Further processing in Central Africa

Legislation to encourage further processing in Central African countries has resulted in a noticeable reduction in log exports but additional measures are needed

by Patrick Langbour and Jean Gérard

CIRAD

73 Rue François Breton 34 398 Montpellier cedex 5 patrick.lanbour@cirad.fr jean.gerard@cirad.fr

ENTRAL AFRICA is the richest region of the African continent in production forests, offering considerable potential for the promotion of social and economic development. However, this potential is still to a large extent undeveloped. The forests of the Congo Basinin particular Cameroon, Gabon, Congo, Democratic Republic of Congo (DRC) and the Central African Republic (CAR)—make up the second largest continuous area of tropical forests after the Amazonian forest. Particular attention focused on these forests for

they play an important role in the supply of public goods as well as in protecting biological diversity and stabilizing global climate.

Numerous conventions have been established to regulate the management of the environment and natural resources at the international level. The majority of states in the sub-region have signed and/or ratified most of these conventions, and a process of harmonizing forestry policies in Central Africa is under way; however, taking account the specificities of each country, progress is being made at different rates.

The main producer countries (Cameroon, Congo, Gabon, CAR and DRC) are all members of the Central Africa Forest Commission (Commission des Forêts d'Afrique Centrale—COMIFAC), the African Timber Organization (ATO) as well as ITTO, and are all engaged in efforts to achieve sustainable development of their forest resources.

Production essentially focused on primary processing

These five countries were traditionally log exporters; in recent years, however, there has been a noticeable reduction in log exports as a result of legislation aimed at encouraging the processing and added value creation within these countries. In Cameroon and elsewhere, this legislation has been accompanied with the setting up or modernization of industrial processing plants.

In 2004, the five countries produced 7.2 million m³ of logs and exported 2.8 million m³, representing 39% of the total production. However, as shown in *Table 1*, there are significant differences in export volumes between countries, indicating that those countries which export a large number of logs process fewer.



Going up: Utilization of wood for construction, Cameroon. Photo: P. Langbour

The timber industry is dominated by primary processing (sawing, peeling and slicing), and is mainly geared towards export markets. In 2004, the five countries produced 1.1 million m³ of sawnwood and exported 0.94 million m³, representing 87% of total production. As noted earlier, however, there are significant differences between countries (Table 1).

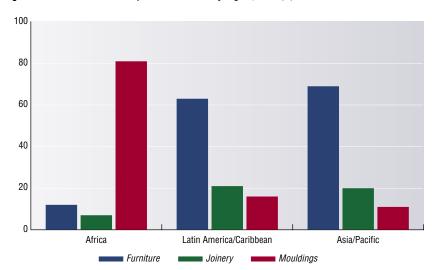
Generally speaking, sawnwood is traded in its raw state and only some sawmills in the countries concerned bring added value by offering dried lumber, and possibly by applying milling techniques to produce mouldings, parquet flooring and other materials.

Moreover, the figures in Table 1 suggest 'apparent' local consumption of sawnwood (a difference between production and exports), which is quite low in Cameroon, Congo, DRC and, to a lesser degree, in Gabon. In fact, consumption is not as low as the figures indicate: the rapid development of the small-scale sawnwood production sector, both formal and informal, makes it possible to meet the evergrowing demand for sawn timber resulting from the urban demographic expansion of the countries in the region, as local populations need wood for construction and housing (in addition to their need for firewood). A study undertaken in Cameroon in 2002 (AGRECO-MINEF/DFID 2002) reveals a volume in the order of 1 million m³ of logs processed in this country by small-scale operators using mobile sawmills or chainsaws.

Production and export data in 2004 for veneer (205 000 m³ was produced, of which 84% was exported) and plywood (87 000 m³ produced, 76% exported) show that these activities remain relatively limited throughout the five countries with the exception of Gabon, where the activity

Specialization

Figure 1: Breakdown of further processed timber by region, 2004 (%)



is essentially focused on a single species, okoumé. As with sawnwood, these products are mainly destined for export.

At the international level, for many years the countries of the region exported logs and primary processed products to Europe. Today, Europe is no longer the only consumer: Asia and notably China are purchasing on a massive scale.

There is also an 'African' market for sawnwood from producer countries, not only from South Africa, which imports significant volumes of okoumé from Gabon, but also from the countries of the Maghreb (Morocco, Tunisia and Algeria). It is also worth mentioning Senegal, which is diversifying its supplies in the wake of events that have occurred in particular in neighbouring countries, and Côte d'Ivoire, which supplies itself from Central Africa to feed its many processing plants due to the reduction of its own forest production.

Operating in parallel to these official markets, there are informal trading links for sawnwood between Central Africa and several adjoining countries: between Cameroon and Chad and Nigeria, or between DRC and Uganda, Zambia and Tanzania. There is a real lack of transparency about this informal sector, which is responding to the needs of local markets neglected by industrial production geared

essentially for export. In the next few years this trade will probably increase at a rate where demand is closely linked to population growth, particularly in urban areas.

The further processing of timber

The further processing of timber for the manufacture of parquets, mouldings, furniture and joinery generate additional added value to timber and create employment. While data and statistics are dispersed and difficult to record in the countries of the region, there are some studies available, notably in Cameroon and Gabon, which show that these activities play an important socioeconomic role in the countries of the region. In addition, a recent study carried out in Yaoundé, Cameroon (JMN Consultants 2005) shows that, from an economic point of view, the sector accounts for 6 billion CFA francs1 annual turnover for small-scale enterprises (carpenters, cabinet makers, woodcarvers, etc). The average timber consumption of the sector is estimated at 85 250 m³ of sawnwood per year (equivalent to approximately 284 000 m³ of logs per year), showing the importance of this sector in terms of both activity and timber consumption.

Two development approaches are being followed in the countries of the region in regards to the further processing of timber:

- Widening the range of production (generally lumber) of both existing and newly established large-scale operators by adding additional equipment suitable for processing more sawnwood (drying, machining, etc).
 The resulting products are mainly exported.
- 2) Developing the formal and informal small-scale woodprocessing sector, which requires additional measures totally lacking at present but would likely meet local and regional wood needs. This area is largely neglected by large-scale operators who prefer to export and take advantage of the prices offered in international markets.

The production of goods from the further processing of timber is still dominated mainly by Asia and Latin America. In 2004, 69% of further processed products (FPP) exported by all ITTO producer countries came from Asia, 29% from

11000 CFA francs = 1.525 euros or US\$2.10

Exports rule
Table 1: Production and exports of logs and sawnwood in the five main producer countries of Central Africa (1000 m²)

| | LOGS | | | SAWNWOOD | | |
|----------|------------|---------|-------------------------|------------|---------|----------------------|
| COUNTRY | PRODUCTION | EXPORTS | % Exports/production | PRODUCTION | EXPORTS | % EXPORTS/PRODUCTION |
| CAMEROON | 1750 | 228 | 13 | 702 | 682 | 97 |
| CAR | 570 | 195 | 34 | 107 | 44 | 41 |
| CONGO | 1321 | 844 | 64 | 175 | 143 | 91 |
| DRC | 90 | 58 | 64 | 15 | 14 | 93 |
| GABON | 3500 | 1517 | 43 | 133 | 91 | 68 |
| TOTAL | 7231 | 2842 | 39 | 1132 | 974 | 87 |

Source: ITTO 2006

Latin America, and 1% from Africa. Ghana and Côte d'Ivoire make a large contribution to the African trade in FPP.

This worldwide trade is focused mainly on furniture, joinery for construction and mouldings. Europe, North America and Japan are the main consumers of these processed products. Alongside these international markets, national markets are also important consumers. It is in the development of their own markets that the main Asian exporters (Indonesia, Malaysia, etc) have gained the upper hand in this niche. Emerging countries such as China, India and Brazil are following the same route and are now producers and exporters of processed goods.

Some African countries involved in further processing specialize more in shaped timber products such as parquets and mouldings (*Table 2 and Figure 2*). Within Central African countries, further processing still occupies only a small niche, although such activities help create employment and added value.

Trends in the further processing of timber in Africa

Like other sectors, the forestry sector is evolving and its situation and that of the associated timber chain are linked to economic, environmental, demographic, social, technological, political and institutional influences. The trends observed over the last few years indicate that the manufacture of woodbased products has shifted to new 'producers', whereas new timber markets are opening across all continents. Some of the changes observed/expected are described below.

Africa

Trade flows will increase between Central African countries and those of West Africa with depleted forest resources but industrial processing plants (sawmills, industrial mills, plywood and veneer factories, etc) in need of supplies to maintain production. Trade flows will also increase between Central African countries and other African countries which have only very limited resources (countries of the Maghreb, Chad, Niger, Egypt, etc); this trade is being established and could develop considerably.

Europe

Europe has been evolving over the last 40 years or so and a decline in industrial employment in western European countries (France, Great Britain) is noticeable. At the same time, a fair number of recent entrants to the Eu (Poland, etc) or situated on the European periphery (Morocco, Tunisia, Turkey) are developing technically, economically, and socially. Transfers of activities are occurring from the 'old European countries' to these countries which benefit from real competitive advantages: cheap labour, taxation and attractive regulations.

Asia

Asia, in particular China and also India, will be consumers of raw timber and primary timber products to meet their own



Mill work: Processed okoumé sawnwood ready for export in Gabon. Photo: J. Gerard

needs for a long time to come, given the expansion of their housing and furniture sectors, their processing capacity and the development of their external markets.

Population growth

Population growth is one of the main factors which impacts the use of land, forests and timber resources. The development of urban centers towards which some of the rural population is migrating is accompanied by growing needs (food commodities, construction raw materials, etc). Although the purchasing power of many of these people is relatively small, it must both feed and house them. Wood is therefore naturally used to meet the needs for construction timber and for joinery and furniture.

The population of the five countries—Cameroon, Congo, Gabon, CAR and DRC—may increase from 83 million inhabitants in 2005 to 123 million in 2020, an increase of 40 million in 15 years. Moreover, some countries of West and North Africa using increasing quantities of timber sourced from Central Africa also have rapidly growing populations: West Africa may increase from 234 million inhabitants in 2000 to 344 million in 2020, and North Africa from 170 million in 2000 to 239 million in 2020.

Providing assistance to Central African countries

Countries differ in their capacities to take advantage of the benefits brought by the manufacture and export of processed products with significant added value. The main producer countries of processed products in Asia (Malaysia, Indonesia) and Latin America (Brazil) have well-

Still tinv

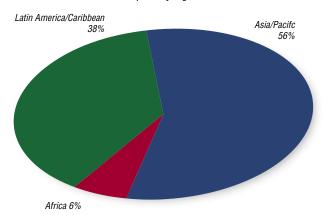
Table 2: Further processing exports by region, 2004 (million US\$)

| | FURNITURE | JOINERY | MOULDINGS | OTHER |
|-----------------------------|-----------|---------|-----------|--------|
| AFRICA | 9.8 | 5.6 | 67 | 9.2 |
| LATIN AMERICA/ Caribbean | 1564 | 535 | 395 | 475 |
| ASIA/PACIFIC | 3852 | 1221 | 588 | 1267 |
| TOTAL | 5425.8 | 1761.6 | 1050 | 1751.2 |

Source: ITTO 2006

Moulded niche

Figure 2: Share of moulded wood exports by region



established primary processing industries and developed export markets. They also have in place the necessary bases for the development of a further processing industry mainly geared towards export markets.

On the other hand, many African countries have difficulty in consolidating their primary processing sectors, strengthening their domestic markets and limiting their log exports. Of the five major producers of Central Africa, only Cameroon has been able to limit its log exports mainly by strengthening its sawing capacity; further processing has not yet developed to any significant extent.

For several years, major efforts have been undertaken and encouraging results have been achieved in the promotion of sustainable forest management. These must be accompanied by additional measures aimed at developing the further processing sector and the marketing of forest products, wood and secondary products, as well as non-wood forest products.

For several years, major efforts have been undertaken and encouraging results have been achieved in the promotion of sustainable forest management. These must be accompanied by additional measures aimed at developing the further processing sector and the marketing of forest products, wood and secondary products, as well as non-wood forest products.

In that respect, during its 38th session in Brazzaville in June 2005, the International Tropical Timber Council launched a study to promote synergies between ATO'S Action Plan for the further processing of timber in Central Africa and COMIFAC'S Regional Convergence Plan. Based on the results of this study, a proposal for a regional plan has been drawn up to develop the further processing of timber in those COMIFAC countries who are members of ITTO in Central Africa.

This project should lead to the establishment of a supporting mechanism for the further processing of timber. It is based on: 1) establishing an inventory of the small-scale, semiindustrial, and industrial timber processing sectors, and analyzing their operating methods; 2) identifying the needs of the parties operating within the supply chain and defining ways of responding to these needs; and 3) setting up and implementing a system to support the parties involved in timber processing.

References

AGRECO-MINEF/DFID 2002. Etude du sous-secteur sciage artisanal au Cameroun. Yaoundé, Ministère de l'environnement et des forêts, Projet Sectoriel Forêt Environnement.

ATO 2004. Promotion de la transformation plus poussée des bois tropicaux en Afrique—Plan d'action proposé par la Conférence Ministérielle de l'OAB. ITTO Pre-project PPD 15/98 REV 2.

COMIFAC–Secrétariat Exécutif 2004. Plan de convergence pour la conservation et la gestion durable des écosystèmes forestiers d'Afrique centrale, COMIFAC, Yaoundé, Cameroon.

Fomete, T. 2003. Stratégie cadre pour l'industrialisation des filières bois africaines (plan d'industrialisation régional). Second joint ATO/ITTO conference on the further processing of tropical African timber.

Gérard J. & Lambour, P. 2006. Etude des synergies entre le plan d'action de l'OAB pour la promotion et la transformation plus poussée des bois en Afrique et le plan de convergence sous-régional de la COMIFAC—Contribution au développement de la transformation plus poussée du bois dans cinq pays producteurs du bassin du Congo. Final report and project proposal, Additional Activity Approved Under Decision 10(XXXII) Promotion of Sustainable Forest Management in the Congo basin—Study on further processing of tropical timber in Africa and development of regional project proposal for promotion of further tropical timber processing in Central Africa.

ITTO 2006. Annual Review and Assessment of the World Timber Situation 2005. ITTO, Yokohama, Japan.

JMN Consultants 2005. Etude sur l'identification du secteur de la 2ème transformation du bois à Yaoundé. Ministère des Forêts et de la Faune, Ambassade de France au Cameroun–SCAC.

This article is a summary of the report Exploitation et gestion durable des forêts en Afrique Centrale, which arose from ITTO Council Decision 10(XXXII) on the promotion of sustainable forest management in the Congo Basin. The complete report (in French) is available from the ITTO Secretariat (itto@itto.or.jp)