

GENEVA TIMBER AND FOREST DISCUSSION PAPERS

THE STATUS OF FOREST CERTIFICATION IN THE ECE REGION

by

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Abstract

This Discussion Paper analyzes the development of forest certification within the Economic Commission for Europe region. The historical development of certification, the present situation with respect to existing systems, marketplace demand, and supply are explored. In addition, the future direction of certification is considered.

Preface

Sustainability and the environment have recently emerged as key issues in the forest industry. Global environmental problems and resulting environmental consciousness has resulted in actions in the marketplace by aggressive change agents. The forest industry has globalized, and the resulting international trade and marketing have created a large network of relationships, influence, and communication. Environmental, non-governmental organizations working for sustainable forest management are successfully accessing and influencing this network. Stakeholder expectations demanding sound practices from forest owners appear to be permanent. Forest certification may become a primary indicator of those expectations being met.

However, considerable controversy surrounds the concept of forest certification. Preferences regarding the type of forest certification system vary widely among the key players: non-industrial private forestland owners, forest industry, environmental groups, and the marketplace. These varying preferences are driving the development of multiple certification systems around the world.

This discussion paper outlines the following concepts as they relate to the development of forest certification:

- The historical development of certification
- The definition and practice of certification
- Perspectives of various stakeholders
- The relationship between environmental marketing and forest certification
- Certification initiatives in the ECE region
- Demand, supply, and other marketplace aspects of certified forest products
- A discussion of what may happen next
- Sources of additional information.

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Chapter 1 - INTRODUCTION

Pursuing Sustainable Development

In the late 1980s the World Commission on Environment and Development defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED 1987). The efforts of the Commission and its definition created increasingly sophisticated discussions surrounding sustainable development and sustainable forestry.

In 1989, the General Assembly of the United Nations called for a meeting of nations on sustainable development. This resulted in the United Nations Conference on Environment and Development (UNCED), in Rio de Janeiro in 1992. The primary outcome of the meeting was the adoption of Agenda 21, a plan for attaining sustainable development in the 21st century. At the end of 1992, the United Nations formed the Commission on Sustainable Development to facilitate follow-up to UNCED by monitoring implementation of the various agreements made in Rio (CSD 1998).

A set of Forest Principles was also signed by 170 countries at UNCED. By endorsing the principles, these countries committed to developing scientifically based criteria and guidelines for the sustainable development of forests (Crossley 1996). Based on geography and/or forest types, groups of countries joined together in intergovernmental “processes” to develop criteria and indicators of sustainable forest management to address the commitment. For example, the Montreal Process includes the US, Japan, Russia, and others which have developed seven criteria and 67 indicators of sustainable forest management for use at the national level. European countries participated in a similar process, the Ministerial Process for the Protection of Forests in Europe, commonly referred to as the Helsinki or Pan-European Process. There are eight efforts like this Worldwide whose purpose is to assess trends in forest conditions and provide a framework for evaluating progress toward sustainability

(Table 1).

Table 1
Intergovernmental processes to create national level criteria and indicators.

Intergovernmental Process	# of Criteria	# of Indicators
African Timber Organization	26	60
Central American Process of Lepaterique	8	52
Dry Zone Africa	7	47
International Tropical Timber Organization	5	27
Montreal Process	7	67
North Africa and Near East	7	65
Pan-European (Helsinki) Process	6	27
Tarapoto Proposal	7	47

Source: FAO 1997, FAO 1998

In March 1995, 120 ministers of forestry met in Rome at the invitation of the Food and Agriculture Organization (FAO). The consensus at this meeting was that additional efforts were necessary to build on the commitments made during UNCED. To this end they created what is known as the Rome Statement on Forestry (Backiel 1995).

Partially based on the Rome Statement, the Commission on Sustainable Development established the Intergovernmental Panel on Forests (IPF). The purpose of the Panel was to work toward consensus on five broad categories of issues related to forests (FAO 1997): 1) implementation of UNCED decisions related to forests at the national and international level including an examination of sectoral and cross-sectoral linkages; 2) international cooperation in financial assistance and technology transfer; 3) scientific research, forest assessment, and development of criteria and indicators for sustainable forest management; 4) trade and environment relating to forest products and services; and 5) international organizations and multilateral institutions and instruments,

including appropriate legal mechanisms (CSD 1996). Following presentation of the Panel's final report in February 1997, the UN General Assembly chose to form the Intergovernmental Forum on Forests (IFF) to continue the Panel's unfinished work. Specifically, the IFF is charged with "(a) Promoting and facilitating the implementation of the Panel's proposals for action; (b) Reviewing, monitoring and reporting on progress in the management, conservation and sustainable development of all types of forest; (c) Considering matters left pending as regards the programme elements of the Intergovernmental Panel on Forests, in particular trade and environment in relation to forest products and services, transfer of technology and the need for financial resources" (CSD 1997).

Mechanisms for Enhancing Sustainability

Legislation and National Policies

International agreements show the direction of sustainable development, but actual mechanisms for putting sustainable development into practice are national and local. It is widely recognized that countries have the sovereign right to use their resources in accordance with their national priorities. However, in the case of forests, national policy and operational practices can no longer be formulated without taking into consideration regional and international deliberations (Maini 1998).

National laws and policies are the most important mechanisms for enhancing sustainable forest management. The background and basis of forest legislation and policies has changed in the 1990s. Earlier legislation was focused on national priority (economic) objectives nearly exclusively. Modern forest policies have adopted international, market-oriented concepts of sustainability. A number of governments, (for example, British Columbia, Sweden, and Finland) have renewed their forest and nature conservation legislation in the 1990s. Through this renewal, they have incorporated modern concepts of sustainable forest management. Similar changes have been made in the national forest policies (national forestry programs) of other ECE countries.

Formal legislation is only as effective as the institutional capacity and will for implementation, present in a given country. As written, environmental regulatory systems may be very comprehensive. However, all too often, their scope is not matched by the capacity or will for implementation. It is pointless to speak about enhancing national level sustainability if a country lacks well-developed and functional infrastructures for implementing laws or plans.

Operations of Environmental Nongovernmental Organizations (ENGOS)

During the 1980s, tropical forests drew considerable attention from the international community. Government failures to prevent rapid tropical deforestation and forest degradation led to many ENGOS to activism and boycotts or bans of tropical timber. ENGOS have proven themselves to be effective at leading stakeholder opinions and forming new perceptions (Upton and Bass 1996). For example, 1000 large cities and communities in Germany, Austria, Switzerland, the Netherlands, and the United Kingdom have avoided the use of tropical timber in public construction activities (ETC 1998).

The ENGO agenda has not been limited to tropical forests. Demonstrations and actions have targeted old-growth forests in a number of countries as well:

Rainforest Action Network: Mitsubishi boycott - (1990)--(<http://www.ran.org/>); Scott Paper boycott - (1989)-- (<http://www.ran.org/>)

Greenpeace: (1) Boycotting Indonesian forestry products in New Zealand - (1997); (<http://www.greenpeace.org/>); (2) Enso demonstrations and postcard campaign - (1996); (<http://www.greenpeace.org/>); (3) Stora demonstrations and postcard campaign - (1997) (Greenpeace Aktionsbrief 29.8.97); (4) Clear-cutting demonstrations on Vancouver Island - (1993) (Greenpeace Aktionsbrief 29.8.97); (5) Demonstration against Assi Domän (ancient forests) - (1998); (<http://www.greenpeace.org/>).

Boycotts have not necessarily always served their intended purpose. For example, boycotting tropical timber in Middle Europe may have actually accelerated the deforestation of tropical

forests. As people lost their opportunity to export high-value timber products, they began to clear more for non-forestry purposes (Parviainen, 1998b).

Some ENGOs have more meaningful forest campaigns that go beyond activism. One example is “The Forests for Life” campaign of the World Wide Fund for Nature (WWF). The campaign goals include certification of land and protection of 10% of each forest type in all countries.

Forest Certification

ENGOs have been key actors in spreading the concept of forest certification. Certification was developed as an alternative to the perceived inefficiency of international initiatives, governmental policies, and boycotts in reducing deforestation and promoting sustainable forest management (Viana et al. 1996). It is being used by ENGOs and the private sector to reach environmental goals through market initiatives (Viana et al. 1996).

Environmental Marketing

Marketing is one mechanism for supporting sustainable development in society. It serves to

build a bridge between the company and its many stakeholders, especially its customers. The function of marketing is to analyze customer needs and transform them into business opportunities. If customers are environmentally conscious and want to make choices supporting sustainable development, a company can transform these environmental requirements into business opportunities. It means integrating environmental perspectives into all aspects of marketing planning, especially marketing strategies. This kind of marketing is “environmental marketing” and can be defined as gaining profit from identifying and providing for the wants and needs of consumers while recognizing and minimizing impacts to the environment. Environmental marketing recognizes a broad company responsibility for environmental impacts, and it emphasizes environmentally friendly products. A company’s competitive advantage is then based on environmentally oriented success factors. Environmental issues and consumer education are central in marketing communication. The primary principle is that environmental marketing integrates all company activities to satisfy and benefit both the customer and the company, while incorporating environmental responsibility.

Chapter 2 - FOREST CERTIFICATION

The Concept of Certification

Generally, the term “certification” stands for a procedure in which a third party provides written assurance (a certificate) that a product, process, or service complies with specified requirements (Ghazali and Simula 1994, 1996). Based on the issuing organization, certification can take three basic forms. First-party certification is an organization’s internal assessment of its own practices. Second-party certification is an assessment by a customer or outside trade association. Third party certification involves an assessment by a neutral third party based on a set of accepted standards (Ervin et al. 1996, Barrett 1993).

Forest Certification

The demand for third-party involvement has been established in forest certification, so the term “forest certification” can be defined as a method by which an independent, third party performs an evaluation to determine whether forest management satisfies pre-established ecological, economic, and social standards (see Standard Setting Organization and Standards, pages 4,5) and verifies it through a written document. Forest certification can also be described as a certificate awarded by an independent party, verifying that the forests have been managed in accordance with principles of sustainability. The term “forest certification” applies to forest management, harvesting, and timber hauling in the forest. (Ghazali and Simula 1994, 1996; FCC 1997).

Auditing

In connection with forest certification, the evaluation of forest management is called auditing. Auditing is a separate operation from awarding the certificate. It is conducted by the certification organization or auditor (see Certification Organization, page 5). Generally, auditing means the systematic and independent interpretation whereby it is determined whether activities and their consequences are in accordance with the plans, whether plans have been effectively implemented, and whether they are practical from the standpoint of the objectives. Auditing usually comprises an inspection, comparison with requirements, and reporting of deviations. It may also include an evaluation of the realization and efficacy of remedial measures. Auditing may be done for internal or external purposes (Ghazali and Simula 1994, 1996; FCC 1997).

Chain-of-Custody Auditing

If a company makes environmental claims concerning the wood used as a raw material in products, it must be able to verify conclusively the origin of this raw material. For certification of the origin of the raw material, the raw timber and its progress through the chain of transportation, processing, and distribution to the final user are monitored. The purpose is to verify that the products are certified when purchasing decisions are being made by wood processors, intermediaries, and consumers. In practice, this is achieved by assessing individual companies (processing industry and traders) to establish that the raw timber or wood-based products that they purchase can be traced back to a certified forest (Ghazali and Simula 1994, 1996; FCC 1997)

Environmental Labeling

The use of certification in marketing calls for a label or code that indicates the use of certified raw material in the product. The general purpose of an ecolabel or environmental label is to provide an incentive for production that minimizes environmental impact. A label may be compulsory or voluntary. A voluntary label means that manufacturers apply for a permit to use the label on their own products at their own

initiative. For such labeling to be meaningful, the label requirements must be stricter and more comprehensive than official regulations.

The label verifying the use of certified raw material in the product (indicating forest certification and confirmed chain of custody) is an example of what is often called a “single-issue” environmental label (ecolabel). It is called a “single-issue label” because it is not based on the whole life cycle of the product from the forest to disposal of the final product. Still, the term “single issue” is inaccurate, because economic and social criteria are reflected in the labelling along with ecological criteria.

Ideally, certification would cover the entire life cycle of the product. This would allow easier and more objective comparison among products. In addition, one or only a few labels would be preferable in order to avoid consumer confusion (Cabarle et al. 1995, FCC 1997). The Nordic Swan and the EU's environmental label are examples of voluntary labels that are based on life cycle examination.

The Implementation of Forest Certification

The main elements or issues in the accomplishment of certification are:

- 1) the certification scheme (organization structure)
- 2) the certification criteria (standards)
- 3) the practical implementation of certification

Many certification schemes currently planned or operating in the ECE region are described in Chapter 3. Here we explain the roles of organizations that set standards, the standards used, accreditation organizations, and certification organizations.

Standard Setting Organization

Standards associated with a certification system can be set by a certification organization, the system's governing body, or a separate organization that plays no other role in certification. For legislation, government acts as the standard setting organization. The standards used in certification are generally more

comprehensive than those in legislation and are usually defined through a process of cooperation among multiple stakeholders.

The Forest Stewardship Council (FSC) system (see Chapter 3) has its own requirements for establishing standard setting bodies. The International Organization for Standardization (ISO) system has a specific organization and method for standard setting. Depending on the coverage requirement for the standards, the bodies in question are national standards organizations, the European standardization organization CEN, and ISO. National standards organizations are members of these other organizations, and the standardization bodies have global networks. Representatives of the various stakeholders form a fundamental part of the standardization process.

Standards

There are two types of standards, performance standards and procedural standards. Performance standards define the quantitative and qualitative objectives or indicators with which the state of forests and forestry practices can be assessed. The Forest Stewardship Council's standards are an example of performance-based standards. Procedural standards define the aspects of the system (e.g., ISO 14000) through which forest operations are managed.

The basic level of performance standards can be found in national legislation. For certification systems, legislation is supplemented by, for example, silvicultural guidelines and recommendations. Certification standards are usually more comprehensive than the requirements set by legislation. Guidelines defining the state of forests and forestry practices are based on principles, criteria, and indicators of sustainable forest management. The measurement of indicators is used to decide whether the standards have been met. Because national or regional criteria of sustainability are so general, national and sub-national (vegetation zone, etc) guidelines must be established to fit local conditions. These guidelines can be drafted by a standard setting organization or a certification organisation.

Procedural standards define the system and the procedures through which the forests and practices are improved. This type of standard is what is used in environmental management systems such as ISO 14001 and the European Eco-Audit and Management Scheme (EMAS). A comprehensive and documented forest management system facilitates cost-effective certification. The system should be adapted to the size of the forest area and local conditions. An important concept associated with a management system is that of continual improvement. Monitoring and measuring the impacts of various actions are used to determine progress (Ghazali and Simula 1994, 1996; FCC 1997).

Certification Organization

The certification organization conducts or organizes an independent audit for certification applicants. Depending on the certification system, it also issues a certificate and the right to use the associated label. A certification organization may be a public body, association, commercial enterprise, or an ENGO-based organization.

A certification organization must be competent, impartial, and independent. A forest certification organization may have its own certification program (including standards for sustainable forest management) for which approval has been given by an accreditation organization. This is the case for the Forest Stewardship Council system. The certification organization may also participate in standard setting.

If the certificate is issued by the same organization as the one carrying out the field auditing, no other organizations are involved. However, the certificate could have more credibility if the field assessment (audit) and the issuing of a certificate are performed by different organizations. It should, however, be noted that the organization issuing the certificate is responsible for auditing and may be required to verify both the competence and the independence of its auditors who are understood to be sub-contractors (Ghazali and Simula 1994, 1996; FCC 1997).

Accreditation Organization

The aim of accreditation is to increase the credibility of certification. Accreditation is usually voluntary and is used when independent verification of a certification organization's competence is needed. The accreditation organization assesses the certification organization's competence, independence, and reliability; verifies the certification organization's proficiency, and supervises its work. Accreditation organisations are generally national, legal bodies; the Forest Stewardship Council is an international accreditation organization (FCC 1997).

The Objectives of and Motives for Forest Certification

Objectives

Forest certification has been created as a tool to promote sustainable and responsible forest management worldwide. The practical objectives of forest certification are to guide forest management in a market-led manner in an economically, ecologically, socially, and culturally sustainable direction. It may achieve that objective because of its links to marketing.

Thus certification may act as

- 1) *A tool for promoting sustainable forest management* - For example, government authorities may use certification to support their forest or environmental policies.
- 2) *A tool for satisfying the needs of customers* - For customers, certification indicates that the product comes from a well-managed forest. Certification helps consumers make choices and supports the attainment of sustainable development connected with consumption.
- 3) *A tool for marketing* - Marketing adapts the company to its business environment and turns prevailing trends in that environment and customers' needs into business opportunities. If sustainable development is one of the values of an enterprise, it makes sense to integrate certification with marketing decisions. (FCC 1997).

Motives

Forest owners: Most European forest owners oppose forest certification. They see certification as a threat to forestry operations and doubt its viability. Participation would be feasible only if certification is economically beneficial and forest owners do not believe that it is. However, some do believe that certification requirements will have a positive effect on the biodiversity of forests. For example, in Finland, it is the owners of smaller estates who believe most in the viability of certification. Although, forest owners generally prefer environmentally sound forest management, they do not consider forest certification an appropriate tool for reaching that goal. (Lindström 1997). They believe rather that the long tradition of family-based forest ownership, plus enforced national regulations and forest legislation ensure sustainable forest management.

In Nordic countries, which are heavily dependent on exports of forest industry products, forest owner organizations have been active in developing certification systems because they see forest certification as a communication and marketing tool. Such voluntary forest certification is perhaps the most cost-effective means of demonstrating both general-value goals and responsible, high-level forest management. It is also a means of securing demand for timber in export markets (FCC 1997).

The attitudes of forest owners have begun to soften. The recent development of certification systems in various European countries is one indication. Despite their opposition, many owners now feel forest certification in some form is inevitable. Although they still anticipate no immediate financial benefits, they believe that developing their own systems will preclude imposition of less accepted systems.

Forest industry: How forest industry companies feel towards forest certification depends on the marketplace. Most recognize that forest certification is needed to meet the demands of final consumers, industrial customers and other marketing intermediaries. As strong pressure groups, ENGOs have had an impact on the demand for forest certification. This means that

industry attitudes toward forest certification are most positive in those countries where customers are most environmentally conscious and ENGOs most active.

In countries where systematic surveying has been conducted (Finland, Germany, and the UK), the majority of companies think that a widely used forest certification system is needed. These companies want to be seen as encouraging and implementing good forest management. Furthermore, through forest certification, companies can respond to environmental criticism concerning the origin of wood products sold (Rametsteiner et al. 1998a).

Thus, for industry, forest certification is clearly used to improve its image and to insure against hostile actions by ENGOs. Although attitudes towards forest certification are positive, the general opinion is that the sustainability of forest management is in fact guaranteed by renewed forestry laws, developed forest policy, and an effective infrastructure for their execution (Rametsteiner et al. 1998a) not by certification. However, for exporting countries especially, certification is needed to allow credible communication about forest management to the marketplace.

Company attitudes also depend on the structure of the forest ownership in specific countries. For example, the Finnish forest industry is highly dependent on raw wood coming from private forests. Although the industry has a marketing need for forest certification, it respects the independent decision-making of forest owners and has not pressured forest owners to adopting forest certification (FCC 1997). In contrast, several large Swedish companies own vast forestlands and this allowed them to adopt FSC certification even though private forest owners were against it.

Industrial customers: Attitudes toward forest certification among industrial customers in the main European markets are also generally positive. They believe demand for certification is created more by ENGOs than by consumer behaviour. Most companies believe that consumers do not pay attention to the origin of timber and that customers are not willing to pay a

higher price for certified products. Nevertheless, the majority of industrial customers feel that a widely accepted timber certification system is needed, if only as a marketing tool.

The most important reason for forest certification cited by industrial customers is that the company can respond to criticism by ENGOs concerning the origin of wood products sold. For their own purposes, most industrial customers are already satisfied with the level of forest management of their European suppliers (Rametsteiner et al. 1998a).

In contrast, however, some industrial customer groups in the UK, Germany, and the Netherlands have been vociferous advocates of forest certification (see Chapter 4). Environmental issues are an integral part of their marketing, and their motives for forest certification can be understood from that point of view.

Consumers: Demand for forest certification originates in the environmentally conscious markets of Central Europe. With respect to consumer behaviour, environmental marketing and ecolabeled products can have a positive impact. The majority of consumers, at the value and attitude level, consider it important to protect the environment. An adaptation of lifestyle to ensure better harmony with nature is seen as inevitable.

Consumers recognize that environmental quality is affected by their demanding environmentally friendly products and by companies responding to that demand. This recognition is the heart of environmental marketing and one of the basic arguments for forest certification. Consumer reactions indicate that reliable, widely accepted, non-confusing ecolabels, certifying the environmentally sound origin of products is needed (Juslin 1997).

ENGOs: Three international ENGOs constitute driving forces in forest issues: the WWF, Greenpeace, and Friends of the Earth, which operate under different names in different countries. For these environmental organizations, forest certification is a tool for the worldwide promotion of responsible forest management.

The loss of tropical forests has been a key issue in creating demand for responsible forest management. Concern about sustainable development is common, but ENGOs in particular have been prime movers in spreading the concept of forest certification all over the globe.

The motives of ENGOs differ sharply from those of other stakeholders. Forest owners, industry, and industrial customers contend that forest certification is not needed to enhance sustainable forest management; ENGOs insist that forest certification is necessary to encourage responsible forest management (FCC 1997).

Forest Certification, Markets, and Marketing

In recent years, environmental issues have exerted influence in the markets of the forest industry. The reactions of consumers, ENGOs, and governments have been strong and appear to be permanent. Because of these changes, the industry has begun to adapt to meet the new situation. The traditional aspects of marketing (product, price, promotion and distribution), are being replaced by (economics, ecology, ethics and esthetics) (Juslin 1994). Marketing with an ethically sound basis of value and integrating environmental issues in all important decisions is called “environmental”, “green”, or “ecological” marketing. Such marketing recognizes the broader environmental responsibility of the company and helps the company adapt to new circumstances.

The general societal goal of environmental marketing is to promote socially and ecologically sustainable forestry and forest product manufacturing. From industry's point of view, environmental marketing is also one more tool for achieving the goals of the company, offering competitive advantages (Juslin 1994).

According to Peattie (1995), environmental marketing comprises social responsibility, the pursuit of sustainability, and an holistic approach. Coddington (1993) describes environmental marketing as those activities that consider environmental stewardship as an opportunity for business development. Some take the more radical view that it involves proactive strategies

that benefit both corporations and society and that it should redirect consumer demand to environmentally preferable products and services (Sheth and Parvatiyar 1995). More simply, environmental marketing could be defined as gaining profit from identifying and providing for the wants and needs of consumers while recognizing and minimizing impacts to the environment.

Integration of forest certification with environmental marketing produces synergistic benefits. This integration is depicted in Figure 1, which shows the overall strategic planning of marketing, with its information environments, and the status of forest certification in marketing planning. In environmental marketing, environmental perspectives are integrated into all marketing planning, decision-making. Marketing planning comprehensively takes into account the entire production chain from forest to final markets. This means that marketing must relate to more stakeholder groups than previously. Thus ENGOs play a central role that marketing organizations must incorporate into their decision-making.

Environmental marketing requires a true commitment to environmental issues. Should a company's strategic product decisions include a commitment to environmental friendly products, forest certification supports the company's product strategy and forest certification would form part of the product's “green component”.

If a company's strategic target markets

emphasize environmental values, forest certification may favourably affect their product choices. If environmental issues constitute one of a company's strategic success factors, certification can reinforce these competitive advantages. The environmental reputation of a company's country of operations as well as that of the company itself can support or hamper the building of a "green" corporate image and its associated competitive advantages.

At the marketing procedure (function) level, environmental marketing manifests itself as environmental arguments in a company's communications, product advertising and personal relationships. Environmental messages and advertising used by companies are sometimes criticised as superficial and misleading. Indeed, if environmental arguments are isolated from genuine strategic decisions, they can be easily criticized. A successful environmental message calls for true commitment to environmental issues and clear linking of

environmental matters to strategic marketing decisions.

The more certain the figures for development of the demand and supply in the marketplace, the more easily or safely a company can make strategic decisions. Because forest certification is so new and the amount of certified wood in the marketplace is so small, it is difficult, if not impossible, to accurately forecast supply and demand. As a result, decisions to pursue markets for certified products are risky.

To make decisions connected with environmental marketing and forest certification "Other Macro-Environment", "Competitors", and "Customers" must be carefully considered. Other Macro-Environment includes authorities, the development of general values and the climate of opinion, and the actions of the environmental organisations (see Figure 1). Customers include both industrial clients and final consumers. An export-oriented country is obliged to carefully follow the reactions of its competitors.

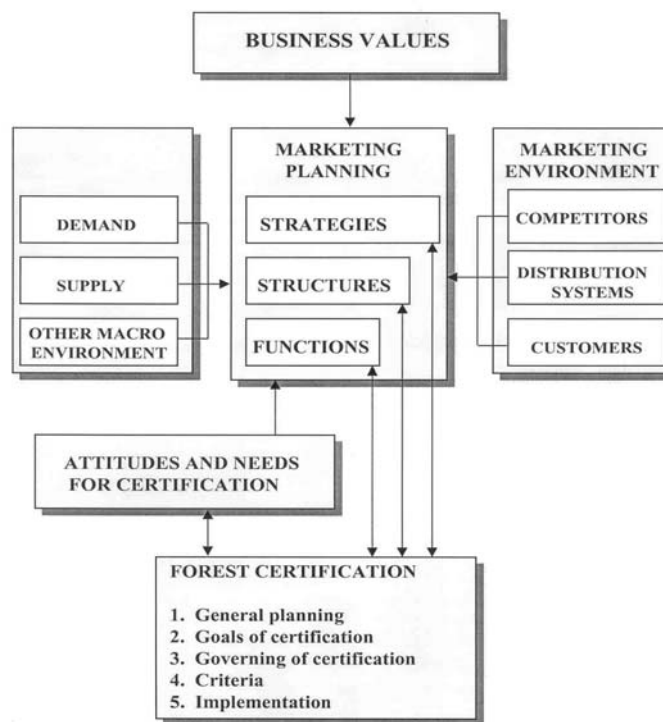


Figure 1. Forest certification in marketing planning.

Chapter 3 - CERTIFICATION INITIATIVES IN THE ECE REGION

International Systems

International Organization for Standardization (ISO) 14001 and 14061

ISO is an international standards-setting organization supported by and participated in by many national-level standards organizations. Subsequent to UNCED, ISO began to create a mechanism to support sustainable business development. In 1993, ISO Technical Committee 207 was formed to create the ISO 14000 series of environmental management standards (ANSI 1998).

During development of the ISO 14000 series, some countries argued for the development of standards specific to land management. However, other members disagreed because ISO standards are designed to be non-sector-specific. As a compromise, ISO 14061 was developed via a Working Group led by New Zealand. The group met several times to create a document designed to assist companies in applying ISO 14001 to forest management operations. The final document is now available from ISO in Geneva, Switzerland (ISO/TR 14061 1998).

A number of companies around the world have chosen to use the ISO standard for their forestry operations. Operations in Brazil, Sweden, Finland, Indonesia, South Africa, New Zealand, and the US are examples (Ghazali and Simula 1997).

Forest Stewardship Council (FSC)

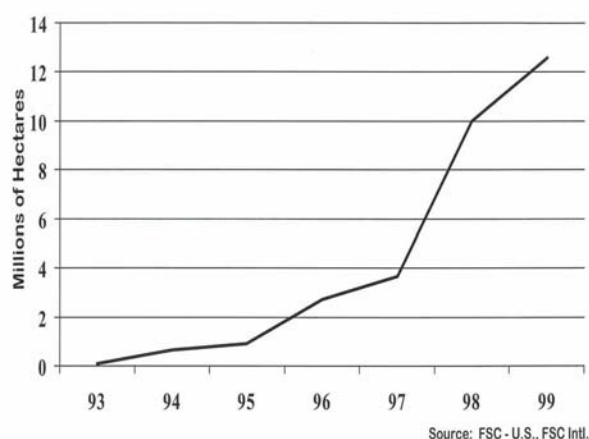
First proposed in 1990, FSC was founded in 1993 in Toronto, Canada and now has its headquarters in Oaxaca, Mexico. Development of FSC was largely led by and continues to be supported by WWF. The FSC's Board of Directors represents three distinct interest areas: economic, social, and ecological. Each area is equally represented and FSC rules ensure representation from both the northern and southern hemispheres.

The FSC has developed 10 principles and criteria for forest management to ensure that consistent performance-based standards are used in evaluating forest management practices. Because the principles and criteria are generic, the FSC facilitates development of specific standards in countries or regions around the world.

The standards development processes are designed to be participated in by a wide variety of stakeholders. Full participation has been a challenge, as shown by the withdrawal of non-industrial private forestland (NIPF) owner organizations from the Swedish standard development process. Nevertheless, the Swedish national standard was the first to be endorsed by FSC, in January 1998.

FSC also serves as an accrediting organization for organizations that wish to perform forest certifications according to its principles and criteria. To date, the FSC has accredited six certifiers: Scientific Certification

Systems and SmartWood from the US, SGS



Qualifor and The Soil Association from the UK, SKAL from the Netherlands, and Institut für Marktökologie from Switzerland. According to the FSC, as of October 1998, certifying organizations from Canada, Costa Rica, Germany, and Sweden have also applied for FSC accreditation.

A key element of the FSC scheme is the incorporation of an ecolabel that tells consumers that the product comes from a well-managed forest. If ecolabeled products become common in the marketplace, consumers may develop a preference for them.

Two other important aspects of the FSC system are percentage-based claims and group certification. Because the FSC system incorporates an ecolabel, strict chain-of-custody monitoring is required. Still, many companies that want to market FSC certified wood products have worked to develop a policy that allows products to be sold with the FSC label that are not made entirely of certified fiber. Such percentage-based claims allow an assembled or fiber- or particle-based product to carry an FSC label even though only part of its wood fiber is from a certified source. The product must be at least 70% certified and no more than 30% uncertified, based on *volume* for assembled products and *weight* for fiber- and particle-based products. The policy also allows use of up to 75% recycled or non-wood fiber in combination with 25% virgin fiber. However, at least 70% of the virgin fiber must be certified.

The FSC system has often been criticized as being economically unfeasible for NIPF owners. In response, the FSC has developed a group certification mechanism based on certifying professional land managers such as consulting foresters. The individual managers (or company) and management practices used are evaluated, and a sample of managed lands is inspected. Providing performance requirements are met, the manager and associated lands are certified.

Although small on a global scale, the area of FSC-certified forests is growing quickly. Figure 2 shows the growth in area certified from less than 1 million hectares at the end of 1995 to over 6 million hectares at the end of 1997 and approximately 12.5 hectares million in early 1999.

Regional Systems

EU Framework for Forest Certification

Various stakeholders in the EU forestry sector have called for an EU-level framework for forest certification, for two basic reasons. First, European NIPF owners deeply distrust FSC certification. Second, the ISO 14000 series has shortcomings as a market-based tool for improving forest management because it does not include environmental performance requirements or product labelling, and there are doubts about its market acceptance.

Within the EU, discussions of certification of sustainable forest management have taken place for several years. Interest has existed in several Directorates General: DG III (industry), DG VI (agriculture), DG VIII (development) and DG XI (environment). Various ad hoc working groups of experts have been appointed, but no EU directives or regulations have been given. Lack of

Figure 2. FSC certified forestland 1993 to January 1999.

coordination among the various DGs makes it difficult to create policy; furthermore, forestry legislation is governed by the EU member states, so creating EU-based legislation becomes complicated. The European Commission has, however, supported research and experimental projects on forest certification.

Fundamental questions for certification through the EU include the following:

- Can forest and forest products certification effectively promote sustainable forest management, either alone or with other measures?
- What kind of measures would complement a certification initiative?
- To what extent should the EU participate in broader-scale projects, including the definition of standards for sustainable forest management?
- What role should the EU adopt in pan-European or international harmonization of certification?

An EU staff discussion paper outlined four broad policy options on certification (EU 1996).

1. Rely mainly on market forces and facilitate their action
2. Contribute actively to the development and definition of standards. These standards could be used as a basis for certification
3. Offer an EU-level certification scheme that replaces numerous other systems
4. Develop other instruments, such as activities concerning trade and registration of forests

Recent demands for EU interventions: As the FSC system has gained acceptance in some sectors, NIPF owners' protests against FSC have become more visible, and demands for EU intervention have strengthened. Consequently, some members of the European Parliament have pressured the Commission to build "a European

umbrella" for various national certification initiatives. The EU offers clear advantages as a forum for creating a solution for forest certification feasible for European legal constraints and for private, small-scale forestry conditions. This approach would be especially beneficial if it established comparability of systems and credibility with consumers, industrial players, and forest owners.

The Symposium on Sustainable Forest Management in France and Europe (Versailles, France, 14-15th May, 1998) called for a European forest certification authentication system. Its declaration was aimed at the Ministerial Conference held in Lisbon in June 1998.

Concrete actions in the European Commission must start with initiatives from member nations. For example, the Finnish Ministry of Agriculture and Forestry proposed an EU framework for certification of sustainable forest management (and related labeling). A non-paper was launched on 20 April, 1998. (Ministry of Agriculture and Forestry, Finland 1998). In this non-paper, the basic role of governments and the EU was defined as ensuring the international compatibility, reliability, fairness, and transparency of certification systems, as well as the free movement of goods.

The non-paper provided a list of considerations for planning a general EU framework for forest certification:

- principles for independent third-party evaluation
- requirements for accreditation of certification organizations
- general requirements for sustainable forest management at the European level that form a framework for national or regional standards
- guidelines for the elaboration of national or regional standards
- principles of group certification
- mechanism for mutual recognition of national

standards (inside or outside EU)

- procedures for the verification of chain of custody
- compatibility with environmental management systems.

In addition, several suggestions for the next steps for development of an EU framework in the European Commission were given. According to the Finnish Minister of Agriculture and Forestry, there is political will among the European Ministers of Agriculture and Forestry including a framework for certification in the EU's forestry strategy (Hemilä 1998).

Application of the eco-management and audit scheme (EMAS) to forest operations: The EMAS is a voluntary, site-based industrial environmental management and auditing system initiative with its roots in EU regulation. The EMAS, unlike ISO 14001 requires an initial environmental review, external verification, a public environmental statement, and an audit of actual performance improvement (Palomares-Soler and Thimme 1996). As provided for by the EMAS, a national, competent body maintains a register of verified reports and keeps in contact with the European Commission. The EMAS may be joined by enterprises in the EU and European Economic Area countries.

Regarding forest certification, the EMAS suffers from the same drawbacks as the ISO approach. That is, even though forest operations of a company can be registered to EMAS, any overall impact is dependent on the forest management standards incorporated into the management system. Some standards may allow the use of ecolabeling, while others may not. The EMAS has been used in forest certification by the Swedish forest industry company, Södra (see page 16).

The Pan-European Forest Certification Initiative (PEFC)

As mentioned previously, European NIPF owners are generally negative towards FSC certification. The most visible action of European NIPF owners against FSC was a demonstration

arranged in Hamburg, Germany, in December 1997. Several hundred people from about ten European countries, claiming to represent 12 million European forest owners, demonstrated against FSC. This demonstration can be seen as the initiation of a search for an FSC alternative.

After the Symposium on Sustainable Forest Management in Versailles, France, Finland and France began preparations to create a European forest certification and authentication system. The preparations continued during the summer of 1998 under the leadership of Germany and France.

On 4 August, 1998 at a meeting in Vienna, Austria, representatives of forestry and the forest industry from Finland, Germany, France, Austria, Norway and Sweden started development of a European forest certification and authentication framework. Their aim is to establish a system to document sustainability of forest management in a manner adapted specifically to European conditions. The system's goal is a certificate based on an audit by an independent organization to prove the sustainability of European forest management and the acceptance of demand for certified wood products. The system will be voluntary and national circumstances will be taken into consideration.

The basic features of the system will be

- Audit by an independent organization
- Standards based on Pan-European criteria for sustainable forest management
- Regional certification and monitoring.

The forest owner organizations emphasize a national basis for certification, especially when defining sustainable forest management standards. According to forest owners, country-based systems are needed because of differences in

- The national significance of forests
- The traditions of forest management
- Forestry legislation
- The infrastructure of forestry
- The structure of forest ownership.

The certification and authentication framework is being developed by a working group

and steering group. The working group has representatives from Finland, Germany, France, Austria, and Norway. The steering group will invite participation by stakeholders from other European countries that have shown interest in the development of a European alternative. The framework and basic elements of certification are to be ready by the end of 1998. Arrangements for chain-of-custody and product labeling will be worked out in 1999.

Developments by Country

The following discussion outlines some of the national schemes being developed in ECE countries. More details are included in a recent report from the European Working Group on Timber Chain of Custody (ETC 1998). There are some systematic differences between Nordic, export-oriented countries and import/domestic-market oriented countries regarding the potential marketing function of forest certification (Mäki and Toivonen 1998b).

Finland

Over thirty percent of Finland's total export income comes from the forest industry, and about ninety percent of Finland's paper products are exported. The importance of exports has a crucial effect on attitudes and actions concerning forest certification in Finland and is directed by demand of the international marketplace.

The Finnish approach to certification is a good example of a *national certification system*, a concept that is especially popular among European forest owners. The development of forest certification in Finland took place in several steps:

Preliminary study (1994): A study was initiated and financed by the forest industry, forest owners, and ENGOs. The study concluded that the forest sector was well positioned for forest certification. However, because the situation in the international marketplace was still vague, action on certification was deferred.

Development of forest certification (1996-1997):

Growing customer demand and competitors' pursuit of certification-based strategies caused the forest sector to react. The Ministry of Agriculture and Forestry created a committee in April 1996 to assess Finland's role and aims in the international development of certification. The committee was to define the structural options for forest certification in Finland and choose strategies for the development of certification. The Ministry emphasized its role as a moderator, encouraging cooperation among various stakeholders but not actively participating.

The committee analyzed the needs and possibilities for certification in Finland (market reactions, the needs of interest groups, framework for certification) and described the potential application of different forest certification schemes. The committee concluded that the Finnish forest sector needs forest certification as a marketing and communication tool and produced a structural model for forest certification. The central feature of the model is that it uses existing organizations, systems, and information to avoid duplication of systems and to keep costs as low as possible.

Development of forest certification standards (1996-1997):

In June 1996, the Central Union of Agricultural Producers and Forest Owners of Finland (MTK), WWF-Finland, the Finnish Forest Industries Federation, and the Finnish Association for Nature Conservation jointly proposed the founding of a working group consisting of 29 environmental, social, and economic organizations to prepare forest certification standards. The standards would be designed to fit the Finnish situation, would be interlinked and equal to international forest certification and environmental management systems (especially FSC and ISO), and based on the Pan-European (Helsinki Process) criteria and indicators for sustainable forestry. In April 1997, the working group reached consensus on approximately 40 criteria applicable to regional, small-scale forest certification.

Testing the applicability of the standards (July-December 1997):

Development of the Regional Group Certification Model has continued with field testing of the practicality of the standard. Priority has been placed on group

certification within the area of a Forestry Center which is approximately 1.5 million hectares and 30,000 forest owners (WGFCs 1997). Like the standard, testing was not tied to a specific certification scheme but is compatible with a wide range of schemes. Finnish ENGOs did not participate in standards testing or developing capacity for large-scale certification.

Developing the capacity for large-scale certification (March 1998 - November 1998):

In March 1998, development of the necessary capability for large-scale certification was begun. Four working groups have developed operational solutions for application of criteria and indicators, audit guidelines, group certification, and chain of custody. Organizational arrangements and cost sharing have been planned (Finnish Forest Association 1998). Once operational, it may be possible for the system to gain recognition from the FSC or the newly proposed Pan-European Forest Certification Initiative (PEFC).

Figure 3 depicts ways that forest certification could be integrated into existing forestry infrastructures in Finland. The blocks above line “a” represent the existing infrastructure of general forest management. The reformed forestry legis-

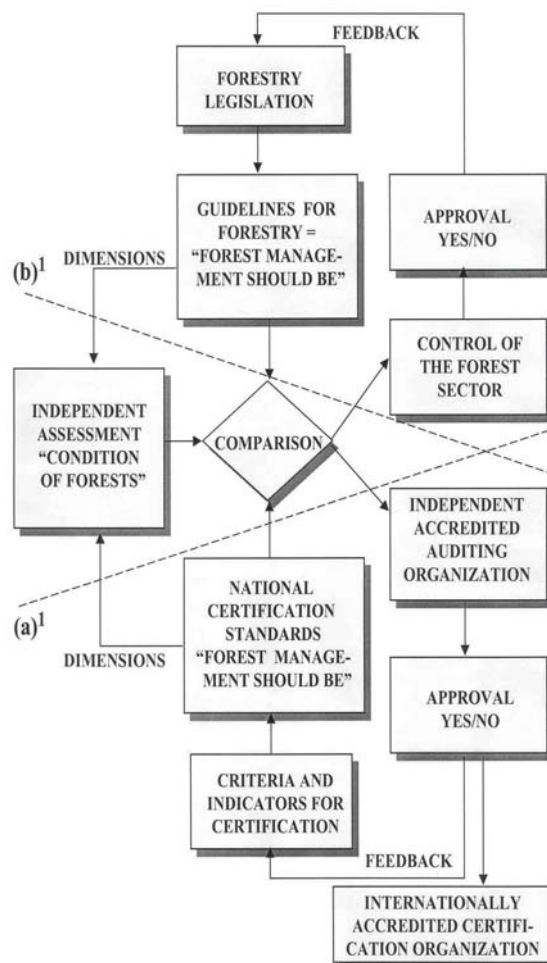
Figure 3. Certification integration into existing forestry infrastructure: Finland.

1 Above line “a” is existing forestry policy infrastructure. Below line “b” is potential certification infrastructure.

lation, the environmental program for forestry, and the practical guidelines emphasize environmental values. The implementation of legislation, programs, and guidelines is monitored by an independent assessment system. The target “forest management should be” is continuously compared with the actual conditions of forests. The results of the comparison are used to continually improve the condition of forests.

The blocks below line “b” describe how the Finnish certification approach works. The block “criteria and indicators for certification” could

include, for example, the criteria and indicators of the Pan-European process or the FSC guidelines and principles. The national certification



standards are based on international criteria, guidelines, and principles produced through a broad-based consultative process.

The essential point in Figure 3 is that the information about the condition of the forests produced by the independent assessment is used in the conduct of both the official forest policy and voluntary forest certification. The information can also be used in internal and external auditing.

To make the system as effective as possible, the auditing targets of the independent assessment have to be developed in such a way that forest certification criteria are taken into consideration to an ever larger extent. The transparency of the independent assessment system must also be developed.

The “auditing organization” is a domestic or international independent, third-party that uses the auditing information produced by the independent assessment. The auditing organization can also conduct test field audits of its own. What is important is that the auditing and certification bodies have international approval and are officially accredited.

Cost-effectiveness is the most important advantage of the system. Information about forest conditions which is costly to develop, can be developed only once by a single organization. To succeed, a certification system must enjoy the confidence of all parties. Thus far, forest owners, the forest industry, and ENGOs have confidence in the system. An internationally approved framework and internationally accredited, independent certification bodies would result in marketplace acceptance.

FSC activities have also taken place in Finland. A Finnish Working Group for FSC-Standard, not yet endorsed by the FSC, started work in June 1998. Its members consist of six ENGOs that intend to rewrite the nationally developed certification criteria. Four of these ENGOs were members of the original national working group (Finnish Forest Certification Project 1998).

Sweden

The Swedish forest industry has been eager to show that it is operating in an environmentally appropriate manner. Since the late 1980s, environmental issues have been prominent in the forest sector, especially in international marketing. Large, integrated Swedish forest industry companies have been leaders in developing a Swedish approach to certification.

Preliminary study: The process of certifying Swedish forests began with WWF-Sweden project to determine the possibility of implementing FSC certification in Sweden. The final report concluded that a forest certification scheme was needed in Sweden to ensure sustainable forest management (Karjalainen and Uimonen 1995).

Other preliminary work involved studying the

implementation and effects of certification on the forest sector. In cooperation with the forest industry, the effects of implementing FSC criteria were studied. Swedish companies conducted trial certifications in their own forests, using certification organizations accredited by the FSC. Several studies were also carried out looking at cooperation between forest owners and forest industry companies, chain-of-custody issues, and consumer preferences for certified forest products. NIPF owners also participated in the research (NFCP 1996).

In the spring of 1995, WWF-Sweden and the Swedish Society for Nature Conservation (SSNC) developed preliminary criteria for certification (WWF and SSNC 1995). The introduction of these ecologically oriented criteria and disagreement concerning their viability led to the formation of the Swedish FSC Working Group in February 1996.

Swedish FSC working group: Key participants in the working group included WWF-Sweden, the SSNC, NIPF owners, and the largest forest industry companies. The group intended to create principles and criteria for forest certification that would be reasonable and acceptable to all parties concerned (Swedish FSCWG 1996).

After nearly two years of work, the working group had failed to reach consensus on common standards. NIPF owners, representing approximately 50% of the forest land base, left the group in April 1997 because of differences regarding economic consequences. The remaining members continued their work and finished a national FSC-standard in the summer of 1997. In January 1998, the standard was the first national standard to be endorsed by FSC’s board of directors.

In contrast to the NIPF owners, the large forest industry companies have actively pursued FSC certification. **AssiDomän** was one of the first forestry companies in the world to have gained FSC certification for all its forest lands (approximately 3.3 million hectares). AssiDomän sought certification in the belief that the market for certified products will increase with growing environmental awareness. FSC-certified timber is currently marketed in the UK, Holland, Belgium, and Germany (<http://www.asdo.se/>). The forest

operations of **Korsnäs** were registered in 1997 in accordance with ISO 14001, and the company has also gained FSC certification of its lands (<http://www.korsnas.se>). According to a July 1998 press release, **SCA** plans to certify its two million hectares of forest land according to FSC (<http://www.sca.se/>).

Having withdrawn from the FSC process, NIPF owners focused on developing a certification system in accordance with EMAS registration (Mäki and Toivonen, 1998b). **Södra's** forestry certification work is based on the EMAS, plus Green forestry plans (forest management plans) and its own forestry standard. The certification scheme is adapted to small-scale, family-run forestry operations. Members seeking EMAS registration are required to enter an agreement with Södra by which they pledge to comply with the Forestry Standard and to acquire a Green forestry plan for their forest holdings (<http://www.sodra.se/>).

Norway

Development of certification in Norway has been part of the Living Forests Project which was initiated in 1995 to promote and contribute to sustainable forest management. One of its most important project tasks was to prepare criteria, standards, and documentation systems for sustainable forest management: (<http://www.levendeskog.no/>). The project emphasized participation of both stakeholder groups and a scientific committee. The Living Forests Project completed its standards for sustainable forest management in March 1998. The standards comply with criteria developed in the pan-European Process and will also be used in forest certification.

Certification was initially not part of the Living Forests Project. During the project, however, it became evident that a national approach to certification was also needed. The Certification Committee of Living Forests was established based on an agreement between the Living Forests Project steering committee and ENGOs in 1997. Economic, ecological, and social interests had three representatives each in the committee. The Certification Committee completed its work on July 1, 1998.

The Committee identified several alternative ways that group certification could be organized and described how the 23 Living Forests standards can be used when certifying, independent of the chosen certification scheme. Thus there is flexibility for linking the standards to internationally accepted certification systems. The committee emphasized forest certification as a marketing tool and hoped to help forest owners, the forest industry, and other organizations make decisions concerning forest certification (Sanness 1998a).

Continued efforts will strive to disseminate information about the standards and the need and use of forest certification. At the moment, one forest owner association in southern Norway has chosen to certify according to an ISO-based suggestion of the Certification Committee. The largest forest owner association in Norway was expected to make its decision regarding certification in late 1998 (Sanness 1998b).

Germany

Germany is both a producer and an importer of forest products with a large and environmentally conscious market. Consequently, certification has been a prominent issue throughout the 1990s. Forest authorities consider the issue of certification and labeling of sustainable forest management to be market-based. Although the Minister of Agriculture and Forestry supports a mark-of-origin to show the sustainable origin of German wood, the Ministry's position is that certification is not essential for German forestry. FSC certification is regarded negatively by the forest authorities (Anonymous 1997a, Strittmatter 1997) and by NIPF owners.

Nevertheless, there have been a number of certification initiatives in Germany:

- 1) Labeling systems for SFM and wood were introduced in Germany in 1992, when increasing attention was paid to the environmental impacts of the production and use of tropical wood. At this time, a wide group of stakeholders started a project called Initiative Tropenwald, later renamed the Initiative to Promote Sustainable Forest

Management. Its goal was to develop a mechanism delivering information about forest management through a product label for tropical wood. The system was finalized in 1997, and now a "Pro Silva" product label is granted to products accepted in this system (Crossley 1996, ISO/TR 14061 1998).

- 2) A mark-of-origin label, Holz - aus nachhaltiger Forstwirtschaft. Gewachsen in Deutschlands Wäldern, is available from Forstabsatzfond, the forest products trade association. The label was initiated by the German Forestry Council (Der Deutsche Forstwirtschaftsrat e.V.) and NIPF owner organizations. It is awarded based on compliance with national forest legislation and the criteria and indicators of the Pan-European (Helsinki) process. No specific national indicators are connected with the label. Forstabsatzfond licenses forest owner organizations to use the label for their member forest owners. More than 1000 licenses had been awarded by 1997 (Nachhaltige Waldbewirtschaftung 1997 in Mäki and Toivonen 1998b).
- 3) The Naturland label was developed by Greenpeace, BUND, and Robin Wood for wood that originates from ecologically managed forests. The Lübeck city forests use this label which is marketed by Naturland-Verbund (Parviainen 1998a).
- 4) The Eco-Timber label which is marketed by Eco-Timber GmbH, is provided for wood originating from environmentally friendly managed forests. The criteria and principles follow closely the forest management recommendations of the German Association for Natural Forest Management (Arbeitsgemeinschaft Naturnaher Waldbau) (Parviainen 1998a).
- 5) Germany is a leading country in the development of the PEFC scheme.

Recent actions indicate that the forest owner organizations' attitude towards forest certification

could be changing. A notable decision was made in Dessau on 9 June 1998 by the German Forestry Council, according to which the central forestry organizations and the industry would support an initiative that should lead to a European certificate of SFM (PEFC scheme) by the end of 1998. What makes the Dessau decision notable is that it marks change from claiming that a mark-of-origin is enough, to speaking about forest certification. Later in the summer of 1998 Germany agreed to act as a coordinator of the PEFC initiative originally led by Finland and France. The lack of national certification standards produced through a broad-based consultative process in Germany is a problem with respect to the proposed PEFC scheme.

With regard to FSC, two standards building initiatives have now joined efforts. The German FSC Working Group (not endorsed by FSC) is developing standards in close relationship with the Forest Initiative in Germany (Neugebauer and Schmitz 1998). The Forest Initiative, which was started by private forest owners and workers of the communal and state forestry organizations in Rheinland-Pfalz (Dertz 1998), had already developed standards for sustainable forestry, keeping FSC certification as a reference point. In August 1998, the Forest Initiative and the FSC Working Group combined their ideas to form the first draft of German FSC guidelines for forest certification (FSC Arbeitsgruppe Deutschland 1998, Steenbock 1998).

Austria

Although Austria is an export-oriented country, its opinions and actions concerning forest certification differ in many respects from those in Nordic countries. Forest owner organizations in Austria have chosen to support development of a mark-of-origin rather than forest certification. Owner cooperation with ENGOs has been less than in the Nordic countries.

Despite the limited development of certification in Austria, there have been three important developments:

- 1) The "Holz aus Österreich - natürlich - kontrolliert" mark-of-origin was finalized in the fall 1996. The label can be used on wood

of Austrian origin and on products primarily (minimum of 50%) made of Austrian wood. Any non-Austrian wood must originate from forests managed under similar management systems and environmental requirements. The organizations that developed the label represent the forest authorities and the Austrian forest industry (Mäki and Toivonen 1998b).

- 2) A model for forest operation certification based on the ISO system is under discussion in a working group initiated by the Austrian Ministry of Environment. The model aims at reducing costs by encouraging cooperation of NIPF owners in forest certification. (CEPI 1997)
- 3) Austria's NIPF organizations are now participating in the development of the PEFC scheme.

France

Because the demand for certified timber or wood-based products is nearly non-existent and certification has little importance in export trade, there is minimal interest in forest certification in France. However, in recognition that being involved may be critical for the future of French forestry, certification initiatives have developed, and France is leading, with Germany, in the development of the PEFC scheme.

By the mid-1990s, both government and the private sector had studied the possibilities of forest certification. In 1996 a national working group was founded to outline a voluntary forest certification system. National forest legislation and the criteria of the Pan-European process form the background for the system. Thus, the system, called ORR (Organization, Regulation, Results), is based on environmental management systems suitable to private forestry. The "organization" is a combination of regional institutions and is registered according to ISO 14001. Under the system, forest management plans for private owners are developed by forest owner centers, and both the realization of plans and sustainable

forest management are controlled by the owner centers and other forest administrative organizations (Mäki and Toivonen 1998b, Oliver 1998).

The United Kingdom

The UK is a large net importer of forest products with very small forest resources. Still, because of its environmentally active and sensitive markets, it has been very active in forest certification issues. The UK forest certification initiatives aim at providing a good example for other initiatives but also at securing market access for domestic forest products (Lindstrom et al. 1999).

The Forestry Industry Committee of Great Britain has been the initiator of the "Woodmark" mark-of-origin system, which has been supported by forest owner organizations. The system shows the origin of the wood and guarantees that forest management has complied with legislation and forest authority recommendations. Use of the label requires that 90% of the wood raw material is of British origin, including recycled materials. About 4000 private and public forests had the right to use the label in 1997 (Patosari 1997 in Mäki and Toivonen 1998b).

The Paper Federation has founded a Forest Certification Working Group in Britain which joins forest owners, importers, the paper industry, and traders. The working group has suggested creation of one label that could incorporate all of the existing forest labeling systems and make them equivalent in the eyes of consumers (CEPI 1997). In practice, this means developing a system for harmonization of various labeling and certification systems of forest management and wood products (Mäki and Toivonen 1998b).

The UK Forestry Standard is another important milestone in forest certification development. It was developed as part of a government initiative in 1995 and published in 1998. The UK Forestry Standard sets out a framework for the protection and management of woodlands in the future. It reflects the commitments and guidelines agreed to at UNCED in 1992 and at Helsinki in 1993 (Anonymous 1998b).

What made the UK Forestry Standard a milestone was the Forestry Commission's plan to develop an audit protocol to be used for the independent certification of UK forests. Working with FSC-UK and others, the Commission agreed to facilitate a series of meetings to bring all important stakeholders together. As the process evolved, the objective became to deliver a forest management certification standard for the UK based on the UK government standard and the FSC draft standard. It was called an "audit protocol" as a neutral term (Howard 1998). The Forestry Commission plan was given qualified approval by 50 representatives of the UK forestry and environmental interests at a meeting in London in February of 1998.

Yet another historical breakthrough was reached in a meeting in September 1998, at which representatives of ENGOs, forest industry, and forest owners produced a final draft of the audit protocol. This document will be used for assessing forest practices in the field by certifiers. The meeting was facilitated by the Forestry Commission, which took a neutral position. On some issues, such as accreditation, agreement was not reached (Howard 1998).

The compromises and working together that have taken place in the UK represent a new turn in the relationship between the forestry establishment and ENGOs. Further developments are expected and should be watched carefully as this model may be followed in other countries.

The Netherlands

Since 1995, the Dutch government has been working to establish a policy for the use of products from sustainably managed forests. In 1997, it published the official paper, "Certification and Sustainable Forest Management (minimum requirements)". Based on these minimum requirements the Kerhout verification procedure was developed. The procedure is not a certification system, but rather a way of verifying that various certification schemes meet the government's minimum standards for sustainable management (Hol 1998). The four minimum requirements represent ecological functions, adequate management systems, an independent certifying organization,

and a valid chain-of-custody system (Hol 1998). Up to 30% non-certified fiber can be included in labeled products, but the mixture must be indicated on the label (ETC 1998). The specific content of the guidelines has meant that most products currently being approved through the system are FSC-certified.

Belgium

The Belgian timber sector created its own mark-of-origin guaranteeing that wood comes from forests managed according to legislation. This was developed because of market pressures for FSC products. However, the FSC approach was not considered feasible because of the high degree of forest fragmentation. The mark is registered by the non-profit (ASBL) WOODNET, which is made up of nine timber sector federations and administrations. This mark is expected eventually to be internationally recognized through harmonization of various European systems (Anonymous 1997b).

The United States

The American Forest & Paper Association (AF&PA) is the national association in the US for the primary forest industries. Its members own approximately 90% of company-owned forestland in the US and account for the majority of total paper and wood product outputs. The AF&PA commissioned a study in 1992 of perceptions of the forest industry among a variety of groups involved with public policy. The study found significant differences between the perceptions of industry managers and others (Wallinger 1995). This finding moved the association toward creating its own program, the Sustainable Forestry Initiative (SFI), in 1996. The SFI is made up of a series of implementation guidelines, objectives, and performance measures.

Companies are required to participate in the SFI to maintain AF&PA membership. As part of their participation, members also educate loggers and non-company foresters to ensure that sustainable forestry is practiced on non-company lands. Although some companies chose to leave AF&PA rather than participate in SFI, the total land area under the program has grown to nearly 22 million hectares (AF&PA 1998).

In early 1998, the Third Annual Progress Report on SFI outlined the commitment and progress made by member companies. A panel of experts representing academic, government, and nongovernmental organizations, reviewed the guidelines and progress made by member companies; the panel gave the SFI a positive evaluation but also suggestions for continued improvement.

The marketplace needs of some members have caused AF&PA to rework the SFI to include a voluntary verification system. It will be compatible with ISO and become an industry standard through the American National Standards Institute. Both procedural and performance requirements and third-party auditing will be included.

There is a US-based FSC organization, and standards development is ongoing in six of eleven regions. The standards developed by the southwest regional have been approved by FSC-US, based on some preconditions. Several other regions are actively developing standards (FSC 1998). The issue of certification of federally-owned lands in the US is highly controversial and has seen heated discussion. FSC-US recently published a policy for federal land certification.

Canada

Canada has led development of a systems-based approach to sustainable forest management. Initiated by industry and developed through the Canadian Standards Association (CSA), two voluntary national standards (CAN/CSA-Z808-96 and CAN/CSA-Z809-96) were introduced in October 1996. Z808 describes the design and implementation of a forest management system that includes environmental, economic, and social and cultural aspects; Z809 outlines auditing requirements for the program.

The Canadian approach to certification is based on ISO 14001 but goes beyond the ISO standard in several areas. For instance, it incorporates a Canadian adaptation of the sustainable forest management criteria that were developed through the Montreal Process. It guides forest managers and public advisory committees through the refinement of the national

criteria into specific performance objectives for the local defined forest area. The required third-party auditing process includes on-the-ground performance measures in addition to an audit of the management system (Abusow 1997). Companies performing audits must be accredited by the Standards Council of Canada.

At least 15 major Canadian forest products companies are implementing CSA standards on approximately 20 million hectares of forestland (Abusow and Rotherham 1998). However, none has yet completed the process of becoming registered or certified in the system. Although it appears that certification to the CSA standard could take as long as 2-3 years for many companies, certifications were expected to begin taking place by the end of 1998.

FSC activities in Canada include three regional working groups, with one, the Acadian Forest Regional Group, having begun its work in 1996. There is a plan for a national boreal forest working group as well.

Other Countries

The UN Economic Commission for Europe, Timber Committee, held a certification workshop for countries in transition in late August 1998. The Czech Republic takes the position that national laws are sufficient and has established a National Certification Center that will certify, for free, that landowners are in compliance with national laws. Poland has been involved with FSC-based certification for some time through the certification of state forests. Estonia is pursuing formation of an FSC working group, with the goal of having a system in place by 2000 (Berg 1998). Other countries in transition are still developing their opinions and policies.

Stakeholder Preferences Regarding Certification Systems

A widely accepted and successful forest certification system can only be developed with a reasonable level of trust among stakeholders. Ongoing certification development processes

have shown that unless the level of trust is high, full consensus may not be achieved (Lindström et al. 1999).

Forest ownership in most European countries is largely made up of small forest holdings. Estimates vary but there are about 10.3 million private forest owners in Europe representing approximately 66% of the forest base, with an average landholding size of 12.6 hectares (Thomas 1996). Ownership in the United States is also heavily weighted toward private owners (including companies) with approximately 73% of the forest base. Approximately nine million NIPF owners in the US account for almost 60% of the forest base (AF&PA 1997, Powell et al. 1992). In contrast, 94% of the Canadian forest base is government owned (Natural Resources Canada 1996). Ownership structure impacts possible systems and implementation of forest certification.

NIPF Owners

Comprehensive studies revealing forest owner preferences have been conducted in Finland and the UK (Lindström 1997). Elsewhere in Europe, the opinions of forest owners are represented by their organizations and the opinions of these organizations have also been examined (Mäki and Toivonen 1998a, b). This topic has received little attention by researchers in North America.

Only certain established, familiar organizations are considered trustworthy. A governmental organization is the most preferred certifying organization, followed in order by scientific and private organizations. When considering certification for their own lands, owners prefer to work with a familiar representative from a forest owner organization. They clearly do not want ENGOs or industrial timber buyers to serve as certification bodies (Lindström et al. 1999).

Owner perceptions of a certification system are heavily dependent on the opinions of their forest owner organizations. Forest owner organizations in all major European countries view a national certification system or a mark-of-origin positively. A system based on group or area certification is also preferred (Mäki and

Toivonen 1998b). In countries dependent on exports, especially Nordic countries, a mark-of-origin is perceived to lack the credibility needed for export marketing. On the other hand, a purely national certification system may also lack international credibility.

For private owners and their organizations, the only existing international system with a product label (FSC) is not considered suitable. However, the ISO approach they prefer lacks the option of product labelling. Therefore, according to European forest owner organizations, the existing international systems need to be further developed or entirely new alternatives for an international framework are needed (Mäki and Toivonen 1998b).

European forest owners are deeply distrustful of FSC because they believe that

- FSC has monopolistic intentions
- FSC decision making system is undemocratic
- FSC is poorly designed for small-scale NIPF forestry
- FSC ignores Europe's long history of forest legislation, silviculture, and forest management.

These beliefs reflect owner perceptions of the FSC as a distant, unknown, and frightening organization that comes and tells how the forest owner should behave on their private land. What is widely preferred by European NIPF owners is

- A national certification system that takes local conditions into consideration
- Group certification to assure economic viability
- A common European framework with international approval and credibility.

Forest Industry

As the intermediary between raw wood suppliers and customers using wood products, the forest industry balances the opinions and preferences of both sides. This can be complicated. The system preferences of companies are heavily dependent on customer requirements. For example, in Finland, those companies marketing to FSC-committed

industrial customers are demanding FSC-certified wood (Rohweder 1998). The Finnish forest industry sources three-quarters of its raw wood from private forests and as a result requires any certification system to be acceptable to both forest owners and customers. On the other hand, the Swedish industry can be somewhat less compromising with their forest certification policies because they own a much larger percentage of their own raw wood requirements.

Among forest industries in UK, Germany, and Finland, governmental organizations and universities or research institutes are the trusted and preferred bodies for planning and implementing forest certification. On the other hand, a large majority of forest industry companies prefer ISO as the governing organization for the certification system. The second choice for a governing organization is an intergovernmental organization, such as the EU. Few companies would prefer international organizations like FSC (Rametsteiner 1998b).

Vlosky and Ozanne (1998) found that the US forest products industry did not see any need for certification of temperate forests; only about 14% of respondents saw such a need. To conduct certifications, forest companies trusted themselves most, followed in order by a private certification companies, the federal government, and ENGOs.

In many Middle European countries, the paper industry is largely based on imported pulp and recycled fibers. Recycled fibers already have a positive environmental image. Thus, the paper industry's requirements for forest certification are especially directed to the countries producing and using virgin fibres, such as Nordic countries (Mäki and Toivonen 1998b). The actions of Nordic countries will heavily influence the future of forest certification (Hansen et al. 1998).

Industrial/Retail Customers

Among industrial customers in Germany, the UK, and Finland, ISO is the most preferred governing organization for any certification

system. Among German paper buyers, an intergovernmental organization (e.g., EU) is the second choice and the FSC is the third choice. However, the support for an EU or FSC system is about equal. Although there is a strong FSC-oriented buyer group in the UK, the general preferences (measured in 1997) are about the same as in Germany. In the US, Vlosky and Ozanne (1997) found that several sectors of industrial customers trusted ENGOs least as a certifying agency and trusted third-party entities most. This study did not ask about ISO versus FSC or other specific schemes. Ruddell and Stevens (1998) surveyed the US business and institutional furniture industry and found that 45% of respondents had seen limited customer interest in ecolabeled wood products. The authors concluded that there is broad misunderstanding of the meaning of certification within this industry segment.

Although FSC is supported by only a minority share of companies, its significance in the marketplace is high because it is supported by some prominent and dedicated companies as well as powerful ENGOs. These supporters have made marketing investments in the FSC label, which makes their demands even louder. This situation is evidence that the future of forest certification is not shaped by average companies. Rather, it is the actions of opinion leaders that will typically shape developments.

The Association of German Magazine Publishers (VDZ Verband Deutscher Zeitschriftenverleger) is such an opinion leader in Middle Europe. Unlike prominent industrial customers in the UK, who have expressed their system preferences by supporting FSC, VDZ members have not fixed their demands to a certain system. In July 1998, VDZ published its requirements for the framing of forest certification (VDZ 1998):

- 1. Commitment to sustainable development.**
- 2. Acceptance by special interest groups:** Affected economic, environmental and social

interest groups must be included in the setting of ecological goals, standards, and guiding principles.

3. **Voluntary participation.**

4. **Inspection by an independent third party.**

5. **Transparency:** Basic structures, criteria, and processes must be easily understandable by non-experts.

6. **Levels of certification:** Models for obtaining individual or group certification will need to pragmatically combine cost effectiveness and traceability according to the size of the company.

7. **International integration, feasibility and comparability:** Devising regional and national models is an important first step. For the medium term, however, globally feasible models are needed.

Final Consumers

Final consumers in Middle Europe give NEGOS the highest overall credibility of all the potential sources of ecolabels. From that, it could be assumed that a certifying organization supported by ENGOs is most preferred among consumers. Thus, British and German industry and trade assume that final consumers would definitely prefer certification carried out by an organization supported by ENGOs. In Finland, however, companies thought the general public would prefer a governmental organization (Rametsteiner et al. 1998b). In the US, Ozanne and Smith (1998) found that consumers preferred that certification be performed by a private certification company, an ENGO was their second choice, and certification by the industry itself was their last choice.

Most final consumers have minimal knowledge concerning certification regardless of the marketplace. Therefore, forest owners, industry, and trade are sceptical about consumer interest in certification. The demand for forest certification has so far been clearly expressed by industrial customers of the forest industry and ENGOs, not by final consumers.

Chapter 4 - MARKETS AND MARKETING OF CERTIFIED PRODUCTS

Although there are existing certification schemes and many more under development, current identifiable marketplace demand is concentrated on third-party, performance-based certification. For that reason, this chapter focuses on the status of markets for FSC-certified products. This text is slightly adapted from Hansen (1998).

The Development of Demand for Certified Products

Demand has been increasing in various markets and market sectors, but it is regional and often segment-specific. One indication of the infancy of the market is that there are as many complaints about lack of demand as there are complaints about lack of supply. Coopers and Lybrand (1998) estimated that by 2003 demand for certified material could amount to approximately 100 million m³. Demand currently appears to be concentrated in the UK, the

Netherlands, and Germany. There is some demand in the US but little interest is evident in southern Europe, the countries in transition, or Asia.

Buyers' Groups

The largest demand for certified products comes from buyers' groups. Brief information on the active buyers' groups is listed in Table 2. Buyers' groups are companies that voluntarily join together and commit to purchasing wood and wood-based products that originate from well-managed forests. Most buyers' groups have been organized by the WWF. The primary members of these groups are typically large do-it-yourself retailers.

The UK 1995+ Group was the first to be developed; others currently operate in the Netherlands, Belgium, Austria, Germany, Switzerland, and North America. More groups

are planned for Australia, Brazil, Denmark, France, Greece, Ireland, Japan, Norway, Spain, and Sweden. Participation has been driven by a variety of factors, including a corporate ethic of "doing the right thing", a desire to obtain assistance in dealing with forestry issues, perceived competitive advantage, and risk aversion.

The market share that do-it-yourself represents within a country, as well as the individual companies involved in a buyers' group, has a significant impact on the ability of the group to influence the marketplace. In the UK, do-it-yourself is an important sector and all of the major do-it-yourself retailers are participating in the 1995+ Group. As a result, they are able to greatly influence their supply chain. As they

successfully obtain more certified products, their ability to move other suppliers to offer certified products will increase. Some central European markets, such as Switzerland, are very committed to buying wood from local forests. However, because very little forestland is certified in those countries, product availability is severely limited. As a result, companies must balance their commitment to buy locally with their commitment to buy certified products.

In 1998, demand from buyers' groups was estimated to be around 9 million m³ of round wood equivalents and the total volume of certified timber traded in Europe around 2 million m³ (Rametsteiner et al. 1998a).

Table 2. Buyers' groups as of mid-1998.

Country	Group Name	Founded	Member Companies	Total Annual Member Sales (millions)
United Kingdom	1995+ Group	1991	87	\$69,000
Netherlands	Hart Voor Hout	1995	11	not available
	Organizations committed to FSC	1992	473	not available
Belgium	Club 1997	1994	79	\$270
Austria	Gruppe 98	1996	26	\$960
Germany	Gruppe 98	1997	31	\$12,000
Switzerland	WWF Wood Group	1997	10	\$170 ¹
North America	Certified Forest Products Council	1997	149 businesses 500 individuals	not available

¹ Sales of wood products only

The 1995+ Group in the UK is an important part of the certification story. Members of the Group generally have a goal of selling only third-party certified forest products by December 31, 1999. These companies have had an undeniable impact on the global forest products industry. Some group members have been very active in their efforts to obtain certified products, even to the point of switching or threatening to switch suppliers. A recent statement from Homebase, Sainsbury's do-it-yourself division, stated that

Indonesia and Canada were questionable supply sources and that the company would soon substitute beech for hemlock from Canada in their stair parts (Dixon 1998). Another do-it-yourself retail chain, B&Q, has publicly threatened to drop Finnish suppliers unless they create concrete plans to provide third party certified products; they have made similar threats to their Canadian suppliers.

Several 1995+ Group members have switched suppliers from Southeast Asia to Central America, South America to Africa, Europe to South America, and even from one Nordic country to another to obtain certified products. As the year 2000 approaches and the commitments of these retailers come due, the pressure to obtain supply is escalating.

Other Sources of Demand

Public entities in a number of countries have tropical wood bans in place and are moving to

develop written preferences for certified products. For example, in the US, cities such as Los Angeles and San Francisco are working in this direction and are considering policies of paying premiums for certified products. The US government, in its planning for \$1.4 billion in military base renovations, is pilot-testing a “buy green” (or buy environmentally friendly products) program. The request for quotations included the term “certified wood”, though certification was not clearly defined.

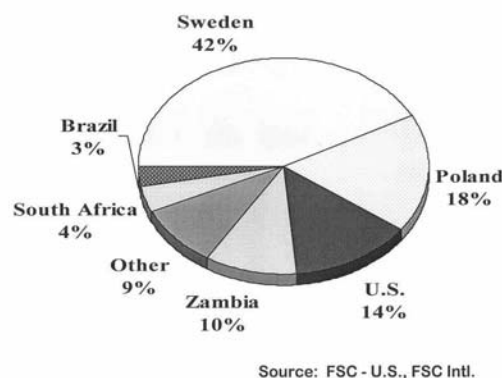
Companies outside of buyers’ groups are also asking for certified products. Often small entrepreneurial operations, these companies typically operate in urban centers where they have an affluent, environmentally minded consumer base. In the US, some high-end retailers seek certified wood for the interiors of their new stores. Their demand is increasing interest along the supply chain.

The publishing industry in Germany has been prominent in the certification debate. Acting through their association, VDZ, publishers cooperated with the German Pulp and Paper Association to produce a series of position papers. They have also called on their suppliers to participate in a certification system that is recognized worldwide. Even though they have made no specific commitments like those of the buyer's groups, their actions could have a significant impact on future demand for certified products.

Supply of Certified Products

Ghazali and Simula (1997) estimated total

roundwood production from certified forests in 1997 to be 9.5 million m³ (only a small percentage of this volume was sold as certified). Certified land area has increased considerably since 1997 to approximately 12.5 million hectares as of December 1998 (FSC 1998). Figure 4 shows where the current FSC-certified forests are located and that Poland, the US, and Sweden



account for the majority of FSC-certified land.

Figure 4. Location of FSC-certified land (December 1998)

Several high-profile certified products reached the market during 1997-1998. Medium-density fiberboard and hardboard from Brazil are now available in Europe. Bathroom tissue and wallpaper originating from certified pulp in Sweden are being sold in the UK. In the US, a limited volume of certified particleboard and softwood structural plywood became available. Introduction of certified fiber and particle-based products is a significant development because manufacturers of these products typically access raw materials from a large number of suppliers. Unless a large percentage of the fiber coming from those suppliers is certified, implementing chain-of-custody is a significant challenge.

Although large areas of forestland were certified during 1998, that did not mean immediate large volumes of certified products in the marketplace. A processing and distribution infrastructure for certified products must still be developed. Even when certified land is owned by

a large company that has processing capabilities, its production of certified products may be limited by mill raw material self-sufficiency and by the increased costs associated with meeting chain of custody requirements.

Although the FSC and certifiers keep careful accounts of the area of land certified, they have not implemented a comprehensive system to quantify the volumes and types of certified products available in the marketplace. Because there are no organizations that systematically quantify the trade of certified products, obtaining a complete, objective picture of the marketplace is impossible. The Timber Committee, Statistics Working Party, will begin to consider how the Committee might deal with this issue in its May 1999 meeting.

Supply Developments

The World Bank and WWF have agreed on a strategic alliance with the goal of certification of a total of 200 million hectares of forest by the year 2005. According to Ghazali and Simula (1997), this could mean that about 6% of the world's production forests and around 600 million m³ of annual certified, roundwood production. However, this project is still under development and will have few short-term impacts on certified product supply.

The area of certified land in the US increased considerably when public lands in two states were certified. Pennsylvania had over 485 thousand hectares of state lands certified and Minnesota over 236 thousand hectares of state and county lands. Both states are considering certification of additional areas that could amount to around 650,000 hectares. However, because there are still very few chain-of-custody-certified manufacturers in either state, there has not been a big increase in the availability of certified processed products.

Other states are also becoming involved in certification. The most developed process is in New York, where approximately 283,000 hectares will be assessed. In Wisconsin, a pilot project is being organized to assess nearly 100,000 hectares. The city of Sitka, Alaska, has received a grant from the US Environmental Protection Agency to

study the feasibility of certification on state lands and land owned by native corporations. A project is also under consideration in Hawaii (Mater 1998).

Certification of federally owned lands in the US is very controversial. A small community in southern Oregon took the initiative to consider certification of a Sustained Yield Unit on the nearby Fremont National Forest. Several large US ENGOs are opposed to timber harvesting on US federal land. Though the ENGOs may support certification in concept, they do not see it as appropriate for federal lands, since it could facilitate harvesting.

Certification of resource managers is gaining momentum in the US, though it typically involves small areas of land. Northern California and Oregon appear to be especially active. As in other sectors, the lack of processing infrastructure presents a challenge. Certified managers find themselves spending considerable time trying to get a small volume of certified logs processed.

Since the approval of the Swedish National Standard a huge area of land has been certified in Sweden. Nearly all of the area certified by December 1998 belonged only to three companies, AssiDomän, StoraEnso, and Korsnäs. AssiDomän has the largest area of certified forestland at 3.3 million hectares followed by Stora/Enso with almost one million hectares and Korsnäs with just over 660 thousand hectares (FSC 1998).

Poland and the Czech Republic both have certified forest land. The Czech Republic has an initial area of just over 10 thousand hectares. Poland has a total of 2.2 million hectares, made up of five regional state forests. Very little activity is occurring in other countries in transition.

Brazil and South Africa are the other two places where significant developments have taken place. The first certified medium-density fiberboard and hardboard became available from Duratex in Brazil (Anonymous 1998a). Klavin Fabricadora de Papel e Celulose S.A. received certification of nearly 221,000 hectares of plantations. So far its chain-of-custody

certification covers only its solid wood business and not paper. Further certification of plantation operations in Brazil is expected in the near future, increasing the current certified area of approximately 300,000 hectares. South Africa now has nearly 485,000 hectares of certified plantations, and products from those plantations are making their way into European markets.

Company Experiences in Marketing Certified Products

Market Access

With certified product offerings, companies have often found opportunities in totally new markets. For instance, Colonial Craft, a US hardwood moulding and millwork producer, filled a small order of certified product for a new customer several years ago and has since become its sole supplier. Although certified product is still a small proportion of the volume sold to this customer, the total order has been worth several million dollars. Collins Pine, a small US sawnwood producer, was able to sell certified pine shelving directly to a large retailer and certified white fir to a furniture company, both of which were new markets.

Swedish companies are beginning to receive inquiries for certified forest products from manufacturers of glulam and other secondary forest products. Small European importers and wholesalers have found that offering certified products gets them the opportunity to talk to buyers from big do-it-yourself chains. Without certified products, these companies would be too small to gain the attention of corporate buyers. Companies selling tropical wood in Europe claim that certification is often what allows them to successfully sell to markets where any wood products from the tropics have largely gone out of favor.

Image

Generally, companies have experienced positive public relations as a result of becoming involved with forest certification. As one of the first companies in the US to certify its forestland, Collins Pine received national media attention despite its relative small size; it also received a

Presidential Award for Sustainability. FSC-certified resource managers in the US have used their certified status to generate media exposure and positive public relations. Some companies feel that being seen as progressive and doing the right thing is critical to their company image. For example, a German contact said that to maintain its strong image with customers, his company must communicate with them about environmental issues. Retailers such as The Home Depot in the US, Homebase in the U.K., and Migros in Switzerland have received positive press for their commitment to purchasing and selling certified products.

Credibility

Credibility is key to successful implementation of environmental marketing strategies. Since consumers rarely see companies as credible sources of information, companies face a challenge in implementing environmental marketing strategies. Certification is being used as a means of meeting that challenge and enhancing the credibility of company communications. Swedish industry saw its improved credibility when communicating with customers as a critical advantage to becoming certified.

Public and company forestland managers in the US hope that certification and the evaluation by a set of outside experts will give citizens more confidence in their management decisions. Managers also hope certification will lead to fewer legal challenges to timber harvests, which have been increasingly common in recent years.

Part of the credibility of certification derives from the involvement of a wide range of stakeholders. Companies and ENGOS often work as partners rather than adversaries. One European retailer sees the affiliation with WWF (through participation in a buyers' group) as one of the most important aspects of its commitment to purchase certified wood. Since certification is supported by many ENGOS, some companies have embraced certification to minimize the risk of being targeted by those groups.

Premiums

Early supporters of certification claimed that consumers would be willing to pay more for "environmentally preferable" products. Therefore, a number of studies have investigated the willingness-to-pay of consumers and various industry sectors (e.g., Ozanne and Vlosky 1997, Rametsteiner et al. 1998a, Vlosky and Ozanne 1997, Winterhalter and Cassens undated), but none observed actual consumer behavior. Therefore, it is difficult to conclude that the respondent's expressed willingness-to-pay would materialize in an actual buying situation.

In evaluating the nature of the marketplace, it is critical to use a common definition of a premium. A premium results when a higher price is paid for a certified product than for the same product lacking certification. Unfortunately, claims about premiums are often made when in fact the products are processed differently or are sold in entirely different markets.

Generally, companies have been unsuccessful in obtaining consistent premiums. Forsyth (1998) interviewed 11 companies in the US and Europe and found that six had paid premiums ranging from 5% to 20% for certified product and four claimed their customers had paid premiums ranging from 5% to 10%. AssiDomän in Sweden reports getting around 6% more for certified sawnwood than for uncertified sawnwood of the same quality and \$20-30 more per ton for certified pulp in some European markets (Forsyth 1998). One US veneer manufacturer does consistently pay a 10% premium for certified logs, and at least part of that increased cost is recovered through higher veneer prices.

Today, although companies selling certified products may not be receiving consistent premiums, they are confident certification will differentiate them from their competitors and influence customer purchase decisions. One small US company claimed that without such differentiation they would be doomed to the highly competitive commodity market dominated by large companies. One small US sawnwood wholesaler claimed that the real value of certification was in maintaining or improving market share, because a low-margin product like sawnwood has to be sold quickly and in volume. Certification has allowed him to get the full

margin more often.

Networking and Improved Marketing

Because the infrastructure for certified products is still being developed, companies are finding it necessary to network with suppliers and competitors alike. This is especially positive for small companies which can learn from each other and co-develop markets, while conserving individual time and energy. Mid-sized companies also benefit, as they see building such alliances as one way to become more competitive with big companies.

Selling certified products requires improved marketing skills. For example, sawnwood companies that have traditionally operated in a commodity market, with a commodity sales approach have changed their approach to market certified products. Pursuing non-traditional markets has required companies to listen to the needs of customers and take new, proactive marketing approaches.

Factors Limiting Market Development

Despite growth in markets for certified products, a variety of factors impede their development. Because the marketplace is young, much of the infrastructure that is needed to process and deliver products to a wide customer base has yet to develop. Although the dynamics of each market and each product are unique, the following subsections outlines some of the difficulties companies face in developing markets for certified products.

Limited Market Demand

At this point in the evolution of markets for certified products, the final consumer is not a significant player. Despite public interest in forest management, there is limited evidence to indicate mass market demand for "responsibly sourced" wood products. Few consumers know what certification is. The consumer market for certified wood products was less than one percent of total European consumption in 1997 (Rametsteiner et al. 1998a). Even though certification has had a high-profile in the industry for several years, very few final consumers have

been exposed to certified products or certification ecolabels.

Many advocates of certification feel that generating demand is simply a matter of educating the consumer. One mid-sized, US company claims that once a potential customer understands certification, selling the product is not difficult. The do-it-yourself market in the UK provides the first indication of mass consumer reactions to FSC-labeled forest products. The FSC ecolabel is now fairly common in do-it-yourself retail outlets, it has received considerable press, and members of the 1995+ Plus are actively using it in their advertising.

There is demand for certified products in a few key European countries. At least one supplier has expressed concern that the market could grow too fast. If demand is consistently larger than supply, companies unable to obtain certified products could abandon their commitment to buy certified products or, switch to non-wood substitutes.

There is often a logistical gap between those who are demanding certified products and those who are in a position to supply them. Companies in South and Central America have certified products but have had difficulties attracting buyers (limited processing capabilities and species availability are partially responsible). Other evidence of this gap is that most companies are able to sell only a low percentage of their certified products to customers specifically requesting them.

Lack of Supply

Companies in various markets and levels of the supply chain cite lack of supply as the biggest challenge to market development. Even a strong supporter of certification who cannot get wood may stop pursuing markets for certified products and lose enthusiasm. European retailers are anxiously awaiting the supply that can help them meet the commitments they made when joining buyers' groups. There is concern within the industry that if more supply is not available soon, the market for FSC products could lose momentum.

Limited Industry Involvement

Mainstream industry has generally been passive about or even resisted the trend toward certification. The FSC scheme in particular has been resisted for a variety of reasons including the costs of certification and uncertainty of cost recovery, the challenges associated with chain-of-custody, the uncertainties of standards development, and the lack of significant market demand. Despite this resistance, 75% percent of Finnish, 68% of British, and 60% of German companies surveyed felt that a widely used certification system was needed (Rametsteiner et al. 1998a). Resistance also stems from the fact that there is considerable confusion and misinformation about certification, and especially about chain-of-custody certification and percentage-based-claims policies. All of these factors combine to make an underdeveloped, inefficient marketplace with gaps in the infrastructure.

Those companies that are interested in buying and selling certified products are faced with several challenges: There is a limited volume of certified products available, and there are few producers. Availability and consistency of supply are concerns at all levels of the industry from wholesalers and retailers to home builders and architects. According to one US contact, supply is not consistent enough for secondary manufacturers yet. A US wholesaler stated that even though production is happening, distribution is still a problem.

Because everyone along the supply chain must be chain-of-custody-certified, certification can add complexity and costs. Companies involved in distribution may find it difficult to obtain enough product volume to justify the allocation of separate storage space and other distribution resources. On the other hand, large, vertically integrated firms with large areas of forestland should be especially well positioned to capitalize on certification.

The Difficulty with Premiums

According to some in the industry, the pursuit of premiums is restricting market development. For example, in the US hardwood plywood

industry, premiums are often paid all along the supply chain. By the time plywood reaches the final customer, it might cost 50% more than its non-certified equivalent. This kind of price differential makes market development difficult.

On the other hand, if producers cannot get a premium, they may have little incentive to become involved. Some producers question, or are even cynical about, commitments to purchase certified products made by European buyers. The producers feel that price is still the overriding factor in purchase decisions.

Fragmentation and Specificity of Market Demand

Final consumers and secondary processors are accustomed to the availability of broad product ranges. Because supply of certified product is still so undeveloped, producers often find it difficult to meet the specific demands of their customers. For example, only a limited number of thicknesses of certified core material is available in the US hardwood plywood industry. This constraint in turn limits the thicknesses of final products. Consequently, companies marketing certified hardwood plywood cannot offer a full range of options to their customers.

US hardwood sawnwood producers, which are typically small, have difficulty meeting large orders of any given species, dimension, etc. Even large producers of softwood sawnwood have experienced difficulties in providing the various lengths demanded by their customers.

At times, the demand for certified products centers on a narrow range of grades. A producer might quite successfully develop a market for that narrow grade range, but be left with the rest to find a market for. This situation is common in the veneer and hardwood sawnwood industries. Some suppliers do not offer their lower-grade products as "certified", even though they could, because they fear the image of the FSC label could be hurt.

Suppliers both large and small receive orders that are too small to fill economically. When a large medium-density fiberboard manufacturer that normally deals in car loads or container loads is approached by a potential customer who wants "at least 50 pieces per year", it simply cannot fill such a small order. Similarly, a certified sawnwood manufacturer in the US approached by a homeowner in another state to supply certified sawnwood for one home is unlikely to make a profit on the venture.

Chapter 5 - DISCUSSION AND RECOMMENDATIONS

Forest Certification Emerges out of Environmental Concerns

In recent years, sustainability and the environment have emerged as key issues in the forest industry's market. Global environmental problems and resulting environmental consciousness has widened the sphere of marketing and resulted in aggressive new market change agents. The forest industry has globalized, and the resulting international trade and marketing form a large network of relationships, influence, and communication. ENGOs working for sustainable forest management are successfully accessing and influencing this network. Stakeholder expectations demanding sound practices from

forest owners appear to be permanent. Forest certification offers a means of demonstrating those expectations are being met.

A general societal goal for forest certification is to promote socially and ecologically sustainable forestry. However, as an integral part of environmental marketing, forest certification can also serve as a tool to achieve company goals, since companies may gain competitive advantage through their positive environmental actions.

Much more than certification is needed to build the infrastructure needed for sustainable forest practices worldwide. Forest certification cannot compensate for a lack of other mechanisms such as forestry and environmental

legislation. It can, however, complement and accelerate their development.

Forest Certification is Here to Stay

NGOs have played a key role in the development of forest certification. It offers them an effective alternative to the perceived inefficiency of international initiatives, government policies, and boycotts in reducing deforestation and promoting sustainable forest management. Open-minded companies in both consuming and producing countries have accepted this concept and are using it skillfully as a marketing tool.

Resistance to the development of forest certification on the part of industry and land owners has been powerful, and resistance to the FSC form of certification has been strongest. Despite their sharing many common goals, supporters and critics of the FSC are separated by a psychological gap of confidence that is large and extremely difficult to overcome. This gap has limited the successful development of not just the FSC approach to certification but also that of other certification schemes. Although the FSC and other schemes have the same general goals, supporters do not always share common values. Changes in values take time.

The conflict between FSC supporters and supporters of other systems has often obscured the original concepts of encouraging sustainable forest management, especially in tropical forests, and positively communicating with the market. In addition, the intensity of the debate may have temporarily marginalized other important mechanisms to improve sustainability. The gradual evolution of values and building of trust is underway; once trust is established, successful development of forest certification can be expected to continue.

Seeking Solutions

The longer the discussion has lasted, the more widely the basic idea of forest certification has been accepted. Both ecological and institutional conditions are in favor of national certification systems containing the following features:

- 1) performance standards based on consensus-based, internationally developed criteria and indicators (The UK and Finnish processes have shown that FSC Principles & Criteria and Pan-European [Helsinki] Process Criteria & Indicators can be harmonized)
- 2) procedural standards to ensure reliable management and continual improvement
- 3) regional/group certification
- 4) independent, third-party auditing of both performance levels and management systems
- 5) meaningful input and involvement from the ENGO community
- 6) voluntary and free competition within the system.

Any system meeting these requirements must also be considered credible and attractive to all important stakeholders, or conflict will result. Influential industrial customers have emphasized that any acceptable certification system must enjoy at least a minimum consensus and be conflict-free. None of the systems offered to date are conflict-free.

Recommended Certification System Requirements

It is expected that the future will consist of mutual recognition and harmonization of schemes. The global forest sector can only benefit from the development of mechanisms for forest certification that truly support the pursuit of sustainable forest management and that are accepted by forest owners, forest industry, and the marketplace. Successful sustainable forest management is dependent on the existence of national standards and forest owners' willingness to follow the standards. Market acceptance is dependent on the perceived value of the ecolabeling system.

Mechanisms meeting all the requirements can be formed by separating the operations in the forests and the operations in the marketplace. The idea of separation is supported by the fact that

different principles are ruling the functioning of forests and markets. Ecological principles are important in the forest; markets are ruled by market principles.

If forests and markets are separated, a forest certification system would consist of three components:

- National Audit System - a system based on national standards and conducted by an independent national or international auditing organization
- International Labeling System - a credible and attractive system that awards certificates of sustainable forest management and associated labels
- Harmonization/Authentication System - an independent system for analyzing the compatibility of the national auditing standards and the standards of the international labeling system. The analysis aims at mutual recognition among systems.

The appropriate functioning of a National Audit System requires:

- Countries develop national standards and an auditing system containing both internal and external audit procedures through a consultative process
- Wood suppliers manage their forests to meet the requirements of sustainability defined by the standards
- Internal audits are made according to the auditing system
- Accredited independent auditors confirm the internal audit.

The appropriate functioning of the International Labeling System requires that

- The owner of the label defines the terms of its use
- The owner of the label defines chain-of-

custody requirements

- The label owner sells the license to use the label to the marketer of the product
- The label owner ensures that the label is well known, credible, and attractive to the market. (The ethics and morals of the label owner have a crucial impact on the credibility and market acceptance of the label)
- The labels are designed for use in the marketplace and there is no monopoly, but rather, open and fair competition; any company that qualifies for the label can be licensed to use it.

The purpose of the Harmonization/Authentication system is to make it possible for a product originating from a nationally audited forest to carry an international ecolabel if the national sustainable forest management standards and auditing systems meet the requirements of the international label.

In principle, there are two ways to achieve harmonization or authentication: harmonization of standards and verifying certification schemes.

Developing the UK Audit Protocol (page 19) is an example of national harmonization of certification standards. The objective of this process was to deliver a forest management certification standard for the UK that was based on the UK government standard and the FSC draft standard. National negotiations among stakeholders is a prerequisite for this harmonization approach.

The Kerhout verification procedure (page 19) is an example of authentication. It verifies whether a certification scheme meets the minimum standards of sustainable forest management indicated by the ecolabeling system. An authentication organization may be national or international. To be effective, an authentication system, like a harmonization system, requires acceptance by all the important stakeholders.

When sustainable forest management and its auditing are separated from the development and

marketing of ecolabels, but reconnected through a harmonization/authentication system, all parties can concentrate on the essential: developing sustainable forest management in the forest and

promoting sustainable forest management through the marketplace.

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World Wide Web Sites

Buyers Groups

Certified Forest Products Council
<http://www.certifiedwood.org/>

WWF listing of groups
<http://www.panda.org/forests4life/network.htm>

ENGOS

The World Conservation Union (IUCN)
<http://www.iucn.org/>

World Wide Fund for Nature
<http://www.panda.org/forests4life/index.htm>

Greenpeace International
<http://www.greenpeace.org/index.shtml>

Friends of the Earth
<http://www.xs4all.nl/~foeint/>

Robin Wood
<http://www.umwelt.org/robin-wood/english.htm>

Bund
<http://www.bund.net/>

Swedish Society for Nature Conservation
<http://www.makitalo.se/nature/welcome.html>

Sierra Club
<http://www.sierraclub.org/>

Wilderness Society
<http://www.wilderness.org/>

Natural Resources Defense Council
<http://www.nrdc.org/nrdc/>

Standards Organizations

International Organization for Standardization
<http://www.iso.ch/>

National Members of the International Organization for Standardization
<http://www.iso.ch/adresse/membodies.html>

Forest Stewardship Council Related Sites

Forest Stewardship Council - International

<http://www.fscoax.org/>
Forest Stewardship Council - United States
<http://www.fscus.org/>
Forest Stewardship Council - United Kingdom
<http://www.fsc-uk.demon.co.uk/>
Forest Stewardship Council - Canada
<http://www.web.net/fscca>
Forest Stewardship Council - Sweden
<http://www.fsc-sweden.org/>

Certifying Organizations

International Organizations

International Tropical Timber Organization
<http://www.itto.or.jp/about.html>
Food and Agricultural Organization
<http://www.fao.org/WAICENT/FAOINFO/FORESTRY/forestry.htm>
Economic Commission for Europe, Timber Division
<http://www.unece.org/trade/timber/Welcome.html>
Intergovernmental Forum on Forests
<http://www.un.org/esa/sustdev/iff.htm>
Commission on Sustainable Development
<http://www.un.org/esa/sustdev/csd.htm>

Associations and Related Organizations

American Forest & Paper Association
<http://www.afandpa.org/>
Canadian Pulp and Paper Association
<http://www.open.doors.cppa.ca/english/index.htm>
VDZ (German Magazine Publishers Association)
<http://www.vdz.de/>
VDP (German Paper Producers Association)
<http://www.vdp-online.de/>
Finnish Forest Industries Federation
<http://www.forestindustries.fi/>
Swedish Forest Industries Federation
<http://www.forestindustries.se/>

Scientific Certification Systems
<http://www.scs1.com/forests.html>
SmartWood
<http://www.smartwood.org/>
SGS, Qualifor
<http://www.sgs.co.uk/qualifor/>
SKAL
<http://www.euronet.nl/users/skal/>
Soil Association
<http://www.earthfoods.co.uk/>

Canadian Sustainable Forestry Certification Coalition
<http://www.sfms.com/welcome.htm>
Nordic Timber Certification Project
<http://www.nordicforest.org/default.htm>

Country Specific Sites

Finland Certification Page
<http://www.smy.fi/certification/>
Canada's National Forestry Page
<http://www.canadian-forests.com>
Norwegian Sustainable Forestry and Certification Project
<http://www.levandeskog.no>

Miscellaneous Sites

Steve Shook's Page
<http://www.forestdirectory.com/>
Jean-Pierre Kieken's Page
<http://www.ulb.ac.be/assoc/iff/study/>
Certification Research of the Department of Forest Economics, University of Helsinki
<http://honeybee.helsinki.fi/MMEKN/research/research.htm>
European Forest Institute, Forest and Forest Product Certification Information Service
<http://www.efi.fi/cis/>