

Forest Certification in the Context of Sustainable Development

Ed Pepke¹, Tapani Pahkasalo² and Rune Juelsborg Karsten³

1. Dr. Ed Pepke, Forest Products Marketing Specialist, UNECE/FAO Timber Section, Geneva, Switzerland

2. Mr. Tapani Pahkasalo, Forest Economist, Indufor Oy, Helsinki, Finland

3. Mr. Rune J. Karsten, Masters Student, University of Bangor, Wales, UK

Abstract

Sustainable development of the entire forest sector begins in the forest and continues until wood and paper products complete their life cycle. Sustainable forest management has been practiced for centuries in some countries, as it is essential to maintaining a constant stream of forest products, including non-wood forest products, to meet the ever-growing demands of society. On the other side of the sector, sustainable forest products markets are essential to maintain a demand and value for the forest's products and services. Certification of sustainable forest management is one means to assure that harvests are continually conducted in an environmentally, socially and economically sustainable manner. Sustainable development of the forest sector is not practiced globally, which leads to the necessity of having objective communication channels between producers and consumers about the source and production of their wood and paper products. Certification is a means to communicate to the markets about good harvesting, production and marketing practices which build consumer confidence in buying and using hardwoods and the many products derived from them.

Introduction

FAO defines sustainable development as the management and conservation of the natural resource base, and the orientation of technological and institutional change in such a manner as to ensure the attainment and continued satisfaction of human needs for present and future generations (FAO, 1988). Such sustainable development (in the agriculture, forestry and fisheries sectors) conserves land, water, plant and animal genetic resources, is environmentally non-degrading, technically appropriate, economically viable and socially acceptable.

Initiated in the early 1990s, certification of sustainable forest management (SFM) was originally aimed at ending forest degradation and deforestation in tropical countries. However, quickly the temperate and boreal forests became a target for certification too. Certification of sustainable forest management (SFM) is one means to assure that forest utilization (harvesting) is continually conducted in an

environmentally, socially and economically sustainable manner. This last pillar of SFM, "economic", necessitates values from forests, which in most cases are forest products, both wood and non-wood.

Thus, in the forest sector, sustainable development necessitates SFM, and that requires sustainable forest products markets (SFPM).

This paper, and its presentation, begins with the role of SFM in sustainable development. Then the value of certification is discussed in the context of achieving SFM and in producing a stream of certified forest products. In line with this conference, certified hardwood products and their contribution back to sustainable development closes the loop in this analysis.

Forest sector's role in global sustainable development

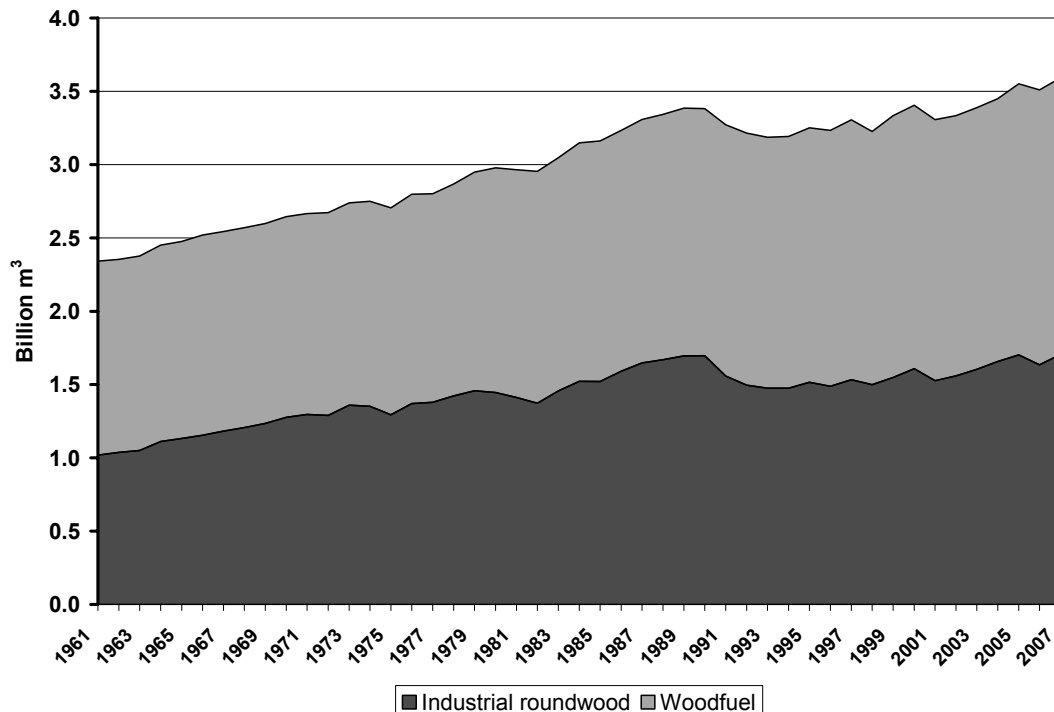
Sustainable forest management is a key factor in ensuring sustainable development of forested developing economies, guaranteeing key environmental services for the local population, the region and also their potentially global trading partners. The environment knows no political borders and with worldwide trade, importers share a responsibility for the source of their forest products. Forests have multiple functions in timber production, biodiversity and genetic conservation, in social and cultural functions and increasingly in carbon sequestration and bioenergy production.

Forests are an invaluable resource for a large portion of the world's population and it is estimated that a total of 1.6 billion people depend on forest resources for their livelihood (UN-DESA 2009). The forests, in addition, provide the entire world with a large range of

invaluable ecosystem services and are home to as much as 80% of the terrestrial biodiversity. Therefore forests play a crucial role in worldwide sustainable development.

Human exploitation of forests is the main reason for the decline of forest cover in some areas, mainly in the tropical and developing world. This exploitation often derives from complex global and regional problems, such as poverty, illegal logging, slash and burn agriculture, and unsustainable collection of woodfuel. It will be decisive to establish a useful framework for the exploitation of existing forests, in order to secure this invaluable resource for future generations (UN-DESA 2009). Global roundwood production is approximately 3.5 billion m³ of which slightly more than half is used as woodfuel, often in simple, inefficient domestic uses for heating and cooking in the developing world (graph 1).

GRAPH 1
World production of roundwood, 1961-2007



Source: FAOSTAT, 2009.

Most of the forests with unsustainable management are found in the developing countries, and the vast majority of natural woodlands in these countries are hardwood forests. It is therefore especially important that the hardwood industry acknowledges its responsibility in developing means of securing a more sustainable use of the forest resource and consequently sustainable development in these regions.

Sustainable forest management

Sustainable forest management is not a fixed concept as the society and also forests change constantly and different function and priorities for forest emerge. Currently, the FAO defines the SFM as the stewardship and use of forests and forestlands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfill, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems (MCPFE, 1993).

Criteria and indicators are tools which are used to conceptualize, evaluate and implement sustainable forest management. Criteria define and characterize the essential elements, as well as a set of conditions or processes, by which sustainable forest management is assessed. Periodically measured indicators reveal the direction of change with respect to each criterion. Criteria and indicators of sustainable forest management have been defined by government and non-government processes. They are widely used and many countries produce national reports that assess their progress toward sustainable forest management. The UNECE/FAO Timber Section collects these periodic reports for the 56-country UNECE region, and submits them to the Global Forest Resource Assessment by FAO. The next assessment is scheduled for 2010.

Different forest certification systems have defined their own principles for sustainable forest management, which for most parts overlap

and are based on commonly agreeable principles. For example the UK Government, Central Point of Expertise (CPET), has laid out a public procurement policy that defines the types of timber products that may be purchased with government funds, and the CPET finds that all main international forest certification systems do proof sustainability of forest management.

Certification of sustainable forest management and certified forest products¹

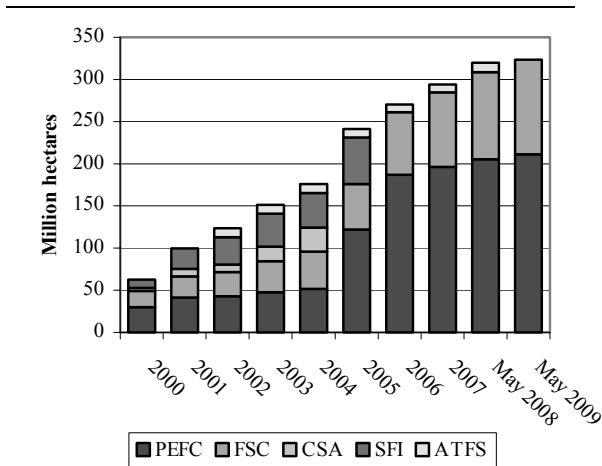
Certification of SFM is one means to assure that forest utilization (harvesting) is continually conducted in an environmentally, socially and economically sustainable manner. Certified forest products carry labels demonstrating, in a manner verifiable by independent bodies, that they come from forests that meet standards for sustainable forest management. Consumers may find labels on furniture and wood products, while manufacturers can verify the sources through the certification scheme's chain-of-custody procedures. Forest certification is a market based instrument to prove the good management of forests and communicate this to the sustainable forest products markets. Without premiums for certified forest products, a main benefit of certification is as a communications tool between forest products producers and consumers.

By May 2009 the global area of certified forest endorsed by one or other of the international frameworks – the Forest Stewardship Council (FSC) and the Programme for Endorsement of Forest Certification (PEFC) – amounted to 325.2 million hectares, approximately 8% of global forest area (graph 2). In addition, there are some smaller areas independently certified under systems operating at the national level. For example, at the end of 2008 around 1.54 million hectares were certified by the Indonesian Eco-labelling Institute (LEI) system and 0.7 million hectares by Japan's Sustainable Green Ecosystem Council (SGEC).

¹ UNECE/FAO *Forest Products Annual Market Review, 2008-2009*, Certified forest products markets. Original authors Mr. Rupert Oliver and Mr. Florian Kraxner.

GRAPH 2

Forest area certified by major certification schemes,, 2000-2009



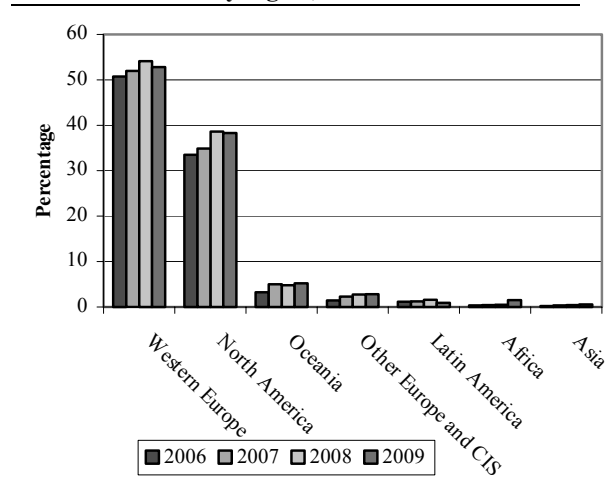
Notes: As of May 2009, approximately 2.6 million hectares have been certified by more than one scheme (mostly FSC and PEFC). These are not deducted from any scheme – the graph therefore shows a slightly higher amount of total forest area certified than exists in reality. FSC = Forest Stewardship Council; PEFC = Programme for the Endorsement of Forest Certification schemes; CSA = Canadian Standards Association Sustainable Forest Management Program (endorsed by PEFC in 2005); SFI = Sustainable Forestry Initiative (endorsed by PEFC in 2005); ATFS = American Tree Farm System.

Sources: Individual certification systems, the Canadian Sustainable Forestry Certification Coalition and authors' compilation, 2009.

The regional distribution of certified forest area is highly uneven (graph 3). Approximately 54% of the total area of forest in western Europe and 38% in North America is certified. Elsewhere, the proportion is negligible, rising to 3% in eastern European countries and the Commonwealth of Independent States (CIS), and to 5% in Oceania (concentrated in Australia and New Zealand), and no higher than 2% in all other regions. The estimated potential global industrial roundwood supply from certified forest amounted to 411 million m³ in May 2009, about 26% of the total industrial roundwood supply.

GRAPH 3

Certified forest area as a percentage of total forest area by region, 2006-2009



Notes: The forest area is based on FAO's State of World's Forests 2009 data, excluding the category "other wooded land". Eastern Europe includes only non-EU countries. CIS is the Commonwealth of Independent States. Information valid as of May 2009.

Sources: Individual certification systems, Forest Certification Watch, the Canadian Sustainable Forestry Certification Coalition, authors' compilation, 2009 and FAO, 2009.

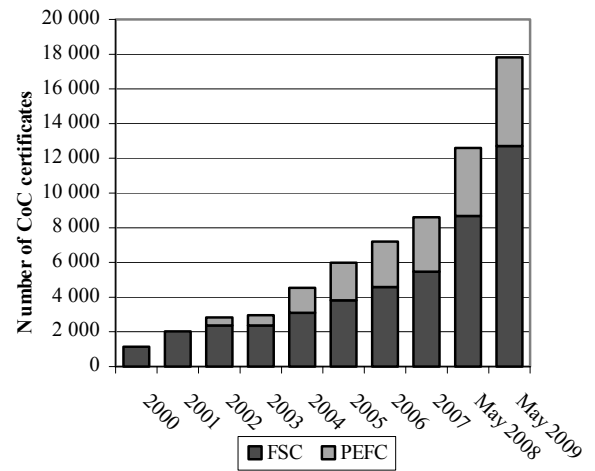
The pace of expansion of global certified forest area has slowed dramatically since 2006. Certified forest area increased by nearly 50 million hectares a year between 2001 and 2005 – mainly due to a rapid increase in certified forest area in North America – then the rate slowed by half to 25 million hectares a year in 2006 and 2007. More recently the rate has stagnated even further, not exceeding an increase of 4 million hectares between mid-2008 and mid-2009.

Now that many of the largest state- and industry-owned lands in the developed world are already certified, the certification movement faces the significant challenge of expanding in more difficult areas. These include both developing countries – many of which still lack capacity, resources and sufficient incentives for forest certification – and the small non-industrial private and communal sector which owns or manages a significant proportion of forests in many parts of the world.

The problems with certification are related to its relatively high costs and requirements for documentation in the processes, and some forest owners will therefore struggle to obtain certification. This is enhanced by the fact that many certified timber products fail to earn price premiums for the producers, leaving the forest owners to pay the costs of certification. Consequently it is only 8% of the world's forests that are certified as of today, and approximately only 6% of the certified areas are found in tropical countries. The objective remains unachieved of reducing deforestation and degradation via certification, and the question is whether it will be achieved in a foreseeable future.

While the rate of forest certification has stagnated in recent years, the number of Chain of Custody (CoC) certificates has been dramatically escalating (graph 4). The majority of CoC certificates are based on business to business relations, in part for corporate responsibility programmes. It is a minority of CoC certificates that are driven by consumer demand. Despite the dramatic increase in CoC certificates, it is still a minority of companies that have obtained certification, and therefore there is still potential for considerably greater numbers of company involvement.

GRAPH 4
Chain-of-custody certified trends worldwide, 2000-2009



Notes: The numbers denote CoC certificates irrespective of the size of the individual companies, their volume of production or trade. Information valid as of May 2009.

Sources: FSC and PEFC, 2009.

Both of the major certification schemes, FSC and PEFC, have shown keen interest in expanding their activities in the developing countries. Furthermore, many plantations established in tropical regions have obtained certification. Plantations provide wood and non-wood products from forests with SFM, lowering the impact on natural forests. Products from the certified plantations have proven to be good alternative sources for tropical hardwood products, mainly due to the attributes of the wood, but also because it is certified and guarantees that it is not illegally or unsustainably logged. This way the forests, and thus the livelihood of the people in many of the world's developing countries will be secured.

Certification of sustainable forest management has evolved and accelerated with demand for certified forest products from public procurement policies and lately from private procurement policies that have evolved. Several governments have established procurement policies where only legal and sustainable timber products are purchased and these policies are being implemented. Private companies are increasingly implementing green procurement policies, some under pressure from the

environmental NGO's and some by own initiative, aiming to source more sustainable timber products. Main driver has not always been the end consumer demand but rather company's own sustainability policies, as part of larger framework of corporate social responsibility strategies, where forest certification plays an important role to communicate efforts to ensure sustainable procurement.

Companies' corporate responsibility has become more important during the economic recession. With the abundant supply of primary as well as processed wood, consumers have a wider variation of suppliers, and they can choose not only to shop for price but also for certification. Suppliers, pressed by collapsed demand, are forced to compete on other factors than price, and proof of certification and/or legality are likely to become a more increasingly important factor.

Certified hardwood products²

As large share of raw material for hardwood products derive from areas with concerns for unsustainable harvesting, and even illegal practises. As a result there are now some new processes that will affect trade in hardwood products. The need for suppliers of all wood products to demonstrate that their products derive from legal sources came into sharp focus with passage by the US legislature of an amendment to the Lacey Act as part of the Farm Bill of May 2008. This legislation means that it is now unlawful in the US to import or trade in timber and its derivatives harvested in contravention of the laws of any country. This new legislation, which carries with it the threat of a maximum fine of up to \$250,000 and a sentence of up to five years in prison, provides a strong incentive to US companies to assess and minimize the risk of suppliers delivering wood products from illegal sources. Implementation of the law will be defined in the courts.

² Text partly reproduced from UNECE/FAO *Forest Products Annual Market Review, 2008-2009*, Sawn hardwood markets. Original author Mr. Roderick Wiles.

The EU is currently reviewing a proposal for legislation that would impose a requirement on all operators who "first place timber and timber products" to implement a due diligence system to minimize the risk of illegal wood entering supply chains. There is much pressure from the European Parliament, ENGOs and some member state politicians to reduce the focus of the legislation on risk assessment and to impose a requirement on operators at every stage of the wood chain to provide proof of legality through independent legality verification and chain-of-custody systems. But other Member States seem to have a greater appreciation of the costs and practical implications of the latter approach. A compromise approach has been suggested by the Government of the UK – to link the legislative requirement for due diligence procedures with a Lacey Act-like prohibition on placing illegally harvested timber on the EU market. Under this approach, the burden of proving such an offence would remain with the authorities. An EU regulation is expected to be introduced before the end of 2009 with a period allowed for development of appropriate regulatory capacity following passage of the law.

While these measures will tend to give a boost to those temperate hardwood suppliers able to provide PEFC- or FSC-certified wood products, they will also encourage the development of alternative mechanisms to demonstrate that wood is a low risk with respect to illegal supply. Last year, for example, the American Hardwood Export Council pioneered an approach based upon independent, objective research to demonstrate low risk at a regional level. This approach is particularly appropriate to smaller non-industrial forest owners, who, due to fragmented supply chains and relatively higher unit costs, often struggle to deliver independently certified wood.

EU policy makers continue to invest considerable time and effort into refining the details of public-sector timber-procurement policies. The Governments of Belgium, Denmark, France, Germany, the Netherlands and the UK have developed elaborate criteria for central government procurement of timber

products. While these differ widely in the variety of mechanisms that will be accepted as evidence of conformity, it is becoming increasingly clear that forest certification of one form of another will ultimately be the best method of assuring continuing access to central-government building contracts, at least in northern Europe.

There is great reluctance among end-users to pay premiums for certified or verified legal wood products, a situation which places significant limits on the ability of suppliers to charge more. The highest premiums for FSC tropical hardwood may only occasionally be passed on when supplying high-profile public-sector contracts. As a result, there are signs that some importers and manufacturers implementing green procurement policies have switched their emphasis away from FSC-certified products in favour of less expensive, legally verified products when sourcing from tropical supplying countries. This is true even in the Netherlands, which has traditionally been the strongest adherent to FSC certification.

A recent study shows that there is a great reluctance to pay a price premium for legal or and sustainable forest products. It is only in restricted conditions that prevail in some parts of the hardwood sector and in specialized softwood products that price premiums arise. This is mainly due to the limited supply of certified/legal products within these sectors. Price premiums for legal/certified tropical sawnwoods range from 3-15%, with the majority of the premiums in the lower part of the range. The highest premiums are found with highly specialized products as tropical sawn hardwood from Africa/Brazil, where price premiums can be as high as 20-50%. These price premiums most often occur, after the signing of high-profile public-sector contracts (Forest Industries Intelligence Ltd, 2009).

Conclusions

From the bottom up, certification of hardwood products is a foundation for sustainable development. Sustainable forest products markets are critical for the economic pillar of SFM. Whether from domestic or imported sources, hardwood buyers are indirectly responsible for ensuring SFM. The hardwood trade is responsible for assuring the legality and sustainability of the sources of their wood.

As with other forest products market sectors, the market for certified forest products has succumbed to the effects of the economic crisis, with some buyers switching to less expensive legally verified products. Demand for certified forest products continues within the trade, especially business-to-business. The public procurement demands are ever increasing, as are those from corporate responsibility programmes of companies and their trade associations. Green building rating systems promote certified wood in energy-efficient construction, although discrimination between systems currently exists, precluding some equally sustainably produced sawnwood, panels and engineered wood products.

It is essential for the hardwood products community to prepare for both legislative and market environment changes that lie ahead. Key issues are the legality of products and how to demonstrate this, marking of origin in the products (whether required or not) and changing consumer and especially market environment requirements and preferences. Responsible sourcing as part of corporate policies has been a common practice for larger hardwood products operators for some time already and this is becoming mainstream for the smaller operators also. This all means the hardwood products sector is constantly moving towards more sustainable markets where all market participants need to demonstrate their commitment. Forest certification is a likely tool to be used although other solutions will be seen also.

Both EU and US legislation to control the trade and use of illegally harvested timber will have a direct effect on the hardwood trade, driving

demand for traceability of legally sourced products, either through certification or other independent verification of legality. Sustainable forest products markets are essential to maintain a demand and value for the forest's products and services. Since overall demand for hardwood products decreased in 2008 and continues to do so in 2009, hardwood suppliers are becoming ever more conscious of the need to use environmental issues as a way of capturing a larger share of a shrinking market.

References

ATFS, American Tree Farm System. 2009. Available at: www.treefarmssystem.org/

Canadian Sustainable Forestry Certification Coalition. 2009. Available at: www.sfms.com

CSA, Canadian Standards Association Sustainable Forest Management Program. 2009. Available at: www.csa-international.org/product_areas/forest_products_marking/

CPET, Central Point of Expertise on Timber. Available at: www.proforest.net/cpet/

FAO. 1988. Available at: www.fao.org/fishery/topic/13297/en

FAO. 2009. State of the World's Forests 2009. Rome. Available at: www.fao.org/forestry

FAOSTAT. 2009. Available at: <http://faostat.fao.org/default.aspx>

Forest Certification Watch. 2009. Available at: www.certificationwatch.org/

Forest Industries Intelligence Ltd. 2009. The EU Market for "Verified Legal and "Verified Legal and Sustainable" Timber Products. UK Timber Trade Federation and Department for International Development. June 2009.

FSC, Forest Stewardship Council. 2009. Available at: www.fsc.org/

LEI, Indonesian Eco-labelling Institute. 2009. Available at: <http://lei.or.id/>

MCPFE, 1993. 2nd Ministerial Conference on the Protection of Forests in Europe. Helsinki Resolution. 16-17 June 1993, Helsinki, Finland. Available at: www.mcpfe.org/files/u1/helsinki_resolution_h1.pdf

PEFC, Programme for the Endorsement of Forest Certification schemes. 2009. Available at: www.pefc.org

SFI, Sustainable Forestry Initiative. 2009. Available at: www.sfiprogram.org/

SGEC, Japan's Sustainable Green Ecosystem Council. 2009. Available at: www.sgec-eco.org/index%28e%29.html

UN-DESA Policy Brief No. 16. 2009. United Nations Department of Economic and Social Affairs.

UNECE/FAO, Forest Products Annual Market Review. 2008-2009. Geneva, Switzerland. Available at: <http://timber.unece.org/index.php?id=208>