Overview of Industrial Forest Concessions and Concession-based Industry in Central and West Africa

and Considerations of Alternatives

Alain Karsenty
April 2007

This paper was prepared by invitation of the Rights and Resources Group to provide background information for Rights and Resources Initiative’s efforts in Central and West Africa.
Executive Summary

1. Concessions in Africa have a long history and mixed records. Initially, under colonial era, concessionaires were granted by Western Governments a given – and generally huge – area on which they received privileges to use natural resources as private assets, the trade monopoly on resources they gathered, and often the right to levy taxes and use hard labour. After the independences, the relationship between private actors and the State evolved into a more balanced one. From the 1980-90’s onwards, concessions were gradually requested to bear new responsibilities, previously carried out by governments, such as the management of production forests and the oversight of some parts of the territories where forest concessions are prominent. Today, concessionaire’s requirements are diverse, either technical (preparation of a logging plan, of a forest management plan following given norms and guidelines, commitment to perform specific tasks, etc), economic (building of a processing unit of a given size, creation and maintenance of road networks of local and regional importance), social (job creation in the logging area, delivery of goods and services to local administrations, authorities or populations, launching of “social” projects and social achievements for the local populations), fiscal (specific fees and taxes to be paid in addition to the general fiscal regime of companies and individuals), or environmental (including fighting illegal hunting and poaching inside the concession area).

2. Overall, concessions provide direct employment for around 135,000 workers in the selected countries of West (Liberia, Ghana, Côte d’Ivoire) and Central Africa (Cameroon, Congo, Gabon, DRC, CAR and Equatorial Guinea). The informal sector is likely to provide much more jobs in populated countries such as Côte d'Ivoire, DRC, Ghana, and Cameroon, according to estimates (more than 100,000 jobs in Cameroon, up to 15,000 permanent jobs in DRC and probably much more if one takes into account also the non-permanent jobs). One specificity of jobs provided by the timber sector is that they are among the rare jobs available in remote and economically marginalized areas (the forest zones), and which target non skilled people. It is estimated that one permanent job in Central Africa sustains the livelihood of 10-12 relatives.

3. The concession timber sector is a significant contributor to the Government budget, although the revenues derived from this sector look modest compared to revenues derived from oil. Forest taxes are totalling annually between $3.85 million for DRC to $40 million in Cameroon and up to $50 million in Gabon. In Congo-Brazzaville, forest taxes compare to theoretical oil revenues in proportion of 1 to 100. Recovery rates are still below the potential, but have improved recently in countries such as Congo and Cameroon. In terms of non-oil GDP contribution, the direct added value provided by the formal forest sector ranges from 3.2% in Cameroon up to 10% in Congo (with 6.4% in Gabon). Such information is available only in a handful of countries, and it is not expressed in economic terms (indirect added-value in transports not considered).

4. The concessions sector is still dominated by the Europeans, but with an increasing prominence of Asian companies, which are already dominant in Equatorial Guinea, CAR and South-Congo. The size of the concessions, the demographic patterns, and the land allocation history are closely related. West African countries are more densely populated than those of the Congo Basin. They have been developed earlier and at a larger scale, especially Ghana and Côte d'Ivoire, with a specific “cocoa development story” which, associated with non regulated and profitable logging, have fuelled fragmentation and further deforestation of these coastal countries. Liberia and Equatorial Guinea, both coastal West African countries that have been out of this cash-crop story, are less populated, and have faced the “resource curse” linked to diamonds (Liberia) and oil (Equatorial Guinea). Such “development” patterns have favoured large scale forestry and the design of large timber concessions. The second feature that matters is the potential domestic market, which depends on the absolute size of the population, but
also on its purchasing power. DRC has potentially a huge domestic market, but how much time will it take to hoist the purchasing power of DRC population at decent levels? In contrast, Gabon’s population has a relatively higher purchase power, but is too small to be a real outlet for the existing industry. Ghana, Côte d'Ivoire and, to a certain extent, Cameroon have both an important population with some categories enjoying a level of purchasing power that give domestic markets a certain significance.

5. As it is defined nowadays, the “modern” concession is viewed as a way to deliver services of public and collective interest through an association of private investment and public regulation. In Central Africa, concessionnaires are requested to deliver various social services to the population. The magnitude of these local transfers is closely linked to the size of the concession, but also to the internal policy of the companies on these purposes. These deliveries are generally organized through a “cahier des charges” in which guidelines are provided by the forest administration, and possibly completed at local level after negotiations with the local administrative authorities and sometimes the village’s communities. However, concessionnaires resist an extension of the requirements to “take care of the local social needs”, especially since the increase of taxes levels.

6. In the Congo Basin, since the mid 90’s for Cameroon, and the beginning of the decade, the fiscal reform promoted by the World Bank and backed by the IMF has lead to changes in the taxation structure pattern, with an introduction or an increase of the area tax. Two complementary effects are perceivable from this change in taxation patterns. On the one hand, and along with the obligations to prepare and implement a forest management plan, certification of legality and eco-certification, it should urge to push to “rationalization” of the concession system, with a progressive transfer of assets to the most professional companies, and frequent downsizing in area by concession. But this trend is thwarted by the lack of implementation of the Governments own regulation that allowed many companies to maintain their current practices and escape from tax paying. On the other hand, such changes favour capital concentration in order to reduce fixed costs burden (such as the management plan studies and human skills) and rationalization of the overall management and outlets. Since selling tropical timber in Western markets becomes more demanding, the importance of the trade networks is growing, and new alliances and restructuring of the sector is driven by these trade companies – such as DLH-Nordisk that took over the largest Congo-Brazzaville company, the CIB.

7. One can see an emerging new scene of the logging industry driven mainly by new policies implemented in the Congo Basin countries. Very large foreign-owned companies seem to have the possibility to cope with new public regulations and export standards required by western markets; many national small-scale companies are positioned on local markets and use their ties with local administration and national governments to avoid costly changes that would be required under stringent law enforcement; medium and large companies are frequently cumulating the disadvantages of the “formality” – the social visibility which made law bypassing much difficult – and the increasing competition and requirements on export markets. Concentration (of the export-oriented) on one hand, fragmentation (of the domestic-oriented) on the other, seem to be the current trend in logging industry of the Congo Basin.

8. Since most of the forest sector in West and Central Africa is export-oriented, with the largest part of the production (in value) still going to Europe (except for Equatorial Guinea), the issue of “environmental norms” (certification) – which includes legality requirement – should not be underestimated. And small-scale logging and processing is, currently, unable to meet these escalating requirements. Admittedly, these current handicaps can be overcome in the future thanks to pro-active training and technical support policies, combined with a complete reorganisation of the credit system and a radical change in the law and administration practices. These certainly are valuable policy actions that ought to be undertaken without delay, but governments are reluctant to conduct such reforms.
9. History, which shapes collective preferences of local inhabitants, also matters. And with a limited tradition of local self-organization for economic development – also the consequence of the concessionaire system inherited from colonial era – those collective preferences can be in favour of a bargaining dependence relationship with the concessionaire rather than an unlikely community development externally promoted. On the other hand, the delivery of local public goods by foreign large-scale companies that are requested to replace an absent government cannot be seen as a sustainable and desirable model, since it might turn out to be an obstacle to the development of local and accountable representation schemes, especially public ones (elected local councils, etc.). Very large concessions combined with weak or “absent” governments result in “State within the State” situation which influences the design and the orientation of public policies against the collective interest, and leads sometimes to very debatable local situations.

10. Community and private forestry is still hampered by land tenure national regulations that prevent forests tenure ownership for local inhabitants. Experiences in Cameroon with institutionalized “community forests” have shown mixed outcomes, where replication of the rent-seeking pattern (i.e. where actors seek to take advantage of any monetary advantage they can grasp thanks to their social connections and through rights claims, without being held accountable for their practices) was observed, rather than autonomous development. In addition, as transport and logging costs become high, as it is the case for dense forest in the Congo Basin, the case for autonomous community forest without a partnership with a neighbour concessionaire is more challenging for mere economic reasons.

11. The concession forest sector in Africa is more and more “externally driven” in terms of ecological and social norms, because or the concern of western consumers and public opinion about the fate of tropical forests, connected to global climate change issues. This creates incentives to raise the environmental standards of the global forest industry, and favours large scale concessions that can cope with the stringent requirements embodied in legal certification and log tracking, sustainable forest management certification, social care for local populations, and significant fiscal contribution. This has the effect of squeezing out small-scale operators, who often resort to becoming, or remain, “informal” to avoid overregulation and associated corruption. In countries where the potential for domestic markets is low, producers face strong competition from other countries, corporations and business models.

12. There is, however, a room and a need for diversification of forest tenure models, which might be seen as complementary rather, at least for the foreseeable future, than alternatives competing with the current system. Conservation concessions embodied interesting promises, but also serious risks related to equity. Above all, the “willingness to pay” to carry out such schemes remains doubtful. In every country, pro-active policies toward the integration of small-scale logging and processing activities into the formal economic sphere are deeply needed, and granting them forest land on which logging can be done legally is essential. Overcoming the current trend of “informalization” and criminalization of the African economies goes hand in hand with significant governance improvement and public policies radical changes.
# Table of Contents

I. HISTORICAL DIMENSION OF CONCESSIONS IN AFRICA ..............................................6
   I.1. An attempt of definition .............................................................................................7
   I.2. Current status of the forest concessions and its associated industry in selected countries of Africa .................................................................................................................7

II. AREAS UNDER CONCESSION AND PROFILE OF THE COMPANIES .................8
   II.1. Côte d'Ivoire ..............................................................................................................8
   II.2. Ghana ...........................................................................................................................9
   II.3. Liberia ..........................................................................................................................11
   II.4. Cameroon .....................................................................................................................13
   II.5. Gabon ..........................................................................................................................14
   II.6. Congo-Brazzaville .....................................................................................................15
   II.7. CAR ..............................................................................................................................16
   II.8. DRC .............................................................................................................................16
   II.9. Equatorial Guinea .....................................................................................................18

III. EMPLOYMENT ...........................................................................................................18

IV. REVENUES DERIVED FROM THE TIMBER SECTOR ...........................................20

V. OTHER CONTRIBUTIONS TO GDP ..........................................................................20

VI. LOCAL AND INFORMAL CONTRIBUTION TO LIVELIHOODS ...............................21

VII. KEY FEATURES AND TRENDS ................................................................................23
   VII.1. Different demographic and historical contexts shape different concessions patterns ...........................................................................................................................................23
   VII.2. The influence of the taxation reforms and forest management requirements ....25
   VII.3. The diverging evolution of the two edges of the forest sector .........................26
   VII.4. The issue of illegal logging ....................................................................................27
   VII.5. Social issues and concession systems .................................................................29
   VII.6. The concession as a socio-political co-construction with local players ............30
   VII.7. How to move away from the patronage system? ...............................................31

VIII. ALTERNATIVES TO TIMBER CONCESSIONS .........................................................32
   VIII.1. Small-scale as a global alternative? .................................................................32
   VIII.2. Can community forestry replace the concession system? ............................33
   VIII.3. Recreational hunting concessions .....................................................................35
   VIII.4. Conservation concessions and ‘Conservation Incentives Agreements’ ........35

IX. CONCLUSION ..............................................................................................................37
I. HISTORICAL DIMENSION OF CONCESSIONS IN AFRICA

Concessions in Africa have a long history and contrasted records. Under colonial rule, Western governments gave concessions over large areas of land. Along with the concessions came the right to use natural resources as private assets, the right to levy taxes and use hard labour, and a trade monopoly on the resources gathered. Most of these large concessions focused on rubber and ivory, rather than timber. Nevertheless, the Société du Haut-Ougoué (SHO), created in 1897 and still existing, was granted 11 million hectares in what is now Gabon, for rubber collection and logging. The primary objective of the Gabonese government was to find alternatives to making large public investments, and thus expected concessionary companies to do so. A secondary objective was to get taxes from prosperous companies. Such expectations have not been met. Instead, companies have largely given priority to short-term profits and were reluctant to make the large investments the governments expected (Coquery-Vidrovitch, 1972).

In French Africa, the beginning of the 20th century is considered the end of the first period of the concessionary system. During the second period, from 1910-1920, logging concessions emerged, focusing on a single activity on smaller areas. The perks of the former period, regarding rights to hard labour and levying of poll tax on local populations, were no longer in force. After countries gained their independence, relations of concessionaires with local populations had to evolve into a more balanced system.

During the 1960’s and 1970’s, African governments created or used the already existing public companies for the extraction of natural resources, including forestry companies. Large parastatal companies had been set up for logging, such as FORESCOM, a large scale company in Congo-Kinshasa and, at more modest scale, SOFIBEL in Cameroon and CFG in Gabon. At this time, the forest concessions were only sporadically requested to invest in public goods and services, such as reforestation plantations, forestry operations, and rural area modernization.

With the economic crises of the 1980’s and 90’s and the requirements of the Multinational Financial Institutions (MFI), governments were forced to scale down their field of intervention. Thus, many public institutions, offices and parastatal companies were phased out. Concessions were granted new responsibilities that were previously assigned to the government, such as the management of production forests and of surrounding forest lands. For example, in Congo-Brazzaville the Forest Management Units (FMU) are not restricted to the forests stricto sensu, but are merely geometric portions of the territory encompassing cities, villages and agriculture areas. Thus, the political and administrative authorities are recurrently requesting the companies granted with such FMU for equipment and the maintenance of the administrative assets overlapping the FMU. In addition, a significant part of the maintenance of the public roads network in the Northern part of the Congo is carried out by forest companies. These services are performed under a formal contract with the government. In return, companies receive a tax cut in proportion to the work done.

Some continuity can be seen between the old and the new concession systems. Yet, the “delegated functions” are very different from what they used to be. African concessions, both in the forest and the mining sectors, are ruled under a more “modern” understanding, which is differentiated from the logic of feudal “fiefs.” Nevertheless, some reminiscences of the old times are sometimes observed in a striking manner. These reminiscences are provoked by some characteristics of the African context; such as a lack of clear role-assignment between the public and private sector, ambiguous relations with the local populations regarding property rights and common interests, inadequate tree tenure and land laws, and weak administration in the control of concessions.
I.1. An attempt of definition

According to FAO’s Land Tenure Thesaurus, a concession is a bilateral or unilateral legal act by which an authority grants a private or public person a use right or a privilege. In French law, a concession is defined as “a contract that requests an individual or a company to build up a public work or to achieve a public service, at his own expenses, with or without a subvention, and who may remunerate itself (or himself) through the commercial use of the work or the service, with the right to levy fees from the users” (Conseil d’Etat, 1916). It is noticeable that the public service was already mentioned within a “public-private” perspective, which can be considered as a very modern one.

There are several commonalities between forestry and mining concession regimes in Africa. Jurists usually consider concessions not as “dismemberment” of the public Estate, but simply as an “action of the government who confides a mission” to any incumbent he wishes. The concession is granted by the central government, but can be also granted by a local government, as is the case of local forest councils in Cameroon. The incumbent is either an individual or a commercial company who benefits from an exclusive right of exploitation and disposal on the products, not the land. Concessionaires’ obligations are registered into a “specifications book” (“cahier des charges”). The content of this book can be set by law, or completed on a case by case basis. It is treated as a contract, which contains general provisions for all the concessions and specific provisions for each concession. The latter are, in principle, derived from a negotiated agreement with the private partner, but often not verified.

Concessionaires’ requirements vary from technical, economic, social, fiscal, to environmental. Technical requirements include the preparation of a logging plan, of a forest management plan following given norms and guidelines, commitment to achieve some specific works, among others. Economic requirements include building a processing unit of a specified size, creation and maintenance of road networks of local and regional importance, among others. Social requirements include job creation in the logging area, delivery of goods and services to local administrations, authorities or populations, launching of social projects and social investments for the local populations. Among fiscal requirements are specific fees and taxes to be paid in addition to the general fiscal regime of companies and individuals. Finally, examples of environmental requirements include fighting illegal hunting and poaching inside the concession area. When the concessionaire fails to comply with the contract, especially if he makes himself responsible for significant forest crime, the concession may be withdrawn. An example of a forest crime would be illegal logging of a prohibited species or logging trees under the authorized tree diameter. However, withdrawing is rarely used as a punishment, despite the evidence of frequent criminal activity, and legal prosecution is also rarely carried out. The forest administrations prefer financial penalization, called “transaction” in French-speaking countries, which allows them and their agents to legally keep a significant part of the money.

I.2. Current status of the forest concessions and its associated industry in selected countries of Africa

The selected countries are:
- in West Africa : Ghana, Côte d’Ivoire and Liberia
- in Central Africa: Cameroon, Gabon, Congo-Brazzaville, Central African Republic (CAR), Democratic Republic of Congo (DRC) and Equatorial Guinea.

The benefits delivered by the concession system can be classified as follows:
1. Employment in logging, forest management, wood processing and transportation. In addition to these direct employments, one can expect indirect jobs to accrue from related economic activities. Yet, assessments of actual employment generation have not been done accurately in any of the selected countries.

---

2. Direct and indirect revenues collected by the governments on the concession activities through different royalties and taxes. Information is more or less accurate from one country to another and often outdated.

3. Fiscal and parafiscal (non official fees, legal or not) revenues earmarked to local bodies, both local councils and communities. Those will include payments made by companies to acquire logging rights in “community forests” or traditional owners. Information available on these payments is partial and rare.

4. Contribution to the unlocking of forest remote areas, through the creation and the maintenance of road networks. It is not possible to give quantitative figures of the economic benefits of phenomena such as easing access to urban and export markets for remote farmers, or giving access to new lands for settlement. Financial private benefits for local economic agents would have to be weighed against the economic and social costs of forest degradation derived from easier access that allows agricultural expansion on forested lands.

5. The economic contribution of the forest sector to national GDP encompasses several of the above elements, which add the profits of the capital investors; and ought to be reflected in national accounts. However, the quality of the data is often poor and the accounting methodologies fail to give an accurate picture of the real contribution, since the induced activity fostered by the industrial forest activity is not accounted for in forestry and wood processing.

We will examine each of these different contributions, country by country.

II. AREAS UNDER CONCESSION AND PROFILE OF THE COMPANIES

II.1. Côte d'Ivoire

There are two categories of forest in Côte d'Ivoire. One is composed of the gazetted forests ("forêts classées"), which have been gazetted for much of them during colonial era. There are 231 gazetted forests in Côte d'Ivoire, covering 4.2 million ha, roughly 13% of the country’ surface. Their surfaces vary from 315,000 ha for the largest to 6 ha for the smallest. They are spread throughout the country in the three forest zones: 1,337,238 ha in the humid dense forest zone in the south; 1,274,834 ha in the semi-deciduous forest zone in the Centre; and 1,584,663 ha in the savannah forest zone in the North of the country. These gazetted forests are part of the Permanent Forest Estate ("Domaine Forestier Permanent de l'État"). Their management has been given to a public agency, the SODEFOR. These forests are, especially in the Eastern part of the country (where the cocoa front is the more ancient), often very degraded, with a huge number of illegal settling farmers (often non-Ivorians), and they contribute marginally to the national timber production. In 1999, it was estimated that 630,000 ha of agricultural plantation (mainly cocoa and coffee) were established in the gazetted forest in 1999.

The management pattern of these gazetted forests is modelled after the French Public Forest administered by the ONF (Office National des Forêts), the French public agency in charge of the management of public forest in France, and Sodefor’s model. ONF has been for a long time Sodefor’s partner for the design and the implementation of management plans, and it has duplicated French system of sealed bidding of stumpage lots, which turned out disappointing since loggers could rely on the forest of the rural domain with much less constraints. To address the issue of agriculture settlers, the Sodefor adopted a strategy based on resettlement on a “voluntary basis” (that has only been implemented marginally, due to the land constraints outside the gazetted forests) through “participatory schemes” with the creation of “Commissions Paysans-Forêts”, that turned out to be more a instrument used by “natives” to send off the “non-autochthonous” (settlers from Sahelian countries, mainly) than a genuine co-management framework (Loffeier et al., 1996).

Since 2005, gazetted forest can be exploited by private concession-holders in partnership with the Sodefor. Limited information is available so far on what can be considered as a major turning point in
the Côte d'Ivoire policy, alongside with the 1998 law on the rural land tenure that favours land and tree ownership by the rural populations.

Logging is done mostly in the Rural Domain (a non-permanent forest domain on which progressive recognition of individual property rights have been allowed by a 1998 law), which is composed of an alternation of more or less closed forest, and spared populations of trees. In 2004, the Ministry of Forestry allocated an area of about 14 million ha for logging in the Rural Domain. This area is divided into 379 concessions of between 25,000 and 75,000 ha each. Concessionaires are obliged to present a forest management plan that includes a reforestation scheme and social investments for the rural population living in or adjacent to the forest. It is estimated that 90% of the timber production comes from the rural domain (ITTO, 2005).

About 76 sawmills officially operated in 2003 and 122 for the first semester of 2004 (USDA, 2005).

**Company profiles**

Prominent companies in Côte d'Ivoire are French, Italian and Lebanese. Due to the earlier log export ban and the growing scarcity of the resource, these companies have been led to invest in downstream wood processing, and many of them rely on species like Fuma / Fromager (*Ceiba pentandra*) that is not really exploited in the Congo Basin (even if it seems that the trees are different in both regions).

- **Inprobois**, a French company with 7 “*Permis d’Exploitation Forestière*” (PEF) totalling 365,706 ha. In addition, the company manages a gazetted forest of 22,000 ha, in partnership with Sodefor. The company is pursuing a FSC certification for (at least) this gazetted forest, which benefits from a management plan prepared by the Sodefor on public funds. Almost all the production of this company, specialized on peeling, is for the export.
- The French Thany group has a subsidiary in Côte d'Ivoire, a large company of 1,400 employees and 5 sawmills, one peeling unit (ply and veneer) and one unit of sliced veneer. No data on the concession is available.
- IGD is another French company “logging 25,000 ha per year within 10 months” (Prospectus for Race Wood 2006, IFIA). This figure gives an idea of the low density of timber per hectare one can found in Côte d'Ivoire.
- **SOFIBEX**, partner of SIBD, is, seemingly, an European company that has 6 PEF totalling 200,000 ha and manages also two “blocs” in a gazetted forest with the Sodefor. Tranchivoire, an Italian company, operates a 172,000 ha concession.
- Tropical Bois, an Italian company has 200,000 ha on its own concession and operates in partnership another 200,000 ha on the rural domain.
- The SNG, a Lebanese company, has 9 PEF totalling 480,000 ha. The production is sawnwood, of which 90% goes to the export.
- CIB, a Lebanese company, runs an important industrial combined unit, and operates a 628,086 ha concession.
- **SIFCI**, another Lebanese company, has a concession of 505,000 ha. It has 630 permanent employees.
- TBT, also a Lebanese company, has a 150,000 ha concession.

Seemingly, the political unrest in Côte d'Ivoire has not affected substantially the timber industry, the relative decline of which is more linked to the resource scarcity – which has led players like the Italian FIP to move to Cameroon in 1999.

**II.2. Ghana**

Ghana can compare with Côte d'Ivoire under many aspects. They are both coastal countries with relatively good road infrastructures, a rather large population, significant economic development in the 1970 and 1980’s, comparable degraded forest due to a combination of intensive logging and cocoa “pioneer fronts” in the 1970 and the 1980’s, early log export ban policies which have led to wood
processing over-capacities. Both have also serious issue with chainsaw logging, even if it is much more acute in Ghana. The countries differ regarding their institutional organization (different colonial legacy). And the recent political history turned into armed conflict in Côte d'Ivoire, while Ghana was blessed with relative stability.

Since independence, the state has successfully claimed ownership of minerals, hydrocarbons, and water resources. The state has also compulsorily acquired lands for various public purposes. The Constitution recognises these as “public lands”. For over 100 years, the state has asserted the right to manage areas designated forest reserves on behalf of landowners. In 1974, the state extended this power to standing timber resources outside of forest reserves. (FERN, 2006)

In Ghana, each concessionaire receives obligations related to their workers, the management of the resource, reforestation and social policy. Practices allowed are set by the “Logging Manual” and the “Contract Area Plan”. “Timber exploitations take place within timber contract areas, which cover areas both inside and outside Forest Reserves. Timber trees found outside the Reserves mostly stand on farmlands and fallow areas” (FAO, 2002). The timber production area within the Reserve represents 762,440 ha (47% of the Forest Reserve) (FAO, 2002, based on 1995 data). According to Bird et al. (2006), the maximum possible size of the area for production within the Reserve does not exceed 500,000 ha. FERN (2006) estimates a figure of 600 active timber concessions. It has also been estimated that intact, closed canopy forest outside the permanent forest estate available for timber production is about 374,000 ha (FAO, 2002). Plantation forests cover about 50,000 ha. Even though these contracts do not exhaust the timber activity despite the large number of small-scale loggers and illegal chain sawyers, one can consider that the “concession sector” covers around 700-800,000 ha overall in Ghana. It is the only country among the ones studied here with significant timber plantation area: close to 100,000 ha in the Permanent Forest Estate.

According to the website of the Forestry Commission (FC), concessions outside Forest Reserves represent 876,000 ha in 2004 and 685,000 ha within the Forest Reserves. One can suspect that these areas are encompassing also some savannas.

Since 2004, under the new system, allocation of timber utilization contracts (TUCs) has been done through public bidding for rights to harvest timber in each area on the basis of an annual Timber Rights Fee. TUCs for Forest Reserves will have a term of 40 years, while TUCs for other lands will have a term of 5 years. As part of the allocation process, a floor price is set for each bidding area/lot. The floor price is set by an independent third party (ITP) who also maintain the confidentiality of the floor price until the bid opening on the bidding day (Forestry Commission website2)

Company profiles

In Ghana, the forest industry is fragmented and has serious liquidity problems. In the short to medium term, forest areas may not qualify for certification because of the lack of management plans, even for those forests which are legally operated. For the few that do meet certification standards, the small-scale owners are unable to afford to join a scheme (Koleva, 2005). Germany remains the first import destination of Ghanaian timber.

However, according to a 2006 WWF document four companies (John Bitar & Co. Ltd, Ghana Primewood Ltd., Logs & Lumber Ltd., and Scanstyle Mim Ltd.) managing total of 170,844 hectares have joined Ghana Forest and Trade Network (FTN). Combined with Ghana FTN’s first member, Samartex Timber & Plywood, five participants hold a total of 44.5% of the total forest reserve concessions in Ghana (WWF, 2006).

- Samartex (2000 employees), funded by UK’s interests, is the only company in Ghana currently committed to the WWF’s ‘Global Forest Trade Network’ initiative to improve the

2 http://www.fcghan.com
management of valuable and threatened forests. Samartexis is working with the GFTN to improve even further the quality of its forest management and implement a verifiable, documented step-by-step process to achieve FSC certification in 2007. Samartex has received SGS-FSC certification indicating that the Company has complied fully with Ghanaian logging standards and certifying that Samartex complies with Chain of Custody standards in its lumber and plywood production (legality). Since Samartex became the first member of the Ghana FTN, eight other companies have followed its lead and applied for membership. Two of them have prepared action plans to achieve FSC certification based on the baseline audits of their forests totaling over 85,000 ha. Overall Samartex controlled 145,300 ha in 2004 (FC website).

- One of the main producers in Ghana, Ghana Primewood Ltd. (also called GAP), is a German company\(^3\) which employs 1,500 individuals. The company has 7 forest reserves totaling 61,912 ha.
- Scanstyle Mim Ltd is specialized in downstream productions (flooring, mouldings, furniture…). It employs 650 individuals and has concessions covering 39,400 ha. They are looking for FSC certification within 3-4 years thanks to an involvement in the Smartwood program.
- Coppon Wood Processing Ltd is a Ghanaian-Swiss company of 350 employees, and its concessions cover 25,000 ha.
- John Bitar & Company is a 2,300-employee company with 140,000 ha. Logs & Lumber Ltd is also controlled by Bitar’s family (Lebanese) and works on 9 forest reserves totaling 88,000 ha.
- Swiss Lumber Company Ltd is a subsidiary of the Dutch group Wijma. No information is available on the area controlled by this 350-employee company which harvests around 15,000 m\(^3\) per year and buys outside an additional 21,000 m\(^3\) per year.

\(\textbf{II.3. Liberia}\)

In June 2005, there were 42 forest concessions in Liberia covering a total of 5.95 million ha. In February 2006, the government decided to cancel all concession contracts and is currently preparing a new set of forest regulations. The total land area of Liberia is 9,591,000 ha. Closed and open dense forests cover respectively 2.42 million and 1.01 million ha for a total of 3.43 million ha of relatively good forest cover, or 35.7\% of total land area of Liberia (ITTO, 2005). Around one million ha of the forest has recently been selectively logged. Mean logging intensity averaged in the past only 3-5 m\(^3\)/ha. The extraction rate was however been much higher towards the end of the Taylor regime, due in part to the large demand for a broader number of species from Asian markets (idem).

Logging concessions have been involved in war and precious minerals traffics during the civil war, with companies such as the well-known OTC (Oriental Timber Company, said to have been a Malaysian company) , whose former CEO, Gus Kouwenhoven was arrested in March 2005 by the Dutch police, on war crimes charges\(^4\).

---
\(^3\) \url{www.ttf.co.uk/forests/responsible/Germany_Final_Draft.pdf}
\(^4\) BBC News, Wednesday, 7 June 2006, \url{http://news.bbc.co.uk/2/hi/africa/5055442.stm}
Central Africa: Comparison of forest areas gazetted for production, under management and engaged in a certification process, under protection (source: Nasi et al., 2006).

<table>
<thead>
<tr>
<th></th>
<th>Cameroon</th>
<th>Gabon</th>
<th>Congo</th>
<th>DRC</th>
<th>CAR</th>
<th>Equatorial Guinea</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land area</td>
<td>46 540 000</td>
<td>25 767 000</td>
<td>34 150 000</td>
<td>226 705 000</td>
<td>62 298 000</td>
<td>2 805 000</td>
<td><strong>398 265 000</strong></td>
</tr>
<tr>
<td>Dense forest area</td>
<td>21 436 000</td>
<td>21 190 000</td>
<td>25 914 000</td>
<td>124 566 000</td>
<td>8 227 000</td>
<td>1 843 000</td>
<td><strong>203 176 000</strong></td>
</tr>
<tr>
<td>Production forests</td>
<td>10 500 000</td>
<td>19 000 000</td>
<td>12 000 000</td>
<td>87 000 000</td>
<td>3 300 000</td>
<td>1 250 000</td>
<td><strong>133 050 000</strong></td>
</tr>
<tr>
<td>Area gazetted for exploitation (02/2006)</td>
<td>7 000 000</td>
<td>12 000 000</td>
<td>10 000 000</td>
<td>22 000 000</td>
<td>3 000 000</td>
<td>1 250 000</td>
<td><strong>55 250 000</strong></td>
</tr>
<tr>
<td>Area under forest management process</td>
<td>4 347 791</td>
<td>6 368 424</td>
<td>7 114 835</td>
<td>9 679 639</td>
<td>2 993 954</td>
<td>54 990</td>
<td><strong>30 559 633</strong></td>
</tr>
<tr>
<td>Preparatory phase</td>
<td>79 442</td>
<td>1 906 888</td>
<td>1 724 422</td>
<td>2 977 527</td>
<td>276 840</td>
<td>0</td>
<td><strong>6 956 119</strong></td>
</tr>
<tr>
<td>Development of the management plan</td>
<td>727 699</td>
<td>1 538 688</td>
<td>3 088 253</td>
<td>6 702 112</td>
<td>1 461 948</td>
<td>0</td>
<td><strong>13 518 700</strong></td>
</tr>
<tr>
<td>Management plan submitted</td>
<td>338 771</td>
<td>117 606</td>
<td>2 302 160</td>
<td>0</td>
<td>707 947</td>
<td>54 990</td>
<td><strong>3 521 474</strong></td>
</tr>
<tr>
<td>Management plan agreed</td>
<td>3 201 879</td>
<td>2 805 242</td>
<td>847 219</td>
<td>0</td>
<td>6 554 340</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Certification in process

<table>
<thead>
<tr>
<th></th>
<th>Cameroon</th>
<th>Gabon</th>
<th>Congo</th>
<th>DRC</th>
<th>CAR</th>
<th>Equatorial Guinea</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO 14001</td>
<td>0</td>
<td>2 031 788</td>
<td>3 298 617</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td><strong>5 330 405</strong></td>
</tr>
<tr>
<td>Pan African Forest Certification</td>
<td>0</td>
<td>874 656</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td><strong>874 656</strong></td>
</tr>
<tr>
<td>Forest Stewardship Council</td>
<td>494 085</td>
<td>333 954</td>
<td>370 160</td>
<td>1 440 869</td>
<td>0</td>
<td>0</td>
<td><strong>2 639 068</strong></td>
</tr>
<tr>
<td>Others (Keurhout…)</td>
<td>0</td>
<td>1 727 788</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td><strong>1 727 788</strong></td>
</tr>
</tbody>
</table>

Additional precisions:
The lines “Production forests” and “area gazetted for exploitation” are somehow ambiguous, since the first figures the land that is potentially suitable for timber production and the second is related to currently allocated concessions, not concessions legally “gazetted” (to be incorporated to the Private Domain of the State, i.e. to create legally the Permanent Forest Estate). Cameroon is the only country that did a national zoning exercise, earmarking precisely forest areas for concession allocation, for other timber contracts (“ventes de coupe”), for community forestry, and for conservation areas. In addition, the word gazetted may not be the more appropriate, since in Cameroon, the more advanced country on that issue, the gazetting process (“classement”) is on-going and around 1/3 of the concessions has been gazetted so far. For DRC, the figure is only a theoretical potential according to the topography and the existing and short-term planned infrastructure. It is very unlikely that 87 million ha of timber concessions will be designed at any time in DRC. Preparation of a zoning plan is planned for the coming years.
II.4. Cameroon

The Cameroon forest sector is well-documented and has been considered a “laboratory” of technical and economic reforms, due to early intervention of the World Bank and other donors in the 1990’s, and the adoption of an innovative forest law, in 1994. Cameroon can be compared to Gabon, in terms of size of the forest resource (but differences in most current species) and production importance, but should be better compared with Ghana in terms of population importance and population entrepreneurship. The country has been the first in Central Africa, to allocate concession through competitive bidding, to allow communities to ask for “community forest”, to make a zoning plan of the Southern part of the country where dense forest are located, to reform its fiscal system with a greater emphasis on area taxes. Since 1999, log export ban has been set for main species, except two – ayous (Triplochiton scleroxylon) and azobé (Lophira latislata) – on which export quotas are allocated by the forest administration.

Company profiles

In Cameroon, the major change that occurred in the forest sector has been the withdrawal of French Bolloré’s group from forest activities in Cameroon, specifically logging and processing, after selling its 2 subsidiaries SIBAF and HFC. One of the SIBAF’s concessions has been sold to the Italian Alpi. Bolloré explained that his decision was motivated by the fact that logging tropical natural forest is perceived more and more negatively in Europe, and maintaining his reputation led him to withdraw from this activity. For the same reason, he withdrew from tobacco activities a few years before.

The forest sector is dominated by Europeans and by Asian groups. In terms of areas controlled, Vicwood-Thanry, with its 6 companies is the largest group, and controls a minimum of 643,000 ha. Vicwood (Hong-Kong) took over former French Thanny-Cameroon in 1999, but has seemed to be, since then, in a defensive position. Besides Vicwood-Thanry, the Italian Alpi (Alpicam and Grumcam) and the French Rougier (SFID and Cambois) are two important players who control directly or indirectly more area than the sum of the one controlled by their subsidiaries (partners, contractors…).

Alpi controls 265,502 and Rougier 549,040 ha. These two groups seem to be the healthier in financial results terms, thanks to industrial efficiency for the Italian, and probably for overall management for the French.

The Dutch Wijma (244,968 ha with its partner CFK) is also an important player (the first FSC certified concession is one of the two owned by Wijma). Its specialization is in hydraulic timber harvesting for the Northern Europe Market.

There are several important European groups. The French group Pasquet includes Pallisco and partners Assene Nkou and Sodetranacam. Together they have concessions over 303,413 ha. The Belgian group Decolvaener includes SFIL, SOTREF and Green Valley, totalling 216,543 ha. The Italian group SEFAC includes SEFAC, SEBAC, Filière Bois with 387,585 ha; FIP with 146,882 ha, PLACAM with 119,736 ha, SIM with 241,294 ha, TTS with 211,888 ha, ECAM-Placages that does processing only and Patrice-Bois, which controls 381,730 ha through its different national partners. The Dutch group TRC controls 207,965 ha. In addition to European groups, the Lebanese Khoury that includes EFMK, Coron, SN COCAM, SABM, has concessions over 387,879 ha.

The famous Lebanese Hazim has no more direct involvement in forestry in Cameroon and has given up its concessions, partly due to its unsuccessful attempts. No Asian companies, except for Vicwood, are currently running concessions in Cameroon. Rimbunan Hijau, from Malaysia, did some logging as sub-contractor between 1995 and 1997, but did not persist.

---

5 See for instance the Global Forest Watch report “An overview of logging in Cameroon”
6 However, this certification has been, apparently, cancelled or suspended in the end of 2006 by FSC after statements showing non compliance with FSC rules during the certification process.
Two groups are controlled by Cameroonian interests. The first one, Ingéniérie Forestière (IngFor), was notoriously co-owned by a son of President Biya before he withdrew his participation some years ago. Some NGO reports claimed that the company was partnered with Hazim, but such links have not been confirmed. IngFor has recently downsized its activities, giving up one of its 2 concessions. IngFor has been one of the two national companies who succeeded at obtaining a concession through an open bidding process. At the beginning, in 1999, this company had important industrial projects, such as an integrated complex including sawmill, peeling unit and industrial joinery. Yet, they only succeeded to build-up a sawmill in the vicinity of Yaoundé. A further withdrawal of IngFor from forest activities is now likely, at least from direct logging.

The second company is SCTCB, owned by a well-known Cameroonian Businessman (Fokou), who obtained its concessions through competitive bidding that was also open to international bidders. In 2006, one of the 2 concessions was in the process of being given back.

Finally, there is also the case of the General Asso, from Aveico Company, who obtained its concession in 1997 through a questionable bidding round. This General failed to pay his fee for 2 years. Its concession was thus cancelled in 2006. There are also a few other Cameroonian companies operating long-term concessions. On the other hand, several Cameroonian with medium-size companies are exploiting, often acting as subcontractors of foreign companies, the 3-years maximum and 2500 ha capped “ventes de coupe” (no management plan required). Such category of small permits is auctioned through bidding limited to national actors.

**II.5. Gabon**

In Gabon, roughly 10 million hectares have been allocated to timber activities (industrial concessions mostly, but also medium-size permits to national and foreign actors). This low-populated country classified as “intermediate revenues” that benefited from oil rent, which is however declining due to wells exhaustion, has been described as an example of Dutch disease (Wunder, 2003), under which agriculture is abandoned, wages for civil servants are high, and the forest is de facto not very exploited. Indeed, it is one of the countries where primary forests still covers a large part of the territory. It is also a country with ancient and close ties with France, even though China has made a remarkable entry in the economic life of the country, looking especially for mining wealth, as well as timber.

*Company profiles*

- Several large international groups have subsidiaries in Gabon, such as the French Rougier. Rougier Ocean Gabon (ROG) controls 571,000 ha, but has sold its subsidiary Ciplac (261,000 ha) in 2006. CEB is a subsidiary of the French Thanry International, a family enterprise. The CEB-Thanry controls 617,000 ha. On April 11 2007 Precious Woods, a Swiss company, acquired majority interests in the companies CEB and TGI, both of which are domiciled in Libreville.
- The Malaysian Rimbunan Hijau (RH) and its 2 subsidiaries control 626,469 ha, when adding the concession area of its subsidiaries Bordamur and DFIK to the RH concession itself.
- The Chinese China International Forestry Group Corporation (Hua Jia) owns a 400,000 ha concession.
- The Portuguese SONAE has taken over the company Leroy-Gabon, which owns a 578,910 ha concession.
- The Italians Corà Domenico & Figli spa (CoraWood), with a 324,778 ha concession, in addition to another area for which figures are unavailable, and Basso Legnami (Basso Timber Industries Gabon) that has 450,000 ha but is currently facing difficulties and seems to act mainly as a contractor of Gabonese concession holders. In the list published by the Ministry of Finances of Gabon in early 2005, BTIG keeps only a 35,000 ha concession, after having abandoned 3 others.
- The Société Forestière de Makokou (298,000 ha), is a contracting partner of the Malaysian Winnerpac Sdn Bhd, subsidiary of the huge Associated Kaolin Industries, part of Greatpac Holdings.
- The Société forestière de Makokou (SFM, 298,000 ha), is partner (contractor) of the Malaysian Winnerpac Sdn Bhd, subsidiary of the huge Associated Kaolin Industries, part of Greatpac Holdings.
- The former German-Swiss Tropical Timber group, taken over by the Danish DLH-Nordisk in early 2006, was present through its subsidiary Gabonaise Industrielle des Bois (GIB) in Port-Gentil, which is focusing on wood processing and trade, not logging.

There are other prominent companies, not subsidiaries of international groups. Most of them are French:
- SBL (334,000 ha)
- Lutexfo-Soforga (382,000 ha)
- CBG (543,500 ha)
- IFK (200,000 ha)
- GEB (209,400 ha)

The only active company effectively operated by Gabonese entrepreneurs is SEEF (Ricordeau brothers), with around 420,000 ha of concession. The entire “première zone” (4.9 million ha), close to the coast and often already logged once or more, is earmarked for Gabonese, who turn to foreign companies to contract a “fermage” agreement under which they only collect a financial rent for each m³ harvested.

The case of LAFICO Gabon (400,000 ha) is worth mentioning. Lafico is the acronym of Libyan Arab Foreign Investment Company and, according to an anonymous watcher named “Arnaud Labrousse”, they are partners of the President Bongo and one of his son’s Ali, Minister of the Defence. A similar situation is mentioned for SHM (322,000 ha) that is said, by A. Labrousse, to be controlled by Bongo’s former spouse and current “Chef de Cabinet”.

II.6. Congo-Brazzaville

This low-populated country (the population of which is concentrated in main towns such as Brazzaville and Pointe-Noire) shows two different faces: the Northern region, with vast landlocked landscape of dense forestland with a dominance of *Entandrophragma* species, and the Southern, mostly composed of smaller pieces of forest, frequently logged-over at least once. The southern part is rich in Okoumé (*Aucoumea klaineana*). Large concessions owned mostly by Europeans dominated in the North, while in the South, Asian companies have taken over former European companies by 1999-2000 and the end of the civil war.

In the North, the timber is exported to Europe through the Douala port in Cameroon (around 1000 km far from logging areas), on trucks of with a combination truck-train. In the south, logging areas are not very far of the Pointe-Noire port, and the timber is exported mostly to Asia.

Company profiles

In the North, 3 prominent companies are operating. The largest is CIB (Congolaise Industrielle des Bois), which is a subsidiary of the former German-Swiss Tropical Timber (TT timber group), taken over by the Danish DLH-Nordisk in early 2006. With almost 1.3 million ha (1 million productive), and a large concession FSC-Certified (UFA Kabo), CIB is politically influent and is known also for the importance of the local social actions it is committed to. Another company with almost the same concession area (1.1 million, with 900,000 productive) is IFO (Industrielle Forêtière de Ouesso), a subsidiary of the German Danzer group. The third one is the Rougier group, which expanded in 2006.

---

7 Fermage is an agreement through which a concession recipient sell the rights of logging to another logger, against a fee of around $10-15 per m³, depending on species, harvested. Fermage is normally not authorized but widely practiced.

8 [http://www.bdpgabon.org/content/view/1405/71/](http://www.bdpgabon.org/content/view/1405/71/)
by buying back the CRISTAL concession, run previously by the Lebanese Hazim, well-known in Cameroon.

Some other companies own large concessions in the North:
- the Chinese VicWood, who bought back in 2003 the French Thanry-Congo (461,296 ha)
- the French ITBL (322,000 ha)
- the Italian Likouala Timber (Fuser family, from and still in Côte d'Ivoire): 525,500 ha
- the Lebanese SIFCO, a family company that took over the former SOCALIB concession (Libyan): 471,219 ha
- The Lebanese BPL, also involved in logging in Ghana where the family (Bitar) is installed (200,000 ha).

In the South, the largest concession is run by a Portuguese family. The Foralac company controls 765,000 ha, but with only 330,000 ha suitable for timber production. The Malaysian Taman company owns a 413,000 ha concession (291,000 productive hectares), but controls also two other companies (SOFIL and CIBN), which bring the total controlled area to 1.28 million ha (773,000 productive). The Chinese Man Fai Tai has been taken over by a Chinese-Malaysian company, SICOFOR, and owns a 313,000 ha concession. Another Chinese, Asian Congo Industries, has bought back the concession and the industrial unit of the former Socobois (German). Asian Congo Industries controls several Congolese medium-scale forest companies de facto in the region.

The Italian Trabec owns a 140,000 ha concession (99,000 productive), and is focused on processing, unlike the Asian companies that prefer log export. Trabec is the only one, in the South, committed to management plan preparation, despite a key regulation. Several Congolese companies are active in the South, but most of them are used to selling their timber to Asian companies.

II.7. CAR

In CAR, the forest industrial operations are undertaken in the southern-Western part of the country within an area of roughly 3.4 million ha. The country is landlocked and extremely poor, with a very narrow domestic market and almost all of the timber is exported through the Cameroonian port of Douala, 1000 to 1300 km from the harvest places.

In CAR, there are around 13 concessionaires, but only 6 are considered as significant.
- Three are Chinese, both subsidiaries of Vicwood: VICA (298.907 ha) and Thanry-Centrafricaine (228.000 ha). SOFOKAD, formerly Lebanese, is also part of the Vicwood group (174.200 ha). The Vicwood group controls more than 700,000 ha now in CAR.
- One is Lebanese (with also Greeks interests): SCAD (434.710), and SEFCA (381.026 ha) is Syrian.
- One is French : IFB (305.444 ha)
- SESAM, initially a French company taken over by the Malaysian WTK in 1998, has brought back its 413.000 ha to the Government in 2006. The same thing happened to the French SBB (Société des Bois de Bayanga).

II.8. DRC

In DRC, the logging industry was running at slow pace until 2002-2003, as the country was split into militia-controlled areas. In 2002, a new Forest code was set up, and 25 million ha of inactive concessions were cancelled, compared to the 35 million hectares or so registered in 2002. Despite a moratorium set up in 2002, logging concessions are still being delivered in DRC. In June 2002, the Ministry of Environment compendiums listed 122 contracts, totalling 18 million hectares. Yet, the official list of existing contracts was only published in May 2003 and it reported 132 contracts, totalling 19.4 million hectares. A new list of existing contracts was published in November 2005. It

---

9 Exactly 19,403,498 hectares (Le Potentiel, May 24, 2003).
reported 141 contracts totalling 20.4 million hectares,\(^{10}\) including 100 contracts dated after May 2002 covering 15 million hectares.

The already logged over and exhausted region of Bas-Congo, close to the Port of Matadi, has been given up by large companies that moved to the richer areas in the Bandundu and Equateur’s provinces.

**Company profiles**

The prominent companies are:

- The Lichtenstein based Holding company of the Nordsudtimber (NST) Group. It is said to control the two large concession holders in DRC, the SODEFOR group and the SOFORMA-FORABOLA-CFT group\(^ {11}\), which are lead by two Portuguese brothers. Altogether, the 2 groups control over 5 million ha in DRC. The Swiss Precious Wood company considered taking a 10 % participation in the NST holding. Due to the uncertainties, this participation has been reduced until a further contract price increase is decided in 2008 (exclusive option).
- The SODEFOR group controls up to 3 million hectares (2 million hectares of productive area)
- The *de facto* group SOFORMA-FORABOLA-CFT is led by Portuguese and Swiss interests (ARD, 2003). SOFORMA group controls around 2 million ha (around 1 million hectares are productive) (FRM website, November 2006\(^ {12}\))

The other major player is the *Danzer* group

- SIFORCO, subsidiary of the Danzer Group, controlled up to 3 million hectares before the 2004’s fiscal reform and the introduction of an area tax. In 2004, SIFORCO brought back to the government logged-over and non-timber productive areas, and came up with a concession area of around 1.8 million ha. SIFORCO runs an important sawmill and peeling unit in Maluku, in the vicinity of Kinshasa.
- SEDAF is a Congolese company with 668,033 ha, which is allegedly a contractor of SIFORCO, to which SEDAF sells its timber production (Kühne K., 2005).

Other major players are:

- TRANS-M, a newcomer Lebanese company subsidiary of *Congo-Future*, a group with various activities in DRC that has 3 concessions totalling 746,000 ha.
- SAFBOIS, a Belgian Company with also US interests (ARD, 2003), controls around 334,700 ha.
- SICBOIS is another Belgian company with concessions over 395.000 ha.
- Parcafric, an Italian wood processor with 235,432 ha.
- SCI BOIS, with 229,400 ha, is a French company owned by the same family that owns ITBL in Congo-Brazzaville.
- ITB, another Lebanese company, has concessions over 200,000 ha.
- ENRA is an 81,000 ha company operating in the East-Congo, close to Kivu, in an area with *Entandrophragma* species (sapelli, sipo…), but landlocked. Focusing only on high quality sawnwood, especially on flooring, this Belgian company exports through Tanzania.
- SEFOCO controls 414,000 ha.
- OLAM-Congo, an Indian company, is a newcomer with around 300,000 ha.
- Another newcomer is the Chinese Yang Shushan, with a 188,672 ha-concession.

Some newcomers, such as “Ambassadeur Nkema Liloo”, have 520,000 ha in the Equateur Province. Other newcomers with significant areas, measuring several hundred thousand hectares, are mentioned in recent documents.

All these concessions are to be “legalised” under the new legal concession category created by the 2002 Forest Law. It is estimated that 75 % of the current concessions can be contested and cancelled

---

\(^{10}\) Exactly 20,354,861 hectares (*La Reference Plus*, 3519, November 1\(^ {st}\), 2005).


on a legal basis for having being allocated after the 2002 moratorium. The new elected government will have to make a statement on this delicate issue.

II.9. Equatorial Guinea

Concessions covered roughly 1.7 million hectares in this small country by 2001. Shimmer International, a subsidiary of the Malaysian company Rimbunan Hijau, now carries out most of the logging in the country (Forest Monitor, 1998), although it officially has a concession of 470,545 ha (2001 data). From 1993 to 1997 forest concessions have grown from 600,000 to 1,500,000 hectares, which means that all the country’s commercially productive forest is now under concession. At the same time, there have been changes in the transnational actors involved and in the destination of exports. In 1993, most of the timber exports went to Japan, followed by Spain, Turkey and Portugal. Four years later, in 1997, 55% of wood exports went to China and 20% to Japan and only 5% to Spain (WRM's bulletin Nº 46, May 2001).

The story of concessions in Equatorial Guinea is edifying. The half-million inhabitants country is rich of Okoumé (Aucoumea klaineana), a specie highly appreciated for plywood and veneers, and actively sought by Asian manufacturers. Forests are quite close to the coast, which makes transport costs relatively low and logging very profitable. Rimbunan Hijau (RI) came in Guinea in the mid-1990, and gained access through concession. The authoritarian regime – with the particularity that, for several years now, the Minister of Forest has been the son of the President and has been accused, abroad, of various crimes, including drug trafficking – did not make difficulties to allow Shimmer (the RI subsidiary) to get a quasi-monopoly on logging, and to bypass all the laws related to the obligation to prepare a forest management plan and to process locally the timber. The log production, almost entirely exported as raw timber to Asia, reached 700,000 m³ in 1997, and has dropped to 300,000 in 2004, a good signal of the resource depletion. According to ongoing rumors, Shimmer was considering leaving the country, unless the Government would decide to reduce the minimum cutting diameter of the Okoumé below the current 60 cm dbh.

Since the country is becoming rich at high speed thanks to its recently discovered oil reserves, there are few reasons to contemplate better governance in the forest sector.

III. EMPLOYMENT

The employment provided by the concession forestry sector includes both direct jobs in logging and wood processing and indirect jobs. Although the first category is more or less quantified, despite some question marks for a country such as Ghana, the second one is never precisely quantified. Within these indirect or induced jobs, one should take into consideration employment in the transportation area, for transporting timber both by truck and by rail. Additionally, there are jobs created around the markets and the ports, including those of intermediaries, the induced employment from the supply of industrial units, and the trade and small-scale processing activities generated by the use of abandoned logs. One example of this is the CIB Company in Congo, which has induced the creation of the Pokola town that now has 12,000 inhabitants in what was initially a village of one hundred people. People have been attracted to the health and social care facilities provided by the company; which have subsequently generated employment for nurses and other staff. This concentration of inhabitants has automatically generated additional jobs that would not have been created without the presence of the company. This type of induced impact needs specific field assessment.

Direct employment

Cameroon: the timber industry provides around 13,000 direct jobs for a formal roundwood production estimated at 2.5 million m³, of which 90% is processed inside the country (Karsenty et al., 2006).

http://www.wrm.org.uy/bulletin/46.html#Guinea
Gabon: the timber industry provides 11,520 direct jobs in 2003, with 70% for logging, and 25% in processing (Odyssé Développement, 2004).

Congo Brazzaville: Direct jobs are given for 6,200 by the National Accounting system.

DRC: At the beginning of the 1990’s, it is said that the timber industry was employing around 20,000 workers (Kankolongo, 1994). In 2000, at the end of the active conflict, this figure was down to 3,000 (Mobula, 2000). In 2002, the estimation was around 6,000 workers for wages totalling $ 6.5 million (Karsenty et al., 2003). In 2006, industry’s representatives claim that 15,000 workers are currently employed by the forest sector (Le Potentiel, 18/09/2006), but they do not provide breakdown figures distinguishing between wood transportation and timber industry. And the figure incorporate also permanent jobs created at local level to help the forest operations.

CAR: According to the « Etats-Généraux des Eaux, Forêts, Chasse et Pêche – Commission Forêt, Bangui, 2003 », around 4,000 workers are employed by the timber industry.

Liberia: At its apex, the sector provided 6,000-7,000 jobs in 2002 (J. Suter, pers. com.). But a document of the UN Security Council suggests a figure of 8,000.

Côte d’Ivoire: According to various sources, one can estimate that the timber industry was employing up to 25,000 workers at his apex.

Ghana: The Ghana wood industry and log ban export study (Birikorang, 2001) estimated that the forest industry directly employed 104,000 people in 1999. The breakdown suggest that 55,000 were working in the “tertiary”; thus, a figure of 50,000 workers in the forest industry looks more realistic, although still high compare to countries such as Cameroon.

Equatorial Guinea: The only information available is given by Lebedys (2004), and suggests a figure of 2,000 workers.

Synthesis: direct employment by formal sector (concessions)

<table>
<thead>
<tr>
<th></th>
<th>Cameroon</th>
<th>Gabon</th>
<th>Congo</th>
<th>DRC</th>
<th>CAR</th>
<th>Equ. Guinea</th>
<th>Côte d'Ivoire</th>
<th>Ghana</th>
<th>Liberia</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13,000</td>
<td>11,500</td>
<td>6,500</td>
<td>15,000</td>
<td>4,000</td>
<td>2,000*</td>
<td>25,000</td>
<td>50,000</td>
<td>8,000 **</td>
<td>135,000</td>
</tr>
</tbody>
</table>

** UN Security Council^{14}

Analysis:

Jobs provided by the timber industry appear to be in quite limited numbers. But it must be emphasized that, since this work focuses on concessions, these figures do not take into account jobs within the informal sector linked with wood, including furniture making, wood carving, etc. In Ghana, “tertiary” producers are estimated as high as 55,000. In Cameroon, workers involved in furniture making are estimated at 50,000^{15}. Still for Cameroon, the statistical institute (INS) estimates that the informal sector could include up to 150,000 workers, if furniture makers are included and the sort. This represents 10 times the figure of the formal sector.

One specific feature of the jobs provided by the timber sector is that they are available in forest zones, which are remote and economically marginalized areas, and target non-skilled people. It is estimated that one permanent job in Central Africa sustains the livelihood of 10-12 relatives.

^{14} [Link](http://daccessdds.un.org/doc/UNDOC/GEN/N03/449/25/PDF/N0344925.pdf?OpenElement)

^{15} INS, Contribution à l’audit économique et financier du secteur forestier au Cameroun, 2006
IV. REVENUES DERIVED FROM THE TIMBER SECTOR

The timber sector is a significant contributor to the governments budget, although the revenues derived from this sector look modest compared to revenues derived from oil. Almost all of these revenues came from the concession sector but not all, since some export taxes come also from small-scale, and often informal, sawyers who use various intermediates to export their timber, such as in Cameroon.

Overall, Gabon and Cameroon are those with the highest level of royalties and taxes collected from the forest sector. In Gabon, the amount collected was around $50 million in 2004, and in Cameroon it was close to 40 million. These 2 countries are also the two top producers (around 2.5 million m³ for Cameroon, and 2.8 million for Gabon). Gabon also exports more logs than Cameroon does (1.58 million m³ for Gabon, 150,000 m³ for Cameroon) and it is a fact that log export is the activity where tax collection potential is the highest.

Congo, with around $20 million recovered in 2005, is getting more and more revenues as the timber production is increasing, especially with the activity of 3 Asian companies exporting Okoume logs from the southern part of the country.

CAR has collected almost $10 million in 2005. As for DRC, the timber revenues collected in 2005 have been $3.85 million, a very small amount in regard to the production potential of the country, but almost a doubling compared to the year 2002, when revenues were below $2 million.

For Côte d'Ivoire, data are available from the Ministry of Forestry, and indicate an amount of $15.7 million.

It is difficult to get accurate and up-to-date data on forest revenues for Ghana. In 1999, the revenues were around $9.6 million (Awudi C., Davies J., 2001). Taking into account the evolution of official production between 1999 and 2005, one can assume that current revenues are around $13-15 million.

In Liberia, the last available data are 2002 estimates which suggest an amount of $13 million in 2002, even if such assessment looks somehow optimistic regarding capacities of the Government at this time to collect taxes.

Equatorial Guinea is the least documented country, and it has not been possible to get any information on forest revenues. Knowing the fiscal pressure on 1 m³ of exported log, and assessing the 2005 production at around 350,000 m³, one can assume the timber fiscal annual revenues to be around $12-13 million.

Comparison with other fiscal revenues

Forest revenues are quite limited when compared to oil or mineral revenues. The Energy Information Agency (July 2003) estimated oil revenues for Congo-Brazzaville at $2.3 billion. In Cameroon, less endowed with oil than Congo, the revenues have been estimated around $480 million per year. In DRC, mining resources – including diamonds – generated close to $15 million in 2005, which according to an IMF statement corresponds to a 10% recovery rate.

V. OTHER CONTRIBUTIONS TO GDP

Data is difficult to find on the overall contribution to GDP of the industrial timber concessions. Only a few countries have directly addressed this issue and made the information available. In the already available national accounting information, the forest sector is often not distinguished from the agricultural sector and extractive industries.
For Cameroon, the National Statistical Institute (INS) indicates a figure of €393 million ($520 million) of gross added value for the year 2004\textsuperscript{16}. On can add €185 million ($240 million) estimated for the informal sector. The formal sector contribution represents 3.1% of the estimates 2004 GDP of Cameroon. If one considers also the informal sector, the figure raises to 4.6%. Compared to the non-oil GDP, the formal sector contribution reaches 3.2%, and 4.8% with the informal sector included.

In Gabon, a 2005 study indicates that the formal forest sector contributed as much as 6.4% of the non-oil GDP (Odyssée Développement, 2005).

In Congo 2004 data, the forest sector contributes 2.73% of total GDP and 5.5% of non-oil GDP \textsuperscript{17}. According to an on-going study on the forest sector in Congo, these figures are not accurate. Another independent calculation suggests figures of 5% of total GDP and up to 10% of the non-oil GFP (C. Bravi, pers. com.).

Data for the others countries are not available.

These figures do not give an exhaustive figure of the full economic contribution of the forest sector. Since they derive from national accounting organized by areas, they do not take into consideration the indirect added value in the other areas, such as transportation, trade, among others. An economic assessment should evaluate such bias calculations. In Gabon, the Odyssée Développement study estimates the contribution of the forests activities at 7.1% of the non-oil GDP for 2003. One can consider that in more “economically dense” countries such as in Cameroon, the multiplier coefficient is likely to be significantly higher than in Gabon, but no estimation is available so far.

VI. LOCAL AND INFORMAL CONTRIBUTION TO LIVELIHOODS

In Central Africa, concessionaires are requested to provide various social services to the population. The magnitude of these local transfers is closely linked to the size of the concession, but also to the internal policy of the companies. These benefits are generally organized through a “cahier des charges” for which guidelines are provided by the forest administration, and possibly completed at the local level after negotiations with the local administrative authorities and sometimes the communities in the villages.

These “cahiers des charges” are extensively used in Congo-Brazzaville, where provisions are made not only for “social” deliveries to local population but also for national and local forest administrations. Deliveries vary from building bridges, food storage houses, schools, to providing the necessary equipment for forest management, health, education and transportation. They also make provisions for the local government administration and for local councils. Furthermore, companies are often requested to pay some premiums and per diemts to officials who are on duty to travel in the region. In a 3-year period, an on-going economic study (C. Bravi, pers. com.) has calculated that these transfers are worth FCFA 4 billion ($8 million), and estimated in average FCFA 38.5 million ($79,000) per contract signed. Normally, one contract is for one FMU, and companies can have several FMUs.

In DRC, transfers are significant but have yet to be formalized through government-supervised “cahiers des charges”, even though the forest administration recently intended to produce guidelines to formalize such documents in connection with the projected sealed bidding allocation process. Notwithstanding, ad hoc “cahiers des charges” have been used for years. Companies also have to fund a lot of local activities and give the local administration financial means for their subsistence. In reality, companies have no choice but to find acceptable agreements with officials that are often former members of armed militias. Agreements also have to be made with local population, granted that officials are also part of these discussions. These practices are often interrupted by petty corruption practices that are a common occurrence in DRC.

\textsuperscript{16} See Karsenty et al., 2006.
\textsuperscript{17} Data from Direction Générale de l’Économie (Ministry of Finances and Economy, Congo)
In Cameroon, “cahiers des charges” are part of the contract signed after the concession allocation. Transfers are less important and their scope is linked to social achievements. In Cameroon, 40% of the area tax that is set up through bidding is earmarked and effectively directed to the local council (communes). Another 10% is for villagers surrounding the concessions, but it is not directly given to the villages, since they do not enjoy the juridical personality. Local council mayors are the money recipient, and they often keep the money with them or they favour only certain communities.

The amount of money that has been poured into the 56 local councils is close to FCFA 5 billion per year ($10 million), plus an additional FCFA 1.2 billion ($2.5 million) for the villages neighbouring the concessions (Karsenty et al., 2006). Outside the Permanent Forest Estate, on the “ventes de coupe” and other small-scale and short-term timber authorizations, loggers now pay FCFA 1,000 ($2) per cubic-meter of log extracted to the villagers of the area. No data is available for the amount, but given the significant part of timber derived from those “petty titles”, a figure of $670,000 distributed is not unlikely. The price paid by companies for getting access to logging within the community forests should also be added, although most of these payments are suspected to go to the local “elites”, and often corrupted officials, rather than to the villagers.

The share of the proceeds between the local councils is unequal, since it depends of the location of the villages vis-à-vis logging areas, as showed by the table below:

<table>
<thead>
<tr>
<th>Amount of area fees (FCFA)</th>
<th>Number of local council who benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 700 million</td>
<td>1</td>
</tr>
<tr>
<td>&gt; 300 million</td>
<td>3</td>
</tr>
<tr>
<td>&gt; 200 million</td>
<td>8</td>
</tr>
<tr>
<td>&gt; 100 million</td>
<td>8</td>
</tr>
<tr>
<td>&lt; 100 million, &gt; 3 million</td>
<td>36</td>
</tr>
<tr>
<td>Total</td>
<td>56 local councils total less than 3 million inhabitants</td>
</tr>
</tbody>
</table>

In Gabon, the government has prepared guidelines for the preparation of “cahiers des charges”. The planned document includes provisions to set up a payment of FCFA 1,000 ($2) per m³ to the local populations, as is in force in Cameroon – but not on the concessions of the Permanent Forest Estate in Cameroon. Such local payments have been tested in one of the CEB-Thanry’s concessions so far. Until recently, concessionaires were accustomed to deliver social contributions to the villagers and the small towns in a “paternalistic” way. Since the 2002 fiscal reform, which increased the taxation pressure on the companies, some have significantly reduced their contributions, arguing that they cannot pay higher taxes and continue to pay at the local level. But this argument is somewhat limited, since concessionaires are aware that stopping all transfers would provoke conflicts that would lead to creating more obstacles for logging.

In CAR, the “cahiers des charges” are part of the management plans that are prepared by a project-supported unit within the forest administration. These “cahiers des charges” include the “basic” provisions, such as health care construction, school equipments and so forth.

No data are available for Equatorial Guinea.

In Ghana and Côte d'Ivoire, the smaller size of the concessions set a different context, in which direct transfers exist but in a lesser proportion than with the large concessions of Congo Basin. In Ghana, the Constitution selected three institutions to receive communities’ shares of royalties. These are District Assemblies (55%), stools (25%) and traditional authorities (20%) (FERN, 2006).

According to Bird et al. (2006), “Landowners and forest communities stood to benefit from competitive bidding, but the idea of immunity of lease holders from paying TRF [Timber Rights fees] loomed high in industry lobbying. FWG’s [Forest Watch Ghana] counter-position, since the beginning
of 2005, has been that the system of lease holding and competitive bidding has important implications for the distribution of forest benefits to forest owners. FWG was therefore opposed to any immunity on the payment of these fees.” And according to a FERN 2006 report: “Forest Watch Ghana members believe that community representatives receive less than 5% of their royalty entitlements and none of their entitlement to timber rights fees (TRFs)” (p. 11).

Summary of concessions and social management features

<table>
<thead>
<tr>
<th>Country</th>
<th>In charge of carrying out forest management plan</th>
<th>Community forests</th>
<th>Local council forests</th>
<th>Tax sharing with local councils and/or villagers</th>
<th>Social achievements requested through « cahier des charges »</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana</td>
<td>Concessionaire</td>
<td>In hand with traditional tenure which is largely recognized</td>
<td>No</td>
<td>Yes, but not really effective</td>
<td>Yes</td>
</tr>
<tr>
<td>Côte d'Ivoire</td>
<td>Sodefor in gazetted forests,</td>
<td>Concessionaires in Rural Domain</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Cameroon</td>
<td>Concessionaire</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Congo</td>
<td>Concessionnaire (de facto)</td>
<td>No</td>
<td>No</td>
<td>No, but not really effective</td>
<td>Yes, widely</td>
</tr>
<tr>
<td>Gabon</td>
<td>Concessionaire</td>
<td>Planned by the 2001 law</td>
<td>No</td>
<td>No, but contemplated</td>
<td>Being launched</td>
</tr>
<tr>
<td>RCA</td>
<td>Government</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes, but imprecise</td>
</tr>
<tr>
<td>DRC</td>
<td>Concessionaire</td>
<td>Planned by the 2002 law</td>
<td>No</td>
<td>No</td>
<td>No, likely to be done</td>
</tr>
<tr>
<td>Equatorial Guinea</td>
<td>Concessionaire</td>
<td>Yes (Bosques Comunales)</td>
<td>No</td>
<td>No</td>
<td>?</td>
</tr>
</tbody>
</table>

Liberia is not mentioned here, due both to the fragmented information and the current process having seen concession cancellation and the preparation of new forest regulations.

VII. KEY FEATURES AND TRENDS

VII.1. Different demographic and historical contexts shape different concessions patterns

How can the current 15,000 – 20,000 hectare concessions of Ghana and Côte d'Ivoire be compared with the million hectares concessions or more in Gabon, Congo-Brazzaville and DRC?

The size of the concessions, the demographic patterns, and the land allocation history are closely related. West African countries are more densely populated than those of the Congo Basin. They were developed earlier and at a larger scale, especially Ghana and Côte d'Ivoire. These two countries have a specific “cocoa development story” associated with non regulated and profitable logging that has led to fragmentation and further deforestation of these coastal countries. Liberia and Equatorial Guinea, less populated countries in coastal West African countries (see tables), have been out of this cash-crop story and have been faced with the “resource curse,” linked to diamonds, as is the case of Liberia, and oil, as is the case of Equatorial Guinea. Such “development” patterns have favoured large scale forestry and the design of large timber concessions.

Gabon and Cameroon are interesting, since they show the two faces of this phenomenon. In Gabon, the coastal zone, with abundant and regenerating Okoume stands, was heavily exploited early in the
20th century, when the huge and low-populated hinterland was suitable for the design of very large concessions. This occurred in places where government investments were very limited, and for which large concessions were seen as an opportunity to develop the hinterland without investing public money. This followed the way of thinking from the earlier French colonial era, which according to C. Coquery-Vidrovitch turned out to be a total failure, since the concessionaires did not make the investments they were expected to do. On the other hand, in Cameroon, even in the hinterland concession sizes never came close to those of the Northern Congo, Gabon and DRC.

For land-locked and low-populated countries such as CAR, Northern Congo and most part of DRC, the rationale for large-scale concession was clear. In DRC, with 50 to 55 million inhabitants and heterogeneous distribution upon a country of the size of Western Europe, one must add the historical pattern of “development” begun by Leopold II who took ownership over and distributed huge concessions to commercial companies for royalties.

The second important feature is the potential domestic market, which depends on the size of the population and on its purchasing power. DRC has potential for a large domestic market, but what will it take to hoist the purchasing power of DRC’s population to a decent level? On the other hand, Gabon’s population has a relatively higher purchasing power, but is too small to be a real outlet for the existing industry. Ghana, Côte d’Ivoire and, to a certain extent, Cameroon have important populations with relatively high purchasing powers for their potential domestic markets. In Ghana, chainsaw loggers are the largest suppliers of timber for domestic markets. In Côte d’Ivoire, the informal sector is expanding, especially with the political crisis. In Cameroon, it is estimated that a minimum of 1 million m³ of logs is mobilized by the informal sector, (Plouvier et al, 2002) most of them for supplying local markets and, increasingly, for exportation. In Cameroon, some companies of lesser importance also supply the local market. Yet, the outlet is limited due to the relatively high cost of production for legal timber with the upstream taxation that characterizes Cameroonian forest taxes system18. Thus, most of the Cameroonian consumers cannot afford to buy “legal” timber from the formal industry, even though taxation system is only one part of the story: simply, it is much more profitable for companies to sell abroad most of their production, due to relative gap pricing.

The table below shows a certain correlation between the population and the population density, on one hand, and the average size of the concessions, on the other.

<table>
<thead>
<tr>
<th>Country</th>
<th>Population (millions)</th>
<th>Rate of natural increase (%)</th>
<th>Population density per square mile</th>
<th>Average size of the concessions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana</td>
<td>22.6</td>
<td>2.3</td>
<td>245</td>
<td>Small to Medium</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>19.7</td>
<td>2.5</td>
<td>158</td>
<td>Medium</td>
</tr>
<tr>
<td>Cameroon</td>
<td>17.3</td>
<td>2.3</td>
<td>94</td>
<td>Medium +</td>
</tr>
<tr>
<td>Liberia</td>
<td>3.4</td>
<td>2.9</td>
<td>78</td>
<td>Large</td>
</tr>
<tr>
<td>DRC</td>
<td>62.7</td>
<td>3.1</td>
<td>69</td>
<td>Very large +</td>
</tr>
<tr>
<td>Eq. Guinea</td>
<td>0.5</td>
<td>2.3</td>
<td>47</td>
<td>Large</td>
</tr>
<tr>
<td>Congo (Rep.)</td>
<td>3.7</td>
<td>2.6</td>
<td>28</td>
<td>Very large</td>
</tr>
<tr>
<td>CAR</td>
<td>4.3</td>
<td>1.7</td>
<td>18</td>
<td>Large</td>
</tr>
<tr>
<td>Gabon</td>
<td>1.4</td>
<td>2</td>
<td>14</td>
<td>Very large</td>
</tr>
</tbody>
</table>

Sources: Population Reference Bureau (http://www.prb.org/), 2006, for the numbers / Consultant’s own assessment for the concessions classification

Other considerations

It is often emphasized by timber private sector’s representatives that large concessions are necessary in a context of increasing competition on the timber export markets, especially to allow the industry to gain economies of scale. This argument is, however, only partially true. It is true that some cost

18 For a constant level of fiscal pressure, when taxes are mainly on exported products, processed timber can be sold on domestic market at lower price compared to a the situation where taxes are set upstream (area, logging, logs entering the mills) with a “multiplier” effect on processed products (if one need 3 m³ of logs to make 1 m³ of sawnwood, the output bears the taxes incorporated to the 3 m³ of logs).
functions would be relatively diminished if they were spread out on large concessions and the cost per hectare was reduced. Depending on the average harvesting rate prevailing, a minimum size is needed to spread a certain amount of fixed costs. However, there is no need for the wood processing industry to own logging concessions. Such provisions have been set by the forest administrations that have favoured the vertical integration of the sector. A wood processing unit entails high fixed costs, and the need for large concessions is rational under such a production pattern.

On the other hand, some industrialists have shown that the “decoupled model” was also very viable, with industrial clusters established in harbour areas or at other strategic locations, such as Gabon and Cameroon. In such cases, the timber supply can be provided by concessions of various dimensions, without negative impacts on the efficiency of the sector. Such a pattern is, in particular, pushed by Italian industrialists, who have brought to Central and West Africa valuable innovations in wood processing and marketing. Yet, since in Central Africa vertical integration is favoured by governments, the equation – “large concessions equals competitiveness” – turns out to be more or less true, even if the rationale for its verification is not commonly believed.

Obviously, when no area tax is applied, or if it is set at very low rate, the relation between the size of the concession and its competitiveness is often negative.

VII.2. The influence of the taxation reforms and forest management requirements

In the Congo Basin, since the mid 90’s for some countries and at the beginning of the decade for others, the fiscal reform promoted by the World Bank has led to changes in the taxation structure pattern, with an increase in the area tax. Area tax is especially high in Cameroon as it is set through a bidding process. In DRC, the area tax is planned to be progressively increased, and has led to a first restructuring and downsizing of some concessions. Since the escalation process has been de facto suspended by the political agenda and due to uncertainty in effective tax recovery by the government, extra-large concessions are still a characteristic of DRC.

Actually, one might keep in mind that higher area taxes do not hamper large concessions per se, since the timber production is proportional to the area, but do hamper “under-exploited” concessions. Since the countries are increasingly trying to favour local processing of timber – despite recent “revival” of log exports in Congo and Cameroon, due to buoyant Asian purchase of logs – they tend to lose also their main source of easy rent collection, export taxes on logs. Shifting tax burden to exports of processed products is not easy, since it contradicts the objective of promotion of local processing, and because private rents are generally less than log exports. Felling taxes are notoriously plagued with low recovery rates, and corporate taxes are only semi-efficient. Area tax is one of the only tax instruments the government can use to limit their forest tax decline that accompany the increasing restrictions on log exports.

Two complementary effects are perceivable from this change in taxation patterns. On one hand, and along with the obligations to prepare and implement a forest management plan, certification of legality and eco-certification should push the “rationalization” of the concession system. This should be done with a progressive transfer of assets to the most professional companies and frequent downsizing in area by concession. Yet, this trend is thwarted by the lack of implementation of the government regulation that allowed many companies to maintain their current practices and evade tax paying. On the other hand, such changes favour capital concentration in order to reduce the fixed-costs burden and rationalization of the overall management and outlets. Since selling tropical timber in Western markets becomes more difficult, the importance of the trade networks is increasing, and new alliances and restructuring of the sector is driven by trade companies. One of the trade companies is DLH-Nordisk, which took over CIB, the largest Congo-Brazzaville company.

19 Expressed as tax amount per cubic-meter traded, and provided a rotation of 30 years or so that is mandatory with the current concession regulations, the tax burden per m³ does not change with the size of the concession. The tax burden per cubic meter vary with the average harvesting rate (in m³ per ha) and the wood-processing recovery rate, not with the area of the concession.
VII.3. The diverging evolution of the two edges of the forest sector

One can see an emerging industry driven mainly by new policies implemented in the Congo Basin countries. Very large foreign-owned companies seem to be able to cope with new public regulations and export standards required by western markets. Many national small-scale companies are positioned on local markets and use their ties with local administration and national governments to avoid costly changes that would be requested under stringent law enforcement. Medium and large companies are frequently accumulating the disadvantages of the “formality” – the social visibility that made law bypassing more difficult – and the increasing competition and requirements on export markets. Recent collapses of mid-sized companies in Cameroon and Gabon have been documented by Fochivé (2005), Karsenty et al. (2006), and mentioned in a recent ITTO-funded country study (ITTO, 2005).

Concentration and fragmentation are both occurring in the logging industry of the Congo Basin (Ruiz Perez et al., 2006). If one analyses the content of the major changes conveyed by the new policies in the last decade, one can see that the different components of these policies have produced a new scenario. Listed are some of these components:

- Environmental regulations: high-standard management plans, strictly following national guidelines and norms, have become mandatory for concessions. These lead to a large demand for technical expertise, filled by a handful of foreign specialized actors providing a sharp expertise at international cost. Only large concessionaires can afford such technical support, except for CAR, where a public institution backed by foreign aid is in charge of preparing the management plans for the six large companies that share the industrial production forest area.

- Forest taxation reforms have generally increased the fiscal pressure born by the enterprises (Karsenty, 2006) and have placed growing emphasis on area fees. Area fees are a fixed cost, independent of the harvest level that tend to add stress to companies that do not have a steady production and that are most sensitive to timber price variations in the international market.

- Social transfer requirements, through growing use of the “cahier des charges” system that set a number of social-oriented deliveries mandatory at local level, pose a growing financial charge. This is greater for some countries than others, as in Congo-Brazzaville, where the scope of such a system has been extended well beyond local deliveries of goods and services (Karsenty and Pierre, 2005).

These public policies have been prepared by governments, with the active support of foreign donors. The policies have shared the characteristic of increasing the fixed costs of the logging activity, which is, without a doubt, a factor favouring the largest companies with strong financial and concentration trend. One of the most tangible illustrations of such a concentration trend is the expansion of the VicWood group and Rimbunan Hijau (see chapter II). Yet, governments tried to avoid concentration with the imposition of a surface thresholds in many countries (200,000 ha in Cameroon, for example); but such a measure is ineffective with holdings.

Besides these sub-regional public policies, some public policies of consumer-countries reinforce this concentration trend. Some European governments (e.g. France) are committed to use only certified timber in public purchasing. The decision of the EU to favour voluntary agreements for legal verification of exported timbers, which pushes companies to generalize timber tracking systems and associated ISO certification, moves up the practical threshold for tropical timber exports. Finally, there is also a non-policy factor, which is playing a growing role. The escalation of energy costs, notably gas oil, represents a large proportion of the logging costs.

Fragmentation and growing non-formal entities is an indirect result of the same policies, within a poor governance context. As the different environmental, economic, financial, and social standards have become higher, numerous small-medium size companies, both new and old, have tried to reduce their “social visibility” in order to avoid the costs entailed by their implementation and avoid many taxes. Year 2004 custom data in Cameroon indicates that 138,000 m³ of sawnwood have been exported by non-concessionaire operators; a figure to put in relation with the 150 mobile saws Lucas-Mill sold in Cameroon in the last years (Fochivé, 2005). The growing importance of sawn-chain lumber operators
in countries such as Cameroon (Plouvier et al, 2002), Ghana (Forestry Commission, 2000) and DRC (Djire, 2003) is also a symptom of the same fragmentation phenomenon, fuelled in Cameroon by the uncontrolled production declared from “community forests”.

One must add that “concentration at the top” and “fragmentation at the bottom” are not totally independent phenomena. Some studies have suggested that large companies are used to utilizing small-scale enterprises for part of their raw material supply, as a way to avoid management regulations and escape certain taxes (Cirad/I&D, 2000). However, since many of these large companies are, now, looking for high-standard certification, it is likely that – at least for these ones – such a practice will tend to decline.

This evolution contradicts the wishes publicly expressed by the government of the Congo Basin of promoting national entrepreneurship into the forest sector, given that African entrepreneurs are the minority among the largest concessionaires; which is not the case in Cameroon. Furthermore, inasmuch as the small-scale companies operating at the edge of the informal, and thus illegal, sector are mostly run by Africans, one can expect that the local political will to fully implement the FLEGT agenda against illegal logging will not be strong enough. Unfortunately, as noticed by Collier (2000), small and medium companies are the first victims of the dysfunction of African governments, since (i) they lack the means to access to international and domestic credit, (ii) they are overwhelmed by the red tape of a predatory administration, (iii) they lack the power of the large companies to resist the corruption solicitations and to negotiate political protection against fiscal and “parafiscal” predatory behaviours performed by the public agents. As observed by recent economic studies in Cameroon and Congo, there is a gap between large and international backed companies on one hand, and the players of the informal sector on the other hand. It is a preferred strategy for small-scale companies to stay – or to shift to the informal sector, to reduce their fiscal and legal “visibility” for avoiding controls and “officials’ racket”.

Addressing this small-scale companies issue and formulating appropriate strategies related to the growing importance of the informal timber sector is a policy priority for the coming years. It also underscores the direct and concrete relationship between governance and corruption issues, and economic development.

**VII.4. The issue of illegal logging**

In a report released in 2006 (World Bank, 2006) about illegal logging, the World Bank gives some figures of estimated share of illegally harvested timber in some developing countries, sourcing it information from various sources dated from 2004 to 2005. The table “Indicative Estimates of Illegal Logging Selected Countries (2000 - 2004)” gives the following estimates for African countries: “Gabon: 70%; Cameroon: 50%; Ghana: 60%”. The accuracy of such figures is, however, quite dubious or, at least, debatable.

The figure of “50% of timber illegally harvested in Cameroon” comes from a 2003 FERN report quoting a 2000 Global Forest Watch report, in which such figure was absent, as stated by Cerruti and Tacconi, (2006). These authors pointed out that “The audit of the forestry sector carried out at the end of 1990s (CIRAD-I&D 2000) is another source that has been distorted”. Having made a careful review of data, Cerruti and Tacconi conclude: “There is evidence of illegal industrial log harvest only during the period 1998-2001 and in 2004, and at decreasing levels well below the widely reported level of 50% of total harvest”. Such illegal logging was also largely correlated to overcapacities into the processing sector, combined with restriction in legal areas allocated for logging, due to the “freezing” of concession allocation during the 1997-2000 transitional period under which new allocation rules were designed.

---

The figure of 60% for Gabon derives initially from a 2001 paper from Friends of the Earth\textsuperscript{21}, which was deriving such figure from a 2000 Global Forest Watch report\textsuperscript{22} in which one could read:

> Nearly three fourths of the decrees planned under Law 1/82 were never written. Article 14 states that Classified Forests must be regulated by a management plan, but procedures and regulation of these plans have yet to be defined. As of 1999, only 5 out of more than 200 logging companies have started (or plan to start) writing a management plan.

One sees that “illegal logging” is not an issue that can be easily sorted out without a minimum of caution (see Karsenty, 2003). Since the time these documents were written, Gabon has passed a new Law in 2001, with a large set of implementation decrees. Small/Medium-scale permits in Gabon represent up to 6 million hectares, ranging from 15,000 (or less) ha up to 50,000 hectares. These permits are commonly held by Gabonese citizens, who rarely exploit themselves, but give them to a “fermier” (generally a foreign logger). No one has a forest management plan, and most of them have taxes owed to the Public Treasury (ITTO, 2005). Thus, saying that those holders do not comply with the law sounds more appropriate than coining that 60% of the timber is derived from illegal logging. Forest offences must be classified in relation with some criteria such as the direct impact on the forest resource, the impact on management, the possibility of path correction, and the impact as deterrent (Karsenty, 2003).

*Where does illegal logging take place?*

Illegal logging can come from both the concessions areas (harvest below the Minimum Diameter of Cutting, harvest outside the AAC), or in what is often called the “non permanent forest estate”. According to the last report of the Independent Observer (Resources Extraction Monitoring, 2006), in Cameroon the pattern of infractions has changed in recent years:

> The Independent Monitor has noted recurrent infractions within different types of permits. Infractions within Sales of Standing Volume and Timber Recovery Permits, such as forest exploitation beyond the authorised limits of permits or a road’s width are ongoing. In Forest Management Units and Community Forests on the other hand, infractions related to document fraud are becoming frequent. This includes cases of exceeding authorised volumes, not recording timber felled in field documents in order to evade payment of various taxes, fraudulent use of transport documents to transport timber illegally exploited, and fraudulent use of log marks for exporting timber of illegal origin.

And further, the report states: “Illegal exploitation remains almost permanent within certain categories of permits, namely Sale of Standing Volume and Timber Recovery Permits also known as ‘Small permits’”. What makes the figure complicated is the fact that concessionaires source a variable part of their timber outside their concessions, being “partners” of small-scale entrepreneurs, or of community forest in Cameroon; when they do not simply buy the timber to farmers on the field of this one, as it is widely practiced in Côte d’Ivoire, in Ghana and, to a lesser extent, in Cameroon.

As stated by Karsenty (2003), “it should be remembered that the more a management system is regulated, the wider becomes the perimeter of possible offences. The danger of breaking rules is greater when those rules have been recently introduced, since businesses tend to be quite inert and vary in their abilities to adapt to new regulatory conditions. In the same way, a looser regulation of forest activities opens the door to fewer opportunities for illegal exploitation”. Cerruti and Tacconi (2006) provided a good illustration of such statement for Cameroon: “We have shown that small-scale logging operations have provided the largest contribution to the illegal log harvest, particularly in


\textsuperscript{22} “A First Look at Logging in Gabon”, \url{www.globalforestwatch.org/common/gabon/english/report.pdf}
recent years. However, had the government not acted illegally by suspending all small-scale logging activities in the period 1999–2006, the supposedly illegal log harvest would obviously have been much smaller. This point highlights the need to consider issues wider than the illegal log harvest to address the problems faced by the forest sector”.

The line between formal small-scale operations and informal operations (i.e. the “chainsaw lumber”) is not easy to draw. Depending on the prevailing regulation, a country can be afflicted with a huge rate of illegal logging or the opposite.

The certification process is likely to involve concerned concessionaires in self-regulatory practices regarding timber sourcing. The first FSC certified company in the Congo Basin (Wijma, in Cameroon) indicates that it had been requested by the auditors to stop sourcing timber from dubious sources outside the concession, and the company considered (in mid-2006) to stop sourcing timber from “ventes de coupe”, even though these permits are legal. The FLEGT programme of the EU can certainly play a positive role also in making concessionaires more cautious about timber sourcing. But such schemes target only a portion of the business, those who are targeting demanding western markets. Such category tends to narrow, however, with the growing importance of Asian markets and also the domestic one.

VII.5. Social issues and concession systems

As it is defined nowadays, the “modern” concession is viewed as a way of delivering services of public and collective interest through an association of private investment and public regulation. In the case of forest concessions, the obligation to undertake and/or implement a forest management plan complying with government-set norms and guidelines can be viewed as fulfilling a service of public interest. The expected benefits of the management plan are, in principle, collective and inter-generational. It should be kept in mind that, traditionally, the design of the management plan was considered in Africa as of the exclusive competence of the forest service. Such a role has been transferred to the private operator through a specialized unit funded by French aid,23 except in CAR, where the design of plans is still a public service. Côte d’Ivoire is also a country where management of “gazetted” forests has been kept under the auspices of a public structure, the Sofdefor, when forests of the “rural domain” were not really considered areas to be managed in a sustainable way. In Ghana, the provisions for management plans are not comparable to the ones that are requested in Cameroon, Gabon and CAR. In Equatorial Guinea, although management plans are mandatory, nothing has been done to enforce the law.24

Economic and social issues are also considered as a delegated obligation of delivering a service of collective interest, through the “cahier des charges” system. A recurrent complaint from local populations, often relayed by NGOs, is that concessionaires do no fulfil their social obligations and responsibilities. Several examples of empirical evidence suggest such defaults occur more frequently with medium-sized concessionaires that move often within the country and are financially less strong as a result of their lack of support from large groups. Admittedly, many press releases, Internet websites and meeting speeches target large-scale multinational companies, such as Rougier or CIB. Yet, it seems that while these companies are also especially targeted by Western NGOs because they are quoted on the Stock Exchange, they are often embarked in certification processes, and they have to maintain a reputation vis-à-vis their shareholders and foreign aid – since they often also benefit from it. This remark does not attempt to deny the existence of abuses and defaults in the fulfilling of obligations subscribed by the companies in the ‘cahier des charges’, or merely vis-à-vis the law.25

---

23 According to Pénelon (2003), who relates an experience with ECOFAC project and forest concessionaires in CAR, management plans prepared by external structures are not likely to be fully implemented, the “learning process” of doing itself that leads to ownership being lacking.

24 The recommendation made by Equato-Guinean consultants during the FAO-FOSA (Forest Outlook Study Analysis) 2001 exercise was to « implement urgently » the management plans (http://www.fao.org/documents/show_cdr.asp?url_file=/DOCREP/004/AB581S/AB581S02.htm).

25 Yet, very limited information has been produced on the situation within and around the Asian concessions in Central Africa, for example.
experts that contributed to the elaboration of “socio-economic component” of the management plans of several companies operating in the sub-region generally underscore the will to take “social issues” seriously. Instead, the companies they work for are more concerned about forest certification. Yet, FSC and ATO/ITTO are adding social issues as part of the criteria for SFM certification.

However, concessionaires resist an extension of the requirements to “take care of the local social needs”. Even concessionaires that subscribe to “deontology codes”, such as the IFIA codes that were written with the assistance of IUCN and dispatched to all the companies throughout the Congo Basin, oppose additional requirements. A critical issue is the entitlement questions of “who?” and “what?” The French-funded study prepared by ATIBT, called “Practical plan for the management of African timber production natural forests – Social issues” released in December 2005, presents a table distinguishing the respective responsibilities of the company and the other players on these social aspects. The players include the government, donors, NGOs, and local councils, among others. Regarding the “actions for the enhancement of livelihoods of rural population”, the study indicates that the company must share the technical responsibility with other partners, but underscores that the financial burden of rural activities and projects must be fully borne by the “partners”. In practice, the company pays for the health insurance of its employees and their families, defined as the legitimate spouse and children living in the same household. Therefore, a company of 700 employees in the Congo Basin has to take care of 4,000 people “entitled to” company benefits.

The document shows the relation between the decentralized tax system and social responsibility. The taxes paid by the company to the government for local development activities in the zone of influence of the forest concession become the direct social contribution of the company. Yet, the company is not involved in the choice of the realizations, in their functioning and their management, since these are the authorities’ responsibilities.

VII.6. The concession as a socio-political co-construction with local players

R Hardin (2002), suggested that the concessionary politics “[are] not simply top-imposed, but [are] the object of a co-construction between foreigners and Africans, between entrepreneurs and local residents”. She indicates that the rights granted at the national level by the government to concessionaires are renegotiated at the regional and local levels. These renegotiations create relations of patronage in which the "expatriates" are perceived as taking over the responsibilities of the government. A similar judgement is expressed by J.-C. Carret, regarding the villagers’ demands on the concession holding companies: “in every negotiation, the workers try to widen the field of the company’s obligations to new situations.” He believes that villagers expect these companies to co-finance their local institutions and family obligations.

However, the authors disagree on the nature of “concessionary politics”. Hardin emphasises the historical continuity. She believes that concessionary politics are the starting-point of a very flexible and adaptive model that mixes relations of patronage, property, power, and that are constantly renegotiated through discretionary arrangements. She considers that concessionary politics are the heirs of a system in which “warlords” have governing power over clientele networks, and the central State exercises control over the use of resources and income redistribution. For Carret, “concessionary politics” represent the end of forced work that marks the difference between former concessionaires companies of colonial days and current concessionaires. “In 1994, in Congo, CIB obliges nobody to work for it. On the other hand, if it wants to arrange of some 700 workers, it is necessary for it to set up certain number of institutions for 7,000 inhabitants of Pokola and N’dollki, take care of family obligations of the workers and their families, and negotiate their co-financing”26. Another difference in perception concerns the local actors’ capacity of participating in politics. Carret speaks about the invention of a local practice of influencing politics. He claims locals have learned to manoeuvre the political system through mill workers as their intermediaries. According to Hardin, concessionary

26 What, nevertheless, Carret does not raise, it is that such type of relation is strongly encouraged by the Congolese government which uses and abuses of mechanisms of direct taking on companies through the “cahier des charges”, with the surprising profusion of obligations of extra-budgetary redistribution of which we saw previously
politics, based on paternalism and patronage, prevent the emergence of a truly representative local political process, based on genuine political associations and labour unions, capable of taking out local identical games or strategies.

Both authors raise the issue of patronage in the political system being the preferred system by locals in forest zones. Such analyses contradict the belief that domination relations are “imposed” on local populations by the concessionaires. Rather, they imply that locals « enroll themselves » into the patronage networks. Even though it has been for a short time, Central and West Africa knew other channels of political expression than those of the communitarian identity. G. Dupré reminded us that in the early 1970’s, the manager of a multinational company operating in a little town of the Niari (Congo-Brazzaville) had been directly involved in a witchcraft case : “Despite an active policy of support to the sport and religious activities, the director had not been able, through this usual means, to fight the union workers’ activity. He told that to a Congolese women who used to practice witchcraft and gave her the name of the union’s leaders, “for she succeed where he failed to do”. This Africa where managers challenges were coming from workers’ unions sounds incongruous nowadays where calls for “participation” are dominant and where most of the donors and the NGOs tend to distrust the democratic forms of the political expression, especially elected representatives to which they prefer “traditional representatives” (see Ribot, 2004).

VII.7. How to move away from the patronage system?

Generally, concessionaires are more efficient than the local governments at delivering public services. In Congo, the government preferred paying concessionaires of the Northern Region to build and maintain the road network infrastructure. These payments were done through tax cuts. Such agreements gave companies greater power in structuring the local society. Still in Congo, the government was encouraged to adopt a “communitarian series”27 model within the boundaries of the concessions as an attempt to respect the rights of villagers. The CIB, often presented as a model company, has hired an agronomy engineer with funds from FFEM—a French version of GEF—to promote agroforestry in the “community series”28.

The design of FMUs in Congo is extremely simple. The country has been divided into FMUs, including towns and savannas. Yet, creating “community series” inside concessions, instead of “community forests” outside them, for example, is difficult to justify; except when the patronage system is the only alternative contemplated by rural inhabitants of the large forest areas. On the other hand, Gabon adopted a somehow similar model, which was suggested by foreign advisers. In this model, concessionaires pay FCFA 1000 ($2) per cubic-meter harvested.

As pointed out by R. Hardin, schemes in which concessionaires replace the State in providing collective goods are hampering the constitution of autonomous local systems of public representation—such as elected and accountable local councils. However, the management of area taxes in Cameroon has been criticized (see Oyono, 2005) for the frequent theft of money by the elites. On the other hand, during the first steps of a long and non-straightforward collective learning process the “subjects” learn to become “citizens”29 and claim accountability and transparent management practices. Yet, it is still likely that many rural people would rather trust foreign-organized distributions than distributions organized by local representatives with solid ties with the central government. The question remains whether or not there are acceptable and sustainable alternatives in concession-dominated patronage relationships. It seems difficult to imagine that the large foreign-owned concessions would be a pivotal point of social restructuring in rural areas. In addition, concessionaires are reluctant to assume the State’s responsibilities. Many of them recognize the risk of being perceived as the actors of a revival of the colonial era in an increasingly troubled Africa. Yet, the acceptance by

27 A serie is a specialized area within a managed forest. In Côte d'Ivoire, the public manager (the Sodefor), used to create “agriculture series” within the degraded “forêts classées” with the objective to contain the settlers within the boundaries of such series.
28 The reading of his report suggests that the creation of an agroforestry scheme will be on an ex-nihilo basis. No significant results have been reached so far.
29 Adopting Mahmood Mamdani’s words from his 1996’book “Citizen and Subject” (Princeton University Press)
concessionaires of such a role is strategic: it allows them to resist tax escalation, ask for tax discount, and negotiate additional benefits with the government. Concessionaires can request that the government refuse granting access to new forest resources to competitors, which is advocated by the World Bank.

Very large concessions combined with weak or “absent” governments result in “State within the State” situations that can be suspected, if not assessed, in DRC, Equatorial Guinea and Congo, for the least. Such a context influences the design and the orientation of sectoral policies against the collective interest, and leads to very debatable local situations. For example, grand concessionaires of Northern Congo have hired “eco-guards” to fight poaching within the context of a joint project with an international conservation NGO; but these eco-guards fill de facto a general police role on huge areas. A document posted on the web in 2005 by the “Observatoire Congolais des Droits de l’Homme” mentioned several cases of “human rights violation” against Pygmies’ hunters done by the CIB’s “eco-guards”, described as “private militia”.

The key question that remains is whether the supply and the maintenance de facto of public goods by companies strengthen the capacity of the local and regional authorities to administer the territories under their jurisdiction. This question is key, mainly in countries undergoing a decentralization process. Otherwise, do they create dependence on the companies’ clientele network?

**VIII. ALTERNATIVES TO TIMBER CONCESSIONS**

There are different alternatives, or complements, to logging concessions in Africa. Some are already implemented; others have not been experimented in West and Central Africa.

**VIII.1. Small-scale as a global alternative?**

A recent IIED Discussion Paper (Mendes and Macqueen, 2006) focused on Guyana’s forest sector suggested the promotion small and medium enterprises alongside with the use of “portable technology” as an alternative to large-scale concessions and an “industry (…) concentrated on high volumes, low revenue primary products such as logs or large sawn baulks” (p. 18). They advocate less “vertical integration” and more “specialisation” that could bring more value-added to the timber production. One knows that small-scale logging and processing generates much more work than large industries concerned by productivity gains. But could such a “small-scale strategy” work for West and Central Africa, where vertical-integration and large-scale concessions are going hand-in-hand?

Currently, portable technology is used by chainsaw loggers to make wood boards sold mainly on the local market, and sometimes exported. Such activity has 3 characteristics:

- The production is more high-graded than the one of large concessionaires. As underscored by economic studies in Cameroon, DRC and Congo (Cirad / I&D, 2000; Plouvier, 2002; JMN Consultant, 2005; Djire, 2003 ; Karsenty et al., 2002, Karsenty et al., 2006) the small-scale loggers concentrate on higher value species, since they are mobile and can look for a handle of species without the spatial constraints entailed by a forest management plan. This is contradictory with the efforts aiming at reducing the pressure on highest value species (generally over-exploited) and a shift toward less-used species, shift which is tried by several industrialists constrained by the reduced AAC (annual allowable cut) entailed by the implementation of the forest management plans, and even accentuated by the certification requirements.

- In addition, recovery rates are low, since the main difference with the industrial wood processing is the making of the board in the forest with the chainsaw itself (very low recovery rate) or with a mobile saw (such as Lucas Mills); in the last case, the recovery rate on the main product (the standard sized FAS board) can compare with the industrial one, but there is no valorisation of by-products (from the “wastes”) which makes all the difference between the common recovery rate of 30-35% and a 50-60 % one corresponding to the combination of

---

main-standard size boar and by-products such as non-standard board, moulding, pieces for flooring, etc. Let’s add that peeling industry needs logs transport and is not compatible with portable technology. In countries such as Cameroon, CAR, Congo and DRC, more investments in peeling industry would help to diversify the range of harvested species, in response to the reduced AAC on managed forest.

- Due to the reasons exposed in the previous paragraph, in West and Central Africa, illegal is, in general, synonymous with informal. That means that small-scale loggers escape many of the formal taxes – even though they are pressurized with non-official taxation by the authority agents – and are out of the salaried system. Such a situation could be reversed, but it would need a radical change in the public policies and an also substantial decrease of the corruption which plagues the administrative system, from the top to the lowest scale.

Since most of the forest sector in West and Central Africa is export-oriented, with the largest part of the production (in value) still going to Europe (except for Equatorial Guinea), the issue of “environmental norms” (certification) – which includes legality requirement – should not be underestimated. And small-scale logging and processing is, currently, unable to meet these escalating requirements. Admittedly, these current handicaps can be overcome in the future thanks to pro-active training and technical support policies, combined with a complete reorganisation of the credit system and a radical change in the law and administration practices, and there are certainly valuable policy actions that ought to be undertaken without delay, but one knows that things are not so simple in Africa regarding willingness for reforming.

Let’s also add that to promote small-scale entrepreneurship, one needs entrepreneurs. There, the situation of countries is contrasted. In Ghana, Côte d'Ivoire, most of Cameroon and in some parts of Congo, there is such a potential. But in Northern-Congo, CAR, Gabon, and in many parts of DRC, the density of the social and economic activity and capital is low. Small-scale enterprises are not very adapted to landlocked, low population density, remote markets and high transportation costs, and it is difficult to imagine that Governments would give up the benefits (fiscal, induced development effects…) granted by the large concessions. Then, a realistic agenda would more focus on helping small-scale sector to be “decriminalized” and getting more efficient to complement the large scale industry (especially for supplying domestic markets) than to believe they could be an alternative in the short term – and even to longer term in certain areas.

VIII.2. Can community forestry replace the concession system?

Community forestry is practised as an institutionalized system in Ghana, Equatorial Guinea, and since recently in Cameroon. In Equatorial Guinea, the “Bosques Comunales” (Iyebi-Mandjek, 1997; Pierre, 1998), but only little information on the real functioning of such tenure is known.

Cameroon is the first country in Central Africa where “community forest” has been institutionalized, by allowing communities to demarcate up to 5,000 ha outside of the Permanent Forest Estate for use in their own way – but under condition of the respect of a simplified forest management plan – without being submitted to the same fiscal rules as concessions. Since 2002, however, industrial logging has been prohibited and only artisanal logging activity is allowed. Community forestry in Cameroon has generated an abundant literature, and the most recent papers denote if not a

disappointment at least a downward revision of the initial expectations (Bigombé Logo, 2003 & 2006; Cuny et al.; 2004, Etoungou, 2003; Oyono, 2004; Oyono et al., 2006; Vermeulen et al., 2006). In short, rents are often captured by local elites who corrupt the forest service’s agents and make alliances with loggers who, in turn, use the “community” forest as a way of avoiding management plans constraints in force on the concessions, and evade taxes. The artisanal activity is generally practiced when the community is backed by an external project that puts money into the activity (investment, maintenance…) and manages to find remunerative outlets for the timber locally produced. Conflicts broke out between communities for territories’ boundaries, and within the communities themselves between lineages (or families) that are the true land holders (Geshiere, 2004).

And as noticed by Ezzine de Blas and Ruiz-Perez (2006) “distance to destination market limits logging options as logging costs increase with distance” (p. 16). The distance to port and markets “limits available management strategies for communities. Far from the market or enclave forests are systematically being managed under agreement with an industrial logger, significantly limiting the income and development opportunities that communities can derive from them. Moreover, the potential empowerment process that a CF can induce is also greatly reduced” (p. 26).

In Gabon, a study (Pierre et al., 2000) has been carried out for the World Bank funded PFE32 by the Gabonese anthropologists of the LUTO (Laboratoire d’Étude des Traditions Orales) and a consultant in social forestry on the feasibility of “community forests” according to the Gabonese’s 2001 new forestry law which contains provisions for such a category. The study concluded to “the non evidence of a local management system which could correspond to the concept of ‘Community Forest’”33. They suggested that “the carrying out of a ‘forest communities’ type management cannot be contemplated in Gabon as the implementation of a single and standard model applicable throughout the whole territory (…) in no case, the feasibility of “community forests” can be objectively stated from the present study” 34. K. Amanor’s (2003) remark ought to be mentioned: “While community forestry has a high profile in official development circles, the concept of the autonomous 'community' is problematic in West Africa” (p. 18). One could add that such issues are not specific to West Africa, and has also been emphasized in Indonesia (Levang, 2006).

Then again, such analysis does not mean there is no room for promoting devolution of power and responsibilities at local scale which can benefits to the livelihoods. Any sound social-oriented policy must give time for carrying out “learning processes” in which accountability, democratization and autonomy will develop at local level (see Ribot, 1999). But community forestry can hardly be seen as a possible global alternative to the industrial concessions even on a mid-term horizon.

A similar analysis can be formulated for local councils’ forest (forêts communales) that are developing in Cameroon, and are severely criticized for money hijacking by the mayors and their clans. These dysfunctions are unavoidable in countries where public interest is disregarded after decades of power abuse at every scale of the public administration and the government. However, there is no way out for citizens but addressing frontally these accountability issues with all the legal means which they can mobilize (with the help of their foreign partners and allies) in, nevertheless, democratizing atmosphere, such as the independent press and the Internet, the judiciary system and the newly created institution such as the “Cour des Comptes” in Cameroon and in DRC.

32 Projet Forêt et Environnement
33 « (...) l’absence initiale d’un mode de gestion locale répondant au concept de « forêt communautaire ». 
34 « Cela signifie que le développement d’une gestion de type « forêts communautaires » ne peut pas être envisagé au Gabon sous la forme d’un modèle standard et unique applicable à l’ensemble du territoire (...) En aucun cas la faisabilité de « forêts communautaires » au Gabon ne peut être objectivement affirmée à partir de cette étude »
VIII.3. Recreational hunting concessions

Recreational hunting was practiced during the colonial period in DRC, which was then Zaire. Fifty-seven concessions were granted to private hunting clubs. There are 19 or so hunting concessions still operational, even though they no longer welcome official hunting tourism. Only in 2003 were hunting new concessions offered for lease, including some of the existing concessions. Three private companies were interested in leasing hunting concessions in 8 sectors, totalling a surface of close to 90,362 km² for 2004 hunting season. Nevertheless, it is difficult to obtain reliable information on the nature, the functioning and the results of this starting activity.

In Congo, the last and unique private hunting club stopped any tourism activities in the year 2000. The club operated in the Northern and Southern region. In the south, it operated in the Nouabalé-Ndoki National Park, on the FMU of Kabo, in the CIB logging concession. This company had signed a draft agreement with the Ministry of Forest Economics (MEF), the NGO Wildlife Conservation Society (WCS) and the CIB, within the management plan of the peripheral zone of the national park Nouabalé-Ndoki. Yet, the hunting has been forced to stop its activities since the MEF stopped giving out quotas of Bongos (a large forest antelope).

In CAR, 48,621 km² (4.86 million ha) are “domaines de chasse sportive” and an additional 30,134 km² (3.01 million ha) are community-managed hunting areas, mostly in the northern part of the country. In 1990 in ZCB, in the southwest of the country, three sectors have been assigned for hunting in the Dzanga-Sangha Reserve, which is a zone of dense humid forest.

In certain hunting regions, waterside communities received a small portion of the total amount of taxes paid by hunting clubs, which was at the most 10% felling tax and 10% lease tax. Furthermore, these taxes are not properly distributed by the government body in charge, and in numerous cases the taxes are paid to the villages. The exploitation rent is captured at an intermediate level that the local populations fail to receive any benefits from the hunting tourism industry. The feelings of despoliation that arise in such cases create opposition against hunting clubs (Roulet, 2005).

VIII.4. Conservation concessions and ‘Conservation Incentives Agreements’

Conservation International has suggested to design conservation incentive agreements (CIAs), which directly benefit rights-holders and groups concerned with the cost of foregoing development in conservation zones. These are “conservation concessions” which do not require that the forests be privately owned nor of a legal minimum size. The analysis (and formula) by Rice et al. (2001) assumes that to prevent “large-scale destruction” by commercial forest loggers (Niesten and Rice, 2004:141) in regions where forests are public property, it is possible to use the same means of exclusive access that forest developers use, namely concessions. In this perspective, conservation investors – whether NGOs, public groups, a state or individuals – propose to acquire development rights, which are the basis of forestry concessions, to prevent its commercial exploitation.

These rights can be bought directly from the public authorities – if the zone under consideration has not previously been leased to logging companies. In this case, the compensation paid by the conservation investor to the State would be at least equivalent to the taxes and royalties paid by a traditional concessionaire (Rice et al. 2001).

According to Hardner and Rice (2002), in 2000-2001 the Peruvian government tried to auction off 800,000 hectares of Amazon forest for concessions, but could not find enough investors willing to offer the minimum prices of $1 to $4 per hectare per year. CI also attempted offering governments a small sum per hectare each year to conserve the forest, instead of logging it. CI calls this concept “conservation concessions” because it works exactly like a normal logging concession, without logging. As a result, Peru established the world's first formal conservation concession, called “Los Amigos” in July 2001. Its 40-year lease covers 130,000 hectares of tropical forest.

35 Information derived from Roulet, 2005.
36 This section is adapted from an article published in International Forestry Review: Karsenty (2007)
Cameroon provides an interesting case for assessing what could be the financial opportunity cost of large-scale conservation concessions. The Ngoïla-Mintom forest is an 830,000 ha area divided into 9 Forest Management Units (FMUs) designed as “production forest” in the Zoning Plan of Southern Cameroon (Côté, 1995). After the 1999 Yaoundé Heads of State Summit, mainly spearheaded by WWF, the Cameroonian Government decided to turn this area into a “potential” protection forest (“projet de zone de protection de la biodiversité”), referred to in some semi-official documents as “conservation concessions”37. Currently, the area is still unallocated (most of the forest has never been logged before) and its legal statute remains unclear: the Government of Cameroon (GoC) was still looking for financial compensations offered by “the international community” before taking a decision (Cameroon’s Director of Forests, pers. com.).

The forest administration is currently considering allocating the 9 FMUs in the near future unless financial compensations are proposed to and accepted by the GoC (idem). This allocation to logging companies can thus be considered the “baseline scenario”, and the option of establishing a conservation concession is an alternative scenario for which the opportunity cost can be assessed. As the official owner of this area, the Government could expect to receive as much royalties and taxes under a conservation concession system as it would have received in the “logging scenario”. The Cameroonian population might also consider claiming the earmarked taxes they benefit from logging, and the revenues generated by this activity. A very crude assessment gives an idea of the likely magnitude of such an opportunity cost38: for direct forest taxes only, the GoC's forgone revenues would thus exceed €6.7 million ($8 million) per year. One must also add companies’ corporate taxes and VAT induced by the overall activity increment. Moreover, a complete evaluation would have to take into account other components of the economic added-value that would not be generated by the conservation scenario, which includes wages corresponding to logging, processing and transport jobs not created by not harvesting around 221,000 m³ annually. Considering a content of full-time jobs of 5.57 per thousand of cubic-meters roundwood equivalent exported (Karsenty et al., 2006), this represents 1,230 jobs39 (transport sector excluded since the data are missing). With an average monthly cost of €450 ($600) for workers in the manufacturing sector40, this represents €6.64 ($8.93) million of forgone salary costs (net wages and social contributions) per year. When considering financial assessments one also needs to include the induced revenues generated by industrial production activities. For instance, it is well known that wages and earmarked taxes do not constitute the only financial and social transfers that are channelled to local populations by the companies (through “cahier des charges”) (Karsenty and Pierre, 2005), and such transfers have to be evaluated.

At first glance, the opportunity cost would be a minimum of €13 million (17.5 million) per year, and probably more with a more comprehensive assessment. Against this number, the net financial benefits (for the GoC and local populations) of the conservation scenario should be evaluated, with likely financial returns from ecotourism (taxes, fees and wages) and possible expenses related to research projects implementation. A recent economic evaluation of the Invido Park in Gabon (Lescuyer, 2006) suggests that it is unlikely that such revenues would exceed €1 million ($1.3 million) per year. Thus, an opportunity cost €12 million ($16 million) (likely a conservative assessment), corresponds to €14.5 per hectare (US $18.85 in January 2006). This example clearly shows that if one seriously wants to consider the issue of equity, the amount of compensation for the stakeholders is significant and a far cry from the idea of “low and affordable cost” suggested by Hardner and Rice (2002) who claim that huge tracts of public forest in the developing world are being leased for less than $1 per hectare a year. At those prices, conservation organizations, which have long demonstrated a willingness to pay for the preservation of biodiversity, can afford to outbid competitors for land leases and to compensate local people to manage the intact ecosystems (p.89).

37 See a presentation made by COMIFAC (Forest Commission for Central Africa) www.cbfp.org/pfbc_paris/reunion230606/tridom.pdf
38 Parameters are derived from a 2006 financial and economic study ordered by GoC (Karsenty et al., 2006).
39 The figure may be lowered if one considers that workforce is not currently occupied full time.
40 Source IZF: http://www.izf.net/izf/EE/pro/cameroun/6060.asp
A questionable instrument if viewed as “global logging alternative”

The question of the legitimacy of these ‘Conservation Incentives Agreements’, must, in turn, be asked. Advocates of the principle of “direct payments for conservation” assume that a stable and regular financial flow paid to the forest communities, as envisaged in the conservation concessions mechanism, would satisfy their aspiration, all the more so as these programs generally provide for the creation of education and health infrastructures in the places where the project is implemented.

Another prospect that could be appreciated, however, is Sen’s proposal of an economy based “on the agent’s perspective” (as opposed to the “patient”), where it is possible for the people to be the agents of change and not “the passive recipients of benefits allocated by one organization or other” (Sen, 2000a:13).

With his theory of fairness based on “capabilities”, Sen has suggested that public policies must be assessed according to the expansion of people’s capabilities. In this term of capabilities, the options and opportunities offered by society are fundamental. This author’s theory is that “development can be understood as a process of expansion of the true freedoms that individuals enjoy” (Sen, 1999). The world suggested by the ‘Conservation Incentives Agreements’ (CIAs) is quite unequivocal: it is one where the opportunities offered to the inhabitants of biodiversity-rich forestry are significantly reduced, where individuals are considered as the passive beneficiaries of conservation programs devised elsewhere, as opposed to the perspective of an economy founded on the recognition of the active role of the “agent”.

Romero and Andrade (2004) point out that annual payment for conservation range, according to the economic literature compiled, from US$39.22/ha in the UK, to $9.88 in Tanzania and only $1.25 in Guyana41. They conclude that “the repeated mention by CIAs advocates that biodiversity-rich tropical forests can be purchased at bargain prices in financially strapped developing countries seems to reflect a fundamental misrepresentation of the importance of these areas” (p. 1454). The fact that the opportunity cost of conserving these lands in their original state is lower in the South than in the North is due to differences in the level of development and the scarcity of potential investment in rural areas. Small food-producing farmers deprived of capital and land are potentially a threat to the integrity of primary forests, but certainly less than the expansion of industrial cash crops. However, turning these poor people into “conservation rentiers” represents, without doubt, a much lower opportunity cost than doing so with agribusiness firm officials looking for land to invest in oil palm plantations. Having said this, this mechanism risks imposing the role of biodiversity reservoirs on the poorest forested countries. This is certainly in exchange for some rent, but only a “poor man’s rent” since the latter is calculated according to the “lowest cost” based on compensations in under-developed countries and regions.

IX. CONCLUSION

The forest concessions in West and Central Africa have one foot in the former colonial era and another in the modern “private-public partnership” and/or the “delegated management” pattern which are so emphasized in current socio-environmental management debates. The importance and weight of the concessions in the different countries vary with the policy choices made by respective governments, but they also depend on objective features, such as population density, remote forest area and transport costs. History, which shapes collective preferences of local inhabitants, also matters. And without tradition of local self-organization – which is also the consequence of the concessionaire system inherited from colonial era – those collective preferences can be in favour of a bargaining dependence relationship with the concessionaire rather than an unlikely community development externally promoted. On the other hand, the delivery of local public goods by foreign large-scale companies who are requested to replace an absent government cannot be seen as a sustainable and desirable model,

41 The last figure refers to the payment for the conservation concession implemented by CI in Guyana, as reported by Ferraro and Kiss, 2002)
since it might turn out to be an obstacle to the development of local and accountable representation schemes, especially public ones (elected local councils, etc.). Very large concessions combined with weak or “absent” governments result in “State within the State” situation which influences the design and the orientation of public policies against the collective interest, and sometimes leads to very debatable local situations.

The contribution of the forest concessions system to the national economy may appear relatively modest, either for fiscal revenues or job creation, especially when compared with the oil sector. However, its full contribution in terms of induced added value is not accurately captured by national accounting systems, and is sometimes dissipated behind transport and trade related contributions to GDP. Yet, the forest industry is one of the rare sectors capable of creating formal manufacturer employment for low-skilled workers in economically marginalized areas. Small-scale forestry is, without any doubt, able to create much more work in accessible and close-to-markets areas, but not in low-populated and landlocked forest zones. In addition, the governance context prevailing in West and Central Africa disfavors the development of small-scale enterprises moving away from the informality they are confined by the prevailing policies and the administration’s “predatory” behaviour. The formalization – and formal taxation – of the small-scale informal sector is as much an economic necessity as a major policy difficulty.

Community and private forestry is still hampered by land tenure national regulations that prevent forest tenure ownership for local inhabitants. Experiences in Cameroon with institutionalized “community forests” have shown contrasted outcomes, where replication of the “rentier” system was observed, rather than autonomous development. In addition, as transport and logging costs become high, as it is the case for dense forest in the Congo Basin, the case for autonomous community forest without a partnership with a neighbour concessionaire becomes unlikely for mere economic reasons. Conservation concession embodied interesting promises, but also serious risks related to equity. But, above all, the “willingness to pay” to carry out such schemes remains doubtful.

The export-oriented forest sector in Africa is more and more “externally driven” in terms of ecological and social norms, because of the concern of western consumers and public opinion about the fate of tropical forests, connected to global change issues. This create incentives for levelling the norms of the global forest industry, and favours large scale concessions that can cope with the stringent requirements embodied with legal certification and log tracking, sustainable forest management certification, social care for local populations, and significant fiscal contribution. In countries where the potential for domestic outlets is low, the productions also have to be competitive compared to other tropical timber products. The only really credible alternative to this trend is the “Asian way”, which is also characterized by large-scale concessions, but is certainly not a “pro-poor” model. Concentration on one hand, fragmentation meaning “informalization” on the other, seem to be the current trend in logging industry of the Congo Basin.

There is, however, room and need for diversification of forest tenure models, which might be seen as complementary rather, at least for the foreseeable future, than alternatives competing with the current system. The vertical integration of the forest industry has a rational, but is not a necessity, as demonstrated by many Italians wood-processors willing to buy their logs on domestic market. Government regulations do not favour such option, that would, if expanded, lead to a downsizing in concession sizes without economic or forest management quality losses. Zoning plans and forest gazetting are also critical; in Cameroon, the exercise has forced public and private actors to plan and distinguish zones of different uses and tenure models. The ongoing publicly open forest gazetting process in Cameroon leads to change in the concessions boundaries to make room for local claims on surfaces to carry out communities forests, and allow local councils to make FMUs reservation for establishing their own forests. Reshaping the FMUs in a country such as Congo is necessary to open the tenure options, whether they are “local public”, “communities” or “small scale logging”. In all the countries, pro-active policy toward the integration of small-scale logging and processing activities into the formal economic sphere is deeply needed, and allowing them forest in which logging can be made legally is essential. Overcoming the current trend of “informalization” and criminalization of the African economies goes hand in hand with significant governance improvement and public policies radical changes, but is certainly one of the critical challenges faced by the Africans today.
References

http://www.wrm.org.uy/countries/Africa/west.pdf


Appendices

1. Distribution of the population in Central Africa (source: Pourtier, 2003)

*Distribution de la population : espaces vides, espaces pleins*

Source: La population de l’Afrique subsaharienne, UNESCO 1994; D. Nozié et G. Dedry. 
2. Summary of main features of the concessions

<table>
<thead>
<tr>
<th></th>
<th>Cameroon</th>
<th>Gabon</th>
<th>Congo</th>
<th>DRC</th>
<th>CAR</th>
<th>Equatorial Guinea</th>
<th>Côte d'Ivoire</th>
<th>Ghana</th>
<th>Liberia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest revenues (forest taxes)</td>
<td>Close to $40 million</td>
<td>Around $50 million</td>
<td>Around $20 million</td>
<td>Around $3.85 million</td>
<td>Close to $10 million</td>
<td>Possibly between $12-13 million</td>
<td>Around 15.7 million</td>
<td>Probably between $13-15 million</td>
<td>Around $13 million in 2002 (optimistic)</td>
</tr>
<tr>
<td>Direct employment (formal sector)</td>
<td>13,000</td>
<td>11,500</td>
<td>6,500</td>
<td>15,000 (optimistic)</td>
<td>4,000</td>
<td>2,000 (estimation)</td>
<td>25,000</td>
<td>50,000</td>
<td>8,000 (before the cancellation of the concessions)</td>
</tr>
<tr>
<td>Additional employment in the informal sector (rough estimations)</td>
<td>150,000 (INS estimation)</td>
<td>No estimation, likely low</td>
<td>No estimation, likely low</td>
<td>No estimation, likely high</td>
<td>No estimation</td>
<td>No estimation, likely high</td>
<td>No estimation, likely high</td>
<td>At least 55,000 workers in “tertiary”, probably much more in the informal sector</td>
<td>No estimation</td>
</tr>
<tr>
<td>Contribution of the forestry sector to GDP</td>
<td>3.1% 3.2 % of non-oil GDP</td>
<td>6.4% of non-oil GDP</td>
<td>5% 10 % of non-oil GDP</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Average size of main concessions</td>
<td>150,000 to 600,000 ha</td>
<td>300,000 to 650,000 ha</td>
<td>200,000 to 1.3 million ha</td>
<td>300,000 ha to 1.8 million. 5 million ha controlled by a single holding</td>
<td>180,000 to 700,000 ha controlled by a single group</td>
<td>550,000 ha for a single company, which controls de facto most of the others</td>
<td>150,000 to 500,000 ha</td>
<td>15,000 to 140,000 ha</td>
<td></td>
</tr>
<tr>
<td>Main nationality of larger concessionaires</td>
<td>Italy – France – China – Netherlands</td>
<td>France – Italy – Malaysia – China</td>
<td>Germany – Denmark – France – China – Portugal</td>
<td>Germany – Swiss – Lebanon – Belgium –</td>
<td>China – Lebanon – France</td>
<td>Malaysia</td>
<td>Lebanon – Italy – France</td>
<td>UK – Germany – Ghana – Netherlands</td>
<td>Formerly, a large Malaysian company (OTC)</td>
</tr>
</tbody>
</table>