



MINISTERIAL CONFERENCE ON THE
PROTECTION OF FORESTS IN EUROPE

LIAISON UNIT VIENNA



Ewald Rametsteiner, Florian Kraxner

Europeans and Their Forests

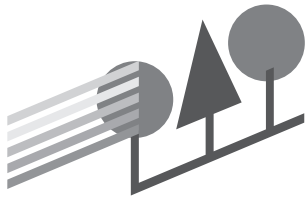
What Do Europeans Think About Forests and
Sustainable Forest Management?



**FAO/UNECE FOREST
COMMUNICATORS NETWORK**



United Nations Economic
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A Review of Representative Public Opinion Surveys in Europe



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Vienna, August 2003



PREFACE

The history of the MCPFE is one of recognising and responding to the needs and concerns of society about forests. Forest dieback created an unprecedented outcry to take action for its protection, which in effect provided the decisive impetus for the creation of the MCPFE itself in 1990.

A common pan-European definition of the central concept in forestry, namely sustainable forest management (SFM), was jointly defined by the ministers responsible for forests in Europe at the second Ministerial Conference in 1993. This definition explicitly expresses the goal to fulfil society's demand, now and in the future. The topics that constitute the core elements of SFM, as endorsed by the ministers at their third Conference in 1998 through the pan-European criteria, address many of the demands and concerns seen as relevant by society at large.

The recognition of changes in the relationship between society and forests led the ministers to call for more dialogue of the forestry sector with society in Europe. This was one of the main themes expressed in the MCPFE Resolution L1 "People, Forests and Society", signed in Lisbon in 1998.

The Fourth Ministerial Conference on the Protection of Forests in Europe – the "Living Forest Summit" – held in Vienna in 2003 re-emphasised the need to work towards SFM in all its dimensions and strengthen dialogue in policy making through national forest programmes. This report should contribute to these efforts by providing an actual overview of general views of European society on forests and sustainable forest management in Europe. To compare opinions and perceptions of Europeans with facts on the situation of forests in Europe, readers are invited to consult the MCPFE report "State of Europe's Forests 2003".



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1 INTRODUCTION

“Fact is fact, but perception is reality.”

This well-known proverb captures an essential truth for public relations, communications and marketing specialists. It is a basic rule of policy making and communication. It is also a driving motivation for the compilation of this report.

Forests are complex ecosystems; they create numerous benefits and contribute to the well-being of millions of both rural and urban people. They are essential for providing environmental and recreational services. And they contribute to economic welfare by supplying the raw material for renewable and environmentally friendly products. Many of these demands cannot be fulfilled without impairing other, alternative uses. If not adequately balanced and managed, over-utilisation, including by people looking for recreation, and other damaging factors can be threats to forest health and vitality. It is the role of policy makers to get these balances on the demand for forest benefits about right – and to set adequate restraints and incentives related to forest use and its protection.

Over the last few decades crucial changes have taken place in the views and demands on forests by society at large. This includes the increased environmental awareness and recreational interests of society. It has also affected the basic role that the now more affluent public accords to the traditional role of forests as a producer of raw material.

All these changes have profound effects on the forest sector, including forest owners and managers. They increasingly cease to be the suppliers of a crude raw material and become service providers, with a multitude of needs to respond to, including the provision of a highly regarded renewable resource.

It requires new knowledge and new capabilities to adequately respond to such changing structural conditions and the opportunities that arise with them for forest owners, managers and policy makers. These groups experience the need for increased communication and improved marketing and public relations skills to meet the new demands of society. First and foremost, however, it requires an increased understanding of and an effort to listen to society, both consumers and the public at large. It is society, after all, for whose benefit policy is made.

The purpose of this report is to contribute to a better understanding of the views of society on forests, forest management and benefits of forests in Europe. This report presents general impressions and findings of a wide range of representative surveys undertaken in many countries in Europe on an even wider range of topics related to forests and forest management.

A word of caution: This report is a first attempt to collect and present results of representative public opinion surveys undertaken in Europe since 1990, as far as they were available from different sources in Europe. It is not a complete report on all surveys undertaken or questions posed on forests in Europe. Such surveys are made on the basis of a range of assumptions. They imply that people have an opinion on a specific subject, and that this opinion can be given upon request. Further, people are usually not free to frame questions and answers as it suits them. The questions are predetermined by those who commissioned the survey – and are influenced by their specific interests. The views of the millions of Europeans can only be captured by making generalisations. With this comes a considerable loss of specificity and complexity of the many divergent and often also contradictory views that the millions of individuals have on forest-related topics. Findings from one country should only cautiously be generalised for a wider region or for the whole

of Europe. And not all findings in one region are necessarily equally valid in another.

The report makes interpretations on the basis of the data available, possibly with over-generalisations. It is thus not a scientific report, with estimations of accuracy and conservative limits of interpretation of data. The limited number of studies available, the different yet often important details of how issues were framed and what was asked, and the usually national scope of surveys, including a lack of information from Eastern European and some Southern European countries, make such an undertaking impossible at this point in time. It is quite a difficult undertaking to find the right balance in generalisations, and it is hoped that additional and future evidence can adjust and refine our current understanding, and correct possible misinterpretations. The intention of publishing such a report is also to trigger more enquiries, to prove or disprove, or to increase the accuracy and detail of our understanding on the views of society and their changes over time.

After presenting some attitudes and perceptions towards forests and their perceived role for society, Chapter 3 presents general views in Europe on sustainable forest management (SFM), its meaning and to what extent Europeans see it being practised by foresters today. Chapters 4-9 show results on individual topics structured according to the six pan-European criteria and indicators for SFM, as far as possible. Whenever possible, the results show changes of public opinion over time and highlight differences in perceptions of different sex and age groups. Please note that in this report Northern Europe is understood to include the Scandinavian countries and Finland. Eastern Europe comprises all EU accession countries. Central Europe covers the German-speaking countries.

It should be kept in mind that this report shows the perception of society about the state of forests and SFM in Europe. It is not a report on the (f)actual situation of forests. To learn more about the situation of Europe's forests, readers are invited to read the MCPFE report on the "State of Europe's Forests 2003".

≡ 2 WHAT DO FORESTS MEAN TO EUROPEANS?

The following chapter provides an overview on how people in Europe generally think about forests. The chapter comprises attitudes towards forests in general, knowledge of the subject and which roles forests do and should play in the opinion of the public. These aspects were mainly covered in surveys in Central European and some larger European countries. Many are detailed surveys on emotions and perceptions. Relatively little information is available from Southern and, especially, Eastern Europe.

2.1 Personal impressions and feelings dominate

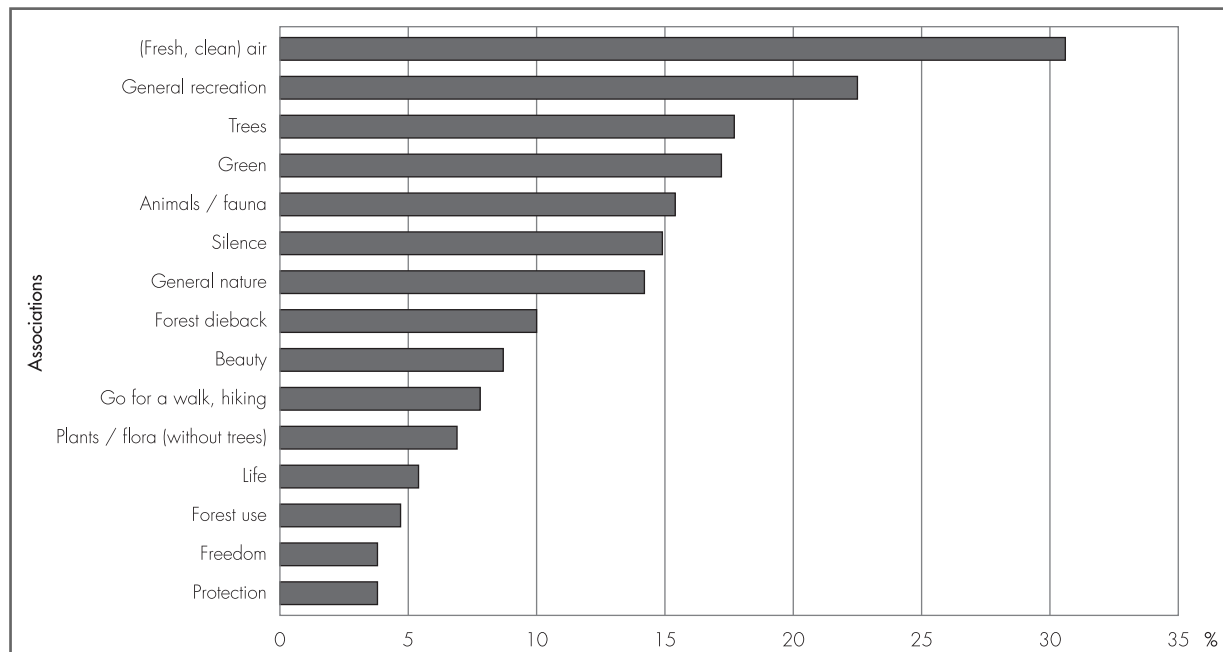
2.1.1 People associate forests with “green” and “fresh air”

Forests are first and foremost perceived through impressions and feelings. People mention these first when asked about their associations with forests. In general, people seem to have mixed and often quite controversial feelings about forests. About half of all people mention more positive aspects related to feelings, while in Central Europe most of the people surveyed have positive associations with forests. Perceptions are dominated by “fresh air”, “green”, “silence”, “quietness”, “happiness”, “trees” and “wood”, or the recreational function of forests. Physical items such as plants, animals and wood are generally mentioned prominently by only few people. Figure 1 shows the situation in Switzerland as a typical example of notions about forests.

The other half state more negative aspects. Negative aspects regarding forests deal with “threat”, “darkness”, “danger” or “forest dieback”. Compared to positive aspects, negative issues seem often not so much dominated by feelings but rather by cognitively formed opinions on physical objects, such as trees, roads, vehicles and machinery. Forest management related terms or “forestry” itself are only mentioned by a very small group of respondents. When they do so, these are mostly negative concerning the tending of forests, somewhat positive on reforestation, and mainly positive on the economic importance of forestry. Positive and negative aspects may vary slightly in different geographical regions across Europe, partly as a result of differently phrased questions and objectives of the different studies and surveys.

When comparing Northern and Western Europe with the central part of the continent, more ecological statements, like wood as a carbon sink, prevention from erosion or species variety, seem to dominate the spectrum of associations in Central Europe. In the northern and western regions multifunctional forest use and other economic issues are more prominently associated with the topic of forests.

Figure 1: Notions of forest in Switzerland (Source: modified after SAEFL, 1999)



2.1.2 People often say they know quite a lot about forestry

When people are asked to evaluate their general knowledge of forests, quite similar results are found in all countries where information is available. The majority of all respondents evaluate their knowledge as between “good” and “very good”. This would imply that most people are able to answer simple questions on the topic. But contrary to that assumption, questions related to knowledge very often actually show a lack of knowledge by a major part of the respondents. However, questions on the issue vary strongly within different public opinion polls carried out in several regions of Europe.

In a poll conducted in Central Europe the general public was asked why trees have to be felled in the forests. It was found that people could state almost all forest management reasons for tree felling, beginning with tree cutting to harvest wood, to thinning, Christmas tree production, and supplying fuel wood. When asked about “multi-purpose-forestry”, only half of the public in some surveys in Western Europe was able to give an adequate description.

In another survey, people in Central Europe were asked how to set forestry measures so that forests fulfil their role best. A clear majority decided that a slightly tended forest may fulfil its functions better than a strongly tended forest or one that is left on its own. With slightly tended forest the general public associated a forest as being cleared up, tidy, without litter and with mixed wood in a natural state. The people in this survey, from a mountainous region, were also strongly convinced that only forests where active forestry is carried out are able to protect people from natural hazards such as avalanches and landslides. Consequently, this protective function was mentioned as the main reason for tending and maintaining forests in mountain areas.

In some countries, including those in Central Europe, people say they are proud of their native forests and their valuable wood and claim to be rather highly interested in the topic of the forest as an aspect of nature. It often seems to be even a sort of social norm that makes it inappropriate to express overt disinterest in

forests. However, younger people tend to show significantly less interest in the forest than older people. Results of several inquiries indicate that the younger generation (aged between 15 and 25) showed high interest in topics concerning nature and environment during the 1990s, but significantly less interest in forests as such.

2.2 The forest is a symbol of nature

The forest, nature and the environment are often named or listed together and seen as being in a close relationship. Studies infer that the social norm to have positive attitudes towards nature is strong. Possibly due to different factors, including their low level of alteration and “undisturbedness” compared to urban areas or agricultural lands, forests are often seen as a “symbol of nature”.

A survey in Central Europe found that a high proportion also thinks that “forest needs to be protected by man” and that most people “feel closest to nature when they are in the forest”. Fewer, but still a clear majority, agree with the notion that “forest should be used by man” and that “forest is nature and a productive field at the same time”. Similar findings were made in other inquiries, e.g. in Ireland. Notions such as “forests are good for the environment” were accepted by the public to a similarly high degree.

Most interviewees in quite different geographic zones of Europe state that they are most satisfied with nature when evaluating various landscapes and that forest is seen as the most characteristic landscape in their country. This also indicates, that throughout Europe forestry, nature and the environment are seen as being very close. By way of contrast, the statement “the use of wood helps nature” is quite controversial. It is clearly rejected by a majority.

2.3 People see multiple roles for forests

2.3.1 Preservation and protection are the most important roles of forests

Various studies on the role of forests show that preservation of the natural environment and biodiversity as well as the protective functions of forests are the most widely recognised and most highly valued roles of forests across Europe. The production of clean and healthy air is possibly the most important and also the most well-known forest function. For the largest part of the public in Western Europe forest means a living natural habitat, which highlights the ecological orientation of people’s perception. The results of one international survey in Northern and Central European countries show that people perceive the environment and the protection from natural disasters as the most important forest functions ahead of others. Among these, top rated is the CO₂-sequestering role of the forest, mentioned by a majority of all respondents to be important, while about half of the respondents consider the protection from erosion and protection of the environment or the increase of species diversity to be more important.

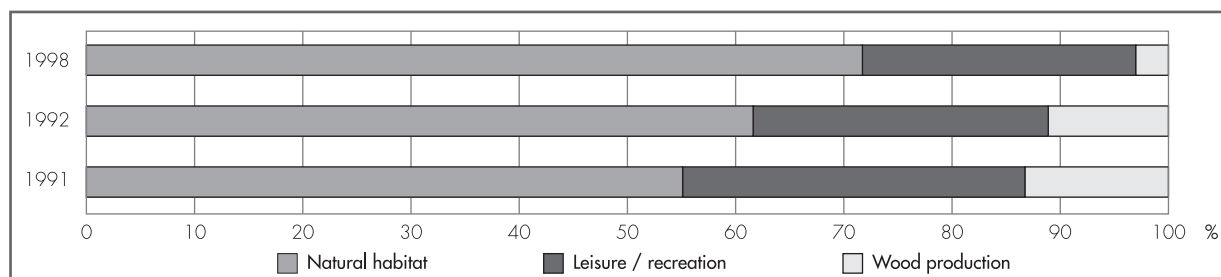
Especially in Southern Europe and in Alpine regions, forests are also highly valued for their protective functions. This includes their role in relation to water and soil erosion as well as the prevention of natural hazards such as avalanches and landslides in mountainous regions.

The public’s perception of the role of forests is changing over time. In people’s minds forests seem to lose more and more of their important economic role of wood production and gain importance especially in the

field of ecology and the environment (see Figure 2). Such a development might indicate that most of the ecological functions are very well known to citizens, while economic functions do not have an important presence in public opinion.

Figure 2 shows a time line indicating the perceived role of forests in Western Europe between the years 1991 and 1998. Obviously, ten years ago forests were already regarded as natural habitat. Since then the share of the public that sees wood production as the main role of forests has steadily declined.

Figure 2: Change in forest roles in France over the years: main role of forests (Source: modified after ODIS, 1998; BVA, 1991, 1992)



2.3.2 Recreation and wood production are acknowledged to play further roles

The role of forests as a place for leisure and recreation is often seen as the most important one, after preservation and protection functions. Last but not least, the role of forest as a place to produce and harvest wood is also recognised by the public. An overwhelming majority of people in Central Europe, for example, link the economic function of forests mainly to the production of wood itself. Only a small minority sees the link to forest industry, paper production and wood as construction or fuel material.

All things considered, it can be said that the economic factor, especially in Central Europe, has not disappeared in the public's consideration. This fact is also confirmed by a finding that a clear majority of the Central European public is in favour of forest use for wood production and harvest. Only half as many respondents vote for a reduced wood harvest and only a very small group wants to halt all harvest activities due to recreational functions, environmental protection and protection from erosion, etc. Importantly, significantly more people under the age of 34 agree with the notion of stopping harvesting or that the use of wood should be minimised. People older than 35 are more likely to agree with the statement that forests should also serve economic functions.

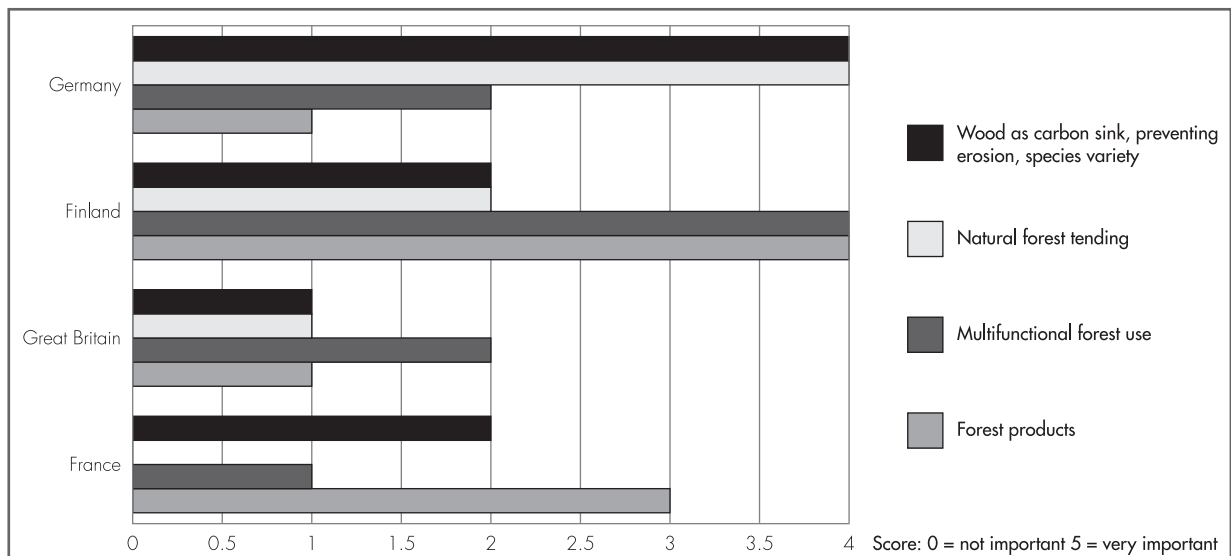
In more northerly, but also eastern parts of Europe, the chief findings from Central and Western Europe are generally confirmed regarding protection and ecological functions. The economic function, however, is still rated higher than recreational aspects. That the role of wood production in these regions is still favoured over recreational aspects can be explained by historical reasons, including long-established utilisation patterns. Surveys in the future will show whether in the northern and eastern parts of Europe the trend towards a more favoured role of recreation will also develop.

In conclusion, when asked, a majority of the public explicitly mentions that all three – the ecological, social and economic – roles of forests are acknowledged, and that forests should and can play all of these roles at the same time. This finding indicates that the public in general supports the multifunctionality concept widely practised in European forestry.

2.3.3 Central Europeans put more weight on ecology than other regions

A research project in Northern Europe surveyed the public of some European countries regarding their general associations with forest. It was shown that the German public, for example, highly identified forest with the more ecological statements, e.g. wood as a carbon sink, species variety or natural forest tending. At the same time, however, they did not neglect the economic importance of forest products, thus supporting the multifunctional use approach. In the Nordic countries, on the other hand, multifunctional forest use is considered to be more important, and forest products are also considered to be of special economic importance (see Figure 3). However, only a minority of respondents voted in favour of letting the trees and plants in the forest grow without tending measures. Also, the suggestion to stop hunting in order to help the forest in fulfilling all three functions was rejected.

Figure 3: The importance of ecological aspects of forests in different countries in Europe (Source: modified after Valtonen et al., 1997)



3 SUSTAINABLE FOREST MANAGEMENT

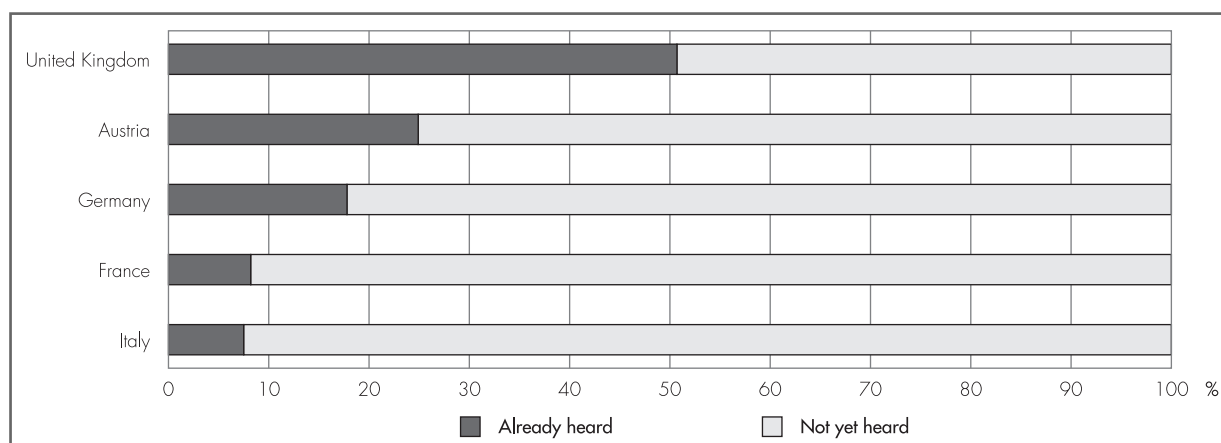
Sustainable forest management has represented the central concept of managing forests for a considerable period of time, and it has been used in a multitude of policy speeches, especially since the concept of sustainable development was widely recognised as a central goal for society in the early 1990s. Sustainable forest management (SFM) was commonly defined by the ministers responsible for forests in Europe in 1993, however, it is not clear to what extent the concept is understood by the public.

A few surveys have included questions related to SFM as a term or as a concept. These were mainly carried out in the larger European countries in the central, western and northern parts of the continent, whereas from the south and in particular from the east very little information is available.

3.1 The term “sustainability” is still widely unknown

Awareness of the term “sustainable forest management” is not very high (see Figure 4). However, there is a big difference within single country results, as far as information is available. In the United Kingdom awareness of the term is exceptionally high, with almost 50% of persons claiming to be familiar with the term in the mid-1990s. This is twice as high as in continental European countries, where the best results show an awareness rate of around 25% maximum. One possible explanation is the degree to which the term “sustainability” has found its way into everyday language. No information is available for Northern and Eastern European Countries.

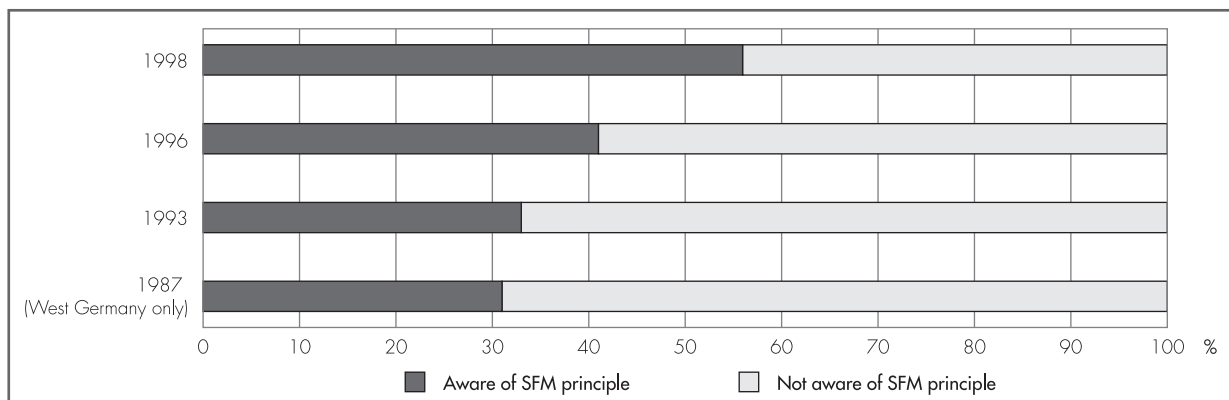
Figure 4: Public awareness of the term “sustainable forest management” in Europe – no further explanation (Source: Rametsteiner, 1998)



In Germany, where “sustainability” has formed the central principle of management for more than a century, another survey provided an additional short answer to the question by pointing out the existence of the old principle of sustainability in German forestry. This resulted in a higher degree of recognition of the term sustainable forest management, with a familiarity about twice as high as without that explanation (see Figure 5). Interestingly, especially older people claim to be aware of this principle of forestry while younger people do not show special familiarity.

Repeated representative surveys conducted in Germany in the years 1987 (West Germany), 1993 and 1996 in which this question was asked show that the awareness of this principle among the general public has increased by about 25% during the last decade (see Figure 5). The increased familiarity with SFM is attributed to the general discussion about sustainable development as well as increased public-relations efforts.

Figure 5: Familiarity with “SFM” in Germany 1987-1998 – some explanation given (Source: Pauli, 1999; Klaus Noyen Research-CMA, 1997; CMA / Holzabsatzfonds, 1993; CMA, 1987)

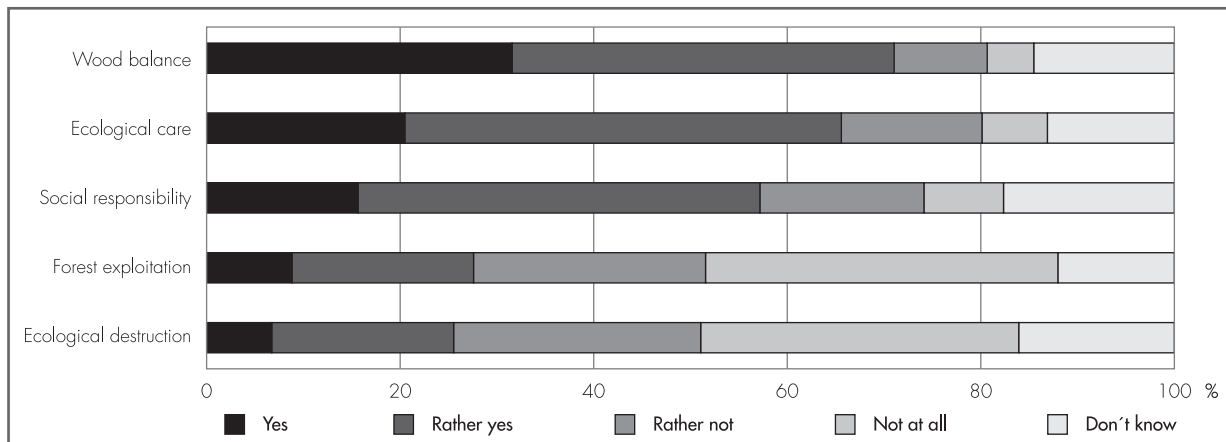


When, after establishing a familiarity with the term SFM, the German public was asked about an increased use of the country’s wood resources, a clear majority of the general public agreed with it. These and other findings indicate that without sustainability explanations, increased harvest of wood seems to be less strictly rejected, while it is accepted under some conditions.

3.2 Sustainable forest management means more than “balanced wood removal”

In some large European countries people were asked to define sustainable forest management, e.g. by agreeing with different statements. The results show that people first name economic aspects like “balanced wood removal in relation to growth”. But they also regard the maintenance of biodiversity and social dimensions as components of the concept of SFM. These views do not vary significantly between gender and different age groups. Regardless of the answer given, a large majority associates something environmentally friendly and, consequently, also something positive with sustainable forest management. The percentage of people who generally do not feel able to give any answer is high, around 20% (see Figure 6).

Figure 6: The meaning of the term “sustainable forest management” in major European countries (GB, DE, FR, IT) (Source: Rametsteiner 1999)



3.3 Confidence in sustainable practices varies considerably

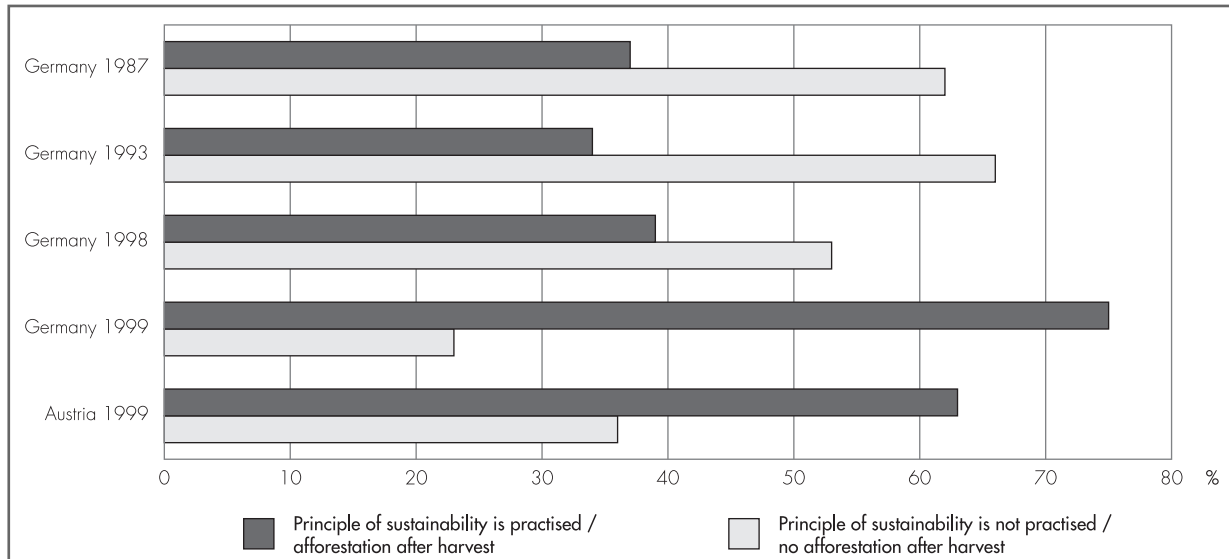
3.3.1 Europeans are divided over whether or not sustainable forest management is applied

Not only knowledge and positive attitudes towards the principle of sustainable forest management is important for the acceptance of contemporary forestry, but also the confidence that this management principle is really applied. Quite diverging results from different polls across Europe show that forest management is seen rather controversially by the public. The assessment of the quality of forestry varies more or less strongly with geography, but also with the very different and often detailed questions that are posed.

One general pattern that emerges is that overall sustainability is generally assessed worse than when people are asked to assess concrete forest management measures. It seems as if the complex web of factors and actors that finally determine the quality of forests and their conditions are difficult to grasp by the public. However, overall, judgements are at least as often surprisingly accurate as they are wrong.

In a majority of countries where information is available a large part of the public does not seem to believe that the sustainability principle is really practised. Those who state not to know the principle are usually considerably more critical than those who do. A majority of those who state to have knowledge of the principle of sustainability show more confidence in the native country's forestry. Overall, however, confidence in forestry in carrying out sustainable practices seems to change for the better in some countries. In Figure 7 the public in five European countries was asked to what extent people think that the sustainability principle is practised by forestry. In Germany the share believing that forestry applies the sustainability principle is slightly increasing, but still below 50%. In other countries between a third and a half of the respondents are not convinced.

Figure 7: Confidence in European forestry to carry out the sustainability principle (Source: modified after Pauli, 1999; CMA / Holzabsatzfonds, 1993; CMA, 1987; Demoskop, 2000; Gill, 2003; FESSEL+GfK, 1990)



3.3.2 Women and young people are more sceptical

Surveys find strong differences in the responses of different age groups and between sexes regarding the confidence that SFM is being applied in practice. Of the younger generations, especially respondents between 15 and 25 years of age, relatively few believe that sustainable forest management is really practised in their own country. Those aged 60 and older predominantly believe that forestry is observing the principle of sustainability.

It appears that women show more scepticism about the degree to which forest management is applied than men. Men tend to believe in good forestry practices to a significantly higher extent. All these results reveal that information provided to the public about forestry measures has to take gender and age differences more into consideration.

3.3.3 People rate domestic forestry better than that of other countries

Interestingly, in almost all the surveyed countries domestic forestry is considered to be among the best or simply the best when it comes to looking after the forests. Countries outside the European continent are usually ranked far behind in all surveys. These results indicate that a majority of the general public supports “their” forests and the way they are treated, when compared to that of other countries. Countries that are not good at caring for their forests are then identified as being outside Europe. Usually countries with a bad general environmental reputation are also considered to be worst at looking after their forests.

A majority among the general public in Central Europe expresses satisfaction with the management of domestic forests. Only a minority is not satisfied and clearly states discontentment with current forest management. In the western parts of Europe, forestry is viewed as somewhat balanced concerning the evaluation of different forestry aspects. Forestry is seen best at providing homes for wildlife, public access and environmental protection. When it comes to the economic sector, or provision of jobs in forestry, the evaluation is not that positive.

In contrast to these rather self-confident evaluations, in a survey made in the Czech Republic the general public was not very convinced about domestic forestry. About twice as many people are not satisfied with the overall performance of their forestry, compared with those who are satisfied. Figure 8 shows an assessment of domestic forestry in Norway, Sweden and the Czech Republic. The Nordic countries' forestry has a good image in their own countries. Contrary to this, the Czech public has a poor opinion of domestic forestry. This is probably the result of severe damage to forests by industrial pollution during earlier decades.

Figure 8: Overall rating of forestry in Norway, Sweden and the Czech Republic (Source: modified after Gill, 2003; Demoskop, 1999; Roček et al., 1997)

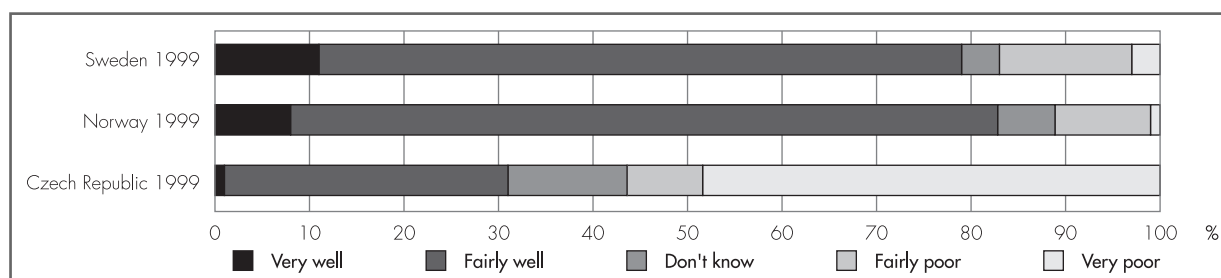
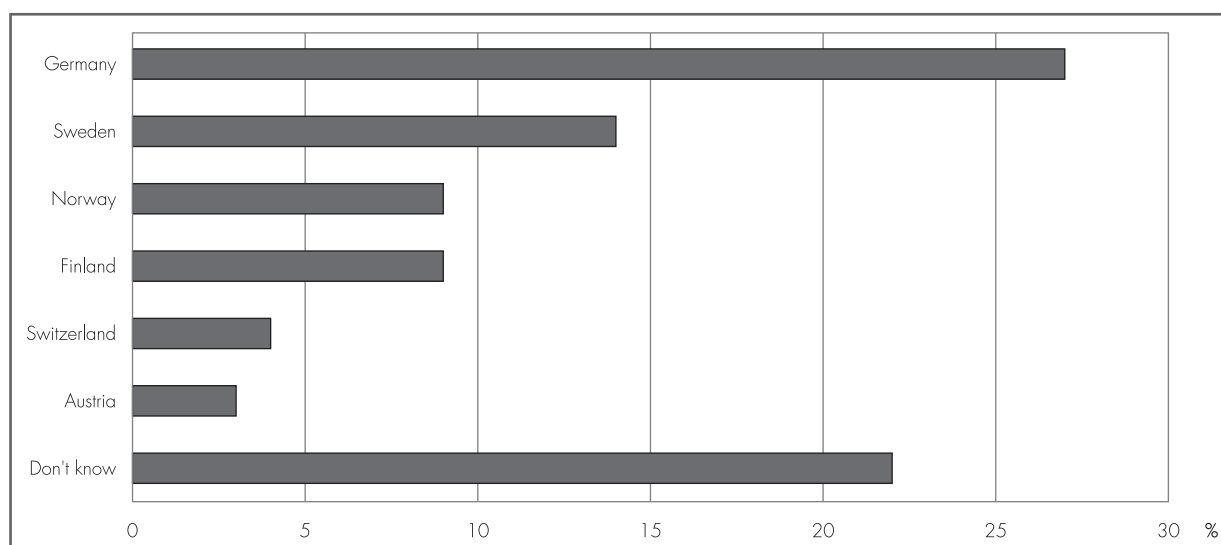


Figure 9 shows the German evaluation of domestic forestry compared to forest management in other countries. The results indicate that domestic forestry is rated as clearly superior regarding environmentally sound management, followed by the Scandinavian countries. These findings are interesting because they show that despite criticism of details or rather negative associations with forestry, especially with regard to ecology, people still think the way things are managed in their country is more ecologically sound than anywhere else. Scandinavian countries lead the group of the lower-ranked countries. However, younger people rank Scandinavian forestry more highly regarding environmentally sound forest use than their own country's forestry. There is also a high percentage of respondents who are undecided.

Figure 9: German rating of forestry in their own country and in other countries regarding their environmentally sound management (Source: Klaus Noyen Research, 1997)

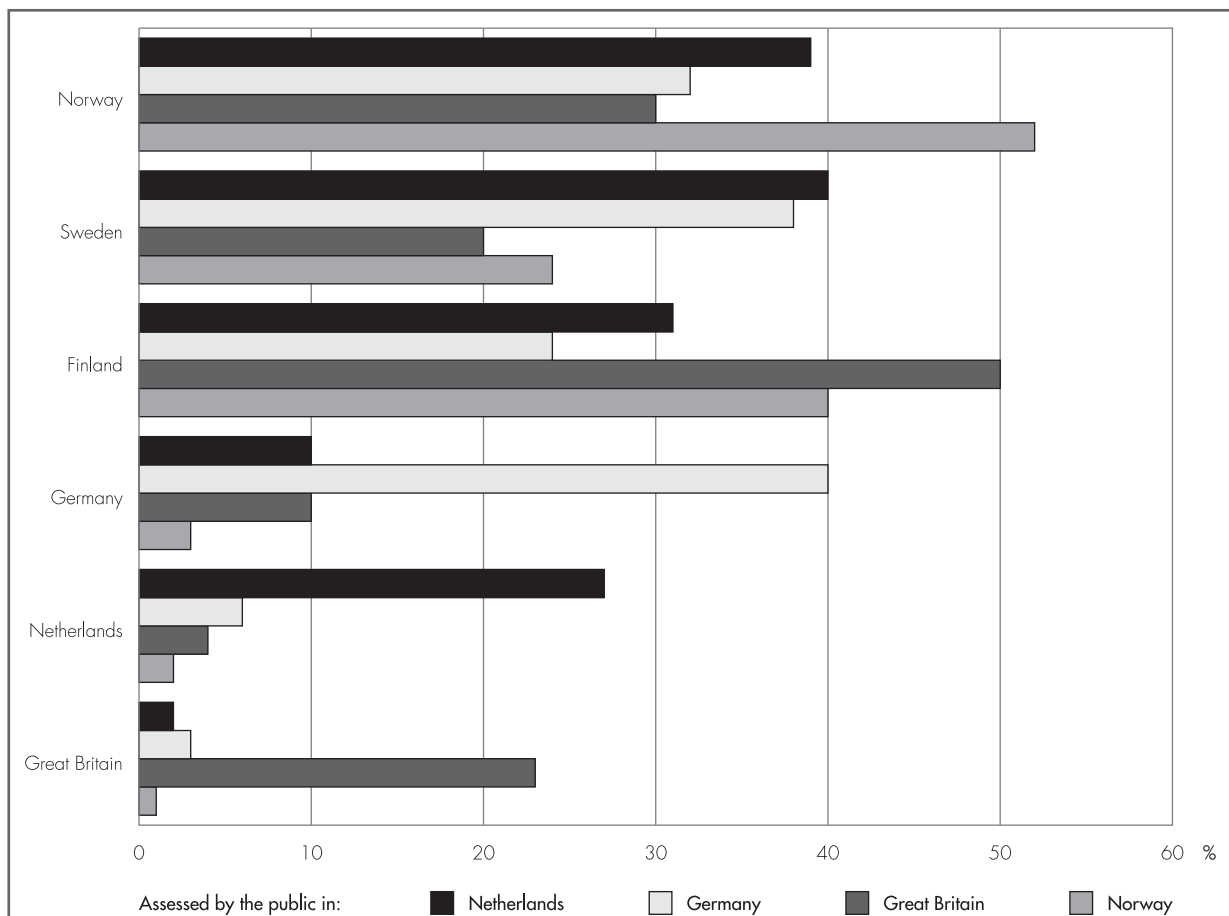


3.3.4 Nordic countries are believed to apply sustainable management most

When people in Western Europe evaluate their own country's forestry and compare it with other countries, it was found that Scandinavia is rated highest and that, in contrast to Central European countries, they do not rate their own country's forestry as being best. The majority of Western European citizens regard forestry in the north to be more sustainable than in any other of the regions in question, including their home countries. Only a very small group believes that the Scandinavian countries are not taking care of their forests.

In all the inquiries Nordic forestry is seen as the benchmark in Europe, regardless of preferences for the home countries' forestry. Not surprisingly, Nordic countries also evaluate their own forestry best. Only in Germany and Austria does the general public consider forestry in their own country to be more sustainable than Scandinavian forestry. When more specific questions are asked, such as whether trees are being replanted after felling, Scandinavian countries receive a strong vote of confidence that sustainable forest management is practised. Figure 10 shows the results of public perceptions in different countries about other countries' forestry. The figures compare perceptions in the Netherlands, Germany, Great Britain and Norway about forestry in Norway, Sweden, Finland, Germany, the Netherlands and Great Britain. Obviously top rated are the Nordic countries, followed by the continental European countries. It is interesting to see that more Britons believe that Finland is better at looking after its forests than Sweden.

Figure 10: Countries best at looking after their forests – judged by the public in NL, DE, GB and NO
(Source: modified after Demoskop, 2000 and Gill, 2003)



3.3.5 Eastern European forestry is much better than Western Europeans think

People in Western Europe have been asked to evaluate the situation of forests and forestry in Eastern European countries. Generally, Eastern European forestry is evaluated badly. In some cases they are rated even worse than tropical countries. This is a gross misperception. Almost all the indicators for sustainable forest management show no clear differences between Eastern European and Western European countries, and Eastern European countries are frequently amongst the best in many aspects of sustainable forest management, including the balance between increment and fellings. They exceed practically all Western European countries in the extent of forests undisturbed by man, and have put comparatively large areas under specific policies for biodiversity protection (see MCPFE “State of Europe’s forests 2003”).

It seems that with only a limited knowledge of conditions in Eastern Europe, Western Europeans believe there are high levels of environmental pollution and low levels of ecological protection in some Eastern European countries, and they base their judgement of sustainability in forestry throughout Eastern Europe on these impressions. The bad reputation of Eastern European forest management in terms of sustainability may have economic consequences. Surveys on the wood purchasing behaviour of Western Europeans indicate that few consumers say they are willing to buy wood of Eastern European origin. While such behaviour might be rare in practice, it is nevertheless not a desirable image.

≡ 4 FOREST RESOURCES

Forest resources are recognised by the public mainly with respect to the amount of, and changes in, forest area. Due to the importance of the forest area, a considerable amount of data and surveys are available on the subject. Surveys from almost all regions of Europe have been identified, with the exception of Eastern Europe. Most of the studies dealing with this topic have been carried out in Central Europe, in the Nordic countries and in the larger European countries. Little information is available from Mediterranean countries.

4.1 Overall, forest area is perceived to be considerably decreasing

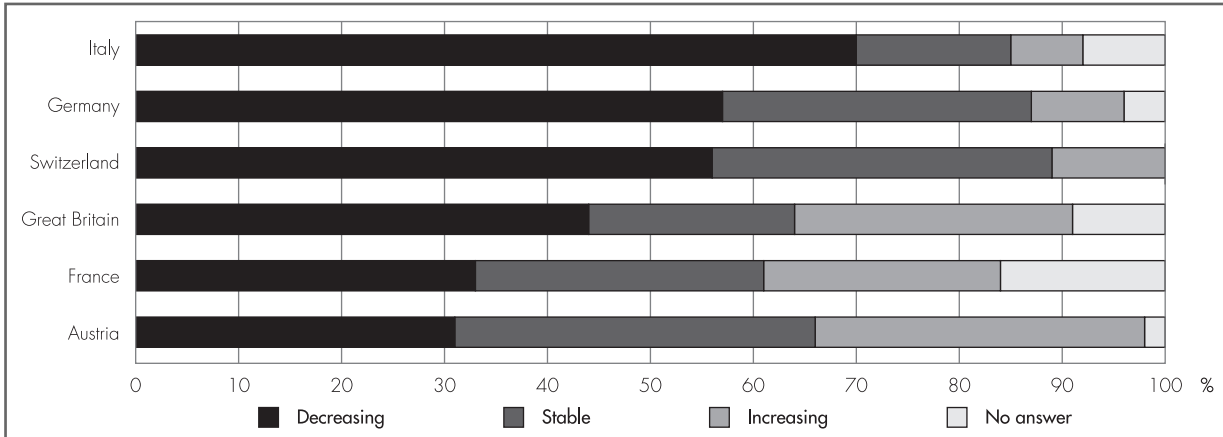
Only a few inquiries analysed in this study included a question on how much of the country's area is actually covered by forest. It is therefore difficult to determine what knowledge people have about the absolute forest area in their countries. However, people in the centre of Europe, such as Switzerland, seem to be very well informed about the amount of forest area in their home countries. Most of the people living there could name about the right share of area covered by forest in their country.

4.1.1 Forest area is believed to be in decline (almost) everywhere

Unlike questions on the actual forest area, questions on whether people perceive the forest area in their country to be increasing or decreasing were posed in several studies in all geographic zones of Europe. Results indicate that people almost everywhere perceive the forest area to have decreased, in some cases sharply, during recent decades. This finding is especially remarkable as the impression by the general public differs strongly from fact. The MCPFE report "State of Europe's Forests 2003" shows that in practically all countries in Europe forest area actually increased. The Mediterranean countries in particular, such as Spain, France, Portugal, Turkey, Greece and Italy, also report increases of forest area.

However, people perceive the forest area to be decreasing in almost every country. Figure 11 shows a comparison between six European countries regarding the perceived development of forest area in these countries. In Italy the public seems to have the worst perception regarding the development of forest area in their country. Especially among Europeans between the age of 15 and 25 a remarkably high proportion believes the forest area to be decreasing. There are only a few exceptions, such as in Austria. Here clearly more people state that they perceive the area of forest in Austria to be increasing or at least to be stable, rather than decreasing. One possible explanation for the Austrian exception might be the increased public relations campaigns conducted since the early 1990s to promote the use of wood and the fact that forest is increasing year by year (see Figure 11).

Figure 11: Development of forest area in Europe: perceived national situation (Source: modified after Pauli, 1999; British Forestry Commission, 1999; SAEFL, 1999; Rametsteiner, 1998; ODIS, 1998; FESSEL+GfK, 1990)

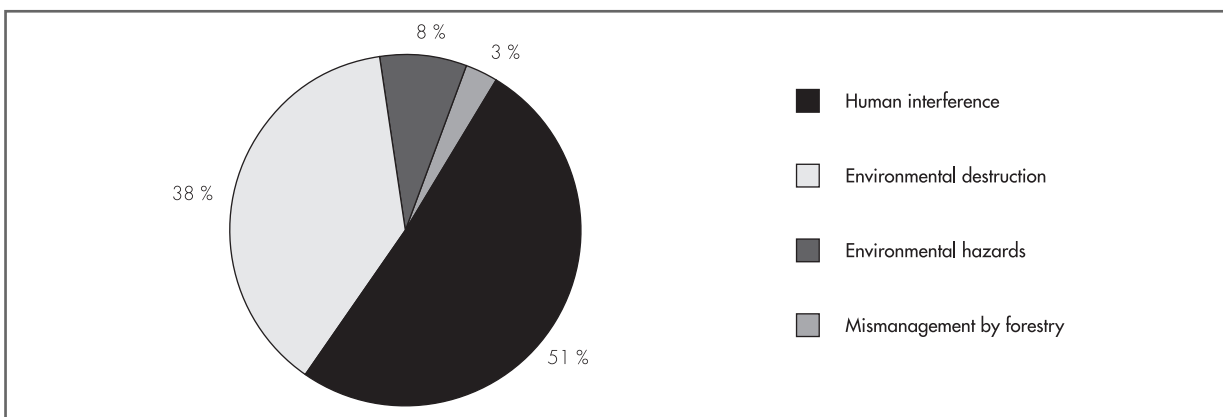


4.1.2 Clear-cutting and environmental destruction are blamed for decreasing forest area

Some studies conducted in Central Europe, Germany and Austria have tried to find out which causes are seen as being most responsible for the perceived decline in forest area. They find that the group of people who perceives forest area as decreasing in their countries mainly blame a range of human interference. One main reason is seen in building activities – private or by the state – and their consequences, such as clear-cutting and too little afforestation. Particularly in some Alpine regions the combination of construction activities together with tourism is strongly blamed for causing the perceived decrease of forest area.

Other reasons for the decrease are believed to be human-caused environmental destruction, including all the causes of forest dieback, such as acid rain and exhaust fumes from traffic as well as natural hazards. In Germany only a small minority of respondents blames the mismanagement in the forests as a negative factor (see Figure 12). Several authors note that most of these arguments do not result from personal experience but have been transmitted by the media.

Figure 12: Perceived reasons for forest area decrease in Germany (Source: Pauli, 1999)



4.2 The demand for more area covered by forests varies in Europe

According to the results of some studies carried out in Western Europe and the northern part of continental Europe, forests are the clearly preferred landscape when “green” in the environment is mentioned. People in these countries also state that they prefer broadleaved forests to coniferous ones. All things considered, the most important finding is that a clear majority wants to have more of their country covered by forest than is now the case. Most of these respondents said they wanted twice as much or at least 50 per cent more forest.

On the other hand, when people in Central Europe were asked if they were content with the current amount of forest in their own country, the majority agreed; only a minority wanted more forest. When comparing these opinions with the data of forest cover as reported by MCPFE (2003), it is interesting to note that in the United Kingdom, where the area covered by forest is about ten per cent of the total country area, people wish to have twice as much. In Alpine Switzerland, where almost a third of the country is forested, people do not wish to increase the actual amount. Allowing for the fact that little data is available for comparison, one might still conclude that most people in Europe prefer around a third of the land area to be forested. Local studies show, however, that such preferences vary widely across regions.

4.3 There is a growing awareness of forests as carbon sinks

The sequestering of CO₂ by the forests and the importance of forest carbon stock as a sink for carbon seems to be an upcoming topic in European public opinion. Carbon is retained for long periods in the forest biomass and also in forest soils. This ecological function of forests contributes to a reduction in the concentration of greenhouse gases in the atmosphere. Although there are actually only a few studies and polls that included this topic, the more recent studies found that the role of forests in global climate change is mentioned by the general public, if prompted, as being among the important ecological functions. One international survey shows that the CO₂-sequestering role of the forest is seen as the most important protective role of forests by a majority of all respondents (see chapter 2.3.1).

By comparison, a Japanese study found that almost half of the public perceives the CO₂-sequestering aspect, which helps fight global warming, as being among the three most important functions of the Japanese forest. However, the protection from avalanches and floods as well as “forests as a water reservoir” are still ranked higher; they were chosen by a little more than half of all Japanese respondents.

≡ 5 FOREST ECOSYSTEM HEALTH AND VITALITY

Forest health and vitality is one of the most important issues for the European public. The widely shared concern about forest health and forest dieback has made this issue one of the most important forest-related topics in the view of the public. The surveys available chiefly covered Central Europe and larger Western European countries. On some of the topics information from Southern and Eastern European regions is also available.

5.1 Forest health is regarded to be fairly poor in Europe

5.1.1 Forest dieback is still a concern to people

Studies concerning the best-known forest health problem – forest dieback – only cover Central European Alpine countries. No information could be obtained from the rest of Europe. During the 1980s forest dieback was the main forest-related topic. People in Central Europe were asked again almost a decade later, and still a clear majority stated that forest dieback persists. A smaller group believed that in the 1990s forest dieback was exaggerated by the media. However, only very few think that forest dieback is now under control.

Some ten years ago most of the public in Central Europe considered their forests to be highly endangered by forest dieback. Younger people, in particular, were among those most convinced of forest dieback. More recent studies show that people still think that acid rain, formerly blamed as the main reason causing forest dieback, is highly dangerous to their native country's forest. A majority of people think that forest dieback is a general personal and environmental threat, more than any other form of environmental pollution. This opinion among the Central European general public, especially in Alpine regions, reached its peak at the end of the 1980s and at the beginning of the 1990s, when these topics made daily headlines. New green political parties were formed and Chernobyl sent shock waves across Europe.

When people were asked to be somewhat more specific about the dieback topic, the responses were very vague. Answers about the percentage of trees damaged by forest dieback ranged from 0 to 100 per cent. However, it is highly interesting to note that a majority of respondents were not able to answer such questions at all. Such findings lead to the conclusion that attitudes and perceived knowledge on the one hand and facts concerning forest dieback on the other hand differed considerably.

The most frequent reasons given for forest dieback are coal-fired power stations, exhaust emissions from traffic and private heating, all perceived to contribute to air pollution. Other factors, including pests, general environmental pollution and monocultures, are also named, but these additional reasons are clearly not seen as being as important as air pollution.

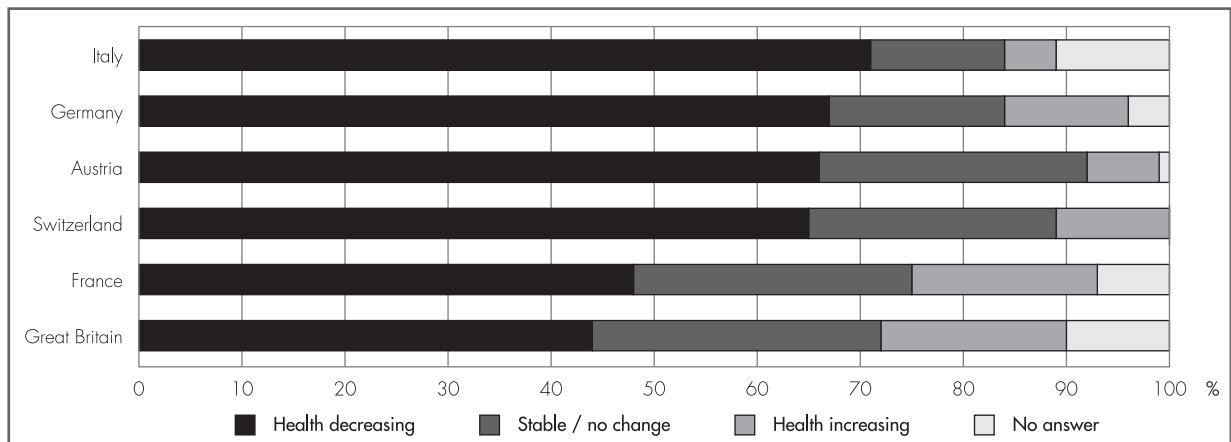
5.1.2 Most Europeans see forest health deteriorating further

Generally it can be said that about the same amount of people in many regions of Europe – approximately one quarter – think that forest health remains stable in their domestic forests. Nevertheless, about twice as many or more believe they see a considerable, or at least moderate, deterioration of forest health. In Italy the

number of those who believe that the health of the domestic forest is decreasing is seven times higher than those who believe it to be in a stable condition.

Figure 13 shows the dominant perception of decreasing forest health in six European countries as of 1997. In the United Kingdom, but also in France, about the same number of people, or slightly more, believe that forest health is at least stable rather than decreasing. The case of Austria is remarkable. It is the only country where the citizens are relatively satisfied with the current forest condition (see next chapter), and yet, this is one of the two countries assessing the situation worst regarding the development of forest health.

Figure 13: Development of forest health in Europe: perceived national situation (Source: modified after Rametsteiner 1998, 1999; SAEFL, 1999)



Little information, other than forest dieback related questions, has been found on time series about the perception of forest health. Most studies including this topic have been carried out in Central Europe. These show a trend towards a more negative perception of forest health among the public, especially during the early 1990s. A majority believed that the forests in their surroundings were definitely not in a healthy condition. More recent results from the late 1990s – for example, from Austria – indicate a trend in the other direction: only a small percentage of the public considered the forest to be sick and suffering and in need of urgent help.

5.2 The overall condition of forests is also seen as bad

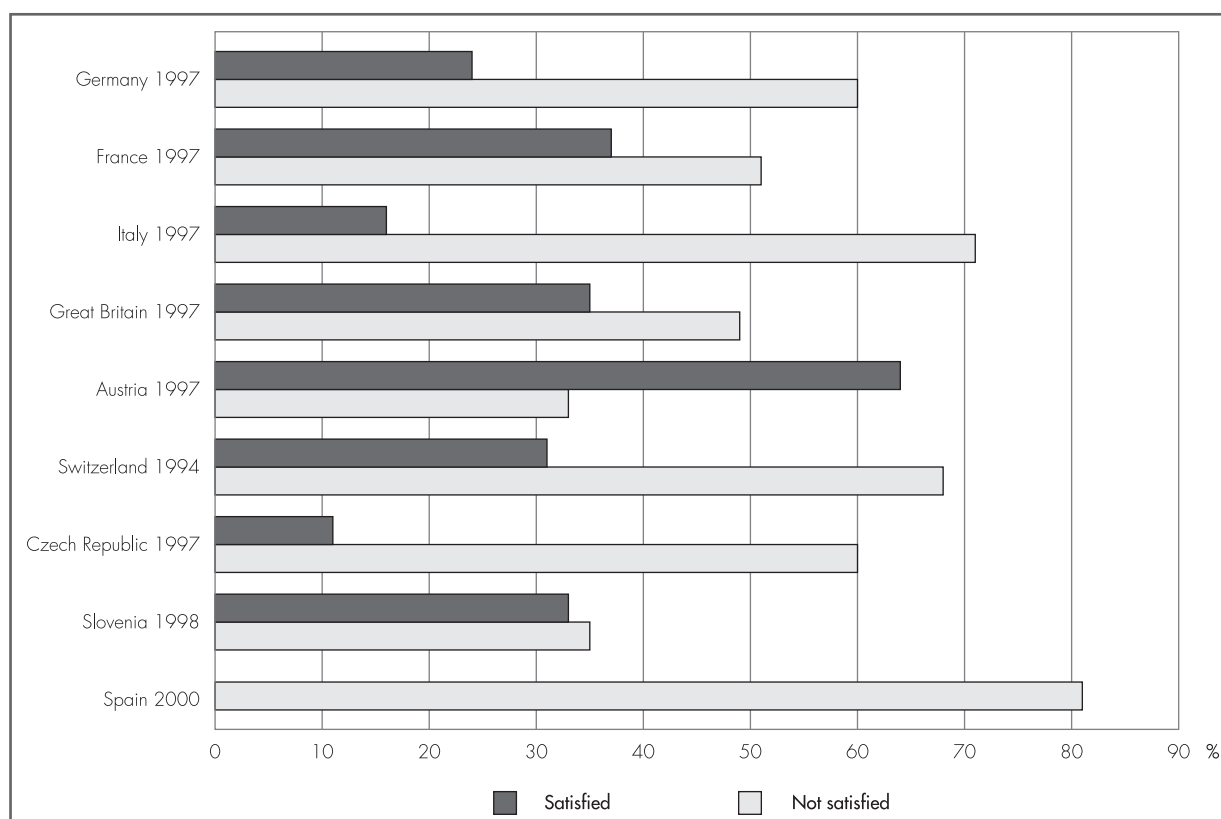
5.2.1 Europeans are not satisfied with the overall condition of forests

With regard to public opinion on the overall forest condition (including health and vitality, biological diversity and forest area), Europeans on the whole are not satisfied with the condition of their domestic forests. The biggest discontent within the surveyed European countries was found in the Mediterranean countries. In northern, eastern and western regions in Europe the percentage of people dissatisfied with forest condition is slightly lower. On average, only about one quarter of the European public is content with the current state of their domestic forests.

Figure 14 shows a comparison between nine European countries regarding their satisfaction with the current domestic forest condition. Please note that the understanding of forest condition varies in the

different surveys shown. In addition, a non-representative study (Spain, 2000) is also included in the analysis in order to widen the geographical spectrum. Obviously the dissatisfactory situations in the different countries predominate. A remarkable and positive exception is represented by the majority of Austrians expressing their overall satisfaction, despite their low evaluation of forest health, as expressed in the same survey. The current forest condition is also perceived as exceptionally negative in eastern and southern European regions. Note that questions and sample sizes differ and this may influence the comparison.

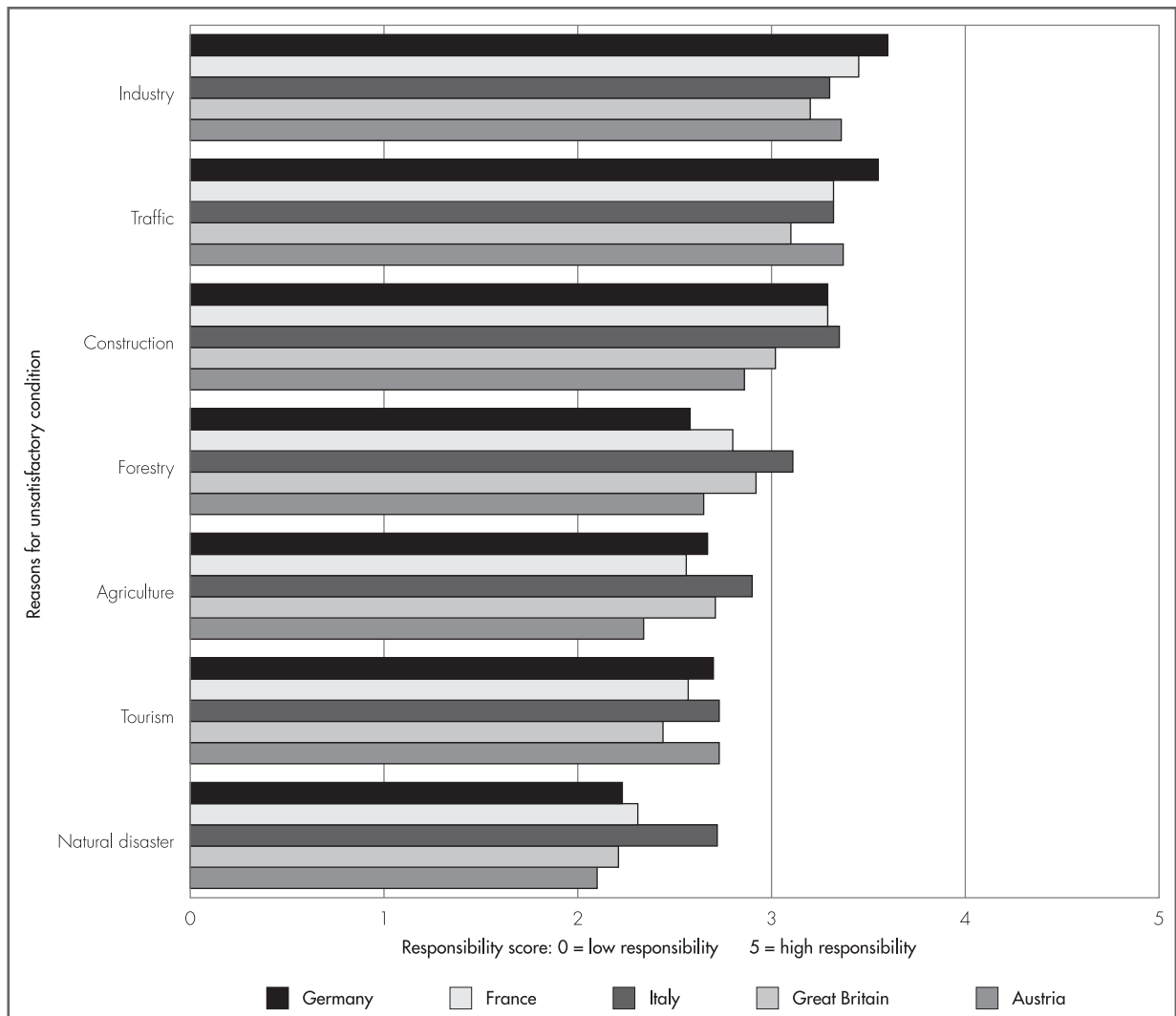
Figure 14: Satisfaction with current domestic forest condition in Europe (Source: modified after Rametsteiner, 1998, 1999; Diekmann and Franzen et al., 1995; Roček et al., 1997; Malnar and Šinko, 1998; WWF Spain /Adena, 2000-not representative)



5.2.2 Forestry is only partly blamed for the dissatisfactory condition of forests

A majority of the general public of the European countries surveyed think that the key factors and responsibilities for the unsatisfactory condition of domestic forests lie outside the direct influence of forestry (see Figure 15). Environmental pollution by industry was blamed as being most responsible, followed by pollution caused by traffic exhaust fumes or general construction activity. Nevertheless, forestry is seen as a factor that is at least partly responsible for the unsatisfactory conditions, and only a few people think that forestry is not responsible at all. Figure 15 also shows that differences between countries and between single reasons are marginal. Industry, construction and traffic are given as the main reasons for the unsatisfactory forest condition.

Figure 15: Perceived reasons for unsatisfactory forest condition in five European countries (Source: modified after Rametsteiner, 1998)



In addition to the main factor perceived as being responsible for bad overall forest condition – namely, air pollution from industry and traffic – studies demonstrate that other factors are also seen as damaging. This concerns other forms of environmental pollution and tourism-related measures, which are usually blamed as being more responsible than natural disasters such as forest fires, droughts and pests or even forestry measures like harvesting. However, although forestry is not explicitly perceived as the main factor in the unsatisfactory forest condition, measures such as wood production and wood harvesting do cause concern.

To improve the perceived bad state of the forests, the public in Central Europe overwhelmingly called for less environmental pollution. One quarter wanted more environmental protection. Very few respondents desired more forestry measures or wanted less or no forestry activity at all. Overall, the results of surveys show that forestry itself is not seen by the public to be able to solve problems related to the overall forest condition.

6 PRODUCTIVE FUNCTIONS OF FORESTS

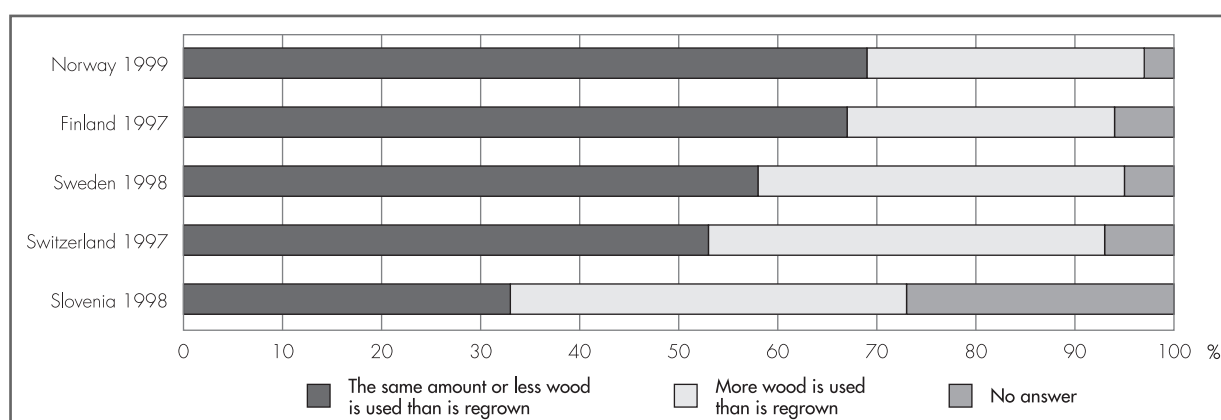
Productive functions of forests cover mainly economic aspects, traditionally important for forest owners and managers. Over decades, and particularly in recent years, European society has increasingly changed its view of the most important goods and services that they demand from forests. The data collected for this chapter are mainly from Nordic polls, but also from studies conducted in Central Europe.

6.1 A majority thinks that increment and fellings in Northern Europe are balanced

Most of the people surveyed in various European countries think that northern forestry harvests the same amount or less wood than is regrown in the same period. The opinion of people in Central European countries seems to be more critical. In these countries many people think that more wood is used than is regrown. Even in the Central European countries where the public expressed confidence in and satisfaction with domestic forestry, there is little confidence that not more wood is cut than is regrown.

Figure 16 shows the perceived amount of harvested wood compared to regrowth in eight European countries. The results show that the public judges the situation to be positive in almost every country. Interestingly, a remarkable majority of the general public in Slovenia believes that in their forests more wood is cut than is regrown. This common perception can be easily disproved. According to data from the MCPFE “State of Europe’s Forests 2003”, less than 40% of annual increment is cut in Slovenia. At the same time, the forest area in Slovenia is increasing. The report shows that increment is higher than fellings in every European country.

Figure 16: Perceived balance between increment and fellings (Source: Demoskop, 2000, 1999; Gill, 2003; Finnish Omnibus Survey, 1997; SAEFL, 1999; Malnar and Šinko, 1998)



6.2 Wood is environmentally friendly and a product of high appeal

In Central Europe the general attitudes towards wood are very positive. An overwhelming majority of the public in Central Europe expresses a high regard for wood and sees it as “the” environmentally friendly

product due to its naturalness. Spontaneous perceptions are dominated by terms like forest, trees, beautiful furniture, practical material with good technical characteristics and active use of wood due to its various quality aspects. Only a very small percentage associates wood with its origin in the forest and with wood production, harvesting or the loss of forest. People associate forests as such and the wooden furniture at home as very positive, but forget or cut out the link in between, namely harvesting and wood processing, which often have negative associations.

Although wood is clearly favoured by the public over other materials such as bricks, concrete or steel, there are also reasons why people in the centre of Europe choose not to use wood when purchasing construction material. These include the high price of wood and the necessity of maintaining rather than over-utilising forests. All in all, wood is considered to be a suitable, good-looking and natural raw and building material with excellent insulating qualities. Perhaps surprisingly, aspects like its high flammability are not seen as deterrents to using wood. Furniture production is seen by the Central European public as the most widespread use of wood. The paper industry as well as the timber and furniture industry are seen as the sectors having the highest demand for wood.

6.3 Non-wood goods and services for recreation are well received

6.3.1 People enjoy recreation as a service provided by forests – and see it to be free

Representative surveys conducted in Western Europe show that the public generally has different wishes and demands, whether they visit forests for a day or whether they make short visits to local forests. A majority of respondents, when out for a day, chiefly demanded toilets, car-parks, picnic areas, signposted walks suitable for all abilities and nature trails. There is much less demand for such facilities for more frequent short visits to local forests. In general, people strongly demand extra efforts for making forests good places to visit. Nevertheless, a great majority is already convinced that forests provide valuable leisure facilities.

With regard to recreation people frequently mention walking and relaxing in particular. Most of the younger generation prefer sports like biking, riding and skiing when they are visiting forests, while older people enjoy nature or playing with their children.

The high demand for recreation raises the question of who is going to pay for recreation in forests, especially if there are special facilities required, or damage occurs. The suggestion that forest visitors should pay for or at least share in paying the costs of maintenance was presented to the public in Central Europe, where the law allows free access to forests. However, financial contributions were clearly rejected by almost everybody. Only a very small group could imagine contributing financially to the maintenance of forests, and only under certain circumstances. Further information on access to forests and recreation can be found in Chapter 9.4.

6.3.2 Collecting berries and mushrooms is favoured by the elderly

From the information available it seems that, overall, picking of mushrooms and berries is not very widespread during trips to the forest. However, up to a third of the population of some European countries, chiefly in Central Europe and in the north, name mushroom and berry picking. Remarkably, fewer

persons mention it in the southern regions of Europe. Socio-demographic data show that men in particular, especially those between 40 and 70 years of age, mention going to the forest to pick mushrooms and berries.

6.3.3 In many regions people have positive attitudes towards hunting

Around a third of the general public in Central Europe mentions hunting when asked about spontaneous associations with forests. This finding might lead to the conclusion that hunting in these regions is a common practice, but the surveys demonstrate that it is not. On the contrary, it can be shown that only around one per cent of the European interviewees mentioned visiting the forest for hunting. Nevertheless, people show quite a high interest in this topic and want to be supplied with information related to hunting, especially those who are frequent visitors to forests.

In Switzerland the term hunting is associated rather positively with wildlife maintenance, regulation and management. When asked about their opinion towards current hunting regulations, most of the respondents say that the current status of regulations should be retained in Central Europe, and they should not be relaxed. Furthermore, many people believe that hunting does not pose any threat to the forests. This is often contrary to fact, especially in regions with difficult natural regeneration conditions and high levels of game pressure. In Central Europe hunting associations are, however, not regarded as an authoritative source on forest matters. In France people seem to fear that hunting could cause problems to the forest and impair its ability to fulfil its three major roles: as a natural resource and for recreation and wood production. Here, about a third of the public was convinced that hunting should be stopped.

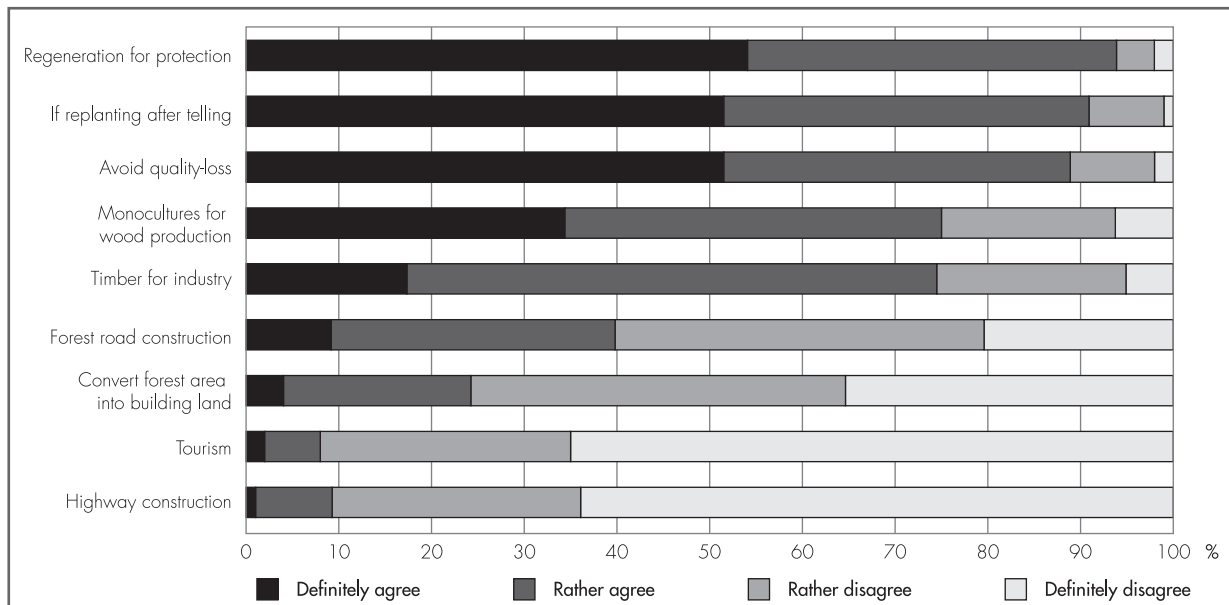
6.4 People tend to oppose forestry measures that disregard nature

6.4.1 Tree felling for timber production is accepted only together with afforestation

The question of accepted and desired forestry measures is relatively well covered by public opinion polls carried out in the central regions of Europe, while recent data is lacking from the rest of Europe. Forestry measures accepted in Central Europe are those that contribute to a healthy forest condition through tending, thinning and removing sick trees. Tree cutting for timber production is also accepted, especially if afforestation is guaranteed after harvesting. Nevertheless, acceptance is rapidly decreasing for tree cutting for Christmas tree production and firewood.

Harvesting is completely rejected when it comes to tourism or construction activities. In Alpine regions the general public clearly supports regeneration to maintain the protective function of forests. Generally, wood harvesting is accepted by the interviewees if there is an economic or qualitative reason. Figure 17 presents the most important reasons for tree cutting accepted by the Austrian public. The results are similar to other Central European findings. Dominant is the acceptance of measures for regeneration, protective measures, but also economic reasons.

Figure 17: Accepted reasons for tree cutting in Austria (Source: FESSEL+GfK, 1990)



An interesting result of the same study was that a majority of the public accepts more afforestation or an indirect contribution to the increase of the forest area – obviously to counterbalance the perceived decrease in forest area. Statements demanding more wood harvesting are received with very low agreement, even if sustainable management is not endangered.

A further topic concerns the number of forest roads, paths and tracks that cut through forest ecosystems in order to facilitate accessibility to the different stands and enable the transportation of timber. A clear majority of the people living in Central-Alpine Europe are convinced that no further forest roads are necessary, and many believe that there are already too many existing roads. Most people also prefer that motor vehicles be banned from the roads, with some exceptions.

Most of the inquiries not only asked for an evaluation of forestry but also for the reasons why people assess forestry to be good or bad. The findings concerning these reasons have been especially remarkable in Nordic countries, where both good and bad ratings are explained by a majority of the public by the relationship between logging and growth. Those who are satisfied with forestry in their countries most often express appreciation of today's relationship between logging and growth. Additionally, a more stringent legislation than in the past and higher levels of competence among those working in the forest industries is declared to be responsible for the satisfactory evaluation of forestry. Those who are not satisfied with their forest management mainly stress that forests are devastated. Others express the concern that replanted trees are not growing at the same pace as logging is carried out.

In Central and Western Europe reasons for bad assessment are also found in a perceived lack of sustainability, too much clear-cutting, replanting with monocultures, and other environmental issues. It was found that people in Central-Alpine countries are not willing to discuss the currently existing prohibition of clear-cutting and clearing of forests in their countries. Almost all citizens declared that they want this prohibition to be retained. Somewhat surprising is the finding that people older than 65, in particular, are among those declaring that forests in Central-Western Europe are managed in a bad way. The different message compared to other surveys' findings on their positive assessment of sustainability might be a consequence of different and partly prompted questions.

Particularly in Central Europe the public warmly welcomes the recent development of forest management influenced by environmental groups. Scepticism towards this progress is demonstrated by only a small minority of the public. It is especially strongly supported by people aged between 15 and 25.

6.4.2 The Central European public seems to be more sensitive to forestry measures

Generally, it seems that the Central European public has more negative associations with forestry than the public in other regions. Forest dieback, destruction of forest, clear-cutting and over-utilisation are only some examples of negative associations that are mentioned. Forestry is blamed for ignoring nature and is seen as guilty of mismanagement that causes further soil problems and the decline of species diversity and also poses other threats to the environment. As most people seek recreation in forests, the lack or poor quality of recreation facilities also features negatively. More positive terms are mentioned in the context of hunting and wildlife, such as hunter, game and game tending. The general public in large countries of Central and Western Europe names very few forestry measures as being positive, such as tending and afforestation. Interestingly, the economic sector of forestry is viewed in a more positive light. Forestry in this case means wood production and providing jobs for people.

In Western Continental Europe, opinions on forest management seem to be more extreme. A majority of interviewees in one poll declared that harvest generally is a necessary action for environmental protection. This might indicate that harvesting has positive associations. However, slightly fewer people stated that wood harvesting in their opinion is a crime against nature.

In Switzerland the majority of people state that their own country's forest is managed by responsible experts who ensure the fulfilling of the functions of forests. This group of people also thinks rather positively about forestry. The opinion on forestry in the eastern parts of Europe is more moderate. Forestry is generally associated with measurements, wood harvesting, replanting and tending, all of which have a more positive or at least neutral image.

7 BIOLOGICAL DIVERSITY IN FOREST ECOSYSTEMS

The following chapter presents Europeans' views on forest biological diversity. Public perception of the relationship between forest and nature shows the importance of environmental aspects in managing and utilising forests. As with forest health and vitality, only a limited number of surveys on forest biological diversity aspects are available. However, there are many surveys that include forests as one aspect amongst many in relation to environmental awareness. The bulk of the material used for this report consists of specific forest-related polls. These have mainly been conducted in Central Europe and in some other large countries. The northern parts of Europe and the West are less well covered, and there was almost no input from Southern and Eastern Europe.

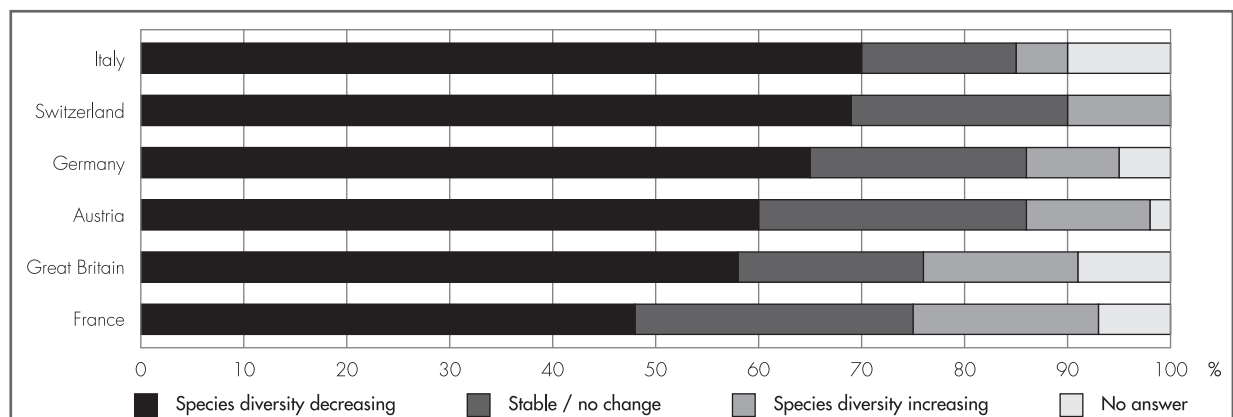
7.1 Perceived decreasing forest biodiversity is a concern

Species diversity is generally quite well covered by opinion polls, however, almost no data are available from Southern Europe and no data at all from Eastern Europe.

7.1.1 Most Europeans think that forest biodiversity is decreasing

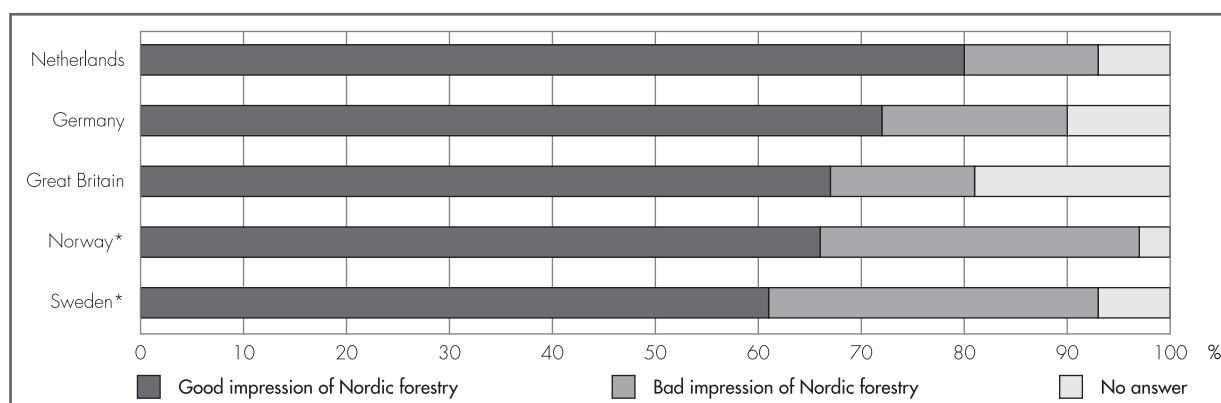
The general view on the situation of species diversity in major European countries is quite bleak. The majority of the public in all European regions believes that the biodiversity in their domestic forests is declining considerably. Figure 18 shows the comparison between six European countries regarding the perceived situation of plant and animal species in their domestic forests. It demonstrates that in all countries a majority of citizens believe the number of species to be decreasing (different question and sample in Switzerland). This is also the case in Austria, where people generally claim to be satisfied with the current situation of the forest. France is somewhat of an exception compared to other countries, as about twice as many people as in other countries surveyed believe that the species diversity in their forests is increasing. However, in France almost 50% of the population also believes that species diversity is declining.

Figure 18: Development of species diversity in forests of Europe: perceived national situation (Source: modified after Rametsteiner, 1998; SAEFL, 1999)



A very important finding is that people consider it most important to preserve plants and animals living in the forests. This issue is much more important to the public than any economic notion or even sustainable forest management. In Nordic countries the number of people having a very good impression of their forestry with regard to plants and animals outnumbers those having bad impressions by about two to one. Outside the Nordic countries this impression of good forestry regarding fauna and flora is even better. Only a very small number of people in some Central and Western European countries do not have a good impression of Nordic forestry (see Figure 19).

Figure 19: Impression of Nordic forestry at taking care of plants and animals;
*countries assessing their domestic forestry (Source: modified after Gill, 2003; Demoskop, 1999, 2000)



In Finland a clear majority of the public perceives that the treatment of forests has taken a turn for the better as regards care of the forest environment and the actual situation of plant and animal species in their forests. However, the general public still believes that felling of timber and forest management also constitute threats to the abundance of flora and fauna.

Overall, the situation of plant and animal species in Europe's forests is perceived to be endangered, and the number of species is generally decreasing. In Nordic countries the public thinks that forestry takes care of biodiversity, while no such information is available from other regions.

7.1.2 Threatened or formerly extinct animals are now increasingly accepted

As one consequence of the changing role of nature and forests for European society, and possibly also the perceived decrease in biological diversity, there are indications that the remigration of wild predators such as lynx, wolf and bear is increasingly accepted. In a Swiss survey the majority of the public favours the tolerance of all these wild animals. Above all, a high acceptance of lynx and wolf was stated.

7.1.3 Mixed forests and native species seem to be preferred

In the United Kingdom it was found that about two-thirds of the respondents favoured mixed forest. Most of the remaining third preferred broadleaved forests, while only a few voted for conifers. This may be seen as a further indication that the public is more accepting of diversity and forests perceived as being natural than they are of monocultures of non-native species. While these findings of a representative survey support the

results of other more regional or local enquiries in other countries, they are not a sufficient basis for a more general judgement.

7.2 Forest biodiversity preservation is an absolute necessity

When the general public in Ireland was asked about the protection of ancient and native forest, it was shown that this preservation measure was desired by nearly all respondents. On the other hand, around half of the general public would accept the removal of some parts of current forest land for developments.

In Central Europe similar results indicate that there is a strong demand for forest under protection. A great part of the people living in Central Europe favour abstaining from wood production on 10 per cent of the forest area. The younger population is definitely more in favour of such protection than the older population. In a similar survey in the same European region a remarkably high number of respondents was very much in favour of setting up nature reserves where any kind of timber use is prohibited, or setting up nature reserves in the forest where the only access is on forest roads. When asked about protected forest reserves without any access at all, a slight majority of the citizens rejected the idea.

In a big Eastern European country almost half of the respondents said that they would agree to donate part of their annual private income for the protection of forests. Similarly, in a Mediterranean country clearly more than half of all respondents offered personal work and time in order to help and protect their forests. People state they would abstain from access, use of wood, part of their annual income, and are willing to invest their own working time – all in order to protect forests in Europe. These are signals that forest protection is desired by the general public to such a degree that they are even willing to accept additional burden. This does not mean that people would necessarily follow up and do what they say, but it is a clear sign that forest protection is desired and perceived to be highly necessary in all geographic parts of Europe.

≡ 8 PROTECTIVE FUNCTIONS IN FOREST MANAGEMENT

The importance of protective forest functions in the opinion of the European public has been addressed in different parts of this report. Protective functions play a paramount role in the view of the public in those regions where society's well-being is strongly dependent on protection from different forms of natural disasters. However, relatively little information is available that covers this issue specifically, and it is geographically limited to Central, Western and Southern Europe.

The "protection from negative natural aspects" is seen as remarkably more important by the public in Central or parts of Southern Europe than in other countries. It is easy to see that in a mountainous country possible natural hazards, such as avalanches and landslides or drought in the South of Europe, lead to a high public demand for protective functions of forests.

9 OTHER SOCIO-ECONOMIC FUNCTIONS AND CONDITIONS

Other socio-economic functions and conditions comprise a wide variety of broader economic aspects. They cover forest ownership, the contribution of the sector to providing income and employment, and free services to society. To a greater or lesser degree, existing surveys have covered each of these topics, however, usually not as the main focus. Again, more surveys are available from Northern countries and Central Europe than from other regions.

9.1 Forest ownership often seems to be misjudged or unknown

Only one inquiry from Austria is available in which the general public was asked about the estimated distribution of ownership between private and state-owned forest. Although the forest itself in this country is highly appreciated, it seems that the public knows rather little about who actually owns the forests. Slightly more than half of the forests are considered to be state-owned and almost half to be privately owned. The fact is that about 80% of the forests is privately owned.

Concerning preferred ownership, only one survey from Southern Europe included in this report gives some information. It shows that, despite the large number of small, privately owned forests and the related difficulty in managing them, people reject the proposal that the state should take over management in these small private forests.

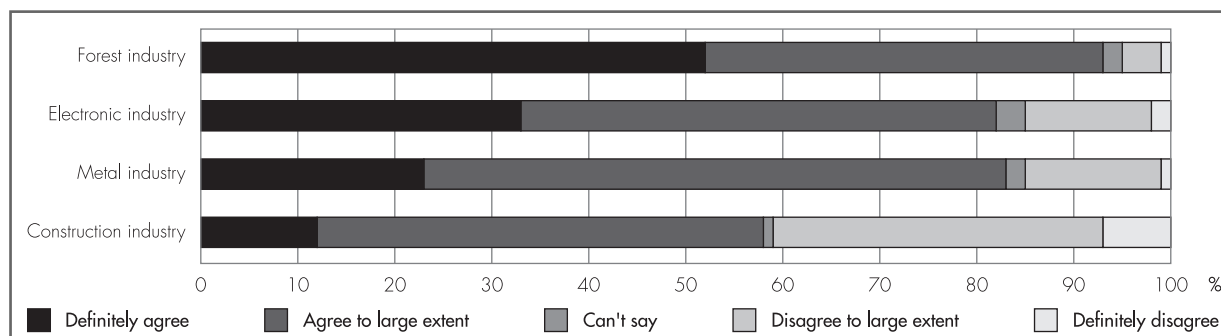
9.2 The Forest industry is seen as highly important in Nordic countries

The most important finding of some surveys in Nordic countries is that a majority of the general public in these countries claims that the country's forest industry is the most important sector from an economic point of view. However, the importance is slightly decreasing over time.

Figure 20 shows the ranking of the most important Finnish industry sectors in their contribution to Finnish well-being as seen by the general public. It was found that the forest industry was still ranked first in 1997. Repeated surveys show that the perceived importance of the electronics industry has been increasing since the early 1990s. These results are quite similar in other Scandinavian countries, such as in Sweden, where the forest industry now competes directly with the pharmaceutical industry, followed by the automobile, computer and telecom industries. This also demonstrates the economic power of the Nordic forest industry and its contribution to the GDP in Scandinavian countries. But also in other regions of Europe people are convinced that the forest industry creates jobs in rural communities and that forestry is an important source of income for farmers.

In Central Europe the fulfilment of the economic functions of forests is not perceived as being as satisfactory as, for example, the fulfilment of the recreational, environmental and protective roles of the forest. This concerns the role of the forest sector as an important factor in the general country's economy, the ability to maintain and create new jobs, to produce energy and wood exports. A recent survey has shown no significant changes compared to an earlier survey from the beginning of the 1990s.

Figure 20: Contribution to Finnish well-being – different industry sectors (Source: Taloustutkimus Oy, 1997)



9.3 Foresters are seen as competent and credible stewards of nature

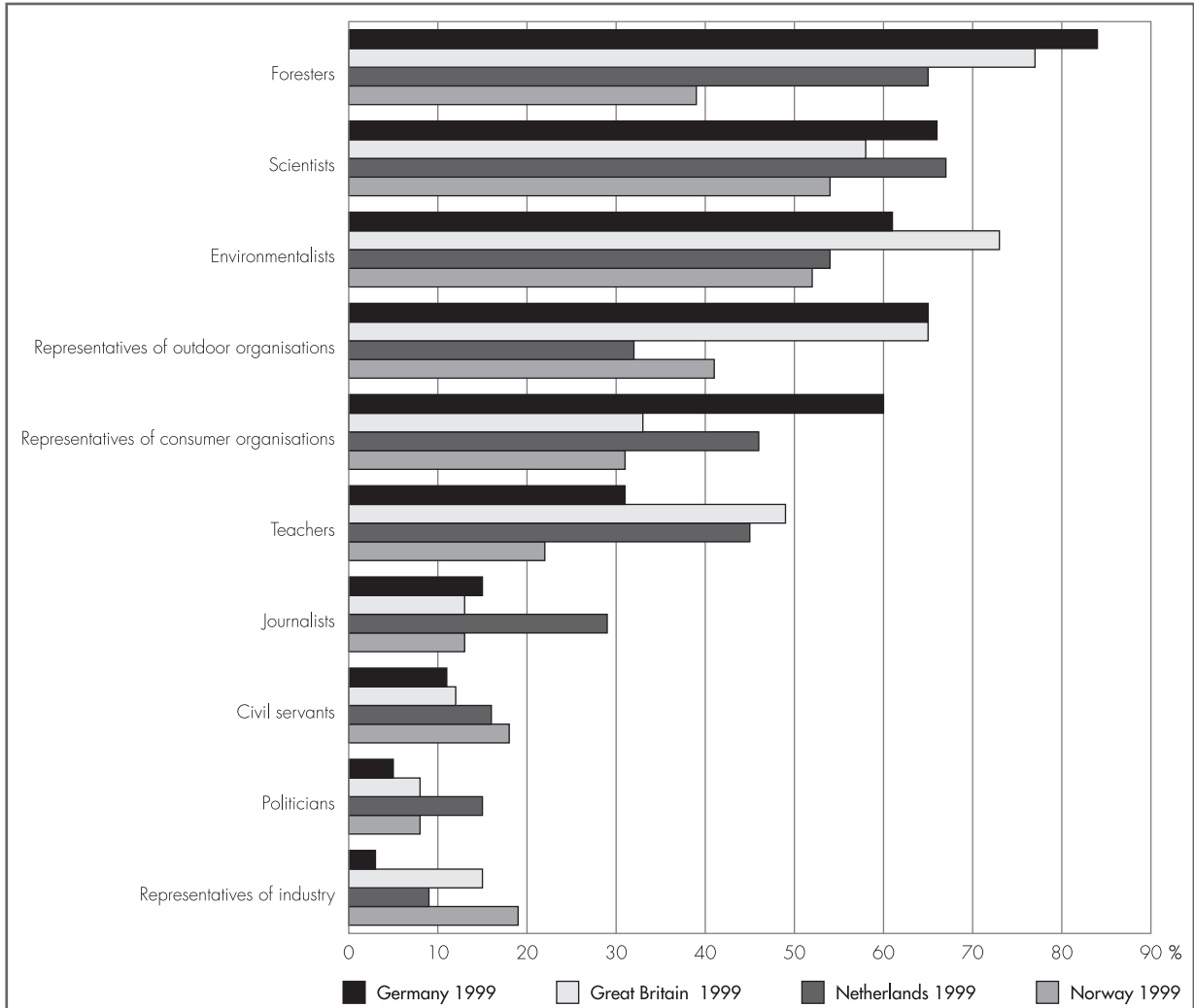
One available study investigated the public's perception of a forester's tasks and whether this view is more a cinema cliché or realistic. It found that the forester is generally seen as the person responsible for maintaining forests in a clean and healthy state. The forester is seen as the person who cuts sick trees in order to maintain health. Some also mention "thinning". Furthermore, in the public's view the forester supervises what happens in the forest and decides which measures to take. He controls and monitors the situation, including adherence to forest rules and the use of forests. It is remarkable that the forester is not considered to be involved in forest use, but is rather seen as a monitor. Overall it seems that in many countries in Europe few people see foresters as modern managers or technicians with technically advanced tools and machinery.

The forester often seems to be seen as an "advocate of nature" as well. He looks after endangered nature and its maintenance, and he stops environmental destruction and pollution in the forest. The small number of people unable to give an answer suggests that a relatively precise image of a forester exists among the public. Some slight socio-demographic differences can be found between age and gender groups. People older than 64 years state significantly more often than others that "tending the forest" and "forest management and wood production" are the most important features of the work. Women see the most important tasks of a forester significantly more often in "nature and environmental protection" and also in "forest management and wood production" than men do. These findings are also confirmed by other opinion polls in the Alpine region.

Another interesting finding in a different study concerned the actual change in forest work. As the level of mechanisation has increased, forest workers have been replaced by heavy machinery. Such developments are seen as rationalisation measures and clearly rejected by the general public.

When the public from Central and Northern Europe was asked to state which source of information on the forest and environment they find most reliable, foresters are seen as the most credible source. Other surveys from Nordic countries also show that forest personnel are one of the most important sources of information regarding forests. Figure 21 shows data from four European countries. In all four countries foresters, scientists, environmentalists and representatives of outdoor organisations enjoy high credibility. Similarly, there is limited confidence in journalists, civil servants, politicians and industry in all countries.

Figure 21: Ranking of sources of information about forest and environment regarding their reliability. A comparison among four European countries (Source: modified after Demoskop, 2000; Gill, 2003)



9.4 Recreation is favoured over other socio-economic functions

Relatively good data are available on recreation from the South to the North of Europe. Most people state that the main reason for visiting a forest is recreation. Few people frequently go picking mushrooms and berries, work in forests, or hunt. Women seem to prefer walking or staying outdoors in the surroundings. Men favour activities like excursions on foot, picking mushrooms, alpinism and free climbing or hunting.

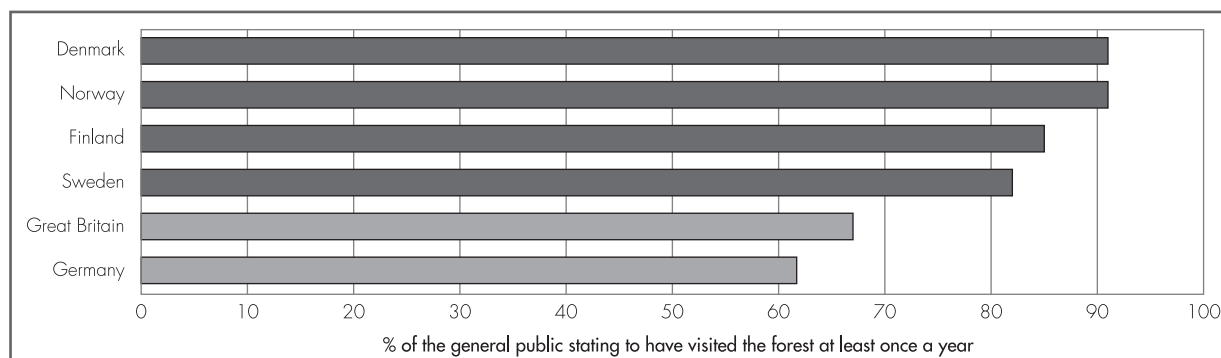
The most important factors in deciding to visit a forest are whether or not it is within easy reach and whether transport is available. One public opinion poll in Central Europe found that recreational visitors do not like to be disturbed while in the forest. They singled out mountain bikers as the most disturbing factor. This reflects the conflict between people going for a walk in the forest, who want peace and quiet, and people seeking sport and recreation. As most of the younger visitors are interested in outdoor sports, a conflict of interest is bound to remain between consumers of different forest services. Few people surveyed, however,

think that recreation in the forests leads to damage. The majority believe that, all in all, recreation in the forests does not have a damaging, destructive or even detrimental influence. Further information on recreation can be found in Chapter 6.3.1.

The number of people visiting the forest is considerably higher in Northern Countries. While in Central Europe slightly more than half of all people say they have visited a forest during the last year, the figure is almost twice as high in the North (see Figure 22). One might assume that this has to do with the country's forest coverage, but comparisons show that even in regions that are very densely covered by forest in Central Europe, the visiting behaviour of the public does not change significantly. In this region people aged mainly between 30 and 70 visited a forest, with the frequency increasing within this age group. Younger and older people are generally not that active with regard to forest visits. Men are also slightly more likely to visit a forest than women.

Figure 22 shows the different visiting frequencies in Nordic countries, Germany and Great Britain. The share of those saying they have visited the forest at least once during the last year in Scandinavia and Denmark is especially high, while it is only two-thirds in Germany and in Great Britain.

Figure 22: Different forest visiting frequencies in Scandinavia, Germany, Great Britain and Japan (Source: modified after Jensen, 1995; Fridberg, 1989; Tveit, 1979; Levnadsförhållanden, 1982; Sievänen, 1993; Forestry Commission, 1999; Welcker and Mantau, 1998)



These findings indicate that the forest plays an especially important role in the leisure patterns of Nordic people. Forest visits as a leisure activity are seen as even more important than movies, concerts, museums or libraries, for example.

10 CONCLUSIONS

“Fact is fact, but perception is reality.”

Whatever the actual state of Europe’s forests, it is the public’s view on issues that counts possibly as much in forest policy and business. This report offers indications of the views of the European public on such complex issues as forest and sustainable forest management. It shows that the public has often controversial opinions. In other areas their views are surprisingly accurate. But in some key aspects, such as the development of forest area in Europe or Eastern European forest management, these views are downright wrong. It is important to bear in mind that the views of the public today reflect the information received on the situation in the past. More recent efforts to improve forest management are usually reflected in public opinion only after a time, and only if adequate efforts have been made to communicate these measures to the public.

Overall, the European public seems to appreciate and support many of the principles and priorities that were set by forest policy, either decades ago or more recently. The public approves of the multifunctionality concept and values the sustainability principle as a good basis for forest management. It also strongly supports policy measures to protect forests as a central part of its natural heritage. The public is clearly convinced that a forest can fulfil all three of the main demands: namely, to protect nature and human beings, to allow for recreation by society and to use forests for economic purposes. It is now up to forest policy and foresters to find the fitting tools and instruments in order to provide and combine these three and other essential topics.

However, there are several areas where the public is deeply concerned, including the still unsatisfactory situation of forest health and the perceived threat of forest biodiversity loss in many regions. The European public will give its consent to utilising forests economically and harvesting wood if it sees that foresters regard themselves as nature’s stewards. Many Europeans seem to disapprove of forest management concepts that disregard natural dynamics in forests and see them as production areas for raw material. Women often seem to have somewhat more critical views on a range of issues, and young people seem either to be more environmentally inclined or less interested in forests compared to the general public. Both tendencies, if they exist, call for closer attention.

To its benefit, forestry in some countries already seems to have managed to improve or keep its good image in balancing ecological and economic aspects. In these countries the sector is seen to contribute substantially to the well-being of the country and its population. They are often leading examples and set the benchmark for communication and public relations measures. Understanding and acceptance of the sector, of foresters and their work by the public requires willingness to communicate with people and engage in an open dialogue with society. The resulting understanding and trust is essential for the well-being of the whole forest sector, in the future as well.

Materials and Methods Used

The materials used for this report are a total of 47 representative surveys conducted in 16 countries all over Europe since the mid-1970s, with a focus on studies since 1990. Of these, 43 studies were conducted on a national scale and four inquiries were carried out internationally. Most of the inquiries have been conducted in Central, Western and Northern Europe. Few or no representative national surveys were available from Southern/Mediterranean and Eastern European countries (see Figure 23). The lack of data from certain countries makes an analysis of the views of people living in these regions more difficult. Few studies are representative and international in scope, allowing a more accurate comparison between countries. Consequently this study should be seen as a first and still incomplete collection of relevant studies undertaken in Europe and an incentive to make existing surveys better available and/or initiate new ones. Few surveys have been periodically repeated, allowing the assessment of changes over time.

Figure 23 shows the number of studies included in this report according to the countries in which they were undertaken. The majority of studies available were conducted in Germany, Austria and the United Kingdom. This distribution does not indicate the quality of the single studies nor their length.

Figure 23: Distribution of studies according to countries covered

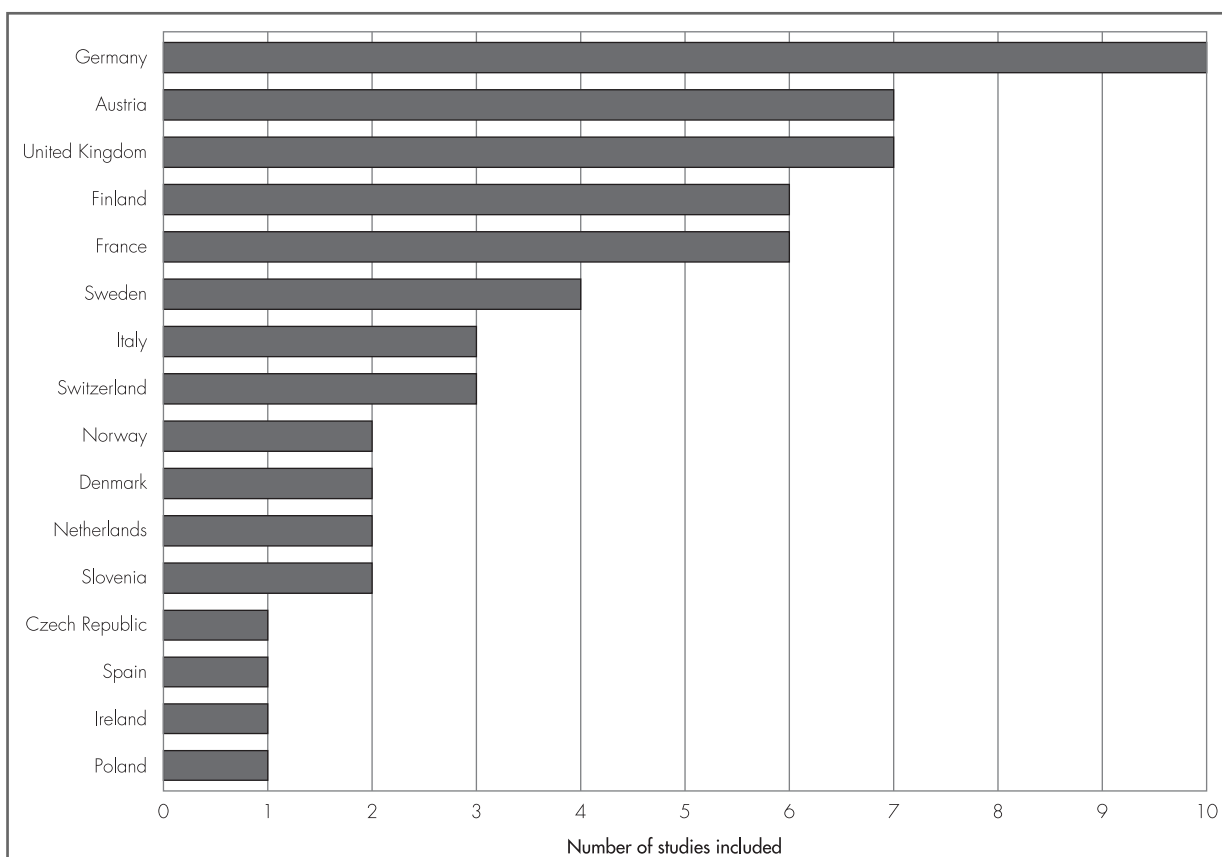
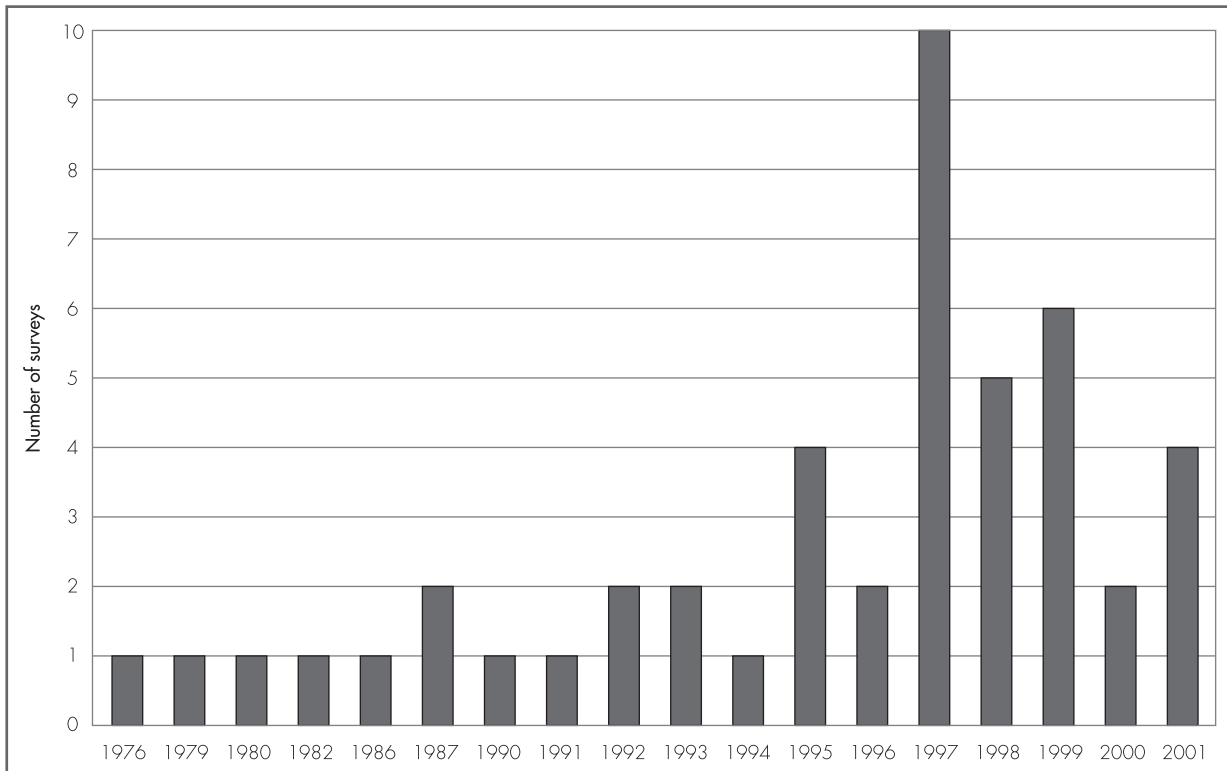


Figure 24 illustrates the fact that most of the inquiries cited in this work were carried out between 1995 and 2000. The graph further demonstrates that most of the material used contains recent data collections since 1990.

Figure 24: Years in which surveys included in this report were conducted



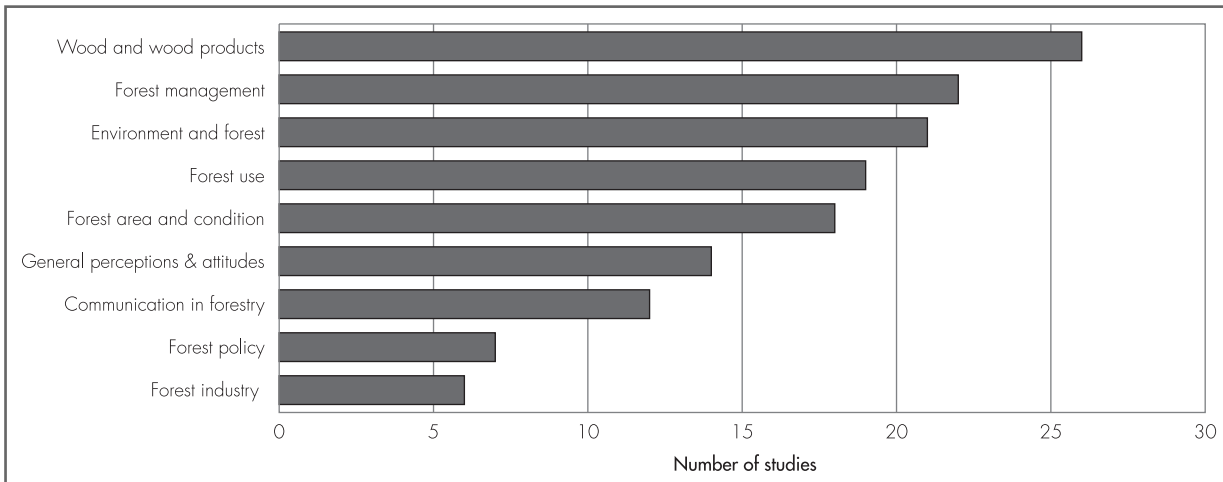
Almost half of the polls included in this report were carried out by private organisations, e.g. interest groups (see Table 1). Some institutions kindly provided their studies or allowed their findings to be included. Studies obtained from the Internet were considered to be public domain. Private bodies are often more reluctant to share their findings with a wider public. It is therefore probable that a range of surveys have been undertaken that are not included here.

Table 1: Origin of studies included: commissioning organisations

Study commissioned by:	Number of studies/surveys/polls included
Private organisations (incl. interest groups)	23
National/international organisations (incl. universities)	24

Wood and wooden products clearly lead the list of topics investigated by the individual inquiries, followed by forest management in general as well as forest-related environmental issues. Subjects like communication in forestry or forest policy are rarely surveyed in polls. The issue of forest industry is only dealt with in six different studies (see Figure 25). This report focuses on forest and sustainability-related aspects and present wood-related opinions only briefly.

Figure 25: Distribution of topics dealt with in the studies included



Data analysis was usually based on reports and tables available from the different studies included. That means that very little or no analysis was undertaken on the basis of primary data. One severely impeding factor for an accurate analysis of results of the different opinion polls available from different countries is the low degree of harmonisation of questions posed to the general public. Also, differently framed questions and the type of question, e.g. open versus closed questions, can and often do lead to considerably different answers. This often makes interpretation more an art than a science, and art is subjective almost by definition, even if objectivity is the aim. The varying amounts of data available across countries and regions in Europe also made generalisations necessary to suggest possible patterns of general views across countries and regions.

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Abbreviations

C&I	Criteria and indicators (for sustainable forest management)
FAO	Food and Agriculture Organization
MCPFE	Ministerial Conference on the Protection of Forests in Europe
SFM	Sustainable forest management
UNECE	United Nations Economic Commission for Europe

Table 2: Abbreviations of countries, ISO (3166) Country Codes

ISO Code	Country
AT	Austria
CH	Switzerland
CZ	Czech Republic
DE	Germany
DK	Denmark
ES	Spain
FI	Finland
FR	France
GB	Great Britain
IR	Ireland
IT	Italy
NL	Netherlands
NO	Norway
PL	Poland
SE	Sweden
SI	Slovenia
UK	United Kingdom

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Studies Included

The table below shows the list of studies included in this work. Every study is listed with its title and name of the author. Furthermore, the year of release and the year of conduction of the inquiry, the countries surveyed by the study, as well as its scale, type of study and sample size are revealed. International surveys are listed first.

Table 3: Overview of all studies included in the report – with short design description, listed alphabetically by countries surveyed and year of release

No	Countries surveyed	Year (field)	Study	Author	Scale	Type of study	N
1	DE, FR, IT, GB, AT	1999 (1997)	"The attitude of European consumers towards forests and forestry" FAO-Unasylva, Vol. 50/196; Potential Markets for Certified Forest Products in Europe, EFI Proceedings No. 25, 1999	Rametsteiner, E.	International, countrywide	Representative multistage stratified clustered random sampling	~ 330 – 2600
2	FI, DE, FR, GB, Can (B.C.)	1997 (1995)	Metsäteollisuuden vihreät kuluttajat. Green consumers of forests industry	Valtonen, K., Juslin, H., Meriluoto, H. METLA (Finnish Forest Research Institute) Metsäntutkimuslaitoksen Tiedonantoja 658, 1997	International, countrywide, 2/3 cities 1/3 countryside	Representative personal interviews	~ 900 (total)
3	NL, DE, GB	2000 (1999)	Nordic Forestry The Public Opinion in Holland, Germany and Great Britain	Demoskop AB (Sweden) – on behalf of Norges Skogseierforbund and Living Forest (Norway)	International, countrywide	Representative telephone interviews	~ 1000 (per country)
4	UK, DE, FR, IT	1999 (1999)	Gallup Opinion Poll Results: Attitudes survey towards the forest sector held in the UK, Germany, France and Italy	Gallup – on behalf of The Forest Cluster Project and CEPI	International, countrywide	Representative telephone survey	~ 1000
5	AT	2001/02 (01/02)	Was österreichische Konsumenten über Holz denken; Präsentationstext ETC-Meeting 17.5.2002	FESSEL+GfK Ges.m.b.H.	Countrywide	Representative	~ 1000 – ~ 4500
6	AT	2001 (2001)	Der Wald ist den Österreichern heilig	INTEGRAL – on behalf of ÖBF	Countrywide	Representative telephone survey	~ 1000
7	AT	1998 (1998)	Werbetracking 1998 "Stolz auf Holz" Präsentationsunterlagen	FESSEL+GfK Ges.m.b.H. – on behalf of PRO-HOLZ- Holzinformation Österreich	Countrywide	Representative face to face	~ 1000

No	Countries surveyed	Year (field)	Study	Author	Scale	Type of study	N
8	AT	1997 (1997)	Bevorzugte Materialien im Wohnraum 1997	Fessel+GfK Ges.m.b.H Institut für Marktforschung – on behalf of Präsidentenkonferenz der Landwirtschaftskammer Österreich	Countrywide	Representative face to face	~ 840
9	AT	1996 (1995)	Schwieriger Einrichtungsmarkt 1996 Market-Studienblätter 4/96	Beutelmeyer, W., Pfarrhofer, D. Marktforschungsgesmb H. und CoKG	Countrywide	Representative face to face	~ 1000
10	AT	1990 (1990)	Einstellung und Wissensstand der Bevölkerung zum und über den Wald Ergebnisse der Meinungsumfrage 1990	FESSEL+GfK G.m.b.H. – on behalf of FPP	Countrywide	Representative face to face	~ 1000
11	CH	1999 (1997)	Social Demands on the Swiss Forest – an Opinion Poll	SAEFL (ed.)	Countrywide	Representative telephone poll	~ 2018
12	CH	1999 (1995)	Wissen, Einstellung sowie Zukunftsperspektiven der Bevölkerung im Berggebiet zum Wald, zur Forstwirtschaft und zur Forstpolitik	Schmithüsen, F., Wild-Eck, S., Zimmermann, W. Forest Policy and Forest Economics Department of the Federal Institute of Technology (ETH) Zurich (ed.)	Regional Swiss mountain regions	Postal inter- view using a random sample	~ 600 + 60
13	CH	1995 (1994)	Swiss Environmental Survey 1994 Code book	Diekmann, A., Franzen, A. Institute of Sociology of Berne University	Countrywide	Standardised telephone interview + postal interview	~ 3000 + ~ 2666
14	CZ	1997 (1997)	The Czech Public Opinion on Forest and Forestry	Roček, I. et al. – on behalf of Czech Ministry of Agriculture	Countrywide	Representative personal interviews	~ 666 (+ 606)
15	DE	2000 (1998)	Waldbesuchsverhalten und Einstellung zu RES-Angeboten in der Bundesrepublik Deutschland. Studie im Rahmen der Projektes RES; März 2000 Forest visiting behaviour and attitudes towards RES ¹ -supply in Germany	Welcker, B. and Mantau, U. – on behalf of Hamburg University	Countrywide	Representative personal interviews INSRA Institut Möln	~ 1100
16	DE	2000 (1999)	Marktuntersuchung zum Imageprofil von Holz an der Schwelle zum neuen Jahrtausend Holzabsatzfonds, Bonn 2000	Holzabsatzfonds	Countrywide	Representative face to face	~ 950

¹ Recreational and Environmental Goods and Services from Multifunctional Forest Production Systems

Studies Included

No	Countries surveyed	Year (field)	Study	Author	Scale	Type of study	N
17	DE	1999 (1998)	Wald und Forstwirtschaft im Meinungsbild der Gesellschaft Mitteilungen aus der bayerischen Staatsforstverwaltung, Heft 50	Pauli, B.	Countrywide, Western Germany	Representative telephone interviews	~ 1000
18	DE	1997 (1996)	Umfrage "Wald / Holz" Die Verbrauchereinstellung zu Holz und der Bewirtschaftung der Wälder January 1997	Klaus Noyen Research on behalf of CMA/ Holzabsatzfonds	Countrywide	Representative face to face	~ 2000
19	DE	1995 (1995)	Die Einstellung zu Holz und der Bewirtschaftung der Wälder Repräsentativerhebung in der Bundesrepublik Deutschland October 1995	Infas Institut für angewandte Sozialwissenschaft, Bonn	Countrywide	Representative face to face	~ 2141
20	DE	1993 (1993)	Verbrauchereinstellungen in Bezug auf Forst und Holz Repräsentativbefragung Wald / Holz December 1993	CMA / Ges. f. Marketing-, Kommunikations- und Sozialforschung, Hamburg / Holzabsatzfonds	Countrywide	Representative face to face random route	~ 2500
21	DK	1999 (93/94)	Forest Recreation in Denmark between 1976 and 1994 In: Forest recreation in Denmark from the 1970s to the 1990s The Research Series, No. 26-1999	Jensen, F. S. Danish Forest and Landscape Research Institute	Countrywide	Representative postal interviews and telephone interviews	~ 2400 + ~ 1800
22	DK	1989 (1987)	The Danes and culture: The leisure activities of the 16-74 year old people in 1987, compared to the situation in 1975 and 1964.	Fridberg T in Jensen, F.S., 1995	Countrywide	Representative	?
23	DK	1978 (76/77)	Forest Recreation in Denmark. Part I: The Use of the Country's Forests by the Population 1978	Koch, N.E.	Countrywide	Representative postal interviews	~ 2800
24	ES	2000 (2000)	Forests and Responsible Consumption – Spanish consumer interest towards products with sustainable forest management	INVYMARK S.A. for WWF/Adena	Countrywide	Personal interviews in stores of the main Spanish wood retailers "mall poll"	~ 800
25	FI	1993 (87/88) 1991	Outdoor recreation household survey in the city of Hämeenlinna; Time use annually. The tables of the time use studies 1987-88.	Sievänen T.; Niemi I. et al.; both in Jensen, F.S., 1995	Various	Various	?

No	Countries surveyed	Year (field)	Study	Author	Scale	Type of study	N
26	FI	1997 (1997)	Finnish Forestry Opinion Poll Among the Finnish General Public	Taloustutkimus oy Omnibus kesäkuu 1/97 HI/tlu	Countrywide	Representative personal interviews	~ 1000
27	FI	1986/1980	This is the way how the Finns move; 1986: Outdoor recreation study, 1980.	Vuolle P. et al., Ulkoilututkimus, both in Jensen, F.S., 1995	Countrywide	Various, representative	~ various
28	FR	1998 (1998)	Image de la forêt et du bois Niveaux de connaissance et de volonté & idées fausses Rapport, May 1998	Observatoire du Dialogue Social (ODIS)	Countrywide	Representative telephone interviews	~ 1000
29	FR	1996 (1996)	Les Opinions des Français sur L'Environnement et sur la Forêt	Dufour, A., Loisel, J.-P. CRÉDOC / IFEN	Countrywide	Representative	?
30	FR	1992 (1992)	Les Français et la forêt, April 1992	BVA	Countrywide	Representative	~ 1000
31	GB	2001 (2001)	Public Opinion of Forestry 2001	Forestry Commission	Countrywide	Quota omnibus survey	~ 2000
32	GB	1999 (1999)	Public Opinion of Forestry 1999	Forestry Commission	Countrywide	Quota omnibus survey	~ 2000
33	GB	1997 (1997)	Public Opinion of Forestry 1997	Forestry Commission	Countrywide	Quota omnibus survey	~ 2000
34	IR	1997 (1997)	Forestry Awareness Survey (Report Excerpts) UP/AR 7L-209	Lansdowne Market Research Ltd. Prepared for: Irish Forest Industry Chain	Countrywide	Omnibus survey, representative, face to face	~ 1400
35	IT	1995 (92/93)	Gli Italiani e il bosco. The Italians and the wood. The forest recreation demand in Italy.	Scrinzi, G., Tosi, V., Agatea, P., Flamminj, T.; ISAFI Comunicazioni di ricerca 95 / 1	Countrywide	Representative postal interviews	~ 700
36	NL	1999 (1999)	Mensenwensen; De wensen van Nederlanders ten aanzien van natuur en groen in de leefomgeving. (Nature in the living environments; The wishes of the Netherlands' public)	Reneman et al. Reeks Operatie Boomhut nummer 6	Countrywide	Representative postal and telephone interviews	~ 3000
37	NO	1998 (1997)	Norway: Public attitudes towards forestry, 1998	Gill, E. – on behalf of Living Forest (Norway)	Countrywide	Representative telephone interviews omnibus (CATI)	~ 1014
38	NO	1979	Leisure, culture and movies. Working report of a study on the movies visiting activity in Stavanger;	Tveit K. J. in Jensen, F.S., 1995	Regional, countrywide	Representative	?
39	PL	2000 (2000)	Non productive functions of forest and resources of its finance in the opinion of Poles 2000	Public Opinion Research Centre (OBOP)	Countrywide	Unknown	~ 1073

Studies Included

No	Countries surveyed	Year (field)	Study	Author	Scale	Type of study	N
40	SE	2001 (2001)	The Forest Industry; The general public view on the Swedish Forest Sector	Demoskop	Countrywide	Demoskop's telephone omnibus	~ 1000
41	SE	1999 (1999)	The General Public's View on the Swedish Forest Sector	Demoskop AB – on commission by the Swedish Forest Industries Association	Countrywide	Demoskop's telephone omnibus	~ 1000
42	SE	1997 (1997)	The General Public's View on the Swedish Forest Sector	Demoskop AB – on commission by the Swedish Forest Industries Association	Countrywide	Demoskop's telephone omnibus	~ 1000
43	SE	1982/83	Living conditions 1982-83: Leisure time	Levnadsförhållanden in Jensen, F.S., 1995	Countrywide	Representative	?
44	SI	1998 (1998)	Attitudes on Forests in Slovenian Public Opinion Survey 1998 – based on "Slovenian Public Opinion (SPO) 1998" data	Malnar B., Šinko M. (SPO)	Countrywide	Representative random sample personal?	~ 1007
45	SI	1997 (1997)	Slovenian Public Opinion on Forests – based on "Slovenian Public Opinion (SPO) 1997"	Malnar B., Šinko M. (SPO)	Countrywide	Representative random sample personal?	~ 1005



MINISTERIAL CONFERENCE ON THE
PROTECTION OF FORESTS IN EUROPE

LIAISON UNIT VIENNA

Marxergasse 2 · A-1030 Vienna
Tel.: +43 1 710 77 02
Fax: +43 1 710 77 02 13
E-mail: liaison.unit@lu-vienna.at
www.mcpfe.org