# Links between trade and sustainable forest management: an overview

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With cross-sectoral collaboration, coherent policies and improved governance, trade in forest products and services and good forest management can be mutually supportive.

s international trade in forest products and services an important contributor to deforestation and forest degradation, especially in developing countries (as suggested by Dudley and Nectoux, 1995)? Or is it a motor for the promotion of sustainable forest management (as asserted by the World Bank, 2002)? The World Trade Organization (WTO, 1997) has concluded that international trade has little to do with unsustainable forestry and deforestation, and WTO's Committee on Trade and Environment (CTE) expressed the view that trade and sustainable forest management are mutually supportive when cross-sectoral collaboration and coherent policies are in place (WTO Committee on Trade and Environment, 2003). Nonetheless, with international trade in all categories of forest products - measured in roundwood equivalents - having increased by more than 400 percent over the past ten years, concerns over continued forest degradation and loss of forest cover are increasing the pressure on governments, the private sector and international institutions to address the impact of trade on sustainable forest management (Rytkönen, 2003).

With issues of sustainable forest management driving the current policy agenda, the economic value of world trade of wood products is at stake. This value, in the main categories of roundwood, sawnwood, pulp and paper, was estimated at approximately US\$150 billion in 2003 (FAO, 2004a), with paper accounting for nearly half. Trade in secondary processed wood products added approximately US\$40 billion to the total. The trade in all product categories of tropical timber accounted for only US\$16 billion in 2002 - roughly 10 percent of the total (Rytkönen, 2003). While most of the international trade in forest products takes place between developed countries and rapidly emerging markets

such as China and India, exports from developing countries offer much-needed opportunities for income. However, forest production for international markets is limited to a relatively small number of developing countries, either those with an important resource base (e.g. Indonesia, Cameroon, Bolivia) or those with rapidly expanding plantations.

Given the varying circumstances and the number of influencing factors and uncertainties about the relationships among them, any analysis of the impacts and interaction between trade in forest products and services and sustainable forest management is highly complex. This overview examines some of the recent environment-related developments in trade of forest products and services; the relative importance of international and domestic forest trade; and the role of governance. It describes the handling of forest-related considerations in international trade discussions (including WTO and multilateral environmental agreements) and of trade concerns in the international forest policy dialogue. The article concludes with a call for greater collaboration and coherence between trade and forest policies.

## INTERNATIONAL TRADE DEVELOPMENTS

#### Changing origin of forest production

Forest plantations of high-yielding varieties are providing an increasing share of the supply of industrial roundwood. In 2000, planted forests were estimated to supply about 35 percent of the global industrial roundwood, with a further increase to 44 percent expected by 2020 (Carle, Vuorinen and del Lungo, 2002). Much of the wood that is not sourced from plantations is from semi-natural forests, with the share of roundwood from natural forests in international trade becoming increasingly small. Even though the share of tropical roundwood

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Forest plantations of high-yielding varieties are providing an increasing share of the supply of industrial wood; shown, products from a smallholder plantation in Viet Nam

in global production has grown from 9 to 18 percent since 1961, the annual increase of tropical hardwood in the world market has been only slight over the past ten years (FAO, 2004a), and the increase is partly due to the maturation of plantations.

#### Tariffs and non-tariff barriers to trade

Import tariffs are generally low for logs and do not limit their trade. Tariff escalations – where higher tariffs are applied to the import of value-added products – are higher in developing countries, particularly in Asia, and are used to support domestic industrialization rather than to support sustainable forest management. By biasing exports towards unprocessed commodities, tariff escalations may prevent commodity-dependent developing countries from diversifying their export base (UNCTAD, 2003). This is generally not the case with imports into industrialized countries.

Export tariffs on logs, including direct charges such as export taxes or export levies, have been widely used by tropical timber exporting countries to raise revenue and support domestic wood processing industries, particularly in Asia, where they generally range from 10 to 20 percent but can be even higher

(FAO, 2004b). However, policies are generally shifting away from export tariffs towards investment incentives supported by export restrictions.

Government export restrictions are among the more frequently applied nontariff measures in most developing and some developed producer countries. These restrictions include total export bans, export quotas and selective bans based on species; limits on harvest levels which limit the amount available for export; and administrative controls such as permits and licenses (Rytkönen, 2003).

Although often criticized, such restrictions can contribute to industrial development and prevent the destruction of forests, albeit at a substantial cost. However, they may also contribute to forest destruction by keeping domestic prices artificially low, thus encouraging wasteful use. They can enhance people's well-being as long as they are adapted to local situations and used in combination with other policy instruments aimed at rural or industrial development (Hoekman and Kostecki, 2001).

#### Control of illegal activities

Restriction of imports of illegally harvested and traded timber is currently under discussion as a new approach for supporting sustainable forest management through trade. Although consumer countries have so far refrained from developing specific laws in this regard, China, Japan, Norway, the United States and the European Union (EU) have begun to negotiate and finalize bilateral agreements with individual tropical producer countries. These activities, carried out under forest law enforcement and governance (FLEG) initiatives in Asia and Africa, are often coupled with increased bilateral cooperation supported by over-



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seas development assistance (ODA), the private sector and non-governmental organizations (NGOs). The EU's FLEG-T Action Plan, which explicitly includes the dimension of trade, is a good example. This approach to increase compliance with national and international law might have a bearing on the interface of trade and social and environmental standards in forest production.

#### **Forest certification**

The most prominent efforts to link trade to sustainable forest management are forest certification schemes and other market-based mechanisms including chain of custody verification and product labelling. Besides having direct impacts on forest operations, such schemes influence national and international policy debate and government standard setting at all levels (Frost, Mayers and Roberts, 2003). Exporting countries in the tropics have sometimes perceived forest certification and product labelling as trade barriers because of their potentially significant impact on both volume of trade and product composition.

Only about 4 percent of the global forest area is currently certified, mostly in developed countries (UNECE/FAO, 2004). However, some forest certification initiatives are in place in the main tropical timber producing countries, notably Malaysia and Indonesia, and others are emerging in countries of the Congo Basin.

Acceptance of uncertified tropical timber is decreasing in industrialized countries with growing consumer awareness of the forest situation in the tropics. Yet despite the market opportunities, certified forest products from developing countries, in particular tropical hardwoods, are still in limited supply, and the certified forest area in the tropics is growing only slowly. Greater collaboration of international schemes in

the establishment (and not merely the endorsement) of national schemes could be helpful.

The International Tropical Timber Organization (ITTO) has developed a phased approach to increase the certified forest area in developing countries and to increase market access and trade in certified products; the approach has been endorsed by the Forest Stewardship Council (FSC) as the "step-by-step approach". The concept entails gradual achievements in forest operations through compliance with national and international law and the application of technical, environmental and social standards within a given time frame.

While forest certification is essentially a market mechanism, governments can support it through coherent policies and regulatory measures that promote non-discriminatory market access. Public procurement as a possible means for supporting forest certification is currently debated in a number of industrialized countries.

#### Markets for environmental services

Markets for environmental services of forests, such as climate change mitigation and watershed protection, exist in some developed countries but are rare in developing countries. These services fall largely under indirect use values, i.e. benefits derived from forests. Currently, forest environmental services cannot be commonly traded since they are still considered as public goods and non-commercial values that forests provide "free of charge". Theoretically, environmental (and social) services could have a role as an additional economic value which influences the cost-benefit analysis of forest operations in individual circumstances and could consequently have an impact on trade in forest products. Yet with the exception of Costa Rica, where a government system of payments

for environmental services has been established, these services of forests are not in demand in defined domestic or international marketplaces, despite various attempts to establish innovative mechanisms for finance in this regard, particularly in Latin America.

While it is unlikely that the economic valuing of environmental and social services will find political support at the national level, possible markets for biodiversity conservation and carbon sequestration through forests have received much attention at the international policy level. It remains to be seen whether a market for carbon trading will be established under the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol and the Clean Development Mechanism (CDM) or under national and regional emission trading approaches. However, the political will and financial support for conserving forest biodiversity, through among others ODA, multilateral cooperation (including the Global Environment Facility [GEF]) and NGOs, should not be mistaken for an "emerging international market" as they have been in some analyses (Landell-Mills and Porras, 2002; Nasi, Wunder and Campos, 2002).

#### Domestic trade in developing countries

Despite the rapid expansion of international trade, most forest-based production – including wood – is destined for consumption in the domestic markets of producing countries. This puts into context the extent to which international trade might be expected to influence sustainable forest management, particularly in developing countries. Except in Europe and North America, most national and intraregional markets tend to show little concern for the environmental and social impacts of forest operations.

In many developing countries, domestic forest products trade is important for economic development and the livelihoods of rural communities, even if it may appear to contribute relatively little to gross national product. However, while FAO and other institutions maintain data on product composition, volume and directions of trade at the international level, data on domestic trade in forest products, including nonwood forest products, and on trade between neighbouring countries are only rarely available, and most of the existing statistics take into account only timber. Thus, despite the importance of domestic trade, its specific impact on forest management has rarely been analysed.

Fuelwood is of particular importance to sustain livelihoods of rural and urban communities. Volumes of domestic trade in fuelwood are increasing rapidly with the expansion of urban centres. While fuelwood accounts for only 7 to 9 percent of global energy consumption, 80 percent of the wood harvested in developing countries is consumed as fuel (FAO, 2004b) and approximately 50 percent of the total primary wood

production worldwide is destined for fuelwood.

International trade in non-wood forest products (NWFPs) is very limited, but it is likely that these products will continue to have an important role in rural income through trade in well-established local markets. While it is estimated that over 80 percent of the rural poor depend on NWFPs for subsistence (FAO, 2004b), and while trade in NWFPs is an important commercial factor at the national level, reliable data on international and domestic trade are only available for a few countries and a few products such as brazil nuts, vanilla, natural rubber and shea nut. Broader commercialization of most NWFPs carries the risk of overexploitation.

In most developing countries (with the exception of important producers such as Brazil, China, Ghana, Indonesia and Malaysia), the forestry sector and downstream industry are mainly on a small scale, involving communities, small forest owners and local enterprises. In countries where forest products are exported in small volumes or not at all, trade and forest policies and debate do not address the further development of the

nonetheless important domestic markets. As a consequence, trade perspectives and market situations are not considered in domestic forest management. This is the case not only for natural forests, but also for plantations. Carle, Vuorinen and del Lungo (2002) found that despite the important value for development, "the end purpose of the plantations is not clearly defined at the outset ... and a lack of planning may result in plantations that have little commercial value and a low potential for local use".

## GOVERNANCE AND TRADE IN FORESTRY

Forest governance and trade are linked in two ways: policies and institutions determine and influence patterns of trade, and the scale and dynamics of trade can influence the nature and quality of forest governance and thus sustainable forest management. In most situations, both relationships have measurable impacts on the quality and sustainability of forest management.

Where good governance is already practised at the national level, the interactions among trade liberalization, market development and forest governance



Despite the rapid expansion of international trade, most wood-based production is traded domestically (as in this market in the Sudan) – but the impact of domestic trade on forest management is difficult to analyse because data on domestic trade are scarce



In most developing countries, downstream industry is mainly on a small scale, and trade and forest policies do not usually address the further development of the domestic markets for wood products

appear to be positive (FAO, 2004b). Thus trade appears to be a magnifier of existing policy and institutional strengths and weaknesses rather than a major driver of change in forest governance as such.

On an institutional level, those who deal with forestry and those who deal with trade do not interact much. Not many forestry departments around the world are good at managing and negotiating forest trade issues. While many have competence related to elements of the trade chain (forestry production, forestry revenue systems, export restrictions and the like), few are used to dealing with investment needs, trade transactions, macroeconomics and import restrictions (Mayers and Bass, 1999). Similarly, it is difficult to find an example of a country where debate on trade liberalization has been the key lever that has opened up forest sector planning and the development of strategic mechanisms such as national forest programmes. National forest programme processes offer a platform for negotiating solutions to trade-related forest governance issues.

## FORESTS AND TRADE IN DISCUSSIONS AT THE INTERNATIONAL LEVEL

There are indications that the obligations that countries assume when they become members of WTO and regional trade agreements will increasingly affect the terms of trade in forest products and services (Neufeld, Mersmann and Nordanstad, 2003). Multilateral agreements under WTO such as the Agreement on Technical Barriers to Trade (TBT Agreement) and the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement), although not specific to the forest sector, could have important implications with regard to how WTO member countries regulate the trade of forest products and services.

In the Doha Declaration adopted by WTO's Fourth Ministerial Conference in 2001 (WTO, 2001) and in the Doha Development Agenda (WTO, 2004), subjects that have a bearing on forests include subsidies, the environment and environmental goods, ecolabelling and certification, plant health, intellectual property rights, development, market access, technical standards and regulations. Deliberations in CTE focus on forest cover loss, forest degradation and the impact of trade on sustainable forest management.

Furthermore, discussions in CTE aim to clarify the relationship between WTO rules and so-called "special trade obligations" in multilateral environmental agreements, including the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), the Convention on Biological Diversity (CBD), UNFCCC and the

International Tropical Timber Agreement (ITTA) (WTO, 2003). The international community generally accepts that compliance with CITES constitutes a trade limitation for forest products listed in the agreement's annexes (Mulliken, 2003). Special trade obligations under other multilateral environmental agreements are still being identified.

ITTA, which is currently being renegotiated, holds a unique position among the multilateral environmental agreements, combining aspects of a commodity agreement (concern with trade and industry) with those of an environmental agreement (attention to the sustainable management of natural resources and forest conservation). ITTO, which is governed by ITTA, therefore has a double role as expressed in its mission statement: "ITTO facilitates discussion, consultation and international cooperation on issues relating to the international trade and utilization of tropical timber and the sustainable management of its resource base".

The Ad Hoc Intergovernmental Panel on Forests (IPF) (ECOSOC, 1997) and Intergovernmental Forum on Forests (IFF) (CSD, 1998) observed that trade can have both positive and negative impacts on sustainable forest management and recommended that countries monitor the effects of trade policies more closely. The United Nations Forum on Forests (UNFF) is mandated to follow up on trade-related issues, and ITTO has taken the lead on this issue within the Collaborative Partnership on Forests (CPF) – an innovative partnership among the major international forest-related organizations. However, trade issues and their impact on sustainable forest management have not been systematically and broadly addressed in the international forest-related processes such as UNFF, CBD and FAO's Committee on Forestry (COFO) and Regional

Forestry Commissions; indeed it is debatable whether these are appropriate fora for such discussions. Although deliberations in these venues can and have yielded interesting analysis and recommendations, the development of practical, coherent policies in trade and forestry needs to be based on national experiences and needs.

The forest-related policy debate under the multilateral environmental agreements, UNFF and other important policy processes, such as COFO and the FLEG initiatives in Asia and Africa, has influenced international trade processes, including regional trade agreements. However, there has not been sufficient coordination between the international dialogue on trade and that on forests, and delegations to WTO and regional trade agreements have not usually had forestry expertise (Bass, 2003). The special sessions of CTE and the meetings of the Committee on Technical Barriers to Trade are exceptions. However, important work in the Committee on Subsidies and Countervailing Measures and in the Negotiating Group on Market Access proceeds without the benefit of forest-sector expertise from developing countries.

The extent to which UNFF and ITTO under the new ITTA will assist in enhancing the positive interactions between trade and forest management remains to be seen. Perhaps closer cooperation between WTO and CPF could contribute in this regard.

## COHERENCE IN TRADE AND FOREST POLICIES

In recent years, policy deliberations have circled around the problem of building an economically viable forest industry based on existing and future forest resources given the international competition and overcapacity of wood processing facilities. In attempting to diversify their forest products through

value addition and trade, developing countries and countries with economies in transition face a major challenge: they will need to develop coherent policies that take into account national development efforts and priorities, macroeconomic reform, the capacity of the private sector (including opportunities for international capital investment), forestry production at the community level and future demands, including those of countries to which they wish to export. Unfortunately, even relatively comprehensive legislative and policy measures addressing timber trade within the framework of FLEG initiatives often do not coherently support trade and sustainable forest management (R. Tarasofsky and D. Brack, unpublished).

Enhanced communication is needed not only between sectors, but also among developing countries to draw on successful experiences in developing a competitive forest industry. Regional trade agreements and fora of trade-related institutions could be instrumental in this regard.

Finally, coherence in trade and forest polices is crucial for the support of rural communities and small forest owners. Since global forest products trade is not likely to constitute the most important economic vehicle for poverty reduction and socio-economic development (except in relatively few forestrich countries), the focus and support of national governments and the international community should shift from the world market to the important domestic markets in developing countries.

### CONCLUSIONS AND CONSIDERATIONS

The political agenda regarding trade in forest products and services is primarily driven by concern over unsustainable operations in natural and semi-natural forests, particularly in the tropics.

However, the changing origin of forest production through rapidly expanding forest plantations is decreasing the overall economic importance of production in natural and semi-natural forests, in particular in secondary forests and other degraded forest resources.

Market access for and trade of forest products is a major issue for tropical timber because of consumer awareness in industrialized countries. Current forest certification initiatives in the tropics are encouraging, although the potential of certification, chain-of-custody verification and product labelling is still largely untapped. Progress in certification can be supported and facilitated through increased efforts by the international community, national governments and other concerned groups.

Trade policies, including export as well as import restrictions, have often assisted in achieving specific objectives such as the development of domestic industries, but have done little to strengthen the potentially supportive role of trade for sustainable forest management. Enhanced international cooperation in rather informal yet primarily governmental initiatives such as the FLEG processes have had a greater influence in this regard.

It appears unlikely that the rules-based WTO will become more supportive in linking trade in forest products to sustainability in the forest sector. Governmental action is therefore called for at the national level, *inter alia* to support domestic trade and reduce negative impacts on forests through trade. One means of achieving greater coherence in trade policies and forest management is through enhanced debate and the identification of practical actions in national policy processes involving all stakeholders, including those from the private sector and civil society. ◆



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