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## Certification, Timber Trade and Market

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*Certification is a benchmark market instrument for assuring sustainable forest management and legality of timber trade. It is being adopted fairly fast forward, already covering over 325 million hectares with an estimated industrial roundwood supply of 430 million m<sup>3</sup>. However, certification costs, know-how and means remain largely beyond the current culture and capacity of tree farmers, woodland owners and public forest custodians, especially in many developing countries. Institutional mechanisms and strategic vision are warranted for drawing upon the certification opportunity through policies, programmes and partnerships pertinent under different contextual considerations. That is required for sustaining forests, trees and related resource assets, their valorization and benefit-sharing among producers and consumers, small and medium enterprises, corporate entities, local communities and other stakeholders. Also for taking advantage of the burgeoning timber trade and forest products market in the ongoing urbanization and globalization processes, the current financial downturn notwithstanding.*

*Need exists for building a better understanding about the diverse aspects of forest certification, involving planners, producers, managers and manufacturers of wood and non-wood forest products, eco-tourism and environmental services. That is because certification can contribute towards improving timber trade and market mechanisms and leveraging sustainable management of forests and related renewable resources for payment of ecosystems services. Sustainable management calls for conjoint commitment by all the stakeholders, including those concerned about attaining Millennium Development Goals, combating climate change, and balancing social, economic and environmental dimensions of development. Persistent poverty as a cause and consequence of deforestation and forest degradation in the tropics is a management issue bedeviled by the lack of good governance, legality of timber trade and deployment of credible certification systems. Despite the plethora of international environmental agreements and commendable national policies, it remains a challenge to save and restore the earth's bio-diversity rich and climate-change mitigating tropical forests.*

*Environmental awareness and ethical consumerism buttress certification as a tool for communicating the ecological and social performance of good forest management. Credible certification system standards, criteria and indicators, and the chain-of-custody, ensure that forest products are derived from responsibly managed forests through legitimate harvesting. This enables access to reputed retailers and major markets, whereby the stewardship role and responsibility of forest owners and managers should get recognized and rewarded. With these perspectives, the paper provides a background about the modus-operandi and relevance of certification for sustainable forest management, markets and trade worldwide.*

**Key words:** *Certification, Sustainable Management, Trade, Market*

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### Environment & Development

Much is being made of the sustainability limits of the earth's resources. Often this is done without considering the plight of poor people, whose livelihoods are intimately interlinked with forests and related natural resource assets. In that context, sustainable trade and development, in-country and across borders, are no less important than critical climate change and other environmental issues.

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There is space and scope for sustainable development, with win-win situations, through holistic management of ecological, economic, social and cultural dimensions of forests and related resources. Good governance, globally and locally, market mechanisms and corporate social responsibility could inspire optimal solutions. Despite the laudable campaigns and advocacy for conservation and preservation *per-se*, the share of tropical countries is hardly five percent of the world's well managed certified forest area. Eco-labelling as a market tool is constrained by the lack of level playing field and the risk of rigorous certification becoming a non-tariff barrier rather than making it profitable for over a billion forest dependent people subsisting on less than a dollar a day.

No wonder, thirteen million hectares of tropical forests are lost annually, creating considerable carbon emissions and environmental degradation. It must be addressed to bring about harmony between humanity and the environment. Besides local action and good governance, a global vision is required to compensate communities and countries for their role as stewards of forest-based environmental assets and for recognizing and rewarding their traditional knowledge, craftsmanship and skills in providing sustainably harvested primary and secondary processed forest products. Otherwise, world congresses and summits shall stay on as hot air balloons in converting the challenges of Rio Agenda 21, the Forest Principles and the Millennium Development Goals into an action-oriented opportunity. Ethical trade could enable that through market based forest certification and payment for environmental services.

### **Forest Certification and Timber Trade**

For many years environmentalists have targeted their campaigns at politicians and the public. With Forest Certification (FC), they have turned their focus on timber trade, markets and consumers. Certification is a market tool for assurance of sustainable forest management (SFM). By linking market and trade to sustainable management standards and practices, FC schemes have elaborated comprehensive standards, which include technical, economic, environmental and social issues.

Certification is defined by the International Organization for Standardization (ISO) as a procedure for written assurance that a product, process or service is in conformity with certain standards. FC initiatives rely on consumers exercising purchasing choice in favour of products originating from sustainably managed forests certified with due diligence. Such certification and eco-labeling are perceived as opportunities to enhance the product positioning for a price premium, on one hand, and ensuring better forest management practices, on the other hand.

About 150 countries worldwide are engaged in one or more international processes to develop national level criteria and indicators for SFM. That is relatively easy compared to operationalizing FC. It requires a combination of performance and process standards. Performance standards include ecological, economic and social elements. Process standards define characteristics of the management of which the environmental management system (EMS) forms a part. These standards are related to the ISO 9,000 and 14,000 series of standards for quality and EMSs, respectively. However, unlike FC standards, ISO standards do not prescribe the desired output of an operation but the desired quality of the process.

FC standards refer to the production process with standards concerned about the mode of production of goods. WTO refers to them as processes and production methods (PPMs), which define the way in which products are manufactured or processed, and how natural resources are extracted or harvested. FC standards are non-product related *per-se*. FC strength is its incentive driven approach with predetermined standards and independent auditing, with broader applications than those targeted at market community. A tentative typology of certification and verification services applicable in the forestry sector could comprise the market-oriented certification of forest management quality, the verification of specific forest management requirements and of legal compliance, the certification of carbon sequestration and other environmental services, and finally the certification of EMSs.

FC and the associated issue of labeling products is one of a number of market-based instruments to improve forest management and conservation. The focus of FC schemes so far is mainly on wood products as well as pulp and paper. The process starts with elaboration and validation of forest management standards based on principles and criteria. An independent third party certification is accredited to inspect the forest harvesting and management activities according to the set standards. A chain-of-custody (COC) system may also be used to trace forest products through processing and distribution chain, and specific labels can be authorized on certified forest products for sale.

Over 325 million hectares, mostly temperate and boreal forests, are already certified. Programme for the Endorsement of Forest Certification (PEFC) system certification covers the largest area, followed by Forest Stewardship Council (FSC), American Forest & Paper Association (SFI), American Tree Farm System, and

the Canadian Standard Association (CSA). ISO additional certification has the highest coverage, mainly in Canada, but it is not of similar comprehensive character as the FC schemes. There are several national FC initiatives in Europe and elsewhere, including Brazilian CERFLOR, Chilean CERTFOR, Indonesian LEI, Gabonese PAFC and Malaysian MTCS. FSC was the front runner. Established in 1993, it was the sole international accreditation organisation for several years, bringing together divergent interests and defining SFM principles. Other schemes followed, initially at the national level, such as CSA and SFI. Competition for FSC came from the regional Pan-European Forest Certification scheme (PEFC) launched in 1999. The success of PEFC with European industry interests and small forest owners led to its re-launch in 2003 as a global programme. It involves over 210 million hectares and 35 national FC systems.

Volumes of certified forest products traded for domestic or international markets are increasing, but still small vis-à-vis the vast untapped potential. Main demand for certified forest products emanates from Western Europe and the USA. There has been limited interest elsewhere, though the subject has started gaining high-profile all over, partly because of advocacy by ENGOs and hurdles to uncertified product trade. Market demand is largely from retailers - not final consumers. Also there is little sign of price premium, except for a few high-value segments. Yet, certified forest products trade is expected to increase, even though consumer demand and price premiums are uncertain.

Issues of immediate importance for FC include (i) the apparent conflict between different certification schemes, while interest is growing about their comparability, (ii) encouraging Russia, Eastern European, tropical forest and other developing countries towards SFM and using certification for combating illegal logging and tracking trade in forest products, and (iii) the potential for carbon sink monitoring and reporting, among other environmental services worthy of weighty compensation. More so after the Copenhagen consensus on linkages between climate change, forest conservation, afforestation, deforestation, forest degradation and related financing options.

### **Non-Wood Forest Products Trade, Ethical and Organic Certification**

Non-wood forest products (NWFP), including bamboo, rattan, nuts, fruit, flowers, medicinal and aromatic plants, wild animals and bush meat in many instances far exceed timber in importance for forest dependent and other local communities, their multiple use and trade. NWFP are important commodities, estimated annual value of their world trade being of the order of US\$ 11 billion. The general direction of trade is from developing to developed countries, with about 60 percent imported by the USA, Europe and Japan. China is the most prominent trader. Bolivia, Brazil, India, Indonesia, Malaysia and Thailand are among other major world market suppliers. NWFP certification should provide market quality assurance and recognize and reward local communities who safeguard these resources.

International trade of NWFP is of high value compared to local or national markets. Certification for NWFP usage and trade can capture issues of agricultural certification schemes, such as fair trade and organic certification. NWFP are multiple use products for forest dwellers, local households, artisan and craftsmen, involving alternative livelihoods for millions engaged in extracting NWFP. They also provide raw materials for large scale industrial processing, such as bamboo for plybo, paper and pulp industry.

The four main categories of NWFP certification can be forest management, social, organic and product quality certification. Overlaps and potential synergies are required between different schemes. Social certification systems foster fair trade, business partnerships and management supply chains, secure commercial deals and provision of market information. Social criteria include tenure and customary rights, fair returns and adequate benefits, safe working environment, economic viability, and ethical marketing. Ethical trade ensures that workers' human rights are implemented, as defined by ILO and the International Federation for Alternative Trade (2002), including better trading conditions for excluded and disadvantaged producers.

Product quality aims at production standards. The "Certificate of Origin" is used for quality control of food products, certifying the source of the product, such as DOC (Domination d'origine contrôlée) for wines and cheeses. Increasingly high value edible NWFP, like morels and mushrooms, are certified through DOC. Product quality certification mainly evaluates physical identity and chemical purity. International standards relevant for the food industry are formulated and harmonised by Codex Alimentarius to protect consumer health and to facilitate fair trading. Standards of Good Manufacturing Practices or Good Laboratory Practices aim at ensuring processing to guarantee product quality.

Key requirements for certifying NWFP may be tenure rights, limited access to harvesting site, monitored permitting system, promotion of niche markets, and the implementation of quality control measures. These comprise FC opportunities for NWFP through commonalities among certification programmes. For example

recent assessment of palm heart production in Brazil, jointly carried out by forest management and organic farming certification entities, showed that the two systems are complementary; no major contradiction was identified.

Organic certification (OC) focuses on agricultural sustainability criteria, including the renunciation of synthetic fertilizers and pesticides. Wild crafted and semi-domesticated NWFP can be considered as organic. Many are commercialised accordingly. However, NWFP rarely result in large volumes for trade from single forest areas comparable to agriculture crops, such as cocoa, coffee or tea. Low volume niche markets demand for NWFP at a premium price is an incentive. International Federation of Organic Agriculture Movements (IFOAM) standards include principles on the collection of non-cultivated material of plant origin and honey. NWFP can be accommodated under the latest IFOAM Organic Standards item 2.4 that wild harvested products are gathered at stable growing rates away from contamination and conventional farming. Other pertinent standards include Florida Certified Organic Growers & Consumers Inc, Soil Association, National Association for Sustainable Agriculture Australia, Forest Garden Initiative, and EU Council Regulation 2092/91 on organic agricultural products.

OC systems need specifications and methodologies to make them fully relevant to forest gathered foods and other NWFP. FC is an approach in combination with fair trade and OC schemes with due convergence of standards and definitions for gathering and producing NWFP. That includes clarification about the applicability of OC for NWFP, suitability and collaboration among different certification programmes, costs, benefits and replicability. A comparative analysis indicates that FC schemes are quite close to dealing with NWFP. OC could complement it, especially regarding forest food products, while major social and environmental aspects of NWFP production and trade can be covered under FC schemes. Therefore, the social certification and fair trade as well as product quality labeling and certificate of origin schemes are not reviewed further in this paper, useful for synergies though they are and should not be ignored in developing well targeted NWFP forest certification systems.

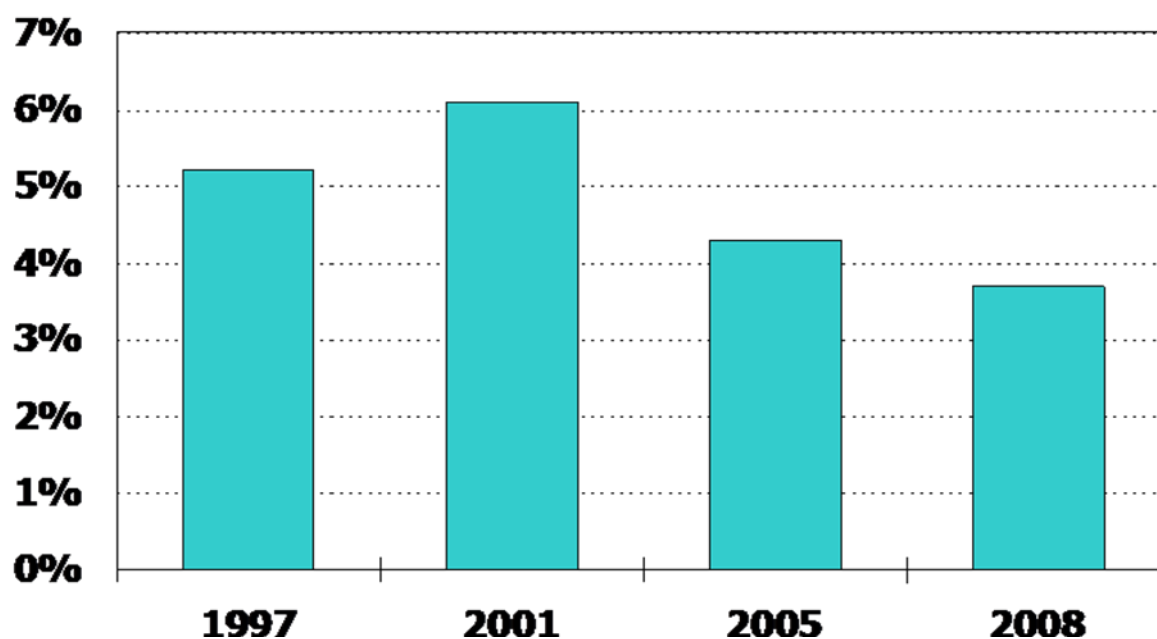
### **Timber Trade and Forest Certification in South**

Degradation and destruction of forests in South can hardly be contained without FC and legality of timber trade. But it is a challenge to adopt the costly, convoluted and time consuming certification processes in the context of tropics. Just 4% of their natural forests are part of the certified area worldwide. If FC had worked, or is made to work there, it would help curb ongoing deforestation. The rigor of certifying a forest must not be given up, but certification systems at national and regional levels should take due account of the contextual considerations in the complex tropical forests, especially in countries where investment resources are limited or certification capacity has yet to be developed.

Environmental interest groups are pressuring consumers to boycott tropical hardwoods in the absence of eco-labeling. FC originated as an alternative to bans and boycotts of illegal timber trade. But if trade declines, the rain forests will have even less value to the producer nations and could be even more prone to clearance. Proposals which limit trade, such as embargoes, are in conflict with the currency of the General Agreement on Tariffs and Trade (GATT) about the liberalization of trade. The so-called “elitist” certification systems are seen as a non-tariff barrier. Certification paradox as a gold standard instrument of international FC systems must address the complex site-specificities and difficulties of tropical countries for capturing emerging opportunities by removing barriers to market entry of wood and non-wood forest products from South.

The global forest dialogue must not only investigate the place of developing countries in international timber trade, but also scope and support for FC. Also their comparative advantage of competitive competence and skilled labour, as demonstrated by China and Malaysia in their exports of diverse products or of the technologically embedded fast grown quality eucalypt plantation pulp and paper from Brazil. This recognition and role can contribute to poverty reduction through gainful employment and income generation, to SFM by preventing the overexploitation and degradation of natural forests, and to ethical trade by avoiding illegal logging and enabling transparency in trade. That is in the mutual interests of North and South.

## Southern Share of Certified Area in the World



Tropical timber is a high-value product. Industrial roundwood, sawnwood and wood-based panels export from developing countries is over US\$12 billion. That is without accounting for fuelwood, pulp, paper and paperboard. It considerably understates the total value of timber, also because much is traded within countries. Despite so much wealth stored in developing country forests, current timber production and processing systems do not generally favour sustained forestry, being mostly capital-, technology- and skill-intensive, with economies of scale and specialized consumer market constraints.

Trees outside forests (ToF) and plantations are playing an increasing role in furnishing industrial timber. Private sector could restore wasteland for producing raw materials sustainably. Constraint is lacklustre land tenure and leasehold forestry. Likewise, people living in and around forests are excluded from access to timber wealth, because they lack power while outsiders take advantage of poor governance. This has begun to change, but power brokering still prevails.

Private sector has recently been invited to participate in an ITTO initiative on timber tracking systems for promoting trade in tropical timber products from sustainably managed and legally harvested sources. Enlightened national and international entities are coming to the conclusion that investment in certification is a cost effective way of achieving the goals of combating unlawful logging, developing SFM standards, and promoting confidence among various players. Tropical countries could draw upon ITTO's Criteria and Indicators (C&I) for SFM. But developing C&I is one thing, making them relevant to FC is another. They have to be adapted to contextual consideration of diverse tropical forests and adjusted for delivering them on the ground. It is necessary to make these readily accessible to all developing countries, with due attention to

the biodiversity rich tropical forests, including climate change adaptation and mitigation through reduced deforestation and forest degradation in the South.

Several wood and paper products companies have decided to preferentially buy certified wood and wood products, even though they may still use products from other sources to meet their demand. While many developing and tropical countries are now making significant progress in improving forest management, the lack of certification is beginning to act as a barrier for entry into higher-value markets, more so with new procurement policies. There is urgent need to promote credible forest certification, for which Phased Approach (PA) is as an option for full compliance to the certification standard in incremental steps. Limited available resources are focused on one or two tasks instead of trying to address all at once. PA framework sets milestones and targets, making it easier for forest managers and external parties to monitor and assess progress toward meeting certification requirements and rewarding genuine SFM attempts, even by those starting from a weak benchmark.

There is wide gap in the developing/tropical countries between the existing level of management across the supply chain and what is required for credible certification. That includes limited capacity and scarcity of resources required to deliver comprehensive certification standards. Also the process of implementing and assessing the standard can be very lengthy, often taking several years and risking missed deadlines. PA as a pragmatic tool can be divided into (i) implementation of standard and certification in individual forest management units, and (ii) PA to certified timber products in procurement policies. Immediate implementation of PA certification would avert loss of trade and market opportunity and support SFM. Legality as a priority will ensure removal of hurdles for public procurement and conformity with countries concerned about Forest Law Enforcement, Governance and Trade (FLEGT). Verification of legal compliance would be a first step towards full certification through PA in the tropics before reaching the FC gold standard.

### **Timber Trade, Procurement and Verification**

There is a widespread perception that illegal logging is a major cause of deforestation and degradation of valuable ecosystems, conflict and corruption. The drive to legality assurance in international timber trade has increased interest in the potential of FC schemes to serve as a means to both assess SFM and verify the legality of forest production. Credible FC schemes demand proof of legality as a precondition for receiving a certificate. Thus there could be convergence between FC and verification of legality assurance in timber trade.

The global wood industry is of economic import. The annual turnover of wood products, including plywood, panels, pulp and paper, exceeded US\$200 billion, with developing countries accounting for over 17 percent of that trade. Three major world regions -North America, Europe, and Asia- dominate the market in industrial wood products. North America accounts for about 40 percent of both production and consumption. Consumption in Asia, especially China, is rising dramatically; the region is now a major importer and significant exporter. Brazil is also a significant consumer and producer. Developing countries are increasingly part of the global timber market. Production and export of their wood products, such as plywood and veneers, have also grown two to threefold in the last 30 years. Individual traders have been joined by 63,000 multinationals trying to procure goods and services globally and merchandise them worldwide.

FC is becoming important issue within the wood products industry and also for new trends in wood products markets. The end markets for certified timber and forest products, including processed wood products, are concentrated in Europe and North America. Certification verifies that forests are well-managed and ensures that wood and paper products come from responsibly managed forests. The need for specific guidance on the legality issue is motivating analyses of the possibilities of implementing independent verification systems of legal compliance.

Increasing population and more wealth mean that the world's demand for wood is growing at about 6% yearly. Natural forests may not meet growing demand for wood and at the same time fulfil their protective and conservation functions. Although the global plantation area is a small proportion of the world's total forest area, about 40% of the raw material for industrial purposes now comes from ToF and plantations rather than from natural forests. Certification has proven an effective instrument in certain types of forests, chiefly planted forests and others with a high degree of standardisation and secure access and ownership rights. This has been typically the case in the temperate regions of Western Europe and North America, and to a varying extent in South Africa, and Central and South America. However, certification has proven less applicable in other contexts, particularly the tropical regions of Africa and Asia where natural forests are

more complex in their structure. Their timber trade and forest governance are also often treated as questionable. Attention therefore has lately turned to the verification of legality.

With evidence of growing convergence between certification and verification, certification is being increasingly viewed as a potential surrogate for legality assurance, and several producer governments are considering some private sector certification schemes as equivalent to verification of legality. Legality assurance is a narrower concept than sustainability, focusing only on the compliance of logging and transformation activities with international, national and local laws. That said, legality assurance still represents a major challenge for timber trade, particularly in the developing countries.

Forest industry is likely to press for the narrowest interpretation, limited only to forest sector standards. But campaigning NGOs are likely to press for much broader interpretations, bringing in issues of tenurial rights and the interests of indigenous groups. The convergence between legality assurance and certification is likely to have implications both for certification bodies and certifiers. Certification and verification are quite diverse instruments. Yet, the fact that all the major certification schemes demand adherence to national and local laws as a precondition for certification implies that there is an overlap between certification and verification of legality. If a forest area is certified, its wood production must be in compliance with all relevant laws. It, therefore, makes sound financial and administrative sense, both for producer companies and governments, to treat certification as a surrogate for legal verification.

Skeptics contend that certification is a tool of the commercial sector and not designed to serve either the public interest or the regulatory requirements of nation states. Such schemes may provide a credible market-based solution for forest operators to demonstrate their high standards of forest management to consumers of wood products. Critics argue that certification should not substitute for the legitimate place of government. There are instances of ENGOs having alleged that certification standards have been accepted as proof of legality in situations when there is clear evidence of illegal production. High-profile controversies surrounding the issue of forest certification are not new. What may be new, however, is the effect on certification of the heightened interest in the issues of timber trade, legality and vigilance.

It is estimated that 12%-17% of internationally traded roundwood volume is of "suspicious" origin; likewise 23%-30% of internationally traded hardwood lumber and plywood and 5%-10% of the value of global wood products trade can be traced to "suspicious" material. Both producer and consumer countries share the responsibility to tackle illegal logging and support countries in developing enabling institutional, legal and policy frameworks for good governance. While the convergence of certification and legality assurance may present a particular challenge, this movement may yet have something to offer to the wood procurement policies, underlined by the new movement to verify legality and to improve the governance of the forest sector.

The UK government has reviewed certification schemes to monitor compliance with its timber procurement policies, conducted through the so called Central Point of Expertise on Timber (CPET). It assesses certification schemes and other evidence against definitions of legality & sustainability, which includes technical and environmental requirements. The results of the CPET 2008 review confirm that CSA, FSC, PEFC and SFI certification schemes continue to deliver evidence of sustainability. MTCS was also found to deliver legality and is in the process of introducing revised requirements.

The CPET results reaffirm the robustness of credible FC schemes. The revised UK procurement policy sends strong signals to companies and consumers to buy credibly certified products. CPET reviews provide a model example of responsible procurement and trade. Certification through approved schemes is required for producers and manufacturers supplying timber and wood products for public sector projects since 2009. The UK government and its departments will procure legal and sustainable timber or FLEGT-licensed timber only. About 60% of timber imports into UK are already certified. Other governments are following suit. FLEGT is the European Union's response to the global problems of illegal logging and international trade in illegally-harvested timber. CoC certification is a mechanism for tracing certified material from the forest to the final product. It provides certainty that the product or product line is linked to a certified forest fulfilling requirements regarding sustainability and legality verification for suppliers of wood and wood products.

### **Certification Challenges and Opportunities**

Certification is new to forestry, but has been a well-established practice in most other industries. It is based on three main pillars of (i) standards, (ii) independent certification bodies, and (iii) an accreditation authority. The development of forest management standards has been complex and contentious. Stakeholders have strong views and resist dilution of FC principles of their priority concerns. Certification

will not carry credibility unless supported by organizations trusted by the public; so it is vital to involve all the stakeholders in the development and testing of standards.

The motives of diverse forest certification stakeholders are rarely reinforcing and require tradeoffs. Some are even seen as mutually exclusive, say local community versus trader versus consumer interests, those incurring cost and those receiving benefits, big versus small operators, North versus South, and global versus national and regional certification systems. The challenge is of unity in diversity.

For environmental movement, FC is a means to influence how forests are managed and biodiversity is conserved. For social movements, it is an opportunity for benefit sharing and recognizing the role and responsibilities of local communities. For industry and trade, it is an avenue for corporate responsibility, ethical trade and market access. For buyers and consumers, it provides information on the impacts of products they purchase. For forest owners and managers, it is a tool for gaining market advantage. For governments, it is a soft policy instrument to promote SFM. Certification has to deal with these apparently divergent values to create a win-win scenario.

Public understanding of the role of old-growth and high-conservation-value forests has been translated into increased call for SFM and FC. It is not a limited vision of pure preservation, neither is it dominated by the demands of profit and production, nor is it a purely populist concept of social security and reforms. All that and more, FC is a multi-stakeholder transparent system designed to equitably balance the environmental, social and economic needs of society as pillars of sustainable development and trade.

Certification in the South is often perceived as a non-tariff barrier. Forests there, especially tropical rainforests, are bio-diverse and species-rich habitats that support not just timber trees but a wide range of flora and fauna that rarely exists elsewhere. They are also homes, hearths and livelihoods of forest dependent millions. If SFM is an objective, its imperatives have to be understood and accepted. That calls for establishing an enabling environment for developing and delivering policies and programmes for managing certified tropical forests. Easy said than done in the complex tropical contexts.

Mandatory, national and international rules, regulations and conventions set the legal framework for FC. Forest inspections by independent third party accredited organizations assess compliance with a set of C&I, including adherence to the legal framework. FC partnerships practice ensures that timber from certified forests is not only legal but also sustainably produced according to the certifier's criteria. If information on certification follows the wood through CoC, consumers can have a positive influence on SFM by choosing products which originate from well-managed forests.

Even in the absence of appropriate policies and commitment from the top, certification makes use of the concerns of other stakeholders in the supply chain to motivate SFM. Certification thereby is an indirect roadway for SFM. However, certification cannot substitute an appropriate forest policy, a strong legislative framework, and committed and capable forest managers. It can have an impact in the absence of these, but responsible forest management will come about more easily if these other mechanisms are in place. An issue is the development of FC schemes seeking mutual recognition and endorsement of national initiatives. Major certification entities as standard setters need to be satisfied that the corresponding certification standards and auditing procedures are essentially equivalent and that any process of mutual recognition or endorsement does not compromise the integrity of their schemes. Harmonization is required.

Bulk of producers certified so far are in the North. Those operating in the trade have to respond to the demand of their customers increasingly seeking sustainability in the products that are retailed. Also because companies in the forestry and timber businesses in North are bound by national commitments, commercial opportunities offered by certification, the influence and power of alternative social groupings, especially NGOs. Often the Southern countries do not have this combination of circumstances. Illegal logging is a manifestation of deep rooted governance problem. Several countries have signed up to collaborative programmes to combat the problem. One of the principle ways is to stem the flow of illegal timber into the international timber trade through certification and secure CoC.

Certification schemes as reference points for customers and the traders, among others, need to maintain consistency, credibility and transparency of standards and auditing. At the same time, certification should have the capacity to be responsive to different scenarios and changing requirements. It could do so in several ways, such as by engaging in dialogue with various national and international stakeholders, undertaking research and pilot testing, providing technical assistance and building national capacities, and promoting site-specific certification systems.

Certification and labeling requirements should be feasible, realistic and cost-effective. Certification will lose its ability to promote changes if it settles at levels which are too demanding, elitist, and catering only for the boutique end of the market. It will lose its credibility if it is too undemanding, business-as-usual,

certifying the lowest common denominator. Equally, certification and labeling will be an ineffective tool unless it is based on the confidence and trust of all concerned. It is a hard job, but worthy of the investment, even if one may start in a stepwise manner in the complex tropical forest arena. Labeling is about communicating messages about good forest management and wood products processing. If the public does not believe it, then the message is useless. Producers and retailers are not interested in labels and certificates without public trusting them. Principled pragmatism is the name of the game.

Producers, manufacturers and retailers now have an independent and trustworthy way of convincing themselves, their clients and the public about the reliability of their products. More and more of them are resorting to certification as a way of implementing policies of environmental and social responsibility, improving their corporate images, and assuring themselves of a long-term sustainable supply of products. More and more corporations are deciding that these assurances about well-managed forests and sustainable forest products are not merely useful image-enhancement, but an essential part of business in a changing world, a world with heightened concern about forests and ethical trade.

An example is chain-of-custody certified companies in China, mostly wood products manufacturers, growing fast forward. Despite the financial crunch, furniture exports through Guangdong port in 2008 soared to US\$ 8 billion. The two biggest export markets for certified wood products have been Europe and the USA, accounting for 54.6% and 29.8% of exports respectively. The giant DIY chain stores are important retail markets for these certified products. Furniture retailers, pulp and paper companies and public procurement form a focused market for these products.

Although FC was initiated to confront deforestation of tropical forests, certified forests are unbalanced in geographical locations, with 60% located in North America and 36% in Europe. The end markets for certified forest products, including processed wood products, are also concentrated in Western Europe and North America, because of the legality issue and price premium potential for environmentally friendly products in these mature and value-added markets.

FC has a huge untapped potential in the tropics. National standards and schemes in Brazil, Chile, China, Gabon, Guatemala, Ghana, Indonesia, Malaysia and Mexico are few examples; many involving plantations rather than natural forests, such as in South Africa. There is a great gap between what is happening, and what is required for certification in the tropics. Investment is warranted to bridge this gap and strengthen national capacity and efforts in developing countries. So is the case of countries in transition, including those of Eastern and Central Europe, Russia, Central Asia and Caucasia. Certification shall grant access to world-wide markets for their forest products, enable foreign investment, and provide an avenue for SFM.

Developing countries with the largest areas of certified forests include Brazil, Bolivia, Mexico and Guatemala, apart from Gabon, Indonesia, Malaysia, Panama, Vietnam and others, while China is moving fast forward with its FC standards. There is also interest in Pan-African FC with sub-national-level set of C&I and verifiers. At the same time, there is an upsurge in FSC and PEFC chain-of-custody globally, which may eventually lead to greater demand for certified wood products. In this respect, there may be parallels with the Kimberley Process for diamonds, where a few dominant industrial producers of kimberlite (deep mine) diamonds stand to benefit from tighter controls over the more dispersed and less disciplined alluvial (sedimentary) diamond producers and markets. The risk of the differences between opposing classes of timber producers expressed in nationalistic terms may be an additional factor to contend with, making credible certification an essential requirement for all those who want to join and stay on in business.

Certified companies have obtained an average 6.3% price premium for certified wood products in European markets, 5.1% price premium in the United States and 1.5% price premium in Canada. The profit margin for certified wood products is highly dependent on the price premium that companies can obtain. However, a model developed to study the subject suggests that as long as the price premium obtained for certified wood products exceeds 11% relative to non-certified wood products, the profit margin for certified wood products will exceed that of non-certified wood products. There is thus space for improvement and scope for tapping opportunities for lucrative international timber trade and commerce, not only in Europe and North America, but also elsewhere.

The costs and benefits of using certified wood products is a problem. The issue of profitability can be viewed from several perspectives: the market share of certified wood products; the market growth rate; the increased cost of certified wood; the small price premium for certified wood products; and the lower profit margin for certified wood products relative to non-certified wood products. The profitability of certified wood products will influence short-term and long-term marketing strategies of companies supplying certified wood products linking with branding and marketing. All major certification programmes are now in the process of attaching their labels to wood products, hoping for higher financial

return, green accounting and consumer credence to compensate certification costs.

Green building initiatives generate growth in timber trade by specifying certified wood products. According to the IPCC, almost two thirds of the potential savings in greenhouse gas emissions by 2030 could be achieved in the building and forest sectors together. Green building is becoming part of corporate responsibility programmes and government procurement policies in line with their energy efficiency targets. Wood industry needs to reach out to architects, designers and decision makers to inform them about the energy and carbon capture life-cycle of wood and the environmental and technical credentials of FC standards.

Another challenge is how and if certification can address the cross-cutting issues of poverty among forest dependent communities. Who compensates them and their countries for the additional costs of certification and how do they remain motivated for concomitant environmental services flowing for global good from SFM, which is a pre-requisite for certification. These challenges must be pondered over and addressed through good global governance, fair trade and better understanding of the complexities of diverse forests. Also their potential role for promoting economic development and MDGs. FC should dovetail its systems accordingly and *inter-alia* get involved in payment of ecosystems services (PES) to concerned countries and communities. More so in the context of climate change mitigation and carbon sequestration, such as in the case of Pearl River basin CDM forestry project in China.

FC must aim to translate external, traditionally non-marketed values of the environment services into financial incentives for forest landowners and users. Services that can be covered by PES schemes are those related to forest carbon, clean energy, watershed management and sustainable soil, biodiversity and eco-tourism, aesthetics and landscape protection. Given the global interest in tackling climate change by using financial incentives to reduce emissions from deforestation and degradation (REDD), now is a good time to have a look at how PES schemes are progressing and adapting to new opportunities. That could be another source of money on trees for and from FC and no less than the current value added in the formal forestry sector and the real value of forest products exports of around US\$450 billion and US\$ 330 billion per year, respectively.

## Conclusion

Forest certification is an international high profile market-based mechanism for trade in timber from sustainably managed and legally harvested forests. It calls for compliance with sustainable forest management standards.

Certified area is increasing, but is still a small percentage of the world's forests. The same applies to the volumes of certified forest products traded. Certification as a tool to promote environmentally friendly, economically viable and socially equitable use needs to be highlighted, both for wood and non-wood forest products.

Many countries in the North have already achieved 100 percent of their forest area as being certified. But, it is largely on the backburner in the South. Investment is required for averting environmental and social risks, capacity-building and awareness-raising. Certification adds to the cost of forest management, and product prices do not increase commensurably. Given its long term profitability prospects, strategic and ethical considerations, forest owners, managers, manufacturers, timber traders and retailers can no longer afford to remain as reticent players in the globalizing certification process.

National commitment to sustainable management of forests and related resources can be a key driver alongside public procurement and business-to-business demand supported by corporate social responsibility and sustainability initiatives. Policy planners, decision makers and business organizations need to adopt management practices that minimize impact on the environment and promote trade in products derived from legally logged and sustainably sourced raw material. Several countries have designed procurement policies and more are likely to follow. Certification is thus becoming a prerequisite for market access with scope for convergent certification under two systems, both for forest management and chain-of-custody. This in turn could help obtain an assured price in the increasingly ethical and environmentally conscious markets.

Certification is stimulating moves towards sustainable forest management. Its focus has been on establishing standards for forest managers and developing a critical mass of certifiable timber. In the future,

emphasis will need to be placed on strengthening national institutions, policies and legislation to reduce the gap between current levels of forest management and certification requirements; lowering the certification costs; improving market access and incentives for trade in certified forest products; increasing the effectiveness of marketing among consumers; delivering requisite rewards and recognition to certification and sustainable forest management stewards and stakeholders; combating illicit felling and illegal trade; promoting payment of ecosystems services and benefit-sharing between buyers and sellers; and upscaling issues of REDD, carbon trading and climate change in forest certification.

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### Acknowledgements

Thanks are due to the three acknowledged certification and marketing experts who have peer reviewed the draft and provided several references. Not all of them are cited below nor are they quoted in the text above, despite being a rich repository of knowledge that has been drawn upon in the paper directly or indirectly, un-amended or not. Wish to acknowledge the commitment of them all to the common cause of appropriately scanning, merging and analysing certification systems and trade policy perspectives.

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