



3.4 The political economy of timber governance in Ghana

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Introduction

In the Ghanaian forestry sector, several attempts to launch policy reform and improve resource governance have been attempted, but have had limited success. This is, for example, the case with the attempt to reform the forest fiscal regime. It is also the case with the legal ban on chainsaw lumbering. In spite of reform initiatives forest taxation levels have remained low, allocation of timber rights remains discretionary, and widespread illegal/criminalized chainsaw lumber constitutes almost the entire domestic timber supply (Hansen and Lund 2011; Hansen et al. 2012).

These features can be seen as a result of resistance to policy reform among an economic and political elite. Given this resistance, the characteristics of Ghanaian forest governance and the underlying causes and the resulting patterns of timber exploitation constitute a challenge to FLEGT in countering illegal logging and promoting the sustainability of tropical forests.

This is because the governance regime has served the entrenched interests of an economic and political elite in the exploitation of timber in Ghana. This elite has subsequently and with considerable success resisted any attempts at reforms that could threaten its favourable position. The outcomes of the FLEGT initiative depend on the extent to which the economic and political elite will resist it. So far, the success of reform initiatives — market based or not — appears to be limited. In addition, the governance regime has created a situation in which the domestic demand for timber is supplied by the informal sector, which export market initiatives such as FLEGT have limited prospects of addressing.



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Background

Ghana relies largely on its natural forests to supply both the export and domestic markets for wood products. The country's timber resources are located in the High Forest Zone (HFZ), which constitutes the southern third of the country and covers an area of approximately 85,000 km² (FD 1999). Approximately 16,000 km² are gazetted as forest



reserves (Affum Baffoe 2002). The area outside the reserves is denoted "off-reserves" and is largely farmland dominated by perennial crops such as cocoa (FD 1999). Timber trees are dispersed throughout this agricultural landscape, either as remnants of the natural forest or as emergent trees that have been nurtured and integrated into the farming system (Amanor 1996).

The forest reserves were gazetted under colonial rule to create a permanent forest estate while allowing for the conversion over time of the remaining natural forest into other land uses, in particular agriculture (Kotey et al. 1998).

Formal ownership of all land in the HFZ is customary; it remains with the Stools, the traditional and formally recognized land-owning communities (Aryeetey et al. 2007). Yet since 1962 timber trees have been vested in the president on behalf of the Stools and felling rights on and off reserves are granted by the state forest authority to timber companies in the form of short- and long-term timber rights (Hansen and Treue 2008).

Companies holding timber rights consist of smaller logging companies without wood processing facilities and larger firms with various forms of processing facilities and vertical integration. The former group supplies logs to the latter or to wood-processing firms without timber rights. Most wood-processing firms focus on the export market: prices are higher than in the domestic market; a log export ban shelters the domestic processing industry from international competition over raw logs; and a large number of competing chainsaw operators keep prices low (Hansen and Lund 2011). The legislation requires all wood-processing firms to supply 20% of their production to the domestic market, but this is not enforced effectively (Hansen and Treue 2008).

Most of the domestic and part of neighbouring countries' demand for lumber is met by chainsaw operators, who convert trees into lumber at the felling site (Odoom 2004). This lumber is subsequently transported to and traded in markets throughout Ghana. In 1998 all production, transportation and trade of chainsaw lumber was criminalized (TRMR 1998). Chainsaw lumber is nevertheless traded quite openly in all major towns (Hansen et al. 2012).

Resource sustainability

Resource sustainability can be assessed by looking at how the species-specific and total harvest levels compare with regrowth estimates. Off-reserves, there is no sustainable

harvest threshold against which actual harvest may be compared. In principle, the 1994 Forest and Wildlife Policy altered this by aiming at sustainable off-reserve production, but the actual practice is still extraction without replacement.

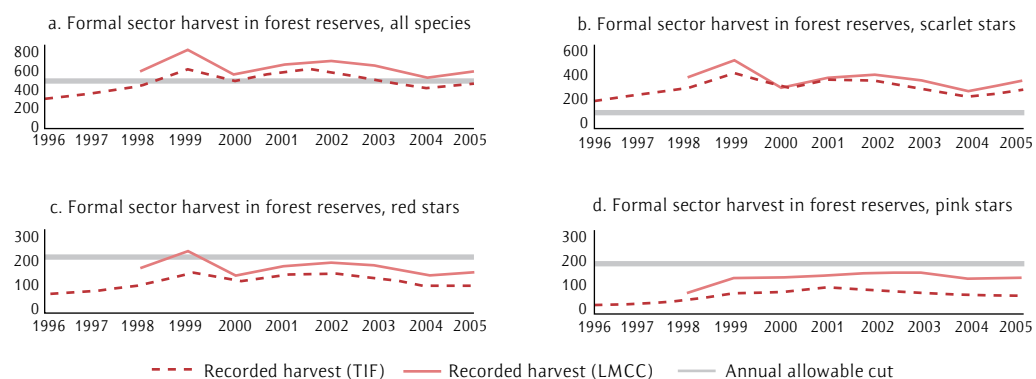
In 1996 the annual allowable cut (AAC) was set at 1.0 million m³, divided equally between on- and off-reserve areas (Planning Branch 1999). The AAC was based on data from the 1996 HFZ timber inventory (Treue 2001) and assumptions about the productive capacity of forest reserves, and assumed a controlled gradual depletion of off-reserve timber resources over a 55-year period. At the time, this threshold could be seen as the maximum harvest level that the national forest resource could sustain over the longer term. Since then, however, rampant overharvesting has, in all likelihood, implied that the resource can no longer sustain this level.

The timber harvested in Ghana falls in one of two categories; the official and formally registered harvest;¹ and a sizeable informal, unregistered harvest.

Formal harvest

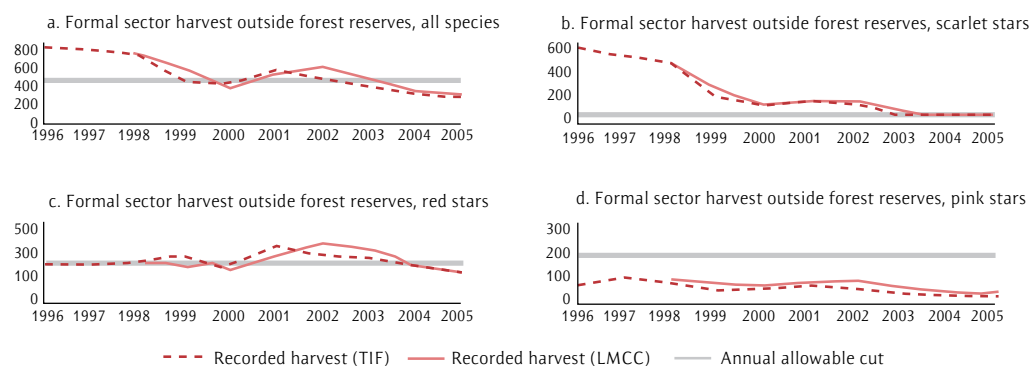
Figures 1 and 2 depict formal harvest figures for 1996–2005. Figure 1 shows that the overall on-reserve harvest has fluctuated around the on-reserve AAC, but that the harvest of scarlet stars, the group of commercially most valuable species,² has exceeded the AAC threshold by a factor of two to three throughout the period.

Figure 1. Formal sector on-reserve harvest: roundwood equivalent (m³ X 1000)



Note: See endnote 1 for explanation of TIF and LMCC

Figure 2 shows that the overall off-reserve harvest has decreased throughout the period; in 2003, it went below the 0.5 million m³ threshold. Furthermore, it shows that the scarlet star harvest has plummeted from more than 0.5 million m³ in 1996 to less than 100,000 m³ in 2005, which suggests that these species are being logged out; strengthened AAC enforcement appears unlikely. Overall, the formal on- and off-reserve harvest has fluctuated around the AAC, but with a significant, albeit decreasing (due to off-reserve depletion), overharvesting of the most valuable species.

Figure 2. Formal sector off-reserve harvest: roundwood equivalent (m³ X 1000)

Note: See endnote 1 for explanation of TIF and LMCC

The resource base is also influenced by a sizable informal harvest. Over the period 1996–2005, Hansen and Treue (2008) estimate this informal harvest to have fluctuated between 2.7 and 2.3 million m³ annually, which largely confirms earlier studies (Tacconi, Boscolo and Brack 2003 and Karsenty 2003, both based on Birikorang et al. 2001). The total timber harvest level in Ghana is likely to be no less than 3 million m³ annually.

Based on monitoring of vehicles transporting wood to lumber markets, Hansen et al. (2012), estimate the annual sales of sawn timber for domestic consumption and overland export to be in the order of 1.4 million m³. Adding the formal overseas export volume of approximately 0.5 million m³ of various products, the total annual wood sales is thus around 1.9 million m³, which corresponds to a timber (round wood) harvest of roughly 6 million m³ — twice the level indicated by previous studies.

Estimating the total annual harvest is difficult for obvious reasons. Attempts to do so leave no doubt that the annual timber harvest is far beyond the annual regrowth.

Distribution of resource rent

Understanding how the value generated from timber exploitation is distributed between different actors in society reveals who benefits from the current de facto arrangement and thus who might stand to win and lose from policy reforms.

Using international log prices, the costs of timber harvesting and transport, and species-specific harvest levels, Hansen and Lund (2011) estimated the stumpage value³ of the estimated 2005 timber harvest (0.9 and 2.4 million m³ formal and informal harvest, respectively) at US\$ 307 million. Of this, US\$ 19.9 million was collected as public revenue through various taxes and fees (see also Table 1).

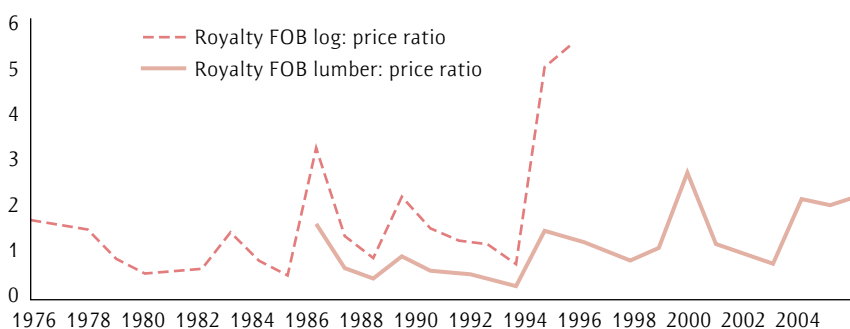
Table 1. Distribution of revenues from timber fees and taxes in Ghana, 2005

Beneficiary	Distribution of invoiced revenues	
	Million US\$	Percent
Forestry Commission	10.4	52
Office of Administrator of Stool Lands	0.4	2
District Assemblies	2.0	10
Stools	0.9	5
Traditional Councils	0.7	4
Consolidated Fund*	5.2	26
Forest Plantation Development Fund	0.3	1
Total	19.9	100

Note: Distribution under the assumption of immediate and 100% collection rate of invoiced fees, and immediate distribution. * The Consolidated Fund of the Government of Ghana, where all tax revenue is deposited.

Sources: Stumpage fee and concession rent: Calculated from current fee rates and recorded 2005 harvest assuming a 100% collection rate; export levies: FC (2006); air-dried export lumber levy: Revenue calculated from 2005 export statistics (TIDD 2005), assuming a 100% collection rate; Corporate tax: Information obtained from Ghana Internal Revenue Service (unpublished). Amount is that actually collected.

Thus, taxes and fees constituted only some 6% of the stumpage value. Most taxes and fees are collected as stumpage fees. Figure 3 illustrates the value of these fees as a share of the log and lumber export price for the period 1976–2005. It shows that timber taxation has remained at a low level. The stumpage fee: log price ratio does not exceed 4% in any year, except for 1994 and 1995, which were unusual; Ghana at that time experienced a log export boom of low-value species that triggered the complete export ban (Treue 2001).

Figure 3. Royalty rate as percentage of log export price, 1976–2005

Volume weighed royalty rate as percentage of weighed (by species prices of the recorded harvest) Free-on-Board (FOB) log export price and weighed FOB lumber export price in Ghana, 1976–2005. Note: After species-specific log export bans in 1979, 1988 and 1993, log exports of all species were banned in 1995.

The taxation level implies the existence of a large resource rent, which in 2005 was almost US\$ 300 million. A large share of this rent is lost, however, through the informal harvesting and selling of timber by chainsaw operators in the domestic market, where prices are lower than in the export market. The low prices obviously benefit Ghanaian lumber consumers. Further, rent is lost through inefficient conversion ratios of logs to lumber



by the Ghanaian timber industry, particularly by chainsaw operators. Yet, Hansen and Lund (2011) conservatively estimate that, in 2005 alone, a residual rent of at least US\$ 58 million was captured by actors involved in the export-driven exploitation of timber in Ghana.

Of the roughly US\$ 20 million collected annually as timber taxes and fees, approximately 75% is appropriated (drawn from the Consolidated and Forest Plantation Development Funds; see Table 1) by the Forestry Commission to finance its running costs and investments. The remainder is distributed to formal representatives of the rural population. How

Traditional Councils and Chiefs actually spend the timber revenues they receive and the degree to which this actually benefits the rural population is unclear, due to the absence of accounting requirements (Hansen and Lund 2011).

Since very little public revenue from timber exploitation ever reaches rural areas, let alone the general rural population, timber's main direct contribution to rural livelihoods may thus come from the Social Responsibility Agreements that timber companies must draw up with affected rural communities. Under these agreements, companies provide services equalling 5% of stumpage fee revenue. Communities also benefit from informal payments from chainsaw operators and companies.

Studies indicate that the rules governing consent by and benefits to rural communities in relation to on-reserve logging are not followed consistently (Ayine 2008; Lartey 2009). Further, in relation to off-reserve logging, the rights of farmers to give consent and negotiate compensation for on-farm logging damages to crops are grossly violated by timber companies. This gives farmers strong incentives to collude with illegal chainsaw operators, with whom they strike better deals for the (illegal) sale of the on-farm timber trees (Hansen 2011).

Reforms and resistance

Since the resource value grossly exceeds the costs of exploiting it, the processes by which exploitation opportunities are allocated become particularly important. As described above, timber rights are allocated in a discretion way to various actors.

No official statistics or information on existing timber rights and who holds them is publicly available. Based on a review of information on timber rights from various sources, Hansen and Lund (2011) estimated that, in 2005, the area of timber rights was approximately 3.2 million ha: 1.8 million ha under long-term contracts (typically between 40 and 99 years) and 1.4 million ha under short-term (typically five-year) contracts.

Almost all contracts had been allocated administratively, i.e., officers in the Forestry Commission select a firm from the applicants who competed for particular timber rights. Since the enactment of competitive bidding on April 23, 2003, only six of 50 long-term contracts had actually been allocated through competitive bidding. The remaining 44 had been allocated administratively, as had all other long-term contracts before this date.

The short-term timber rights over 1.4 million ha were allocated in the form of Timber Utilization Permits (TUPs) and Salvage Felling Permits (SFPs). Both of these are meant for a specified (limited) number of trees. TUPs are intended for district assemblies, town committees, rural community groups and NGOs for social and community purposes. SFPs are issued for the salvage of timber trees from smaller areas undergoing development, such as road construction. The data show that all TUPs — 124 in total — have been granted to timber firms, not community groups. Further, all TUPs have been granted for large tracts of forest — an average of 31.7 km² — and not a specified number of trees. Likewise, all 448 SFPs, the size of which averaged 22.9 km², had been allocated to companies.

In summary, reforms of timber rights allocation as stipulated in the 1994 Forest and Wildlife Policy, most notably competitive bidding, have been enacted only and in general not implemented. The same goes for numerous attempts to increase the taxation level, stumpage fees in particular (Hansen and Treue 2008). Accordingly, low official timber taxes and discretionary allocation of timber rights characterize the sector. This suggests that timber rights are allocated in exchange for payments and/or political support, e.g., in connection with election campaigns. What other rationales could apply? The large number of short-term timber rights allocated to firms with no track record in the forestry sector may be explained as rewards, possibly for political support, that may be turned into cash through joint ventures with or outright sale to active timber companies.

Discussion and conclusion

The FLEGT action plan in Ghana combines market-based incentives in the form of access to export markets with strengthened law enforcement. Compared to a purely voluntary market-based instrument, such as forest certification, FLEGT appears to be a stronger measure for invoking behavioural change. FLEGT, however, seems to be confronted by a number of challenges to effectively contain illegal logging and induce sustainable forest management in Ghana.

First, the sheer size of the domestic lumber market implies that reforms must deal with it as well as the export market if ambitions of legality — not to mention sustainable forest management — are to be met. This will be a challenge, since the domestic timber supply chain is largely decoupled from the few large companies that account for most of the overseas export. Hence, additional regulation, with the indirect incentives of the promise of EU market access for the nation, is needed. It seems doubtful, however, that



national politicians would back the enforcement of a legalization that effectively and significantly reduces supply to the domestic market just to secure the EU as an export market. This would lead to an immediate price hike on domestic timber that the vast majority of the population would hardly appreciate.

Second, the market share of the EU is declining. The EU share of Ghana's total wood export volume has dropped from around 60% in 2000 to around 25% in 2010 (TIDD 2010), which weakens it as driver of change. The size of the informal lumber market in terms of traded volume is double the size of the export market and ten times current exports to the EU and the U.S. (TIDD 2010) — the markets of immediate relevance for legal timber products.

For FLEGT to succeed in Ghana it must incorporate broad-based legal reforms of forest governance. In short, the scarcity of sustainably supplied timber should be reflected in the price of standing timber. That would require substantial changes in tree tenure and, hence in the allocation of timber rights. If individuals and Stools could own naturally occurring off-reserve timber trees, for example, and market them freely, this would significantly improve their incentives to cultivate timber trees. It remains doubtful, however, whether the FLEGT initiative can promote such reforms, as these would run counter to the interests of the economic and political elite who benefits from the control of timber taxes and official timber rights.

If, in the pursuit of addressing illegality, FLEGT ignores the illegitimacy of current forest and timber laws and the shortcomings of the actual governance practices, then the domestic market — including the lack of incentives for rural people to manage and nurture trees — is likely to undermine both legality and sustainability. Indeed, the VPA agreement does make reference to the need for broader reforms, but not in a very specific manner. Although the FLEGT process in Ghana has included a broad-based stakeholder consultation process, it remains to be seen whether this momentum can be maintained and, more importantly, whether it can foster actual reforms.

Endnotes

1. The statistics are on (i) bole volume of all harvested trees maintained by the Resource Management Support Centre (RMSC) of the Forestry Commission; and (ii) log statistics maintained by TIDD (Timber Industry Development Division). The former is denoted TIF because the information is recorded in Tree Information Forms (TIF), which are used to invoice the timber operator for a volume-based species-specific stumpage fee. Log data is recorded in Log Measurement and Conveyance Certificates (LMCC), which must accompany logs during transport from felling to processing sites. See also Hansen and Treue (2008: 580).
2. In addition to scarlet star species, there are red and pink stars of lower quality and price. Categorization also reflects species scarcity, with scarlet stars being the most threatened and pink stars the least.
3. This is the price a contractor would be willing to pay, in theory, for access to standing timber.

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