

**The African timber-processing sector grew little over the 1990s. It remains a key, though, to sustainable development on the continent**

by **Gérard Buttoud<sup>1</sup>**  
**Panagiotis Lefakis<sup>2</sup>**  
and **Jean Bakouma<sup>3</sup>**

<sup>1</sup>**Professor, Laboratory of Forest Policy**

National Institute of Forestry,  
Agricultural and Environmental  
Engineering (ENGREF)

14 rue Girardet, CS 4216  
54042 Nancy, France  
buttoud@engref.fr

<sup>2</sup>**Lecturer, Laboratory of Forest Informatics**

Faculty of Forestry and Natural  
Environment, Aristotelian  
University

54006 Thessaloniki, Greece  
plefakis@for.auth.gr

<sup>3</sup>**Assistant, Laboratory of Forestry Economics**

National Institute of Agricultural  
Research (INRA)

14 rue Girardet, CS 4216  
54042 Nancy, France  
bakouma@engref.fr

IN analysing trends in the production and trade of tropical timber, market evolution can be distinguished at two scales:

- 1) at the 'immediate' level, where changes take place in the market as a result of short-term market decisions. Such decisions can be facilitated by permanent market intelligence systems that give almost-real-time market information: in this respect, ITTO provides detailed and up-to-date information through its *Tropical Timber Market Information Service*; and
- 2) at a structural level, which is mostly related to the state of the resource and to socio-economic conditions at the national and international levels.

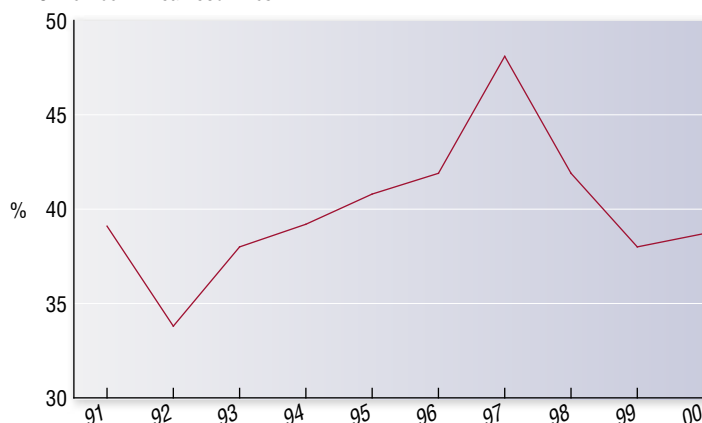
Both scales can play an important role in the sustainability of timber production and trade, and indirectly in the sustainability of the resource itself. For African producers, the need for an in-depth analysis of the long-term structural trends in the production and trade of forest products is essential for the pursuit of sustainable forest management and sustainable development.

For this reason the Laboratory of Forest Policy at the National Institute of Forestry, Agricultural and Environmental Engineering (ENGREF) in Nancy, France has developed software for analysing long-term trends in the production and trade of tropical timber products in the main African producing countries. The information used for this purpose is derived from ITTO data (ie the ITTO *Annual Review of the World Timber Situation*), which are amended where possible with: 1) additional national data collected from various public and private sources; and 2) some rectifying calculations concerning mainly the stocks and conversion rates. Nevertheless, we realise that the data on which our analysis is based is often flawed and more efforts are needed to improve production and trade statistics (*see box*).

This article presents the results of our analysis of trends in the African timber economy during the 1990s.

## Raw figures

**Figure 1:** Percentage of timber exported as unprocessed logs from net export ITTO member African countries



## Slow progress in processing

The rate of timber processing—into sawnwood, plywood and other added-value products—remained lower in Africa during the 1990s than elsewhere in the tropical world; more than 38% of tropical timber produced on the continent was still exported as logs at the end of the decade (*Figure 1*). Of course, this percentage varies from country to country; nevertheless, the main producers—those from the central part of Africa, the so-called Congo Basin countries—are characterised by a particularly low rate of processing.

Ghana (not strictly a Congo Basin country) and Côte d'Ivoire are notable exceptions: both countries have a long history of processing industries and now process more than 95% of their timber production. In Côte d'Ivoire, only plantation teak is exported as logs, while Ghana has been processing 100% of its log production since 1996, when log exports were banned. In other African countries, however, the processing industries grew little over the decade (*Figure 2*). Indeed, in many countries the percentage of local processing declined in the mid 1990s as log exports boomed (particularly to Asia) and only began to increase again towards the end of the decade. In Gabon, in-country timber processing was higher in 1999 than it was in 1990; in Cameroon and Congo, though, in-country timber processing had not returned to 1990 levels by 1999. In the case of Congo, the civil war undoubtedly had an impact on the development of processing activities. It is harder to fathom

## A need for improved statistics

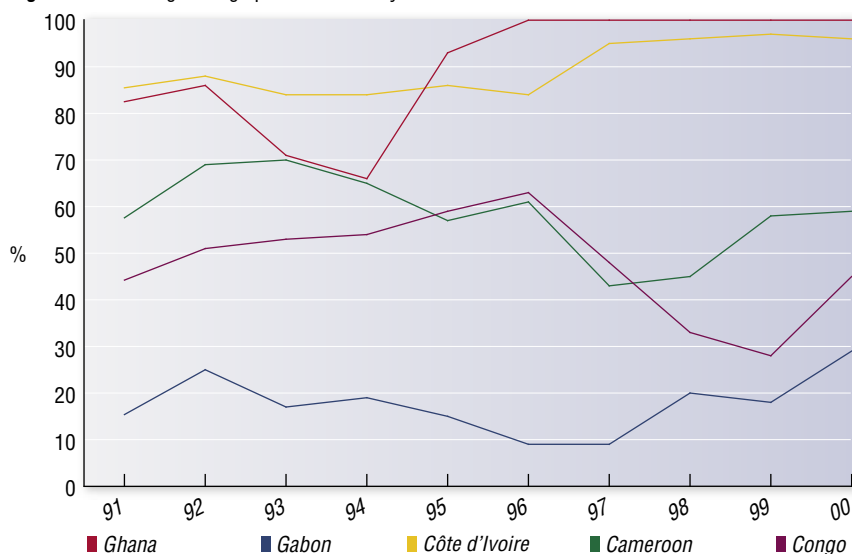
A deeper analysis of the trends in African timber economy than that given here requires good statistical data. These are generally not available, despite major efforts to improve statistical capacity with ITTO assistance.

Some important improvements are still needed in the procedures for data collection in the following areas: (i) data on international trade, especially in places where customs services are not performing, and where containerisation has been developed with no change in statistical formulae and procedures; (ii) data on illegal logging, which is becoming increasingly significant and may account for up to 60% of total declared production in some countries (especially Congo and Cameroon, which may partly explain aberrant trends related to some economic indicators in those countries); (iii) data on conversion factors, to be revised from the official ones to take into account the real technical situation of processing units at the local level; and (iv) data on constituted stocks at various points in the timber chain.

ITTO should play the leading role in improving production and trade statistics, in collaboration with the African Timber Association and the Inter-African Forest Industries Association. Good policy decisions—both public and private—can only be made on the basis of good information. Improving the statistics is therefore crucial for sustainable development in ITTO's African member countries.

## Thinking locally

**Figure 2:** Percentage of logs processed locally in selected African countries



the reason for the failure of efforts to stimulate growth in the processing sector of Cameroon, a politically stable country (although the devaluation of the Central African franc—CFAF—may have played a role; see later).

Some general reasons for the low level of in-country timber processing can be enumerated. These include a dependency on the business strategies of European companies (which dominate the timber sector in tropical Africa), the small size of internal and even external markets, the high quality of the timber extracted (and therefore the sophistication of processing facilities in Europe), the generally low volumes per hectare of log production, and additional demand for logs from Asiatic operators.

This situation is not specific to the timber sector. The average annual growth of the total manufactured added value in Africa decreased from 4.3% during the 1980s to 2.0% in the 1990s. In the CFAF economic zone, the devaluation of the currency in 1994 led to an increase of production costs—and, except in Côte d'Ivoire, a recession in industrial activity—and accentuated this trend. The decrease in manufactured added value was particularly significant in the Congo Basin: over the period 1990–99, the rate of growth in industrial production decreased from 6.9% to –2.2% in Congo, from 10.4% to –1.0% in Cameroon, from 1.6% to –7.3% in the Democratic Republic of Congo (formerly Zaire), and from 1.8% to 0.9% in Gabon.

The level of investment in processing activities remained correspondingly very low. For example, investment in the production of added value timber decreased in Cameroon from 2.3% in 1996 to zero in 1999. In the Democratic Republic of Congo, the average annual rate of growth of investment 'grew' from –5.1% during the 1980s to –2.7% in the 1990s.

A detailed study carried out by SODEFOR/ITTO (2000) shows that the volumes of raw timber purchased by factories and effectively processed in Côte d'Ivoire decreased in the period 1994–97. There, the policy reforms of 1995 promoting the use of small-size logs and lesser known species led to unsatisfactory results, due to both technical difficulties faced by industrialists to adapt to this policy, and the non-existent market for such products. As for further processing activities, the recession is still more severe. Despite a ban on log exports, there has been no reorganisation of the forest sector, which remains dependent on European demand.

There are exceptions to this generally negative picture. For example, the number and efficiency of sawmills in some countries (including Côte d'Ivoire) have increased. However, the full nature and extent of such successes and their contribution to sustainable development are not well documented. If they are to be extended to other countries, it is important to know more about the success stories; an analytical catalogue of successful experiences may be useful.

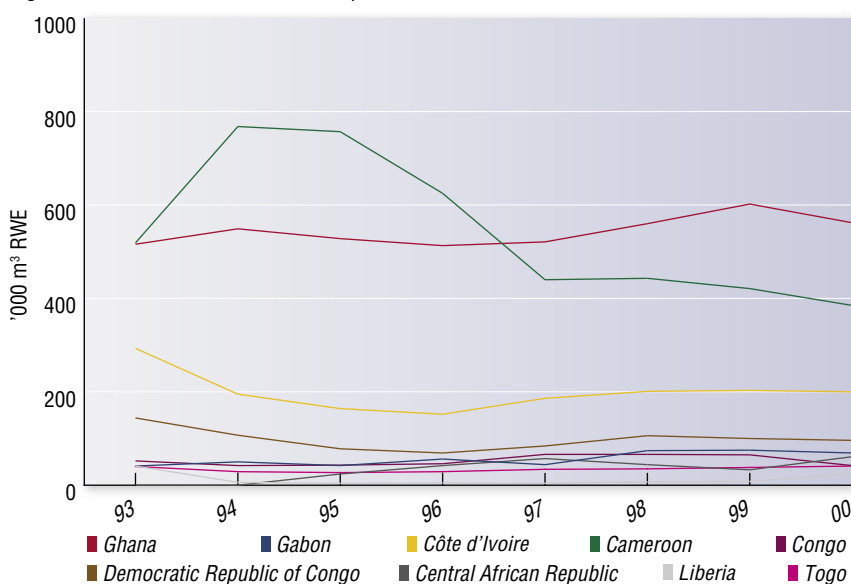
## Small domestic demand

At the same time as processing industries were stagnating in Africa, the level of internal demand remained very low, even decreasing in some cases such as in Cameroon after 1994 and in Congo after 1997.

Indeed, local needs for sawn timber are not increasing significantly in any African country. In Gabon and Congo, demand is limited by low populations. Domestic demand

## Undemanding markets

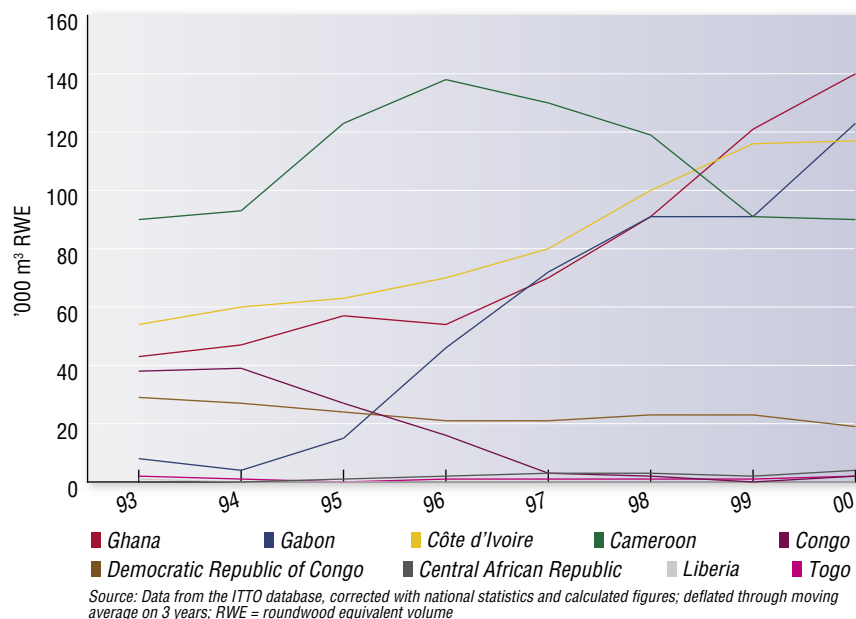
**Figure 3a:** Domestic sawnwood consumption in African ITTO member countries



Source: Data from the ITTO database, corrected with national statistics and calculated figures; deflated through moving average on 3 years; RWE = roundwood equivalent volume

## Plying the markets

**Figure 3b:** Domestic plywood consumption in African ITTO member countries



began increasing after 1996 in Côte d'Ivoire and Ghana, but by 1999 had not grown much above 1992 levels. In Cameroon, the local consumption of sawnwood increased strongly between 1992 and 1994 but declined steadily thereafter. The situation is rather different for plywood: growth in domestic consumption can be seen in Côte d'Ivoire, Gabon and Ghana. However, demand for plywood was stagnant in Congo and fell a dramatic 25% in Cameroon between 1995 and 1999 (Figures 3a & 3b).

In most countries the per capita consumption of timber products was stagnant over the period at the level of less than 0.1 m<sup>3</sup> per inhabitant (Figure 4); it even decreased in Cameroon. The exception, Gabon, saw a significant increase between 1996 and 1999.

Thus, local demand for timber generally did not increase in the producing countries themselves. However, there was growth in consumption in their main African clients, including in Nigeria and North African countries. The main demand of these countries is for sawn timber; the decline in exports of sawnwood from the main African producers may therefore create a regional shortfall in supply in the medium term unless this trend can be reversed.

A major objective of the African timber industry is to be partly reoriented towards satisfying African needs, including those in producing countries, for economic development and a more sustainable management of the resource. This probably needs an investment strategy based on a share of risks between public and private sectors.

## The inter-African competition on niches

The volumes of timber products exported from African countries is very limited compared to those coming from Southeast Asia, resulting in strong competition between the

main exporters, especially in restricted markets for specific products.

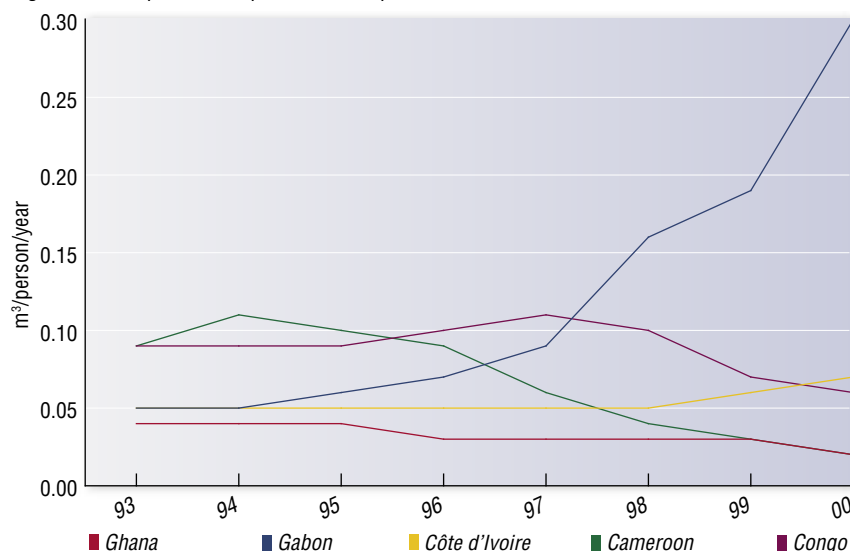
As an example of this, Côte d'Ivoire and Ghana compete directly in the same market for special plywood destined for European countries: trends in the percentages of the export market have been almost diametrically opposed during the whole period (Figure 5). The same can be said for Cameroon and Gabon for another type of plywood (Figure 5). This is mainly due to the existence of two separate chains for such products, one being in western

Africa and the other in the Congo Basin, with specific ship-transport companies and arrangements. Inside each chain, the competition for satisfying immediate demand is very strong due to the limited availability of the resource.

There appears to be no significant link between competitiveness in the market and the prices of various products. The average value of logs, for example, is almost the same within the period for all exporters except Congo (Figure 6). The reasons for this situation include: a) a rather high quality of African roundwood products for specific material ('specialities' and not 'commodities') for which competitiveness is not defined through pricing; and b) the importance of intra-firm trade (especially inside the French and Italian international companies) with artificial values. The market is thus driven by niches, not by the prices as it is the case for timber exports from Southeast Asia.

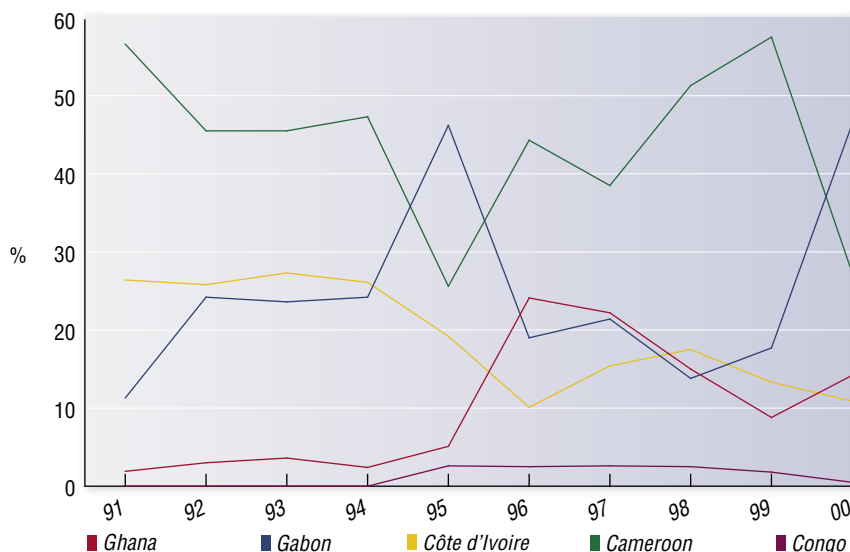
## Gabon and the rest

**Figure 4:** Per capita consumption of timber products in selected African countries



## Market share

**Figure 5:** Percentage of the African plywood export market commanded by selected countries



Source: ITTO database, corrected with national statistics and calculated figures

## African timbers: just a reactive economy?

The significance of total tropical timber exports from Africa is certainly rather low at a global level, representing only 12% of the international trade of tropical timber (from 33% of the total tropical forest area), these figures including non-ITTO tropical members. This is indicative of the generally undynamic nature of the African timber sector; it remains basically extractive in nature and few of the earnings are re-invested in productive activities such as processing.

This situation may create some financial difficulties in promoting a competitive timber economy, but it could also provide time in which prudent silvicultural and harvesting models for sustainable forest

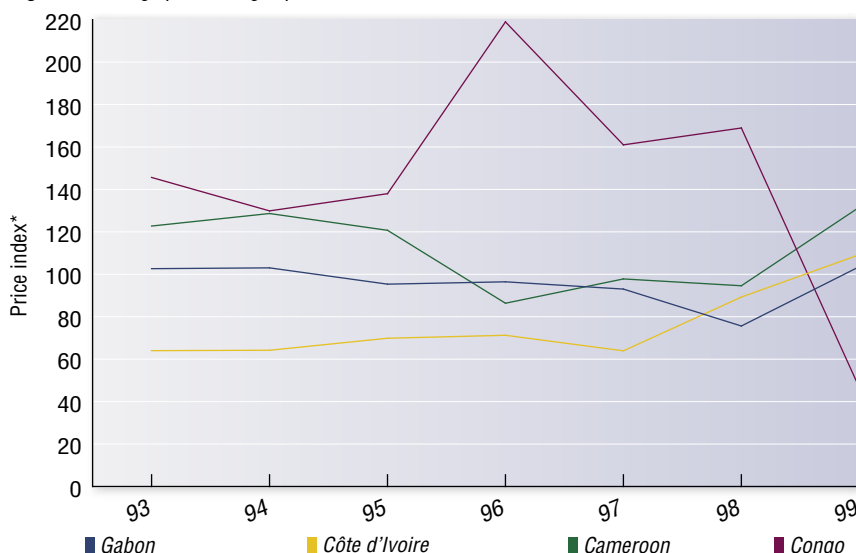
production linked to the market and conforming to long-term economic scenarios can be developed. Certainly, a dynamic timber processing sector is needed in Africa; nevertheless, the 'slow start' compared to what has occurred in many other parts of the tropical world provides an opportunity for African foresters, industrialists and policy-makers to get the processes right—so that the forest industry is able to play a substantial role in the sustainable development of the continent.

## References

- Bakouma, J. & Buttoud, G. 1996. African markets: a future for African sawnwood? *Tropical forest update* 6/3: 17.
- Bakouma, J. & Buttoud, G. 1999. Sustainable forest management in Africa: constraints, costs and conditions. *ITTO Tropical forest update* 9/3: 4–5.
- Buttoud, G. 2001. *Gérer les forêts du Sud; l'essentiel sur la politique et l'économie forestières dans les pays en développement*. L'Harmattan, Paris, France. 255 p.
- Eba'a Atyi, R. 1998. Cameroon's logging industry: structure, economic importance and effects of devaluation. *CIFOR occasional paper No 14*. Bogor, Indonesia.
- Johnson, S. 1998. Production and trade of tropical timber in the African region. *ITTO Tropical forest update*, 8/3: 19–21.
- SODEFOR/ITTO 2000. Etude sur la consommation du bois en Côte d'Ivoire. Report of ITTO PROJECT PD 109/90 Rev.4.

## Price parity

**Figure 6:** Average price of log exports in selected African countries



\*Ratio of national price of log exports per m<sup>3</sup> compared to the average price of logs exported by all African ITTO members in the same year; Source: ITTO database, corrected with national statistics and calculated figures

## African outlook study

The Forestry Outlook Study for Africa (FOSA) is an initiative of the Food and Agriculture Organization of the United Nations (FAO), in partnership with the African Development Bank, the European Commission, the World Bank, the Economic Commission for Africa and all member countries of Africa. Its purpose is to analyse the status, trends and driving forces in African forestry and to reach a prognosis for sustainable development in the sector to the year 2020.

The study was undertaken as a highly participatory initiative involving all the 53 African countries and the main regional and sub-regional organisations in Africa. Considering the enormous diversity encompassing Africa, the study adopted a sub-regional approach, dividing Africa into five sub-regions. Therefore, FOSA consists of one regional report (*Regional Overview of Opportunities and Challenges Towards 2020*) and five sub-regional reports (North Africa; Central Africa; East Africa; West Africa and Southern Africa). These six reports can be downloaded from [www.fao.org/forestry/fosa](http://www.fao.org/forestry/fosa).

**For more information contact:** Johan Lejeune, EC-FAO Partnership Programme, Forestry Policy and Planning Division, FONS, Forestry Department, FAO, Viale delle Terme di Caracalla, 00100 Rome, Italy; Tel 39-06-570 55861; Fax 39-06-570 55137; [johan.lejeune@fao.org](mailto:johan.lejeune@fao.org)