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How domestic timber markets challenge reforms to curb illegal logging

The case of Ghana

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Introduction

Reforms have been launched to address illegal logging, including the European Union' Forest Law Enforcement, Governance and Trade Action Plan (FLEGT). The objective of FLEGT is to combat illegal logging though enhanced forest law enforcement and governance, including promotion of trade in legal timber products. In many tropical countries lumber produced by the informal sector by chainsaws and traded on the domestic market constitutes a considerable, yet hidden, share of the total timber harvest; this harvest and trade is by definition illegal because it takes place outside the legal framework. Since it is not captured by official statistics, this harvest and trade tends to be overlooked, and there is a lack of reliable information about it upon which policy and regulatory interventions, such as those under FLEGT, can be based.

Policy Recommendations

- Information on the size of the informal timber markets and their dynamics over time is needed in order to propose appropriate policy measures.
- Large informal markets, like in Ghana, must be attended to if policy reforms – such as FLEGT – are to arrest illegal logging. A legality assurance system and strengthened forest law enforcement will be insufficient.
- Market monitoring through vehicle observation appears a cost-effective and reliable method for gaining policy relevant data on informal timber markets.

The objective of this study was therefore to investigate the volume of lumber on the domestic market, which is predominantly produced by the informal sector, in the case of Ghana.

Method and data

The volume of lumber traded in selected domestic markets was assessed through monitoring (direct observation) of lumber-carrying vehicles. Around-the-clock observations were made over a two week period during the dry (peak) and wet (slow) seasons, respectively.

In all surveyed markets, a number of timber dealers were asked for information on the load of vehicles, i.e. the typical number of pieces of lumber and their dimensions for each vehicle type. A high and low estimate for each vehicle type was established as the mean +/- the standard deviation, respectively. These estimates were subsequently transformed to cubic meters of lumber.

The sampling strategy aimed at including the key lumber markets in Ghana. A list of markets and their relative size

Table 1: Surveyed markets (X).

Market	Region	Dry (peak) season monitoring	Wet (low) season monitoring
Tema	Greater Accra	X	
Ofankor (Accra)	Greater Accra	X	X
Agbogbloshie (Accra)	Greater Accra	X	X
Ashaiman	Greater Accra	X	X
Muus Timber (Accra)	Greater Accra	X	X
Koforidua	Eastern	X	
Oda	Eastern	X	
Nkawkaw	Eastern	X	
Ho	Volta	X	
Kasoa	Central	X	X
Cape Coast	Central	X	X
Agona Swedru	Central	X	
Mankesim	Central	X	
Takoradi	Western	X	X
Sunyani	Brong Ahafo	X	
Techiman	Brong Ahafo	X	X
Anloga (Kumasi)	Ashanti	X	X
Ahwia (Kumasi)	Ashanti	X	X
Kwadaso (Kumasi)	Ashanti	X	X

(small, medium, large) was compiled through consultations with researchers, Forestry Commission staff, and market dealers. A total of 19 markets were selected for the survey from the compiled list giving emphasis to the main markets. Due to budget limitations, the wet season monitoring was only undertaken in 11 of the 19 markets cf. Table 1.

The monitoring was carried out in 2009 and recorded 3 500 vehicle entries in the dry season and 1 594 vehicle entries in the wet season.

Results

In the peak (dry) season, a total of 115 000 m^3 of lumber was supplied per month to the 19 surveyed markets, with a low estimate at 77 000 m^3/month and a high estimate at 150 000 m^3/month. The timber inflow to the markets of Greater Accra and Kumasi (the two largest cities in Ghana) constitutes close to 60% of the total recorded volume. Also the market in Techiman (Brong Ahafo), supplying the northern regions of Ghana (as well as neighbouring countries) was among the largest. Chainsaw lumber is the main source of lumber in the markets providing for 81% of the total volume, yet with a large variation between markets.

In the slow (wet) season, the 11 surveyed markets receive some 48 000 m^3/month, with high and low estimates of 65 000 m^3/month and 31 000 m^3/month, respectively. The share of chainsaw lumber, 75%, is slightly lower than what was recorded in the dry season. The wet season monitoring consistently depicts a lower lumber inflow compared to the dry season. The supply is on average approximately half (47%) the dry season supply, yet with markets showing a varying degree of seasonal variation.

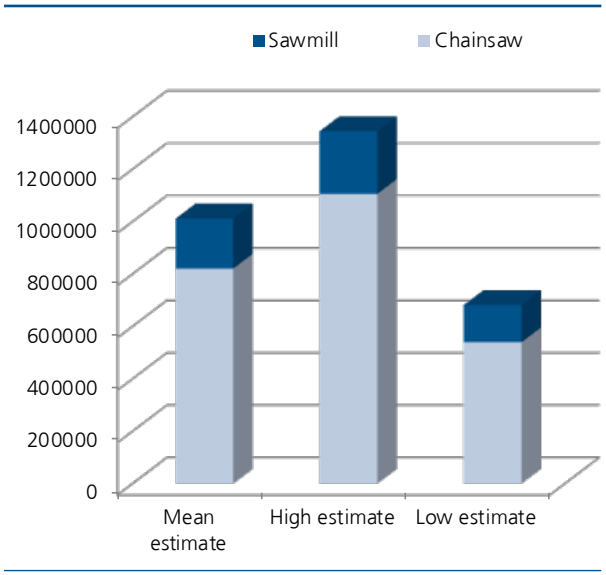

Figure 1: Estimated annual lumber inflows to the 19 surveyed markets in m^3.

Conservatively estimating the supply in the intermediate periods between peak (dry) and slow (rainy) season as for the slow (rainy) season, a total annual lumber supply for the 19 surveyed markets is estimated at 1.0 million m^3 with a low estimate of 0.7 million m^3 and high estimate of 1.3 million m^3, respectively (Figure 1). Chainsaw lumber constitutes 81%.

Discussion

Based on the results, we suggest that the total annual volume traded on the domestic market may be in the order of 1.4 million m^3/year. This estimate it based on an assumption of little exchange between the key markets, i.e. no "double counting" in our survey. 80% of the total supply is provided by the informal sector (chainsaw operators). Most is consumed domestically but a share is exported overland to neighbouring countries, primarily from the markets in Brong Ahafo (Techiman) and Ashanti (Kumasi). The results of this study suggest a much larger domestic timber market (informal timber sector) than previous studies, and an informal sector close to three times the size of the formal timber sector. These findings stress the importance of addressing the informal timber sector; and to give it higher emphasis in the FLEGT implementation in Ghana. Currently, key emphasis in FLEGT is on setting up a timber legality assurance system for the formal sector, which is of course important, but if the objective is to reduce illegal logging, the main focus should be elsewhere. This may call for policy reforms that consider tree tenure and the timber right/concession/permit regime; reforms that are not at the core of the FLEGT implementation in Ghana at present.

In terms of methods, the present pilot study suggests that direct observations of transport vehicles is a cost-effective method which could be applied in a larger scale study on the size of the domestic timber market in Ghana, possibly in combination with monitoring at overland border posts to estimate overland export. The method also has potential applications in other FLEGT partner countries.

Further information

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