

# Potential Markets for Certified Forest Products in Europe

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# INTRODUCTION

## 1. BACKGROUND

The relationship between humans and their environment has increasingly moved onto centre stage with global attention in recent decades. Both the level of resource use and its subsequent disposal have changed the environment on a scale that has given rise to considerable concerns over its associated problems, particularly in the industrialised parts of the world.

One specific area that has received prominent attention has been the fate of forests. This concern was originally focused mainly on the humid tropics of the world. The pace of depletion of these tropical forest resources has increased considerably in the last decades. The concerns raised were mainly related to the destruction of biodiversity, the fate of indigenous people and forest dwellers, the role of forests in mitigating global warming and, not the least, the future implications of unsustainable resource use. However, the attention paid to forests generally soon led to concerns not only in the tropics but also about forests in temperate and boreal zones of the world, such as in Canada or in Siberia.

The issues at stake have led to considerable political activity on various levels and by various actors. Several non-governmental groups in industrialised countries have demanded the boycott of tropical timber. International governmental actors have brought the concept of "sustainable development", and specifically "sustainable forest management" onto the global political agenda.

Arising out of this background concern the issue of "certification of sustainably managed forests" (SFM) was brought forward by some groups around the 1990s as one potential market-based instrument that might act as a positive incentive for managing forests sustainably. This potential instrument soon attracted considerable interest. Investigations into the possibilities of certification focused primarily on political and technical aspects such as the definition and operationalisation of "SFM". However, little attention has been paid to the probably most crucial part of any market-based instrument: the existence of sufficiently large markets for certified forest products (CFP's).

## 2. THE EUROPEAN MARKETS FOR CERTIFIED FOREST PRODUCTS

The European market is undoubtedly one of the big global markets for forest products. Its role in both total consumption and in trade underline its size and importance: in Europe the apparent consumption of sawnwood and wood-based panels amounted to 131.8 mill. m<sup>3</sup>, and the consumption of paper and paperboard to 73.1 mill. tons in 1995 (UN/ECE-FAO 1996). Despite its large forest resources in Europe the region is a major net importer of

forest products, accounting for about 27 percent of global inter-regional trade which means that Europe is the second largest destination for forest products globally (UN/ECE-FAO 1996a). The four main markets in Europe that were surveyed for this study (Germany, France, Italy, UK) show an apparent consumption of about 56.1 mill m<sup>3</sup> of sawnwood and wood-based panels (which is about 43 % of total apparent consumption in Europe) and about 44.1 mill tons of paper and paperboard (which is approximately 60 % of total apparent consumption in Europe) in 1995 (UN/ECE-FAO 1997).

The most important wood product categories where timber is extensively used are construction, furniture, packaging and paper but there is a big variety of other uses.

### European business-to-business markets

A significant amount of empirical data can be found on the European business to business market. This is mostly due to an initiative of the World Wide Fund for Nature (WWF) and other E-NGO's (environmental non-governmental organisations) to support an existing global certification system (the Forest Stewardship Council), and its goals and to assist companies in communicating to the market and facilitate communication and co-operation within the cooperation groups. Additionally, some publishing companies have expressed preferential demand for CFP's. Little data is available on demand by others.

WWF-Buyers groups or similar	UK	NL	Belgium	Austria	Germany	Switzerland
Founded	1991	1992	1994	1996	1997	1997
Members (1/98)	82	401	75	25	26	7
Market share of companies claimed	ca. 15 % of usage usage in UK		> 50 % of wood trade	4.2 % of wood market		

- a) Market size.** The volume of FSC-certified timber bought in Europe in 1996 is estimated to have been less than 100 000 m<sup>3</sup> of (mainly) sawnwood. However, this is to some extent an effect of supply restraints, as the FSC trade mark itself was only launched in spring 1996. Current market size controlled by buyers group is estimated to be around 9 mill. m<sup>3</sup> of roundwood equivalents.
- b) Market growth.** As of September 1997, approximately 1.940 mill. ha forests were certified in Europe (approximately 1.4% of European forest area). More than 99% of this area is certified according to the FSC-system. Assuming annual removals in the order of net annual increment this would result in roughly 6 million m<sup>3</sup> roundwood potential supply from European forests. The total FSC-certified forest area globally was about 3.1 mill. ha in September 1997.

The volume of certified timber which will be traded in Europe in 1998 is estimated by some experts to amount to 2 mill. m<sup>3</sup> and optimistic estimations speak of 15 mill. m<sup>3</sup> of certified forest products demand in 1998 (55<sup>th</sup> Session of the Timber Committee. Markets for Certified Forest Products – personal communication).

The number of Buyers Groups and/or the number of members of the Buyers Groups are predicted to grow further in central Europe. The major potential business market outside the markets in which these groups are active is mainly the paper market where no certified timber is currently traded. The market potential is mainly dependent on

- The market pull factor: general demand by European companies and especially the already expressed demand by large German publishing companies.
- The market push factor: ready supply of products made of certified timber by big suppliers in Scandinavia or Canada. Canadian companies for instance announced plans to certify about 20 mill. ha of forests that together will produce an output of about 25-30 mill m<sup>3</sup> of timber per year (Holzzentralblatt 1997).

### **European consumer markets**

Little is known about the market behaviour of the private consumer. Although several private organisations have made surveys or organised test markets for their specific purposes, this data is in most cases not available to the public.

- a) **Regional variation in market development.** Private consumer markets with more than the occasional market transactions/purchases of certified timber products can only be found in two European countries, the U.K. where it is fairly developed, and to some extent also in the Netherlands. No or low interest in certified wood products seems to prevail in southern Europe, although, again, hardly any data are available.
- b) **Market size.** The size of the existing consumer market for certified timber products in Europe in 1997 was negligible – a fraction of a percent of total European market size. Certified timber products are hardly available even in the most advanced markets in U.K (a total of 600 products in the shelves as of 6/97) or the Netherlands. Other product eco-labelling/certification programmes are usually catering for niche markets where total market share of the different product categories is usually well below 3 % even in more attractive markets (see e.g. v. Alvensleben 1992). However, the different structure of the forest sector and the uniqueness of a market support initiative such as the WWF Buyers Groups might result in higher market shares in forest products markets.

### **Our response**

A European Community FAIR -shared cost research programme (FAIR-CT95-766) "Policy Analysis of Timber Certification as a Market-based Instrument of Forest Policy to Promote Sustainable Multifunctional Management of Forests" was launched by a team of four

European universities to investigate the potential markets and potential market reactions to timber certification in Europe. The analysis covered the main European consumer markets (on the basis of representative surveys) and also key national business markets (analysis of the whole forestry-wood chain within the countries) in Europe. The results presented here focus mainly on key aspects of timber certification. The summary of results presented here does not investigate the full complexity of background variables as the complete results do. These complete results with forest policy analysis will be published for the EC in 1999.

### **3. OBJECTIVES OF THE FAIR-PROJECT SURVEYS**

**The objective of the Consumer Survey** was:

- to collect representative data on the potential importance of eco-labels as a purchasing incentive, purchasing prevention factors and the willingness to pay for a “Timber Label” as seen by EU-consumers
- to collect representative data on attitudes of EU-citizens towards forests and forestry as well as towards wood in relation to substitution materials in the four major markets of the EU (Germany, France, Italy, U.K.) and in Austria<sup>1</sup>.

**The Forest Owner Survey** studied the private forest owners attitudes, expectations, preferences and behavioural intentions in connection with forest certification. Forest product labelling issues are excluded from this survey. The term ‘ecolabelling’ is used as a synonym for the term ‘forest certification’.

**The Purpose of the Industry and Trade Survey** study was to evaluate the attitudes and intentions of wood using industry, marketing channels and industrial end-users towards forest certification.

### **4. DATA COLLECTION**

#### **Data Collection for the Consumer Survey**

Type of survey: Representative surveys in each country.

Countries surveyed:

- within FAIR-project: Germany, France, Italy, U.K. (the four major EU-markets)
- with additional funds: Austria

Survey method: personal interviews

Sample design: multistage stratified clustered random sampling

Sample size: n = 1000 persons > 14 years per country (Germany: n = 2400)

Field dates: Dec. 1996 - Jan 1997

Total EU-population covered: approx.70 %

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<sup>1</sup> The Austrian survey was jointly funded by the Federal Ministry of Environment, Youth and Family Affairs and the Federal Ministry of Agriculture and Forestry in Austria.



## Data Collection for the Forest Owners Surveys

- a) **Finnish forest owners survey.** The sampling population for this study was formed by the Finnish private forest owners. Enterprises and public institutions (church, municipalities) owning forests were excluded from this survey. The address register of Maataloustuottajain Palvelu Oy, which contains mailing addresses of 275 000 Finnish forest owners, was used to obtain the mailing addresses for the mail survey. The primary data used in the study was gathered by mailing to 1064 private forest owners a four-paged questionnaire with an additional letter explaining the purpose and background of the study. A total of 593 forest owners returned their questionnaires by Friday 7 February, 1997. Thus, the rate of response is 61 per cent. Out of the returned questionnaires 10 per cent (61 pcs.) were rejected because they had not been filled in properly. Therefore, the primary data used in the analysis consists of 532 observations.
- b) **UK forest owner survey.** The statistical sample for the UK forest owner survey was drawn from private forest owners belonging to the Timber Growers Association (TGA). 1000 members were chosen randomly by TGA staff to retain the anonymity of their members and the confidentiality of their addressees. The number of respondents was 263. No follow-up mailing was carried out.
- c) **German forest experts survey.** When planning the suitable scope of a forest owner survey regarding certification in Germany, two problems had to be taken into consideration: (1) the high number of round about one million forest owners and the very diverse structure of forest ownership; (2) the well founded assumption that the large majority of individual forest owners do not yet have a profound knowledge of or opinion regarding forest management certification and timber labelling. It was therefore decided – rather differently from the approach used in Finland and in the UK – to organise the German forest owners survey as an expert consultation.

The forestry experts, as defined for the purposes of this survey, included representatives of five groups:

1. Owners or managers of all private forest enterprises > 1000 hectares forest area
2. Persons responsible for the management of communal forests of all municipalities which own > 1000 hectares forest area; this group includes mayors and municipality administration officers as well as foresters employed by the municipality and state forest officers involved in the management of communal forests,
3. Managers of all forest owners cooperatives in the Federal State of Bavaria
4. Managers or Presidents of all forest owners associations on federal and federal state level
5. Officers of all Forestry Administrations and Chambers of Agriculture in the Federal States.

Out of groups 1 to 3, the private forest enterprises, municipalities, and forest owner cooperatives to be included in the survey were selected by random sampling. Out of groups 4 and 5 all organisations listed were included. Altogether, the sample covered 288 forestry experts.

**Table 1.** Survey sample

Expert group	Questionnaires mailed	Questionnaires evaluated
1. Private forests	54	43 = 80%
2. Communal forests	133	88 = 66%
3. Forest owners coop.	58	32 = 55%
4. Forest owners assoc.	23	13 = 57%
5. State forest administration	20	16 = 80%
Total	288	193 = 67%

The data were gathered by a mailed questionnaire, following Dillman's "Total Design Method". The survey was conducted between October 1997 and January 1998. 193 questionnaires (67% of the number mailed) could be evaluated.

**Data collection of the Industry and Trade Surveys.** The industry and trade survey was conducted in Finland, Germany and in the UK. Standardised personal interviews were used with a sample size of between 100-150 in each country. The sampling method was quota sampling with the objective of achieving representative data for each group surveyed – preferably 70 % or more of the production/wood use in each industry sector. In Finland the sampling emphasis was on the beginning of the forestry-wood chain (primary industry) and in Germany and the UK it was on the end part of the forestry-wood chain.

**Table 2.** Number of interviews and estimated coverage

Industry sector	Interviewed			Estimated Coverage	
	FIN	GER	UK	FIN	UK
Pulp, paper and paperboard	34	13	8	100 % of the production	70 % of the production
Sawmills and wood based panels	45	3	18	70 % of the prod. (sawmills), 100 % (panels)	60 % of the prod. (sawmills), 100 % (panels)
Secondary wood processing	20	58	43	20 - 80 % depending on the defined branch	20 - 80 % depending on the defined branch
Marketing channel intermediaries	11	23	23	70 % of the volume traded	80 % of the volume traded, 100 % of the DIY retail
Paper and paper-board buyers	4	48	7	40 % of the industrial paper purchases	50 % of the industrial paper purchases
Total	114	145	99		

## **1. CONSUMER SURVEY RESULTS**

### **1.1 EU-Consumers and SFM-Certification: Summary and Conclusions**

1. The key piece of information used to signal improved product quality to the consumer, namely that wood has originated from sustainably managed forests (SFM), is recognised by only a small fraction of the population in Germany, France, Italy or Austria. It was only in the UK that consumers said they were quite familiar with the term.
2. About half of the consumers evaluated the term “SFM” in an ad hoc way as being rather environmentally friendly. However, about a quarter of the consumers did not know whether to evaluate the term as being positive or negative. Again in the UK significantly more people evaluated the term as being something very environmentally friendly.
3. If asked what the term “SFM” means, people in each of the countries associated it with the concepts of a balance between growth and removal of wood, followed by ecological care and social responsibility. Negative interpretations of the term were by and large rejected. When purchasing furniture or fixtures, the ecological attributes of the product were not on average amongst the five most important product features. The image of “SFM”-labelled wood products varies only slightly but significantly from ordinary wood products. However, the fact that wood comes from Sustainably-Managed-Forests causes the product to be less favourably perceived as regards its main functional features than is the case for ordinary wood products. Improvements are seen only in three characteristics: it is perceived to be more environmentally friendly, more modern and, surprisingly, more economically priced. Again the U.K. market shows these differences the most distinctly.
4. If asked directly how important people regard SFM-wood in products, about one quarter found this aspect very important, about 10 – 15 % not at all important. There are no great differences amongst product groups in this valuation. However, people tend to value it more in furniture than in paper products.
5. Regarding labels and labelling, about half of the population of the countries surveyed were content with the existing environmental product information, half were not. If asked whether they as consumers prefer marks of origin of the home country for wood products to SFM-wood labels, about 60 % of the consumers in the main markets (Germany, France, Italy, UK) voted for SFM-labels. Familiarity with the term SFM increased the preference for SFM-labels considerably.

6. When asked about their willingness as consumers to pay (WTP) for SFM-wood, approximately 40 % answered that they were not willing to pay any more. Those persons that stated to be willing volunteered to pay on average up to about 6 % more. The lowest WTP was found in France (5.5 %), the highest in Austria (9.5 %). The willingness to pay is quite price-sensitive: a different start price of about 150 % of the original initial price reduces WTP by approximately 20 %. Even if people had evaluated the term SFM as very friendly, that did not lead to a strong increase in WTP.
7. The results of the consumer survey show that the majority of EU-consumers regards SFM-wood as environmentally friendly and something that is rather important. As a product feature, however, environmental friendliness is seen as an aspect of only secondary importance. On average, people seem to regard SFM-wood as a feature of product quality that they expect as a rule rather than a new additional benefit and they are thus only willing to pay a quite low additional sum of money for it. In general SFM-wood thus does not find very welcoming market conditions in Europe. Somewhat higher latent demand could perhaps be engendered in specific market segments such as those groups that favour environmental products or those who prefer modern and "in"-style products.

Considerable differences can also be found in different geographical locations. The UK market is clearly the most aware consumer market for this issue:

- There is a considerably higher familiarity with the key term "SFM" and people evaluate the term considerably more often as meaning something "very environmentally friendly".
- The image differentiation between SFM-wood products and ordinary wood products is already quite distinct.
- People clearly prefer SFM-labels over "made in the UK"-country of origin labels

However, the UK market also shows several weak signals:

- the attention given to the environmental friendliness and naturalness of a product is lower in the UK than in the other markets surveyed.
- Fewer persons in the UK stated that they are willing to pay more for SFM-wood and those who were willing volunteered a lower amount of additional money that they are prepared to spend

The German market is still a sleeping market:

- There is a low familiarity with the key term "SFM" and people tended to evaluate the term less often than in the other markets as meaning something "very environmentally friendly".
- The attention given to the environmental compatibility of a product is higher in Germany than in the other main markets surveyed.
- There are more people willing to pay more for SFM-wood than in any other market surveyed and people are on average prepared to pay slightly more than in the other main markets.

Nevertheless, the rather unfavourable receptiveness of the European market for SFM-wood is true also in general in the German context.

## **1.2 The Attitude of EU-citizens towards Forests, Forestry and Wood: Summary**

1. The majority of the EU-population regards the preservation of species diversity and protection aspects as more important with regard to the role of forests for today's society than its utilisation in the form of recreation or wood harvesting.
2. This is most probably a consequence of the poor public opinion regarding the situation of forests: on average about 60 % of the population in the EU main markets (Germany, France, Italy, U.K) thinks that the situation of forests in the home country is on a decreasing trend with regard to forest area, species diversity and forest health. The assessment of the situation in tropical countries is considerably poorer. People state most often that they were only marginally content with the situation regarding domestic forests and not at all content with the situation of tropical forests.
3. The practice of forestry is seen, by a large part of the population, to contribute to the poor situation of forests. However, the factors seen as most responsible for the poor situation in Europe are pollution by industry and traffic as well as construction activity. Most people, however, believe forestry to be the main cause for the miserable situation of tropical forests. Good rating for the achievement of a sustainable form of forest management is only attributed to forestry in Scandinavia and Central Europe. Eastern Europe and tropical countries are regarded as either not at all or only little sustainably managed.
4. Wood, especially domestic wood, is regarded to be more environmentally friendly than most of the other substitution materials in question. Even tropical wood is – on average of the four main markets – seen as being more environmentally friendly than steel, aluminium or plastic. Tropical wood is regarded as being considerably less environmentally friendly in Germany or Austria than in Italy or France. If asked for the environmental friendliness of different life cycles of wood products people rated wood production, i.e. forestry and harvesting, to be the most environmental friendly phase of in general environmentally friendly product cycles.
5. The European population is by large only marginally content with the situation of forests in Europe and therefore puts more emphasis on the protection and preservation of forests than on their utilisation. The practice of forestry is seen as having an influence on the condition of forests but is often thought to manage forest with only little regard for sustainability. Nevertheless, people rate wood to be a leader amongst environmentally friendly materials, and the relative performance of forestry and harvesting improves the greenness of the product's life cycle. The majority of the EU-population is only little or not at all content with the situation of tropical forests and the practice of forestry is seen as the main cause.

## 2. FORESTRY-WOOD CHAIN SURVEY RESULTS

### 2.1 Summary and Comparison of the Forest Owners and Experts Surveys

#### 2.1.1 Forest Owners Survey in Finland and the UK

**a) Forest owners' views on the use of forests and their objectives of ownership.**

Though the history of forestry in Finland is very different from that of Britain, forest owners from both countries had similar attitudes to the use of forests and their objectives of ownership. Both emphasised the economic use of forests. However, ecological aspects were also seen to be of considerable importance.

**b) Forest owners' views on forest certification.** While UK respondents' views on certification were generally positive, Finnish owners tended not to be. British forest owners disagreed (62%) with only one statement: that the forest industry only buys timber from certified forests, to which statement 84% of Finnish forest owners disagreed. Opinions of Finnish forest owners were equally split as to whether forest owner associations should encourage and help members to certify their woodlands, whilst 65% of UK owners thought they should.

**c) Forest owners' knowledge of forest certification.** British forest owners had heard more about certification than their Finnish counterparts, with 43% of UK owners feeling they had heard a lot about the subject compared with only 14% of Finnish owners. Knowledge of certification was weak in both countries, with 28% of British owners and 9% of Finnish owners feeling they had a reasonably good knowledge about certification.

**d) General attitudes towards forest certification.** Forest owners in Finland and Britain generally felt that there would be few benefits from the certification of their forests. Most of them felt that certification would only be profitable for them if there was a rise in timber prices. Most also considered that following national forestry regulations and laws was a sufficient guarantee of good forest management. The majority of respondents felt that certification would neither increase the demand for their timber, nor that a premium would exist for certified timber. Over 60% did not see the condition of their forests improving due to certification.

**e) Potential reasons for certification.** The principal reasons for Finnish and British owners to certify their forests are economic. The more directly the reason related to sales, the more important they were. The ecological reasons for certification were the least important aspects, though they were still important to the majority of owners.

**f) Preferred certification system.**

- *Most trusted certifying body.* Both in Finland and the UK the first choice of forest owners was for certification to be controlled by a governmental organisation. In Finland a scientific organisation was a very close second whilst in Britain the second choice was a private organisation. In both countries, consumer and especially environ-

mental organisations scored poorly and therefore were not considered by forest owners to be trustworthy to function as a certifying body.

- *Preferred certification negotiating organisation.* Overwhelmingly in both countries respondents would most prefer a representative of a forest owners' association with which to negotiate the issues for the application of forest certification. Notable in both countries was the definite rejection by forest owners of environmental organisations, private certifying companies and industrial timber buyers as certifying negotiators. Though both countries placed a governmental organisation as second choice, British forest owners did so by a much higher margin.
- *Importance of some certification objectives.* Increasing the productive capacity of forests was considered to be the most important aspect in sustainable forest management in both countries. In the UK this was closely followed by maintaining local people's forest-based means of livelihood, whilst in Finland, increasing the protective role of the forests against erosion and in the supply of water was a close second. However, in both countries all the stated social and ecological objectives were considered to be important in sustainable forest management.
- *Basis on which respondents would join a certification system.* Finnish forest owners had different choices from British forest owners in how they could join a certification system if they wished. Therefore, detailed comparisons are difficult. 62% of UK and Finnish respondents indicated they would consider joining a certification system. 19% of UK and 22% of Finnish respondents were not willing to join a certification system and 19% of UK and 16% of Finnish owners were unsure of their views.

#### **g) Willingness to adapt to certification**

- *Willingness to pay for the costs of certification.* In both countries, the vast majority of forest owners were either not willing to spend anything, or up to a maximum of 2% of their timber income, on the direct costs of certifying their forests. Respondents were slightly more willing to forgo timber income to meet the necessary forest management standards to attain certification, but very few were willing to forgo more than 5% of their timber income for this.
- *Willingness to adapt to certification system requirements.* Generally, most forest owners in both countries were not willing to conform to all the management system requirements of certification. Over a quarter of respondents indicated that they were not willing to follow any of the requirements. In both countries, the only requirement a majority were willing to accept was for the certifying body to inspect their forests and related documents. The requirement Finnish or British forest owners were least willing to accept was formally to commit themselves to change the management and use of their forests to accommodate the certification standards.
- *Willingness to adapt forest management to certification requirements.* Because of the different certification standards in the two countries, only limited comparison is possible of owners' willingness to adapt to forest management requirements. An unexpected result is that in both countries more than 70% of respondents were willing to: maintain part of their forest area in an old age class, leave decaying trees in forests and leave buffer zones around important biotopes. The requirement 60% or more

of respondents were least willing to carry out in both countries was to leave part of their forests for permanent retention and non-intervention.

#### **h) Decisions on applying for forest certification**

- *Factors affecting application for certification by forest owners.* In both countries, forest owners considered most of the potential factors affecting certification were important. The factors were:
  - Forest owners have participated in the designing of the timber certification system
  - The certification of forests does not require much time or paperwork
  - The certification body is the one forest owners prefer
  - The cost of certification is met in part by a grant
  - Forest management does not have to be changed much to get the forests certified
  - Owners should derive a profit from having their forests certified
  - Other local owners have had their forests certified

These factors were seen as more important by UK forest owners, with many of them being considered very important. In both countries, owners agreed that their participation in the planning process of certification was very important indeed.

- i) Inclinations toward forest certification.** About half UK forest owners were interested in certifying their forests, whereas only 35% of Finnish owners were interested. However, virtually all of those interested in certifying their forests wished to examine certification further. 52% of Finnish and 37% of British forest owners were not currently interested in applying for certification, and about 14% stated they were never likely to want their forests certified.

### **2.1.2 Forest 'Expert' Survey in Germany**

**Basic attitudes towards timber certification.** German forest experts are split relatively evenly as to whether they are for, against or undecided about certification.

**Timber market expectations.** 80% of German forest experts believe there will be no price premium for certified forest products and there will only be a small demand for certified wood products.

**Other expectations.** German forest experts generally do not think there will be any benefits from certification either for the management of forests or to the forest ecosystems.

**Acceptable costs.** Though half of the German forest experts did not give an answer, the average cost acceptable to the half that did was 6.10 DM/ha for the initial certification inspection of documents and forests and 1.18 DM/ha for an annual inspection.

**Mark of origin versus certification of forest enterprises.** German forest experts thought that to guarantee sustainable forest management in Germany only the mark of origin will be used. Only 14% thought the FSC system and 8% the ISO system would be used, but 24% thought an EU level certification system would be used.



### **Participation of German forest owners in development of certification schemes.**

Though all the German forest expert groups did not agree, overall 67% thought that the participation of forest owners and their associations in certification systems was necessary.

**Willingness to adapt forest management to certification requirements.** Of the eleven potential forest management requirements for certification in Germany only four were acceptable to a majority. Over 70% of German forest experts thought the following were acceptable:

- Mixed stands based on native species are to be strived for
- Regeneration of shade bearing trees over long periods is desirable (30 years minimum)
- Natural regeneration of native species is to be the standard silvicultural system
- To preserve soils, permanent skidding tracks and cable strips have to be established

## **2.2 Summary and Comparison of the Industry and Trade Surveys**

### **2.2.1 Values and Expected Development of the Market Environment**

a) **Environmental business values.** Respondents in all three countries generally felt that companies have a responsibility for the social and environmental impacts of their businesses and that governments have a regulatory role in balancing environmental and economic values. Companies in Finland tended to have slightly higher environmental business values than German and British companies. Companies in all countries agreed that consumer demand and industry competition were the most desirable measures for influencing the quality of the environment. Over 70% also saw ecolabels and government regulations as desirable measures, and about 60% felt taxes on pollution were desirable. Consumer boycotts and pressure by E-NGOs, however, were not regarded desirable ways of influencing the quality of the environment. Whilst over two-thirds of German and Finnish companies had a reasonably strong interest in redirecting consumers' towards less environmentally harmful consumption, only two-fifths of UK companies did.

b) **Environmental micro and macro environment and customer behaviour.** Companies in all three countries expected strong increases in the demand for and supply of environmentally friendly products. They also detected increasing consumer concern for the environment and environmentally friendly lifestyles. However, most companies agreed that customers would not be willing to pay higher prices for environmentally friendly products.

The companies in the three countries unanimously agreed that price was by far the single most important factor to customers in their buying decisions, but product quality was an important factor as well. Environmental friendliness on the other hand was rated as the lowest factor (around 8%) in customers' buying criteria.

Finnish companies considered 37% of their customers were 'environmentally aware', against 32% of British companies, and 27% of German companies. However, German companies thought fewer of their customers were 'environmentally un-

ware' (21%) than did Finnish companies (30%), and UK companies thought that nearly a half of their customers were 'environmentally unaware'.

Many more Finnish companies than British or German ones, though not the majority, thought their customers would find a certification system important. The number of companies who had no idea about how their customers would view certification was 6% in Finland but more than twice that in Germany and Britain.

Only about 20% of companies had experienced reasonably strong interest in certified products from their customers. More interest had been shown in certified products by the customers of British and Finnish companies than German companies.

## 2.2.2. Ecological Marketing and Environmental Activity

### a) Decisions for marketing strategies.

- *Product strategies.* British companies gave much less emphasis to the environmental friendliness of products when they made decisions about acquiring products, than did Finnish or German companies. Nearly 60% of German companies emphasised environmental friendliness heavily against 52% of Finnish and 33% of British companies.

Companies in all three countries considered that in rating the overall environmental friendliness of a product, the most important aspect was the raw material used.

More than 50% of Finnish and British companies felt that timber certification would support their decisions about the future products and markets of the company, against 40% of German companies.

- *Customer and supplier strategies.* While 60% of German companies felt that the level of their customers' environmental awareness was important in their search for customers, only 30% of Finnish and British thought similarly. The difference may lie in the perception that many companies feel they cannot choose their customers.

More than 50% of companies in Britain and Germany felt that a timber certification system would strongly influence their choice of raw material suppliers, compared with 40% of Finnish companies.

- *Competitive advantage strategies.* Environmental friendliness was seen to be the most important factor by Finnish companies (54%) when planning the competitive emphasis for the most important products and markets, but 39% of German and only 24% of British companies felt similarly. Four-fifths of Finnish companies thought that good forest management could be regarded as a source of competitive advantage, against just over half of German and British companies. Around 60% of companies in the three countries thought that they would try to use certified raw material as a source of competitive advantage.

- ### b) Decisions for marketing structures.
- British companies' marketing and business management have been very much less influenced by environmental issues than those of German or Finnish companies. The values and philosophy of management was influenced by environmental issues in over 50% of Finnish and German companies but in

only 31% of those in the UK. The UK companies use ISO 9000 and company environmental policy statements to a much higher degree than Finnish or German companies.

### c) Decisions for Marketing Functions

- *Communication and market information.* Few companies in the three countries always look at environmental issues or customer wishes as a matter of course when making decisions, but most do occasionally.

Environmental issues have had an effect on advertising or personal sales in 50% of Finnish companies, 40% of German and 25% of British companies. However, more than 60% of companies in all countries would use timber certification in their advertising.

- *Pricing and distribution.* Environmental issues seem to have had little influence on pricing in the UK, with 85% seeing no ‘green premium’. In Finland nearly 70% and in Germany just over half of the companies have seen no ‘green premium’.

Whilst 55% of the UK respondents thought that there is little or no chance of getting higher prices for environmentally friendly products, only 40% of German and Finnish companies thought similarly. Over half of German and British companies felt environmental friendliness could not convert a commodity/ordinary product into a special product in such a way that it is reflected in the price, against 40% of Finnish companies.

In all countries, when asked what price premium they thought they would have to pay for certified raw materials, a third of companies saw a price rise of 1-5% and about a tenth saw price rises above 5%. 40% of German, a third of British and a fifth of Finnish companies would not pay any premium. A fifth of German, a third of British and two-fifths of Finnish companies felt unable to answer.

Few companies in any of the countries thought they could pass on any cost increases induced by the use of certified materials. However, nearly a third of Finnish companies felt they could pass on some of the costs, against about 16% of British and German companies.

*Over two thirds of companies in each of the countries thought segregating certified from non-certified timber down the whole supply chain would be very difficult or impossible. The cost effect of segregation was seen by over 70% of Finnish companies as substantial, whereas about 45% of German and British companies felt similarly.*

## 2.2.3 Timber Certification

- a) **General attitudes towards timber certification.** One of the most striking results of the survey is that 75% of Finnish, 68% of British and 60% of German companies thought that a widely used timber certification system for good forest management was needed. Conversely only about 10% of Finnish and British, but a third of German companies did not think a widely used timber certification system for good forest management was needed.

80% of British and Finnish and 60% of German companies agreed timber certification was needed to respond to the criticism of the forest industry by environmental groups.

When asked whether the majority of consumers paid any attention to the origin of timber, three quarters of British and Finnish and two-thirds of German companies thought they did not. 64% of British, and about 45% of German and Finnish companies agreed that industry would only use certified wood if the consumer pays a higher price for the end product.

73% of Finnish, 59% of German and 44% of British companies thought for their purposes a mark of origin would be sufficient to guarantee good forest management. 90% of companies in all countries thought that the majority of their customers would not be prepared to pay a higher price for certified products.

## b) Preferences concerning timber certification

- *General planning and implementation.* There was little difference between the countries in how they wished to see timber certification planned and implemented. All agreed that they would least like the consumer organisations or environmental groups to be in control. German companies preferred scientists to be in charge of planning and implementation, closely followed by the forest industry and forest owners. Finnish companies preferred the forest industry closely followed by scientists and forest owners. British companies on the other hand preferred the governmental forestry and environmental authorities closely followed by the forest industry and scientists.
- *Goals of certification.* Companies in all three countries saw all suggested positive aspects of timber certification as important to themselves, particularly being able to use it in marketing, promoting good forest management and responding to criticism by environmental groups. However, being able to offer customers products from well managed forests, was seen as being much more important in Germany and Finland than Britain.
- *Governing of certification.* In all countries, the ISO was the first choice (60%) for a certification system governing body. The second choice, some way behind, was an intergovernmental organisation such as the EU (25%). Very few companies wanted an international environmental organisation such as the FSC (12%) as the certifying body.
- *Criteria.* Companies in Finland and Britain thought that maintaining and enhancing wood production potential was the most important criterion for sustainable forest management by a considerable margin. However, German companies thought maintaining and enhancing the protective role of the forests against erosion and in the supply of water was the most important. German companies also placed maintaining and enhancing biodiversity of nature above enhancing wood production potential. Companies in Finland and Britain also felt that environmental aspects were important and there was only a 20% difference between the most and least important aspect.
- *Implementation.* In the auditing of forest management, German forest companies expressed a clear preference for auditing to be carried out by an organisation affiliated with universities and research institutes. A governmental organisation was placed in

second place. The Finnish companies placed the German preferences the other way round whilst the first choice of British companies was a certifying organisation of the forest industry followed by a governmental organisation. However, German and British companies thought end consumers would definitely prefer auditing to be carried out by a certifying organisation supported by environmental organisations, whilst Finnish companies thought the general public would prefer a governmental organisation followed by a certifying organisation supported by environmental organisations.

- c) **Intentions to use certified wood products.** In all three countries, nearly three-quarters or more of respondents thought their companies would buy some certified wood products in the next five years. Of these, a third of Finnish and British companies and 12% of German companies expect to use mostly certified products by the year 2000. 65% of German companies intended to use some certified wood products but did not expect them to play a major role over the next 5 years. Comparable percentages were 39% for British and 33% for Finnish companies. Only about 10% of companies in any of the countries did not think they would use certified products in the near future.

When asked if certified products were available in quantity and at a reasonable price between 40 to 60% of respondents in the three countries were not able to predict their future purchases of certified products. The other companies thought they would purchase between 20-50% of their products as certified in the first year, rising to 60-90% in the fifth year. British companies were the most likely to predict future purchases and also gave the highest percentage of purchases as certified materials.

### 2.3 Similarities between the Views of Forest Owners and Forest Industries

The following paragraphs summarise similarities between forest owners and the forest industries where there are common questions.

**Certifying body.** The question was asked as to what kind of organisation they would want to certify forests and the chain of custody of the certified timber. Forest owners in both Finland and the UK preferred a governmental organisation as the certifying body, as did British forest industry companies. The Finnish wood using companies preferred auditing to be carried out by the forest industry and German companies preferred scientists.

**Importance of some certification objectives.** The forest owners and the forest industry in the UK and Finland thought the most important aspect of sustainable forest management was increasing the productive capacity of forests. However, German companies thought maintaining and enhancing the protective role of the forests against erosion and in the supply of water was the most important. However, in all countries in both surveys, all stated objectives were considered to be important in sustainable forest management.

**Price premium for certified products.** This question, though phased differently in the two surveys, gave an indication of the price premium the forest industries would be willing to pay for certified timber, and what price premium UK forest owners would need to certify their forests. Generally, a third of the industries in the three countries were not prepared to

offer a premium for certified timber, a third of companies would pay a price premium of 1-5% and about a tenth saw a premium above 5%. A quarter of UK forest owners would need a 1-5% premium; a further quarter would need a 5-10% premium and the last 35% a price premium in excess of 10% in order to induce them to seek certification for their forests. 7% would certify their forest without a premium and 7% would never certify their forests whatever the premium.

## CONCLUSIONS

In all the surveyed countries, forest owners and the forest industry generally view timber certification as a potentially beneficial system. However, they have very serious reservations regarding its costs, governance and implementation. This is likely to mean that for small private forest owners and the industries they supply, timber certification in its present guise is unlikely to be widely implemented.

There is clear evidence of the demand from industry for a timber certification system in order to provide environmental guarantees of sustainable forest management and use. Industry also wants a widely used and recognised timber certification system. The forest industry clearly wants the certification system to be under the governance of the ISO. However, it is doubted whether an ISO management process system rather than a performance based system would be acceptable to consumers and environmental organisations and also whether it would be a suitable method for guaranteeing sustainable forest management.

Forest owners and experts felt there were few potential benefits from certification and that there was little reason to certify their forests as national standards were an adequate guarantee.

This aside, cost is probably the largest factor in preventing the widespread adoption of timber certification. From the evidence of the survey, virtually all the costs of forest certification are likely to be borne by the forest owners. Historically, and from data collected for this survey, private forest owners either operate on very low margins or lose money from their forests. This therefore is likely to prevent private forest owners certifying their forests. The survey indicated that costs of implementing the chain of custody for certified timber and of segregating certified from non-certified materials in the forest industry, are unlikely to be passed on to customers. This may not be a hindrance to the adoption of certification by large companies, especially those close to the end of the forestry wood chain because margins are considered to be higher there. However, for low margin smaller companies near the beginning of the wood chain, for example small and medium sized sawmills, such costs may not be acceptable unless certification significantly increases market access for their products.

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