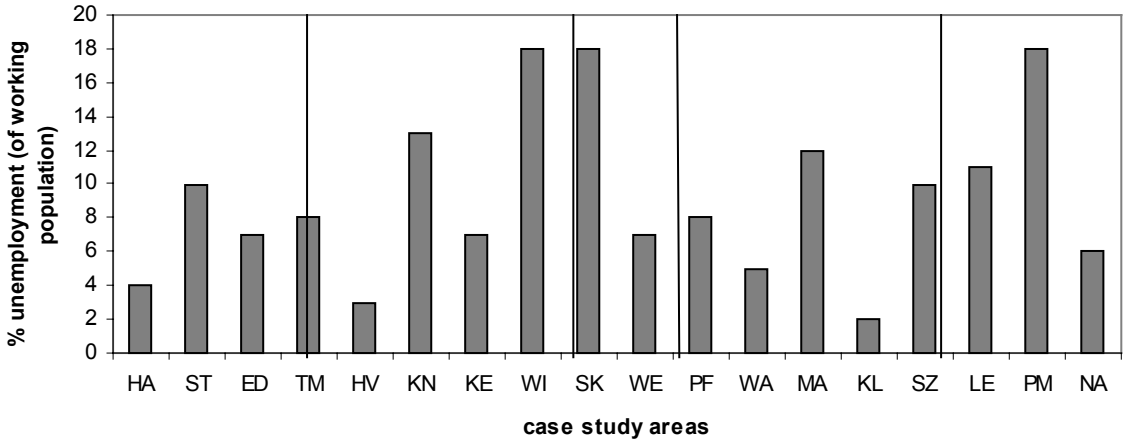


Figure 4.7 Demographic trends

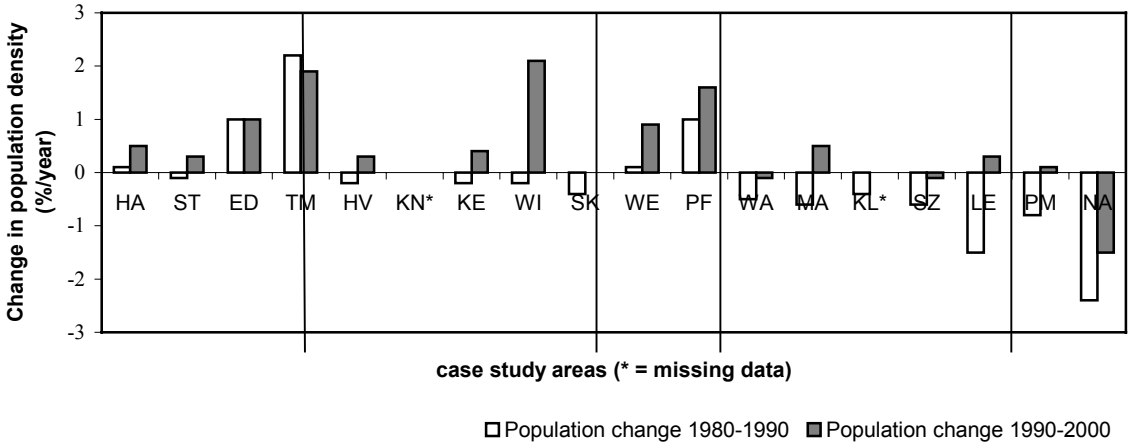


Figure 4.8 Land-use trends

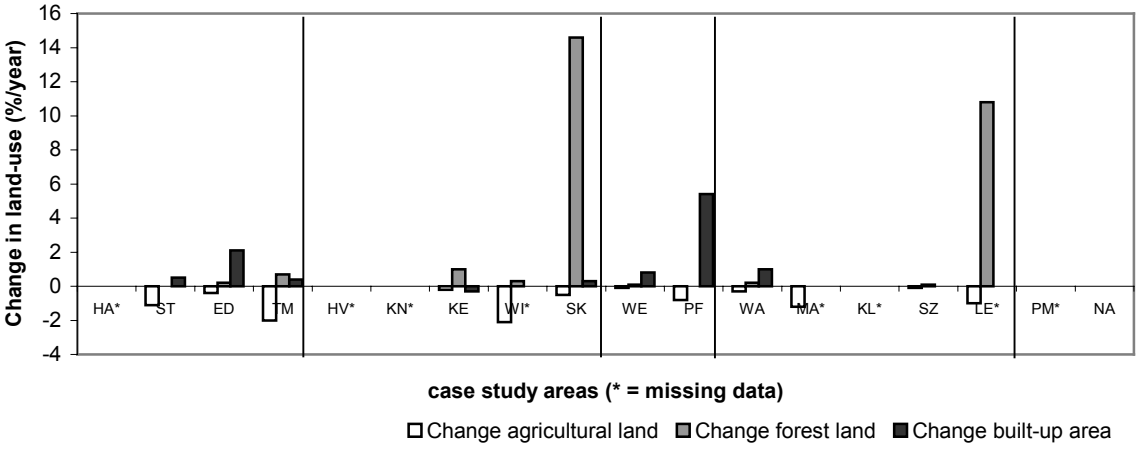


Figure 4.9 Employment trends

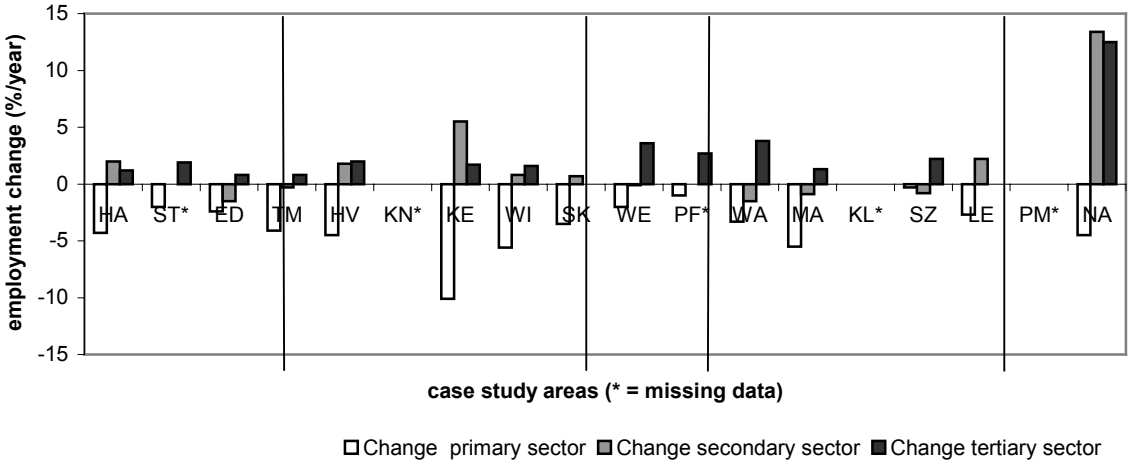


Figure 4.10 Unemployment trends

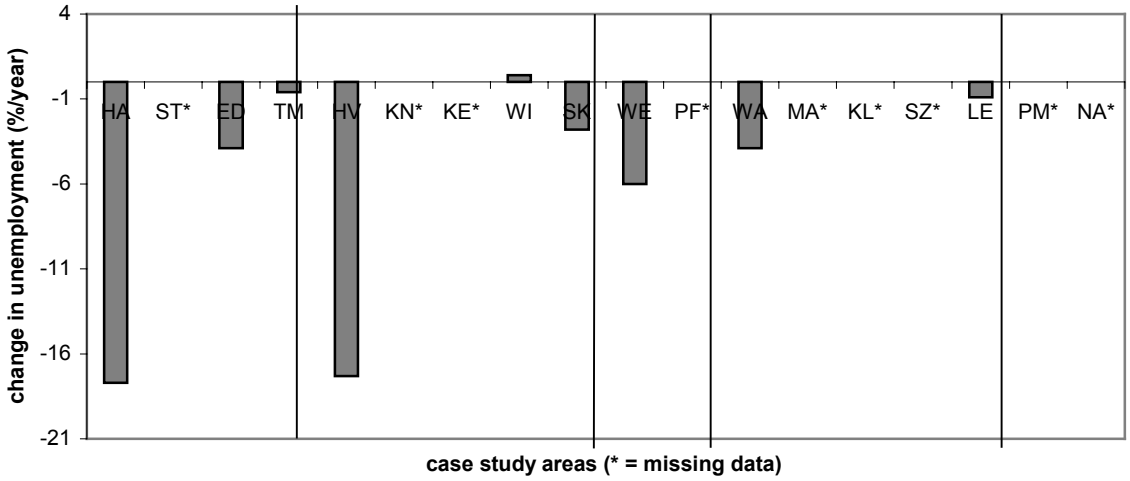
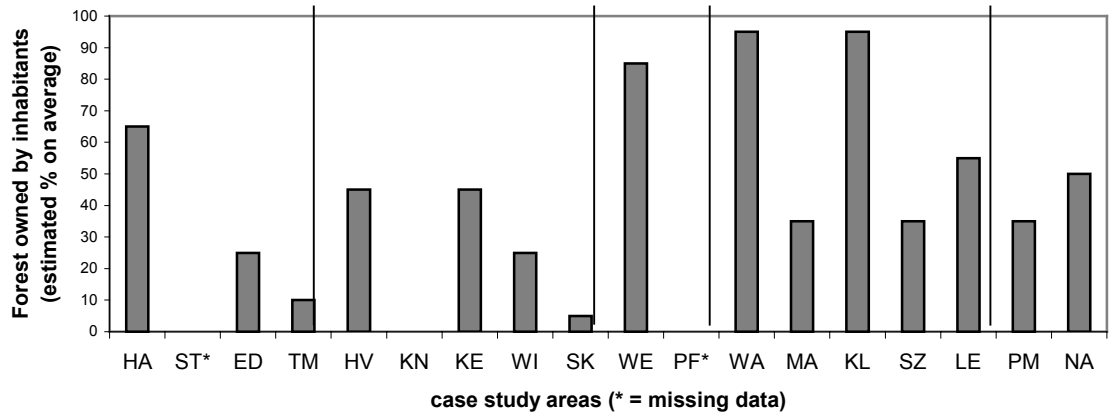


Figure 4.11 Forest owned by inhabitants



Forestry conditions and trends

As concluded before, although both areas are afforestation areas, the amount of forestland is not small in these afforestation areas timber production is not that important, protection, nature and recreation are also significant functions. The amount of forests owned by inhabitants is very high in Weinviertel (in between 90 and 100%) and low in Pfullendorf (less than 10%).

4.6.4 Decline area dependent on agriculture

Rural conditions

These areas are characterised by a low population density and a relatively large distance to cities. Especially Leitrim is pretty remote located, whereas Szentgál is situated close to a city. All traditional forest areas have high percentages of both agricultural and forest land. In the case of Waldviertel the share of forestland is higher than the share of farming land. The afforestation areas, Leitrim and Monts d'Arrée, have little forestland. In the case of Leitrim

the area is dominated by agricultural land, whereas Monts d'Arrée has also a high percentage of moorland (degraded/wilderness area).

Employment in the primary and secondary sector is in most areas still important. Kolindros has a high amount of people working in the primary sector, not only in agriculture but also in forestry for wood production. Szentgál on the contrary has half of the people working in the secondary sector. In the other three areas tertiary sector employment is most important. Unemployment figures are variable, but in three areas fairly high. For most areas tourism is not very important, but for both Waldviertel and Leitrim the impact on the economy is relatively high, although in the latter area the number of spent nights by tourists is low.

Rural trends

All areas show a decrease in population for the years 1980-1990. This negative trend stopped or even reversed in the years 1990-2000, when all areas show a stabilisation or even growth of the population. Just like in the other groups, the change in land use shows that the amount of agricultural land is gradually decreasing, while the amount of forestland is growing. In the two afforestation areas, Leitrim and Monts d'Arrée, the forest cover has extensively multiplied in a short period. There have been small enlargements of the built-up area. Only in Kolindros no considerable changes in the land use occurred. All areas show a strong drop of employment in the primary sector, a smaller drop in the secondary sector and a strong expansion of employment in the tertiary sector. In several areas, tourism plays an important role in this expansion. Only Leitrim depicts a growth of secondary sector employment. Some areas show are decrease of unemployment, others an increase.

Forestry conditions and trends

The amount of forestland is variable as well as the functions of forests in the different areas. The new forests in the afforestation areas are mainly established for wood production. Functions as protection, nature and recreation are less significant. This is different in the areas that are traditionally forested. Although production is important in Kolindros, Waldviertel and Szentgál, other functions of the forests are equally important and the forests are culturally rooted in the localities. In Waldviertel and Kolindros most forest activities are integrated with farming.

4.6.5 Remote area

Rural conditions

Navès and Plateau de Millevaches distinguish themselves from the other areas, as they are both mountainous, remote and have an exceptional low populated area. The percentage of agricultural land is lower than the percentage forestland. In Navès, more than 80% of the land is covered with forests. The primary sector provides the most jobs, followed by the tertiary sector that is of medium importance. The secondary sector is not well represented in both areas. The unfavourable conditions cause an extreme degree of unemployed people in Plateau de Millevaches. Tourism is in Navès extremely important in the local economy, whereas in Plateau de Millevaches it is of moderate importance.

Rural trends

The decrease in population in the '80s indicates that these places have become less and less favourable to live and work. This happened especially in Navès where the depopulation continues in the '90s, whereas in Plateau de Millevaches one can observe a stabilisation. It might be that this negative trend will stop and even reverse in Navès as well, due to the growing tourism initiatives. The growth of the tertiary sector has been significant in Navès, as well as increase of employment in the secondary sector. No worth mentioning land use changes have been taken place in this Catalonian traditional forest area. Land use and economy trends are missing for Plateau de Millevaches.

Forestry conditions and trends

The amount of forestland is high in both areas. Forests play an important economic role in the local economies. The protective functions of the forests are essential as well.

4.7 Conclusion

In this section we will shortly summarise the main differences between the five rural area types, which were used in this study. In Table 4.7 the main characteristics of these rural classes and the distribution of the various case studies over these classes are summarized.

Rural areas with urban characteristics. In these areas agricultural practices are in decline while urban related development is growing. In this category, areas are confronted with a decline in the primary sector and the tertiary sector has taken over the primary sector. The study areas included in this group are densely populated and are located in close proximity to urban centres. A sizeable part of the land is forest but the economic contribution of forestry to local livelihood is small.

Diversified rural areas. The main land use is agriculture; forestland does not occupy a significant part of the rural territory. 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. Especially the secondary sector is high and the tertiary sector still developing.

Growth areas depending on agriculture. The areas are located favourably in relation to urban centres. They have not suffered from depopulation over the last decades; moreover, the population is still increasing.

Decline areas dependent on agriculture. The economic viability of these areas is dependent on agricultural practices. The population density is low and the areas are situated relatively far from cities. In the past they have suffered from depopulation.

Remote areas. These areas are dependent on agriculture, are remote, mountainous and sparsely populated. They still suffer from depopulation.

Table 4.7: Typology of rural areas, and distribution of rural areas according to demographic, land use and economic descriptors

Type of rural area	Characteristics	Case study areas
Rural area with urban characteristics	High population density (at least 100 to over 300 persons/km^2) Equal importance of agriculture and forest as land use Significant tertiary sector, small agricultural sector	Ede (NL) Haderslev (DK) Staufen (DE) *Torroella de Montgrí (ES)*
Diversified rural area	Medium population density (50 – 75 persons/km^2, only Stadskanaal higher) Agriculture main form of land use Equally developed secondary and tertiary sector, small agricultural sector	*Hvorslev (DK)* *Kerekegyháza (HU)* Konitsa (GR)* *Stadskanaal (NL)* Wicklow (EI)
Growth area dependent on agriculture	Medium, varied population density (33-116 persons/km^2) Agriculture most important, forest medium land use Dominance of primary sector, but growing importance of tertiary sector	*Pfullendorf (DE)* *Weinviertel (AU)*
Decline area dependent on agriculture	Low-medium population density (20-45 persons/km^2) Both forest and agricultural land-use All sectors equally important, but tertiary sector is stagnating	Kolindros (GR)* *Leitrim (EI)* Monts d'Arrée (FR) Szentgál (HU) Waldviertel (AU)
Remote area	Very low population (less than 10 persons/km^2) Dominance of forest land-use Dominance of primary sector, growing importance of tertiary sector	Navès (ES) Plateau de Millevaches (FR)

Afforestation areas are printed in italics, traditional forest areas are printed in plain text
As Greece did not have any area with substantial afforestation, two traditional forest areas were selected, one with mostly privately owned forests and one with predominantly public owned forest

5 Forestry as a means to rural development: a qualitative approximation

Konitsa, Greece (Eduard Plana Bach, Spain)

5.1 Introduction[11]

As discussed in Chapter 3, during the first phase of the study a qualitative study was undertaken in six countries (Denmark, France, Greece, Hungary, Ireland and the Netherlands) to get insight into the variety of social representations regarding the role of forestry in rural development. These data served to provide base-line information for use in the follow-up quantitative survey. In this Chapter the main conclusions from this qualitative survey will be summarised. In the first place, an overview will be given of the perspectives regarding the various dimensions of forestry and rural development. In the second place, a summary is given of the different discourses through which people express what meaning they attribute towards rural development and the role of forests therein. This information provides a first qualitative approximation of the variety of opinions regarding the role of forestry for rural development. In Chapter 6, a more in-depth analysis of these opinions will be made on the basis of the results of the quantitative survey.

5.2 Characterisation of main discourses

From an assessment of the main emerging characteristics regarding forestry and rural development five major cross-cutting themes were identified:

- *Main interpretation of rural characteristics*. What aspects are considered to be determinative in the rural area?
- *Main policy-oriented perspective on the meaning of rural development*. What does rural development mean to the policy-makers and administrators?
- *Main experience-oriented perspective on the meaning of forestry in rural development*. How do people perceive the role of forests and forestry in the rural area? Do they see a relation between forestry and rural development?
- *Main considerations on multifunctional forest management*. How do people experience the variety of (potential) functions that can integrated in forest management?
- *Main points of contention*. What are the main points of discussion?

These themes were used for making a comparative assessment of the results in the different countries. The results of this thematic analysis are summarised in Table 5.1. From this information the following conclusions can be drawn. The conception of rural areas include three major aspects, i.e. local identity, economic position and demographic trends. The perspectives on local identity range from very positive (e.g. highly valued beautiful area) to negative (e.g. physically poor and economically backward) perspectives. The perspectives on economic position mostly focus on either the domination of primary production or on the degree of inclusion urban networks. The demographic perspective mostly concerns the out migration.

[11] This Chapter is based on Elands, B.H.M., K.F. Wiersum, T.N. O'Leary and S. le Floch (2001). *Perceptions on forestry as a means to rural development. Comparative analysis of a qualitative survey performed in six European countries*. Multifor.RD Working paper, Wageningen University, Wageningen, The Netherlands.

The policy-oriented perspective on the meaning of rural development includes three major dimensions:

1. the need for maintenance and further rationalisation of agriculture
2. the need for employment creation and improved rural services
- the need to restructure the rural economy and stimulate new economic activities, such as (agro-)tourism.

Regarding the experience-oriented perspective on the meaning of forestry in rural development most attention focuses on the landscape values of forests, which are generally perceived as highly positive. A related factor is the contribution of forests to the local identity. Opinions on the productive roles of forests are less dominant. In the case of commercial plantations the opinion on the development role of forestry is in several cases even negative, notably in case these plantations are owned by people from outside the rural community.

Regarding the multifunctional forest management generally the need for a balance in production, environmental and recreation/tourism functions are indicated. In some cases also the need for integration between forest management and farming is highlighted.

Table 5.1: Summary of main perspectives regarding forestry and rural development in study areas (in order of traditional versus afforestation area and increasing population density)

Traditional forest area	Afforestation area
Plateau de Millevaches (France) Population density 6 pers/km^2, forest cover 46% **Main interpretation of rural characteristics** • A physically poor and economically backwards area with • high degree of migration, but emergence of economic rejuvenation **Main policy-oriented perspective** • Need to revitalise the rural economy by stimulating new rural activities • Influx of new rural people has positive dynamic impact **Main experience-oriented perspective** • Differentiation between touristic potential of traditional public forests and production potential of private coniferous plantations established on former moorlands • Autochthonous people consider coniferous plantations as signs of abandonment of area • Newcomers find jobs in timber exploitation and manufacturing sector **Main considerations on multifunctional forest management** • Timber production viewed as most important function despite significant (but unregistered) role of forest mushrooms • As result of recent storm damage diversification from coniferous plantation to mixed stands. **Main points of contention** • Contradictory views on scope for increased wood production and local manufacturing and scope for development of nature products for emerging niche markets	**Monts d'Arrée (France)** Population density 20 pers/ km^2, forest cover 13% **Main interpretation of rural characteristics** • Specific and impressive landscape **Main policy-oriented perspective** • Need to rectify decline in agricultural and social conditions • Debate between two strategic views of pro-landscape and pro-forest (commercial timber plantations) respectively **Main experience-oriented perspective** • Beautiful landscape should be maintained, it is threatened by socio-economic transformations and landscape changes • Debate on preservation of traditional landscape versus acceptance of landscape dynamics • Different opinions on role forests in rural complex **Main considerations on multifunctional forest management** • Debate on role of making Sitka spruce timber plantations more ecologically and landscape friendly versus preservation of traditional farmer-managed woody landscape elements **Main points of contention** • Development of forestry economy versus development of tourism economy • Private versus collective access to forests

Traditional forest area	Afforestation area
Szentgál (Hungary) Population density 30 pers/km^2, forest cover 49% **Main interpretation of rural characteristics** • Close to town with heavy reliance on urban-based income earning • Rurality often equated with backwardness • Landscape has high importance in local identity **Main policy-oriented perspective** • Low profitability of rural production processes due to former political structure requires restructuring of economy, including privatisation of forest ownership **Main experience-oriented perspective** • Forests as part of rural identity are taken for granted, but no close connection to forests • Due to change in ownership uncertainty about future options **Main considerations on multifunctional forest management** • Unclear position as to future relation between wood production (presently not financially attractive) and service roles **Main points of contention** • Effects of restructuring of economy and process of privatisation and its implementation dominates all thinking	**South Leitrim (Ireland)** Population density 31 pers/km^2, forest cover 7% **Main interpretation of rural characteristics** • Rural area characterised by strong links with countryside and dependency on land, which results in high quality of life and environment **Main policy-oriented perspective** • Maintain and increase population. Prevent further economic decline & increase employment in SME's which does not compromise the environment **Main experience-oriented perspective** • Plantation establishment has negative social and environmental connotations • Prevailing method of plantation forestry too commercially oriented, but forests are gradually becoming more community-friendly **Main considerations on multifunctional forest management** • Afforestation should be linked to efforts to maintain (part-time) family farming and should be both community and environmentally friendly **Main points of contention** • Is afforestation cause or result of depopulation? • Who benefits from afforestation, locals or outsiders?
Kolindros (Greece) Population density 42 pers/km^2, forest cover 44% **Main interpretation of rural characteristics** • Highly-valued beautiful area with mixed agricultural/forestry landscape located relatively near to urban centre • Agricultural land is scarce and fragmented • Changing population due to migration of young people and immigration by commuters **Main policy-oriented perspective** • Stimulate sustainable agriculture as main economic activity • Improve labour opportunities for local people, e.g. through (agro)tourism • Need for integrated regional development **Main experience-oriented perspective** • Current management does not fulfil local aspirations due to lack of investment by private forest owners **Main considerations on multifunctional forest management** • Rationalise timber production and increase competitiveness of local wood • Expand recreational facilities and improve environmental functions regarding regulation of irrigation water • Conflicts between grazing and forest should be resolved **Main points of contention** • Greater efficacy of state/municipal forest management than management by private forest owners • Scope for afforestation disputed	**Hvorslev (Denmark)** Population density 51 pers/km^2, forest cover 10% **Main interpretation of rural characteristics** • Dominance of agriculture, no big towns and industries **Main policy-oriented perspective** • The rural character dominated by agriculture should be maintained, incl. sufficient levels of services, in addition the area should be attractive for newcomers • Agricultural rationalisation results in big, specialised farms, additional part-time/hobby farmers are developing • Nice place to live in and attractive for new settlers, but small villages loose facilities **Main experience-oriented perspective** • Agriculture forms the basis of rurality with forests mainly serving highly appreciated landscape values and local recreation. • Christmas tree & greenery production represent 'industrial' rather than ecological values **Main considerations on multifunctional forest management** • No drastic change foreseen in current trends of gradually increasing importance of nature, recreation and landscape • Tree growing for nature & amenity purposes could become part of hobby-farmers deriving main income from off-farm sources **Main points of contention** • Location of new forests: integration with residential areas or location in countryside

Traditional forest area	Afforestation area
Konitsa (Greece) Population density 52 persons/km^2, forest cover 55% **Main interpretation of rural characteristics** • Highly esteemed rural identity shaped by agriculture/ primary production and related traditional lifestyle and landscape, but lack of employment opportunities **Main policy-oriented perspective** • Improved agriculture is the most prominent activity to overcome problems of unemployment and depopulation; tourism could provide part-time additional income earning opportunities **Main experience-oriented perspective** • Forests are shaped through human activities. The positive reciprocal relations between forests and human practices should be maintained by improving timber production and local manufacturing and strengthening recreation/tourism facilities • Forest protection needs improvement **Main considerations on multifunctional forest management** • Debate on priority of stimulating wood production and manufacturing or tourism development **Main points of contention** • Should rural development primarily be based on agricultural improvement or on development of tourism facilities	**Kerekegyháza (Hungary)** Population density 75 pers/km^2, forest cover 15% **Main interpretation of rural characteristics** • Almost suburban area with increasing importance of secondary and tertiary sector • Many commuters remain in area because of low cost of living **Main policy-oriented perspective** • Economic restructuring should enable to compensate decreasing labour opportunities in agriculture labour growth in industry and service sector • Role of forestry in rural development is not significant, but subsidies can be used to stimulate afforestation **Main experience-oriented perspective** • 'Puszta' as characteristic open landscape including scattered forest plots, but only a small proportion of people show emotional connection with forests • After 1st world war forest was reduced by 80%, now afforestation of abandoned agricultural lands is accepted **Main considerations on multifunctional forest management** • Wood production and soil conservation, increased appreciation for nature values **Main points of contention** • Unclarity over effects of forest privatisation
East Wicklow (Ireland) Population density 54 pers/km^2, forest cover 6% **Main interpretation of rural characteristics** • Proximity to Dublin with plenty local facilities and increasing population • Pleasant variety of landscape (Garden of Ireland) **Main policy-oriented perspective** • Area becoming less rural with increase in residential development and tourism • Rural development as bottom-up process • Enhance contributions of forest assets **Main experience-oriented perspective** • Forest contribute significantly to maintain people in the countryside through grants and employment creation in small-scale enterprise and tourism **Main considerations on multifunctional forest management** • Need to develop wood culture in the form of community-based wood manufacturing enterprises • Forest recreation will gradually become more important **Main points of contention** • Insufficient local co-ordination to optimise contribution to rural development in terms of stimulating small-scale community-based timber industries and forest-based services	**Stadskanaal (Netherlands)** Population density 274 persons/km^2, forest cover 3% **Main interpretation of rural characteristics** • Agriculture forms the socio-cultural basis of rurality **Main policy-oriented perspective** • Agriculture will remain the foundation of rural areas • Forests form an integral part of efforts to restructure the traditional crop-growing area into an attractive 'green' rural landscape providing increased living and tourism options **Main experience-oriented perspective** • Forests provide amenity functions to diversify rural economy, but should not replace agricultural production **Main considerations on multifunctional forest management** • Multifunctional forestry can be optimised in old-growth forests with variation and contrast **Main points of contention** • The location and extent of new afforestation areas

Traditional forest area	Traditional forest area
Haderslev (Denmark) Population density 116 pers/km^2, forest cover 6 % **Main interpretation of rural characteristics** • Town municipality with adjacent countryside with strong community identity, but with increasing importance in non-farm income **Main policy-oriented perspective** • Rectify stagnation in economic operations of business, commerce and industry to prevent out migration of people • Gradual change in farming structure towards big specialised farms and small hobby farms **Main experience-oriented perspective** • Beautiful environment is an asset in developing a new local economy • Old growth forest seen as contrast to industrialised agriculture **Main considerations on multifunctional forest management** • Wood production is financially not very attractive; recreational and amenity functions are very important, forest areas as attractive places for new housing, also hunting important function • Debate between need to secure nature values versus need to maintain an attractive landscape for housing and business **Main points of contention** • Need for further afforestation in view of competition for land between agriculture and afforestation • Distrust between farmers and government, and debate on role farmers as managers of the landscape versus rural polluters	**Ede (Netherlands)** Population density 318 pers/km^2, forest cover 33 % **Main interpretation of rural characteristics** • Distinction between rural area characterised by farming activities and separate forest/nature area **Main policy-oriented perspective** • Renew rural areas by stimulating environmentally-sound and multifunctional farming activities, establishing ecological corridors and developing agro tourism • Control expansion of built-up areas • Increase nature values of forest areas **Main experience-oriented perspective** • Stimulate increased nature values in forest/nature area which is part of the largest forest/nature conglomeration in the Netherlands • Improve amenity tree growing in rural area **Main considerations on multifunctional forest management** • Multi-functional forest management (called integrated forest management) is generally supported with increasing role for nature and recreation values, although some groups consider that priority should be given to nature development • Increased demands for public participation in planning forest management **Main points of contention** • Distrust between farmers and government coupled with debate between traditional and modern farmers on their role in landscape management • Competition for high-prized land

Overall, three main points of contention can be distinguished:

1. the need to focus rural development on improved primary production versus need to focus on economic restructuring and development of secondary and tertiary sector activities
2. the importance of commercial forest production versus maintenance of nature and landscape values
3. the scope for afforestation on agricultural lands.

In addition, in several areas also the access to forests is contested.

5.3 Discourses on forestry and rural development

The content analysis of the interviews did not only identify the main characteristics of the prevailing discourses regarding forestry and rural development, but also the contents of the discourses on the meaning of rural development and the role forests (could) play in it. A discourse consists of a set of arguments which people use to communicate their understanding and explanations about the meaning of certain phenomena. It symbolises the meaning given by people in everyday talk to terms such as rural development. This meaning

is socially constructed in interactions with other people, and is therefore space and time specific (Elands & Wiersum, 2001). From the interview results, several specific discourses concerning rural development and concerning the role of forestry in rural development could be identified.

5.3.1 Discourses on rural development

Regarding the meaning of rural development three major contrasting discourses were identified, i.e.

1. production oriented versus landscape oriented discourses
2. private use versus collective use discourses
3. discourses considering rural areas as being dominated by a traditional farming culture versus discourses considering rural areas as needing to incorporate new urban-based socio-cultural values.

A first major distinction in discourses concerns the differentiation between a *pro-production* and a *pro-landscape discourse*. Within the production oriented discourse the attention is focused mainly on the question how primary production can be optimised as a means to stimulate economic development. An element in this discourse concerns the notion that fallowed agricultural lands could be given a new productive function, e.g. by reforesting them. Whereas in the landscape oriented discourse major emphasis is laid on the wish to preserve the historically developed and highly appreciated landscape. The preservation of these landscapes does not only relate to the aesthetic landscape values, but also to the social values (notably the farmers' creativity), which were incorporated in the creation and maintenance of those landscapes.

The second major contrast concerned the *private use* versus *collective use discourse*. Within the private use oriented discourse the rural space is primarily considered as a location to make private profits, be it in the form of (intensive) agriculture, hunting, timber production, etc. In some countries (e.g. Ireland) a distinction still can be made whether such private rights are considered to relate primarily to the autochthonous population or whether it relates also to newcomers and even new absentee landowners. In most countries the contrast between the two discourses is predominantly experience based. Thus, within the collective use discourse attention is notably focused on the need to preserve the rural space for collective free use, e.g. by recreationists and tourists. In most countries, the contrast in private versus collective use is hardly expressed in economic terms, and very little attention is given to the role of collective rural production processes. Due to the policy changes taking place in Hungary, which involve (re)privatisation of former times collective lands, in this country the private use oriented discourse was mainly policy based.

The third major contrast in discourse related to the opinion whether *rural areas* should be conceived as being dominated by a *traditional farming culture* or whether they should be conceived as having to integrate *new urban-derived socio-cultural values*. Such urban-derived values do not only concern social facilities, but also needs for new nature. In the

traditional farming oriented discourse traditional rural values are highly appreciated, especially regarding community and landscape values. In the integration oriented discourse traditional farming is often conceived as stagnating and rural areas as lacking modern amenities. This discourse prevails in some remote areas where young people leave the area resulting in depopulation of rural areas. In these areas it is often considered that the rural production processes depend mainly on subsidies.

As demonstrated by these contrasting discourses, opinions about what is involved in rural development is not only related to economic and policy considerations, but also to experience-based considerations regarding landscape values and to moral considerations on whether traditional inhabitants or newcomers/outsiders should be involved in deciding over and/or maintaining the rural space.

5.3.2 Discourses on the role of forests

In the different discourses on rural development the conceived role of forestry is quite variable. Three major arguments play a major role in the different discourses:

1. the role of production versus amenity values
2. the integration versus segregation of forestry and agriculture
3. the role of forests in maintaining the traditional rural identity versus contributing towards a new rural identity.

The discourses on the role of forest for rural development vary between traditional forest areas and afforestation areas. Therefore, the discourses within each area type will be discussed separately.

Traditional forest area

In the traditional forest areas the role of forests is normally not disputed. In most areas the existing forests are considered as a characteristic element of the rural landscape, and part of the rural identity, which should be maintained. This perspective is especially strong when it concerns traditional (mixed-species) forests, but monocultural (coniferous) plantations are often less appreciated, even when established in the past. Except in the case of such monofunctional plantations, forests are highly valued for their enhancement of the quality of life, which result from their beauty, restfulness and open access. In the Netherlands it was considered that traditional forest area do not form a part of the rural landscape, but rather belong to a separate, highly-appreciated, nature area.

The main contrast regarding the role of forests in traditional forest areas relate to the question of whether the traditional forest management should be changed in order to either increase their economic value or to reflect new (often urban-based) values. Especially in the relatively remote and economically less-advanced rural areas (France, Greece, Hungary) the main attention focuses on options to improve the productive base of forests as a means to improve economic conditions. This pro-production focus is mostly confined to the notion that wood production and manufacturing should be improved. Options for optimisation of other types of production, e.g. of non-wood forest products were generally not considered. Even in

areas where forest grazing (Greece) or commercial mushroom collection (France) are important forms of actual forest use, these activities seem mostly to be considered as an informal types of forest use. They are often not considered as holding potential for contributing towards further development.

In areas which are subject to a relatively greater influence of urban agglomerations (notably Denmark and the Netherlands) the orientation on the productive function of forests is much less. In these areas two other orientations prevail. Within the discourse characterised by appreciation for traditional features of farming (and forestry) as well as private use of land, traditional multiple-use management practices are often appreciated. It might be strengthened by stimulating local manufacturing of region-specific forest products and developing forest-based tourism. In contrast, within the discourse characterised by the opinion that rural areas should be conceived as representing space for collective use, including increased use by people with urban-based values, it is often argued that forest management should change more to a close-to-nature approach, including a change from (often exotic) coniferous species to (native) broad-leaved species. It is sometimes suggested that such forests will be more highly esteemed by tourists than the traditionally managed forests.

Regarding the contrast in private use versus collective use discourse it could be noted that the collective use discourse was mainly use related. Attention mainly focussed on the free access to forests, especially in the context of recreation and tourism. Only in remote and relatively less-economically developed areas also considerations regarding the importance of collective management (e.g. in Hungary in the form of forest co-operatives), or public management by either the state or municipality (Greece) were mentioned, as well as the need for public financing of forest management through subsidies.

Afforestation areas

In afforestation areas, a much greater variety of, often competing, opinions on the role of forests were found. In general four typical rural development discourse-related points-of-view could be distinguished

Within the discourse characterised by a combination of production orientation and orientation on private use of rural space it was often considered that in several areas farming is no longer viable and that establishment of highly-productive timber plantations offers a new production option. Moreover, plantation establishment offers the landowner the option to undertake off-farm work adding to his income.

Within the discourse characterised by a landscape orientation and orientation on collective use of rural space the establishment of commercial timber plantations was strongly opposed. The more so, in case it involved private use of space of new immigrants or even large commercial firms. In this case it was considered that the traditional rural culture was being threatened and that the rural areas are taken over by outsiders.

Within the discourse dominated by the notion of rural areas being characterised by the traditional farming culture it may be considered that selected reforestation may assist in

making the area more attractive. In this case, the establishment of new forests is not considered as the creation of a new form of land-use, but rather as the creation of a better ecological infrastructure making the area more attractive for farmed-based recreation and tourism. Consequently, relatively small-scale reforestation to enhance property or community environment is preferred rather than large-scale reforestation.

Within the discourses based on the notion to change the rurality patterns and to orient the countryside more on urban-based values a similar consideration regarding the need of establishing forests to create a more attractive ecological infrastructure may be incorporated. In this case, this ecological infrastructure should serve to attract commercial and/or new housing estates, as well as increase property values.

Thus, in the last three points-of-view small-scale afforestation improving the environmental infrastructure is preferred above large-scale afforestation. In fact, large-scale afforestation is often considered as representing non-development. Especially in cases where afforestation is primarily based upon fast-growing exotic monocultures the new forests are considered to have little to offer in terms of either employment creation, preservation of rural identity and biodiversity or nature protection.

5.3.3 Differentiation between actor groups

The main distinction between actor groups concerned a policy-oriented discourse versus an experience-oriented discourse. The first type of discourse is expressed by people who commonly participate in discussions with(in) political institutions, in which strategic views about what is or should be rural developments are communicated. This discourse is typically expressed by people from actor group 3, such as politicians, civil servants / public administrators and lobbyists from farmer and forestry organisations. Also local people from actor groups 1 or 2, who are in regular contact with politicians, may express such a discourse. Such political oriented discourses were also found by the forest and nature managers of actor group 1. This discourse often represents the points-of-view as expressed in policy papers. In contrast, the second type of discourse is expressed by people who speak about their own experiences. These people may be belong either to actor group 1 “producers” (farmers, forest owners) or to actor group 2 “consumers” (local inhabitants, tourists).

In some countries (e.g. France) the differences in terms and arguments used in the policy-oriented discourse and the experience-based discourse were relatively large, but in other countries (e.g. the Netherlands) quite some overlap in terminology and argumentation did occur. These differences seems to reflect differences in the degree of communication between politicians/decision makers at the one hand, and producers and consumers at the other hand on matters related to rural and forestry development. It may also reflect differences in the degree of participatory policy development in rural development.
In general, members of actor group 1 and 2 who are not professionally involved in forestry and rural development have an experience-oriented perspective on the role of forestry in

rural development. Although both producers and consumers predominantly express experience-oriented discourses, the contents of these experience-oriented discourses was highly varied. No clear differentiation in discourses between the actor groups 1 and 2 were found. The diversity of views often seemed stronger related to the degree of emotional attachment people had to an area rather than to the fact whether they were labelled as a producer or consumer. Consequently, the variation in opinions within actor group 1 and 2 is much greater than the variation in opinion between these two actor categories.

5.4 Conclusion

The qualitative survey provided information on a range of perspectives regarding the nature and development of rural areas as well as on the role of forests in rural areas. As discussed in Chapter 3, this information served as a basis for the design of a conceptual model (see Figure 3.3) for the follow-up quantitative survey.

The different perspectives on the various dimensions of rurality, rural development and the role of forests are often interrelated. It was possible to distinguish a series of specific discourses, being a set of arguments used by people to communicate their opinions and practices, on forestry and rural development. These discourses are both region and actor group specific. The identified discourses will serve as cross-checks for the final evaluation of the results of the quantitative survey, which will be discussed in the next Chapter.

6 The role of forestry in rural development in Europe: a quantitative perspective

South Leitrim, Ireland (Frank Sondergaard Jensen, Denmark)

6.1 Introduction

To get insight in the distribution of local views upon the role of forestry in rural development a quantitative survey using a common questionnaire, as a follow-up of the qualitative interviews, was carried out. This survey was implemented in eight countries; in addition in France a locally adapted survey was carried out. The results from the eight country survey include data from 4,638 community inhabitants and 2,406 landowners (Table 3.4). In this Chapter the main results of the survey will be reported[12].

The main hypotheses guiding the Multifor.RD research were the notions that major differences in the perspectives on the role of forestry in rural development exist between different regions, between traditional forest areas and areas with recent afforestation, and between community inhabitants (consumers) and landowners (producers) (Table 1.1). This Chapter will specifically focus on these hypotheses. The summary of the overall conclusions of the study in relation to the three main hypotheses will follow in the next Chapter with main conclusions.

As a basis for analysing regional differentiation, the project developed a rural area typology for its research areas (Chapter 4). In an initial round of data analysis (Elands & O'Leary, 2002), it was checked whether this typology was relevant. Next, also three Euro-zones (Atlantic, Central Europe and Mediterranean region), forest history (traditional versus afforestation area) as well as individual countries were tested as variables. It was found, that although in several respects differences between individual countries, forest history and Euro-zones were significant, overall the rural area typology explained the differences in perspectives most systematically. Thus, the rurality status does have an important impact on the perspectives on the role of forestry as a means to rural development. Consequently, in this synthesis mainly this area typology will be used as a regional variable. However, whenever relevant, differences that can be related to Euro-zones, forest history and countries will be indicated.

Local discourses regarding the (potential) role of forest in rural areas will be assessed with regards to the main elements that characterise rural development discourses: (a) conception, (b) quality of life and (c) preferred rural futures. With regards to the area these three topics will be discussed in Section 6.2.1, 6.2.2 and 6.2.3 respectively, with regards to local forests these three topics will be disccused in Sections 6.3.1 and 6.3.2 (conception), Sections 6.3.3 and 6.3.4 (quality of life), and Sections 6.3.5 and 6.3.6 (preferred rural futures). Besides, within the multifunctional forestry discourse, perspectives of landowners on future prospects of their enterprises as well as on forest management will be discussed (Section 6.4). Finally, it is important to understand local opinions about government grants for forest and land management. In these sections both the differentiation between rural areas and community inhabitants and landowners will be indicated (Section 6.5).

[12] In this synthesis no details on statistical tests will be given; these have been reported in the various scientific papers, which were prepared by the project, see Annex 3.

6.2 Perspectives on local meaning of rural life

In order to understand the discourses on meaning of rural life in the 16 case study areas, the elements that structure rural development discourses, i.e. conception, quality of life (perceived problems) and preferred rural futures, will be taken up. The following issues will be described in this Section:

- *Conception of the area*: the opinions about the rural versus urban identity as well as a more nuanced reflection upon the self-defined rural conception
- *Quality of life*: local concerns on rural quality of life reflecting the perceived strengths and problems
- *Preferred rural futures*: perspectives on desired future conditions of the locality.

6.2.1 Conception of the area

A first question is whether they indeed experience the area they are living in as rural[13]. Therefore respondents were asked to indicate whether they think their area is mainly rural or urban. The results indicated that in all areas except the rural areas with urban characteristics 90-100% of the respondents do indeed experience their area as being rural. In the rural areas with urban characteristics this percentage varies between 35-90%. It is remarkable that although the Dutch study areas are by far the most densely populated and the most industrialised, Danish and Spanish people perceive urbanity more. This reflects that rurality is a relative concept and constructed within the framework of a specific country.

In order to understand what makes the survey population identify their area as rural or urban, the respondents had to value a list with characterisations of the area. A cluster analysis created four rural identity groups:

- '*Agri-nature & wilderness'* identity (41%): these people characterise their area as significantly occupied by the agricultural sector and nature & wilderness areas.
- '*Diverse business activities centre in rural countryside'* identity (31%): these local people think their area is a centre with diverse business activities surrounded by rural countryside. About half of these respondents think also that their area is either under influence of adjacent urban araes or is urbanised itself.
- *'Agri-production forestry'* identity (13%): these people characterise their area as significantly occupied by the agricultural sector and production forestry. An important share of these locals also think their area is visited by a high number of tourists, as well as that the area is located adjacent to urban centres.
- '*Agri-remote & sparsely populated'* identity (15%): local people consider their area to be remote and sparsely populated which is significantly occupied by the agricultural sector. Some of them conceive the area as significantly occupied by nature & wilderniss areas.

[13] Only 3% of all respondents do not live in the locality itself. This means that all landowners are also community inhabitants. If the group of landowners needs to be distinguished from the community inhabitants, it will be explicitly stated.

As you can see in Figure 6.1 there is strong relation with the rural area typology, although differencens in the way people conceive their area can be observed. The more urbanised areas indeed define themselves predominantly as a diverse business activity centre, surrounded by rural countryside. An agri-remote & sparsely populated identity is not only perceived by inhabitants from the remote area but also by inhabitants from e.g. the diversified area. This is remarkable as population density figures indicate the opposite of sparsely populated. It can be concluded that there is not one-to-one relationship between objective space characterisations and subjective space characterisations.

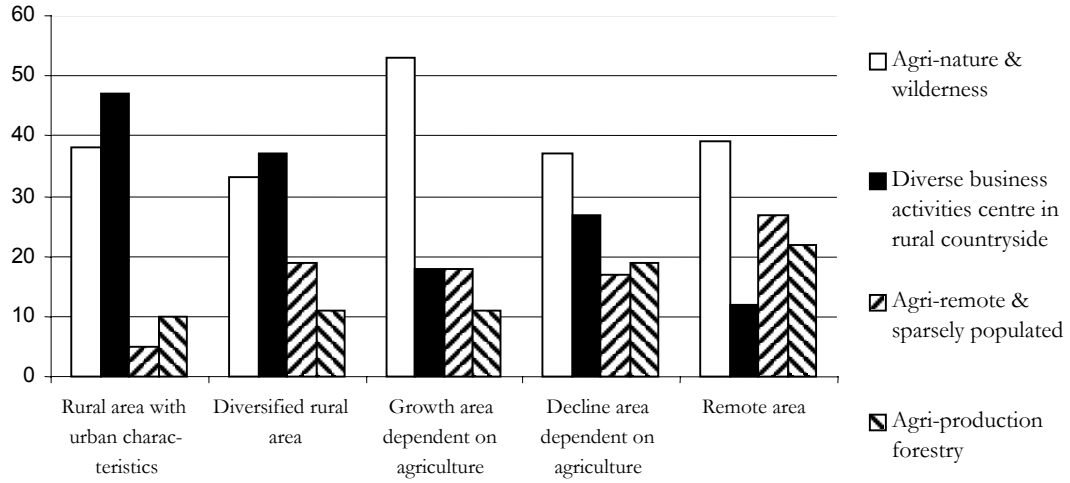


Figure 6.1 Distribution identity characteristics per rural area type (% of respondents within each rural area type)

6.2.2 Quality of life[14]

The area self-identity gives us some ideas about the character of rural areas, but not about the quality of life in these areas. Quality of life in the community can be valued on different aspects that are related to living conditions, such as community feelings, landscape identity, economic welfare and environment and nature quality (see Table 3.3). On the basis of a factor analysis of answers to a set of questions measuring local quality of life five main concerns regarding the quality of life were determined:

- *Over-development*: People are concerned about a strong growth in built-up and industrial areas, in crime and in visiting tourists. Apart from this, conflicts are being perceived between different uses of land;
- *Nature and landscape quality*: People appreciate the variety of nature and wildlife, the beauty of a landscape that is characteristically different from other places and the fact that a lot of forests are present;

[14] Section 6.2.1 and 6.2.2 are based on Elands, B.H.M. and T.N. O'Leary (2002). The myth of forests; a reflection of the variety of rural identities in Europe and the role of forests in it. In: Wiersum, K.F. and B.H.M. Elands (eds), *The changing role of forestry in Europe: perspectives for rural development*. Nature Forest in Society 2002-2, Wageningen University, Wageningen, the Netherlands, p. 25-50.

- *Rurality*: People recognize features that were traditionally linked to rural societies, as opposed to urban life. A closely knit community, a strong sense of history and tradition, a very sparse population, peace and quite with low traffic and unpolluted air, water and soil are the items are included in this concern;
- *Services*: People appreciate a high quality of facilities and living conditions, such as very good overall services, plenty of opportunities for recreation and sports and an attractive setting for houses;
- *Weak economy and top down development*: People experience few employment opportunities and a prevalence of low incomes as an indicator of a weak economy. The fact that there is no involvement of locals in how the area is developed is linked to this weak economy.

These quality of life concerns reflect the perceived problems and strengths of a local community. In general, the notion of 'over-development' is rejected by most respondents, they endorse the 'attractiveness' of nature and landscape, they consider the area to be 'rural' with enough 'services', but they also consider that the 'economy is weak and top down developed'. However, the more urbanised an area gets the more it is confronted with 'over-development', the less rurality is being experienced and the stronger the economy is perceived. The reverse is also true: the more remote an area, the stronger the rejection on over-development as well as the agreement on the weak economy.

On the basis of a further statistical analysis[15] of these quality of life dimensions five main opinion groups regarding the quality of life in the various research areas could be ascertained:

- *"Perfect" rurality* (23%). These locals do not see economical problems nor over-development. They are very happy with the present nature and landscape situation, pleased with the level of services as well as traditional rural values.
- *Comfortable rurality* (20%). Residents are pleased with their locality, especially regarding the nature and landscape features as well as the level of services. The economy could function better, but it seems that live is prosperous enough.
- *Overdeveloped, though prosperous rurality* (21%). From a rural point-of-view, the locality is considered as being overdeveloped in the sense of there being many social conflicts (e.g. crime) as well as conflicts on competing land-uses and too much housing and industrial development.
- *Nice rurality, but weak economy* (16%) The area has highly appreciated landscape and rural features as well as good services, but also major economic and political problems.
- *Deprived rurality* (20%). People are neither enthusiast about the level of services nor the nature and landscape quality. Besides, the respondents are convinced of the weak economy. The overall picture is a locality with low expectations regarding future prospects.

[15] Dieleman, M. (2003). *Different people, different values. A study on values and perceptions of landowners and community inhabitants on forestry and rural development in Europe*. M.Sc. thesis, Forest and Nature Conservation Policy group, Wageningen University, Wageningen, the Netherlands.

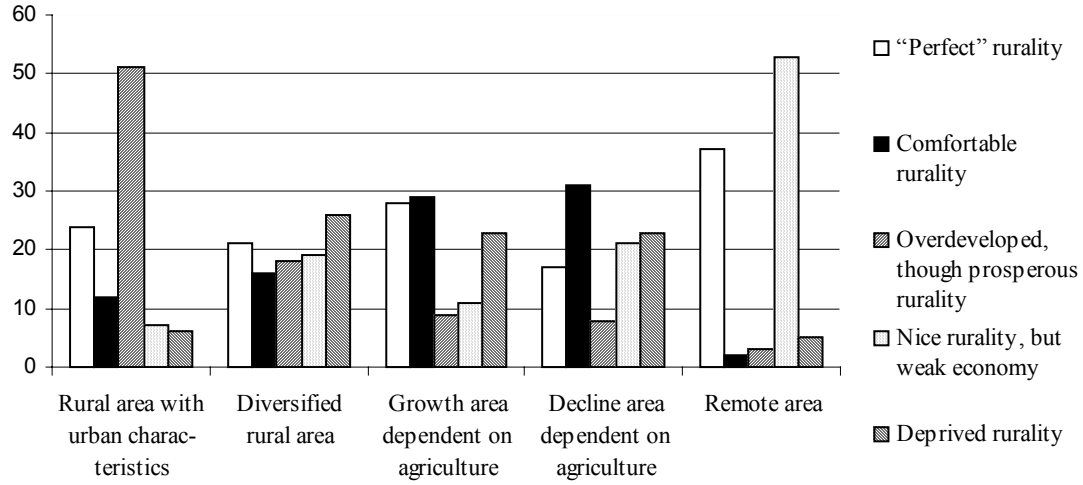


Figure 6.2 Distribution quality of life opinion groups per rural area type (% of respondents within each rural area type)

Overall, about one-fifth of all respondents adhered to each of these opinions, but the variation between the various rural area classes was great (Figure 6.2). Perfect rurality is perceived in every area, though in the remote area the strongest, followed by the two most prosperous areas (growth area dependent on agriculture as well as rural area with urban characteristics). Next, it can be concluded that the more 'urbanised' an area gets, the more local people perceive overdevelopment problems. Especially in rural areas with urban characteristics half of the population thinks the area is facing too many overdevelopment problems. One third of both agricultural areas feel live is comfortable enough. The opinions on an area having poor rural conditions was greatest in the diversified rural areas and the rural areas dependent on agriculture and much lower in the rural areas with urban characteristics and remote areas. For the urbanised area this is logical, as economic activities are flowering. Although it is an unexpected result for the remote area, it seems explainble from the perspective that the decline period has finished and the area is recovering again. That the remote area is not free from any problems can be observed by the fact that half of the population thinks the quality of life is nice in terms of environment and rural values, but with a very weak economy.

The opinions regarding the overall quality of life did not differ much between community inhabitants and landowners in general (Table 6.1). However, within the category of landowners clear differences were found between farmers and people owning forest land with farmers observing more quality of life problems than forest owners. For example, farmers perceive more overdevelopment on the one hand as weak economy problems on the other hand.

Table 6.1 Distribution quality of life opinion groups per stakeholder group (% within each stakeholder group)

	Community inhabitant	Farmer (only)	Forester (only)	Farm-forester
"Perfect" rurality	22	23	18	25
Overdeveloped, though prosperous rurality	21	25	18	18
Comfortable rurality	21	12	27	23
Deprived rurality	17	15	16	17
Nice rurality, but weak economy	19	25	20	17

6.2.3 Perspectives on rural futures

In addition to the perspectives on the present quality of life, also the future perspectives for rural areas are of importance for understanding the local notions about the scope for rural development. The ways in which a rural locality should develop is highly dependent on the commitment of the local people. The respondents were therefore asked what kind of future they would prefer their locality to develop to. They could tick at maximum three future alternatives (see Table 6.2).

Table 6.2 Most preferred future in order of decreasing importance (% that ticked option)

In this locality in the future there could be an increase in…	N	%
1. Employment opportunities	3380	49
2. Organic farming	2875	41
3. The availability of services	2318	33
4. Numbers of visiting tourists	2007	29
5. Scenic beauty of landscape	1770	26
6. The amount of nature and wildlife areas	1698	24
7. Strength of bond / friendship between neighbours	1665	24
8. Industrial activities	1624	23
9. Intensive factory farming	1590	23
10. The amount of forests	1354	20
11. Built-up areas	828	12

It can be concluded that the most preferred future options should aim at an increase in employment opportunities and organic farming. Secondly, an increase in services and visiting tourists is considered to be important as well.

On the basis of a cluster analysis six groups of respondents indicating their preferred future developments could be identified:

- *secondary sector economy development*: increase in industrial activities, employment opportunities, availability of services (25%)
- *tourism development*: increase in the number of visiting tourists (20%);
- *agri-business development*: increase in intensive factory farming and employment (14%)
- *organic-economy development*: increase in organic farming and employment (13%)
- *ecological development*: increase in organic farming, amount of nature, landscape scenic beauty, and to a smaller extent forests (19%), and

- *traditional values development*: increase in services and in friendship and strength of bond between neighbours (10%).

The agri-business and secondary sector development options can be equated with the traditional approach of agricultural modernisation, whereas the tourism, ecological and organic-economy development can be equated with the more recent considerations of rural restructuring. Traditional values development could not be categorised in a similar way.

When looking at the various rural area classes, that the more remote the area gets, the more prevalent is the agricultural modernisation perspective (Figure 6.3). In all areas the restructuring perspective (47-59%) predominates over the modernisation perspective (29-46%), although in both agricultural areas and the remote area the differences are not so strong. More than 50% of the urban and diversified societies ask for restructuring perspectives, with one third (on average) preferring modernisation. In the remote area there is a very strong wish for an increase in agri-business activities (38%), whereas in both agricultural areas groups of people prefer an increase in either agri-business activities (on average 17%) or secondary sector development (on average 25%). The latter development is also equally desired in the diversified area.

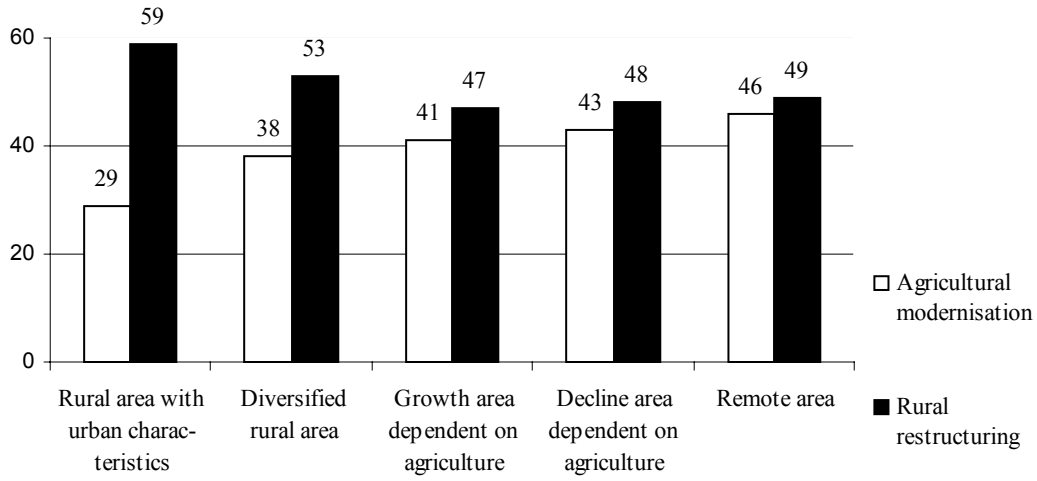


Figure 6.3 The share of agricultural modernisation of rural restructuring approaches as a future development option per rural area type (%)

It is remarkable that landowners share more or less the same opinions as community inhabitants. Also amongst the landowners the restructuring perspective (50-57%) predominates over the modernisation perspective (37-41%); only in the agricultural growth area, the agricultural modernisation perspective predominates (51%) over the rural restructuring perspective (37%). In the diversified rural area, the decline area dependent on agriculture and the remote area even a somewhat larger proportion of the landowners is in favour of rural restructuring than the community inhabitants are. It might be that landowners recognise at first hand the difficulties facing farming in the future and have more faith in restructuring than modernisation. Community inhabitants, on the other hand, may have a

more nostalgic view of modernisation, keeping the farmers as caretakers of the countryside and associating restructuring with great change and deterioration in traditional rural lifestyles.

When looking at the opinions on rural restructuring in more detail, it becomes clear that the most preferred approach to restructuring varies between the different rurality classes: in rural areas with urban characteristics ecological development is preferred, whereas in diversified, agricultural decline and remote areas tourism development is most highly appreciated. Tourism is likely perceived as a direct cash injection to the more rural economies whereas it is more difficult to improve economic welfare on the basis of ecological development alone.

The opinions on how to restructure the rural conditions also differ between stakeholders. In general landowners give a higher priority (23%) to agri-business development than the community average respondents, and a lower priority to secondary sector economic development (20%) and ecological development (17%). Especially in urbanised areas the differences in opinions between community inhabitants and landowners is quite noticeable.

6.2.4 Conclusion

There exist a strong variety of rural identities in Europe. When considering these rural identities one should consider that there exists no objective concept of rurality; it always needs to be considered within the perspective of for example a country. This especially accounts for rural areas with urban characteristics, such as high population densities, location of towns, the degree of industrialisation and the importance of the tertiary sector. Rural identities are thus self-defined on the basis of perceived strengths and values of the quality of life. The Multifor.RD data indicate that people from rural areas interpret the quality of life in their area foremost by a combination of social concerns regarding ‘over-development’ and ‘rurality’, socio-economically related concerns regarding ‘services’ and ‘weak economy’, and by environmental concerns on ‘nature and landscape quality’. Between various types of rural areas important differences in opinion about the quality of life in their community does exist. Such differences can also be found between different stakeholders. The average opinions between community inhabitants and land owners do not show much indication. But between various categories of land owner’s important variations do exist with forest owners appreciating the rural quality of life much more positively than farmers.

When considering rural development, not only the perceived quality of life is of importance, but also the perspectives on rural futures. The majority of the Multifor.RD respondents think that the rural future should be based on a restructuring of the rural conditions in which organic-economy development as well as tourism and ecological development should play a major role. A minority adheres to a more traditional vision of rural modernisation based on the development of primary and related secondary sector economy. This was the case in all rural area types as distinguished by the project, even in the remote areas. However, the preferred content of rural restructuring varied between the different rurality classes: in rural areas under urban influence it is predominantly focused on environmental concerns, while in the more remote areas it is predominantly focused on tourism development.

No major differences between community inhabitants and landowners regarding the need for rural restructuring was found. Only in the growth area dependent on agriculture landowners favoured rural modernisation over rural restructuring. However, between different categories of landowners important differences in perceptions regarding the preferred futures do exist with farmers being more modernisation focused than forest owners.

6.3 Perspectives on local significance of forests[16]

In order to understand the discourses on local significance of forests, again the elements 'conception of local forests', 'contribution of local forests to quality of life' as well as 'the role of forests in preferred rural futures' will be discussed. The following issues will be described in this section:

- *conception of local forests*: (i) the opinions about the amount of forest as well as (ii) recreational use and public access to the local forests will be discussed
- *contribution of local forests to quality of life*: (iii) the perceived qualities of forests and (iv) opinions about the roles of forests
- *role of forests in preferred rural futures*: (v) the preferred forest functions and finally, (vi) the preferred future in respect to forests.

6.3.1 Amount of forests

A first impression on the perspectives on the local significance of forests can be derived from the answers to the questions about the present forest cover in the locality as well as the degree of satisfaction with the amount of forests. Overall, the respondents in the traditional forest areas considered that the amount of forests in their localities was medium to high, whereas the respondents in the afforestation areas felt it was medium. Regarding the satisfaction with the amount of forests, 20% of all respondents have the impression there are too few forests, 72% feel the current forest area is OK as it is and the remaining 8% say there are too many forests. At the European level, therefore, the majority is satisfied with the present forest cover in their locality. As a qualifier to perceptions as to whether the amount of forests in the locality is too little, OK, or too much, respondents were asked if their answers depend upon the type of forest (for example, broadleaf versus conifer). Approximately 25%

[16] The information in this section is based on the following publications:
(i) Elands, B.H.M. and T.N. O'Leary (2002). The myth of forests; a reflection of the variety of rural identities in Europe and the role of forests in it
(ii) T.N. O'Leary and B.H.M Elands (2002). Anyone for more forests; current perspectives and future expectations on afforestation and forest functions across Europe.
Both are published in: Wiersum, K.F. and B.H.M. Elands (eds), *The changing role of forestry in Europe: perspectives for rural development*. Nature Forest in Society 2002-2, Wageningen University, Wageningen, the Netherlands. The last publication is:
(iii) Elands, B.H.M., T.N. O'Leary and K.F. Wiersum (2003). *What do urbanised and rural societies expect from their forests? Comparative research of public demand and support for future forests across Europe.* Proceedings IUFRO European Regional Conference 'Forestry serving urbanised societies, Copenhagen, Denmark, August 27-30, 2002.

of respondents ticked the answer ‘yes’, highlighting that an expression for additional or fewer forests is, for many people dependent upon what type of forest is on offer – yes, perhaps more forests, as long as they suit our interests and needs.

The case study areas which are most inclined to feel there are too little forests in their locality are the afforestation areas of the Netherlands and Hungary (approximately 60% each). The next two highest areas in this respect are also afforestation areas in both Denmark and Spain (approximately one third of both populations). Four case study areas are relatively high in the proportion of respondents who feel there are too many forests (18% to 37%), namely both areas in Greece, the traditional forestry area in Austria and the afforestation area in Ireland. In the above Austrian area, there is currently a campaign underway called “more sunshine for our villages”, highlighting local concern about the perceived encroachment of forests upon residential areas. These data indicate that there is a clear tendency that people in afforestation areas more often feel that there are too little forests in their locality than people in traditional forest areas.

At the rural area type level, diversified locations are those which most feel there are too few forests (35%), followed by urbanised areas (19%). The area type in which people mostly feel that there are too many forests is the agricultural area in decline (17%). This is relevant in both the traditional and afforestation areas: in the traditional areas, the overwhelming amount of forests is eroding the agricultural character of the area and in the afforestation area the dominance of plantation forests established by outsiders is perceived as threatening the self-control and identity of the area.

As indicated by these findings, the question whether people feel there are too few / many forests is strongly related to the perceived present forest cover, which in turn is related to whether the area has a long forest history (traditional area) or a short forest history (afforestation area). In Table 6.3, the perception of the present forest cover as well as the satisfaction with it is depicted for each rural area type and forest history.

Table 6.3: Perceptions about the present forest cover in the locality compared to the satisfaction with it, presented per rural area type and traditional/afforestation area

	Rural area type				
	Rural area with urban characteristics	**Diversified rural area**	**Growth area dependent on agriculture**	**Decline area dependent on agriculture**	**Remote area**
Traditional forest area					
- present forest cover	2.4	2.3	*	2.3	2.7
- satisfaction about amount of forests	2.1	1.9	*	2.0	2.0
Afforestation area					
- present forest cover	2.0	1.8	2.2	1.9	*
- satisfaction about amount of forests	2.3	2.5	2.1	2.0	*

Present forest cover: 1=low, 2=medium, 3=high.
Satisfaction amount of forests: 1=too much, 2=okay as it is, 3=too low
** = no data available*

People in the traditional areas all tend to feel that the amount of forests is medium to high, compared to the afforestation areas where the perception of forest cover tends to be closer to medium. Next, it can be concluded that all traditional forest areas are satisfied about the amount of forests, despite the varied perception of the present forest cover. With respect to the afforestation areas, there is a tendency to be slightly dissatisfied ("too low") with the amount of forests. People from diversified areas are the most dissatisfied taking into account their perception of the present forest cover. Although the forest cover in urbanised afforestation areas is perceived as being medium, residents still think they need more forests. Not so in the declining afforestation areas, however, where people generally feel that the current cover is 'okay as it is'. Further details of the satisfaction with the amount of forests in each rural category class is presented in Figure 6.4.

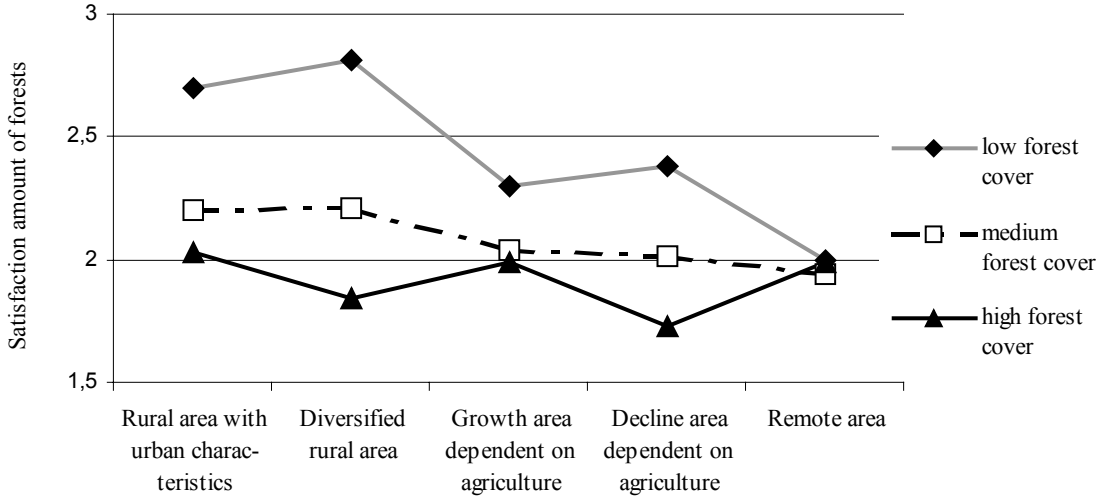


Figure 6.4: Satisfaction with present amount of forest cover (1=too much, 2=okay as it is, 3=too little) related to the perception of the present local forest cover per rural area type

Figure 6.4 demonstrates:

- If people feel the present forest cover is high, there is hardly any difference between the different areas. All rural residents are more or less satisfied with the present amount of forests; some of them even thinking there are too many forests (diversified and decline areas).
- When people perceive that the amount of forests is either low or medium, then urbanised areas demonstrate a greater demand for more forests, decreasing with increasing rurality. People in more urbanised locations, therefore, tend to be more concerned about low or medium forest cover, expressing a preference for an increase, whereas those living in more rural areas tend to be more satisfied with the level of cover as it is, expressing no great desire for more.

6.3.2 Recreational use and access to forests

The most immediate relation between consumers and producers concerning forests and forestry occurs via recreation. Therefore, in this section two topics will be discussed: the actual recreational use of the forests and perspectives on public access to forests. They will be explored in general terms, as well as for differences between consumers (community inhabitants) and producers (landowners) and between urban and rural societies.

Recreational use of forests

Respondents were asked to indicate how often they visited forests for recreational purposes in the year 2000, whether daily, weekly, monthly, 2-4 times, once or never. On average across the entire survey population, people visit forests almost monthly and at least one quarter visit forests on a weekly basis. Forests in Europe are frequently visited, therefore. There are no big differences in recreational visits to forests between community inhabitants and landowners. Some strong relations exist, including the following:

- The amount of visits is linearly correlated to the distance people live to the nearest forest. Those who live immediately besides a forest go either weekly or monthly and those who live further than 2 km away from the nearest forest go only 2-4 times a year.
- The attachment of people to their local forests is strongly correlated to their behaviour: the more attached people are, the more often they visit the forests.
- Visiting frequency is negatively correlated to the opinion that forests in the locality offer very few possibilities for recreation and sports: the more often people visit forests, the stronger they disagree with such a statement. The opposite is true as well, namely that the less frequently people visit forests the more they are dissatisfied with the opportunities for recreation and sports.

There are some differences along the urban-rural societal continuum (see Table 6.4). First of all, people from the remote area visit their forests the most, which in this case is not surprising as almost all people live next to or even within a forest. Next, the most prosperous societies (the urbanised and agricultural growth areas) visit the local forests much more frequently than the diversified and decline areas. In the afforestated urbanised and decline areas, the recreational use of local forests is less, most likely due to the fact that forests

there may not be as mature overall as those in traditional areas and therefore do not offer the same recreational opportunities. The lowest visiting frequency of all is found in the agricultural decline area, where most forests are planted for production and therefore have become the symbol of deterioration of the area (O'Leary et al., 2002).

Table 6.4: Frequency of outdoor activities in local forests per rural area type and traditional/afforestation areas (all respondents; N=6,781; weighted for dissimilar sample sizes)

	Rural area type				
Recreational use	**Rural area with urban characteristics**	**Diversified rural area**	**Growth area dependent on agriculture**	**Decline area dependent on agriculture**	**Remote area**
Traditional forest area	4.0	3.3	*	3.4	4.4
Afforestation area	3.7	3.4	4.1	2.3	*

Mean visits: varies from 1=never, 2=once, 3=2-4 times a year, 4=monthly, 5=weekly, 6=daily
** = no data available*

Perspectives on public access to forests

The issue of public access to forests for recreation is highly topical in Europe presently, most especially as to whether the public should be allowed to visit privately owned forests freely given that most forests are planted with substantial support from the public purse in terms of grants and premiums. The Multifor.RD quantitative survey thus sought to investigate this issue and some of the key results are presently below.

Looking firstly at the general population level and comparing just between community inhabitants and landowners, it can be seen from Table 6.5 that there exists much greater support for freedom of public access to public owned forests (e.g. State owned forests) compared to those forests which are privately owned (irrespective of respondent type). There thus appears to be some appreciation that private forest owners have a greater right to limit free public access to their forests, whereas public forests should be openly accessible to all for recreational purposes. Nevertheless, some 60% (ie. the majority) of all respondents support the idea of privately owned forests being made freely available for public recreation. Forest owners should realise, therefore, that there exists a considerable expectation among the public for access to their forests for recreation.

Table 6.5: Support for freedom of public access to private and public/State owned forests for recreation (%)

Support for public access to:	**All**	**Community Inhabitants**	**Landowners**
privately owned forests	60	61	57
public owned forests	89	90	84

Considering differences between community inhabitants and landowners, it can be seen that the latter group is less supportive of free public access to both private and public owned forests forest. Landowners are thus more cautious regarding allowing members of the public to freely visit land for recreation, whether that land is privately or public owned. This result is not unexpected, however, given that landowners may wish to receive payments for services and amenities provided to the public.

Opinions relating to the above issue among forest owners is also worth considering, given that they stand to be most affected by policies on public access to privately owned forests. Foresters (only) are found to be as equally supportive as community inhabitants for freedom of access to both private and public owned forests (59% and 90% respectively). It would appear, therefore, that this group do not express any great concern over possible access to their forests compared to community inhabitants. Not so with forest-farmers, on the other hand, where the level of support for free public access to private and public owned forests is considerably less (44% and 84% respectively). Forest owners who also are engaged in farming, therefore, are likely to be much less supportive of policies aimed at opening up privately owned forests for public recreation, compared to their forester (only) counterparts. This may reflect their understanding that services such as recreation and amenities provided to the public should be paid for.

Table 6.6: Support for free public access to private and public owned forests per rural area type (all respondents; %)

	Rural area type				
Support for public access to:	**Rural area with urban characteristics**	**Diversified rural area**	**Growth area dependent on agriculture**	**Decline area dependent on agriculture**	**Remote area**
privately owned forests	50	54	65	66	32
public owned forests	90	90	86	87	70

Moving from the general European level, attention will next be focused at different rural area types and the differences or similarities therein (Table 6.6). Firstly, we can see that rural area typology does not influence the fact that there is much greater support for freedom of public access to public owned forests than private forests. Neither does rural area typology influence the fact that landowners are less supportive than community inhabitants of allowing the public free access to either private or public owned forests (not in the table) and that in general the differences between landowners and inhabitants are not very large. The exception to this trend concerns landowners in the agricultural growth area, who are much less enthusiastic about public access to private forests than inhabitants are (49% vs. 71% respectively).

Secondly, comparing across rural area types in relation to private forests, respondents in the two areas dependent upon agriculture are the most supportive of allowing free public access, whereas the remote area is least supportive. The two most urbanised areas are somewhere in between. It can be concluded that expectations regarding open access of privately owned forests increase with increasing rurality. The remote area is, however, an exception on this. The reverse can be concluded for support for general access to public owned forests: the mean level of support decreases with increasing rurality. The more urbanised a society gets, the more they appreciate that public forests are for their enjoyment.

6.3.3 Contributions of forests to quality of life

In general, the respondents of all case study areas are very positive about the forests in their locality. Forests contribute in particular to the landscape identity of the area and the environmental and nature quality. People tend to be more ambiguous with respect to the economic benefits of the forests and the opportunities they offer for leisure and recreation. To a smaller extent people don't see that forests contribute to a characteristically different landscape and that they have cultural and historical value. Moreover, one in five respondents doubt the contribution of forests to biodiversity purposes. On the basis of these findings, it is clear that the perspectives on the roles of forests in respect to the quality of life are not unequivocally positive.

In order to understand the diverse perspectives on the role of forests a further analysis of the opinions on the role of forests in the research areas was made. A factor analysis revealed three *local forest quality dimensions*. The role of forests in constituting quality of life are apparently judged on either their 'benefits' in diverse respects, their 'harmfulness' in equally diverse respects, or their 'neutral position':

- *Forests are beneficial*: they provide good incomes and employment for local people, create a landscape which is characteristically different from other places, are of important historical or cultural value, protect our air, water and soil, and improve the attractiveness of living. On the average this dimension is valued at 3.6[17]. One in ten respondents disagree with this dimension (< 2.7)
- *Forests are harmful*: forests are here against the wishes of local people, create a sense of isolation between neighbours, deteriorate the beauty of the landscape, and are a threat for other land use activities such as farming. On the average people disagree with it (value 2.0). Only 5% of all the respondents agree with this dimension (>3.3).
- *Forests have nothing to offer*: they are very poor in terms of the variety of plants and animals and they provide very few opportunities for recreation and sports. People tend to disagree with this statement somewhat (value 2.6), however, more than 20% of all the respondents agree with this dimension (>3.5).

Although it can observed that forests are highly appreciated for their contribution to the local area in general, we can see that some people do not like forests in every perspective. Especially, their supposed contribution to recreation and biodiversity is questioned by more than 20% of the European residents.

Area differences

The way forests are experienced in each case study area is very different and there is consequently a wide variety in the way forests are perceived as contributing to the local quality of life. These differences cannot be systematically related to the rural conditions, although people in the primary sector areas that are in decline are less enthusiast about the local forests than any other area. Overall, however, Euro-regional and country conditions are more significantly related to the opinions about the role of forests. The German areas, the

[17] The following scale has been used for these items: 1=strongly disagree, 2=disagree, 3=neither disagree nor agree, 4=agree, 5=totally agree.

Austrian areas, the Mediterranean traditional forest areas (Greece, Spain) are judged positively (above the average), whereas the Atlantic afforestation areas of Ireland and the Netherlands perceive their local forests less positively.

It is striking that the negative aspects of forests are mostly felt in the Atlantic countries and in the afforestation areas, whereas the beneficial perception of forestry is expressed especially in the Germanic and Mediterranean countries and in the traditional forest areas. It seems that the shorter the forest history of an area the less benefits are perceived by the local people. The longer the forestry tradition, the more positive forestry is being received (see Figure 6.5).

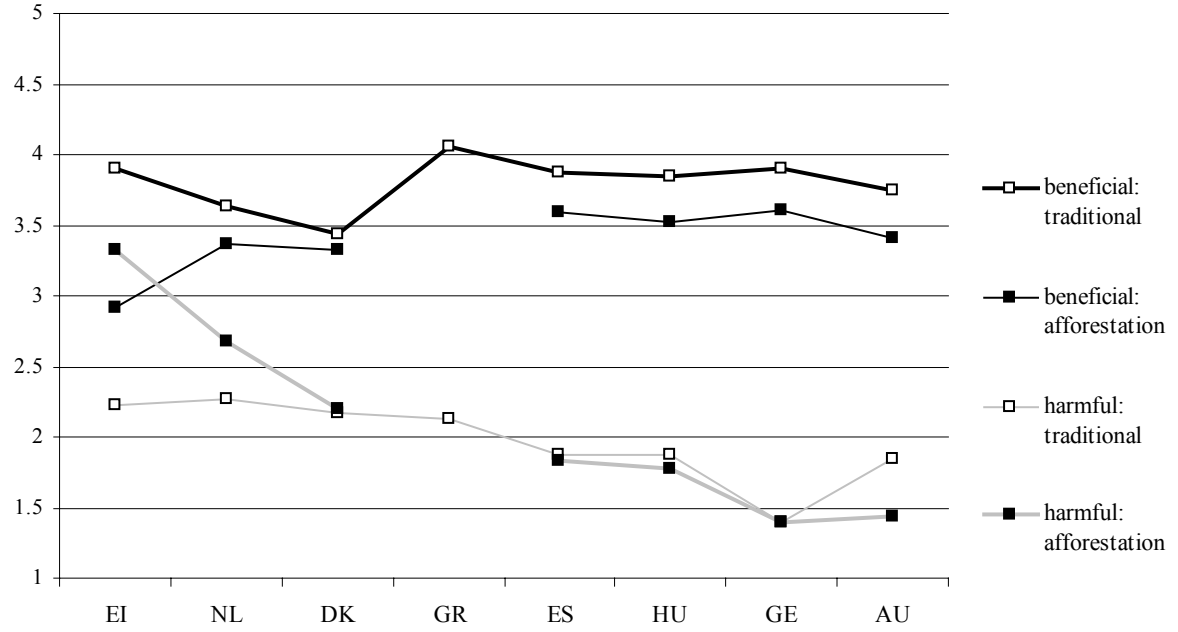


Figure 6.5: Countries and forest tradition with respect to the dimension 'forests are beneficial' and 'forests are harmful' (1=totally disagree, 2=disagree, 3=neutral, 4=agree, 5=totally agree)

In the traditional forest areas, no matter what rural area type, people disagree that forests are harmful for the locality. In afforestation areas, people's opinions are not so constant. It is conspicuous that the decline areas are the most negative about forests. It might be that the new forests do not provide enough economic prosperity according to the local people. On the contrary, they are possibly being developed by outsiders and locals feel they loose control over their own community. To them, forestry releases further decline.

6.3.4 Opinion groups regarding the role of forest to quality of life

When considering the opinion of the contribution of forests to quality of life not only the impact of rurality types was not strong, but also the differences between community inhabitants and the landowners were not very pronounced. On average, inhabitants always agree more on the positive aspects and disagree more on the negative aspects than landowners do. In two types of areas the differences are relatively large. Firstly, in the peri-urbanised areas there is a relatively strong distinction between consumers and producers. This is related to the strong connection between those people who own land and the

inhabitants; a majority of the inhabitants is landowner as well or at least is close family or friend to a landowner. Secondly, in declining rural areas farmers are opposing the foresters, feeling the threat of the afforestation and/or management practices. They consider afforestation, either in the form of an increase of nature and wildlife areas or an increase in forest plantations, as a degradation of land use.

The opinions of the respondents as regards the role of forests to the quality of life was further analysed by means of a cluster analysis. Five forest opinion groups could be identified (names are given by the researchers on the basis of scoring pattern on factors, Figure 6.6):

- *Enthusiasts*: These respondents embrace forests in their locality. They cannot mention one negative aspect about them; 28% of the respondents belong to this group..
- *Moderate enthusiasts***:** This group is mostly positive about forests, although they are conscious of the low economic profits. In addition, they doubt whether forests have a lot to offer in terms of recreational opportunities and biodiversity. This opinion is expressed by 24% of the respondents.
- *Positive realists*: This group also rejects the economic importance of the forests. They have a neutral attitude with respect to the landscape benefits of forests: they don't see the immediate contribution of forests to the creation of a characteristically different landscape and don't agree with that they are of cultural and historical value. They disagree that forests have nothing to offer. 23% of all respondents adhere to this opinion.
- S*ceptics*: this group is aware of the benefits of the forests, even the economic benefits are considered to be important. However, they observe that forests can be a threat for other land use activities, can cause feelings of isolation and can deteriorate the landscape. They doubt whether the forests are planted according to the wishes of the local people. They neither agree nor disagree with the dimension 'forest have nothing to offer'. 14% of the respondents are of this opinion.
- *Adversaries*: these people dislike the forests in almost every aspect: they do not contribute to an attractive living environment, they do not fit in the landscape, and they do not provide any economic benefits. The only thing that forests bring is places for outdoor recreation. This opinion is expressed by 10% of the respondents.

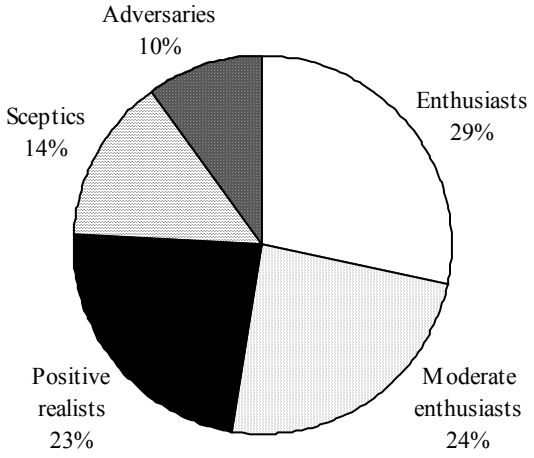


Figure 6.6: Forest opinion groups

Regarding the different stakeholder groups, landowners tend to be somewhat less enthusiast than community inhabitants. This is mainly due to the negative attitude of the farmers, who do not own any forested land. In contrast to the opinions of farmers, forester's owners generally show the same opinions as community inhabitants.

Area differences

It can be concluded that not everyone is of the opinion that forests contribute positively towards the quality of life in the area. The notion that forests are perceived by all as being positive and beneficial is, therefore, a myth. Once again the distribution of these five forest opinion groups cannot be systematically related to the rural area types. However, some strong relations exists between the distribution of these five forest opinion groups and other area characteristics:

- At the forest situation level, three areas have more than 10% of adversaries, these are the afforestation areas of Denmark, Ireland and the Netherlands (13%, 59% and 20% respectively). In contrast, the enthusiasts can be found especially in the traditional forest areas of Spain (64%), Greece (Konitsa: 51%), Ireland (43%) and Austria (39%). Especially the German inhabitants are more modest in expressing their enthusiasm: they have high percentages on the moderate enthusiasts (about 80%). The Austrian and both Danish areas have a more positive realistic attitude towards the forests (about 45%).
- In all countries, except Denmark, Ireland and the Netherlands, more than 50% of the people belong to the groups of (moderate) enthusiasts. The enthusiasts can be especially found in the Mediterranean zone. The adversaries, on the contrary, can be found in the Atlantic countries.
- The latter is caused by the afforestation areas in these countries. People from traditional forest areas are more positive than people from afforestation areas. The latter areas have relatively high proportion of 'positive realists' people: they appreciate the new land use, however, they stay realistic with regard to the benefits forests really bring to their locality in socio-economic terms.
- It is striking that the group adversaries is relatively large in declining areas dominated by the primary sector (18%). Uncertainty about the future felt mostly by farmers in combination with commercial foresters 'planting their land', as is the case in the Irish afforestation area, might cause feelings of alienation and isolation.

6.3.5 Future forest functions

The respondents were not only asked to indicate their satisfaction with the present forest cover, but also to judge 5 potential benefits of local forests by indicating the relative priority of each (1 = low priority, 2 = medium priority and 3 = high priority). The indicated benefits can be divided in two groups:

- Protection, nature conservation and landscape benefits are regarded as top priority (2.8, 2.7 and 2.6 respectively);
- Recreation for local people and business activities, including providing jobs, are valued as medium priority with recreation slightly higher than business (2.4 vs. 2.2 respectively).

Differences between community inhabitants and categories of landowners are depicted in Figure 6.7. Community inhabitants tend to place a higher priority on each of the functions than the landowners. Within the group landowners, forests give relatively high priority to each of the functions, whereas farmers give relatively low priority.

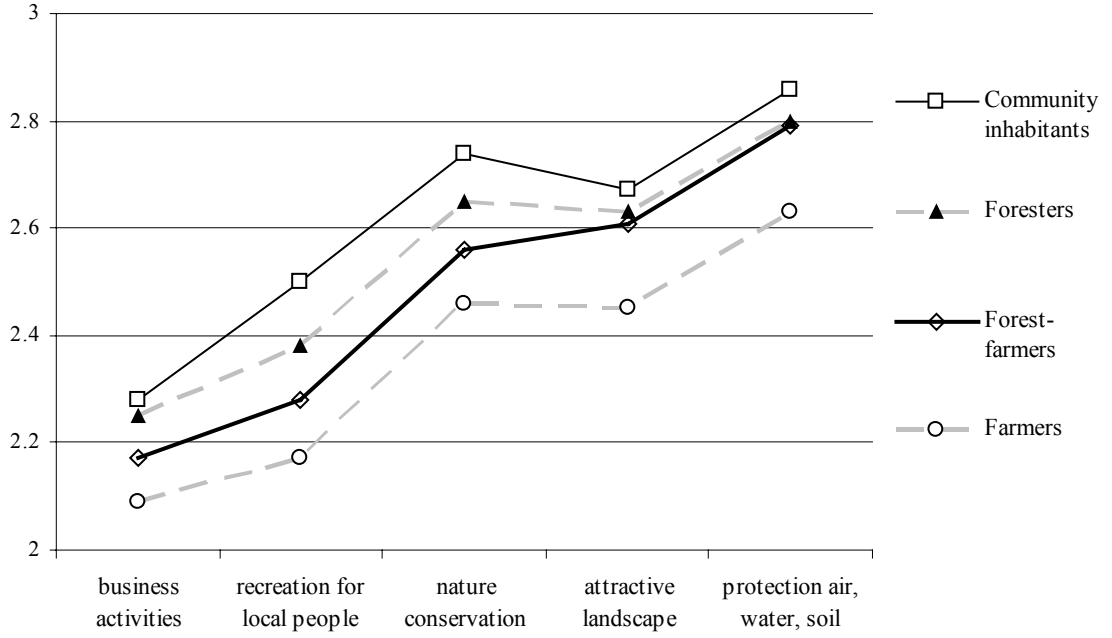


Figure 6.7 Priority of local forests functions as determined by different stakeholders

Although business activities rated lowest, statistical testing indicated that this issue is the most discriminative of the five items considered by the respondents. Respondents who rate business activities as a high priority are significantly more likely to feel that:

- forests provide good employment for local people;
- forests provide good incomes for local people;
- forestry is of high importance to the local economy;
- their local area is significantly occupied by production forestry; and
- grants should be provided to private landowners to plant their land.

The converse in opinions was found for respondents who rate business activities as a low priority. Thus, the perceived priority, which should be placed on forest business activities in the future, is positively related to the extent to which forestry contributes to the local economy of rural areas.

Area differences

Not much difference exists between rural areas with respect to the valuation of forest functions (Figure 6.8). The two most discriminating functions are recreation and business activities. Business activities are regarded as a higher priority in diversified, declining and remote areas compared to the two most progressive area types (urbanised and primary sector in growth), reflecting the higher dependency in the more rural areas upon incomes from forests. The converse relationship is found for recreation: the more prosperous areas attribute more importance to the recreation function than the other area types. Differences between inhabitants and landowners are greatest in the two most urbanised areas, with

much smaller differences in more rural areas. The importance of both nature and recreation increases among landowners with increasing rurality, whereas it decreases for inhabitants.

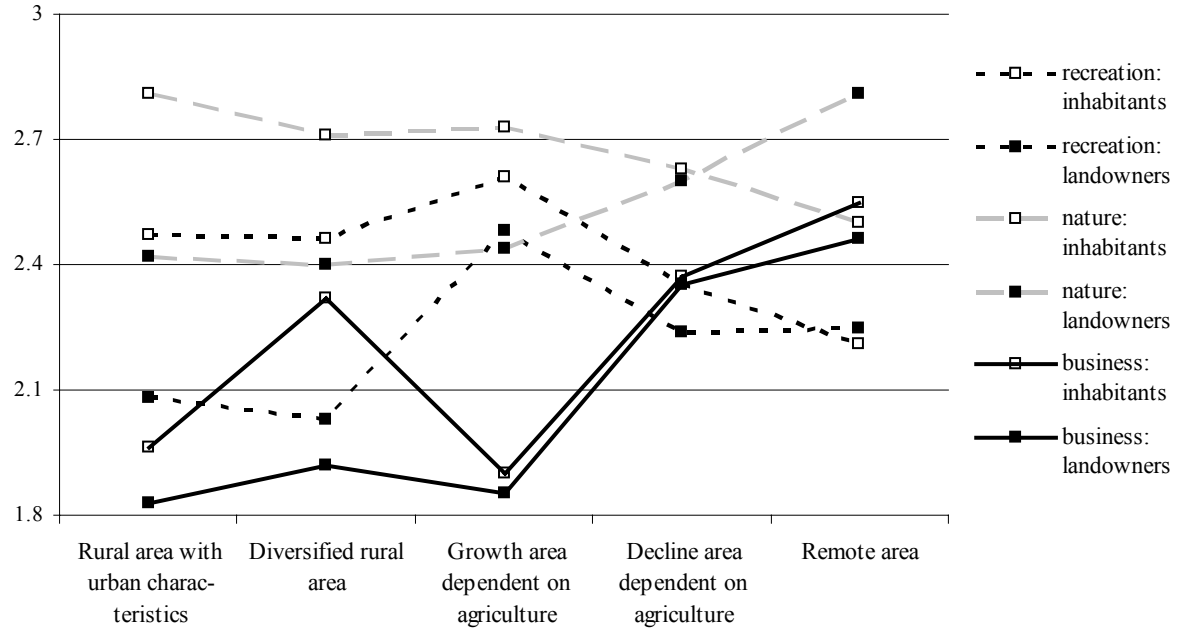


Figure 6.8: Future priority of forest function (1=low, 2=medium, 3=high) of community inhabitants and landowners per rural area type

Also a clear differentiation between the Euro-zones exist, the Mediterranean region rates business activities considerably higher than either Atlantic or Central European. Also between the traditional and afforestation areas the greatest differences in opinions concerned the business activities, they were rated higher in terms of priority in the traditional forest areas.

6.3.6 Future role of forests

When asked about their preferred futures (see Section 6.2.3) respondents did not frequently mention 'an increase in the amount of forests'; only 20% indicated a wish for more forests in their locality in the future. This wish for an increase in the amount of forests forms one of the components of the ecological development option. The other components of ecological development such as an increase in the amount of nature and wildlife, and an increase in scenic beauty score higher than an increase in forest area (Figure 6.9). The demand for more forest is positively correlated with a demand for more nature and wildlife and, to a smaller extent, more organic farming. It is negatively correlated with most of the other future options, of which the most important are: employment opportunities, industrial activities, visiting tourists, intensive factory farming, services and strong bonds/friendship.

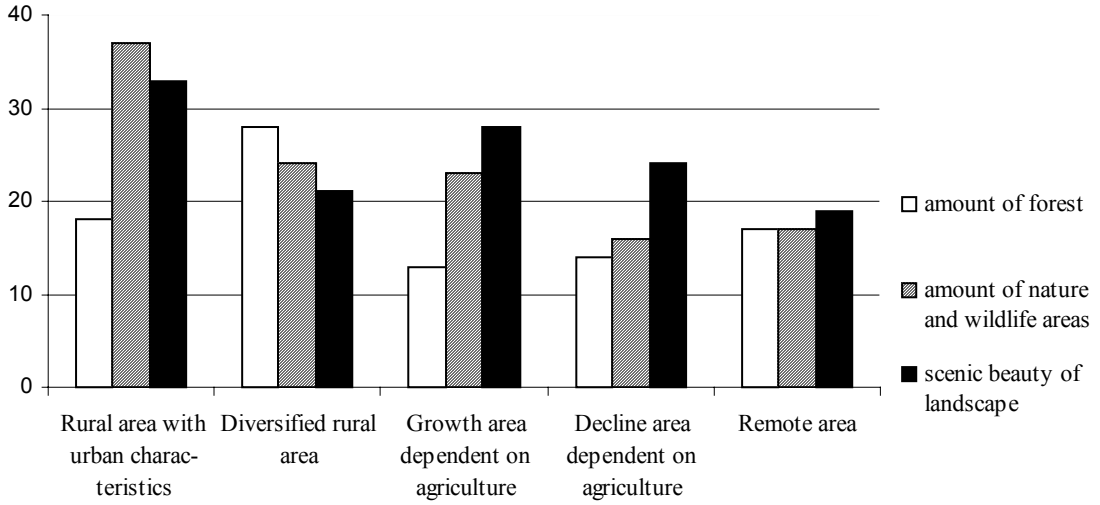


Figure 6.9 Differences in preferences for forest, nature and landscape future options per rural area type (%)

In relation to stakeholder and area characteristics a number of significant relationships with the desire for more forests can be identified:

- Respondents from diversified areas ask much more frequently for more forests in the future (28%) than residents from the other rural areas. Residents from rural areas with urban characteristics prefer more often an increase in nature and wildlife areas (37%) and scenic beauty of landscape than an increase in forests (see table 6.10).
- Respondents from afforestation areas prefer an increase in forests slightly more than respondents from traditional forest areas (23% versus 17%);
- Landowners prefer slightly more often an increase in the amount of forests than community inhabitants (23% versus 18%). The latter group prefers nature and wildlife areas more than the former group (28% versus 19%);
- Within the group of landowner important variations in opinion exist. Forest owners belong more often to the (moderate) enthusiasts than do farmers (54% vs. 42%). The adversaries can be especially found amongst farmers: 22% of them belong to this group, compared to 7% of the other groups of landowners. As most full-time and part-time owners can be found among farmers it is not surprising that they -especially part-time owners- are more critical towards local forests than the hobby and retired owners (on average 21% vs. 9%). Hobby owners are much more positive, however, than retired owners; within the latter group there are a lot of sceptics (20%).

6.3.7 Conclusion

It has become clear that satisfaction with present forest cover is highly dependent upon the forest history of the area and the perception of the present forest cover. People from traditional forest areas and people who feel the present forest cover is high are content with the present forest situation. On the contrary, people from afforestation areas and those who feel the present forest cover is low or medium think their locality needs additional forests. The need for more forests increases with increasing urbanity.

People pay on average a monthly visit to their local forests. The closer their residence is to the forests, the more frequent they go there. There is hardly any difference between respondent type and rural area type. People in traditional forest areas go more often than people in afforestation areas. In general, it can be concluded that there is a much greater support for freedom of access to public owned than for privately owned forest as well as that inhabitants are more in favour of public access to both forest types than landowners. Besides, with increasing urbanity there is a decreasing support for public access to private forests, whereas the reverse is true for public owned forests. It seems that urbanised societies have lower expectations regarding access to private property and more appreciation of public forests for their enjoyment.

Also the overall opinion about the role of the forests in the locality is (very) positive. Nonetheless, there are important differences between stakeholders about the role of forests and 20% of the respondents feel that forest have nothing to offer. In a further analysis of the differences in opinion of stakeholders on the contribution of forests to the quality of life five opinion groups could be distinguished ranging from ‘enthusiasts’ to ‘adversaries’. About one quarter of the respondents were adverse or sceptic about the role of forests in the quality of life in their locality. These people consider that forest can be a threat to other land use activities, do not contribute towards an attractive living environment, do have little economic benefits, or are not planned according to the wishes of the local people. Notably farmers tend to have a lower opinion about the role of forests than community inhabitants and forest owners. The differences in opinions are most pronounced in the peri-urban and diversified forest areas.

Regarding the regional variation in opinions about the local significance of forests, generally respondents in traditional forest areas were more positive than people in afforestation areas. Only in respect to some issues a systematic trend between the opinions on the role of forests rurality classes could be ascertained. Notably in the agricultural decline and remote areas business opportunities were higher appreciated than in the other areas. But overall, the rurality typology was not very clearly related to these opinions. Better relations were found with Euro-zones and countries. This indicates that opinions about the rural significance of forests are to quite some extent influenced by the region or country specific history of forestry rather than by the changes in rural conditions. The findings seem to reflect the great differences in forestry conditions within Europe, e.g. in respect to ownership and access rights

Concerning benefits of local forests, environmental, nature and landscape functions get high priority, whereas business activities and recreation get medium priority. This is irrespective of rural area type and target group. The trend in opinions is in general similar for both community inhabitants and landowners, although the opinions of the landowners generally are less strong than those of community inhabitants. Only forest owners tend to value nature conservation higher than landscape benefits, whereas this is the other way around for community inhabitants and farmers. Interestingly, the forest owners rate the business benefits even lower than the community inhabitants. More specifically, it is interesting to observe that the more ‘rural’ an area gets, the higher priority that is put on nature and

recreation by landowners, whereas the lower priority by inhabitants. Besides, inhabitants of the peri-urban and diversified areas attach surprisingly more priority to nature conservation than to recreation. At the same time, however, these inhabitants value recreation much higher than landowners.

Forests play a minor role in the preferred future development of rural areas. The study indicates that forests are mostly perceived by people from rural areas within the perspective of nature and landscape quality and less as an economic activity or carrier of services. Furthermore, people do not connect forests to strong community feelings. Future forest policy at a European level, therefore, should continue to focus attention on the non-material benefits of forests for rural areas. This accounts both for existing forests as well as for 'new' forests. Moroever, future forest policy should acknowledge the need for more forests in urbanising societies.

6.4 Landowners' perspectives and forest management[18]

As indicated by the above data, although the average opinion on local quality of life and the role of forestry in it does not differ much between community inhabitants and landowners, there do exist several differences in perspectives on rural futures between these two stakeholder groups. As discussed in Chapter 2 rural production processes are often considered as a major characteristic of rurality and the landowners are therefore a major element in the shaping of rural identity. Consequently, when assessing local perspectives on rural development it is important to give specific attention to the perspectives of the landowners. First of all, the trends in landownership and perspectives of landowners on the futures of their rural enterprises will be discussed. Next, this Section will highlight the management objectives of forest owners as well as the opinions of landowners on afforestation on their own lands.

6.4.1 Differentiation in landowner categories

It should not be assumed that all landowners have the same perspectives on rural conditions and rural development. Indeed, as discussed in Section 6.2.1, when looking at the opinions about the quality of life in the research areas, major differences were found within the category of landowners rather than between community inhabitants and landowners.

[18] Section 6.4 is based on:
(i) Wiersum, K.F., B.H.M. Elands and T.N. O'Leary (2003). *Landowners perspectives on the future of rural Europe, consequences for farm forestry*. In: Proceedings International Symposium Contributions of family-farm enterprises to sustainable rural development, Gengenbach, Germany, 28 July – 1 August 2002.
(ii) O'Leary, T.N. and B.H.M. Elands (2002). Anyone for more forests? Current perspectives and future expectations on afforestation and forest functions across Europe. In: Wiersum, K.F. and B.H.M. Elands (eds), *The changing role of forestry in Europe: perspectives for rural development*. Nature Forest in Society 2002-2, Wageningen University, Wageningen, the Netherlands., p. 51-72.

Consequently, it is of interest to assess the differentiation in landowners in more detail. Initially, three categories of land owners were distinguished:

- Farmers, land owners with only farming land (39%, N=938);
- Forest-farmers, land owners with both forest and farming land (52%, N=1259)
- Foresters, land owners with only forest land (9%, N=209).

Table 6.7 gives the percentages of each landowner type per rural area type. In the diversified rural area farmers predominate over forest-farmers, in the semi-urbanised areas farmers and forest-farmers are more or less equally distributed, whereas in the three other categories forest farmers are more numerous than farmers. Only a small proportion of the respondents consists of foresters; their percentage is highest in the agricultural area in decline. As the research took place in areas with forests being present, the precise distribution of the different landowner categories should not be considered as being representative for Europe. Nonetheless, the comparative trends between the various rurality classes indicate how in general the importance of specialised farmer enterprises decreases when going from diversified rural areas to remote areas, whereas the importance of integrated farm forest enterprises increases. Interestingly, in rural areas with urban characteristics the importance of forest farmers increases again when compared to specialised farmers.

Table 6.7: Distribution of landowner type per rural area type

	Rural area type				
Landowner type	**Rural area with urban characteristics**	**Diversified rural area**	**Growth area dependent on agriculture**	**Decline area dependent on agriculture**	**Remote area**
Farmers (only)	47	60	33	26	11
Forest-farmers	48	34	61	60	86
Foresters (only)	5	6	6	14	3

Activity level

The landowners vary in the degree to which they are economically dependent on their landholdings and to the degree to which their daily activities are dependent upon their property. Depending upon the landowners' employment status four types of landowner activity levels were distinguished (Praestholm, 2002):

- *Retired landowners* (25%): one quarter of all landowners are retired;
- *Hobby landowners* (35%): the largest group of landowners do not define themselves as a professional farmer or forester;
- *Part-time landowners* (9%): a small portion of all landowners are employed as farmers/foresters but have off-farm duties as well;
- *Full-time landowners* (31%): these landowners are full-time engaged with their enterprise; they are only employed as a farmer and/or forester.

No statistically significant relations between the employment status and the rurality classes were found. However, a clear relation between the type of landowner and his activity level exists (Figure 6.10). It is remarkable that only 40% of all landowners are fully or part-time engaged in land-use activities, while 60% can be classified as hobby owners or as retired. This clearly illustrates the fact that rural land ownership nowadays is not synonymous with an

exclusive engagement in primary production processes. Generally, farmers and forest-farmers have a fairly equal activity level with about 40% of them being (part-time) engaged in primary production, and 60% being either a hobby farmer or retired. Interestingly, farmers tend to be engaged more often in an additional part time activity than forest farmers. The fact that forest-farmers show the highest degree of full-time farming may be caused by the fact that such integrated farms are often located in the lesser physically favoured and relatively more remote areas where options for alternative activities are relatively low.

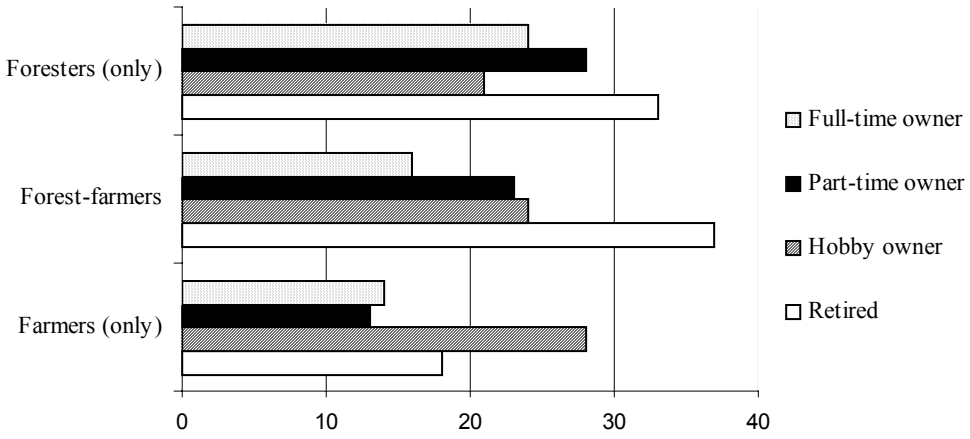


Figure 6.10: Distribution activity level per landowner type (%)

Owners of only forest lands show a different picture, wherein the percentage of retired or hobby owners is 75%, and only 25% are partly (only 3% of respondents) or fully engaged in forest management activities. This finding indicates that forest ownership distribution does not reflect a similar pattern to ownership of agricultural lands. The fact that a higher percentage of forest owners compared to owners of agricultural lands are retired or manage their land as a hobby, suggests that private forest lands are not primarily valued for optimisation of production, but rather as family lands with an important emotional value. Indeed, several studies have indicated that notably small forest owners value their forests primarily for amenity and emotional reasons rather than for productive reasons (Van der Ploeg & Wiersum, 1996).

Place of residence

Between the various categories of landowners occurs not only a differentiation in their activity level but also in their place of residence. The full-time and part-time landowners live mostly in the locality; on average just 2% live outside the locality. This is in contrast with the retired landowners and the hobby farmers, of which 11% and 8% respectively live outside the locality. Once again, there is a big difference between farmers and foresters regarding the location of residence. Whereas 16% of the retired forest owners and 11% of the hobby forest owners do not live in the community where their forests is located, only 3% of the (exclusively) farmers who are retired or hobby owner live elsewhere. This finding illustrates the tendency of private forest ownership increasingly becoming characterised by ‘absentee’ land ownership. The value systems of the ‘absentee’ forest owners and hobby forest owners engaged outside the primary sector may well reflect more ‘urban-based’ values rather than the traditional rural values (Kvarda, 2002; Schraml et al., 2002)

6.4.2 Landowners' prospects for the future of their enterprises

When considering the special position of landowners in shaping rural identity and rural development, a second major point of consideration is what their opinion is regarding the future prospects of their farm and/or forestry enterprise. In order to get insight into these opinions, three types of information was collected. The landowners were asked to indicate their perspective on the prospect of farming in general, on land mobility and on farm development options.

Farming prospects

When asked to describe the future prospects of their farming enterprise, 19% of landowners indicated that the prospect was 'progressive', 57% stated the prospect as 'stable', and 24% mentioned the prospect as 'declining'. The country in which landowners are most optimistic concerning future prospects (i.e. high proportion of progressive and low proportion of declining) is Spain[19], whereas the most pessimistic farmers (i.e. low progressive and high declining) are located in Greece, Germany and the Netherlands. There is no statistical difference in opinions between the different landowner categories, such as between exclusively farmers and forest-farmers. However, several clear differences emerged between the different landowner activity levels as indicated in Figure 6.11. The highest percentage of progressive prospects occurred amongst full-time farmers, the highest percentage of stable prospects amongst part-time farmers, and the highest percentages of decline prospects amongst retired and hobby farmers.

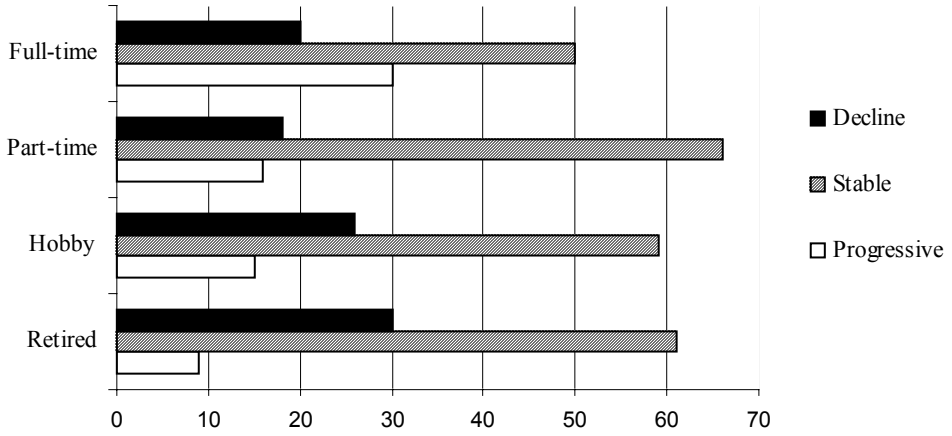


Figure 6.11: Prospects for future farm per landowner activity level (%)

Regarding rural area type, the most optimistic landowners are located in the remote area (no further decline is possible), whereas those in primary sector areas in decline are most pessimistic. In between are the three more urbanised and growth areas, among which there is very little difference (Table 6.8).

[19] The Spanish research team suggest that the reason for the apparent optimism is that farmers who experienced decline have already left the rural areas

Table 6.8: Prospects for future farm per rural area type

Prospects future farm	Rural area type				
	Rural area with urban characteristics	Diversified rural area	Growth area dependent on agriculture	Decline area dependent on agriculture	Remote area
Progressive	21	21	23	12	31
Stable	54	56	58	59	64
Decline	25	23	19	29	5

Land mobility and farm development options

In view of the different perspectives on farming prospects, it is not surprising that a variety of opinions on the development options of the farm exist. Such developments options may be related to either changes in farm size or changes in farming activities:

- *Changes in farm size*: Many landowners indicated that they were planning to change the size of their holdings. About a quarter of the landowners plan to sell or rent land to others (12% and 24% respectively); a somewhat bigger percentage plan to extend their holdings through buying or renting land from others (33%).
- *Changes in farming activities*: About one-fifth of the landowners indicated that they wanted to change their land-use activities in the future, either by planting forests (21%), developing agri-tourism facilities (13%), or to let land return to nature (19%).

The changes in land size and farming activities are related to the type of landowner, their activity level, the future prospects for their farm as well as in what type of rural area their property is located. Generally, full-time farmers and land owners with a progressive future prospect want to extend their land holdings, notably in peri-urbanised and agricultural growth areas. In contrast, retired farmers and landowners with a future prospect of decline want to sell or rent out their lands. Forest farmers feature importantly in this landowner category.

6.4.3 Management objectives of forest owners

In addition to the question to all respondents about their opinion on the priority in future benefits of forests, the landowners were also asked their opinions regarding the objectives for maintaining their forests by indicating the level of importance they attribute to 9 diverse management objectives. These objectives regarded the functions that are usually identified in forest policies, but excluded more personal objectives such as satisfaction in maintaining forests as family heritage. Subsequent factor analysis identified three main functional management categories, i.e. nature and landscape, economy and personal use (Table 6.9).

In almost all case study areas the nature and landscape group scored the highest of the three categories. The economy group, on the other hand, scored the lowest in half of the case study areas. Thus, forest owners generally expressed the highest regard for nature and landscape functions, followed by financial reward and, lastly, use of the forest for personal interests. This trend pertains to all classes of forest owners (retired, ‘hobby’, part-time and full time). Only ‘hobby’ owners are marginally more interested than others in nature and

landscape, and full-time owners are marginally more interested than others in economy. Economy of the forest is deemed to be of high importance to just 10% of owners.

Table 6.9: Dimensions of factors pertaining to forest management objectives

Nature and landscape - Enhance landscape scenery - Contribute towards bio-diversity - Protect natural resources - Create nice places for recreation	Economy - Income from wood production - Income from non-timber products and services - Supply of timber for own use
	Personal use - Use for personal hunting - Supply of timber for own use

Following the above factor analysis, all forest owners were classified using cluster analysis as one of the following forest management objectives categories:

- *Indifferent* (36%): these forest owners show a low level of motivation concerning all officially defined forest functions;
- *Environmentalist* (30%): this group of forest owners puts priority upon nature and landscape;
- *Multifunctional* (18%): these forest owners give equal priority to economy and nature and landscape; and
- *Self-interested* (16%): this owner type uses the forest mostly for providing products for their own use.

At the European level, therefore, the highest proportion of forest owners are indifferent, closely followed by environmentalists. Multifunctional and self-interested foresters comprise the lowest and approximately equal proportions. In Finland, Karppinen (1997) also identified four forest owner types similar in some respects to those found in the Multifor.RD study, i.e. “multi-objective” owners who value both the financial and amenity benefits of their forests, “recreationists” primarily interested in non-timber and amenity aspects, “self-employed owners” who value regular sales and income as well as employment and “investors” who regard their forest as a source of economic security. The most striking difference between Karppinen’s classification and the Multifor.RD classification is the financial or economic thread which connects three owner types in the Finnish study compared to just one type in the Multifor.RD study.

Regarding forest management objectives no clear differentiation was found between the two landowner groups of forester and forest-farmers. However, a significant differentiation in the prevailing objectives was found according to the landowner activity level:

- Almost half of the retired forest owners belong to the indifferent category (43%), compared to one third of the other forest owners;
- 36% of the hobby owners belong to the environmentalist category, as compared to an average 26% of the other forest owners;
- Part-time owners score relatively high (27%) in the self-interest category, followed by full-time owners (21%), and 13% hobby or retired forest owners

- There is not much differentiation in adherents to the multifunctional category: of the full-time forest owners, hobby owners and retired owners respectively 19%, 18% and 17% belong to this category. Only part-time owners score lower: 'only'14%.

Also several other variables were found which influence the forest management objectives, i.e. size of forest holding, income, how the forest was obtained and the attachment to the forest.

Regional differentiation in management objectives

Between the different rurality classes a clear differentiation was found in the distribution of the various forest management objectives categories (Figure 6.12). The highest proportion of multifunctional foresters occurs in the agricultural decline area as well as in remote areas. In these areas the contribution of forestry to the local economy is likely to be more critical than elsewhere. However, in the remote area the self-interested forest owners are also strongly represented. This group is also well represented in the peri-urbanised areas, but hardy at all in the agricultural (growth and decline) areas. The indifferent groups are well represented in the diversified and agricultural growth areas. The fact that the environmentalist group is comparatively weakly represented in the remote areas may be due to the fact that the landscape and nature values are self-evident in such regions. Also a higher proportion of multifunctional foresters is found in traditional forestry areas than in afforestation areas. Perhaps it can be predicted that foresters in afforestation areas might become more multifunctional in outlook in the future as local forest resources and associated downstream industries develop and mature.

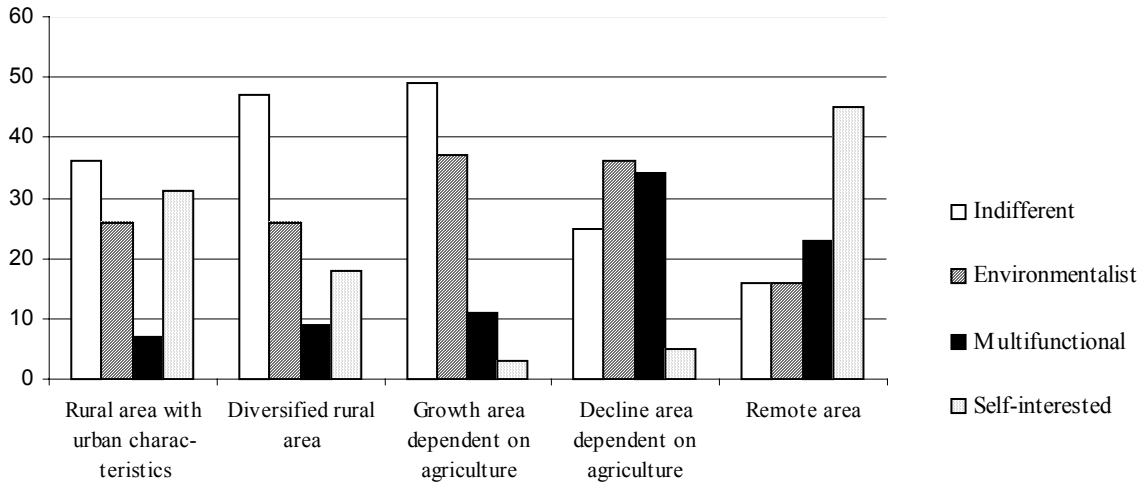


Figure 6.12: Distribution of forest owners management objectives per rural area type (%)

6.4.4 Afforestation

When considering the rural development role of forestry not only the objectives of forest owners for forest management should be considered, but also the interest of farmers in afforestation. In this context, farmers and forest-farmers were asked to consider a number of varied 'development' options for their enterprise and select those most appropriate given their individual circumstances. At the general European level the development options, which

are most favoured, is to buy additional land (32%) and / or rent additional land (31%). This finding indicates that an increase in size of holding is the top priority of farmers in Europe.

Plans for future afforestation

One of the development options presented was the planting of land with forests. Approximately 18% of respondents say they are considering afforestation over the next five years. Those in afforestation areas are more likely to plant land (21%) than those in traditional areas (17%), albeit this trend is not the case in all countries. Those in Central Europe (22%) are more likely to plant than those in either Atlantic (19%) or the Mediterranean (11%) and the most likely rural area type to witness afforestation is diversified (21%), followed by primary sector areas in decline (20%). Less than 5% of farmers in the remote area intend to plant.

It is interesting to note that the prospect of afforestation is significantly more likely among farmers who already own forests (25%) compared to those who do not (9%). Perhaps those who own forests have found it to be a worthwhile experience (whether from an emotional, economic and / or environment perspective), compared to those who have little or no experience of forestry and who thus may be more reluctant to participate in afforestation schemes. Farmers who have not already planted land may view afforestation as a sign of incompetence, being forced to turn away from farming, and thus may be less likely to plant their land in the future. Furthermore, afforestation is a more likely initiative among landowners who feel that farming prospects are unstable. Between 23% and 26% of farmers who say that future prospects are either progressive or declining indicated their consideration to plant, compared to 14% of those who feel that farming prospects are stable. Neither farm size nor farm type (tillage versus grassland) are significantly related to intentions to plant land with trees. Lastly, it is appears that the percentage cover of forests in the case study areas has little influence over planting intentions, with the exception of the tradition area in Spain, where over 80% of the surface area is forest and less than 5% of farmers intend to plant.

Constraints upon future afforestation

While 18% of farmers indicated they are considering planting land, the remaining majority of 82% appear to have no intention of doing so. The motivations of these farmers are worth considering, in order to identify the main constraints upon future afforestation in Europe. Landowners with no forests were given nine varied reasons influencing their intention not to plant land with forests (Table 6.10). The most frequently recorded reason at the European level is that the idea of planting simply never occurred to them (43%), followed by the impression that their holding is too small or dispersed (34%) or that the land is too productive (32%). Approximately one quarter of respondents ticked the options ‘not financially attractive’, ‘enough forests in the locality already’ and ‘don’t know enough about forests’.

Considerable variation exists between different case study areas. For example, in the traditional forest areas the top reason for not planting is never thought of it and the second reason is there is already enough forests. In afforestation areas, on the other hand, the top main reason for not planting is that the land is too productive, whereas the second most

frequent reason is that planting is not financially attractive. Considering briefly the rural area types, a number of patterns can be discerned. The reasons land is too productive and not financially attractive, for example, increase in frequency with increasing level of urbanisation. Landowners in urban areas are likely to have more financially rewarding alternative uses for their land than planting trees, such as residential or commercial development opportunities.

Table 6.10: Primary motivations for not planting by landowners at the European level (%; N=778)

Reasons for not planting land	% applicable
I never thought about it	43
My property is small and / or dispersed	34
My land is too productive for trees	32
It is not financially attractive	27
There is enough forest already in this locality	27
I don't know enough about forestry	22
I will let my children decide about the best land use	15
I don't like trees / forests	7
I am not allowed according to local regulations	5

Factor analysis carried out on the nine reasons for not planting identified the following five factors explaining some 65% of the variance:

- *uneconomic* – farmers feel that their land is too productive and that afforestation is not financially attractive (most prevalent in the Dutch afforestation area (where land has a very high development value) and two Danish areas);
- *unaware* – farmers with sizeable properties never thought of planting and feel they know little of forestry (most prevalent in the Greek Konitsa area and both Austrian areas);
- *low confidence* – farmers would prefer to let their children make any decisions regarding planting land, as they have smaller properties and don't know enough about forestry (most prevalent in the Hungarian traditional area and the Irish afforestation area);
- *dislike* – farmers do not like trees and feel there are enough forests in the locality already (most prevalent in the two case study areas in Ireland and in the traditional area in Austria); and
- *prohibited* – farmers, particularly those with larger properties, feel they are not allowed to plant according to local regulations (of minor relevance for both Greek areas as well as the Danish traditional area).

Landowners' afforestation plans and future forest needs of community inhabitants

Having examined separately the wishes of all respondents concerning future expansion of forests in their locality (Section 6.3.1) and the likelihood of landowners planting forests on their land, it is useful to consider next the level of agreement or conflict that exists specifically between the two stakeholder groups of community inhabitants and farmers / forester-farmers. As will be seen below, in some case study areas there is close agreement between landowners' afforestation plans and the wishes of community inhabitants concerning future afforestation, but in others there are discrepancies in these future visions

A scatter diagram relating the proportion of community inhabitants who want more forests and proportion of farmers who are considering planting over the next five years is depicted below in Figure 6.13. Sidaway (1997) used a similar approach in analysis of land management stakeholder controversies in different European countries.

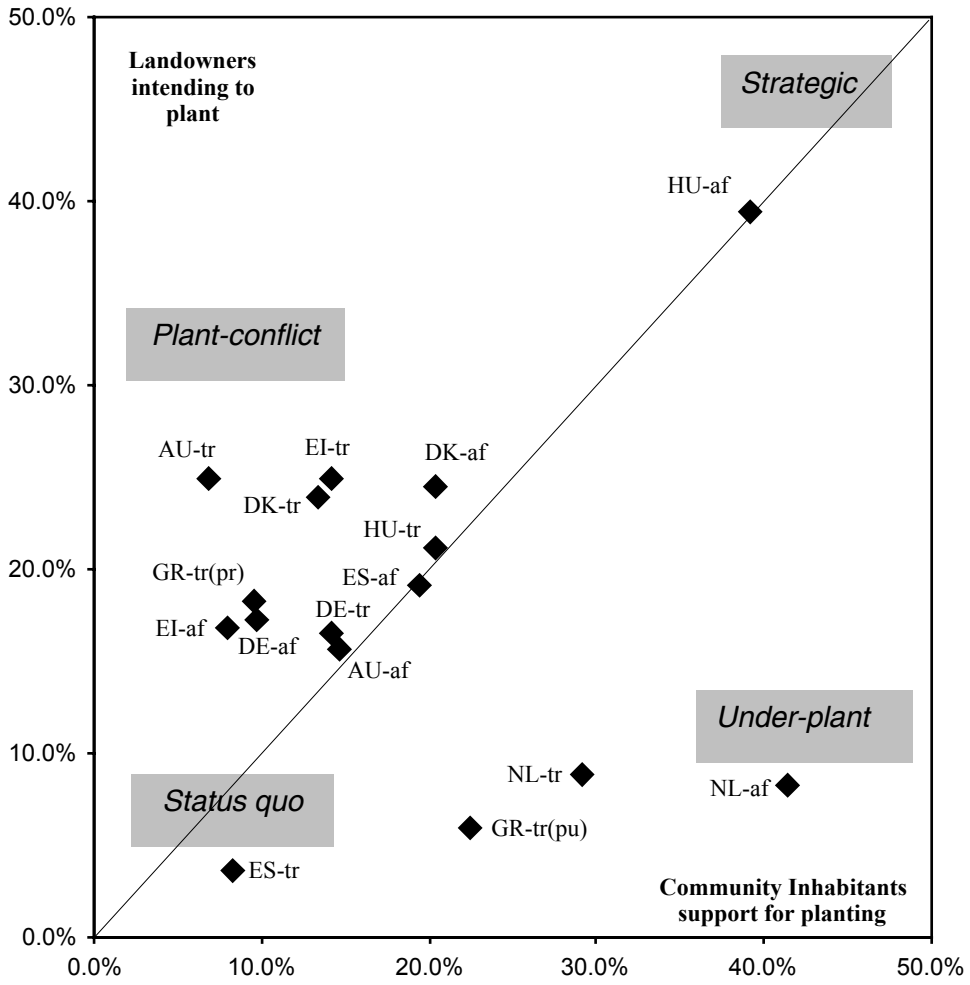


Figure 6.13: Comparison between community inhabitant support for expansion of forests and likelihood of future afforestation at case study area level

Where case study areas are located close to or on the 45 degree line indicated in the figure, it can be concluded that there is a sort of harmony between inhabitants and landowners. The further an area is located from this line, the greater the level of potential conflict between actor groups. The scatter diagram thus enables the classification of all case study areas into four categories regarding visions on afforestation:

- *status quo* – unlikely or 'no-go' areas due to both low public support and low likelihood of planting by farmers, an example of which is the traditional area in Spain;
- *under-plant* – where public support for afforestation is much higher than likelihood of planting by farmers, as exists in both areas in the Netherlands, and most especially in the afforestation case study;
- *plant conflict* - where the likelihood of planting by farmers public is higher than public support and thus where there is most likely to be conflict in the future, an example of

which might be relevant to the traditional Austrian area, in which local people are concerned about a further increase of the amount of forests (see also Section 6.3.1);
- *strategic* – where both public support and likelihood of planting are high, as can be found in the afforestation area in Hungary.

Interpretation of Figure 6.13 must be considered in the context of perceptions regarding the amount of forests in the locality. For instance, community inhabitants who feel there is a low forest cover in the locality are significantly more likely to support increased afforestation. Likewise, farmers and forest-farmers who feel there is a low amount of forests locally are significantly more likely to plant their land. The converse of both the above relationships is also found to be true.

Referring to the Spanish traditional area above where the lowest support for afforestation by both stakeholder groups is found, approximately 68% of both community inhabitants and farmers / forest-farmers feel there is a high forest cover already existing. Taking the afforestation area in Hungary, on the other hand, where there is high support for planting by both groups, less than 5% of both community inhabitants and farmers / forest-farmers feel there is a high forest cover already existing. It would appear in both these extreme locations, therefore, that support for planting is strongly influenced by perceptions regarding current amount of forest cover. In other case study areas, this relationship does not appear to exist. Considering rural area types in the context of the above figure, a cluster of three diverse / urbanised areas are likely to experience under-planting, another group of diverse and urbanised areas are located midway between status quo and strategic, the primary sector areas are tending more towards status quo and the remote area is located at status quo. It can be concluded, therefore, that from the point of local perspectives there may be very little scope for afforestation in remote areas and in primary sector areas and relatively more scope for afforestation in more urbanised areas. A notable exception to this, however, pertains to the highly urbanised case study areas in the Netherlands where land has potentially high development value and is thus unlikely to be planted.

6.4.5 Conclusion

When considering rural futures not only the opinions of community groups on desired futures for their locality are of importance, but also the perspectives of the landowners on the future of their rural enterprises. As demonstrated by the Multifor.RD data the percentage of full-time farmers is decreasing and the percentage of so-called hobby landowners is increasing. This trend is stronger for forest owners than farmers. Concomitantly with the increase in retired or hobby land owners the average value systems of landowners are increasingly becoming urban-oriented. These developments are in agreement with the finding that amongst landowners the interpretation of the concept of rural development is gradually being extended from a concern about agricultural modernisation and employment creation to overall quality of rural life.

The perspectives of forest owners on the desired future benefits are forests (as discussed in Section 6.3.5) are reflected in their own objectives for forest management. Although economic factors do play a role in their own management objectives, nature and landscape functions are considered more important. And a sizeable portion of the forest owners manage forests just for their own private use. These trends regarding the management objectives are in agreement with the trend towards an increasing importance of hobby and 'absentee' forest owners (Section 6.4.1).

When considering these conclusions, it is important to be aware that the median size of the forest holdings of the respondents with forests was 3.25 ha (4.0 ha for full-time landowners). Thus, the forest owners included in the study were mainly small private forest owners. The research findings support the conclusions of earlier studies (Van der Ploeg & Wiersum, 1996) that such forest owners (including many forest farmers) often maintain their forests for emotional reasons, such as maintenance of family heritage, rather than for economic reasons. Notably in the peri-urbanised, diversified and remote areas it was found that forest owners more often consider forests as either not having a major economic significance or as just having an interest for their own use (scores over 60%). In the areas dominated by agriculture forests are more often considered to contribute towards the local economy, but still in combination with a contribution towards nature and landscape values.

Overall, farmers are mostly much more sceptical about the benefits of forests. In their future perspectives an increase in land size (allowing modernisation of farming) is highly preferred above afforestation. The fact that farmers are generally rather sceptical about future benefits of forests is reflected in the fact that only 18% of them consider afforestation in the coming five years. Important constraints to afforestation are related to the fact that forests are disliked or are considered as being uneconomically. Constraints also exist in respect to a lack of confidence on how children would like to use the land or a lack of information on options for and regulations afforestation.

6.5 Opinions about government grants for land & forest management

6.5.1 Grants or subsidies

Grants and subsidies are important means to stimulate afforestation and management of existing forests. On the other hand, there are other financial measures which are used to stimulate agriculture. The respondents have been asked to qualify five purposes for the provision of grants and subsidies: farming practices, enhancement of landscape, planting of trees, management and protection of existing forests, and finally, the accessibility of forests for recreation. Table 6.11 presents the results.

Table 6.11: Opinions about government grants for land & forest management per respondent type (%)

… should be paid grants or subsidies…	All	Target group	
		Community inhabitants	Landowners
a) Farmers…. to enhance and sustain the landscape	85	82	90
b) Farmers…. to support their farming enterprises	73	67	84
c) Private landowners…to plant trees on their lands	69	65	76
d) Private landowners… to manage and protect their forests	68	63	75
e) Private landowners…to allow people to visit their forest for recreation	47	46	50

Firstly, one can observe that the majority of the respondents agree with the provision of grants and subsidies to landowners for both farming and forestry activities. The most endorsed purpose is landscape enhancement (85% agreement). There is also, however, high support for farming enterprises. Afforestation and protection/management of forests are equally endorsed and there is relatively low support for forest recreation (47%). This low appreciation seems to be related to the feeling that exist in many countries (and which often are supported by forest legislation) that forests should be of an open-access nature.

Opinions of inhabitants and landowners can differ. In every case, not surprisingly, landowners are more supportive of grants than inhabitants. Next, we can conclude that as soon as things are being asked of farmers that have nothing to do with their core business, such as landscape enhancement, both community inhabitants and landowners think that provision of grants and subsidies is reasonable and there is hardly any difference in opinion between both target groups. The same is true for a measure that gets less support generally: both inhabitants and landowners have the same opinion about grants for opening their property for recreation. When asked should farmers receive grants to support their farming enterprise, on the other hand, (ie. their core business), there is a very strong divergence of opinion between respondent types, with community inhabitants being much less supportive.

There is only a small difference between the level of support exhibited for either afforestation or management of existing forests among both community inhabitants and landowners. However, while community inhabitants regarded these two forestry activities as equal to supporting farming enterprises, farmers are comparatively less concerned about them.

Regional differences in grant-aiding land uses

In Table 6.12 the regional differences in support for land use grants are depicted. First of all, it can be seen that support for agriculture grants increases linearly with increasing rurality (strong relationship), clearly reflecting the relative dependence upon farming in those more rural areas. Secondly, landscape grants are almost equally supported in all areas, although areas in decline are the most supportive of it. This finding is expected at least in the Irish case study given that many of the locals complain about the adverse landscape impacts arising from afforestation of farmland with commercial conifer forests of limited species diversity. Thirdly, relatively low support is demonstrated in urbanised areas for both the protection and management of existing forests and afforestation. Support for protection/management grants increases linearly with increasing rurality (strong relationship),

clearly reflecting the strong connection of local people with their natural surroundings. With respect to afforestation grants there is little difference between rural area types. While those in urbanised areas who expressed a desire for more forests in the future are more supportive of afforestation grants (64%), it still can be seen that those in urbanised areas are still less supportive than diversified, growth or decline areas (70-75%). Notably, in diversified areas there is a strong support for afforestation, probably to be explained by the fact that most of them have a low nature and landscape quality. Finally, the approval of grants for forest recreation is highest in peri-urban and diversified areas and lower in the other areas.

Table 6.12: Opinions about government grants for land & forest management per rural area type (%)

	Rural area type				
… should be paid grants or subsidies…	**Rural area with urban characteristics**	**Diversified rural area**	**Growth area dependent on agriculture**	**Decline area dependent on agriculture**	**Remote area**
a) Farmers…. to enhance and sustain the landscape	84	84	84	90	86
b) Farmers…. to support their farming enterprises	58	71	72	87	89
c) Private landowners…to plant trees on their lands	59	75	69	71	72
d) Private landowners… to manage and protect their forests	60	68	62	73	81
e) Private landowners…to allow people to visit their forest for recreation	49	54	44	40	44

6.5.2 Subsidies for afforestation

At present, one of the main EU forest policies concerns the stimulation of afforestation on abandoned agricultural lands. In order to test which factors impact on a positive opinion of local people on such grants, a further analysis was made about the characteristics of people having a positive opinion about subsidizing afforestation. Increasing level of approval for grant aiding of afforestation is significantly associated with an increase in the level of agreement with the following:

- that forests are planted / managed with proper consultation with local people;
- that the wishes of the local community are respected by those responsible for promoting afforestation ;
- that people who do not own land should be involved in decisions regarding land use; and
    - that there should be strict environmental rules on planting and management of forests.

The first of the above two items suggest that people who support grant aiding are more likely to be satisfied concerning the level of consultation with and respect shown for community inhabitants regarding afforestation and forest management policies and practices. The last two items, however, indicate that support for grant aiding afforestation and forest management is conditional upon participation of community inhabitants in land use policies as well as placing strict environmental rules on forestry practices. Approval of grant aid is therefore a reflection of positive experience with forests but is not unconditional.

In terms of rural area type, the highest level of support occurs in diversified and remote areas and the lowest support is found in urbanised areas. There are no significant differences between traditional and afforestation areas. Important differences between countries exist. The highest level of approval for grant aiding afforestation occurs in both Hungarian areas and both Greek areas (between 85% and 94%). The lowest level of approval occurs in the Austrian traditional area (38%).

6.5.3 Grant-aiding recreation

If private forest owners are to allow the public to visit their forests for recreational purposes, it is interesting to consider whether or not they should receive additional financial supports. Firstly, comparing different respondent types at the general European level, it can be said that the greatest support comes from foresters (only), at 53%, followed closely by community inhabitants, farmers (only) and forest-farmers (47%, 51% and 50% respectively). It would appear, therefore, that aside from foresters (only), the type of respondent has little influence on opinions regarding whether private forest owners should be paid to allow public access to their forest. Though the difference between foresters (only) and forest-farmers is small, it is also curious, given that they both own forests and would thus stand to gain similar benefits financially from such a scheme. Apparently, forest-farmers want their property to be exclusively used by themselves more often and not to be shared with others.

It appears there may be some relationship between support by private forest owners for recreational grants and the size of their forest, with larger forest owners (irrespective of whether they are just foresters or forest farmers) tending to be more in favour. The mean size of forest for foresters and forest farmers who are in support of recreational grants is 13ha and 33ha respectively, compared to 6ha and 10ha respectively for those who are not in favour.

At a country level, there are interesting differences of opinion regarding support for recreational grants, with considerably lower support in the three central European countries of Hungary (21%), Austria (41%), Germany (32%) compared to the others (53-58%). This may be due to the fact that these countries have a long history and tradition of forestry and, accordingly, public use of forests for recreation. Forests in these countries might already be well developed for recreation and thus the provision of grants may not be so critical. In the Atlantic countries, on the other hand, where there is a much shorter history of forests, a considerably higher support for recreational grants has been demonstrated, perhaps reflecting the perceived need to assist forest owners in improving the recreational quality of their holding. This interpretation is supported by the relative frequency of forest visits, where people in central Europe visit significantly more often than those in the Atlantic countries.

Having concluded that there is not much difference between respondent types concerning support for recreational grants at the general European level, it is next worth considering whether there are distinctions to be made at the level of rural area type (Figure 6.14)

between community inhabitants and landowners. In general 47% of inhabitants and 51% of landowners support recreational grants.

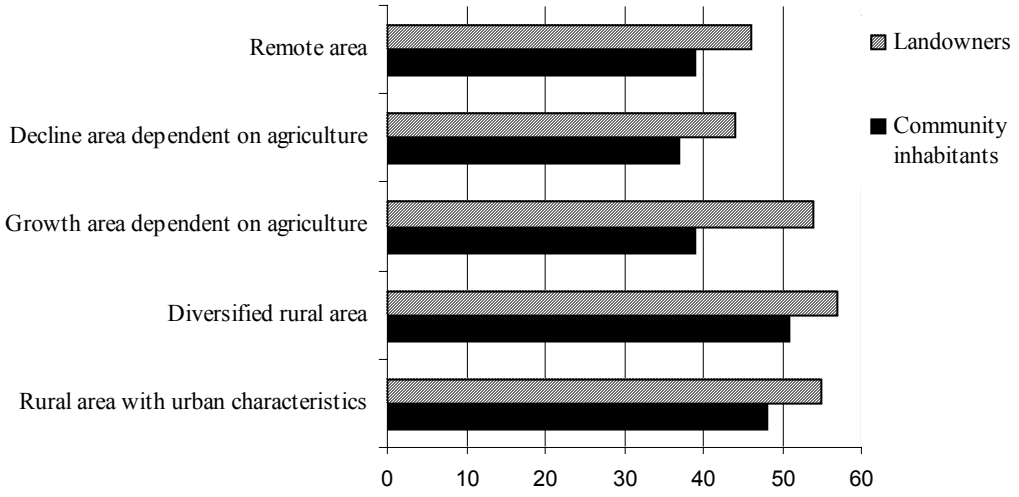


Figure 6.14 Support for providing grants to forest owners to allow the public visit their forest according to rural area and respondent type (%)

Looking firstly to the community inhabitants, there is greater support for recreational grants in the two most urbanised areas, with no difference whatsoever between the three most rural areas. It would appear, therefore, that urbanised community inhabitants are the most willing to pay for recreation in private forests. Referring back to the results in Table 5, it will be remembered that these two urbanised societies had lower expectations regarding freedom of access to private forests than the two agricultural areas. Considering next the opinions of landowners, the greatest level of support for forest recreational grants is found in the peri-urban, diversified and growth areas.

6.5.4 Conclusion

In the past, one of the major EU forestry policies consisted of subsidising of afforestation on abandoned agricultural lands. The majority of respondents support such a subsidy. However, an almost equal support exist for subsidising management. Moreover, with respect to grant-aiding land uses, it can be observed that even very high support exists for farming and landscape measures. This indicates that people do not consider that governments should only assist financially in investment in new land use activities, but that they consider it acceptable that also the management of existing forests is subsidised, notably for providing environmental benefits.

Landowners are always more supportive than inhabitants. Support for protection/management of forests, afforestation and farming increases with increasing rurality, reflecting the high dependency between natural resource production processes and local people in the more rural areas.

However, subsidies for opening forests to visitors are much less approved; this seems to reflect the opinion in many countries that forests should have an open access. Although recreation is not highly supported, community inhabitants from peri-urban and diversified areas are the most willing to pay for recreation in private forests. These two societies perhaps appreciate more than the others that landowners cannot be expected to freely open their property for the general public but, instead, that they should be compensated for this.

7 Main scientific conclusions and policy implications

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7.1 Introduction

As discussed in Chapter 1, the Multifor.RD research was based on the need to develop a better understanding of the changing rural conditions in Europe and how this impacts on forestry development and policy action. As such, the research follows a more general trend towards understanding how the empirical realities of a changing countryside has consequences for both theoretical and policy issues regarding rural development (Marsden et al., 2001). In this approach much attention is given towards increasing understanding about the diverse social understandings of what is involved in rural development. The concept of 'forestry as a means to rural development' was interpreted as referring to a process of co-evolution of the rural society and forest resources, rather than to a process of moving towards a professionally or politically defined desired future in which predicted future requirements of the rural producers and/or consumers are fulfilled. Consequently, 'forestry as a means to rural development' was conceptualised as referring towards people's perceptions about the role of forests in rural life and their expectations about the future role of forests.

The Multifor.RD project was expected to generate two main types of conclusions:

- Scientific conclusions regarding the role of forestry in the context of rural development in Europe (§ 7.2)
- Conclusions regarding the policy implications of the research (§ 7.3)

On the basis of the combined results of the descriptive characterization of case study areas as well as the quantitative and qualitative surveys in this chapter both types of conclusions will be presented. On the basis of both conclusion sections, in Section 7.4 we will meet the main objective of the Multifor.RD research, namely 'to develop criteria for distinguishing regional-specific strategies for multifunctional forestry to serve rural development'. Finally, we will shortly summarize the main policy implications at European level (§ 7.5).

7.2 Main scientific conclusions

The Multifor.RD research was based on three main hypotheses (see Figure 7.1). In the following, each of these three hypotheses will be reviewed. As the regional differentiation formed the central focus point of attention, this aspect will be discussed first. Next, the main conclusions regarding differences in stakeholder perspectives and differences between traditional forest areas and afforestation areas will be given.

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.
1. 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-urbanization, etc.
1. 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

Figure 7.1: Main hypotheses guiding the Multifor.RD project

7.2.1 Differences between rural area types

The Multifor.RD data clearly indicate that major differences between the opinions on the role of forestry and rural development exist between different regions. In the study a rural area typology was developed with five classes of rural conditions: remote rural areas, rural areas in decline dominated by agriculture, rural growth areas dominated by agriculture, diversified rural areas and rural areas with urban characteristics. In earlier studies focusing on regional differentiation in options for forestry development in Europe, attention has only been given to area characteristics in respect to socio-economic and forestry conditions (Hyttinen et al., 2000; Niskanen & Lin, 2001). As explained in Chapter 4, in the Multifor.RD study this approach was modified by adding characteristics regarding the overall land-use conditions. Moreover, a differentiation was made between indicators of the present conditions and indicators of ongoing developments. It was also tried to include parameters on the functional roles of forests and their contribution to employment generation outside the traditional forestry sector. However, as discussed in Section 3.3, it proved to be difficult to ascertain such parameters as they are usually not included in the standard statistical data collections. Nonetheless, the Multifor.RD results indicate the need to consider the regional importance of forests on the basis of rurality characteristics rather than forestry sector characteristics only.

Although in several respects differences between individual countries and Euro-zones were found to be significant, overall the differentiation in rurality classes as used by the project was found to be the main variable explaining variations in perspectives systematically. Thus, different degrees of rurality are of great significance in respect to the role, which forests can play in the context of rural development. Between the five rurality categories that were distinguished, differences were found in respect to both the overall opinions on rural futures and the role of forests therein, and to the opinions of landowners regarding the future of their rural enterprises. Table 7.1 presents per rural area type a summary overview of the predominant value orientation, perspectives on rural conditions and trends, local significance of forests and forest management issues.

Table 7.1: Summary of average European perspectives on forestry in the context of rural development in different rurality classes

Rural area classes and predominant value orientation	**LOCAL MEANING OF RURAL LIFE**	**LOCAL SIGNFICANCE OF FORESTS**	**LANDOWNERS' PERSPECTIVES AND FOREST MANAGEMENT**	**GRANTS FOR LAND AND FOREST MANAGEMENT**
Rural area with urban characteristics Urban based values	*Highest concern with over-development issues *Over development major threat for existing and new to establish forests (and other types of nature) *Highest demand for rural restructuring with emphasis on ecological and tourism development. Residents more concerned with an increase in nature and wildlife and better scenery (ecological development) than an increase in amount of forests	*Likely to feel there are too few forests *Along with all areas, nature and landscape functions are rated highest. Production function is rated lowest. Recreation rated relatively high. *Among with diversified areas, highest support for access to public owned forests and lowest support to private owned forests *Forests are perceived very beneficial to the community	*Forest owners: mix of indifferent, environmentalist and self-interest *Mixed progressive and decline farming prospects *Small interest in afforestation, motivation not to plant: land is too productive, not financially attractive enough	*Least supportive of providing most types of grants to landowners, increasing linearly with increasing rurality. *Inhabitants –along with inhabitants from diversified and growth areas- most supportive of forest recreation grants
Diversified area Combination of urban and rural based values	*Concern with over-development issues *No major problems with respect to quality of life *High demand for rural restructuring perspective. Along with remote and decline areas, highest demand for tourism development	*Most likely to feel there are too few forests, especially in the degraded yet well serviced areas *Production function is relatively important. Inhabitants rate recreation especially high. *Along with urbanized areas, highest support for access to public owned forests and lowest support to private owned forests *In the afforestation areas, the nature and landscape quality if low valued, in these areas forests are sometimes perceived as harmful to the locality	*Forest owners: mainly indifferent, small environmentalist *Mixed progressive and decline farming prospects *Comparatively high interest in afforestation, motivation not to plant: land is too productive, not financially attractive enough	*Highest support for afforestation grants. *Inhabitants –along with inhabitants from urbanised and growth areas- most supportive of forest recreation grants
Agricultural growth area Traditional rural based values emphasizing agricultural production processes	*Economic growth is positively received, however, concern with a loss of traditional values *Comparatively high demand for development of secondary economy and maintaining traditional values	*Present amount of forest = okay *Productive function is rated low in importance, recreation relatively high. *Along with declining areas, highest support for public access to private forests and medium support to private owned forests *The present forests are appreciated, but don't offer the locality very much, also not for recreation purposes	*Forest owners: mainly indifferent and environmentalist *Comparatively high progressive prospect reflected in interest to enlarge landholdings *Small interest in afforestation by farmers, relatively high interest to return land into nature, motivation not to plant: diverse	*Relatively high support by landowners for forest recreational grants. *Inhabitants –along with inhabitants from urbanized and diversified areas- most supportive of forest recreation grants

Table 7.1: Summary of average European perspectives on forestry in the context of rural development in different rurality classes (continued)

Agricultural decline area Traditional rural based values, search for new rural activities	*High concern with weak economy and top down development *High appreciation of traditional rural values *After remote areas, greatest demand for development of agri-business. High demand for tourism development	*Present amount of forest = okay, but most likely to feel there are too many forests *Relatively high priority put on production and protective functions *Along with growth areas, highest support for public access to private forests and medium support private owned forests *In afforestation areas, forests are relatively often perceived as harmful to the locality. The group 'adversaries' is big	*Forest owners: mainly environmentalist and multifunctional, less indifferent *comparatively high decline farming prospect, reflected in interest to sell or rent-out land, limited intention of afforestation by farmers, motivation not to plant: diverse (afforestation areas: dislike trees)	*Most supportive of landscape related measures and high concern for management/protection of forests and farming activities
Remote area Increasing influx of urban based values due to impact of migrants and tourist	*High concern with weak economy and top down development *Highest demand for modernisation perspective, i.e. more agri-business activities, with comparatively low concern for ecological development. High demand for tourism development	*Present amount of forest = okay *Relatively highest priority put on productive/ commercial and protective functions *Lowest level of support for public access to either private or public owned forests *Very high appreciation of traditional rural values *Forests are perceived very beneficial to the community	*Forest owners: mainly self-interested and multifunctional *Comparatively low decline farming prospect, *As almost 90% is forest-farmer, hardly any intention to plant forests, motivation: enough forests. Besides, comparatively high desire to return land into nature	*Most supportive generally of financial assistance for landowners. Special concern directed towards management/protection of forests.

The differences between the rural areas can be summarized as follows[20]:

- **Rural areas with urban characteristics**. These areas are facing dynamic peri-urban development, which is –to a certain extent- perceived as too much. Therefore, people are highly concerned with the maintenance of the rural character of the area and the preservation of present forests (and other natural areas). Local people perceive loss of control of the ongoing developments. The quality of life should primarily be improved through rural restructuring, notably through ecological and tourism development. However, the management objectives of forest owners do not reflect such desired developments: their objectives are predominantly indifferent or directed at self-interest. The forest owners appear to have a primarily a private good rather than (semi)public good. This attitude might be related to a relatively small size of forest ownership. Also the local people have lower expectations regarding access to private property and more appreciation of public forests for their enjoyment. Although residents would like to enlarge the forest size, it is highly unlikely that landowners will afforest their land as it is very uneconomic to do so. It will be difficult enough, seen the ongoing urbanisation, to maintain the present forest and nature areas. Moreover, even though ecology and recreation are to the residents main functions of the forests, they are not very enthusiastic about financially supporting the landowners in reaching these goals.
- **Diversified areas**. The quality of future life should be improved through rural restructuring. In this case tourism and secondary sector development are considered as being most important. There is a low interest in improving primary production, rather the trend towards economic diversification prevails. The low regard for increased primary production is reflected in the low interest of forest owners in multi-functional forestry, rather the management objectives are indifferent or environmentally oriented. The perspective that there is little scope for improved agricultural production, and that forests can contribute towards better environmental conditions and tourism development seems to be reflected in a relatively high interest in afforestation. The quest for more forests is strongly related to the forest history and the present landscape quality. The support for afforestation and recreation grants is generally high, and no conflicts between stakeholders may be expected as long as new forests are not mono-functional. As there is a broad support amongst the residents for future tourism development, the establishment of new forests should at least not damage this development perspective and –even better- contribute to it.
- **Agricultural growth areas**. For the area in general, a majority of the people ask for a more traditional (agricultural) modernisation approach, although the voice of more environmental oriented people can be heard as well. The perspective on the need to modernise agriculture prevails and there is a relatively high desire to enlarge the landholdings. There is also a comparatively high desire for preservation of traditional rural values, and for letting nature return. In these typical agricultural areas forests are not considered as main contributors to primary production, but rather to have mainly an environmentally supportive function for agriculture. For forest owners, the predominant management objectives are indifferent or environmentally oriented. People are not really

[20] The reader must be aware that, within each rural area type, different ideas exist about the role of forests within rural development. However, as there are significant average differences between rural area types, in this section the overall ideas for each rurality class are presented.

concerned with more or less forests. The residents value the recreation function of forests relatively high as well as freedom of access to public owned forests. As these areas are relatively prosperous, the non-productive values of forests are highly esteemed.

- **Agricultural decline areas**. There is a search for new living alternatives to counteract the relatively pessimistic prospects regarding the present rural production processes. People ask for developments that boost the local economy, rather than local ecology. An improved quality of life is considered to be brought about as a result of rural restructuring (notably increasing tourism facilities) as well as through improved primary production (including a shift to a more organic economy). This search for diversification is reflected in the management objectives of forest owners. Their management is predominantly directed at environmental and multifunctional objectives, self interest scores low. People favour the development of the economy of existing forests rather than the planting of more land. Besides, there is a high support for management, protection and landscape related subsidies for private landowners. In principle, there is good scope for afforestation on abandoned agricultural lands. However, in the case that such afforestation concerns industrial timber plantations being established by outside investors, this may be considered as a manifestation of rural decline and a decrease in the local quality of life.
- **Remote areas**. The search for a better quality of life is reflected in a predominant perspective on the need to restructure rural conditions; in addition a scope is foreseen for improved agro-business. Prospects for development of the secondary sector are perceived as very limited and more prospects are seen in development of tourism and ecological conditions. Residents show a great concern for the protective and productive functions of their forests as well as for the economic viability of their area. There is a definite interest to let nature return. Forest owners have a dual perspective on their management objectives, their objective is dominated by self interest, but also multifunctionality plays an important role. A conspicuous feature in these remote areas is the low value given to the preservation of traditional rural values. This indicates that due to the communication with migrants who left the area, remote areas are increasingly being exposed to urban lifestyles. Also the impact of tourism may play a role in quickly changing the rural values in these areas. There is a pronounced wish for more agri-business activities in the future. In general, these people are worried about the economic viability of landowners and are therefore the supportive of any kind of financial assistance for landowners. They also show a special concern directed towards management/protection of forests. But, although the protection of the forests is highly valued, there is a low support for a more ecological development of the area. Most probably people think the area is ‘ecological’ enough already.

7.2.2 Differences in stakeholder perspectives

As indicated by both the quantitative and qualitative survey, in general the perspectives of community inhabitants (considered in this study as rural consumers) and landowners (considered as rural producers) regarding rural values and on the role which forests play within the locality are rather similar. However, in the more urbanised case study areas exceptions on this rule can be found. High population densities and people that are no longer connected to land use activities, but are more consumers of rural space can display different ideas with respect to forests in the development of the locality than landowners. Of course, within the group of community inhabitants diverse discourses operate. This is caused by different value orientations of people, such as conservative, traditional, environmentalist and utilitarian. These value orientations can exist next to another and make a significant distinction with respect to the future ideas of the area. However, these different experience-oriented discourses can be found amongst both rural producers and consumers and they cannot be systematically related to major differences between these two actor categories.

Within the category of landowners several important differences in opinions regarding the role of forestry in rural development exist, especially between farmers and forest owners. Notably, regarding the (future) role of forest in the area farmers are much more negative than forest owners, while the perspectives between forest owners and community inhabitants were found to be relatively similar. This finding can be related to the differences in outlook on the future of their enterprises of farmers and forest owners. In general, farmers more often tend to modernize their traditional rural production activities or to shift to alternative employment opportunities and sell their lands. Exclusively forest owners can more often be characterized as hobby forest managers, who are primarily engaged in other economic livelihood activities. Forest owners are much more often than farmers inclined to maintain their forest property when becoming engaged in non-primary production activities. Thus, forest owners tend to be relatively often engaged in non-traditional rural activities (Kvarda, 2002) and tend to adhere to modern lifestyles (Schraml et al., 2002). The outlook of forest farmers tends to be more related to forest owners than to exclusive farmers. In view of these contrasts between farm ownership and forest ownership, it is not surprising that the differences in opinions between community inhabitants and of forest owners regarding the rural values and preferred rural futures are more similar than between community inhabitants and farmers.

In the following the main differences between the four stakeholder groups, i.e. community inhabitants, foresters, farmers and forest-farmers will be summarized. This summary concerns the same issues as used in the comparison of the different types of rural area (Table 7.1). In addition the position of policy and decision-makers as a stakeholder group will be discussed.

Local meaning of rural life

There are no differences between community inhabitants and landowners with respect to their perception of local quality of life and main problems of the area. Differences can be observed with respect to further modernisation of agriculture: landowners prefer relatively

more often an increase in agri-business complexes, whereas inhabitants prefer ecological development. This difference can be ascribed to the attitude of farmers. This is especially true in urbanized areas, where the differences between both groups are the biggest. Inhabitants are more consumer oriented with a hedonistic attitude. However, the majority of landowners and community inhabitants, irrespective of area type, chooses for the agricultural restructuring perspective. Landowners are sometimes even more in favour of restructuring than inhabitants are.

Local significance of forests

With respect to the amount of forests no major differences can be observed. Important differences exist with respect to the local role of forests. Landowners tend to be less enthusiastic about the local forests than community inhabitants are. This is due to the negative attitude to forests of farmers without forest land. More than half of the forest owners are (moderate) enthusiast about the local forests. There is hardly any difference between the exclusively foresters and those foresters who own farming land as well. Some differences with respect to the desired forest functions exist:

Community inhabitants place a higher priority on each of the functions than landowners do. This differentiation is less pronounced in the remote and agricultural decline areas than in the other areas.

Overall, the importance attributed to both nature and recreation increases among landowners with increasing rurality, whereas it decreases for inhabitants. The largest differentiation in opinions is found in the peri-urbanized and agricultural growth areas.

The issue of public access to forests (notably for recreation) is highly topical. In several countries there is a strong feeling that forest should be openly accessible. There is some feeling that private forest owners have a greater right to limit free access to their forests, whereas public forests should be openly accessible to all for recreational purposes. Nevertheless, an ample majority support the idea of privately owned forests being made freely available for public use. However, landowners are less supportive of this idea than community inhabitants. This is especially true for farmers and forest-farmers; foresters (only) are found to be as equally supportive as community inhabitants for freedom of access. Farming landowners may wish to receive payments for services and amenities provided to the public.

Landowners' perspectives and forest management

Considering practical issues of forest management, several differences in opinions between community inhabitants and forest owners did appear. Community inhabitants generally were more optimistic than forest owners about the economic benefits of forests. In almost all areas a discrepancy exists between the low priority attributed to forest-related business activities by community inhabitants and the higher level of importance given to business activities by forest owners. Thus, in all areas the support of inhabitants for business activities in forests is much lower than importance of forest economy to forest owners is. Also ideas with respect to afforestation differ. In several areas there is a discrepancy between the landowners' willingness to plant forests and community inhabitants support for afforestation. In many areas with low community interests in afforestation the interest of landowners to afforest is

relatively greater. But in some peri-urbanized areas there is more support of the community inhabitants for afforestation than landowners are willing to consider.

With respect to public support for forest management, a high support exists for financial assistance to landscape oriented measures, and a somewhat lower support for financial assistance for protection/management of forests and afforestation, and a relatively low support for assistance to assure recreational access to forests. Landowners are always more supportive to such financial assistance than inhabitants. The differences in opinion are smallest in the case of management activities that are not traditionally related to the tasks of rural producers (e.g. landscape enhancement, and to a lesser extent nature preservation) or to the traditional rural quality of life (e.g. open access of forests). They are more pronounced in case of activities related to the core business of rural producers.

Decision-makers as a stakeholder group

Whereas in the quantitative survey only community inhabitants and landowners were considered as specific stakeholder groups, in the quantitative survey still a third stakeholder category was considered, i.e. decision makers on forestry and rural development. In this survey a clear differentiation was found in a policy-oriented discourse and an experience-oriented discourse. The first discourse prevails amongst politicians, civil servants / public administrators and representatives from different civic organizations, whereas the second prevails amongst the rural inhabitants. In some countries these two discourses indicated similar interests of both groups of people, but in other countries such as for instance France (Le Floch & Deuffic, 2002) large differences in the terms and arguments used occurred. These differences between countries reflect differences in the degree of communication between politicians/decision makers and the general public, as well as differences in the degree of participatory policy development in forestry and rural development issues.

7.2.3 Differences between traditional forest and afforestation areas

In general, no strong differences were found in rural values and future perspectives between established forest areas and areas with afforestation. However, the (potential) local role of forests is interpreted in a varied way. This is not so much related to forests as such, but to the symbolic meaning of forests in the context of problems that the rural area has to deal with. In the following, we will highlight the main differences between the traditional forestry and afforestation areas.

Local significance of forests: perspectives on the importance of forests in quality of life

The nature and landscape quality of an area is important in the overall perceived quality of life in the area. People associate forests mainly as an element of the natural environment. Although the nature and landscape quality of forests is highly appreciated by all local people, those from traditional forest areas emphasize it more strongly than those from afforestation areas. In the traditional forest areas the attachment to forest is higher than in afforestation areas and the opinions about forests are more positive. Especially in case that afforestation

takes place on abandoned agricultural lands or in characteristically open landscapes such as peat lands, people may feel that it threatens the local landscape identity. Besides, if afforestation comprises mostly commercial plantations owned by external companies and in case that these plantations replace former open-access landscapes, this may be perceived as a loss of rural quality of life. It appears that the shorter the forest history of an area the less benefits are perceived by locals. The longer the forestry tradition, the more that forestry is perceived as positive (Elands & O'Leary, 2002).

If forestry has a role to play in rural development, it cannot be developed independently of the self-definition of rural areas. If forests are regarded as a threat to rurality and of little economic importance, self-evidently forestry does not play a role in the future development of these areas, which are predominantly found in the Atlantic countries, and more specifically in afforestation areas. People in afforestation areas hardly expect that forests can function as a catalyst for further development or improve services in their area. It is remarkable to observe that people taking this view still express a preference for an increase in the amount of forests in the future. It is not that people do not like forests at all, however. It is just that they oppose the way the present forests have been established with little interest in community benefits, landscape identity and environmental quality.

Local significance of forests: perspectives on the amount of forest and forest functions

The areas were found to differ clearly in respect to the opinions about the satisfaction about the amount and function of forests People in traditional forest areas tend to feel that the amount of forests is medium to high, and they are generally satisfied about the amount of forests. In the afforestation areas the perception is that the forest cover is only medium and there is a tendency to be slightly dissatisfied with the low amount of forests. There is no great difference between the area types with respect to the functions forests should fulfil. Business activities, however, are much higher valued in traditional forest areas, where people have much more experience and developed (small-scale) industrial activities, than in afforestation areas.

7.2.4 Conclusion

Most studies on public perceptions and forest owners attitudes towards forestry have until now mainly focussed on the forests as a specialized object (Koch & Rasmussen, 1998; Terrasson, 1998; Wiersum, 1998a; Hyttinen et al., 2002). Consequently, when considering the desired futures, attention was focused mostly on the future of the forestry sector. The Multifor.RD project enlarged the scope of studies on perceptions and attitudes regarding forests and forestry by placing it within a rural development perspective. Consequently, rather than the roles of forests and forestry per se their relative role was the central point of attention. Within this context, it was found that concerns regarding forests do indeed feature in the preferred futures of rural inhabitants. This concern is clustered with other concerns regarding ecological development such as an increase in organic farming, nature areas and landscape qualities. Within this cluster, a desire for the extension of forests is of lesser

importance than an increase in nature and wildlife areas. Moreover, rural people showed greater concerns for other future developments such as secondary sector economy development, tourism development, agri-business development and organic-economy development.
In respect to rural development, the majority of the respondents was in favour of a rural restructuring rather than only a rural modernisation. Forests can play an important role in such restructuring. This is reflected by the fact that the benefits of forests are foremost conceived as the protection of air, water and soil, followed by their contribution to a nice landscape, nature conservation, and recreation respectively. The role of forests to business activities was least considered as a benefit of forests. These opinions on the benefits of forests were reflected in the opinions of forest owners that nature and landscape functions were more important than economic functions in forest management. These findings clearly indicate that forests are foremost conceived of as contributing towards environmental and landscape identity rather than as productive resources. These functions of forests are not just related to the forest as a form of land-use, but rather as forests as a component of the rural landscape.

With regard to the economic role of forests, both landowners and community inhabitants only perceived the traditional production functions of forests. During the quantitative survey no references were made to the fact that forests may make a significant contribution to the rural economy through the marketing of forest-derived environmental goods and services (Mantau et al., 2000) such as tourism facilities. The Multifor.RD results indicate that although environmental and tourism benefits of forests are well recognised, people do not perceive the labour and income that are generated by these benefits as being forestry related. Thus, in respect to the economic benefits of forests the community perspectives are still restricted to labour and income generation as derived from the traditional forest sector. Thus, the local opinions on forests show an important contrast: at the one hand forests are primarily perceived as contributors to rural identity and ecological structure, but at the other hand the economic benefits of forests are conceived of as referring to the traditional forestry sector rather than to the regional economy.

Regarding forest ownership a clear trend towards a change in perspectives of private forest owners was found. In the past, forests were often (a part of) a rural enterprise based on primary production. The results of this study showed that this situation is changing. Gradually, the private forests no longer are a productive asset in a rural livelihood but rather a social asset in a livelihood, which is not primarily rural-oriented. As witnessed by the fact that the median size of the forest holdings of respondents was only 3.25 ha it might be that the private forest holdings are also decreasing due to fragmentation through inheritance. An interesting question is whether the area of forests owned by public or institutional organisations shows a concomitant increases in size, but this question was not addressed by the study. The changes in livelihood conditions of forest owners indicates that when considering the forestry development it is very important to be cognisant about the changing roles of rural producers. The Multifor.RD data suggest a contrasting trends in farming and forest ownership. Whereas in farming often still an approach of modernisation of farming practices prevails, in private forestry de-facto a trend towards a restructuring of forest

ownership from a productive towards a social asset prevails. As a result of this restructuring in perspectives of forest owners new styles of forest management need to be developed, which are primarily focused on the role of forests as a hobby object as well as an object of community identity (Van der Ploeg & Wiersum, 1996; Praestholm, 2002).

7.3 Main policy-related conclusions

The results of the quantitative survey are in general agreement with the results of the qualitative survey, especially regarding the nature and trends of the perspectives of community inhabitants and landowners on the role of forests in rural development. The qualitative survey also included interviews with policy makers; this information together with information from literature was used for assessing the policy implications of the research. By combining the information from the various phases of research, three main conclusions having important policy implications can be drawn. These conclusions regard the meaning of rurality and of rural development, and the rural significance of forests.

The meaning of rurality

Originally, rural areas were considered to be characterized by the presence of a set of primary production processes and a related culture. They were bounded one site by wilderness areas characterized by a lack of impact of human civilisation and on the other hand by urban areas characterised by the lack of human-induced reproduction of natural resources (Van der Ploeg, 1997). Several studies (see Chapter 2) have shown that due to the ongoing processes of rural dynamics this interpretation is quickly changing. The results of the Multifor.RD project support such observations. From the research two major social trends could be inferred which impact on the interpretation of the meaning of rurality; these trends have major repercussions on the role of forests in rural areas:

- The wilderness has been tamed and the domesticated nature is increasingly being integrated in the living environment. Consequently, forests are no longer primarily being considered as the last frontiers to be opened for cultivation or as major productive resources for marginal areas, but rather as components of a green infrastructure. This results in an increased appreciation of the landscape and environmental values of forests over their value as productive asset.
- Urbanisation is increasing, not only in physical and economic sense, but also in the sense of adherence to urban lifestyles. Moreover, there is an increase in both mobility and leisure time. This results in an increased interrelationship between rural and urban areas. At the one hand, rural people increasingly work and even live in urban areas, while maintaining ties with their rural area of origin. At the other hand, urban people increasingly visit the countryside as a leisure activity. Consequently, forests as becoming increasingly important for providing amenity services to rural visitors.

Within various regions of Europe these trends have progressed at different intensities. Consequently, there exist a strong variety of rural identities in Europe (Hoggart et al., 1995). Such rural identities are typically expressed through self-definition by rural people on the basis of the perceived strengths and values of the quality of life in an area. Within rural areas

different groups of people may think differently about the nature and desired future for the area. In order to be effective rural development policies should be well adjusted to such (variation in) self-identification of rural identity. The emergence of new rural identities requires a new set of policies to regulate the differentiated rural spaces (Marsden, 1998).

The meaning of rural development

Two main discourses towards rural development may be distinguished, i.e. an experience-oriented discourse and a policy-oriented discourse. As illustrated by the findings of the Multifor.RD research, regarding the experience-oriented discourse rapid changes are taking place in the European countryside and the local opinions about the desired rural futures are diversifying. The policy-oriented discourse on rural development is in many cases not yet adjusted to the changes that take place in the everyday world as experienced by local people. In the policy-oriented discourse, rural development was traditionally equated with rural modernisation in the form of provision of labour and income through the further rationalisation and intensification of primary production. Also the provision of rural services featured in this perspective. More recently, increased policy attention is given towards rural restructuring. In this approach increased attention is given towards the need for restructuring of the rural economy and development of new rural activities such as the provision of leisure and recreational services or environmental and amenity services.

The Multifor.RD data indicate that the opinions expressed by the majority of the interviewed rural people are in agreement with such a rural restructuring perspective. However, whereas in the policy interpretation of rural restructuring mostly attention is given to socio-economic aspects (diversification and increase in economic activities, development of rural infrastructure) and to environmental aspects (improvement of environmental conditions and nature protection), in the experience-based discourse of local people also social aspects play a role. In this context issues regarding the ownership of and access to land as a basic rural resources are of importance, as well as issues regarding local participation in the planning and implementation of rural development policies. Such social issues arise notably in areas where former freely accessible (forest) lands are closed off to rural communities or when lands are taken over by outsiders who subsequently introduce labor-extensive new production systems. Local people often perceive of such developments as representing a loss of the local rural identity rather than as a desirable rural development.

In the (inter)national policy arena's the rural modernisation perspective is still dominant. In some countries hardly any interaction between the policy discourse on rural development of government decision-makers and the experience-based discourse on rural development of local people take place. In such cases important discrepancies and even conflicts may arise between the community perspectives on rural development and the policy perspectives (Le Floch & Deuffic, 2002). The most intensive conflicts seem to be related to contentious issues regarding the social dimensions of rural development. However, in other countries interactions are stimulated by developing appropriate communicative networks between policy makers and local stakeholders.

The rural significance of forests

As indicated by the research findings, forests play a well appreciated role in rural areas, even if forest are not a primary concern within the context of rural development. From the research a multiple set perspectives on forests could be ascertained, which are essential for shaping the desired rural futures as envisaged by local people. The expression of these values is location-specific and depends on both socio-cultural and socio-economic conditions. The following four basic perspectives could be ascertained:

- **Forests are foremost a symbol for environmental well-being**. Traditionally, the environmental role of forests is related to the provision of shelter, protection against avalanches and erosion, as well as protection of hydrological conditions. Increasingly it is also related to the protection of nature and wildlife, and to concerns regarding pollution buffering, carbon absorption and oxygen production. Apart from these positive environmental features (as well as their open-access nature, see below), forests are also much appreciated as a space for living and leisure. They are also increasingly valued for providing environmentally-friendly working conditions.
- **Forests form an essential component of the regional identity as expressed through the prevailing landscape**. The regional identity role of forests finds its expression primarily through the creation of pleasing rural landscapes. Such landscapes are characterized by an integrated set of biophysical and socio-cultural features. The socio-cultural characteristics have historically been shaped and include a set of specific land ownership conditions reflecting the traditional social relations. The fact that forest are often not sold or that farmlands are reforested when farmers shift to non-farming jobs, indicates the important role forests may play in the maintenance of a link towards a region. However, in case of traditional open landscapes, the establishment of new forests, notably by external people, may be considered as being detrimental to the regional identity. And in rural areas near urban agglomerations, the regional identity role of forests increasingly does not relate predominantly towards traditional rural landscapes, but also to newly arising urban landscapes. Under such conditions forests are often perceived as buffers against unwanted and unplanned urban growth.
- **Forests are often perceived as a major component of the rural open-access space**. In many rural areas forests characterized by their well-appreciated open-access nature. Such open access is maintained through public or common property ownership or through state legislation regarding free access to private forests. Only in a few countries forests are protected as a private domain. Such private domain forests (e.g. in the form of farm forests) may be positively perceived as a component of the rural economy. But in case that such private domain forests are owned by what are locally perceived as a socially-privileged group of people or outsiders, they may be considered as detrimental to rural quality of life.
- **The productive value of forests** is often conceived of as being subaltern to the three above-mentioned values. This is even the case in remote areas where forests often are one of the main forms of land use. Only in the case of growth areas depending on primary production the productive value of forests is conceived as an independent value.

Thus, when considering the role of forestry in rural development, three aspects need increased attention:

- The discussion on the role of forestry in rural development has mainly been dominated by a policy-oriented administrative approach that focused on the identification of policy plans regarding the future role of forestry. Still little attention has been given to supplement such an approach with an experience-oriented approach aimed at incorporating the perspectives of local communities regarding the present and expected future roles of forest within the local quality of life.
- Most of the discussions on the future of forestry has been based on a sectoral approach. However, the rural value of forests does not arise from their simple physical presence, but from their contribution to the rural quality of life and local identity. This means that the rural role of forests is perceived primarily within the context of the overall rural landscape. The stimulation of forestry within the context of rural development should therefore be based on an inter-sectoral rather than sectoral approach.
- Most policies to stimulate forestry development have primarily been based on a perspective of rural modernisation. However, within a rural development context forestry development should foremost be approached from the point-of-view of rural restructuring. And policies to stimulate the role of forestry within the context of rural development should not only be based on considerations regarding production and environmental issues, but also on social issues.

7.4 Principles and criteria for multifunctional forestry serving rural development

On the basis of the main scientific and policy-related conclusions a set of principles and criteria for planning programmes for multifunctional forestry serving rural development was identified (Table 7.2).

Table 7.2: Principles and criteria for planning programmes for multifunctional forestry serving rural development

Principle	Criteria	Key indicator
FORESTRY: FROM A SECTORAL APPROACH TO A QUALITY OF LIFE APPROACH		
Forestry policies should enlarge its focus from a traditional sectoral approach to an approach in which quality of life is central focus point	Multifiunctional forestry should acknowledge the varied meanings that relevant stakeholder groups attach to forests.	Meaning of forests
	Rural development oriented forestry development programmes should be based on a good understanding of the sense of place and rural quality of different groups of people in a locality and of how they perceive the desired future.	Sense of place Rural experiences Future perspectives
	Rural development oriented forestry development programmes should be based on the understanding of how activities by external people impact on values of rural identity and local access rights to natural resources.	Endogenous – exogenous practices Access rights
Forestry programmes aimed at rural development should not be interpreted as solely referring to rural modernisation, but should incorporate the need for rural restructuring	Rural development programmes should be based on three major dimensions: improvement of income and labour opportunities, improvement of rural services and sustaining of social and community values.	Economic benefits Level of services Social and community values
	Rural development should not only be directed at improvement of social services in the sense of physical infrastructure, but also in the sense of ecological infrastructure.	Ecological infrastructure
In planning multifunctional forestry development the traditional sector-oriented approach must be extended into a multi-sectoral approach	Benefits of multifunctionally-oriented forestry development programmes need to be appraised not only at the level of forest enterprises, but also at the level of rural landscapes.	Landscape approach
	Benefits of multifunctionally-oriented development programmes need not only to be appraised at the level of the forestry sector but at the level of regional economy.	Impact on regional economy
	In order to stimulate multifunctional forestry within the context of rural development at least equal attention must be given to improve management of existing forests within a rural landscape context, notably of small private forest owners, as to establishment of new forests.	Improve management conditions for existing forests
	Programmes to stimulate afforestation should not be based solely on considerations to stimulate new production processes on abandoned agricultural lands, but also on considerations on how to improve rural landscapes and maintain a positive sense of place.	Role of afforestation

Table 7.2: Principles and criteria for planning programmes for multifunctional forestry serving rural development (continued)

FORESTRY: RESPECT FOR DIFFERENCES IN RURAL CONDITIONS AND TRENDS		
Rural development oriented forestry development programmes should take differences in rural conditions and trends into account	Rural development should not be interpreted as being of special significance to remote rural areas and agricultural decline areas, but should also be directed at rural areas near urban agglomerations.	Peri-urban areas
	In formulating plans for forestry serving rural development the regional-specific conditions in cultural and historical situation regarding experiences with forests as a component of the local landscape and environment as well as open-access space should be considered.	Cultural and historic context
FORESTRY: RESPECT FOR DIFFERENT PERSPECTIVES OF STAKEHOLDER GROUPS		
Rural development oriented forestry development programmes should take differences in stakeholder opinions regarding rural conditions into account	Forestry development programmes should incorporate measures to negotiate different opinions of stakeholder groups regarding the desirability of rural development efforts.	Negotiation between stakeholders
	When planning afforestation, attention should be given to the notion that agricultural lands or nature areas such as peatlands may be considered as a much appreciated open space, also within in forested landscapes.	Opinions on open space
	Stakeholder experience with forests does not only relate to forests as an ecological and landscape component, but in many cases also to forests as open-access components.	Opinions on open access
	Establishment of forest plantations for commercial production is not judged only on its ecological and landscape merits, but also on its possible impact on the redistribution of landownership and incorporation in external commercial networks .	Loss of local identity to external influences
In planning multifunctional forestry development within the framework of rural development the changing position of private forests owners need to be taken into account	Programmes to stimulate multifunctional forestry by private forest owners should be based on the understanding that forest ownership is increasingly characterized by a pluri-active livelihood system rather than a rural production-based livelihood system.	Pluri-active livelihoods of private forest owners
	Programmes for forestry development in the context of rural development should be based on the understanding that in many rural areas private forest ownership is increasingly characterized by urban-oriented lifestyles, including incomes generation from the secondary or tertiary sector, and residence in another, often urban, locality than where the forests are situated.	Role of part-time & hobby forest owners
	Multifunctional forestry development programmes should be aware of the gradually increasing difference in value orientation of farmers and forest owners.	Differentiation between of farmers and forest owners
	Forestry development programmes should uses appropriate extension and information systems for communication with the new types of private forest owners.	Extension

7.5 Policy implications

In relation to these main conclusions the following main policy implications at European level were identified[21]:

- The Multifor.RD results show that social and environmental quality aspects are the main concerns regarding forestry in a rural development context. This challenges the dominant European policy concerns about forestry development as focusing predominantly on the improvement of the production function of forests thereby generating income and employment. Instead of focusing on the traditional rural development approach of forestry contributing towards modernisation increased attention should be given towards the role of forests in restructuring rural areas and improving its quality of life[22]. Measures to stimulate multipurpose forestry should be positively related to and even enhance the role of forests in shaping regional identity and landscape. Measures to stimulate afforestation should foremost be based on a landscape development approach. In many cases afforestation can be used to enhance the landscape identity, but in other cases afforestation may destroy much appreciated open spaces.
- When considering options for forestry development within the context of a rural restructuring approach, attention should not only be given to productive and environmental issues, but also to social issues. The following social issues merit specific attention: the role of forests in contributing towards rural identity (including possible negative perceptions) and the position of forests as an open-access rural space. For instance, afforestation as a means towards producing industrial resources in non-accessible, externally-owned, high production units is generally disfavoured and policy measures to stimulate such a sectoral approach will often result in rural discontent or even outright conflict.
- Within the context of stimulating the role of forests in restructuring rural areas, more attention needs to be given towards strengthening the social roles of forests. In this context European forest policies should identify quality criteria regarding interactions (including negotiation of conflicts) between forest owners and community inhabitants, as well as regarding measures for fulfilling the role of forests in respect to local identity. In this context, more emphasis should be given towards the proper organisation of forest management by (often small-scale) forest owners rather than to afforestation and forest protection measures only.
- In formulating policies to stimulate multipurpose forestry for rural development in an European context, attention needs to be given to the variety of rural conditions in Europe rather than only towards the variety of forestry conditions. In order to meet the requirements of finding a proper balance between European level and local-level concerns, policies for forest protection and forestry development should be based on the following principles:

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[21] More detailed country-level policy implications have been formulated in the various country synthesis reports, see Annex 2. These country synthesis reports can be downloaded from www.dow.wau.nl/multifor

[22] Although the recent suggestions to use EU agricultural subsidies for renumerating farmers for landscape and environmental management rather than as production stimulants were not explicitly addressed in the study, the Multifor.RD results indicate that in the context of forest management such a measure is favoured by many people.

- Policies should be based on a regionalised set of forestry stimulation actions, which can be implemented in accordance with the principle of subsidiarity
- Policies should identify common standards for inter-sectoral co-ordination and local involvement in the planning of location-specific forestry development measures.
- At present within EU rural development policy is mainly focused on remote areas. However, under influence of the ongoing urbanization process, many traditionally more favoured areas are increasingly faced by a loss of identity and subsequent problems of rural restructuring. This is notably the case in areas with rural/urban interfaces. Forests can play a significant role in the restructuring of such peri-urban areas. The EU forestry development policy should therefore not be solely focused on stimulating forestry in traditional rural areas characterized by rural production processes, but explicitly also on the role of forests in areas with rural/urban interactions in which important discrepancies exist between requirements of community inhabitants and actions of landowners.
- At present a major proportion of EU forestry policies are focused on the stimulation of afforestation of abandoned agricultural lands. Although there are certainly rural areas where such afforestation can contribute towards a better quality of life as perceived by local people, this is not everywhere the case. However, as indicated by the Multifor.RD data the locally perceived forestry problems are often not primarily the amount of forests, but proper management of existing forest with due respect for environmental and social values. Attention needs to be given towards the formulation of European policies for stimulating the development of novel arrangements for multifunctional forestry based on the principle of equitable distribution of multiple forest benefits at community level.
- Policy measures to stimulate multifunctional forestry for rural development should be cognizant of the perceived role of forests as an open access landscape component. Policy measures to stimulate multipurpose forest management should therefore not only focus on improving the financial returns of forest production as a private good, but also on improving forest-derived incomes within the regional economy. In order to assure that such forest-based regional incomes are at least partly reinvested in forest management, novel financing mechanisms need to be developed and implemented.

In order to accomplish these policy objectives attention needs also to be given towards the development of new policy instruments:

- In developing quality criteria for forest management (e.g. within the framework of the EU-required National Forest Plans) attention should be given towards how to address the concerns of rural communities regarding the local role of forests. This will require increased attention to communicative forest policy instruments as a means to address the perspectives of different local stakeholder groups.
- In developing quality criteria for forest management attention should also be given towards the needs to clearly identify the rights and duties of both governments, private enterprises and forest owners regarding the provision and use of forest goods and services.
- In order to stimulate the role of forests in the rural restructuring special attention needs to be given towards the development of policy instruments to stimulate the creation of new forms of function endowment systems (e.g. for payment of forest products and services as

either common property goods or club goods) for remunerating forest owners for the provision of amenity functions

- In developing financial and communicative instruments for stimulating improved forest management attention needs to be given to the changes in forest owner conditions and the increase in hobby owners and urban-based forest owners.

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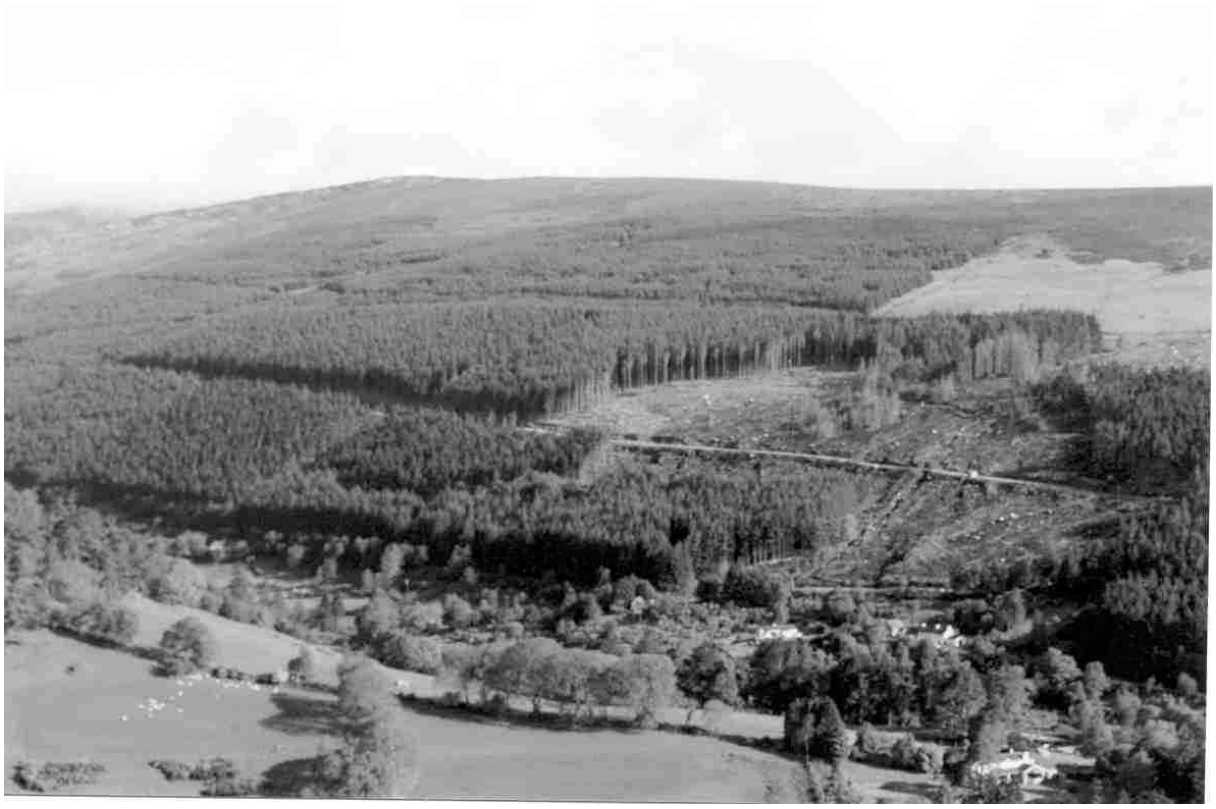

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Annexes

Ede, the Netherlands (J. van Broekhuizen, the Netherlands)

Annex 1 Composition of research team

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Annex 2 List of National Synthesis Reports[23]

Mediterranean Countries	
Greece	Kassioumis, K., K. Papageorgiou, N. Stamou, A. Christodolou, V. Blioumis and A. Karameris (2002). *National Synthesis Report.* Multifor.RD Working Paper, NAGREF, Ioannina, Greece
Spain	Domínguez-Torres, G., E. Plana Bach and M. Bori Sanz (2002). *Multifor.RD National Synthesis report of Spain*. Multifor.RD Working Paper, Centre Tecnològic Forestal de Catalunya, Solsona, Spain
Central European Countries	
Austria	Kvarda, E. (2002). *Concise National Synthesis - Austria Multifor.RD Working Paper*, University of Agricultural Sciences Vienna, Austria
Germany	Schraml, U. and K. Volz (2002). *Synthesis Report – Germany*. Multifor.RD Working Paper, Institute of Forest Policy Freiburg, Germany
Hungary	Szepesi, A. and L. Jager (2002). *National Synthesis Report Hungary.* Multifor.RD Working Paper, State Forest Service - Section of Forest Inventory/University of West Hungary - Department of Forest Policy and Economics, Budapest, Hungary
Atlantic Countries	
Denmark	Præstholm, S. and F. Jensen (2002). *Synthesis report of Denmark.* Multifor.RD Working Paper, Danish Forest and Landscape Research Institute, Hørsholm, Denmark
France	Le Floch, S. and D. Terrasson (2002). *French synthesis report.* Multifor.RD Working Paper, CEMAGREF, Cestas Cedex, France
Ireland	O'Leary, T., A. McCormack and A. Ni Dhubáin (2002). *Full National Synthesis Report: Project Summary and Policy Repercussions.* Multifor.RD Working Paper, University College Dublin, Dublin, Ireland
The Netherlands	Elands, B.H.M. and K.F. Wiersum (2002). *Synthesis report of the Netherlands.* Multifor.RD Working Paper, Wageningen University, Wageningen, the Netherlands
Country Reports Finland and Switzerland	
Finland	Selby, A. and H. Karppinen (2002). *Country Report – Finland.* Multifor.RD Working Paper, Finnish Forest Research Institute, Helsinki, Finland
Switzerland	Hermann, K., K. Seeland and W. Zimmermann (2002). *Country Report Switzerland*. Multifor.RD Working Paper, Zürich, Switzerland

[23] All reports can be downloaded from http://www.dow.wau.nl/multifor

Annex 3 List of project publications

Special project publication

K.F. Wiersum & B.H.M. Elands (eds) (2002). *The changing role of forestry in Europe: perspectives for rural development*. Nature Forest in Society 2002-02, Wageningen University, Wageningen, the Netherlands[24]

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[24] This report can be downloaded from http://www.dow.wau.nl/multifor

Publications in scientific journals

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Annex 4 Description of research areas

In the following paragraphs a short description of each case-study area is given. The comparative characteristics in respect to geographic conditions, demographic conditions and land use are summarised in Table A4.1 to A4.5 respectively.

1 Austria

The case study area **Waldviertel** forms the so-called Bohemian Mass in the eastern part of Austria. The area is part of the larger Waldviertel region in the Northwest of Lower Austria. It is situated on a hilly plateau with a range of 1000 meter in altitude and crossed by meandering ravines. The “Upper Waldviertel” is of predominantly mountainous character with uneven relief and relatively large differences in altitude of between 600 and 1000m. The area can be seen as remote and peripheral. For a few decades the Waldviertel as a whole has a declining population caused by the unfavourable income changes and by the bad situation on the labour market respectively. The population is now stabilising. Forestry and agriculture land-uses are both dominating. There are hardly any farms without woodland. Tourism is increasing in the area due to the opening of a spa.

The case study area **Weinviertel** belongs partially to the entry-area of the federal capital Vienna. The region is well supplied with public transport facilities, but due to its peripheral location to the main traffic-axes it is not possible to profit from this infrastructure. Though, the process of sub-urbanisation and the improvement of public transport connections have reached the communities, which are situated along the region in the north of the urban region of Vienna. In the area there are no strong differences in altitude (the altitude is around 200 to 300m.) and there are only a few elevations reaching up to over 350m. Weinviertel is a region with a dominating primary sector. After a strong decline in population and a high labour commuting in the direction to Vienna due to low development-dynamics and unfavourable income change an increase in population takes place in Weinviertel. In the larger part of Weinviertel the tourism-activities generally are very low.

2 Denmark

Haderslev is located in the Southeast of Denmark. The land is formed during the Weichsel glacial period. The landscape is general gently shaped moraine between 20 and 50m. The exception is a large subglacial stream trench formed by melting water under the massive cover of glaciers that divides the municipality into two major parts. The landscape along the trench has steep slopes and side valleys. The area is characterised by the dominance of agriculture. Within the matrix of agriculture there are some old forests. A few large forests are owned by the state and the rest of the forests are mainly small and owned by farmers. A trend can be noticed that the agricultural production is concentrating on fewer farms and that employment in the tertiary sector is dominating (70%).

The area **Hvorslev**, situated in the Northeast of Denmark, is also influenced by the last ice age. Most of the area consists of moraines between 50 and 60m. There are a few areas with hills more than 90m. Two broad river valleys cut through the northern part of the municipality down in the landscape (below 5m.). The soils are generally good and agriculture is dominating, but on the slopes along a couple of river valleys the soil is sandy and these areas are mostly afforestated. Inside Hvorslev municipality agriculture is still very important for the employment. But nearly 60 % of the working people living in Hvorslev are working outside the municipality. The secondary sector is highly influenced by the nearby industries in the neighbour municipality of Bjerringbro. Afforestation has been taken place since 1950, mostly on former heathlands on the slopes along the valleys. During the 90s the afforestation has mostly been indirect in terms of planting Christmas trees on agricultural land.

3 France

Plateau de Millevaches is an area located at the western margin of the Massif Central in the middle of France. It is an old granite mountain with an Atlantic temperate climate. The mountain altitude range between 700 and 1000m. In the past fallow lands were predominating and mainly used for sheep farming. There was very little woodland. Nowadays fallow land only takes in 10% of the land-use and forests are dominating. From 1920 afforestation of farmland has taken place. The old traditional forests are composed with beech and oak whereas the afforestated areas mainly exist of conifers. Plateau de Millevaches is considered as a rural area in decline with a very low population density and working population. The area is enclosed through lack of motorways and difficult to access in winter. There is not enough snow to develop winter sports resorts and the tourist season in the summer is very short (two months).

The study area **Monts d'Arrée** is located in the Natural regional Park of Armorique in the West of France. It is a hilly area between 200 and 380m above sea level. Eight municipalities are settled in the centre of the park. The landscapes exist of farmland, moorland and in a lesser extend of woodland. It is an area of rural decline and the numbers of farmers is reducing. The farmlands decrease steadily and concentrate on the best soils, whereas moorlands increase between the ridge of the hills and the field area. Afforestation was promoted without a real forest management plan and isolated clumps of coniferous appeared in the traditional open landscape. Problems with afforestation of the open landscape, in particularly on moorlands remain despite an official charter dividing the Park into three areas with differences in afforestation.

Table A4.1: Geographical characteristics of the areas

Country	**Austria**		**Denmark**		**France**		**Germany**		**Greece**		**Hungary**		**Ireland**		**Netherlands**		**Spain**	
Study area*	WA	WE	HA	HV	PM	MA	ST	PF	KL	KN	SZ	KE	WI	LE	ED	SK	NA	TM
Type**	Tr	Af	Tr	Af	Tr	Af	Tr	Af	Tr(pr)	Tr(pu)	Tr	Af	Tr	Af	Tr	Af	Tr	Af
Altitude a.s.l (m)	560-1070	200-300	0-75	0-100	700-1000	200-380	200-1400	Av. 550	Av. 400	542-1073	350-650	110	50-380	40-425	0-80	0	Av. 610	Av. 31
Size (km^2)	302	346	272	130	246	256	91	197	125	55	95	81	77	112	319	121	150	65
Relative size (av.=169km^2)	1.8	2.0	1.6	0.8	1.5	1.5	0.5	1.2	0.7	0.3	0.6	0.5	0.5	0.7	1.9	0.7	0.9	0.4

* Study area: WA= Waldviertel, WE= Weinviertel, HA= Haderslev, HV= Hvorslev, PM= Plateau de Millevaches, MA= Monts d'Arrée, ST= Staufen, PF= Pfullendorf, KL= Kolindros, KN= Konitsa, SZ= Szentgál, KE= Kerekegyháza, WI= East Wicklow, LE= South Leitrim, ED= Ede, SK= Stadskanaal, NA= Navès, TM= Torroella de Montgrí

** Type: Tr= traditional, Af= afforestation

Greece has no afforestated areas. The differences between the chosen are areas with mostly: pu= public forests and pr= private forests

Av. = average

*Table A4.2: Rurality conditions and trends: demography**

Country	Austria		Denmark		France		Germany		Greece		Hungary		Ireland		Netherlands		Spain	
Study area	WA	WE	HA	HV	PM	MA	ST	PF	KL	KN	SZ	KE	WI	LE	ED	SK	NA	TM
Type	Tr	Af	Tr	Af	Tr	Af	Tr	Af	Tr(pr)	Tr(pu)	Tr	Af	Tr	Af	Tr	Af	Tr	Af
Population																		
Population	8731	11234	31759	6715	1444	5216	12396	22893	5245	2858	2826	6070	4147	3477	101333	32908	210	6804
Pop. Density (pers/km2)	29	32	117	52	6	20	136	116	42	52	30	75	54	31	318	272	1	105
Pop. 15-60 years (%)	58	60	60	60	37 F1	34 F1	55	56	67	72	61	62	52I1	58I1	61	61	59S1	66S1
Pop. Trends (%/year)																		
Pop. Change '80-'90	-0.5	0.1	0.1	-0.2	-0.8	-0.6	-0.1	1.0	-0.4	0.0	-0.6	-0.2	-0.2	-1.5	1.0	-0.4	-2.4	2.2
Pop change '90-'00	-0.1	0.9	0.5	0.3	0.1	0.5	0.3	1.6	G1	G1	-0.1	0.4	2.1	0.3	1.0	0.0	-1.5	1.9
Distance nearest city (km)																		
> 10,000 persons	20	20	0	16	60	36	5	13	25	64	15	15	30	60	0	0	32	28
> 50,000 persons	70	40	25	12	60	48	12	28	55	64	15	15	45	120	0	30	60	30
> 100,000 persons	70	40	80	28	60	48	12	84	55	64	70	80	45	135	25	30	120	150

* Statistics about demography, in general, are from either the year 1998, 1999 or the year 2000.
F1 Estimated as population statistics do not use 15 years of age as a cut-off
G1 Last population/land-use and employment census conducted in 1991, next one will be conducted in 2001
I1 Estimated as population statistics do not use 15 years of age as a cut-off
S1 These are recalculated figures. Originally, data is based on 15-64 years: NA=62%, TM=69%

4 Germany

The research area **Staufen** is located in a mountainous area nearby Freiburg in the southwest part of the Black Forest and in the southeast of the state of Baden-Wurttemberg. The area has ranges in altitudes of more than 1000m within a few kilometres. In the southwest it includes either areas of the Rhine Valley (200m) and in the east several mountains rise up to 1400m. The steepest areas in Germany can be found in the case study site. More than half of the area is used for forestry. Most of the forests are collective forests owned by the municipality. The tertiary sector is bigger than the primary and secondary sector together and a lot of jobs in this sector are involved in tourism. There is no industrial dense in the area.

Pfullendorf is also situated in the Southeast part of Baden-Wurttemberg. The whole district covers a part of the Alpine Foreland in the north of the Lake Constance. During the last three ice ages the glaciers formed the landscape. The average height is about 550m. The area can be divided into four districts belonging to different municipalities. The settlement patterns are very different. Two municipalities are characterised by tourism enterprises, although small middle class enterprises and farms still are most important for the local economic infrastructure. In the city Pfullendorf also industrial enterprises are important and the other municipality has a lot of people working in surrounding areas. The importance of forestry in local economic infrastructure in the case study area can be neglected. Agricultural land-use is still the dominating land-use.

5 Greece

Kolindros is a rather remote area in the west part of the Region of Central Macedonia in the Prefecture of Pieria in Northern Greece. The average altitude is 400m and the area is classified as semi-mountainous. In Kolindros there is a dominant agricultural tradition as almost half of the population is employed in the primary sector. A high percentage of the area is covered with forest, which is predominately private owned. Tourist infrastructure is not yet developed in Kolindros case study area. Little recent afforestation has been taking place in Kolindros, but because afforestation in Greece is small in general, the area is subdivided in the category of case study areas with recent afforestation. In Kolindros most forests are privately owned.

The smallest case study area is **Konitsa** and it covers a total area of 54.6 km2. It is situated in the Northern Pindos mountain range, near the border with Albania at the Northwest of Greece in the Ioannina prefecture. The average altitude is 808m and it is classified as semi-mountainous area. The area extends from lowland agricultural areas at an altitude of 542m to forested mountain peaks at 1073m altitude. Agriculture and forestry are the cornerstone of the rural area. Almost half of the area is classified as grazing area. Most of the grazing areas are included in “forested area” category by the Forest Service’s management plan for this area. In Konitsa, most of the forestland is under state ownership and has a National Park status. Despite the widespread traditional farming activities, Konitsa shows an urban-like employment structure with above half of the working population working in the tertiary sector. The highly valued landscape has resulted in increased tourist numbers.

Table A4.3: Rurality conditions and trends: land-use

Country	Austria		Denmark		France		Germany		Greece		Hungary		Ireland		Netherlands		Spain	
Study area	WA	WE	HA	HV	PM	MA	ST	PF	KL	KN	SZ	KE	WI	LE	ED	SK	NA	TM
Type	Tr	Af	Tr	Af	Tr	Af	Tr	Af	Tr(pr)	Tr(pu)	Tr	Af	Tr	Af	Tr	Af	Tr	Af
Land-use (%)																		
Agr land	41	70	86	88	34	39	32	57	44	18	50	71	92	77	39	86	16	25
Forest	55	23	6	10	46	13	61	31	44	51G1	45	15	6	6	35	3	83	53
degr/wilderness	0	0	1	0	12F1	41F1	0	0	5	14	0	0	0	0	19 N1	1 N1	0	0
Build-up area	3	6	5	2	3	3	6	9	4	4	5	6H1	2	4	7	8	0	5
Else area	1	2	2	0	5	4	1	3	3G2	13G2	0	8 H2	0	13 I1	0	2 N2	1	17S1
Tourism																		
Sleeping places (beds)	1584	272	12641	649	74	151	1858	455	42	867	0H3	80	150	250	30000	1500	208	42900
Spent nights	303662	11664	400000	20000-30000 D1	9000	20000	116094	42848		6067	200	6000	585	1150	733633	75000	35040	5167305
Spent nights (%/ inh.)	3478	104	1259	298-447	623	383	937	187		212	7	99	14	33	724	228	13272	66882
Land-use trends (%/Year)																		
Change agr land	-0.3	-0.1	<(-1)D1	<(-1) D1		-1.2	-1.1	-0.8	G3	G3	-0.1	-0.2	-2.1	-1.0	-0.4	-0.5	0.0	-2.0
Change forest land	0.2	0.1	<1 D1	<1 D1			0.0	0.0	G3	G3	0.1	1.0	0.3 I2	10.8 I2	0.2	14.6	0.0	0.7
Change build-up area	1.0	0.8	<1 D1	<1 D1			0.5	5.4	G3	G3	0	-0.3	I3	I3	2.1	0.3	0.0	0.4
Change in tourism	1-5	0-1	<0D2	0-1			< 0	1-5	G3	G3	0-1	10-25	0-1	>25	1-5	10-25	0-1	0-1

Table A4.3(continued): Rurality conditions and trends: land-use

D1 Estimated
D2 Negative due to general drop in German tourists in Denmark
F1 ancient pasture lands evoluated into moorland with heather, gorse, broom and willow
G1 Forest areas, which includes grazing areas
G2 Water
G3 last population/land-use and employment census conducted in 1991, next one will be conducted in 2001
H1 Build up area in Kerekegyhaza also contains the non-productive land, that is estimated to be half of the area. Therefore, half of the orginal figure 12% (6%) is included in the 'else area'.
H2 Cane (wetland)
H3 no registered sleeping places
I1 Lakes and wetlands
I2 Estimation
I3 Negligible
N1 nature reserve, parts could be forest
N2 Water
S1 Area divided between rivers and lakes (wetlands) and non-productive area (abandoned/degraded agricultural land, coastal surface and rocky terrain)

Table A4.4: Rurality conditions and trends: employment

Country	Austria		Denmark		France		Germany		Greece		Hungary		Ireland		Netherlands		Spain	
Study area	WA	WE	HA	HV	PM	MA	ST	PF	KL	KN	SZ	KE	WI	LE	ED	SK	NA	TM
Type	Tr	Af	Tr	Af	Tr	Af	Tr	Af	Tr(pr)	Tr(pu)	Tr	Af	Tr	Af	Tr	Af	Tr	Af
Employ-ment (%)																		
Primary sector	27	42	4	9	42	29	44 Ge1	70 Ge1	50	12	27	10	13	21	8	5	54	8
Secondary sector	25	25	24	44	16	27	Ge1	Ge1	16	20	48	40	43	36	19	37	18	29
Tertiary sector	48	33	72	47	42	44	56	30	29	54	25	50	44	40	74	55	27	63
Tourism (% empl)	5-10	2.5-5	2.5-5	0.5-2.5	<0.5	<0.5	>10	2.5-5	G1	G1	<0.5	0.5-2.5	0.5-2.5	5-10	2.5-5	0.5-2.5	5-10	>10
Unempl (% of Workforce)	5	7	4	3	18	12	10	8	2	13	10 H1	7 H1	18	11	7	18	6	8
Employm. Trends (90-00 %/year)																		
Change prim. sector	-3.3	-2.0	-4.3 D1	-4.5 D1		-5.5	-2.0 Ge1	-1.0 Ge1	G2	G2	-0.3	-10.1	-5.6	-2.7	-2.4	-3.5	-4.5	-4.1
Change sec. sector	-1.5	-0.1	2.0 D1	1.8 D1		-0.9	Ge1	Ge1	G2	G2	-0.8	5.5	0.8	2.2	-1.5	0.7	13.4	-0.3
Change tert. Sector	3.8	3.6	1.2 D1	2.0 D1		1.3	1.9	2.7	G2	G2	2.2	1.7	1.6	0.0	0.8	0.0	12.5	0.8
Change unempl.	-3.9	-6.0	-17.7 D1	-17.3 D1					G2	G2	H2	H2	0.4	-0.9	-3.9	-2.8		-0.6

D1 figures based on period November 1993-January 1999
Ge1 Primary and secondary sector employment are summed up, no separated figures available
G1 Tourism employment is part-time, those engaged in the sector are also working in the primary or secondary sector
G2 last population/land-use and employment census conducted in 1991, next one will be conducted in 2001
H1 Only the registered unemployment
H2 For political reasons there was no unemployment in 1985

Table A4.5: Forestry conditions

Country	Austria		Denmark		France		Germany		Greece		Hungary		Ireland		Netherlands		Spain	
Study area	WA	WE	HA	HV	PM	MA	ST	PF	KL	KN	SZ	KE	WI	LE	ED	SK	NA	TM
Type	Tr	Af	Tr	Af	Tr	Af	Tr	Af	Tr(pr)	Tr(pu)	Tr	Af	Tr	Af	Tr	Af	Tr	Af
Forest ownership																		
Forest (%)	55	23	6	10	46	13	61	31	44	51	45	15	6	6	35	3	83	53
Forest owned by inhab.(%)	90-100	80-90	60-70	40-50D1	30-40	30-40			90-100G1	0G2	30-40	40-50	20-30 I1	50-60 I1	20-30N1	0-10	50 S1	10 S1

D1 estimation and two major owners in the neighbour municipalities own approximately half of the forest
G1 Church owns 2.5 % of forest
G2 All state forest
I1 Figures derived from average for the county (total private forest area Wicklow 31% and Leitrim 98%)
N1 Assumed that private owners are inhabitants
S1 Assumed that private owners are inhabitants

6 Hungary

The study area **Szentgál** is situated in Transdanubia, in the middle of a valley between the Northern and Southern Bakony Mountains in the Northwest of Hungary. It is located at 350m and several higher hills (400-650m high) are incorporated. Within the last two decades the population decreased moderately, especially young people between 20-40 years are searching for better work and life conditions in nearby cities, whereas the permanent settlers are mainly elderly people. Almost half of the area comprises of forestland. Private ownership has been dominant before the Second World War, but they were nationalised in 1949 and became state property. In 1991 the forests were re-privatised (53%) and the local population now owns at least 60 to 70% of the private forests. Afforestation was not too intensive in the region in the last 30 years, as the majority of sites suitable for forest management are naturally forested.

The study area **Kerekegyháza** is located in the middle of Hungary in the Hungarian lowlands. It is not homogenous and exists of flat “puszta”, waving ploughlands, former lake bottoms, temporary ponds and forested sand dunes. The area is located in the middle of the Great Plain on the sandy area between the Duna and the Tisza rivers. The altitude is about 110m (average). In the last 15 years vineyards and pastures were converted to ploughlands and on part of the poor ploughlands afforestation took place. Private forestry has no tradition in this region, there are a lot of small owners and the forests have never been managed independently. Agriculture is still the main land use, but employment in the primary sector has decreased rapidly in the last 25 years and nowadays about 10% of the population is working in this sector. Half of the population works in the tertiary sector and tourism is seen as an important income for local people in the future.

7 Ireland

East Wicklow is situated on the East Coast of Ireland, 50 km south of Dublin. The County of Wicklow is known as “The Garden of Ireland”, reflecting the high quality and diversity of landscape as well as the many formal gardens and large estates. The landscape comprises rolling foothills (up to 380m), rolling agricultural mosaic (50 to 150m) and wooded valleys (50m to 250m). The study area is characterised by a mosaic of clearly defined fields, punctuated by forests, two villages, scattered farmsteads and houses. Typically the fields on the lower ground are under pasture or tillage, contrasting with wooded foothills and valley sides. The 1996 Census data shows a high unemployment rate in the area and a shift from primary sector employment to secondary and tertiary sector is recognised. The proximity of Dublin to the north has a major influence upon the locality.

South Leitrim is located within County Leitrim in the Northwest of Ireland. Low marginal drumlin hills (40-100m), with inter-drumlin flats and lakes, as well as mountain moorland (up to 425m) with extensive conifer plantation characterise the landscape. The typical continuity of small rolling hills over an otherwise relatively even terrain as well as the prevalence of a close network of fields and hedgerows results in a small-scale intimate landscape. The Ballinamore Ballyconnell Canal, comprising a slow flowing navigable river meandering through drumlin hills and studded with lakes and wooded islands flanks the study area to the north. Leitrim south is sparsely populated and can be classified as a rather remote area and

(agriculturally) disadvantaged due to poorly draining soils and of high environmental quality. Approximately three quarters of the land is pasture, woodlands covering only 6,7 % of the total area. All forests in South Leitrim have been planted recently on both public and private land.

8 The Netherlands

Ede is one of the important municipalities at the Veluwe, which is the largest and well-known nature area of the Netherlands. It is located in the middle of the country in the province Gelderland. A variation of landscapes can be seen, agricultural fields, open heathland, forests and 'drifting' sand areas. The area is formed in the last ice aged and the height varies from 30 till 80m above sea level. The area is opened up by infrastructure and built-up area. The largest part of the rural area is reserved for forest and nature area since a long time. Since a couple of decades nature and amenity values have overtaken the production function of forest, but nowadays due to sustainability conditions the production function is taken up more seriously again. The economy of Ede is growing and the importance of recreation and tourism is enormous. The presence of forest and heath land together with the provisions, activities and events that take place makes the area attractive for tourist.

The study area **Stadskanaal** is situated in the Northeast part of the Netherlands in the province Groningen. It covers an area of 120 km2. The landscape is man-made, flat, open and rectangular. Two landscape types can be identified which reflect the occupational history. The brook valley landscape with old arable fields occurs on a small scale in an open landscape. The fencolonial landscape is of rectilinear shape, expressing the rational reclamation of the fen area into arable land. Urbanisation and afforestation change the old structures in the landscape that primarily exists of agricultural land. Recently, several farmers within and nearby Stadskanaal have planted or intend to afforestate former farming land. Forests still cover a very small surface of the area. In a Dutch perspective, the area is relatively peripherally located and not dense populated, although it is apart from Ede the most populated case study area. The share of employment in the secondary and tertiary sector is rising and the tourism sector is small but growing in importance.

9 Spain

Navès is located in the Catalan Pre-Pyrenees in a mountainous area. The study site exists of mountainous areas, hilly areas and flatlands. The average height is 610m. Strong slopes in classes over 30 % are dominating. It is a very remote area. In the period of 1981 and 1991 there was a dramatic decrease in population, which became less dramatic in the following period. There was a strong trend towards population concentration in the county capital. The level of ageing in the area is high. Most of the people are employed in the primary sector and forests are the dominant land-use. In addition to the productive function forest fulfil to some extend also a protective and recreation function. All the forests are private owned. Afforestation programme of abandoned agricultural land has had very little repercussion mainly due to the lack of natural regeneration in the zone.

Torroella de Montgrí is located in Catalonia, in the Northeast of Spain. The urban area surrounds an isolated mountain in the middle of a delta, called Montgrí massif. The average

height is 31m. Besides the urban area and the massif there are areas with agricultural crops, rivers and wetlands. Forests cover more than half of the area. The main function of the forests in the area is a protective one, since the kind of species used in most forests have a very low potential yield and commercial exploitation only exist for fast growing intensive plantations. The number of inhabitants has been increased during the last decades. One of the important reasons is the flooring tourist industry thanks to its proximity to the Mediterranean Sea. During the summer the population increases up to 40 thousand. Tourism not only attracts people employed in the area, but also tourists who decide to live there. Not surprisingly the biggest part of the working population is employed in the tertiary sector.

Annex 5 Multifor.RD questionnaires

Survey Questionaire Investigating Your Vieuws About This Locality

- Community Inhabitants Questionnairs
- Landowners Questionnaires

Survey Questionnaire Investigating Your Views About This Locality

Researchers at UCD have teamed up with local area development agencies to find out your views concerning this locality. For example, what do you like or dislike about this area? How would you like to see it develop in the future? What do you think about landuse in this area? What is your opinion regarding forestry?

Please let us know what you think by filling out this questionnaire and then post it back in the pre-paid envelope provided. The results of this study will be used to help recommend specific rural development strategies for this locality and will published locally in the summer of this year. This is your opportunity to voice your opinion.

Q1. **Please answer the following concerning your place of residence (*tick one box on each row*):**

How many years have you lived in this locality? (*please write the number of years in the space provided or tick the other box as appropriate*)	☐ Years	☐ I don't live in this locality
Do you have children or other relations living in this locality?	Yes ☐	No ☐
Do you work outside this locality?	Yes ☐	No ☐
Were you mainly brought up (to the age of 18 years) in this locality?	Yes ☐	No ☐
If no, were you mainly brought up (to the age of 18) in a rural or urban area?	Rural ☐	Urban ☐
Would you describe this locality as rural or urban?	Rural ☐	Urban ☐

Q2. **Could you indicate how personally attached or detached you feel to this locality by ticking one of the boxes below. If you feel more strongly attached you can mark a box more to the left; if more strongly detached a box more to the right.**

Strongly Attached	*Attached*	*Neutral*	*Detached*	*Strongly detached*
☐	☐	☐	☐	☐

Q3. **On a general level, how would you describe this locality? Please tick <u>a maximum of three boxes</u> below which most closely agree with your overall impression.**

This locality is …	*Tick 3 boxes only*
An area significantly occupied by the agricultural sector	☐
An area significantly occupied by production forestry	☐
An area significantly occupied by nature / wilderness	☐
A remote and sparsely populated area	☐
A rural area adjacent to urban areas	☐
A centre with diverse business activities which is surrounded by rural countryside	☐
Urbanised area	☐
An area visited by a high number of tourists	☐
Other, please specify ……	☐
I don't know	☐

Q4. **Some more specific statements describing this locality are listed below. Please indicate the extent to which you agree or disagree with the statements by ticking the relevant box on each row. If you only agree or disagree to some extent, but not totally, you can tick one of the relevant boxes next to the extremes.**

In this locality there is / are …..	*Strongly agree*	*Agree*	*Neither agree nor disagree*	*Disagree*	*Strongly disagree*
a very attractive setting for houses	☐	☐	☐	☐	☐
peace and quiet with low traffic	☐	☐	☐	☐	☐
beautiful landscape scenery	☐	☐	☐	☐	☐
a landscape which is characteristically different from other places	☐	☐	☐	☐	☐
unpolluted air, water and soil	☐	☐	☐	☐	☐
very good overall services such as public transport, shops and schools	☐	☐	☐	☐	☐
plenty of opportunities for recreation and sports	☐	☐	☐	☐	☐
a lot of forests	☐	☐	☐	☐	☐
a rich variety of nature and wildlife	☐	☐	☐	☐	☐
a closely knit community	☐	☐	☐	☐	☐
a strong sense of history and tradition	☐	☐	☐	☐	☐
a very sparse population	☐	☐	☐	☐	☐
a prevalence of low incomes	☐	☐	☐	☐	☐
too many visiting tourists	☐	☐	☐	☐	☐
too much crime	☐	☐	☐	☐	☐
very few employment opportunities	☐	☐	☐	☐	☐
no involvement of locals in how the area is developed	☐	☐	☐	☐	☐
conflict between different uses of land such as for tourism, industry and farming	☐	☐	☐	☐	☐
too many houses being built in the recent past	☐	☐	☐	☐	☐
too much industrial development, including factories	☐	☐	☐	☐	☐

Q5. **Please indicate whether you think the following activities are currently of high importance, some importance or no importance / non existent to the economy of this locality *(Tick one box for each row):***

	High importance	*Some importance*	*No importance/ non existent*	*I don't know*
Farming	☐	☐	☐	☐
Forestry	☐	☐	☐	☐
Commercial trade	☐	☐	☐	☐
Tourism	☐	☐	☐	☐
Industry	☐	☐	☐	☐
Crafts	☐	☐	☐	☐

Q6. **A number of possible ways in which this locality could develop in the future are outlined below. Can you please indicate which three possibilities are most preferable to you:**

In this locality in the future there could be an increase in…	*Tick the three most preferable*
intensive factory farming	☐
organic farming	☐
numbers of visiting tourists	☐
industrial activities	☐
built-up areas	☐
employment opportunities	☐
the amount of forests	☐
the amount of nature and wildlife areas	☐
the availability of services (eg. transport, shopping)	☐
scenic beauty of landscape	☐
strength of bond / friendship between neighbours	☐

In this questionnaire we would next like to ask you some general questions about the forests in this locality. By 'forests' we mean forests and woodlands in general - all kind of wooded areas, including old forests and also new plantations.

Q7. **Approximately how often in the year 2000 did you set out for any sort of outdoor recreational activity in this locality such as walking, cycling, hunting (a) in the open countryside and (b) specifically in any kind of forests?**

	In the open countryside - not including forests	Specifically inside any kind of forest
Never	☐	☐
Once	☐	☐
2 to 4 times per year	☐	☐
Monthly	☐	☐
Weekly	☐	☐
Daily	☐	☐

Q8. **Do you agree that the public should have freedom of access for recreation to <u>privately</u> owned forests?**

Yes ☐ No ☐

Do you agree that the public should have freedom of access for recreation to <u>public or state</u> owned forests?

Yes ☐ No ☐

Q9. **What is the approximate distance to the nearest forest where you live *(Tick one box)*?**

Immediately beside my house	☐
Less than 500 meters / yards	☐
Between 500 metres and 2 kilometers (500 yards to 1.25 miles)	☐
More than 2 kilometers (1.25 miles)	☐
I don't know	☐

Q10. **Would you say that the amount of forests in this locality is high, medium or low *(Tick one box)*?**

High	*Medium*	*Low*	*I don't know*
☐	☐	☐	☐

Q11. **Generally speaking, do you think the amount of forests in the following places is too little, OK as it is or too much *(Tick one box)*?**

	Too little	*OK as it is*	*Too much*	*I don't know*
Next to where I live	☐	☐	☐	☐
In this locality generally	☐	☐	☐	☐
In Ireland in general	☐	☐	☐	☐

Do the answers you have indicated depend upon the type of forest? Yes ☐ No ☐

If yes, please write the type of forest you most prefer

Q12. **Could you indicate how personally attached or detached you feel to the <u>forests</u> in this locality by ticking one of the boxes below. If you feel more strongly attached you can mark a box more to the left; if more strongly detached a box more to the right.**

Strongly Attached	*Attached*	*Neutral*	*Detached*	*Strongly detached*
☐	☐	☐	☐	☐

Q13. **Forests in this locality can contribute in a variety of ways to your quality of life. Please indicate the extent to which you disagree or agree with the statements listed below by ticking the relevant box on each row.**

Forests in this locality...	*Strongly agree*	*Agree*	*Neither agree nor disagree*	*Disagree*	*Strongly disagree*
significantly improve the attractiveness of living here	☐	☐	☐	☐	☐
provide good employment for local people	☐	☐	☐	☐	☐
provide good incomes for local people	☐	☐	☐	☐	☐
have created a landscape which is characteristically different from other places	☐	☐	☐	☐	☐
are of important historical or cultural value	☐	☐	☐	☐	☐
protect our air, water and soil	☐	☐	☐	☐	☐
are a threat for other land use activities such as farming	☐	☐	☐	☐	☐
create a sense of isolation between neighbours	☐	☐	☐	☐	☐
are here against the wishes of local people	☐	☐	☐	☐	☐
deteriorate the beauty of the landscape	☐	☐	☐	☐	☐
are very poor in terms of the variety of plants and animals	☐	☐	☐	☐	☐
provide very few opportunities for recreation and sports	☐	☐	☐	☐	☐

Q14. **Please indicate if you think that forests in this locality are currently highly threatened, threatened, or not threatened by any of the following *(Tick one box on each row)*:**

	Highly threatened	*Somewhat threatened*	*Not threatened*	*I don't know*
Fires	☐	☐	☐	☐
Pollution	☐	☐	☐	☐
Storms	☐	☐	☐	☐
Excessive wood harvesting	☐	☐	☐	☐
Illegal logging	☐	☐	☐	☐
Hunting	☐	☐	☐	☐
Farming	☐	☐	☐	☐
Too many visitors	☐	☐	☐	☐
Urban development, such as houses, industries	☐	☐	☐	☐
Poor forest management	☐	☐	☐	☐
None of the above	☐			
Other, please specify ……				

Q15. **Please indicate the extent to which you agree or disagree with the following *(tick one box for each row)*:**

	Strongly agree	*Agree*	*Neither agree nor disagree*	*Disagree*	*Strongly disagree*
Forests are planted / managed in this locality with proper consultation with local people	☐	☐	☐	☐	☐
People who do not own land should still be involved in decision making regarding the use of land	☐	☐	☐	☐	☐
There should be very strict environmental rules on planting and management of new forests	☐	☐	☐	☐	☐
There is too much pressure from the Forest Service to develop and manage forests in this locality	☐	☐	☐	☐	☐
The Forest Service have a lot of respect for the wishes of local communities regarding the planting and management of forests	☐	☐	☐	☐	☐
The local County Council cannot be trusted regarding land use policies for this area	☐	☐	☐	☐	☐

Q16. **Please answer yes or no to the following questions (*Tick one box on each row*):**

	Yes	*No*	*I don't know*
Do you think farmers should be paid grants or subsidies to support their farming enterprises?	☐	☐	☐
Do you think farmers should be paid grants or subsidies to enhance and sustain the landscape?	☐	☐	☐
Do you think private land owners should be paid grants or subsidies to plant trees on their land?	☐	☐	☐
Do you think private land owners should be paid grants or subsidies to manage and protect their forests?	☐	☐	☐
Do you think private forest owners should be paid grants or subsidies to allow people to visit their forest for recreation?	☐	☐	☐

Q17. **Referring to the future of this locality, can you please tell us whether you think the following potential benefits of forests should be a high priority, medium priority or low prority?**

	High priority	*Medium priority*	*Low priority*	*I don't know*
Recreation for local people	☐	☐	☐	☐
Business activities, including providing jobs	☐	☐	☐	☐
Nature conservation	☐	☐	☐	☐
Providing attractive landscape, nice scenery	☐	☐	☐	☐
Protection of air, water and soil	☐	☐	☐	☐

Finally, we would like to record some details about you.
These are only used to classify your views and will be treated in the strictest confidence.

Q18. **So far we have asked you your views on your locality and landscape elements present in it. All these things are part of the society you live in. We are now interested to know what kind of society you most prefer. Please consider each of the statements listed below and tick the box which most closely represents your view. If you agree totally with a statement on the left hand side, tick the left most box. If you agree totally with the statement on the right hand side, tick the right most box. If you think both alternatives are more equally preferable you can express this by ticking the middle box, or a box somewhat more to the middle.**

We include an example here. The person in the following example agrees totally with the preference for a society that first of all stimulates agriculture instead of afforestation.

I prefer most a society that *first of all …*						**I prefer most a society that *first of all …***
Stimulates afforestation	☐	☐	☐	☐	☒	Stimulates agriculture

Please now consider the statements below and tick the boxes which represent your view.

I prefer most a society that *first of all …*						**I prefer most a society that *first of all …***
Protects nature and gives it a chance to develop	☐	☐	☐	☐	☐	Exploits nature to bring prosperity
Puts top priority on pollution control	☐	☐	☐	☐	☐	Puts top priority on economic growth
Brings prosperity only if it is without risks	☐	☐	☐	☐	☐	Brings more prosperity even at some risk
Puts emphasis on enjoyment of work, even if it reduces productiveness	☐	☐	☐	☐	☐	Requires people to be productive in their work, even if it means it is less enjoyable
Lets people fully participate in political decisions	☐	☐	☐	☐	☐	Lets politicians make the decisions
Judges people on who they are	☐	☐	☐	☐	☐	Judges people on what they achieve
Calls for respect for individual moral judgement	☐	☐	☐	☐	☐	Calls for respect for authority
Stimulates people to develop individual life-styles	☐	☐	☐	☐	☐	Expects people to observe family and community traditions
Lets people freely choose if they want to work on Sundays or not	☐	☐	☐	☐	☐	Preserves Sundays strictly for non-work activities
Provides for individual freedom	☐	☐	☐	☐	☐	Requires people to be disciplined for society's sake
Puts top priority on re-integration of criminals into society	☐	☐	☐	☐	☐	Puts top priority on isolating criminals from society
Honours people for voluntarily spending time on community interests and welfare	☐	☐	☐	☐	☐	Demands without discussion that people spend time on community interests and welfare

Q19. Please indicate your gender

Female ☐ Male ☐

Q20. In what year were you born?

☐

Q21. How many adults (18 years and over) including yourself and children (aged less than 18 years) live in your household?

Adults (18 years and over) ☐ Children (aged less than 18 years) ☐

Q22. What is the highest level of education you have achieved (*tick one box*)?

Primary school	☐
Junior/Intermediate Certificate	☐
Leaving Certificate	☐
University or college	☐

Q23. How would you describe your present situation with respect to work (*tick more than one box if necessary*)?

At work as an employee	☐
Self-employment (non-agricultural)	☐
Farmer / forester	☐
Student/pupil (or scholar)	☐
Unemployed	☐
Retired	☐
Home duties	☐
Other (please specify)	☐

Q24. Are you a <u>member</u> of any or all of the following organisation or association types, either local or national *(tick one or more boxes as appropriate)*?

	Local	National
Environment and nature	☐	☐
Local heritage / history	☐	☐
Youth activities / interests	☐	☐
Housing association	☐	☐
Art and culture	☐	☐
Sporting	☐	☐
Religion	☐	☐
Politics	☐	☐
Other, please specify…	☐	☐
Not a member of any organisation	☐	☐

Q25. **Lastly, we would like to ask about the approximate level of net household income. This means the total income of all members of the household after removal of tax and other statutory deductions. We would just like to know which of the four broad categories the total net income of your household falls into. I'd like to reassure you that all information you give me is entirely confidential.**

Per week	Per Month	Per Year	My net total household income
Under £200	Under £800	Under £9,600	☐
£200 - £349	£800 - £1,399	£9,600 - £16,999	☐
£350 - £500	£1,400 - £,2000	£17,000 - £24,000	☐
More that £500	More than £2,000	More than £24,000	☐
I prefer not to disclose this information			☐

If you feel there is anything important missing or if you have further comments please write here:

_____

_____

_____

_____

Thank you for completing this questionnaire.
Results will be published locally in the summer.

Survey Questionnaire Investigating Your Views About This Locality

Researchers at UCD have teamed up with local area development agencies to find out your views concerning this locality. For example, what do you like or dislike about this area? How would you like to see it develop in the future? What do you think about farming in this area? What is your opinion regarding forestry?

Please let us know what you think by filling out this questionnaire and then post it back in the pre-paid envelope provided. The results of this study will be used to help recommend specific rural develop-ment strategies for this locality and will published locally in the summer of this year. This is your opportunity to voice your opinion.

Q1. **Please answer the following concerning your place of residence (*tick one box on each row*):**

How many years have you lived in this locality? (*please write the number of years in the space provided or tick the other box as appropriate*)	☐ Years	☐ I don't live in this locality
Do you have children or other relations living in this locality?	Yes ☐	No ☐
Do you work outside this locality?	Yes ☐	No ☐
Were you mainly brought up (to the age of 18 years) in this locality?	Yes ☐	No ☐
If no, were you mainly brought up (to the age of 18) in a rural or urban area?	Rural ☐	Urban ☐
Would you describe this locality as rural or urban?	Rural ☐	Urban ☐

Q2. **Could you indicate how personally attached or detached you feel to this locality by ticking one of the boxes below. If you feel more strongly attached you can mark a box more to the left; if more strong-ly detached a box more to the right.**

Strongly Attached	*Attached*	*Neutral*	*Detached*	*Strongly detached*
☐	☐	☐	☐	☐

Q3. **On a general level, how would you describe this locality? Please tick <u>a maximum of three boxes</u> below which most closely agree with your overall impression.**

This locality is …	*Tick 3 boxes only*
An area significantly occupied by the agricultural sector	☐
An area significantly occupied by production forestry	☐
An area significantly occupied by nature / wilderness	☐
A remote and sparsely populated area	☐
A rural area adjacent to urban areas	☐
A centre with diverse business activities which is surrounded by rural countryside	☐
Urbanised area	☐
An area visited by a high number of tourists	☐
Other, please specify ……	☐
I don't know	☐

Q4. **Some more specific statements describing this locality are listed below. Please indicate the extent to which you agree or disagree with the statements by ticking the relevant box on each row. If you only agree or disagree to some extent, but not totally, you can tick one of the relevant boxes next to the extremes.**

In this locality there is / are …..	*Strongly agree*	*Agree*	*Neither agree nor disagree*	*Disagree*	*Strongly disagree*
a very attractive setting for houses	☐	☐	☐	☐	☐
peace and quiet with low traffic	☐	☐	☐	☐	☐
beautiful landscape scenery	☐	☐	☐	☐	☐
a landscape which is characteristically different from other places	☐	☐	☐	☐	☐
unpolluted air, water and soil	☐	☐	☐	☐	☐
very good overall services such as public transport, shops and schools	☐	☐	☐	☐	☐
plenty of opportunities for recreation and sports	☐	☐	☐	☐	☐
a lot of forests	☐	☐	☐	☐	☐
a rich variety of nature and wildlife	☐	☐	☐	☐	☐
a closely knit community	☐	☐	☐	☐	☐
a strong sense of history and tradition	☐	☐	☐	☐	☐
a very sparse population	☐	☐	☐	☐	☐
a prevalence of low incomes	☐	☐	☐	☐	☐
too many visiting tourists	☐	☐	☐	☐	☐
too much crime	☐	☐	☐	☐	☐
very few employment opportunities	☐	☐	☐	☐	☐
no involvement of locals in how the area is developed	☐	☐	☐	☐	☐
conflict between different uses of land such as for tourism, industry and farming	☐	☐	☐	☐	☐
too many houses being built in the recent past	☐	☐	☐	☐	☐
too much industrial development, including factories	☐	☐	☐	☐	☐

Q5. **Please indicate whether you think the following activities are currently of high importance, some importance or no importance / non existent to the economy of this locality *(Tick one box for each row):***

	High importance	*Some importance*	*No importance/ non existent*	*I don't know*
Farming	☐	☐	☐	☐
Forestry	☐	☐	☐	☐
Commercial trade	☐	☐	☐	☐
Tourism	☐	☐	☐	☐
Industry	☐	☐	☐	☐
Crafts	☐	☐	☐	☐

Q6. **A number of possible ways in which this locality could develop in the future are outlined below. Can you please indicate which three possibilities are most preferable to you:**

In this locality in the future there could be an increase in…	*Tick the three most preferable*
intensive factory farming	☐
organic farming	☐
numbers of visiting tourists	☐
industrial activities	☐
built-up areas	☐
employment opportunities	☐
the amount of forests	☐
the amount of nature and wildlife areas	☐
the availability of services (eg. transport, shopping)	☐
scenic beauty of landscape	☐
strength of bond / friendship between neighbours	☐

In this questionnaire we would next like to ask you some general questions about the forests in this locality. By 'forests' we mean forests and woodlands in general - all kind of wooded areas, including old forests and also new plantations.

Q7. **Approximately how often in the year 2000 did you set out for any sort of outdoor recreational activity in this locality such as walking, cycling, hunting (a) in the open countryside and (b) specifically in any kind of forests?**

	In the open countryside - not including forests	Specifically inside any kind of forest
Never	☐	☐
Once	☐	☐
2 to 4 times per year	☐	☐
Monthly	☐	☐
Weekly	☐	☐
Daily	☐	☐

Q8. **Do you agree that the public should have freedom of access for recreation to <u>privately</u> owned forests?**

Yes ☐ No ☐

Do you agree that the public should have freedom of access for recreation to <u>public or state</u> owned forests?

Yes ☐ No ☐

Q9. **What is the approximate distance to the nearest forest where you live *(Tick one box)*?**

Immediately beside my house	☐
Less than 500 meters / yards	☐
Between 500 metres and 2 kilometers (500 yards to 1.25 miles)	☐
More than 2 kilometers (1.25 miles)	☐
I don't know	☐

Q10. **Would you say that the amount of forests in this locality is high, medium or low *(Tick one box)*?**

High	*Medium*	*Low*	*I don't know*
☐	☐	☐	☐

Q11. **Generally speaking, do you think the amount of forests in the following places is too little, OK as it is or too much *(Tick one box)*?**

	Too little	*OK as it is*	*Too much*	*I don't know*
Next to where I live	☐	☐	☐	☐
In this locality generally	☐	☐	☐	☐
In Ireland in general	☐	☐	☐	☐

Do the answers you have indicated depend upon the type of forest? Yes ☐ No ☐

If yes, please write the type of forest you most prefer

Q12. **Could you indicate how personally attached or detached you feel to the <u>forests</u> in this locality by ticking one of the boxes below. If you feel more strongly attached you can mark a box more to the left; if more strongly detached a box more to the right.**

Strongly Attached	*Attached*	*Neutral*	*Detached*	*Strongly detached*
☐	☐	☐	☐	☐

Q13. **Forests in this locality can contribute in a variety of ways to your quality of life. Please indicate the extent to which you disagree or agree with the statements listed below by ticking the relevant box on each row.**

Forests in this locality...	*Strongly agree*	*Agree*	*Neither agree nor disagree*	*Disagree*	*Strongly disagree*
significantly improve the attractiveness of living here	☐	☐	☐	☐	☐
provide good employment for local people	☐	☐	☐	☐	☐
provide good incomes for local people	☐	☐	☐	☐	☐
have created a landscape which is characteristically different from other places	☐	☐	☐	☐	☐
are of important historical or cultural value	☐	☐	☐	☐	☐
protect our air, water and soil	☐	☐	☐	☐	☐
are a threat for other land use activities such as farming	☐	☐	☐	☐	☐
create a sense of isolation between neighbours	☐	☐	☐	☐	☐
are here against the wishes of local people	☐	☐	☐	☐	☐
deteriorate the beauty of the landscape	☐	☐	☐	☐	☐
are very poor in terms of the variety of plants and animals	☐	☐	☐	☐	☐
provide very few opportunities for recreation and sports	☐	☐	☐	☐	☐

Q14. **Please indicate if you think that forests in this locality are currently highly threatened, threatened, or not threatened by any of the following *(Tick one box on each row)*:**

	Highly threatened	*Somewhat threatened*	*Not threatened*	*I don't know*
Fires	☐	☐	☐	☐
Pollution	☐	☐	☐	☐
Storms	☐	☐	☐	☐
Excessive wood harvesting	☐	☐	☐	☐
Illegal logging	☐	☐	☐	☐
Hunting	☐	☐	☐	☐
Farming	☐	☐	☐	☐
Too many visitors	☐	☐	☐	☐
Urban development, such as houses, industries	☐	☐	☐	☐
Poor forest management	☐	☐	☐	☐
None of the above	☐			
Other, please specify ……				

Q15. **Please indicate the extent to which you agree or disagree with the following *(tick one box for each row)*:**

	Strongly agree	*Agree*	*Neither agree nor disagree*	*Disagree*	*Strongly disagree*
Forests are planted / managed in this locality with proper consultation with local people	☐	☐	☐	☐	☐
People who do not own land should still be involved in decision making regarding the use of land	☐	☐	☐	☐	☐
There should be very strict environmental rules on planting and management of new forests	☐	☐	☐	☐	☐
There is too much pressure from the Forest Service to develop and manage forests in this locality	☐	☐	☐	☐	☐
The Forest Service have a lot of respect for the wishes of local communities regarding the planting and management of forests	☐	☐	☐	☐	☐
The local County Council cannot be trusted regarding land use policies for this area	☐	☐	☐	☐	☐

Q16. **Please answer yes or no to the following questions (*Tick one box on each row*):**

	Yes	*No*	*I don't know*
Do you think farmers should be paid grants or subsidies to support their farming enterprises?	☐	☐	☐
Do you think farmers should be paid grants or subsidies to enhance and sustain the landscape?	☐	☐	☐
Do you think private land owners should be paid grants or subsidies to plant trees on their land?	☐	☐	☐
Do you think private land owners should be paid grants or subsidies to manage and protect their forests?	☐	☐	☐
Do you think private forest owners should be paid grants or subsidies to allow people to visit their forest for recreation?	☐	☐	☐

Q17. **Referring to the future of this locality, can you please tell us whether you think the following potential benefits of forests should be a high priority, medium priority or low prority?**

	High priority	*Medium priority*	*Low priority*	*I don't know*
Recreation for local people	☐	☐	☐	☐
Business activities, including providing jobs	☐	☐	☐	☐
Nature conservation	☐	☐	☐	☐
Providing attractive landscape, nice scenery	☐	☐	☐	☐
Protection of air, water and soil	☐	☐	☐	☐

The next part of this questionnaire concerns your activities if you are a farmer or forest owner in this locality

Q18. **What approximate area of your land within this locality is engaged in the following land uses (*please use hectares and enter nil if and where relevant*)?**

	Your own land *Hectares*	**Land rented from others** *Hectares*
Forests		
Grazing land		
Crops		
Scrub / wasteland		
Other, please specify		

Q19. **Aside from land uses listed in Q18 above, are you involved in any enterprise(s) on your land (for example, tourism, food processing, crafts or others)?**

Yes ☐ No ☐

If yes, please specify:

Q20. Please tell us who manages your farm and / or forest lands on a day-today basis.

	Farm land	Forest land
Yourself only, without help	☐	☐
Yourself with help from family or staff	☐	☐
Other family members only (I am not involved)	☐	☐
Hired staff only (I am not involved)	☐	☐
A company / consultant	☐	☐
Other, please specify…..		

Q21. Are you (or have you been) a member of a farming and/or forestry association or organisation?

	Yes	No
Farming organisation	☐	☐
Forestry organisation	☐	☐
Where do you get advice from regarding farming (if any), please specify		
Where do you get advice from regarding forestry (if any), please specify?		

Q22. Concerning regulations for planting and managing forest in this locality, please answer yes or no to the following *(tick one box for each row)*:

	Agree	*Disagree*	*I don't know*
Providing grants for forestry results in unfair competition with agriculture	☐	☐	☐
Agriculture and forestry are conflicting land-uses	☐	☐	☐
It is acceptable to plant fertile farmland with forests	☐	☐	☐
More forests should be developed locally if agriculture is losing importance	☐	☐	☐
Land owners would not plant their land if there were no grants or subsidies available	☐	☐	☐
The grants are sufficient to successfully plant or manage forests	☐	☐	☐
The process of getting grants for forestry is too complicated	☐	☐	☐
There are too many regulations governing the planting and management of forests	☐	☐	☐

Questions 23, 24, 25 and 26 below should only be completed by farmers irrespective of whether or not you own a forest. If you do not own or rent farm land, please skip to Q27 on the next page.

Q23. **What are your expectations for the prospects of <u>your</u> farm over the next 5 years or so *(Tick one box)*?**

Progressive (expansive - the farm is growing due to e.g. more animals and more land, new buildings …)	☐
Stable (stay the same)	☐
Declining (for example due to giving up animal production, selling land …)	☐

Q24. **Are you considering any of the following options for some or all of your property or farm within say the next five years or so?**

	Yes	No
Sell land	☐	☐
Rent land to others	☐	☐
Buy land from others	☐	☐
Rent land from others	☐	☐
Plant forests	☐	☐
Agri-tourism enterprise	☐	☐
Allow some land to return to nature (other than forests)	☐	☐
Others, please specify		

Q25. **If you have NOT planted forest, why is this so *(please tick all relevant boxes. If you have planted or bought a forest, please skip to Question 27)*:**

Reasons	*Tick all relevant boxes*
I never thought about it	☐
I am not allowed according to local regulations	☐
My land is too productive for trees	☐
My property is small and / or dispersed	☐
I don't know enough about forestry	☐
I will let my children decide about the best land use	☐
It is not financially attractive	☐
There is enough forest already in this locality	☐
I don't like trees / forests	☐
Other, please specify:	

Q26. **If you have NOT planted forest please answer yes or no to the following *(If you have planted or bought a forest, please skip to Question 27)*:**

	Yes	No
Did you know that there are schemes that encourage tree planting on farmland?	☐	☐
Would you be interested in getting involved in such a scheme in your present situation?	☐	☐

Questions 27, 28 and 29 below should only be completed by forest owners and managers. Farmers who do not own forests should skip to Q30 on the following page.

Q27. **How did you obtain your forest (*please tick more than one box if relevant*)?**

I planted the forest	☐
I purchased the forest	☐
Forest was inherited	☐
Other, please specify...	

Q28. **Could you indicate how personally attached or detached you feel to your <u>own forests</u> by ticking one of the boxes below. If you feel more strongly attached you can mark a box more to the left; if more strongly detached a box more to the right.**

Strongly Attached	*Attached*	*Neutral*	*Detached*	*Strongly detached*
☐	☐	☐	☐	☐

Q29. **How important are the following in the management of your forest *(Tick one box on each row)?***

Management objectives	*High importance*	*Some importance*	*No importance/ non existent*
Income generation from wood production	☐	☐	☐
Supply of timber for my own use / use of my organisation	☐	☐	☐
Income from non timber goods and services (mushrooms, game, tourist activities, renting out hunting rights)	☐	☐	☐
To develop an asset for the next generation	☐	☐	☐
Natural resources protection (air, water, soil)	☐	☐	☐
Good possibilities for my own hunting	☐	☐	☐
Contribution towards bio-diversity (plants and animals)	☐	☐	☐
Enhancing landscape scenery	☐	☐	☐
Catering a nice place for recreation	☐	☐	☐
Other, please specify			

Finally, we would like to record some details about you.
These are only used to classify your views and will be treated in the strictest confidence.

Q30. **So far we have asked you your views on your locality and landscape elements present in it. All these things are part of the society you live in. We are now interested to know what kind of society you most prefer. Please consider each of the statements listed below and tick the box which most closely represents your view. If you agree totally with a statement on the left hand side, tick the left most box. If you agree totally with the statement on the right hand side, tick the right most box. If you think both alternatives are more equally preferable you can express this by ticking the middle box, or a box somewhat more to the middle.**

We include an example here. The person in the following example agrees totally with the preference for a society that first of all stimulates agriculture instead of afforestation.

I prefer most a society that *first of all …*						**I prefer most a society that *first of all …***
Stimulates afforestation	☐	☐	☐	☐	☒	Stimulates agriculture

Please now consider the statements below and tick the boxes which represent your view.

I prefer most a society that *first of all …*						**I prefer most a society that *first of all …***
Protects nature and gives it a chance to develop	☐	☐	☐	☐	☐	Exploits nature to bring prosperity
Puts top priority on pollution control	☐	☐	☐	☐	☐	Puts top priority on economic growth
Brings prosperity only if it is without risks	☐	☐	☐	☐	☐	Brings more prosperity even at some risk
Puts emphasis on enjoyment of work, even if it reduces productiveness	☐	☐	☐	☐	☐	Requires people to be productive in their work, even if it means it is less enjoyable
Lets people fully participate in political decisions	☐	☐	☐	☐	☐	Lets politicians make the decisions
Judges people on who they are	☐	☐	☐	☐	☐	Judges people on what they achieve
Calls for respect for individual moral judgement	☐	☐	☐	☐	☐	Calls for respect for authority
Stimulates people to develop individual life-styles	☐	☐	☐	☐	☐	Expects people to observe family and community traditions
Lets people freely choose if they want to work on Sundays or not	☐	☐	☐	☐	☐	Preserves Sundays strictly for non-work activities
Provides for individual freedom	☐	☐	☐	☐	☐	Requires people to be disciplined for society's sake
Puts top priority on re-integration of criminals into society	☐	☐	☐	☐	☐	Puts top priority on isolating criminals from society
Honours people for voluntarily spending time on community interests and welfare	☐	☐	☐	☐	☐	Demands without discussion that people spend time on community interests and welfare

Q31. Please indicate your gender

Female ☐ Male ☐

Q32. In what year were you born?

☐

Q33. How many adults (18 years and over) including yourself and children (aged less than 18 years) live in your household?

Adults (18 years and over) ☐ Children (aged less than 18 years) ☐

Q34. What is the highest level of education you have achieved (*tick one box*)?

Primary school	☐
Junior/Intermediate Certificate	☐
Leaving Certificate	☐
University or college	☐

Q35. How would you describe your present situation with respect to work (*tick more than one box if necessary*)?

At work as an employee	☐
Self-employment (non-agricultural)	☐
Farmer / forester	☐
Student/pupil (or scholar)	☐
Unemployed	☐
Retired	☐
Home duties	☐
Other (please specify)	☐

Q36. Are you a <u>member</u> of any or all of the following organisation or association types, either local or national *(tick one or more boxes as appropriate)*?

	Local	National
Environment and nature	☐	☐
Local heritage / history	☐	☐
Youth activities / interests	☐	☐
Housing association	☐	☐
Art and culture	☐	☐
Sporting	☐	☐
Religion	☐	☐
Politics	☐	☐
Other, please specify…	☐	☐
Not a member of any organisation	☐	☐

Q37. **Lastly, we would like to ask about the approximate level of net household income. This means the total income of all members of the household after removal of tax and other statutory deductions. We would just like to know which of the four broad categories the total net income of your household falls into. I'd like to reassure you that all information you give me is entirely confidential.**

Per week	Per Month	Per Year	My net total household income
Under £200	Under £800	Under £9,600	☐
£200 - £349	£800 - £1,399	£9,600 - £16,999	☐
£350 - £500	£1,400 - £,2000	£17,000 - £24,000	☐
More that £500	More than £2,000	More than £24,000	☐
I prefer not to disclose this information			☐

If you feel there is anything important missing or if you have further comments please write here:

_____

_____

_____

_____

Thank you for completing this questionnaire.
Results will be published locally in the summer.