The technical and political challenges of the industrial forest sector in Cameroon

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SUMMARY

Cameroon's forest sector has for many decades been characterized by industrial, large-scale, concession-based and export-oriented timber production. Over the past two decades, many innovative regulations have been adopted that largely responded to the external requests of the country's technical and financial partners. By using data and information collected over more than a decade, complemented by semi-structured interviews, we assess how some of the most relevant regulations have been implemented. Findings indicate that over the years, a clear disconnect appears between what is promised and adopted in the rules and regulations governing the industrial sector, and what is actually implemented on the ground. We discuss how such disconnect may have originated and how it may negatively impact the sustainable development of the industrial forest sector. We propose some technical and policy options that may improve the sector's management, positively impact Cameroon's international image and possibly strengthen the country's engagement in international regimes such as FLEGT and/or REDD+.

Keywords: sustainable forest management, Cameroon, logging concessions, FLEGT, environmental governance

Les défis techniques et politiques du secteur forestier industriel au Cameroun

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Pendant plusieurs décennies, le secteur forestier camerounais a été caractérisé par une exploitation industrielle du bois d'œuvre dans les concessions forestières à grandes surfaces, l'essentiel de la production visant principalement à satisfaire la demande extérieure du bois. Durant les deux dernières décennies, un grand nombre de décrets, d'arrêtés et de règlements innovants ont été adoptés, en grande partie sous l'impulsion des partenaires techniques et financiers internationaux du pays. A partir des données d'exploitation recueillies pendant plus d'une décennie, complétées par une série d'interviews semi-structurées des parties prenantes à l'exploitation forestières, cet article fait une évaluation de la mise en œuvre des dispositions règlementaires les plus importantes du secteur. Les résultats indiquent une nette différence entre les dispositions des textes règlementaires du secteur forestier industriel et les pratiques observées au fil des années. Nous discutons les déterminants d'une telle différence ainsi que ses impacts potentiels sur le développement durable du secteur forestier industriel. Nous proposons quelques options politiques et techniques qui pourraient améliorer la gestion du secteur forestier industriel, renforcer les engagements pris par le Cameroun dans des régimes internationaux tels que le FLEGT et/ou la REDD+ et avoir un impact positif sur l'image du Cameroun sur la scène internationale.

Los desafíos técnicos y políticos del sector forestal industrial en Camerún

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El sector forestal de Camerún durante muchas décadas se ha caracterizado por la producción industrial a gran escala, basada en la concesión y en madera orientada a la exportación. Durante las últimas dos décadas, muchas regulaciones innovadoras que se han adoptado en gran medida respondieron a las solicitudes externas de socios técnicos y financieros del país. Mediante el uso de datos e información recogidos durante más de una década, complementados con entrevistas semi-estructuradas, evaluamos cómo se aplicaron algunas de las regulaciones más relevantes. Los resultados indican que a lo largo de los años aparece una desconexión clara entre lo que se promete y se adopta en normas y reglamentos que regulan el sector industrial, y lo que realmente se implementa. Se discute cual puede ser el origen de tal desconexión y cómo esta puede influir negativamente en el desarrollo sostenible del sector forestal industrial. Proponemos algunas opciones técnicas y políticas que podrían impactar positivamente en la imagen internacional de Camerún y posiblemente fortalecer la participación del país en los regímenes internacionales como FLEGT y/o REDD+.

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INTRODUCTION

Large-scale concession-based forest operations have been the predominant model of the industrial forest sector in the Congo basin for many decades. The concessionary model finds its origins in colonial times (Karsenty 2007), but the current governance regime applied to it largely stems from two processes that have concurrently been developing over the past two decades. On the one side, a series of macroeconomic structural adjustments (Brunner and Ekoko 2000, Atyi et al. 2009). On the other side, the political commitment to the sustainable management of forest resources that was firmly put into the international policy agenda at the Earth Summit in Rio de Janeiro, Brazil, in 1992. The current importance of the concessionary model in the Congo basin is illustrated by the sheer numbers that it represents: As of 2013, 403 logging concessions covered about 50 million ha (Bayol et al. 2013), the related forest operations generated direct employment for about 55,000 people, and the contribution to the countries' GDP averaged about 6% (de Wasseige et al. 2012).

In the region, Cameroon was the first to draft a forest code based on the sustainability principles agreed at the 1992 Earth Summit. It thus has the oldest and most mature of the forest policies and legal frameworks, used as a blueprint for the codes adopted by other Congo basin countries. Several important regulations targeting the industrial forest sector were introduced in the first half of the 1990s. First, land deeds had to be issued to demarcate the permanent forest domain, which must remain forested to maintain the biodiversity of the country. The permanent domain includes Forest Management Units (FMU) and protected areas, and in contrast to the non-permanent forest domain, cannot be converted to alternative uses, such as agriculture (Republic of Cameroon 1994). Second, management plans based on ecological, economic and social sustainability principles were made mandatory for FMUs. The law gives responsibility for preparing management plans to the Ministry of Forests, but such task was eventually delegated to logging companies (Cerutti et al. 2008). Third, a new fiscal regime was adopted that would increase state revenues, as well as the benefits enjoyed by local populations. Fourth, local processing of harvested resources was to be favoured over exports of raw materials, with the aim of increasing employment and local livelihoods (Essama-Nssah and Gockowski 2000, Topa et al. 2009).

Overall, available information on the evolution of the forest policy over the last two decades seem to indicate at least a partial implementation. A partial log export ban was adopted in 1999, increasing local processing and the export of processed products. In 2000–2015, almost all available FMUs had been attributed at least once, and although only a minority had received permanent land deeds, over 80% of them were harvested following the prescriptions of approved management plans (MINFOF 2015). Over the same period, about EUR 140 million were paid out by logging companies and redistributed to rural councils and the communities neighbouring logging concessions (PSRF 2004, PSRF 2008, PSRF

2009, PSRF 2010, PSRF 2011, PSRF 2012, PSRF 2013, PSRF 2014).

Yet, although available information may indicate progress with the integration of the SFM principles in the legal framework, and with the adoption of measures that were requested by the 1994 Forest Law and its implementing decree (Republic of Cameroon 1994, Republic of Cameroon 1995), much still remains to be done in terms of implementation on the ground (e.g. Mbile and van der Meer 2009, Hoare 2015, Cerutti et al. 2016). The disconnect between adopted measures and actual implementation is the focus of this article. As it will be argued, this situation is, at least partially, the result of the conditions under which the sector has been governed, which have changed significantly over the years and which may be split into two major periods, before and after 2006. The reforms adopted between the end of the 1980s and 2006 were introduced within the framework of three successive structural adjustment plans (SAP), negotiated between the government of Cameroon and its international lenders, notably the World Bank and the Paris Club (Topa et al. 2009). In 2006, Cameroon reached the so-called completion point of the Heavily Indebted Poor Countries (HIPC) Initiative (AfDB and OECD 2007). The country's debt was slashed and restructured, and many of its main creditors, who had a prominent role in driving past reforms, lost their financial leverage.

Concurrently, international efforts to prevent illegal logging, and notably the EU's Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan, took centre stage in driving reforms in Cameroon's forest sector. A FLEGT Voluntary Partnership Agreement (VPA) for the production and export of legal timber was first informally discussed and then negotiated and signed during 2004–2010 (European Commission 2007). Thus, over the years, the EU – together with much financial engagement from Germany (PSFE 2011) – replaced the World Bank as the main external driver of reform in the forest sector.

For practical purposes, in VPA-related discussions, the focus of reforms shifted from sustainable forest management (SFM) to a "more pragmatic focus on legality" (European Commission 2004, p.1); however, the main objectives of the forest policy established in the 1990s remained unaltered, with SFM being the ultimate target of both the EU and the government of Cameroon (e.g. MINFOF 2015).

While the technicalities of engagement between international partners and the Cameroonian government on various processes differed (e.g. the SAPs had a much broader macroeconomic scope than the FLEGT Action Plan), we theorise that the leitmotif behind the reforms in the forest sector has remained largely unchanged over the years. In general terms, such leitmotif has been one based on the perception of externally imposed reforms that have duly been accepted and nominally adopted by the recipient Ministry (Brunner and Ekoko 2000), but then internally resisted (often by both state officials and part of the private sector) and eventually only partially implemented. Hence the disconnect between what some may assess as a successful rate of adoption and a

low rate of implementation, generally explained with the recurrent reference to a lack of political will, leadership (e.g. Mbile and van der Meer 2009), or commitment (e.g. Essama-Nssah and Gockowski 2000) on the part of the Cameroonian government.

With the help of available data, we discuss how such tension between nominal adoption and actual implementation has played out in the operationalization of reforms, and we gauge some lessons for the future development of the industrial forest sector in Cameroon.

Purpose

Within the general framework of this Special Issue, the purpose of this article is twofold. First, it conducts a stocktaking exercise on available data and information to assess the status of some of the most important forest reforms, two decades after their introduction, notably those promoting the implementation of SFM and those aimed at increasing the financial contribution of the sector to the State's coffers. Second, it aims to draw some lessons for future policy developments. In particular, it reviews the reforms that are still standing, those that have been eroded and those that have not made any progress since inception, and discusses the reasons behind success or failure, as well as their impacts.

As explained in the introductory article to this Special Issue and as it will be argued in this article, one of the biggest problems for the forest sector to be considered in national development policies, and possibly one of the reasons also negatively impacting actual implementation, is that the entire sector has historically been identified only with its industrial part, like a jigsaw puzzle identified by only one of its pieces. Indeed, it remains of the utmost importance to be able to compare the forest sector as a whole to other sectors, such as the mining or agribusiness ones. Especially so, when one notes that while in the 1990s the forest sector was seen as the engine of development and growth (Essama-Nssah and Gockowski 2000), today the EU and partners operate against the background of a radically different national agenda, with the government now investing both technical and political capital in agribusiness and mining - often at the expense of forested areas (Republic of Cameroon 2009).

Yet, we maintain that such a comparative exercise will only be possible once a more coherent view of the forest sector as a whole will be established, which is the overall purpose of this Special Issue. For this reason, it is outside the scope of this article to conduct a comparative assessment with other sectors, e.g. the mining or agribusiness ones.

The following section briefly introduces the methodology applied to data collection. Next, two sections present largely quantitative results linked to the major policy and financial innovations introduced by the 1994 legal framework. The final section discusses some lessons that can be learned and offers some conclusions and recommendations for the future management of Cameroon's forests.

METHODOLOGY

The data and information presented in this paper have been collected in various ways. First, a literature review of existing studies and reports was conducted. Most of the relevant reports on the past two decades of forest policy discussions and implementation belong to the grey literature, have not been publicly disseminated, and can be found either on the shelves of ministry offices or on the hard-disks of public officials. Such literature has been painstakingly collected by the authors over more than two decades spent working on the Cameroonian forest sector, and was thus made available for this study. This literature review has been complemented by interviews and specific data collection for this paper, conducted in 2013–2015 with various ministries, including the Ministry of Forests and Fauna (MINFOF) and the Ministry of Finance.¹

Second, 23 one-to-one semi-structured interviews complemented by field visits were conducted with key unions, syndicates and professional organizations (4), logging industry representatives (7), local communities (7) and civil society organizations (5). The interviews focussed on peoples' recollection of policy events over the past two decades, as well as on the various data collection procedures the interviewees' companies or organizations were subjected to, and, when possible, on the availability of data in their premises.

Third, official accounting and financial data on the forest sector and logging companies were requested from, and graciously made available by, various departments of the Ministry of Finance, such as the Division of Large Enterprises, the Medium-scale Enterprises Tax Office and the Tax Pilot Centres in the capital city, Yaoundé, and in Douala. Most such data are recorded annually in the Statistics and Fiscal Statements (DFS) made by logging companies to the Ministry of Finance. In total, the DFS of 77 companies (from about 2008–2011) were made available. Data were released under a confidentiality agreement which stated that they could only be made public in aggregate form to maintain the anonymity of participating logging companies.

Fourth, volumetric data about timber exports were made available by MINFOF through the annual reports produced by its Littoral Region division, which records exports from the main port of Douala. The declarations of exporting companies (90–100, depending on the year) are recorded and aggregated per product (logs, sawn-wood, plywood or veneer), destination and species. These data have been used to estimate processing rates and the contribution of the sector to the national economy.

The next two sections present the results linked to the major policy and financial innovations introduced by the 1994 legal framework, namely the concessions' requirements to register land deeds and to prepare management plans, and the sector's new fiscal regime.

¹ The MINFOF assumed its current name and acronym in 2004. Previously, it was the Ministry of Environment and Forests (MINEF). In this paper, the acronym MINFOF is used throughout for clarity's sake.

LAND DEEDS, FOREST MANAGEMENT UNITS AND TIMBER PRODUCTION: THEORY AND PRACTICE

In Cameroon, forests on national lands are incorporated into the permanent forest domain in the form of protected areas and FMU (Assembe-Mvondo *et al.* 2014). The permanent forest domain covers about 16.3 million ha, of which about 46% is covered by 114 FMUs (Global Forest Watch and MINFOF 2012). FMUs are thus the property of the state, once classified as state forests (art.24 and 25, Republic of Cameroon 1994). For classification (or gazetting) of state forests to occur, a decree must be issued by the Prime Minister (art.17, Republic of Cameroon 1995). Such a decree determines, among others, the geographical boundaries of state forests and their category (FMU, protected area or otherwise). The decree also serves to establish a land certificate for the state.

Once an FMU has been granted to a logging company, a temporary contract for a maximum duration of three years is signed between the Minister of Forests and the company. The temporary contract is non-renewable (art.66(2), Republic of Cameroon 1995). During the three years of the temporary contract, the company is mandated, among others, to (i) conduct a management inventory; (ii) draft a management plan for the entire area of the FMU and for the entire harvesting rotation period, which is generally set at 30 years; (iii) draft a five-year plan and an annual plan of operations with a detailed description of the operations to be conducted in the initial years of the harvesting cycle; and (iv) build and operate a sawmill neighbouring the granted FMUs to contribute to local employment, local processing and value addition.

Once all the requirements listed in the temporary contract are completed and verified, the Minister signs a certificate to confirm this, and the company is eligible for a permanent and definitive contract for the FMU concerned. The permanent contract lasts for 15 years and is renewable once. It is issued in the legal form of a forest concession, which may contain multiple FMUs, granted through a decree signed by the Prime Minister.

Once an FMU has been granted to a logging company, if the company wants to conduct harvesting operations, it must conduct an annual harvesting inventory on clearly delimited annual allowable cuts (AAC), measured in hectares and mapped in the management plan. Once the inventory has been validated by MINFOF, harvesting can start. Harvesting can occur on the same AAC for a maximum of two years, after which access roads to the AAC must be closed to prevent encroachment.

The theoretical sequence of events suggested by the legislators and presented above follows a clear logic: first, the gazetting of an FMU; second, its attribution to a logging company; and third, actual harvesting operations. The process of gazetting should include consultations with the local populations about the planned FMUs' boundaries (Topa *et al.* 2009). After gazetting, logging companies would bid for FMUs with clearly defined boundaries. Within those boundaries, companies would then conduct a forest inventory, an environmental impact assessment, and further public consultations with the local populations in order to prepare a

management plan respectful of the social, environmental and economic requirements defined by the law.

In reality, MINFOF allowed gazetting and attribution to be run as parallel processes, with the latter often occurring earlier than the former. This has resulted in logging companies being granted FMUs or starting harvesting operations where the negotiations about boundaries and compensation to local communities had yet to occur. By 2003, 72 FMUs had already been granted with only five being gazetted and no management plan approved (FIGURE 1).

A decade later, in 2015, all available FMUs – including some newly created in recent years – had been attributed at least once. However, the majority of gazetting and management plan approval occurred during 2004–2006 (FIGURE 1). Partly, this trend may be understood as a decade-long learning process, starting with the adoption of the 1994 law, during which MINFOF staff learned how to master and eventually implement the new regulatory framework. Yet, when one compares Figure 1 with the political and economic situation of Cameroon in those same years, another and – we argue – more compelling explanation emerges.

This explanation takes into account the external pressures exerted on the government of Cameroon, and particularly MINFOF, by multilateral donors and lenders during 1989–2005. It was during those years that three subsequent SAPs and – most importantly – their corollaries of related conditional matrices influenced the decisions taken in many sectors of the Cameroonian economy (World Bank 1989, ADB 2002, ADF 2005, Ongolo and Karsenty 2015). Since the conditional matrices contained separate provisions on different topics and processes targeting the forest sector, notably on gazetting, attribution and management, the next three subsections will discuss them separately.

Attribution and approval of management plans in FMUs

The number of attributed and classified FMUs, and the number of approved management plans, were all specific triggers linked to conditional financial disbursements through the SAPs. In the final years of the third and last SAP, MINFOF faced a lot of pressure, both internal and external, to deliver on agreed SAP matrices. This largely explains the 47 FMUs classified, the 34 FMUs attributed and the 41 management plans approved in 2004–2006 (FIGURE 1).

MINFOF's quantitative performance was remarkable, especially since it had a chronic lack of staff, capacities and means to perform such intensive tasks as conducting the necessary negotiations prior to gazetting, or verifying the reliability of forest inventories. However, the rush to fulfil the conditional matrices had some notable negative impacts on the quality of outputs. For example, during the 2005 and 2006 FMU attributions, "suspicious numbers of bidders [were] eliminated at the technical evaluation stage, and [the FMUs] awarded to the only remaining bidder at the floor price" (Topa et al. 2009, p.42). In other words, MINFOF chose to forego the revenues that the country could have gained from higher bids, and risked granting FMUs to companies not necessarily

1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015

N FMUs attributed or re-attributed

FIGURE 1 Timeline of FMU gazetting, attribution or re-attribution, and management plan approval processes

FMU = forest management unit.

Source: Authors' elaboration on MINFOF's data.

willing to engage in long-term SFM practices. Similarly, the quality of many management plans was also wanting, with especially worrying gaps in the acknowledgment and definition of customary uses and rights (Vandenhaute and Doucet 2006), and in the species selected for sustainable management (Cerutti *et al.* 2008). Yet, management plans were nonetheless approved.

= FMUs with approved management plans

Land gazetting

The issue of land gazetting is at the heart of a fundamental lack of security in the forest sector. As of 2013, from a total of 114 FMUs across the country, Cameroon had 70 recorded as gazetted (covering about 4.6 million ha) and 80 with an approved management plan (covering about 5.3 million ha). However, because the two processes run in parallel, in the same year there were only 58 FMUs that were gazetted *and* also had an approved management plan (covering about 4 million ha).

Gazetting and having an approved management plan are two of the basic conditions required for logging companies to request a permanent contract.² Without a permanent contract, logging companies have no legal security with regard to the boundaries of their FMUs and, implicitly, in the areas where they are required to make long-term investments. Under these conditions, most of the objectives set out in the forest policy over the past 20 years are based on a false premise. These

considerations did not escape the attention of the country's financial and technical partners, and in particular the World Bank, which had founded their engagement in the forestry sector on this premise.

× FMUs gazetted

In the discussions between MINFOF and the country's partners that occurred after 2005–2006 (i.e. after the HIPC completion point) the issue of permanent contracts, or lack thereof, was constantly at the top of the agenda. It was one of the thorniest points discussed, at least until 2010–2011, when several donors, led by the World Bank, decided that the conditions set for their further support to the forest sector had not been met. Thus they abandoned their preeminent role in leading the reforms, leaving it largely to the EU and to Germany under the FLEGT agenda. By 2012, permanent contracts had been signed for only 22 FMUs. Of those, three had been abandoned and the remaining 19 included "a provision by the Government allowing for mining activities in the event of mines discovered in these [FMUs]" (World Bank 2012, p.8).

Timber production, exports and logging titles

Over the years, the discourse about permanent contracts as a means towards the implementation of SFM was paralleled by a discourse on the shift that should have occurred from unsustainable to sustainable logging titles. Indeed, most existing planning documents from the 1990s and 2000s, produced

² MINFOF has published public lists of granted FMUs and their status over the years. Those lists generally divide FMUs into temporary (provisoire) and permanent (définitive); however, for the latter group, the term "permanent" is used inappropriately for FMUs that either have an approved management plan, or are classified, or both. Only the 22 FMUs that actually have permanent contracts signed by the Prime Minister should legally fall into this group.

under SAPs, aim at phasing out logging titles – such as sales of standing volume (SSV) - which did not require management plans or respect for sustainability criteria (e.g. MINEF 1999, MINEF 2004).

The attribution of unsustainable titles in the 1990s could be considered a necessary evil for logging companies to be able to supply the sawmills they were building in fulfilment of the new legal requirements. As new legally attributed FMUs were promised by the law in 1994 but were not available until the 2000s, SSVs and similar authorizations (e.g. timber recovery permits, TRP) filled the gap in timber demand (Cerutti and Tacconi 2008).

Yet, data on attributed FMUs and SSVs/TRPs for 1998-2015 present a similar pattern to that shown above for gazetted and attributed FMUs (FIGURE 1). Over the years MINFOF has tended to attribute more and more unsustainable titles, most notably since the release of donors pressure around 2006-2007. As a result, in 2014, for example, the area granted for timber harvesting through such titles was higher than that granted at the end of the 1990s and higher than the AAC granted to FMUs (FIGURE 2).

A similar disconnect between policy and practice also seems to exist between log exports and the 1994 targets of increased local processing and value addition. The 1994 law promised a log export ban to be enacted in 1999. The ban was indeed enacted in 1999, with a corresponding drop in log exports (FIGURE 3). Yet, contrary to expectations, it was only a partial ban, which left open the door to the export of "secondary species" (as they are referred to in the legislation). This oddly included a few of the most commonly harvested and exported species for many decades, such as ayous

(Triplochiton spp.) and azobé (Lophira alata). Such implementation contradicted, as it does today, the promise to adopt policies that would favour both more and better local processing, increased local investment, and the harvest and export of more "secondary" - also intended as less profitable - timber species.

The increasing trend in log exports during 2005-2014 (FIGURE 3) can be attributed to three major proximate causes: (i) the increased number of unsustainable logging permits (SSV/TRP, FIGURE 2) granted in agro-forestry areas in the non-permanent forest domain to companies that do not have the processing capacity needed to produce sawn-wood and thus prefer exporting logs; (ii) exceptional measures adopted by the government to face the 2008 financial crisis (some of which are still active, such as reduced taxation on selected species); and (iii) a buoyant Asian market, which has historically been focussing on logs (as compared to sawn-wood) and also less selective than the European one in terms of demanded species (Cerutti et al. 2011). Hence, the Asian market, and notably China and Vietnam, has been able to capture the vast majority of the increasing volumes of logs produced from unsustainable logging permits.

In addition to proximate causes, the political economy of the forest sector in Cameroon has played a significant role in influencing log exports. Several timber companies, especially those focussing on unsustainable permits and largely unwilling or unable to mobilize the long-term investments needed to gain access to FMUs, exerted lobbying pressure on the government to relax log export restrictions. The power of such lobbying is enhanced by the fact that several members of Parliament, as well as government and army officials,

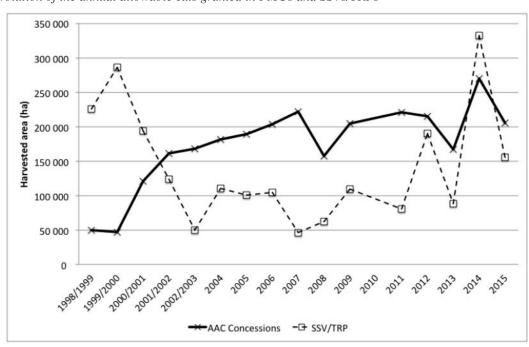
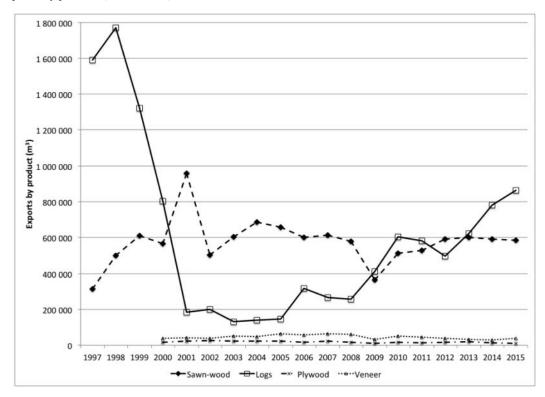


FIGURE 2 Evolution of the annual allowable cuts granted in FMUs and SSVs/TRPs

SSV = sales of standing volume, TRP = timber recovery permit. Source: Authors' elaboration on MINFOF's data.

FIGURE 3 Exports by product (1996–2015)



Note: In order to obtain the corresponding annual harvested production, processing rates of about 35% must be applied to sawn-wood, and of about 50% to both plywood and veneer.

Note: In 2003, the financial year was changed from Jul-Jun to Jan-Dec. Data before 2003 are thus reported in official documents as 1996/1997, 1997/1998, etc.

Source: Authors' elaboration on MINFOF's data.

also own logging companies. These interests converge with those of the Ministry of Finance, for which one single tax-collection point at the port of export (i.e. Douala) and thus taxes on log exports have always been easier to monitor and collect than those on processed products (HTR and MINEFI 2005).

Data indicate that sawn-wood, plywood and veneer production has remained stable for more than a decade, except during the financial crisis. Yet, Figure 3 also shows that log exports remain the most attractive activity for many producers. Processing activities do not yet generate important added-value, mainly because the quality of Cameroonian downstream production remains low. Investment in improved processing materials, wood technology and capacity development has been inadequate in both the public and private sector. This leaves the industry in a primitive state, where exporting sawn-wood remains the main activity of most logging companies.

CONTRIBUTION TO THE ECONOMY AND REVENUE COLLECTION: THEORY AND PRACTICE

Coming as they did against the background of a series of SAPs which imposed a lot of conditional matrices also on the

forest sector, it is not surprising that a large part of the reforms of the 1990s focussed on increasing revenue collection by the state, decreasing rent by logging companies, and attracting foreign investment (Essama-Nssah and Gockowski 2000, Karsenty 2010). To that end, a new area fee and several volume-based taxes were introduced by the legislator. Although the area fee already existed under the previous forest code, one major innovation of the new regulations was – in addition to setting its value to that offered by logging companies for each FMU in a public auction – to mandate the redistribution of 50% of the area fee to rural councils and the villages where logging titles were located; the remaining 50% went to the Treasury. The aim was to ensure that exploitation of the forest contributed to improving rural livelihoods.

Yet even in the case of the taxation system, as with land deeds and SFM, there has been a disconnect between theory and practice, or between the adoptions of rules and regulations and their actual implementation. Indeed, two decades have not been enough to set up effective institutional structures, able to function properly and to achieve the initial purposes of the reforms. In 1998, within the framework of the SAP, the responsibility for collecting forest-related taxation was transferred from MINFOF to the Ministry of Finance. The change was introduced to streamline revenue collection at the national level, irrespective of the sector considered. To

that end, in March 1999 the Enhanced Forest Revenues Programme (EFRP), an interministerial programme (MINFOF and Ministry of Finance), was established within the Ministry of Finance to ensure a rigorous monitoring of fiscal revenues in the timber sector, thus increasing its contribution to the state budget (Topa *et al.* 2009). However, creation of the EFRP had the drawback of physically separating two sets of primary data related to the forest sector, namely timber production and the collection of corresponding revenues, which could then only be reconciled if the two ministries were to establish strong collaborative links. In fact, collaboration remains sporadic and weak to this day (e.g. HTR and MINEFI 2005, PSRF 2014).

In a declarative taxation system like the Cameroonian one, where logging companies declare the amounts they have to pay, and are only later possibly subject to official controls, such disconnect is a recipe for regular underperformance in terms of revenue collection. Also, it can become an easy channel for the laundering of illegal forest activities, as tax controllers can only verify whether the relevant taxes have been paid or not, but not, for example, the origin of the resource.

Lack of collaboration is just one factor undermining performance. In addition, the Ministry of Finance has continuously tried to adapt the forest sector to its fiscal needs, instead of building on MINFOF's knowledge, which could be channelled through the EFRP. For example, while at inception the EFRP was responsible for collecting taxes from all logging companies, in 2004, 2006 and most recently in 2013 its responsibilities were reduced, leaving it today with no tax-collection responsibility at all. Instead, the EFRP's responsibilities for data collection and analysis have grown year after year, with no increase in personnel, means or political clout. Clearly established institutional channels do not exist for it to reach out to MINFOF and the various agencies within the Ministry of Finance that are the repositories of original data and information (PSRF 2014).

These subsequent limitations imposed on the EFRP follow a path that goes in parallel with the trends highlighted in Figure 1, 2 and 3, i.e. reforms imposed under the SAPs were gradually but regularly dismantled over the years, to the detriment – we argue – of the entire forest sector. Indeed, those limitations have a practical negative impact on the quality and quantity of collected data, which remain partial, scattered across multiple agencies and irregularly distributed over the years. Notwithstanding these shortcomings and within the aim of this Special Issue, the following subsections present the status of the forest sector's contribution to the national economy, as it can be gauged from available data.

Contribution to the national formal economy

In the framework of this Special Issue, three indicators are used here to capture the industrial timber sector's contribution to the national economy: turnover, added value and employment. The same three indicators have been collected for all the other sub-sectors considered in the Special Issue, so that a coherent picture of the overall forest sector's contribution to the national economy can be drawn.

The turnover of the formal forest industry is considered as the production recorded during each fiscal year. That is the entire industrial wood production output sold, stored or capitalized per year, regardless of its form. Generally it consists of exports of wood and wood-based panels from natural forests and wood used directly in the production process. During the last two decades the industrial forest sector realized an average annual turnover of about USD 600 million.

The added value is considered here as the overall wealth generated by the industrial sector during a fiscal year. It is calculated as the difference between the turnover and the value of all goods and services consumed during production, created by intermediate sectors (intermediate consumption).³ Data made available for this study show that the industry average added value was about USD 351 million in 2008–2011, or about 1.5% of gross domestic product over the same period. Wages and expenses, specific forest taxation and general taxation contributed the largest part (about 60%).

Data also indicate that the timber industry (forest management, timber processing and export) contributed to the creation of about 23 000 formal jobs in 2011, corresponding to about USD 96 million in personnel wages. This represented an increase from the 13 000 jobs recorded in 2006 (Karsenty 2006). This increase could be attributed to the fact that the 2006 data only took account of direct employment in harvesting and processing, but it could also be partially linked to the increase in area harvested and logging permits granted in recent years.

Revenue collection

The quantity of forest-related taxes collected changed over the last two decades, as a result of changes to the fiscal system and to the forestry sector. Whereas the largest amount collected before 2000 was from log export tax, after 2000 the area fee, calculated on the bids made by logging companies and the area of their titles, became the single largest source of revenue collected (FIGURE 4).

Following the 50% devaluation of the CFA franc in 1994, and before the implementation of the new forestry law (early 2000s), companies increased the volume of wood they were

³ This is the accounting definition of added value. From an economic perspective, it might not be the best approach to assessing the performance of the industrial forest sector. As for timber processing, the intermediate consumption products are the logs. In national accounting, they are priced not at their opportunity cost (their potential market price) but at their production cost, if the industry is vertically integrated (which is largely the case in Cameroon). Pricing logs at their opportunity cost would often lower significantly the added value displayed in national accounts.

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1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

FIGURE 4 Forest-related and total tax collection (1992–2014, corrected for inflation)

AF = area fee, SF = stumpage fee, SET = sawmill entry tax.

Note: In 2003, the financial year was changed from Jul–Jun to Jan–Dec. Data before 2003 are thus reported in official documents as 1991/1992, 1992/1993, etc.

Source: Authors' elaboration on MINFOF's data.

harvesting, in part because of the extremely favourable exchange rate, but also possibly in anticipation of future shortages created by the announced log export ban (enacted in 1999) (Ndoye and Kaimowitz 2000). This caused a rush to use unsustainable logging titles, as discussed above.

In 2001, the long-promised public auctions to grant FMUs were eventually implemented as a further requirement for the conditional disbursements under SAPs, and the government started collecting the area fee due on those FMUs. The revenue generated from the area fee grew for several years (FIGURE 4), until almost all FMUs were granted. It plunged in 2008–2010 during the financial crisis because MINFOF adopted a special measure halving the area fee due from logging companies. It later recovered to pre-crisis levels and increased to an unprecedented high. This was the result of the increased number of SSVs being delivered (FIGURE 2) in addition to the more regular area fee income from FMUs.

At the beginning of the century, the streamlining of the roles and responsibilities of the EFRP seemed to bear fruit in

the collection of volume-based taxes, such as the stumpage fee (FIGURE 4), which has however remained constant since then. Less successful was the impact on the sawmill entry tax (FIGURE 4), which was eventually abolished in 2013 and substituted with an export tax applied to exported processed products. The establishment of the EFRP also played an important role in bringing to light some previously unreported taxes and fees (e.g. value added tax, fines, taxes on employment, etc.). These were initially reported under the general banner of "other taxes", and later on with clearer specifications. Yet, reporting is still far from optimal or regular, and large unexplained year-on-year variations are common (FIGURE 4).⁵

Although the trends in revenue collection might be seen as an improvement as compared to the pre-1994 situation, such numbers hide the clearest example of the disconnect between adopted policies and eventually implemented actions. The redistribution of revenues collected from the forestry sector was one of the most innovative and welcomed

⁴ Since the area fee is a fixed cost to companies, because it is paid on the entire FMU area irrespective of production or market conditions, MINFOF tried to ease the negative conditions experienced by the industrial forest sector during the crisis years.

In the last decade, many estimates have been published (often by the Ministry of Finance) of the total contribution of the forestry sector to national revenues, but "other taxes" (*autres taxes*) have never been detailed nor explained as to their origin, and they often present huge, inexplicable variations from one year to the next.

targets introduced by the 1994 law. The idea was simple: half (50%) of the area fee paid by logging companies each year was to be redistributed to the councils (40%) and villages (10%) neighbouring logging concessions, as evidence that the exploitation of the forest could bring about improved rural livelihoods. The novelty of redistribution and the amounts involved have brought much scrutiny to the area fee, with most of the available literature agreeing on the scheme's very poor performance and weak impacts on people's livelihoods, especially because of many councils' widespread embezzlements and misuse of funds (e.g. Nzoyem *et al.* 2003, Morrison *et al.* 2009, Cerutti *et al.* 2010).

Notwithstanding the large and increasing volume of evidence about weak results and mismanagement by some councils and mayors, over the years several decrees were adopted that changed the 40%–10% ratio several times (e.g. see Republic of Cameroon 2009, MINATD *et al.* 2010, MINATD *et al.* 2012), until eventually the 2015 finance law not only abrogated the 10% originally allocated to the rural populations, but also transferred it in the hands of councils and mayors, providing even more resources to the very institutions that have over the years proven unable to stimulate rural development, growth and improved livelihoods for their constituencies. Thus, about 15 years after initial implementation, the area fee has proven to be more a battleground for mayors and their political aspirations than a means to improve people's livelihoods in areas affected by forestry operations.

DISCUSSION

Results indicate that some of the main objectives of the forest policy developed by Cameroon in the 1990s have yet to be reached, notably with regard to the contribution that the industrial forest sector should have made to SFM and to national and rural development. In particular, some basic preconditions that could facilitate an improved adoption of SFM by logging companies, although much talked about, have yet to be realized on a sizeable scale, such as permanent contracts and coherent fiscal policies that provide incentives for long-term investments. Other targets set forward by the 1990s' policies, such as further processing, value addition, increased revenues and better employment in the industrial forest sector, have had mixed results, for both technical and political reasons.

Technical reasons such as the quality and quantity of publicly available data and the lack of staff, resources and capacities of government departments to set up modern and interconnected forest information systems (which must include, among others, financial data) remain indeed a concern (FODER 2015, Hoare 2015). We believe this concern is even more important today than it was in the 1990s, especially considering the high reliance that processes such as FLEGT or REDD+ will have on computerised timber traceability systems or real-time data systems to establish and monitor legality, SFM and forest and environmental baselines. Yet, technical reasons can only partially explain those mixed results and the gap that remains between the adoption

and effective implementation of policies. The long and contradicting history of the area fee's redistribution, or the fact that timber production and financial data remain very much divided between two Ministries, for instance, speak more to the presence of powerful political interests in managing the concerned amounts, than to the lack of data or capacities.

The lack of coherent long-term strategies and the overlap of political and financial interests that hamper such coherence to materialise are not, of course, peculiar to the forest sector. In fact, the forest sector is sometimes just the passive observer of more powerful forces at play, as illustrated by the recent cases where mining or agribusiness companies had been granted permits inside FMUs with little consultation among the ministries of mines, agriculture and forests (e.g. Greeenpeace and The Oakland Institute 2013). Similarly, other unjustified or unexplained delays in policy implementation, as in the case of permanent contracts, or implementation that contradicts the spirit of the law, as in the case of the area fee, are not entirely or not always directly under the responsibility of the MINFOF: Permanent contracts are under the responsibility of the Prime Minister's office, and decisions on the area fee redistributions have largely been taken by the Ministry of Finance.

Yet, such delays and contradictions do have detrimental impacts on the forest sector. For example, the lack of permanent contracts after 36 months of operation makes the status of any logging company, its products and the FMUs producing the latter at best unclear and at worst illegal, unless the 1994 law is changed. The Cameroonian government, and MINFOF in particular, have been banking on their engagement with the FLEGT process, to improve the image of the country's forest sector. And indeed, engagement with FLEGT and the regular and transparent production of data that it will require have also been used as evidence of goodwill and capacity in the international negotiations of other processes, such as REDD+. Ultimately, however, the long-standing uncertainties about permanent contracts, the unclear planning about the present and future use of unsustainable logging titles, the weak links that continue to exist with the Ministry of Finance, and the lack of inclusive public discussions on such topics tarnish this image and render the implementation of those processes - and the fulfilment of their long-term objectives - very difficult, whatever the internal political reasons for such delays and contradictions.

In addition to the country's international image, the same uncertainties and contradictions also have negative impacts on the private sector's engagement with the international timber market, or at least on the most progressive logging companies, such as those engaged with forest certification schemes or those willing to publish transparent accounts of some of the taxes they pay. Despite the companies' stated objectives and engagements under international, third-party verification standards, key steps remain that only a collaborative government and clear political directions (e.g. in the form of improved regulations) can provide (Lambin *et al.* 2014), such as the granting of permanent contracts, the publication of transparent and regular data, or the effective redistribution

of benefits accrued from forest operations. Temporary solutions that are more in sync with external requests from international technical or financial partners than with internal, well-thought long-term development objectives, and that leave logging companies in a legal limbo or uncertain about the direction that the sector is taking are not what the market or the final consumers want, eventually discouraging serious investment in the sector.

All in all, these recurrent issues are further indication that the forest sector, despite more than two decades of progressive ad-hoc regulations, is not yet integrated into a coherent set of broader and multi-sectorial political strategies and decisions that consider it important for the future development of the country. This situation not only prevents MINFOF to play the important role that, we argue, it should have on the national political arena and in the development of cross-sectorial approaches, but it also has environmental, financial and social impacts.

Environmentally, the long-term lack of reliable data (e.g. FODER 2015), unjustified or collusive decisions on the attribution of logging titles (e.g. CONAC 2012), and lack of clarity about how the sector is being managed, contribute to perpetuate an environment in which logging companies operate with a short-term, cut-and-run mentality. In such an environment, even the growing numbers of officially approved management plans or promises to only produce legal timber risk not stimulating future investments, unless backed up by serious monitoring efforts. For example, if one considers the past two decades, it is difficult to understand why the MINFOF would have technical problems in preparing FMPs - in fact a role that it has relinquished to logging companies since the adoption of the 1994 law - while it would not have the same technical problems in assessing both their quality and their actual financial, social and environmental impacts on the ground, tasks that would arguably require even more skills, improved curricula, and both financial and technical means. This, we argue, is where a clear and determined decision is needed if SFM has to assume a key role, not only for the future development of the industrial forest sector in Cameroon, but also for the engagements that the country is underwriting under international processes that will require, among others, the preparation of clear theories of change, the establishment of reference baselines, and detailed measurement of progress. For instance, independent thirdparty contractors could be brought in to monitor the quality of management plans before approval, as well as their implementation on the ground once approved, possibly at regular intervals of 5 or 10 years, in line with the requirements of

Financially, investments such as more comprehensive multi-resource inventories that consider the sustainable use of all floral and faunal resources, including those used by local populations in their customary activities, specialized teams dedicated to engagement with local populations and to the effective establishment of strong local forest governance structures or advanced processing facilities, require a long-term vision that the current situation does not encourage.

Obviously, all these considerations could affect the profitability of the sector and detailed analyses should be conducted to understand when and where improved policies could be adopted and who should bear responsibility for implementation. Yet, such improved policies could only be seriously discussed when the disconnect between what the government technically adopts and what it actually implements disappears, or at least decreases to a lower level than the current one.

Socially, the issue here is mainly one of transparency and public availability of information, notably for Cameroonians who expect the industrial forest sector to contribute to improving their livelihoods. Nothing is inherently wrong with attributing unsustainable logging titles that are in accordance with the law, if technical or political considerations so dictate. But the public need to be given sound reasons as to why one choice has been made over another, and what consequences such decisions may have on the future development of the forest sector and on their livelihoods. For instance, an increase of the area fee collected through unsustainable logging titles because of the large bids made by logging companies for those titles, as it occurred in recent years, can surely be reported as good news for the Treasury and for the MINFOF, as it has several times been done in the national press (e.g. Bainkong 2014). Yet, because of their very nature, unsustainable logging titles are a very short-term investment and cannot provide sustained income to the Treasury or long-term benefits to the rural populations. In fact, large bids may even indicate a dwindling resource and thus decreased livelihoods opportunities in the near future.

Cross-sectorial, inclusive, regular and informed discussions about these strategic issues are sadly lacking in the national arena. Instead, such discussions as do take place in the forest sector, often take the form of publicly aired conflicts between civil society organizations and MINFOF (e.g. Greenpeace 2015, Ngole Ngwese 2015), causing further reputational damage to the sector.

CONCLUSIONS

The research conducted for this paper is testimony to the existence of several technical and political challenges that characterise the industrial forest sector in Cameroon. Results indicate that many among such challenges have persisted over the years, notwithstanding the different social and macroeconomic backgrounds in which the sector has been evolving over the past two decades. In particular, results point to a recurrent gap between public commitments, laws and regulations (e.g. on SFM, value-addition, benefit-sharing, and transparency among others), and their effective implementation and monitoring on the ground. Commitments and new regulations, be they made or adopted under FLEGT (e.g. MINFOF 2015) or any other process to which the country decides to subscribe (e.g. REDD+), are positive and must be supported. They must however also be effectively implemented and monitored for the sector to gain the legitimacy it deserves and that is currently lacking.

More research is certainly needed on the processes that could help strengthening political will so that policy objectives are translated into reality on the ground (Brinkerhoff 2010). Yet, some available ways forward seem readily available in the case of Cameroon. For instance, signing a larger number of permanent contracts with progressive logging companies that have a proven willingness to invest in SFM (e.g. they voluntarily engage in forest certification), or indexing the area fee to the average price of a basket of species, representative of Cameroonian production, in order to lower the risk for the industry in relation to market downturns (e.g. Karsenty 2010), or effectively redistributing forest-related monetary benefits to the local populations, would already send a strong signal to international markets, lenders and the private sector. If more valuable land use alternatives - which may include alternative models of forest management become available, or if the economic model based on extensive logging of timber mainly for export purposes does not prove to be viable, then fair compensation can always be discussed later on among the local populations, logging companies and the government.

In addition, MINFOF, in collaboration with the Ministry of Finance, should acknowledge that longer-term investment is needed for FMUs as compared to unsustainable logging titles, and legislate accordingly. This would be a great improvement to the current situation, where promises of value addition, local processing, employment and long-term local benefits have largely remained unfulfilled. In fact, under current conditions, the granting of many short-term unsustainable permits may send a signal to logging companies that they may divest from long-term commitments, such as FMUs and SFM, and move towards short-term, unsustainable ones.

Given the current situation, with only a handful of companies seriously engaged in forest certification, the prospects for encouraging companies to practice SFM are poor, unless a well-considered framework of incentives and disincentives can be established. Several alternative schemes could be adopted, the ultimate goal being that companies showing clear signs of willingness to engage in long-term SFM, and ready to be regularly monitored by an independent thirdparty, should also be rewarded for their efforts in the shortterm. For instance, unsustainable permits might be directed to partly fill the growing national demand for timber, currently fulfilled by a thriving artisanal, albeit informal sector (Cerutti et al. 2013). Or a national procurement policy could be adopted that requires at least "legal" timber to be sourced, with possible premium prices for the public purchasing of legal and sustainable timber. This would raise the bar for the owners of unsustainable permits, and it would target effectively managed FMUs while creating new outlets for responsible concessionaires. Instead, under current conditions that maintain a large gap between what is promised in the regulations and what is done on the ground, companies wanting to invest in the long term face unfair competition from those who exploit short-term permits and are ready to move on to other sectors or other countries once the resource is depleted.

More broadly, such policies would also be a positive step to solve one of the major dilemmas facing the proponents of legal timber production processes, now prominent in international forest governance debates, to which Cameroon is fully committed. They would help establish a clear difference between legal and sustainable vs. legal and unsustainable timber, a difference that is today difficult to grasp on the international markets (Masiero *et al.* 2015), but that is fundamental for a broader adoption of SFM in tropical forests that is also understood and supported by international consumers who care for the future of those forests and the livelihoods they sustain.

ACKNOWLEDGEMENTS

This article was written with the financial support of the UKAID-funded KnowFOR (Forestry Knowledge) program and the CGIAR research program on Forests, Trees and Agroforestry (FTA). The authors wish to express their gratitude to the Cameroonian Ministry of Forests and Wildlife and the Ministry of Finance for the invaluable help in searching and providing requested data. Also, the useful comments provided by two anonymous reviewers are acknowledged. The usual caveats relating to authors' responsibilities apply.

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