

CHAPTER 2

THE LOGGING INDUSTRY AND MANAGEMENT OF NATURAL FORESTS : TROPICAL TIMBER AND THE FORESTS OF CENTRAL AFRICA IN THE FACE OF MARKET TRENDS

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1. Introduction : Markets and the value chain

Trends in Central Africa logging are largely dependent on market requirements. This is particularly true for international markets which demand high quality products. Strict market requirements create an obstacle for the optimum use of forest resources. International markets are increasingly concerned with production conditions and compliance with national regulations and international standards of sustainable management. At the same time, the internal Congo Basin market is growing

rapidly, but because of low domestic purchasing power and buyers' indifference to forest management concerns, the domestic market is mainly supplied by informal and/or illegal operations.

This chapter concerns recent logging developments in Central Africa : it first reviews trends in demand for tropical timber, then gives an account of producers and their outlets, and lastly addresses the management of natural forests.



Photo 2.1 : Logs from Okoumé being transported by sea, Gabon

2. Demand for tropical timber

2.1 International markets for tropical timber

2.1.1 Trends in timber volumes, prices and flows. The Congo Basin within world production

The world rough lumber (logs) harvest (excluding wood fuel) is estimated at 1 578 million m³ (FAO, 2011).

The extraction of timber from the natural forests of all the COMIFAC countries, again according to FAO, amounts to approximately 16 million m³, or just 1 % of world production². Of this volume, 5 million m³ of rough-lumber equivalent are exported (taking all products together), which represents just 0.3 % of world rough lumber production.

Volumes exported and destinations

Asia – essentially China – accounts for over 50 % of rough lumber equivalent³ volumes exported. The European and Asian markets are mainly supplied by Cameroon and Gabon.

The inter-African market accounts for less than 10 % of the volume exported (about 0.4 million m³ of rough-lumber equivalent by Gabon and Cameroon). Informal sawn wood, estimated at more than an additional 0.2 million m³ per annum, constitutes a substantial share of supplies to neighboring countries in the subregion.

Evolution of volumes

The ban of rough lumber wood exports, which was ordered by Gabon in 2009 (almost 2 million m³ of rough lumber was exported in 2007), came into force in 2010. In 2009, Gabon alone exported as much rough lumber as the rest of the sub-region but in 2010 all exports were stopped. The decrease in Gabonese rough lumber exports between 2009 and 2010 was partly offset by an increase of 500 000 m³ in exports of rough lumber from other countries of the region, essentially Cameroon and the Republic of Congo. The profitability of Gabonese concessions declined following the imposition of this strict and unexpected ban.

The effects of the 2008 world economic crisis on volumes of sawn wood imported into the European market (whose market collapsed in 2009 and is still in recession) continue to be felt. Cameroon, the leading exporter and producer of sawn wood in the region, saw its exports recover in 2010 to a level which exceeded that of 2006 (close to 600 000 m³). Gabon increased its sawn wood exports threefold between 2007 and 2011, reaching 470 000 m³ after putting additional industrial equipment into service following the 2009 cessation of rough lumber exports. Gabon has also prohibited the felling of five species: Afo (*Poga oleosa*), Andok (*Irvingia gabonensis*), Douka (*Tieghemella sp.*), Moabi (*Baillonella toxisperma*)

- 2 Formal production in recent years has been between 6 and 8 million m³; the FAO figure probably includes a proportion of informal production.
- 3 The rough lumber equivalent volume is the volume of rough lumber which has been necessary to produce 1 m³ of finished products.

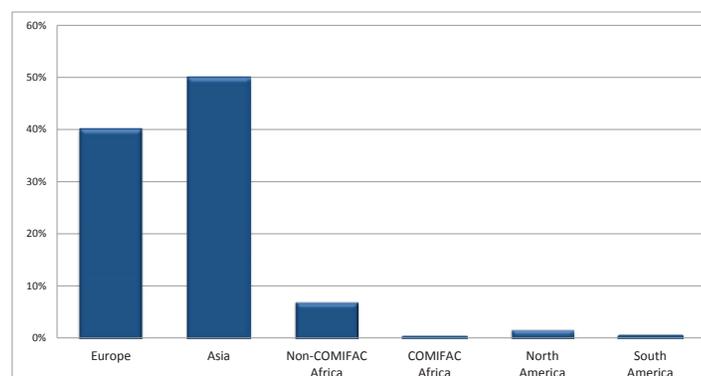


Figure 2.1: Volumes exported in 2012 (as percentages of exports of rough lumber equivalent) by the COMIFAC countries according to destination (OFAC data, Ministries in charge of forests in the countries concerned)

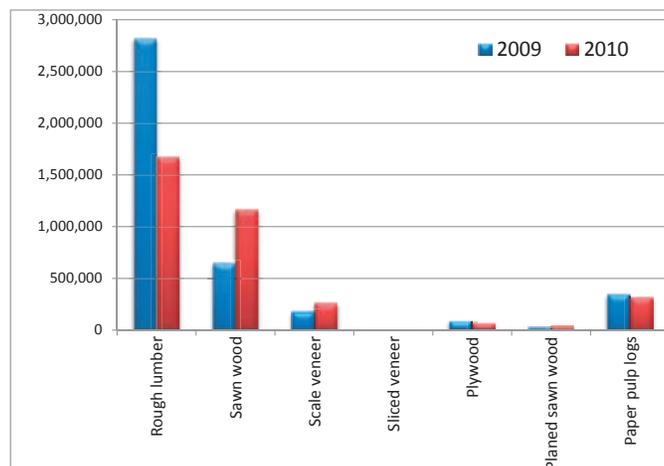


Figure 2.2: COMIFAC countries – volumes exported in 2009-2010 (actual m³ of products)

and Ozigo (*Dacryodes buettneri*)⁴. Although these species account for only relatively small volumes (13% of rough lumber exported in 2007⁵), this restriction has weakened the economic viability of certain concessions and has had a knock-on effect in neighboring countries.

Exports of planed sawn wood (flooring, terrace decking, moldings, etc.) remain very low (2% of exports in rough lumber equivalent), dominated by far by Cameroon, which is again approaching its 2008 export level (41 000 m³ of planed sawn wood in 2010). Gabonese exports of plywood fell sharply, while scale veneer exports grew rapidly (an indirect effect of the as of yet unsigned economic partnership agreements between Gabon and the European Union, which triggered differentiated increases in customs tariffs according to product; which are particularly high for plywood).

Exports of processed manufactured products (e.g. doors, furniture) remain negligible.

At the regional level, exports of new species (known as secondary species) are growing, albeit slowly. These species include: Tali (*Erythrophleum sp.*), Padouk (*Pterocarpus sp.*), Okan (*Cylicodiscus gabunensis*), Eyoum (*Dialium sp.*), Anzem (*Copaifera sp.*), Kotibé (*Nesogordonia papaverifera*), Red Longhi (*Chrysophyllum sp.*), Mukulungu (*Austranella congolensis*), Gheombi (*Sindoropsis le-testui*), etc. Their marketing has been jeopardized by the difficulty in making up sufficient homogeneous consignments in volume and ensuring a stable supply over time. These species also suffer from low price levels which in most cases prevent them from becoming profitable, especially for remote concessions where transport costs greatly affect cost/price.

Furthermore, prospects for tropical timber on the European market are limited by competition from temperate timber and the very strong competition from materials other than wood (PVC and aluminum in external joinery, wood-polymers, etc.).

The supply of Forest Stewardship Council (FSC) certified tropical timber, although substantial, is not significantly modifying consumer behavior vis-à-vis tropical timber. The effects on the competitiveness of certified products by the entry into force of the European Union Timber Regulation (EUTR) on 3 March 2013 and the first Forest Law Enforcement, Governance and Trade (FLEGT) licenses expected in 2014 are hard to predict.



Photo 2.2: Logs for export from Owendo port, Gabon

Movement of prices

During the crisis, the changes in currency exchange rates tended to make exports more expensive.

The various logistical constraints (bridges, ports, roads) also increase transport costs and thus harm prospects for the development of exports.

The decline in demand linked to the 2008/2009 crisis has caused prices to fall. This decrease was greater for sawn wood (almost 25% in 2009 and 2010) than for rough lumber (only in 2009).

Timber flows

Rough lumber (Cameroon, Congo), which accounts for more than half of regional exports, is mainly exported to China, followed by India as a distant second but where demand is increasing.

- 4 Only Moabi, Douka and Ozigo accounted for significant volumes.
- 5 Source: SEPBG statistics.

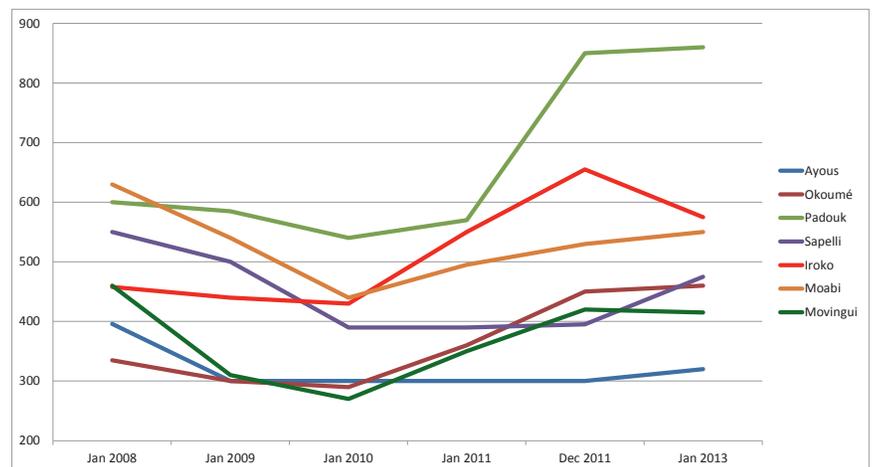
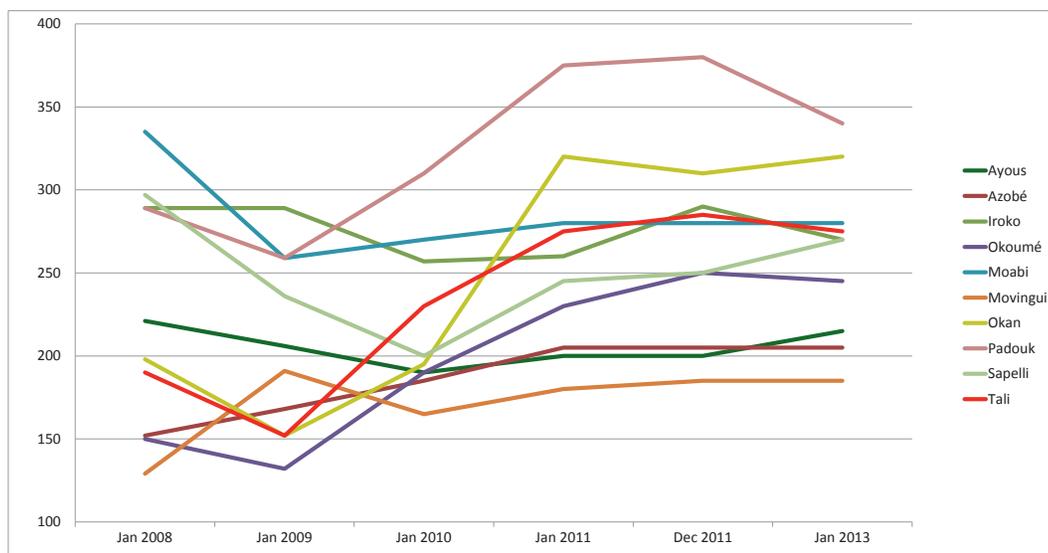


Figure 2.3: FOB prices of African sawn wood (€/m³)
Source: OIBT



Ayous (Triplochiton scleroxylon); Azobe (Lophira alata); Iroko (Chlorophora regia); Okoumé (Aucoumea klaineana); Moabi (Baillonella toxisperma); Movingui (Distemonanthus benthamianus); Okan (Cyclicodiscus gabunensis); Padouk (Pterocarpus soyauxii); Sapelli (Entandrophragma cylendricum); Tali (Erythrophleum sp.)

Figure 2.4: Movement of FOB prices of African rough lumber (€/m³)
Source: OIBT

Sawn wood, which until recently came principally from Cameroon, is mainly exported to the traditional European customers (Spain, France, Italy, Netherlands), where demand is, however, falling. Asia is taking up the slack from this diminishing market (*Carte examen annuel 2010, ITTO, p.45*).

Scale veneer is exported essentially to Europe (France, Italy), but it is suffering from both the loss of interest in plywood and competition from temperate timber.

The requirements of international consumer markets for timber originating in Central Africa vary widely. The Asian market continues to pay little heed to questions relating to the sustainable

management of forests and harvest legality. But since the Asian market is partly oriented towards the re-exportation of processed products, it too has to comply with requirements of other consuming countries including the European, American and Australian markets, notably for the traceability of products. The latter markets are becoming increasingly concerned about the production conditions of the timber they buy. The particular case of the European market is spelled out below because of its importance and the current interest in the execution of the FLEGT action plan. Indeed, although Asia has become the leading importer of African timber, Central African producers cannot afford to cut themselves off from the European market, to whose requirements they must adapt.

Table 2.1: Quantity and types of products exported (formal sector) from Central African countries in 2010

Exports 2010 (m ³ of real product)	Cameroon	Congo	DRC	CAR	Equatorial Guinea(*)	Gabon	Total
Rough lumber	607 647	798 954	124 037	147 893	23 385	-	1 678 531
Sawn wood	696 166	132 187	25 838	36 657	3 375	278 236	1 169 084
Scale veneer	52 548	18 038	-	-	8 388	196 804	267 390
Sliced veneer	78	-	-	-	-	-	78
Plywood	17 084	167	-	-	-	54 707	71 958
Planed sawn wood	40 945	-	225	-	-	971	42 141
Paper pulp logs	-	318 492	-	-	-	-	318 492
Rough lumber equivalent	2 616 104	1 493 343	189 195	239 536	52 793	1 299 442	5 837 618

Source: Statistics from the forestry authorities in the countries concerned, volume in rough lumber equivalent estimated by the authors. (*) data of 2009

2.1.2. Voluntary Partnership Agreement and European Union Timber Regulation: legal requirements for access to the European market

The European Union (EU) established new requirements concerning trade in timber and its derivatives in 2003. These requirements were specified in the FLEGT action plan; its demonstrated objective is to ban illegal timber and trade in such timber with the EU. Some tropical timber-producing countries have begun negotiations with the EU on a Voluntary Partnership Agreement (VPA). The aims of such an agreement are to give concrete form to this mutual desire to combat illegal logging and to improve governance and control of the forestry sector. And lastly, it ensures that European consumers receive legal timber.

With the FLEGT action plan of 2003, the EU demonstrated its intentions to combat illegal logging and establish sustainable forest management in the timber-producing countries engaged in sector reforms. The EU supports efforts to strengthen the capacity of states to implement forestry regulations, to promote a “virtuous” private sector and the emergence of a civil society which wants to see good management of their country’s forestry resources. Among the tools available under the FLEGT process, the negotiation of the partnership agreements is certainly the best known.

The Voluntary Partnership Agreements

The countries of the Central Africa region have been among the first to engage in this process. As of today, three countries from the region have negotiated, signed and ratified VPAs which are now being implemented: Cameroon, Congo and CAR. Two countries are at the negotiation stage: DRC and Gabon. No country has yet set up the system for verification of legality which allows the issuance of FLEGT permits. When the VPA is considered operational by the two parties (the first permits are expected in 2014), the EU will institute control measures at its borders and will reject any timber not accompanied by a FLEGT permit.

At the end of 2012 the situation regarding the implementation of the VPAs was as follows:

The VPA with Cameroon entered into force at the beginning of 2012. This country, which has a large number of logging licenses (volumes and areas), has numerous actors which makes control very complex. An additional difficulty is that some

of the timber intended for export originates from a large informal timber sector.

The VPA with Congo entered into force in March 2013, but this country is having difficulties with implementation of its Legality Verification System and its national traceability system, and also with the rigorous application of the law by many logging companies. The development of the legality verification procedures is well advanced but their effective implementation requires a permanent financing mechanism and strengthening of the capacity of the personnel who will be responsible for it.

The VPA with the Central African Republic entered into force in July 2012. There are practical difficulties with its implementation as the country is heavily dependent on external assistance. The fact that it is completely landlocked creates problems with regard to the transit of its timber exports through Cameroon and responsibility for their traceability.

The VPA with the Democratic Republic of Congo has been under negotiation since 2010. One difficulty lies in the desire for decentralization within the country. In addition, industrial logging, which has developed in recent years under cover of small-scale permits, does not provide sufficient guarantees on the origin of the timber or the sustainable management of forest resources.



Photo 2.3: Sawing of Afrormosia (Pericopsis elata), DRC



Photo 2.4: A well-deserved rest for these workers in a designated logging unit, Gabon



Photo 2.5: OLB labeling for export – Douala Port, Cameroon

Lastly, the VPA with Gabon has been under negotiation since 2010. The division of the logging sector between the large companies and small logging operators, together with a lack of commitment on the part of the authorities concerned has left negotiations dormant for a long time.

The European Union Timber Regulation

The European Union Timber Regulation (EUTR) forms part of the FLEGT action plan and has supplemented the VPAs since 2010. The EUTR does not constitute a border control measure but applies to exporters of timber to the European market regardless of its origin (tropical or temperate timber, timber imported or produced in EU territory). It requires exporters to establish a system of “due diligence” which will enable them to ensure that the timber they are placing on the market is of legal origin. It makes illegal trade in timber a punishable offence and it requires those who engage in the European timber trade to implement a traceability system.

The Regulation explicitly states that timber importers who have a FLEGT (or CITES) authorization have complied with the Regulation, which is undoubtedly an advantage for all countries capable of issuing such an authorization.

Promulgated in 2010, the EUTR entered into force on 3 March 2013, but all the countries engaged in a VPA have been slow to implement it. These countries are therefore not in a position to issue a FLEGT permit, which is causing concern among the private sector in the producer countries. Without FLEGT permits, importers will infer a risk that their supplier is selling them illegal timber. In the absence of a national legal verification system it is incumbent on each exporter to the EU to supply information that will reassure the purchaser of the legality of the timber and its derivatives and of the credibility of the supporting information. The voluntary certification schemes, already well developed within the region, will certainly play an important positive role in this regard.

In the long term, the FLEGT permits will enable European operators to import timber from countries where the VPA is in effect. They will thus be able to fulfill without difficulty their obligations as defined by the EUTR, which constitutes an incentive for making progress in the implementation of the VPAs.

The positive image conveyed by an operational VPA should also reassure private and institutional investors engaged in “deforestation avoided” projects in the context of the REDD+ mechanism (Reduction of emissions linked to deforestation and forest degradation).

Box 2.1: The European Union Timber Regulation

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The European Union Timber Regulation⁶ adopted a legality definition. Article 2 (subparagraph h) specifies the areas of current legislation in the countries of origin covered by the EUTR:

- rights to harvest timber within gazetted boundaries;
- payment of harvest and timber rights, including duties related to timber harvesting;
- timber harvesting conditions, including directly related environmental and forest legislation, notably regarding forest management and biodiversity conservation;
- third parties' legal rights concerning use and tenure that are affected by timber harvesting;
- trade and customs, in so far as the forest sector is concerned.

There is coherence, favored by European legislators, between the legality of timber as defined in the EUTR and that defined in the VPAs.

⁶ EU Council Regulation N° 955/2010 of the European Parliament and of the Council adopted on 20/10/2010 laying down the obligations of operators who place timber and timber products on the market.

Challenges to the EUTR as a supplement to the VPAs

The EUTR in practice embodies a transfer of the responsibility for forest regulatory compliance, normally the responsibility of sovereign states, to the operators initiating transactions. In Europe, the latter are required to exercise due diligence and to verify the legality of the timber with their suppliers. The certified companies, thanks to a recognized internal chain of control, are able to demonstrate more visibly the legality of their products. In order to obtain a certificate, the necessary voluntary action requires a company's time and remains expensive, and is subject to due diligence. Certification may therefore constitute a valid alternative to the FLEGT permit in countries which have not yet negotiated a VPA.

In the countries of the Congo Basin, a major question associated with the implementation of the EUTR is what effect this new process offered to European purchasers will have on VPA implementation. By implementing a VPA, states would in effect regain their control powers on the basis of a legitimate, operational and recognized system for verification of legality. The recent history of the VPAs negotiated in Central Africa has shown how far these agreements have gone beyond the mere desire to combat illegal logging to focus increased attention on the future of the Congo Basin forests.

2.1.3. Requirements of the other international markets

Other timber-consuming markets are not lagging behind Europe. The tools to combat illegal logging are increasing in number, with a range of requirements vis-à-vis timber-producing countries.

- The international scene is prompting consumers to be more demanding

Since the G8 of 1998 and the world summit on sustainable development in 2002, action to combat illegal logging has come to the fore in international discussions. Timber-producing countries, notably in Africa, are mobilizing on this issue. The World Bank publishes data on the financial losses caused by illegal logging. NGOs regularly denounce this phenomenon. Gradually, consumers are asking for assurance that they are not participating in a controversial trade and are therefore requiring more information concerning the origin of timber products.

- The voluntary development of responsible purchasing policies

Responsible purchasing policies are developing both in the private sector among companies wishing to burnish their image with consumers and among public-sector authorities and communities. By way of illustration, mention may be made of the public purchasing policies of the Netherlands and the United Kingdom and the Japanese policy (*Japan Goho* (=legal) *Wood*).

However, these purchasing policies remain market tools based on voluntary action and concern only a quarter of the timber trade at best.

- A further step: Regulations in Australia and the USA

Like the EU, other timber-consuming countries have opted to legislate against the trade in illegal timber: the United States since May 2008 with the Lacey Act, and Australia, which in late 2012 adopted the Illegal Logging Prohibition Act, which will come into force at the end of 2014. Like the EUTR this legislation prohibits the marketing of illegal timber harvested in breach of the laws of the producing country.

The Lacey Act imposes a broad ban ranging from sale to barter and even to possession of illegally harvested timber. However, this Act does not impose any obligation on means used, even if the authority encourages "due care" as a practical response to the obligations set out in regulations. All timber products, from rough lumber to paper are covered by the Lacey Act.

The Australian Illegal Logging Prohibition Act adopts a similar approach to the EUTR, i.e. a prohibition of sales and the exercise of "due diligence". A list of "regulated" products, the only ones that will be affected by the obligation of due diligence will be compiled within a year.

Like the EUTR, these regulations do not set up new customs barriers; they apply above all to economic operators and require applicable declarations. Thus the Lacey Act requires a declaration by the country of origin with scientific identification of species along with the quantity and value of the product for customs purposes. In Australia, the declaration of the due diligence system will be obligatory at the time of importation (this will be spelt out in 2013).

It is still early to compare controls and penalties since only the Lacey Act has been in operation for any length of time. That said, the enforcement thinking behind this Act is based on action by the American Justice Department to identify symptomatic criminal acts followed, in the event of an



Photo 2.6: A stump is labeled to meet traceability standards



Photo 2.7: Plywood sign at Alpicam – Douala, Cameroon

offence, by rigorous judicial proceedings. On the other hand, the EUTR and the Illegal Logging Prohibition Act aim to gradually give the private sector responsibility through controls and regular state monitoring.

Even though the approaches adopted by these legal instruments are slightly different, the expectations are the same: namely, that operators should be responsible and discriminating as regards their supply chain(s). In practice, therefore, these instruments impose responsible purchasing policies on the whole sector.

- Reliable producers and increasingly responsible importers

This legislation is not without consequences for operators in the timber-producing countries. In order to avoid taking risks, American, European and Australian importers will *de facto* exclude timber of uncertain origin from their supplies. They want reliable products.

Producers must therefore be able to offer guarantees in order to keep their clients. Documentation, security and transparency must be the watchwords of the supply chain. Some firms in producing countries have already made commitments to this end, notably through voluntary certification (of legality or sustainable management).

On a national scale, this is a formidable challenge for export operations. Only the EU has planned to assist the timber-producing countries in meeting this challenge posed by the VPAs. Neither the Lacey Act nor the Illegal Logging Prohibition Act provides for such specific assistance.

The African producing-countries have certainly committed themselves to achieve a strong market position. They have relatively short – and therefore relatively transparent – supply chains. The exporting companies are very committed to certification. Lastly, when the VPAs now being developed become operational, the verification of legality which will be applied to all exports will bring the evidence of legality to the international scene which the market is seeking.

2.2 Regional markets and intra-regional trade

Because of the high price of timber on the international market, several Central African countries source timber directly from neighboring countries at competitive rates, almost always through informal transactions. The regional market is therefore growing and the timber “leaving” the producing-countries (Cameroon, CAR or DRC) is exported to Chad, Nigeria or Uganda. The chief variable influencing cross-border demand is the

distance between a rapidly expanding city and the nearest sources of supply.

The economic growth and increasing urbanization of Central Africa countries are the drivers of the increasing demand for timber, both nationally and regionally. Transport infrastructures nevertheless remain a constraint on the development of these cross-border flows (such as, for example, the difficulties in exporting timber to Nigeria or from the DRC to the CAR). But new roads are being

built (Cameroon-Nigeria, Cameroon-Congo) which will promote regional and intra-regional trade, as is already illustrated by timber exports from eastern DRC to countries in east and southern Africa (Uganda, Rwanda, Kenya, South Sudan, etc.). Efforts to facilitate trade are being made in the Great Lakes region, together with the establishment of economic zones, which may also become a factor in promoting the development of regional and intra-regional trade.



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Photo 2.8: Stack of sawn wood ready for the international market – Douala Port, Cameroon

2.3 Requirements of national markets

The large proportion of illegal and informal sawn wood sold on the domestic markets of all the countries of the sub-region shows that consumers are paying little heed to the criterion of legality. The very great majority of purchasers simply want to buy products as cheaply as possible, which tends to promote informal production that does not have to bear the costs of forest management or conformity with legislation. Low prices also mean that mainly poor-quality products are found on the domestic markets.

Three approaches (probably in combination with each other) are feasible in order to increase the requirements of national markets for more legality and sustainability: (1) the influence of the VPA-FLEGT process; (2) the public markets; (3) technical and commercial standards.

Cameroon and Congo have included their domestic markets in their VPA and thus will have to endeavor to ensure the legality of all their national production. The CAR has initially excluded the domestic market from its VPA. The choices of Gabon and the DRC are as yet unknown.

In Congo and Cameroon, legal provisions have not yet included the “small permits” which are the most attractive to small-scale sawmill operators. Legislative reforms needed to incorporate the domestic market into the VPAs have not progressed. Therefore there is little chance that their “legality” can be verified by external auditors. The VPA under these circumstances could force actors on the domestic market to remain illegal. Such a

situation could then create openings in the domestic market for certain formal loggers who would know how to adapt their “business model” to local conditions (prices, quality, etc.). It will be interesting to see to what extent they could enter into competition and in which niches with informal sawyers, as is the case today in the CAR.

Price remains a serious constraint on increasing the requirements in domestic markets: the formal legally- sawn wood products are three to four times more expensive than the informally-produced sawn wood. Legal timber, including that originating from sustainable logging, will have great difficulty competing in national markets if it is much more

Photo 2.9: Entering the Alpicam plywood production factory, Cameroon



© Bandonin Desclée

expensive than informal sawn timber. The latter will not disappear overnight and will fight to keep its market share. Making legal timber attractive on domestic markets would therefore require major incentives such as reducing the charges imposed on legal timber.

It is unlikely that the local private demand for sawn wood will turn to more costly legal products. The state therefore will need to create this demand for legal sawn wood in its national market. However, there is still very little talk of increasing

the standards for national public markets. Efforts to this end must be made. Furthermore, development partners could begin to ask for quality control of the timber used in projects which they sponsor: building of schools, hospitals, etc., or other infrastructure.

The standardization of technical and commercial legislation must also be developed to assist producers in adapting to markets more effectively.

3. The producers

3.1 Diversified operations

Logging operations in Central Africa may be described in several ways: formal or informal, industrial or small-scale, legal or illegal.

Informal production is that which escapes regulation, registration and taxation by the state; it is generally undertaken on a small scale, with limited human, material and financial resources.

Illegal activities are those undertaken in breach of the laws and regulations in force.

Small-scale activities are undertaken without mechanical equipment or with rudimentary mechanical equipment.

Production may be small-scale and legal in origin, or it may be industrial and illegal in origin. Production is often informal because the regulatory framework is ill suited to operators working on a small scale or to their market. Although the definition of legality is clear enough, there is debate about the legality desired in timber markets.

For some, legality is limited to the right of access to the resource. A company in possession of valid legal felling permits for the forest and trees concerned would thus be legal, as would its production. In the context of industrial production (forest concessions), access to the resource (long-term concession contract and annual felling permits – relating to an “annual felling base”) is generally well regulated and formalized, and the timber originating therefrom is in most cases legal in relation to this criterion for access to the resource.

But the work done within the private certification processes (SGS, BVQI and Rain Forest

Alliance) has created a more global vision of the legality of timber and its derivatives. The FLEGT process has also encouraged the various participants to define more precisely and in a more consensual fashion what is entailed by the legality of a type of timber or derivative. On the basis of national regulations and legislation, legality encompasses, apart from the right of access to the resource; regulations relating to land rights, the environment and the protection of biodiversity, forest management, taxation, the right to work, transport and processing of forestry products, respect for local communities and indigenous peoples, and commercial and export procedures.

As the result of the work done through negotiating the VPAs, the FLEGT is a set of legality tables defining criteria and indicators of the legality of a product on the basis of the laws and regulations of the producing country. In the context of the VPAs, the legality verification system will seek to verify whether all the various criteria, indicators and verifiers defined in these tables are fully respected, which will permit the issuance of a FLEGT authorization. The first analyses show that substantial progress is needed in order for all companies to respect all the criteria defined in the tables.

The small-scale sector is in most cases informal. The right of access to the resource in particular is ill defined and subject to little state control, the rights are often acquired on a customary basis within the local communities, which means that under existing regulations this “small-scale timber” is most often illegal. Substantial work is currently being

done by the states of the region with the support of CIFOR to more effectively regulate the small-scale sector by adopting regulations which are more closely adapted to its specific characteristics. This approach also seeks to prevent this important sector of the local economy from being bypassed by industrial entrepreneurs seeking to evade compliance with the regulations imposed on concessions, as was shown in the DRC in 2012 (press conference and technical note by the National Coalition Against Illegal Logging in DRC concerning “artisanal-industrial” enterprises operating in an industrial manner with small-scale permits). In Central Africa, production by the small-scale sector dominates domestic markets. Volumes exported outside the subregion remain limited.



Photo 2.10: Construction of latrines for workers' camp, Gabon

Table 2.2: Dominant characteristics of small-scale and industrial operations in Central Africa

	Small-scale	Industrial
Logging permits	None or rarely, short-term permits by number of stands or area	Yes in most cases (cf. list of types below) Sometimes logging permits not valid or not compatible with industrial logging
Legality	Legal framework often incomplete or unsuited to small-scale activity and its actors. Limited compliance with laws and regulations	Legal framework often very complete. Very variable level of compliance with all laws and regulations.
Operators	Small or very small national enterprises. Segmented operations, multitude of small operators.	Large or medium-sized enterprises, in most cases with foreign capital. Very integrated operation, with forestry and industrial enterprises.
Felling	Chainsaws, sometimes axes, a few trees per producer.	Chainsaws. Larger worksite per producer (generally more than 1000 m ³ rough lumber per month).
Extraction and transport of products	Partly manual for processed timber and rough lumber. No heavy equipment used.	Extraction by means of tractors with tires or tracks.
Processing	Several examples : chainsaw at the felling site in forest (no transport of rough lumber), small sawing units, processing tools often rudimentary and obsolete. Low-quality sawing, generally wood not dried or second and third processing products.	In plants: sawn wood, veneer and plywood, slicing. If legislation permits, a proportion of rough lumber is exported as is and processed abroad.
Sales	National markets or in neighboring countries.	Sales essentially for exports outside the subregion.
Declaration of production	No declaration in most cases.	Declaration to ministries responsible for forests.
Taxation	Only partial taxation in most cases.	Taxation and partial taxation.

Adapted from Lescuyer et al., 2012

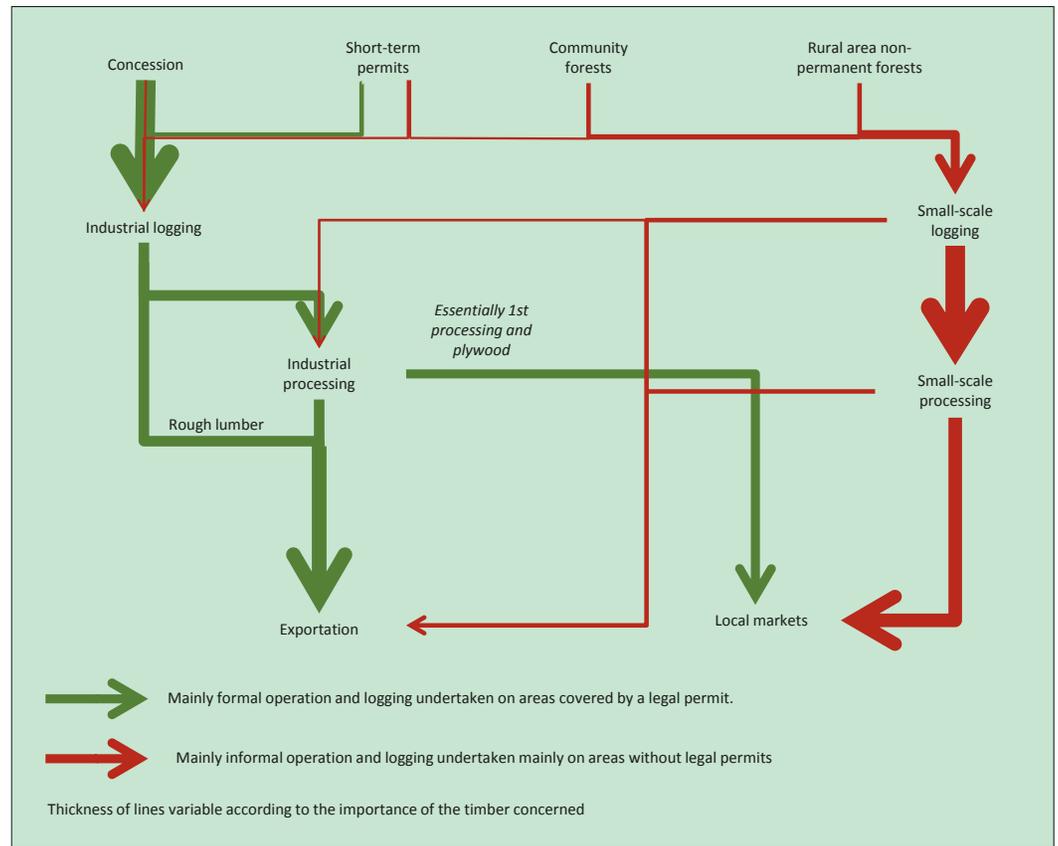


Figure 2.5: The main logging operations in Central Africa

3.2 Formal production and types of forestry permits (formal logging)

The formal regional production of rough lumber declined appreciably in 2010 to approximately 6 million cubic meters, the lowest production level recorded since 1993. This decline is the result of the combined effect of the economic crisis on the tropical timber market and the prohibition of Gabonese rough lumber exports in 2010.

This formal production originates from various logging permits, which we have endeavored to classify by type. The bulk of formal production (over 90 % in 2010) derives from long-term logging permits on concessions which permit-holders have an obligation to manage.

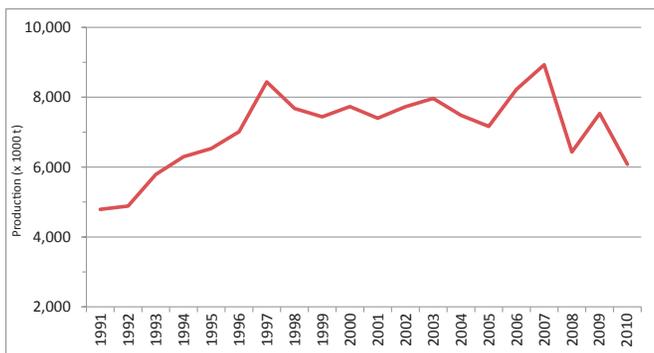


Figure 2.6: Rough lumber harvests in Central Africa 1991-2010

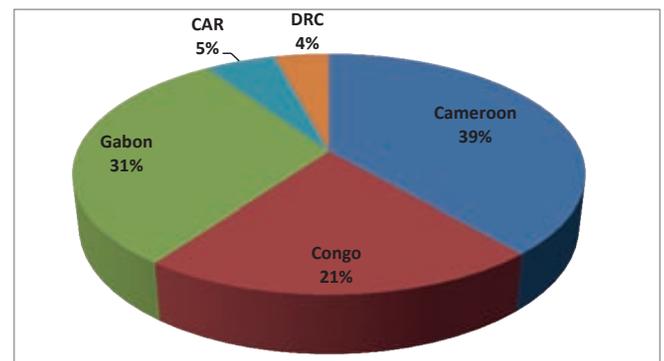


Figure 2.7: Distribution by countries of annual rough lumber harvest in Central Africa in 2010

Table 2.3: Types of logging permits in Central Africa for the harvest of timber originating from national forests

	Cameroon	Congo	CAR	DRC	Gabon
Long-term permits covering an area of more than 15 000 ha Granted for a minimum of 15 years Management obligation on concession-holder	Logging agreement issued on a UFA	CAT or CCI issued on a UFA or UFE	PEA	Forestry concession contract	CPAET and CFAD which may integrate or combine associated forest permits
Community forests	Communal forests	Communal forests and forests of other local communities	Public community forests	Not provided for in Forestry Code	Not provided for in Forestry Code
Local community forests	Community forest	Community development series	Community forest	Local community forests	Not provided for in Forestry Code. Creation of community forests under study
Short-term permits by volume, number of stands or area Issued for a maximum of one year Covering not more than 50 stands, 2 500 ha or 500 m ³	Sale of felled lumber, authorization to recover timber, authorization to remove timber, personal authorization of felling, logging permit	Special permit	Small-scale logging permit	Small-scale felling permit	Permit by mutual agreement

Existence: Yes No

With: CAT: Management and processing agreement; CFAD: Forest concession under sustainable management; CPAET: Provisional management, logging and processing agreement; CCI: Industrial processing agreement; PEA: Logging and management permit; UFA: Forest management unit; UFE: Forest logging unit.

At the regional level, long-term forest concessions are dominant with formal operators in both area and volumes extracted.

The short-term permits are in theory intended for small-scale operators who sell their products to nearby towns or cities or countries in the subregion

which do not produce timber. In practice, the complexity of access to this type of permit and the very low level of formal production recorded from these permits raise questions about their relevance, in that they do not seem to meet the specific requirements of small-scale operators.

3.3 Informal producers and production

In the countries of the Congo Basin, the latest estimates of volumes of timber sawn by small-scale operators (most without a valid logging permit) and sold in the large cities show that this type of production is very substantial compared with the production and exports of industrial sawn wood enterprises.

In the DRC, the latest estimates indicate that consumption in the cities of Kinshasa and Kisangani is about 290 000 m³ of sawn wood, of which about 60 000 m³ originates from industrial discards (CIFOR 2013, not published); about ten

times the production (and export) of industrial sawn wood. In Cameroon and the CAR, local consumption exceeds the production of industrial sawn wood, whereas in Congo and especially Gabon, industrial production is greater than local consumption. Following the Gabonese government's decision to prohibit the export of rough lumber, which means that all felled wood has to be processed locally, a likely medium-term increase in the quantity of industrial discards will compete in the domestic market with small-scale sawn wood.

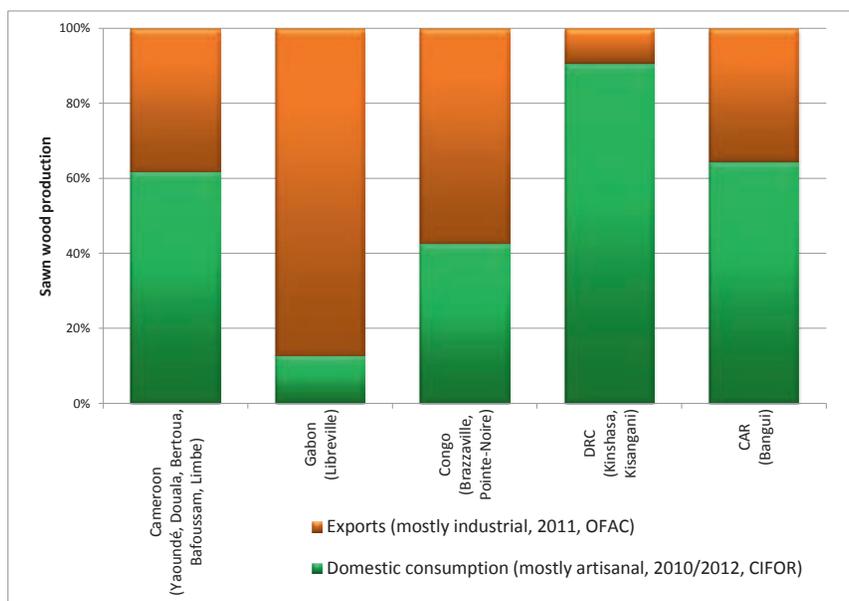


Figure 2.8: Comparison (in %) of volumes of sawn wood exported and consumed locally in five Congo Basin countries

In all the countries of the region, demand continues to be sustained mainly by the construction industry and large public infrastructures. These markets are not yet concerned about the quality and legality of the products used. Their influence on the quality of domestic production therefore remains low.

The great majority of production for the internal market is based on small-scale sawn wood exploited with limited means by a majority of small entrepreneurs, which sometimes form syndicates, and rarely by medium-sized enterprises. The small-scale sawn wood operators may be divided into two main groups depending on whether they receive prior orders from residents of the large cities or they themselves decide to fell timber for the urban markets. In each case, the structure of costs and benefits may vary considerably. In general, sawn wood operators without prior orders do not manage to sell their products at the same price as operators filling orders. They are also more subject to roadside controls.

Small-scale operators who export to neighboring countries have the benefit of far more developed organization and support (commercial, financial and political) than sawn wood operators who only supply the domestic markets. This applies in Cameroon to small-scale sawn wood exported to Chad and in the DRC to sawn wood exported to Uganda.



Photo 2.11: Artisanal sawing – Ovigui, Gabon

3.4 Changes in the industrialization of the value chain

Globally, the Central African timber industry remains underdeveloped, characterized by processing timber to a lesser extent than the other tropical regions of Africa, South America and Asia. This industry nevertheless is by no means an insignificant part in the economies of the countries concerned (between 4% and 6% of GDP, 15% of export earnings in Gabon and 21% of earnings in Cameroon).

To date, the legal minimum processing rates required for each logging operator are as follows:

- In Congo, 85% of timber must be processed, but in 2012 some enterprises obtained extensions for reaching that quota or an exceptional temporary authorizations for certain species;

- In Gabon, 100% since the end of 2009;
- In Cameroon, 100% with possible exceptions for secondary species;
- In CAR, 70% since 2008;
- In DRC, 70% in at least over 10 years for owners of processing units and national operators (100% for the others);
- In Equatorial Guinea, 100% since 2008.

However, these rates are complied with only to a limited extent, as shown by Table 2.4.

Table 2.4: *Estimated actual processing rates*

	2009-2011	2005-2008	1993-1999
Cameroon	NA	88 %	57 %
Congo	NA	57 %	42 %
Gabon	67 % (1)	37 %	15 %
Equatorial Guinea	NA	11 %	NA
CAR	51 % (2)	59 %	77 %
DRC	NA	39 %	69 %
Central Africa	NA	54 %	42 %

Sources: 1993-1999: OIBT; 2005-2008: OFAC; 2009-2011: MEF-DCESP/SDV-CMA (Gabon), OFAC (CAR)

NA: data not available; (1) rate reaching 100 % in 2011; (2) period 2009-2010

Legitimately, the countries require logging operators to ensure improved use of the rough lumber extracted from the forest. In order to further this aim, in 2010 and 2011 four meetings entitled “Towards a strategy for promotion of the development of the logging industry in the Congo Basin” were organized by IFIA, OIBT, FAO and the RECAP WOOD INVEST project financed by the EU under the PROINVEST program. These meetings were held in Yaoundé (Cameroon, September 2010), in Brazzaville (Congo, March 2011), in Kinshasa (DRC, May 2011) and in Libreville (Gabon, June 2011). Their objective was to formulate and implement national strategies for the development of the logging industries. This effort is linked to the fifth strategic axis of COMIFAC’s

“Convergence Plan” on the sustainable evaluation of forestry resources.

The strategic axes adopted were:

- Support and promote investment in small enterprises in the sector;
- Propose products for financing adapted and accessible to industrial operators and small or very small enterprises;
- Place emphasis on training by creating technical and vocational training centers;
- Remove trade barriers in local and regional markets;
- Integrate the informal sector into national economies;
- Establish tax incentives for the development of timber processing operations.



Photo 2.12: *Some planks from a small-scale logging operation drying in a Gabon village*

4. The management of production forests

4.1. Logging concessions geared to industrial production

Work on the management of concessions in the Congo Basin has been under way for about 15 years. The first management plans were approved in the late 1990s and early 21st century. Up to 2009 the momentum for managing logging concessions was strong (cf. chap. 2 of State of the Forest 2010, de Wasseige *et al.*, 2012). In early 2013, concessions accompanied by a management plan covered approximately 19 million hectares – an increase of 35 % since 2009. This managed area accounts for 40 % of areas under concession in the subregion.

Since 2010, however, the area of managed forests has stagnated, a development which may be attributed to various factors including the effects of the world economic crisis which severely affected the African tropical timber sector in 2008-2009 creating conditions unfavorable for investing in management plans, which cost 3-5 €/ha (Cassagne and Nasi, 2007).

Progress in sustainable forest management varies very widely according to countries and geographic zones, but also according to types of actors:

Cameroon and Northern Congo continue to be models, with a majority of managed areas and

numerous certifications attesting to compliance with implementation of management plans.

The CAR has completed the effort to manage all its forestry concessions granted, but must now meet the challenge of effectively implementing these management plans. The PARPAF project, the driver of management in this country, ended in 2011 and an agency for the sustainable management of forestry resources (AGDRF) was created in May 2012. The purpose of this agency is to implement the sectoral forest management policy of the Ministry for Water, Forests, Hunting and Fishing, taking into account the achievements of PARPAF and to pursue management activities for the logging permits not yet issued.

At the end of 2012, neither southern nor central Congo nor the DRC had a single approved management plan. Nevertheless, this fact hides the genuine progress made in recent years; the process is now under way for an inventory of resources prior to the drafting of the management plans. This process has been undertaken on over 1.8 million hectares in southern and central Congo and for 3.2 million hectares in DRC, covering 37 % and 30 % of concession areas respectively.

Over these two areas, the first relevant plans were completed in 2013. In addition, in the DRC, management plans approved in late 2012 for 4.3 million hectares (41 % of concessions) established the management standards for the first four-year period of the management plans.

It is also expected that the entry into force of the EUTR (cf. 2.1.2) will force action from operators who have hitherto been insensitive to the legal requirements of sustainable management.

The situation in Gabon is in contrast: in the first decade of the present century, Gabon was a driver in the initiative for sustainable management of forest concessions, with the strong commitment of enterprises preceding the establishment of a legal framework. The small producers who were lagging behind because of their low investment capacity and whose size was incompatible with application of the model developed for large areas are now committed to the process through support of the Gabonese project for development of small forestry permits (PAPPFG).



Photo 2.13: A raft of logs – Owendo, Gabon

Firms with European capital are at the forefront of sustainable management. The commitment of many of them to private certification has made possible great progress—environmentally, socially and economically. The consistent efforts made by companies to meet certification requirements have led to increasingly effective management tools and procedures for the protection of fauna and flora and to increasingly close cooperation with local communities, including investments in social capital (schools, dispensaries, direct and indirect employment, HIV campaign, training, etc.). At present there are over five million hectares of FSC-certified national forests in the Congo Basin.

Certification of legality in the Congo Basin has begun, with over three million hectares under Origin and Legality of Timber (OLB) and Timber Legality and Traceability Verification (TLTV) certificates.

This progress in the area of responsible development and management is, however, taking place in restrictive conditions which are affecting the environmental and economic viability of African operations. The logging companies (certified or

otherwise) based in Africa are operating in an economic context that is often unattractive: difficult access to investments, lack of tax incentives, very limited locally available vocational training, few competitive qualified personnel, industrial equipment incapable of maintaining added value locally (low drying capacity, mediocre output, expensive petrol used for fuel), competition with informal local markets. Forestry research is insufficient to produce data on the ecology of species and forestry dynamics or to assist in the development of management tools, etc. The authorities lack the means to perform their role and make legislation operational. At a higher level, the lack of multisectoral vision is impeding the development of forest-timber operations, which is poorly integrated in the national development strategy (e.g. lack of planting to meet energy demand, employment market underestimated). In addition, the poor image of tropical timber in certain international markets means that maximum benefit is not derived from it.

Table 2.5: Areas of long-term forestry concessions in Central Africa

	Forest concessions			Managed concessions		Certified concessions	
	Area (ha)	Number	Average area (ha)	Area (ha)	%(1)	Area (ha)	%(2)
Cameroon	7 058 958	111	63 594	5 071 000	72 %	2 393 061	34 %
Congo	12 600 221	51	247 063	3 504 159	28 %	2 584 813	21 %
Northern Congo	5 822 597	14	415 900	3 504 159	60 %	2 584 813	44 %
Southern Congo	6 777 624	37	183 179	0	0 %	0	0 %
Gabon	14 272 630	150	95 151	7 181 420	50 %	2 435 511	17 %
Equatorial Guinea	0	0		0		0	
CAR	3 058 937	11	278 085	3 058 937	100 %	0	
DRC	12 184 130	80	152 302	0	0 %	828 033	7 %
Total	49 174 876	403	247 063	18 815 516	38 %	8 241 418	17 %

(1) FSC, OLB and TLTV certificates

(2) Percentage of area of concessions

Sources: WRI 2011 (Cameroon), Gally and Bayol 2013 (Congo), PAPPFG Project (Gabon), AGEDUFOR Project (DRC), ECOFORAF Project (CAR and certification)

In recent years, some of the first management plans in Gabon, the CAR and Cameroon have been revised in order to take account of new trends in an evolving context (notably new markets) or to update and spell out more clearly the basic data used for planning. It would now appear useful to review the execution of these planning documents. In Congo, the first management plans were the subject of a five-year evaluation which attested to the effective execution of the bulk of management requirements. The French Development Agency

(AFD), a major actor in the management process, drew up a “Balance sheet of 20 years of AFD intervention in the Congo Basin” in 2011.

This balance sheet shows the success of the sustainable management plan as an “economic and ecological model for partial delegation of governance to logging companies”. It also emphasizes the need to go still further in taking account of the social and environmental questions involved in sustainable forest management.

4.2. Communal forests – Situation in Cameroon

At present, Cameroon is the only country in the subregion with communal forests. Other countries are studying the advisability and procedures for creating forests managed by local communities.

Cameroonian legislation gives communes the right to manage forest resources with retrocession of land rights. Thus, a communal forest is classified a Permanent Forest Domain to the benefit of the commune concerned or which has been planted by it on communal land. The average area of communal forests (excluding plantings) is about 20 000 hectares or four times the maximum area of community forests.

According to Cuny (2011), communal forestry is facing three main challenges: (i) land classification and registration are complicated administrative operations and expensive (obligation to proceed via the Prime Minister’s Office and secure the prior agreement of the Office of the President of

the Republic since land is a highly political issue; classification of some forests has thus taken several years); (ii) the environmental impact study, although expensive, becomes obligatory under the law; (iii) the cost of the whole process is high: 50 million CFA francs (excluding demarcation) apart from subsequent operating costs resulting from logging, monitoring, review of the management plan, etc. The first classification agreement was signed in 2001 (Poissonnet and Lescuyer, 2005), i.e. seven years after the concept was created. Since then the number of classified communal forests has increased steadily. In 2012, 17 forests were classified as such covering an area of 381 834 hectares (table 2.6). Among these classified communal forests, 15 are under management (management plans approved) covering 318 613 hectares, nine are under exploitation (229 690 hectares) and in

Table 2.6: *Situation of classified communal forests in Cameroon by region*

Region	Number of CFs classified, managed and under exploitation	Area (ha)	Number of CFs classified and managed	Area (ha)	Number of CFs classified under management	Area (ha)	Total area of CF per region (ha)
East	4	115 257	3	51 697.5	0	0	166 955
Centre	3	58 076	1	20 000	1	29 500	107 576
South	2	56 357	2	17 226	1	33 720.5	107 304
Total	9	229 690	6	88 923.5	2	63 220.5	381 834

Source: Database of the Technical Centre for Communal Forests in Cameroon (CTFC)

two, management approval is pending (management plans under preparation – 63 221 hectares).

In addition to the 17 classified forests, 16 others are in the process of classification and their area is approximately 413 850 hectares. Forty seven communal forests have been created or are being created through planting (approx. 11 000 ha). In

addition, the Minister of Forests and Wildlife has established the list and procedures for transfer of the management of certain forest reserves to the communes. Forth three reserves and reforestation areas are thus concerned by this decision (estimated area: 151 086 ha).

4.3. The community forests

COMIFAC's convergence plan advocates harmonization of legislative approaches concerning "community permits", the forestry licenses which grant local and indigenous communities the right to harvest and supply a timber market. Cameroon, the CAR and Gabon passed similar legislation which defines community forestry in the "classic" sense, binding the state and a community in the management of a part of the forest. However,

these countries differ in their level of execution. Numerous community forests in Cameroon are beginning to supply a share of the national market estimated at 5-10 % (Malnoury, 2012), whereas no community forest has yet been allocated in Gabon or the CAR. In the DRC, the situation is comparable to that in Gabon: the few pilot experiments are not yet based on enacted legislation and are not making a significant contribution

Box 2.2: Management of a pilot concession at Maniema (DRC)

Frédéric Sepulchre and Antoine Schmitt.

PBF/GIZ

A pilot concession of 42 000 hectares has been created through the support of the German-Congolese Cooperation Agency "Biodiversity and Forest Program" (PDF) near Kindu between the Congo and the Elila rivers. The objective is to test a simple model for managing forest resources and revenue. The project is being undertaken jointly by the local communities living near the concession and the applicable government institutions.

The Kailo forest concession is one of the national government's protected forests. The 18 villages surrounding it enjoy customary rights and are allowed to undertake logging within the protected forest. Only manual logging is taking place, mainly near roads and rivers. Almost all the timber is from three species: Iroko (*Milicia excelsa*), Kosipo or Tiama (*Entandrophragma sp.*) and Emien (*Alstonia sp.*). Fallen wood is shared through agreements between loggers and local communities, the loggers paying a "right for logging".

The forestry code provides that any timber harvest must be preceded by a forest management plan. The PBF has charged the German Forest Service (DFS) with drawing up this document. The management plan must be simple and must, *inter alia*, meet the following conditions:

- the majority of the community must benefit from the use of the forest;
- the forestry activities on village lands must be planned;
- the forest cover must be preserved and the regeneration of marketed species ensured.

In order to achieve these results, the following major constraints must be removed:

- difficulty within the communities in reaching a consensus on land questions and access to natural resources;
- transportation of forestry products is difficult because of poor road conditions ;
- government agencies do not effectively carry out their supervisory responsibilities ;
- the unclear process of forestry decentralization creates uncertainties making decentralization policies difficult to put into effect.

The preparation of a management plan has demonstrated the legal and technical vacuum which exists between small-scale and industrial logging. This vacuum must be quickly filled in order to be able to develop strategies needed to resolve problems in the DRC forest sector.

to the timber market. The experience of Congo Brazzaville is different: community development areas are defined within a logging concession, whose management plan is concluded between the private sector (and not a community) and the state. Various development options are possible under the plan, including small-scale logging.

It must therefore be concluded that, in Central Africa, despite some innovative and encouraging policies, social forestry in the broad sense is contributing only to a very marginal extent to the international and national timber markets. A substantial effort remains to be made for the execution of these policy options. Community forestry

cannot originate solely from law, but in addition requires local support since the production know-how and potential are great. The experiences of Gabon and Cameroon show that communities can produce quality sharp-edged planks with chain-saws and mobile saws. This represents a unique opportunity to supply legal and equitable timber to meet the considerable demand of the domestic markets, even if the competitiveness of this timber remains threatened by the persistence of illegal production. This aspect is very important within the FLEGT context in the subregion, when the internal markets are integrated into the legality verification systems.

4.4. How are the areas intended for small-scale production to be managed?

Although the regulations provide for logging permits adapted to small-scale production (cf. Table 2.3), very small volumes are in fact produced with these permits. The bulk of small-scale production remains informal if not illegal.

Studies need to be undertaken to identify effective opportunities for legal small-scale production. Such production is possible; this is already partly the case with informal production in the non-permanent forest domain and hence in degraded forests or areas intended over time for conversion to a non-forestry use.

An opportunistic association exists between small-scale logging and agricultural land uses, which is mostly a result of the abundance of valuable timber species in fallows and on cocoa farms, their easy accessibility and the low price of farmland timber. Farmers apply various strategies to the management of tree resources in fallows and cocoa agroforests with most felling authorized in fallows and most trees preserved on the cocoa farms. With current agricultural expansion and intensification trends associated with small-scale logging, timber resources on rural land are at risk of depletion with direct consequences for domestic timber supplies and the thousands of livelihoods it sustains. Marketing and regulatory changes – notably for forest tenure – are needed to encourage

the integration of timber production in agricultural management systems.

Timber volumes produced on these agricultural areas will probably remain insufficient to supply small-scale production operations, therefore solutions to access the permanent forest domain need to be found. A major challenge will then be to determine procedures for the sustainable management of these forest areas in cooperation with local sawmill operators. This new model will differ from that of the large logging concession which is exploited solely by operators using industrial equipment and wage-earning employees. It will also be different from the current community forest approach, which offers only community management of the areas and resources, whereas small-scale logging is above all an individual enterprise.

Photo 2.14: Raft of logs ready for transport – Sodefor Concession – Bandundu Province, DRC

