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## Illegal logging in Cameroon: Causes and the path forward

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## ABSTRACT

Despite the systemic problems associated with illegal logging in Cameroon, minimal research has been undertaken to explore the reasons underlying these practices. Based on a series of interviews and analyses of relevant literature, this paper identifies the underlying causes of illegal logging in Cameroon, namely, systemic corruption, poverty, conflicts, licensing schemes, usurpation of property rights, and inadequate institutional support, and provides a path forward to potentially curb illegal logging activities in the country. It is hoped that results of this study will be used by the government of Cameroon (and other interested stakeholders) in crafting and implementing policies, plans, and programs directed at minimizing illegal logging practices.

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## 1. Introduction

Illegal logging is defined “as the felling and extraction of logs from forests that is not in conformity with an approved forest management plan or an official license issued by a forest authority in accordance with operations authorized by prevailing forestry laws” (Mir and Fraser, 2003, p. 278). It is a global concern – occurring in both developing and developed economies – with annual losses between \$10 and \$15 billion in the tropics and \$1 billion in the United States alone (World Bank, 2002a; Mendoza, 2003; Johnson, 2003).

Illegal logging has also become an important issue in the global policy discourse pertaining to sustainable forest management. As such, several recent initiatives have been put forward to address and combat the problem of illegal logging, including an action plan by the European Union, an initiative by the President of United States, a Japan–Indonesia agreement, and the African Forestry Law Enforcement and Governance program (EU, 2003; USDOS, 2003; Anon, 2003; Johnson, 2003; De Blas and Pérez, 2008).

Illegal logging is an endemic issue in many Latin American countries. Clandestine timber production in Honduras is estimated to account for 75 to 85% (about 125,000 to 145,000 m<sup>3</sup>) of the total annual hardwood production, and 30 to 50% (350,000 to 600,000 m<sup>3</sup>) of the softwood production, while in Nicaragua, approximately half (30,000 to 50,000 m<sup>3</sup>) of the total annual hardwood production and 40 to 50% (110,000 to 135,000 m<sup>3</sup>) of the softwood production are illegally harvested (Del Gatto, 2003; Alcocer Lopez, 2003; Richards

et al., 2003). Interestingly, Richards et al. (2003) state that, oftentimes, timber is fraudulently legalized at the beginning of the production process or in transport with bribes to government authorities and law enforcement officials.

Illegal logging is also known to be commonplace on the African continent. In Ghana, for example, the volume of illegal timber harvested from the formal and informal sectors<sup>1</sup> was approximately 640,000 m<sup>3</sup> in 2005 and 1.7 million m<sup>3</sup> per year, respectively (Birikorang et al. 2006; Hamilton Resources and Consulting, 2008). The issue is also prevalent in Tanzania where as much as 500,000 ha of the country's forests are lost annually as a result of illegal logging (Glastra, 1999; Contrera-Hermosilla, 2001).

In the Democratic Republic of Congo, where there is currently an armed conflict as well as widespread corruption, Scotland (2003) notes that illegal logging has resulted in estimated losses of €3.6 million. This speaks to a broader issue, namely the fact that illegal logging and armed conflict frequently go hand-in-hand. In a well known case in point, the value of timber illegally exported to Thailand between 1989 and 1998 from areas controlled by the Khmer Rouge – the infamous rebellious movement that operated in Western Cambodia at that time – was in the order of US\$ 700 million (Le Billon, 1999; Le Billon, 2000).

The focus of this paper is on illegal logging in Cameroon. As a result of widespread illegal logging in Cameroon's dense tropical rain forest

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<sup>1</sup> The formal sector is defined as the legalized domain and includes forest enterprises that are registered with the government, while the informal sector is the unofficial domain (“shadow economy”) and is often characterized by the processing of logs at forest stumps using chainsaws (Karsenty, 2003; Hamilton Resources and Consulting, 2008).

within the Congo Basin, a major forestry law (Law NO. 94/01 of 20th January 1994) was enacted by the government in 1994, and in the subsequent year, a decree (Decree NO. 95-531-PM of 23rd August 1995) was introduced to facilitate its implementation. While this law has been cited as a pioneering attempt to decentralize forest management practices and address issues of sustainability and inequity in the Congo Basin (Oyono, 2004), illegal logging remains ubiquitous in Cameroon (Karsenty, 2003). This paper attempts to uncover the underlying root causes that explain why illegal logging is still commonplace in Cameroon and proffers a potential path forward for addressing this pressing social and environmental concern. It is hoped that policy makers – including the government of Cameroon – will be able to incorporate the results of this study into strategic policies, plans, and programs formulated to address the curbing of illegal logging in Cameroon and elsewhere in the world.

## 2. Background and objectives

Cameroon's forests (Fig. 1) and forest products play a fundamental role in the country's economy, providing between 45,000 and 70,000 jobs and accounting for more than 10% of the country's GDP (Amariei, 2005). As the sixth largest exporter of tropical woods in the world (Nguemdjom, 2006), the forest sector makes a significant contribution to Cameroon's total export base, with forest products accounting for 19.8% of Cameroon's merchandised exports between 1990 and 2000 (Lebedys, 2004) or approximately US\$ 60 million in revenues every year (Nguemdjom, 2006).

The government of Cameroon plays a key role in its forestry sector as the sole authority that can enter into any business agreement regarding the allocation of forest concessions to large-scale logging companies (concessionaires). The Ministry of Forests and Fauna (MINFOF) is the governing body responsible for granting long-term tenures of fifteen years to concessionaires, up to a maximum area of 200,000 ha (MINEF, 1996). MINFOF also oversees the sale of standing timber – up to a maximum area of 2500 ha over a three-year lease – to logging companies owned by Cameroonian nationals (MINEF, 1996; Karsenty, 2007). Additionally, in 1994, community forest licenses were officially enacted in the country, giving local communities the right to operate a maximum forest area of 5000 ha with tenure durations of 25 years (MINEF, 1998). As of 2008, there were 135 fully operational community forest licenses in the country covering about 2% (621,245 ha) of the country's forest (Mbile et al., 2008).

Concession-based forestry remains the dominant business paradigm in Cameroon's forest sector. Simply put, concession-based forestry is the allocation of forest tenures to large-scale industrial firms for the purpose of timber exploitation (Karsenty, 2007). According to MINEF (1996), the process of acquiring a license starts with the prospective concessionaire submitting a file containing ten copies of an administrative and technical bid, as well as a financial bid to the relevant authority (MINFOF) following a call for public tender by the government. The duration of this advertisement is forty-five days. A forest concession is awarded to the highest bidder by MINFOF after approval by an Inter-Ministerial Committee. The official endorsement of an order granting a concession the rights to a forest is contingent upon the applicant paying a cautionary fee into the state

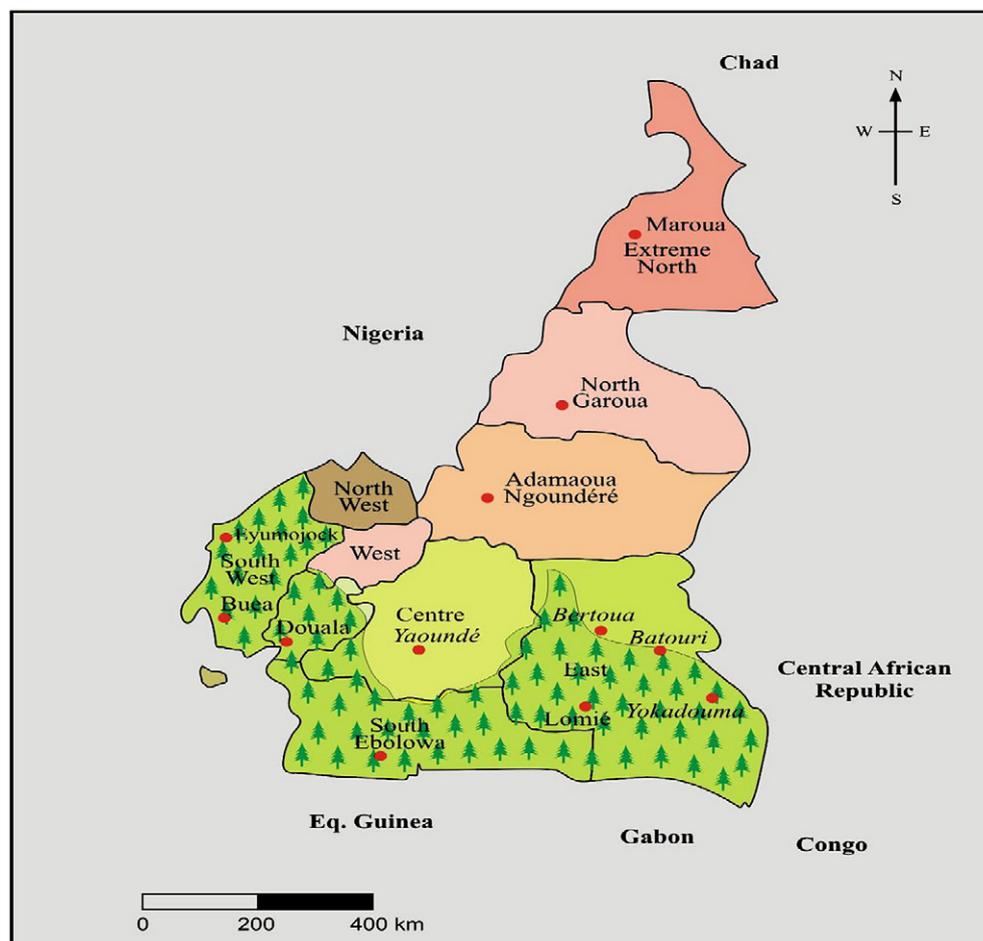


Fig. 1. Map of Cameroon and its regions. Tree icons represent Cameroon's tropical rain forest of the Congo Basin (Source: Adapted from Mertens et al. (2001)).

treasury. The concessionaire has forty-five days from the date of notification to meet this financial obligation.

The total annual timber production from concession-based forestry in Cameroon for 2005 and 2006 was estimated at 1,903,561 m<sup>3</sup> and 2,226,000 m<sup>3</sup>, respectively (Bigombe and Atamana, 2004; Mbile et al., 2008), and accounted for approximately 3.1% of the country's GDP in 2004 (Karsenty, 2007). Apart from a few locally owned enterprises, most concessions in the country are owned and operated by European and Asian interests from France, Italy, the Netherlands, Belgium, Malaysia, Hong-Kong, and Lebanon (Karsenty, 2007).

Despite this entrenched formal system of legally registered forest enterprises in Cameroon, the rates of illegal logging in Cameroon's forestry sector remain high. It is estimated that as much as 50%<sup>2</sup> of Cameroon's roundwood is harvested clandestinely (European Commission, 2004; Amariei, 2005), with many of these practices emanating from forest lands operated by concessions (Verbelen, 2000).

In a synthetic review of forest governance in selected African countries, Mitchell (2002) reports that Cameroon is losing about US\$ 5.3million annually due to illegal logging practices. Additionally, a report by Global Witness, corroborated by Cameroon's Ministry of Environment and Forests (currently MINFOF), reveals that more than 73,000 m<sup>3</sup> of timber was logged in excess of the volume allotted to concessionaires in the 2002/2003 fiscal year (Global Witness, 2004; Amariei, 2005).

Authors have identified logging without a legal title and the widespread abuse of logging permits as the principal types of illegal logging occurring in Cameroon (Mitchell, 2002; Pandya, 2002; Global Witness, 2004). While it is difficult to disentangle the parties responsible for illegal logging in Cameroon, it is worth noting that the informal sector is, by definition, involved in illegal logging. For example, due to the high domestic demand for wood and wood products, illegal loggers from the informal sector have encroached into the Ottotomo forest reserve located in the outskirts of Yaoundé, the national capital (Plouvier et al., 2002; Jum and Oyono, 2005).

Private individuals are also engaged in these illicit operations, largely for subsistence purposes. It is reported that small-scale logging by private individuals is partly responsible for the consumption of 200,000 m<sup>3</sup> of illegal timber from Cameroon (World Bank, 2002b; Amariei, 2005). However, since a portion of the nonpermanent forests<sup>3</sup> in the country is oftentimes granted to communities for subsistence purposes, it is likely that most illegal activity emanates from the informal sector.

Amariei (2005) offers specific examples of illegal logging in Cameroon, including: (i) logging outside of concession perimeters; (ii) harvesting within concession perimeters, but above the legally assigned timber volumes; (iii) harvesting logs that have not reached the minimum exploitable diameters; and (iv) logging of tree species conserved under the Convention on the International Trade in Endangered Species of Flora and Fauna (CITES). It is also reported that, in Cameroon, "a large part of the illegal logging operations can be attributed to operations that are out of bounds. These are sometimes, outside the permit, but within it as well" (Karsenty, 2003, p. 236). Others have cited discrepancies between reports provided by Cameroon regarding its roundwood exports and import reports from trading partners as indicative of illegal logging practices in the country (Johnson, 2003).

Fifteen years ago, the government of Cameroon enacted the main forestry law (Law NO. 94/01 of 20th January 1994) and its subsequent

decree of implementation (Decree NO. 95-531-PM of 23rd August 1995) as a strategy to combat illegal logging and unsustainable forest management. Part of this law stipulates that a proportion of royalties collected from logging companies are to be set aside for community development (and thus potentially curb illegal logging activities) with allocation in the following manner: 50% to the state; 40% to the rural council within which the concession is located; and 10% to the neighboring village communities (Oyono, 2005). With the help and supervision of organizations like Global Witness, MINFOF has created an Urgent Action Program (UAP), as well as the National Brigade for the Control of Forests and Wildlife which is responsible for monitoring and regulating illegal logging in forest concessions (Tieguhong and Betti, 2008). Enormous efforts have also been made by other stakeholders nationwide to mitigate the problem of illegal logging. A case in point is the use of satellite photos and the geographic information system (GIS) by the German Agency for Technical Cooperation (GTZ) to monitor illegal logging in the Southeast of the country (Pandya, 2002).

Despite these efforts to address illegal logging in Cameroon, widespread improvements have yet to be observed. Furthermore, all of the studies on illegal logging in Cameroon thus far have been very general in nature and do not specifically address the systemic reasons underlying the causes. Improved understanding of the root causes is essential for developing robust policy measures which address and curb illegal logging practices. Therefore, this paper sets out to:

1. identify the reasons why, fifteen years after the enactment of Cameroon's main forestry law, illegal logging continues to be prevalent in the country; and
2. suggest policy recommendations for addressing and reducing illegal logging in Cameroon.

### 3. Methods

In order to meet the objectives of this study, data from both primary and secondary sources were employed. Specifically, a synthetic review of data from secondary sources was conducted and included legislation formulated by the Cameroonian government, aid agency reports, and 'grey' literature in the form of reports and working papers from relevant governmental/non-governmental organizations (NGOs). Information from the peer reviewed literature was also collected and evaluated to gain further insight into the problems of illegal logging.

Secondary data was supplemented with unstructured interviews (Halvorsen, 1992) of 25 individuals representing all stakeholder groups involved in forest management in Cameroon's forestry sector, including managers, representatives from civil society, local residents, state officials, and university researchers (Table 1). Interview protocols focused on the causes of illegal logging in Cameroon and loosely followed themes that were identified from the review of secondary data sources. These themes were developed in two stages. Initially, a comprehensive review and analysis of reports, working papers, and forest legislation pertaining to illegal logging in Cameroon were conducted. This was followed by a review and detailed evaluation of peer reviewed literature on illegal logging in Cameroon. While a breadth of topics were explored, six themes emerged that were directly related to the question of illegal logging in Cameroon:

**Table 1**  
Affiliations of the interviewees.

Affiliation	Interviewees
Non-governmental organizations (NGOs)	5
Local community associations	12
Government	4
Universities	4

<sup>2</sup> Although these values and others cited elsewhere in this paper are illustrative of the severity of illegal logging in Cameroon, the reader should note that some of the data were obtained from 'grey' literature that has not been subjected to the peer review process.

<sup>3</sup> Nonpermanent forests comprise "all forests for which no licenses are held, community forests, and private forests" (Mbile et al., 2008, p. 6).

systemic corruption; poverty; conflicts; licensing schemes; usurpation of property rights; and inadequate institutional support.

The interviews were conducted between 2008 and 2009 during field visits, workshops, and by phone/email,<sup>4</sup> with the main topics revolving around the underlying causes of illegal logging in Cameroon. During the course of the interviews, every attempt was made to gather specific information on the following discussion points:

- How long (on average) does it take to obtain a community forest license in Cameroon?
- Do you think that corruption is a major cause of illegal logging in Cameroon?
- Do you believe that poverty in this community has contributed to illegal logging and, if so, how?
- Are there any existing conflicts between government ministries and, if so, do these conflicts contribute to illegal logging?
- What types of conflicts occur between stakeholders and do these conflicts contribute to illegal logging in Cameroon's forest communities?
- Are there adequate infrastructural resources in place to monitor illegal logging in this region of Cameroon?
- Is the system of forest allocation equitable in Cameroon and, if not, how does this inequity contribute to illegal logging?

With the exception of email responses, notes were taken during all of the interviews, each of which lasted approximately 35 min. Upon completion of the interviews, the transcribed data was analyzed by extracting relevant passages and quotes. Using an open-coding process (Creswell, 1998), these passages were then coded according to the six themes identified as principal causes of illegal logging in Cameroon.

#### 4. The causes of illegal logging in Cameroon

Results relating to the factors underpinning illegal logging in Cameroon are summarized according to the six themes identified in the review of secondary data sources: systemic corruption; poverty; conflicts; licensing schemes; usurpation of property rights; and inadequate institutional support. Each theme is discussed in turn and is supplemented with quotes from the interview transcripts.

##### 4.1. Systemic corruption

The Berlin-based Transparency International has consistently rated Cameroon as one of the most corrupt countries in the world. The 2008 Transparency International Corruption Perceptions Index reports that Cameroon ranked 141st out of the 180 countries surveyed, with a corruption perception index (CPI) of 2.3<sup>5</sup> (Transparency International, 2008). Such metrics indicate that corruption is indeed deeply rooted in the country (Amariei, 2005; Transparency International, 2008).

Many have noted that both collusive and non-collusive forms of corruption have the ability to cripple the socio-political, economic, and moral integrity of a polity (Shleifer and Vishny, 1993; Bardhan, 1997; Smith et al., 2003; and Akindele, 2005). While non-collusive corruption refers to a corruption practice in which the government demands a bribe for the provision of a service (such as a logging permit), collusive corruption is defined as a situation where government officials and the private sector conspire to deprive the government of its revenues (Shleifer and Vishny, 1993; Bardhan, 1997; Smith et al., 2003). These types of corruption are currently

<sup>4</sup> During phone interviews with two respondents, the lines were disconnected. Consequently, email responses (on their perceptions of the causes of illegal logging in Cameroon) were sent by these two interviewees as a follow-up.

<sup>5</sup> The CPI score ranges from 0 to 10, with 0 being the highest level of corruption and 10 representing no corruption.

commonplace in Cameroon and have exacerbated illegal logging (Global Forest Watch, 2000; Tetchiada, 2005; Jum and Oyono, 2005). It is possible, for example, that some concessionaires are able to operate with impunity as a result. Global Forest Watch reports that “due to intervention from an influential person, one in every five reports of illegal logging in the East and Central Region of Cameroon are dismissed” (Global Forest Watch, 2000, p. 7). During an interview with the head of a community-based forestry organization in the Littoral Region of the country, the severity of corruption as a major contributing factor to illegal logging was conveyed as follows:

“What I can tell you about illegal logging is that it is a big issue now in our region. It's really a mafia developed [phenomenon] and very well covered [practiced] by some civil servants or officials of the Ministry of Forests and Fauna like [a high ranking forestry official]...who are in connection with some concessionaires, village chiefs... Concessionaires will bribe these officials and go for illegal logging.”

Another fundamental issue arising from the presence of non-collusive corruption in Cameroon is that the government has done little in the way of setting up an ethical standard to which concessionaires must adhere. To this end, the government has little ethical leverage over concessionaires, has lost its credibility as an effective regulator, and has difficulties in holding concessionaires accountable for any illegalities. As one leader of a civil society organization in Lomié located in the East Region of the country puts it:

“The government cannot point fingers at concessionaires and other small companies that are logging illegally because they [the government] are also corrupt... But our government is not clean and cannot hold companies [responsible] for logging illegally... If you are corrupt, what do you expect from others...? The bottom line is that the government has not set a good example for others to copy.”

As part of the national forest policy, Order No. 00122/MINEFI/MINAT of 29th April 1998 states that the creation of a management committee responsible for managing forest royalties is mandatory in all sub-divisions and villages where forest concessions are located. According to Oyono et al. (2005), a management committee at the sub-division level is under the supervision of two administrative authorities (the ‘*sous-prefet*’ and mayor), while for villages, the committee is headed by a chairman and four to five village members. Cases of corruption, as well as embezzlement of forest royalties by members of the sub-division and village management committees in the East Region of the country, have been reported (Assembe, 2001; Efoa, 2001; Kouna, 2001; Oyono, 2001; Oyono et al., 2005). These corrupt practices have served to feed illegal logging practices, especially within concessions.

##### 4.2. Poverty

Poverty is another factor that leads to illegal logging in Cameroon. In a nationwide address to the young on February 10, 2007, the President of the Republic of Cameroon stated:

“For as I have often said, the future of a country lies with its youths. You are the future of Cameroon. You must be keen in preparing to build the Cameroon of tomorrow. As you are aware, my ambition in this respect is to modernize our country and, at the same time, to roll back poverty which is still widespread in our society” (The Post Online, 2007).

Clearly, as this quote illustrates, Cameroon's economy is weak. Most Cameroonians earn low wages and work long and tedious hours.

Due to the high rate of unemployment, many citizens have been forced to engage in criminal activities and other unlawful practices. The Human Development Index<sup>6</sup> for Cameroon was 0.532 in 2005, giving the country a comparatively low ranking of 144th out of 177 countries surveyed (UNDP, 2005). Unemployment stands at 30%, while the level of illiteracy (32.1%) is comparatively low (CIA, 2008). In 2007, the GDP per capita was estimated at US\$ 2200, and Cameroon is one of the most heavily indebted countries of the world (CIA, 2008). In the final analysis, 50.6% of the population live on less than US\$ 2 per day (UNDP, 2008), with most of the impoverished (87% in 2007) being rural dwellers (World Bank, 2009).

Kaimowitz (2003) argues that most subsistent farmers, indigenous people, and local communities are poor and ill equipped to carry out the paperwork required to fully engage in forestry activities in a legal manner. Cameroon's forest communities are by no means immune to this situation, which has led to increased illegal logging activities both by the informal sector as well as by private individuals harvesting trees illegally for subsistence purposes. A local resident in the East Region of the country provided his perspectives on the situation:

“Look at how poor we are in this village... There is no money and no facilities and jobs for us...it is very difficult. I do not want to steal logs from [the public] government forests like some people do in this village; to sell and get cash.”

A further problem related to the abject poverty conditions in Cameroon is the lack of adequate education in the country. This can have a bearing on illegal logging in so much as many individuals engaged in these activities may do so because they lack fundamental knowledge regarding the importance of higher value wood products (for instance, value-added wood products<sup>7</sup>) as a means of achieving socio-economic and ecological sustainability. As a result, illegal operations – especially in the informal sector – tend to manufacture lower value commodity wood products like lumber and timbers that typically do not generate as much wealth and employment.

#### 4.3. Conflicts

Conflicts are commonplace in Cameroon at many levels and can ultimately lead to increased levels of illegal logging. At the very least, conflicts do not help in curbing illegal logging activities in Cameroon. For instance, inter-ministerial conflicts affect forest governance in Cameroon, a case in point being the protection of Cameroon's forests. The Ministry of Environment and Nature Protection (MINEP) has the mandate to articulate, execute, and assess the government's policy in relation to the environment (Republic of Cameroon, 2005). However, the forestry sector and its policy is formulated, evaluated, and implemented by a different ministry, MINFOF. This has resulted in conflicts between these two ministries, and as a result, some forestry firms may be using these ‘cracks’ in the system to operate illegally. A government official with MINFOF noted that:

“We are trying to stop this illegal logging, but still, we have conflicts at times with another ministry like MINEP, especially when you look at the problem of EIA [Environmental Impact Assessment] in the forestry area that is validated by MINEP and not us. This is a problem.”

Intra-community conflicts (conflict within forest communities) are also prevalent in many forested communities of Cameroon.

<sup>6</sup> The Human Development Index “looks beyond Gross Domestic Product to a broader definition of well-being” (UNDP, 2005, p. 1).

<sup>7</sup> Value-added wood products manufacturing is defined as: “production activities that transform primary products (like lumber and panels) into secondary wood products like furniture, pallets, and engineered building products” (Delong et al. 2007, p. 2212).

Notable examples include logging trucks being barricaded and forest workers being held hostage in forest camps by forest communities (Oyono et al., 2005). These conflicts only serve to fuel illegal logging activities in the informal sector of the economy, perhaps due to their lawless nature or simply because they tend to occur in very remote areas.

Furthermore, because of the transfer of powers regarding the management of forest royalties to village management committees, there is currently a “conflict of precedence” between traditional chiefs and the village elites who make up these management committees (Oyono, 2005), which has been observed in the East Region of the country (Efoua, 2002; Oyono, 2005). As one senior official from MINFOF describes the situation:

“In the East Region, one observes competition between the chiefs of villages and the elites of the common interest groups... The village chiefs are angry that these elites have become arrogant and more respected and are obeyed in the villages than they [the chiefs] who are traditional custodians of the land... Many chiefs boycott meetings organized by these elites or even disrupt them... Some of these disgruntled chiefs are involved in illegal logging as well.”

#### 4.4. Licensing schemes

There is growing concern among stakeholders regarding the efficacy of forestry licensing procedures. This is especially the case for community forestry in Cameroon. Specifically, the contention is that the costs of procuring community forest licenses discourages many small-scale firms and private individuals in forest communities from registering as an official business, and hence, operating legally. As Kaimowitz (2003) explains, despite provisions for community forestry in Cameroon's 1994 forestry law, the high cost incurred by communities in formulating a management plan is a fundamental deterrent to the creation of many community forests in the country.

In addition, the length of time required for the registration process is also a significant roadblock for many potential community forest applicants. Many local residents from the forest community of Payo in the East Region of the country lamented that their application for the formation of a community forest had resided in Yaoundé for more than a year without approval. Alemagi (2010) provides a quote from a leader of a forest community in the Littoral Region of the country, who stated:

“...it takes about 18 months [on average] to obtain a community forest license in the country [Cameroon] and the procedure for getting this license is very time consuming. At times, we have to travel to the capital [Yaoundé] several times before the process is completed, so we think our government needs to do something about this.”

Arguably, the extensive timeline associated with obtaining licensing schemes for forestry operations in Cameroon is one of the underlying causes of illegal logging. As a result of this lengthy duration, some private individuals and operators in the informal sector (especially those depending on cash returns from logging for daily survival) are unable to wait for the evaluation of their applications for community forest licenses. In other words, the bureaucratic process forces them to engage in illegal logging.

#### 4.5. Usurpation of property rights

Forest management in Cameroon is very centralized, with legislative provisions favoring this mode as a means of apportioning forest use. Importantly, these centralized state forest management laws have served to usurp property rights of forest communities. Until

2008, 96% of Cameroon's forest (estimated at 19,631,000 ha) was completely under state ownership and control (Mbile et al., 2008). Still, communities (or individuals) interested in forest enterprises must obtain a license from the relevant government authority as a fundamental prerequisite for forest exploitation. However, this is further complicated by the fact that forest management committees appointed by the state at the regional level to manage forest royalties are disconnected from the rest of the communities and are not accountable to them (Oyono, 2001; Bigombé, 2003; Oyono et al., 2005). It is reasonable to assume that this usurpation of local forest rights further fuels illegal logging. As one local resident of the Banga Bakundu village in the Southwest Region of the country stated:

"I don't know why almost all the land and forests in our village are a 'no go' area [public forests] because we have been living in this village for a very long time and I think that this is our ancestral land...that is why I think many chiefs are selling this 'no go' forest [public forests] to people who want to farm because, as you know, we need to grow crops for ourselves and [our] families and to get some money too."

The precarious relationship between concessionaires and forest-dependent communities appears to be exacerbating an already frustrating situation. At the root of this problem are the favorable taxes and investment initiatives that have been crafted and implemented to lure foreign investment in the forestry sector. As a result, most concessions – referred to as Forest Management Units ('Unités Forestière D'aménagement') – have been granted to concessionaires. Forest communities have questioned this system of forest allocation in light of the challenges they encounter when trying to secure concessions. The problem is especially acute in the Littoral Region, where two much sought after Forest Management Units were awarded to two concessionaires (Oyono, 2009). In fact, by the end of 2008, the state had granted seventy-two Forest Management Units to concessionaires throughout Cameroon, with fourteen being in process (Mbile et al., 2008).

One problem associated with this prevalence of concessions which may further fuel illegal activities is that many companies may not be meeting their corporate responsibilities to provide social assistance to communities. For example, Mindourou – a town located in the East Region of the country – is devoid of electricity, while nearby concessionaires have access to private electricity. However, the main problem with this system of granting concessionaires Forest Management Units is that it ultimately precludes communities from formally registering and participating in forestry enterprises, leading to a severe shortage of land in many forest communities, and thus, increased levels of illegal logging. The issue of land inadequacy and its correlation with illegal logging was elucidated by the head of a civil society organization in the Littoral Region who stated that:

"Most Forest Management Units are normally given to big private logging companies. Some of them are, of course, fully responsible for illegal logging...the best land is given to them by the state, while local communities, especially in this region, are having many problems with getting land and, if the government continues to give the best land to them [concessionaires], villagers will surely continue to cut illegally in order to survive."

#### 4.6. Inadequate institutional support

In Cameroon, MINFOF is the competent authority overseeing forest management. A report by AfDevInfo (2006) states that MINFOF has decentralized services at the regional, divisional, and district level in the following manner, respectively: Regional and Divisional Delegations of Forests and Fauna; District Forest Checkpoints; and Technical Operation Units. Although MINFOF continues to offer services

designed to curb illegal logging, its services may be inadequate and constitute another reason exacerbating the problem. This institution is afflicted with a series of problems. First, decentralized services are usually far away from forest communities. Thus, to receive the requisite support and assistance, some villagers are forced to commute for many miles. Moreover, government officials offering decentralized services are often obliged to travel for long distances, sometimes without a car (for example, in the Southeast Region) to monitor illegal forest operations (Pandya, 2002). Finally, limited forestry personnel is also a major issue. In the past, the then Ministry of Environment and Forests reportedly had only one staff member (without a vehicle) for every 21,000 ha of forest in the entire Southeast Region (Pandya, 2002; Siebock, 2002). Similar patterns were noted with the Ministry of Forests and Fauna employees during field visits in the Eyumojock sub-division.

In addition, the lack of adequate financial support to forest communities that accommodate logging companies is another factor that seems to be spurring private individuals to engage in illegal logging operations in order to meet basic needs. Currently, forestry laws stipulate that 10% of forest royalties must be allocated to forest communities within which forest concessions are situated (Oyono, 2005). However, communities have argued that, as forest owners, they are entitled to further compensation (Oyono et al., 2005), and some individuals may be engaging in illegal activities as a means of obtaining what they perceive to be legally theirs.

#### 5. Strategies for curbing illegal logging in Cameroon

The previous section identified six major factors underpinning illegal logging in Cameroon: systemic corruption; poverty; conflicts; licensing schemes; usurpation of property rights; and inadequate institutional support. Based on this analysis, recommendations for policy makers to consider are offered up as a means of addressing these illicit practices in the country.

Smith et al. (2003) argue that economic competition discourages non-collusive corruption as a result of its costs on the private sector, and if combined with enforced regulations designed to fight collusive corruption, can result in drastically reduced levels of illegal logging. In a centralized country like Cameroon, non-collusive corruption can presumably be contained by encouraging competition in the procurement of government services like logging permits. The current process of allocating forest concession through a competitive bidding process should be strictly followed. This, in concert with effective enforcement of regulations directed at addressing collusive corruption, should go a long way in reducing illegal logging activity in Cameroon.

To further curb corruption, accountability, transparency, rigor, and local democracy must be promoted and applied in managing forest resources and the royalties derived from them. For example, protests by villagers in Ebolowa and Mbang of the South and East Regions of Cameroon have resulted in the removal of corrupt members of committees responsible for managing forest royalties and community forests (Oyono, 2004).

It is also suggested that sustainable land tenure and livelihood programs (like community forestry) be fostered to address rural poverty and unemployment. Indeed, proponents of community-based forestry have held that, by restituting forest management to local communities, this form of forest tenure is better able to reconcile the objectives of social justice, equity, development, empowerment, and ecological sustainability and can do so in a sustainable manner (Gauld, 2000; Alemagi, 2010). For example, Ndjebet (2008) points out that community forestry implementation in the Littoral Region of Cameroon has provided some employment to villagers and has been an effective means of curbing illegal logging. One possible solution would be for concessionaires to relinquish some of their unused concessions for possible demarcation as community forests.

In terms of forest products manufactured by these sorts of smaller scale enterprises, government and civil society should be actively promoting and supporting business operations that are engaged in the production of higher value wood products like furniture, pallets, containers, and finished building products as a strategy to combat illegal logging from the informal sector. This could be achieved through financial incentives, business capacity building initiatives, and programs of knowledge dissemination related to the environmental and economic benefits of higher value wood products. Market opportunities for value-added wood products exist both within Cameroon and all over the world. As Kozak (2007) explains, higher value wood products represent a \$US 200 billion market in the United States alone.

The role of traditional chiefs as custodians of forest communities should be recognized by the state and streamlining is necessary where the duties and responsibilities of different institutions attempting to control illegal logging coincide. These sorts of reforms would serve to minimize overlapping responsibilities and, thus, decrease the likelihood of conflicts and ambiguities that continue to propagate illegality within the system.

One of the major factors underpinning illegal logging in Cameroon is the complexity – particularly in terms of the high costs and excessive timelines – for the formalization and registration of community forests. The enactment of less cumbersome and cost effective legislative procedures that enable communities to easily obtain community forests would contribute greatly to resolving the problem of illegal logging. To address this issue, it is crucial for the government to work towards the devolution or decentralization of the decision-making authority for community forests licensing to the Regional level. Not only would this hasten the registration process and undoubtedly save communities much needed funds, but it would spare community forest applicants the burden of travelling numerous times to Yaoundé to follow up on their applications.

Finally, institutional, infrastructural, and financial support for the forestry sector needs to be strengthened in order to minimize illegal logging practices in Cameroon. For example, there is an urgent need for the government to invest in providing adequate infrastructural resources (like vehicles) to monitor illegal logging practices. Perhaps more importantly, the proportion of forest royalties allocated annually to forest communities from industrial logging needs to be reexamined in such a way that these funds better satisfy the socio-economic needs of the communities in which companies reside.

## 6. Concluding remarks

Using results obtained from unstructured interviews with stakeholders and secondary data from relevant literature, this paper has attempted to outline the root causes of illegal logging in Cameroon. Fifteen years after the enactment of the country's main forestry law, and despite noble efforts on the part of civil society, clandestine logging activities continue to prevail in the country's forested regions. Systemic corruption, poverty, conflicts, licensing schemes, usurpation of property rights, and inadequate institutional support were identified as reasons underlying these illicit practices.

Currently, the country's regulatory framework directed at minimizing illegal logging has failed to yield tangible results. To effectively address this problem, there is a need for the government to be practical and forthcoming in addressing corrupt practices within the forestry sector. Interventions in the form of sustainable alternative livelihood programs and the development of business capacity in forest-dependent communities should be a priority for the government of Cameroon.

The government also needs to streamline overlapping institutional responsibilities, recognize the role of traditional chiefs as custodians of forest communities, and enact cost effective processes for the establishment and maintenance of community forests in the country.

Adequate institutional, infrastructural, and financial support needs to be provided to relevant authorities and forest communities as well. These initiatives would serve to advance sustainable forest management in the country and indeed be beneficial to all relevant stakeholders in Cameroon.

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