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Missing the Forest for the Trees: Ekiti State's Quest for Forestry Revenue and its Impact on Forest Management

Giovanni Occhiali
and Michael Falade

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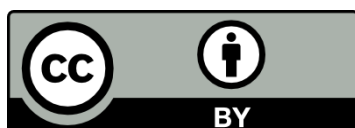
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Summary

Forests are important socio-economic assets in many low-income countries. However, they are often over-exploited as governments do not sufficiently valorise them, including by taxing them inefficiently. This is the case across Nigeria, where forest management and taxation has been effectively decentralised from the federal government to individual states.

In this paper we assess the current forestry tax regime in Ekiti State, one of the eight Nigerian states where forests represent more than 50 per cent of land area, and where forest revenue has been historically relevant. Based on 16 interviews with government state officials, forest officers and actors from the industry, as well as data from the Forestry Commission, our analysis suggests that the ongoing depletion of forest resources in the state seems to be partially connected to an excessive focus on their capacity to generate revenue. The conceptualisation of the Ekiti State Forestry Commission as a revenue-raising agency rather than a management one, a continuous drive to extract revenue from the sector through outdated tax rates, and a view of the industry potential disconnected from the existing stock, all perversely led to a lower contribution from forestry to the state budget.

While there is potential to reform both the structure of forestry taxes and their method of administration, evidence from our interviews suggests that priority should be given to enforcing a ban on forest exploitation for a period that is long enough to allow for its re-growth, at least in government reserves. This will require substantial sensitisation and engagement with actors in the sector, as well as increasing the monitoring capacity of the Forestry Commission. The Forestry Commission does not currently have enough staff to guarantee the enforcement of existing legislation, let alone a ban on all forest activities.

Keywords: forestry taxes; natural resource taxation; sustainable forestry management; Ekiti State; Nigeria.

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Acronyms

EFL	Ekiti Forestry Law
EIRS	Ekiti Internal Revenue Services
FC	Forestry Commission
IGR	Internally generated revenue
LIC	Low-income country
MDAs	Ministries, Departments and Agencies
MT	Metric tons
SFM	Sustainable forestry management
SSA	Sub-Saharan Africa

1 Introduction

Forestry is an important component of the national economy of many low-income countries (LICs). Preservation of forests has long been recognised as fundamental for achieving sustainable development, due to their role in regulating climate and the many services they provide (Katila et al. 2020). Nevertheless, deforestation rates, although decreasing over the last decade, remain excessively high especially in tropical areas of Latin America and sub-Saharan Africa (SSA). Less than 5 per cent of tropical forests are sustainably managed (Hansen and Lund 2018). This poses a serious challenge to the development of climate resilient economies in these regions, and directly contributes to climate change. Land use change and forestry represented 56 per cent of African greenhouse gas emissions in 2016, as forest wood is converted into biomass for fuel, and deforested areas are converted to agriculture (AfDB 2020). Across SSA more than 7 million people are employed in the formal and informal charcoal economies (World Bank 2021), harvesting trees to satisfy the need for household energy. This, and the need for more agricultural land, are among the main drivers of forest degradation (Tegegne et al. 2016). There is no single policy solution that can guarantee that trends in deforestation will be halted, and forest resources will be more sustainably managed. Land use regulations, stronger control of forestry industry practices, more public investment in forest management, and better tax and subsidy policies, must all play a role.

These trends are observable in Nigeria, whose forests constitute about 17 per cent of the Guinean primary forest in West Africa – one of the world’s ten largest rainforests (Butler 2020). About 3,800 km², Nigerian primary forest and reserves host an abundance of biodiversity, and contribute to locking up about MMT1,085 of carbon (Adekola and Mbalisi 2015; UNEP 2017). Nigeria’s forest is gazetted into 445 reserves, with forest habitats ranging from rainforests in the south, to savannah in the north (Igu et al. 2017; Imasuen et al. 2013). Yet over the last three decades Nigeria has also often ranked as a country with one of the highest net losses of forest area in the world. It was fifth in absolute value for the period 1990-2000, and fourth 2000-2010 – when it had the third highest rate of net loss globally (-3.7 per cent, FAO 2010). In addition to loss of biodiversity, deforestation has a significant impact on forest ecosystem services, leading to an estimated total loss of ₦91.9 billion (over US\$500 million) in 2013 (UNEP 2017).

It is harder to quantify the additional impact that deforestation has on mobilisation of domestic revenue. Reliable forestry revenue figures for Nigeria have historically been hard to obtain. The longest series of figures are in an FAO study from 2001, which aims to gather evidence of forest revenue and expenditure systems across Nigeria. This study, which covers the period 1991-1999, contains no data for 8 of the 36 states that existed at the end of the decade (FAO 2001).¹ Between 1996 and 1999, the top five states in terms of average forest revenue generation – Ondo, Osun, Ogun, Edo and Ekiti – accounted for 84 per cent of total revenue, which mostly originated from charges on the timber industry (FAO 2001). Not surprisingly, all these states are in the South-West and the South-South Zones, which account for over 83 per cent of the Nigerian land area with a dense forest cover (Butler 2014).

¹ The number of Nigerian states varies over the period 1990-1999. Nine states were established in 1991, bringing the total to 30 from the previous 21. A further 6 were established in 1996, bringing the total to the current 36 (see Adeyemi 2013 for a discussion of the politics of state creation in Nigeria).

Historically forest charges in Nigeria were introduced during the early colonial period,² aiming to discourage farmers from cutting down trees as part of shifting cultivation practices (FAO 2001). These were integrated into the forestry management system relatively early (von Hellerman 2007). These charges remained in place as more and more forest land was gazetted as reserves, as they were seen as a useful way to generate government revenue (FAO 2001) – something that is still true today. Indeed, the Nigerian National Forest Policy of 2006 openly states that forests are seen by state governments mostly as a source of revenue through the promotion of timber exploitation, although it also mentions that the contribution of this industry to deforestation remains unknown (Nigerian Federal Ministry of Environment 2006).³

The scope of the paper is to shed some light on whether a connection exists between the current fiscal treatment of forest resources and their over-exploitation, focusing on the case of Ekiti State. The choice of Ekiti State is based on a series of considerations. First, forestry management in Nigeria is completely decentralised to state level, with Forestry Departments or Forestry Commissions in charge of establishing and administering forest taxes and charges (FAO 2001; Oso and Babalola 2021). Given the great variation in administrative practices across the federation, and the complexity of obtaining information from government stakeholders (FAO 2001), the most appropriate level at which to conduct in-depth analysis is that of the state. Second, from the little information available, Ekiti State has historically accounted for a significant share of forest revenue, and 43 per cent of its land area was considered 'densely forested'⁴ in 2014. Third, there are clear indications that significant deforestation has taken place in the state over the last few decades, with the area of forest cover decreasing from 74 per cent in 1972 to 59 per cent in 1991, 43 per cent in 2000 and 36 per cent in 2017 (Olorunfemi et al. 2020).⁵ Fourth, the fact that Ekiti State passed its own Forestry Law in 2016,⁶ establishing a Forestry Commission and setting forestry charges, demonstrates a particular interest for the management of the sector.

Our study is based on 16 in-depth interviews with stakeholders from the public and private sector who are involved in the regulation and exploitation of forestry resources, as well as analysis of both public data and data made available by the Ekiti State Forestry Commission. Evidence from all our interviews supports the idea that an excessive focus on generating revenue from forestry, including through the establishment of revenue targets for the Forestry Commission, has played a significant role in driving over-exploitation of resources. Perversely, this has led to a steadily declining contribution from forest revenue to the state's budget. This has also been hindered by a lack of monitoring and enforcement capacity in the underfunded Forestry Commission, and a lack of transparency in both the level of forestry charges and the process for paying them. Given the current situation, rather than focusing on reforming revenue charges, the best course of action seems to be to establish a ban on exploitation of Ekiti forest reserves – logging might still be allowed in free areas, which still show higher productivity. The Forestry Commission should also be guaranteed its statutory allocation, without which it cannot be expected to carry out its mandate – of which revenue generation is only a component.

² Scientific forestry management was introduced in the protectorate of Southern Nigeria in 1903 (von Hellermann 2007), and the first forest law containing forestry fees was passed in 1908 (FAO 2001).

³ Nigeria started the process of updating the National Forest Policy of 2006 in 2017. A 'Revised National Forest Policy 2020' was adopted in November 2019 and launched in April 2022. However, the text of the revised policy could not be located anywhere online, despite the best efforts of the research team.

⁴ That is, tree cover more than 50% of a hectare (Butler 2014).

⁵ The mismatch between this and the previous statistics is due to a different definition of forested area, which Olorunfemi et al. (2020: 668) defines as 'Evergreen and Deciduous Broadleaf forests, medium and less dense forests'.

⁶ Making it only the third state to pass its own Forestry Law since 2000 according to FAOLEX.

The rest of the paper proceeds as follows. Section 2 summarises some of the literature on forestry taxation in tropical countries, with a focus on case studies from sub-Saharan Africa. Section 3 briefly presents our methodology, and discusses the limitations of our approach. Section 4 introduces the institutional set-up of forestry management in Ekiti, covering the provisions of the Ekiti Forestry Law of 2016, which set up the Forestry Commission, and discussing its formula for revenue retention and budget allocation. Section 5 discusses revenue collection from the forestry sector, comparing actual collection with the targets set by the Forestry Commission, and showing both a high variance in main revenue headings and a declining trend in overall contribution. In section 6, we argue that the declining forest stock in the state is connected with the conceptualisation of forests as revenue-generating assets, and the Forestry Commission as a collection agency, leading to deprioritisation of afforestation activities and declining morale among forestry operators. Section 7 briefly discusses two potential ways forward – a reform of the fiscal treatment of forests to incentivise sustainable harvesting, and a ban on exploiting timber in forest reserves. Section 8 concludes.

2 Tropical forestry taxation in low-income countries

The literature on tropical forestry taxation and its connection with sustainable forestry management (SFM) in low-income countries can be divided into two main branches – one based on theoretical economics, and the other grounded in political economy (Hansen and Lund 2018). Studies from the former are mostly concerned with determining the optimal set-up of forest taxes and allocation of harvesting rights to promote SFM and maximise revenue (Gray 2002). While in theory the two could go hand in hand, in practice there is often a trade-off between them when forestry departments do not have capacity to enforce regulation (Amacher et al. 2001; Gray 2002). In many LICs the high reliance on downstream charges – such as royalties or export levies – seems to suggest that revenue mobilisation from the sector takes precedence over SFM (Gray 2002; World Bank 2021). This is because upstream charges – such as stumpage fees and taxes levied on standing trees – provide a greater incentive for the efficient transformation of trees into timber, as they are levied on the whole volume of the logs obtained from felling, rather than processed products (Karsenty 2000; World Bank 2021). However, upstream charges apply equally to both timber for export and to the domestic market, therefore potentially incentivising local processors to seek illegally sourced wood (Karsenty 2000), a real threat in a context where monitoring capacity is limited.

As downstream charges are easier to collect, and less prone to misappropriation given their collection in visible chokepoints (Karsenty 2000, 2016; World Bank 2021), they will probably remain more popular across LICs. Further, in practice stumpage fees are often set at a low level, homogeneously across species and age, providing little real incentive for sustainable harvesting (Karsenty 2000; Gray 2002). In fact, they push operators to expand the size of their concession in a search for high value trees, leaving those with a lower value standing (Hansen and Lund 2018). Area fees could in theory help to reduce this issue, especially if they are set through an auction, but this has proved impractical due to the poor quality of forest inventories in LICs. Even when they are present, they also remain too low to

incentivise the use of all economically viable species (Karsenty 2010), even though these could contribute substantial revenue (Hansen and Lund 2011).

Whether high or low rates or forest taxes are more conducive to SFM has been hotly debated. Those supporting high rates argue that low ones incentivise short-term rent-seeking (Hansen and Lund 2018), while also reducing revenue from the sector. This deprives forestry departments of the funds required for monitoring and enforcement, and disincentivises forest preservation on economic grounds (Vincent 1990; Amacher et al. 2001; Gray 2002). Those arguing for low rates maintain that compliance in the sector is low, so high rates may incentivise illegal logging and place an unfair burden on the few firms that do comply (Leuth et al. 2000). High rates, combined with preferential tax treatment for vertically integrated operators (Karsenty 2000), or rebates for legally and sustainably sourced timber (World Bank 2021), have been proposed as a potential solution to this conundrum, but these require a lot of administrative capacity and penalise smaller operators.

On the other hand, political economy analyses focus on assessing why, after decades of forestry tax reforms, LIC governments only collect between 3 per cent and 30 per cent of forest rents (World Bank 2021), defined as the difference between the cost of felling a tree and its price on the market (Gaudet and Lasserre 2015). This strand of literature stresses that patron-client relationships between politicians and timber operators (Hansen and Lund 2011; Carlsen and Hansen 2014), and rent-seeking behaviour of regulators with discretionary power over allocation rights (Ross 2001; Cerutti et al. 2013), play as much a role in low collection as low enforcement capacity. Indeed, whether any revenue is redistributed to local communities also impacts whether they support the enforcement of regulation, or contributes to their flaunting it (Karsenty 2000; Hansen and Lund 2011; Hansen 2011; Sungusia and Lund 2016). Their buy-in is especially relevant, as illegal and informal timber production accounts for up to 90 per cent of LIC production, and forest managers lack the information required to identify illegal loggers – something that local communities could help with (World Bank 2021). The fiscal treatment of agricultural land is also relevant, as having lower tax rates for this than forested land signals that the government prioritises the expansion of agriculture over forest conservation – these should be looked at in conjunction (World Bank 2021).

Some case studies on tropical forest taxation in SSA are now quite dated, and those assessing the structure of specific fees (Lund 2007; Krellove and Melhado 2010) may not be very informative about current set-ups. On the other hand, various studies of the political economy of timber taxation in Ghana (Hansen 2011; Hansen and Lund 2011; Carlsen and Hansen 2014), are more likely to offer relevant lessons. These show that there is significant under-collection of tax revenue from forestry, connected to outdated tax schedules, inefficiencies, and price manipulation of timber destined to local markets. Further, the stated need to jointly develop the forestry sector and guarantee forest conservation led to a concentration of discretionary allocative power in the hand of political actors, who use it for rent-seeking opportunities – which leads to the opposite. Given these circumstances, it is not surprising that most forest communities are more interested in expanding their agricultural land than trying to fight for control of revenue from timber. However, communal control of forestry revenue can also have perverse effects – in Tanzania, an upward revision of tax rates in newly-established communal forest reserves displaced logging activities to unprotected areas, depriving communities of the capacity to determine land use (Sungusia and Lund 2016).

3 Methodology

Our study relies on a combination of desk reviews of published reports and legal material, key stakeholder interviews and data analysis. First, we reviewed both the admittedly scant literature on forestry management in Ekiti State and in the wider South-Western Zone, and the relevant Nigeria-wide and Ekiti-specific forestry legislation and policies. These documents helped to provide a background of the institutional structure of the forestry sector in the state, as well as to inform both our choice of stakeholders and the topics to be covered during key informant interviews. Second, we carried out 16 in-depth interviews with both public and private stakeholders. The public stakeholders interviewed were three senior managers in the Ekiti State Forestry Commission and two forest officers deployed in the northern and the southern part of the state respectively; two senior managers in the Ekiti Ministry of Agriculture and Food Security; one senior manager in the Ekiti Ministry of Environment and Natural Resources; and one senior manager in the Ekiti Ministry of Finance and Economic Development. From private stakeholders, we interviewed one independent forestry consultant who was earlier a senior manager in the Federal Ministry of Forestry; one senior member of the Ekiti Association of Saw Millers, one senior member of the Ekiti Timber Traders Association; one representative of the Ekiti Tree Growers Association; and two representatives of forest communities. While the topics covered varied slightly across type of stakeholder, all interviewees were asked about their view of the current state of Ekiti forest resources, including their management practices, the challenges associated with them and potential for reform, and their opinion of current forestry fiscal charges. Finally, we analysed all publicly available data from the Ekiti Forestry Commission and the Ekiti Ministry of Finance and Economic Development, including the contribution from forestry revenue to the state budget, the targets set for the Forestry Commission, and timber out-turn from both forest reserves and free areas.

While we argue that the combination of these different types of data allows us to obtain a fairly reliable picture of the connection between revenue from forest extraction and the overall management of forest resources in Ekiti, some limitations must be kept in mind. First, most of the public stakeholders interviewed were in senior managerial positions, so their views do not necessarily reflect those of more junior officials – although we do not find relevant differences between the opinions they expressed and those of the two forest officers. Further, we cannot exclude that the current set-up of forest charges allows them to obtain private rents, although this does not seem likely given their widespread support for a ban on forest activities. Second, given the limited disaggregated data available at the Forestry Commission, we could not verify some of the claims made about the relative contribution to revenue generation in the state from different categories of forested areas, or from different segments of the industry. Third, while it would have been interesting to gather the opinions and actual revenue contribution of various actors directly involved in the timber sector, rather than only from their sectoral associations, carrying out a wider representative survey was outside the scope of the study.

4 Institutional organisation of Ekiti forestry management: set-up and challenges

Since the state was created in 1996, the forest resources of Ekiti have been managed by a Forestry Department in the Ekiti Ministry of Agriculture, and later in the Ekiti Ministry of Environment and Natural Resources. However, after the Ekiti Forestry Law (EFL) was passed in 2016 (Ekiti State Government 2016), Ekiti became the second state in Nigeria after Cross River to create a semi-autonomous Forestry Commission (FC). Nominally overseen by the Ekiti Ministry of Environment and Natural Resources, Ekiti FC has a variety of functions, set out in the fifth article of the EFL. These range from the regulation of the activities of all public bodies as they relate to the use of forest resources, to the promotion of sustainable forestry management and wildlife conservation. Interestingly, revenue generation is only mentioned in relation to the promotion of ecotourism (article 5, paragraph f) and in the last paragraph, which reads: '(j) perform such other functions which are incidental to conservation and sustainable management of the State's forest resources and revenue generation.'⁷

It seems that, at least in the mind of the legislator, generating revenue was a secondary function of the FC relative to the conservation of forest resources. This can also be seen in the actual scope of the law, which is: '[To establish] THE EKITI STATE FORESTRY COMMISSION: PROVISION OF SUSTAINABLE FOREST MANAGEMENT, PRESERVATION AND PROTECTION OF WILD LIFE RESOURCES AND ECOSYSTEM IN EKITI STATE AND OTHER RELATED MATTERS.'⁸

As can be seen, revenue generation is not among the explicit reasons to either enact the EFL or establish the FC. Further, the EFL also ringfences a significant proportion of the revenue from the sector for forest regeneration and afforestation. This is demonstrated by the establishment of a Forestry Trust Fund (article 39) and of a Timber Development Levy Fund (article 40). The funds for the Forestry Trust Fund include, among others, 25 per cent of all fees received or collected under the EFL (article 39, sub-section 2(a)), and should be used for 'the purposes of regeneration or afforestation of particular forest reserves or generally for forest regeneration and afforestation in the State' (article 39, sub-section 3). Similarly, all Timber Development Levies (equal to ₦200 per economic tree felled, schedule A) should be directed in the Timber Development Levy Trust Fund (article 40, sub-section 1), which should also be used 'exclusively for regeneration of degraded forests' (article 40, sub-section 2). Hence, while nothing prevents a portion of forestry revenue from being used for local development, the main scope of the FC is not that of a revenue-generating body, but rather – as expected – that of sustainably managing forest resources. In theory, the EFL gives the FC both the funds and the power (article 6) to carry out this mandate.

However, the general feedback provided by all stakeholders interviewed from the FC paints a different picture.⁹ To start with, while in theory the EFL gives power to the FC to regulate forest-related activities of all Ekiti's ministries, departments and agencies (MDAs), in practice they have concurrent claims on forest resources in particular instances, and can therefore influence forest management. While the FC could aim to mediate among different MDAs with competing mandates on forest resources, this is made difficult by the continuous state of

⁷ Ekiti State Government (2016), p. 9.

⁸ Ekiti State Government (2016), p.7

⁹ Interviews with Ekiti State Forestry Commission, June 2022.

under-funding that the FC finds itself in. While consistent data on funding to the FC was not available, some information can be obtained from the financial accounts and budget appraisal of Ekiti State published by the Ekiti Ministry of Budget and Economic Planning. This is shown in Table 1.

Table 1 Budgeted and actual funds released to the Ekiti Forestry Department (2013-2015) and Ekiti Forestry Commission (2016-2018)

Year	Overhead costs			Capital release		
	Budgeted	Actual	Share	Budgeted	Actual	Share
2013	1,500,000	777,000	51.8%	500,000	150,000	30.0%
2014	3,000,000	618,000	20.6%	40,000,000	2,956,200	7.4%
2015	1,500,000	256,000	17.1%	70,000,000	0	0.0%
2016	2,500,000	352,000	14.1%	25,000,000	0	0.0%
2017	2,000,000	288,000	14.4%	15,000,000	0	0.0%
2018	2,000,000	352,000	17.6%	5,000,000	0	0.0%

Source: Authors' elaboration on data from the Ekiti State Ministry of Budget and Economic Planning, all figures in nominal Nigerian ₦.

The data available supports the claim that both the FC and the earlier Forestry Services have not been receiving the funds required to carry out their mandate. Given these figures, it is not surprising to discover that the FC is grossly understaffed, especially for uniformed field staff. One of our interviewees stated that when Ekiti was created in 1996, the Forestry Department had approximately 170 staff.¹⁰ No major recruitment has happened since, despite having fewer employees due to retirement, so:

In the year 2000, there were at least 7 uniformed staff covering about 14 towns and villages in 1 local government area. But, now in [the] year 2022, there are only 2 people, 1 uniformed and 1 administrative [staff], doing the same amount of work.¹¹

Currently, the FC workforce has around 70 people. Given the size of Ekiti forest reserves (296.6 km²), this puts staffing almost 62 per cent below the internationally recommended level for adequate forestry monitoring (Edet et al. 2017).¹² While inadequate staffing is a state-wide challenge in many public sector institutions in Ekiti, its consequences are particularly far-reaching in the forestry sector. It leads to a minimal capacity to monitor the activities of forest operators, especially as some staff do not possess the right skillset for the position they are assigned to. In addition, the almost non-existent capital releases shown in Table 1 have led to a widespread lack of equipment for both uniformed and office staff. Again, in the words of one interviewee from the FC:

¹⁰ Interviews with Ekiti State Forestry Commission, June 2022.

¹¹ Interviews with Ekiti State Forestry Commission, June 2022. There is evidence from other African countries that under-staffed government agencies with revenue-raising powers have been known to employ 'informal staff' through which they collect illicit earnings (Blundo 2006). While we cannot exclude that something similar might be happening with Ekiti FC, we have found no evidence in interviews with private sector stakeholders, although we did not probe this directly. However, as discussed below, there is an indication that this understaffing is leading to rent-seeking among the officially hired.

¹² The recommended personnel is 183 employees for every 300 km² of forested area. This only refers to forest reserves. The total forested areas in the state, including derived savannas, is 5,806 km². Understaffing of forestry-managing bodies is not unique to Ekiti, as the website from the Kwara Forestry Services reveals that they have 104 staff looking after a forested area of 5,792 km², including 32 forest reserves.

[W]e do not have a single functional vehicle to carry out our activities ... We depend on the timber contractors for movement from one location to another – the forest and patrol officers must source motorcycles to visit the forests. Also, we are still a paper-based agency, there are no advanced information and technological gadgets such as laptops, computers and quality internet services to carry out the activities in the office.¹³

These challenges have far-reaching consequences for the capacity of FC uniformed staff to carry out monitoring and enforcing activities. They also give rise to opportunities for rent-seeking behaviour, given the dependence on forest operators, as noted during one interview:

If we are to tell ourselves the truth, with the current realities, about half of the timbers felled in Ekiti cannot be accounted for because of poor monitoring and because the few forest guards are overworked. How would a forest guard move from one location to another without adequate funding and without engaging in rent seeking and collecting?¹⁴

Interestingly, the above quote comes from an interview with a senior official of the Ekiti Ministry of Finance and Economic Development, demonstrating that these challenges are recognised by some state actors. The same interviewee also admitted that there has been a material change in the retention formula for the Forestry Trust Fund, which has been reduced from 25 per cent to 5 per cent of revenue collected. This has had serious consequences on the capacity of the FC to carry out its mandate.¹⁵ However, despite this recognition, an amendment of the EFL to bring it in line with the material retention allocation seems more likely than the decision to follow the letter of the law, as the government has the power to make unilateral decisions about state agencies' retention funds. This is because most revenue-collecting MDAs have a retention allocation of 5 per cent, and there is a concern that allowing the FC to retain its currently allocated 25 per cent of revenue collected will lead to greater demands for funding from other agencies.¹⁶

Late provision of what funds are available presents a further challenge. This prevents the FC from properly planning their activities, some of which are time-sensitive as they are linked to seasonal phenomena. Since 2001 all revenue collected by any MDA in the state flows into the Treasury's single account – this includes that under retention formulas, which could instead be directed towards approved retention accounts. However, as long as these accounts are not established, what happens in practice is that the government does not release funding on time – or at all. They provide a variety of reasons, including failing to meet revenue targets – to which we now turn.¹⁷

¹³ Interviews with Ekiti State Forestry Commission, June 2022.

¹⁴ Interview with Ekiti Ministry of Finance and Economic Development, June 2022.

¹⁵ Interview with Ekiti Ministry of Finance and Economic Development, June 2022.

¹⁶ Interview with Ekiti Ministry of Finance and Economic Development, June 2022.

¹⁷ Interviews with Ekiti State Forestry Commission and Ekiti Ministry of Finance and Economic Development, June 2022.

5 Ekiti forestry revenue: contribution and collection process

The EFL gives the FC power to levy fees from both owners of private forest plantations (part V) and from the extraction of forest products from, or economic activities taking place in, forest reserves (part VII), as well as establishing a range of penalties (part IX). A summary of the existing fees, levies and penalties is presented in Table 2. These range from registration of saw blades and licensing of sawmills, to stumpage and farm fees. Clearly, almost all economic actors in the forestry value chain are subject to some form of levy. Not surprisingly, their level of compliance varies significantly, with timber contractors contributing the most revenue.¹⁸

Table 2 Comparing pre-EFL rates, published EFL rates, and those actually charged, selected fees

Forest tariff	Pre-EFL rate	EFL rate	Actual rate
Stumpage (Melicia excelsa – Iroko)	1,800	5,000	7,500
Stumpage (Tectona grandis – Teak)	2,500	2,500	3,750
Penalty: illegal sawmill installation	20,000	200,000	200,000
Penalty/lorry: billeting of teak in reserves	-	25,000	50,000
Property hammer – registration	20,000	30,000	30,000
Property hammer – renewal	10,000	20,000	20,000
Company hammer – registration	25,000	50,000	50,000
Company hammer – renewal	20,000	20,000	30,000
Toll fee – above 3.72 m (12 ft)	-	2,000	2,000
Sawmill licence: non-refundable application fee	100,000	150,000	150,000
Saw blade registration (7-14m ³ <100mm)	60,000	500,000	500,000
Saw blade renewal (7-14m ³ <100mm)	20,000	30,000	40,000
Saw blade registration (14-20m ³ 100–150mm)	100,000	1,000,000	1,000,000
Saw blade renewal (14-20m ³ 100–150mm)	30,000	40,000	50,000
Power chain saw: registration	20,000	20,000	20,000
Power chain saw: renewal	10,000	7,000	7,000
Minor forest product: firewood	1,200	1,350	1,350
Minor forest product: leaf picking	2,500	3,000	3,000
Farming Fee/ha	-	5,000	5,000
Sawn plank: 1 coach vehicle	-	2,000	2,500

Source: the first two columns of the table are from the Sixth Schedule of the EFL (Ekiti State Government 2016), the last column is copied from the unpublished updated Sixth Schedule accessed at the Ekiti State Forestry Commission in June 2022.

It is interesting to note that the level of charges contained in the EFL do not actually match those enforced by the FC. At face value this is not surprising, as the schedule was enacted in 2016, and the EFL mandates the FC to review all charges every five years. However, the discrepancy between the rates charged and those contained in the law did not arise out of an official review process, but was rather introduced as soon as the EFL was enacted.¹⁹ The

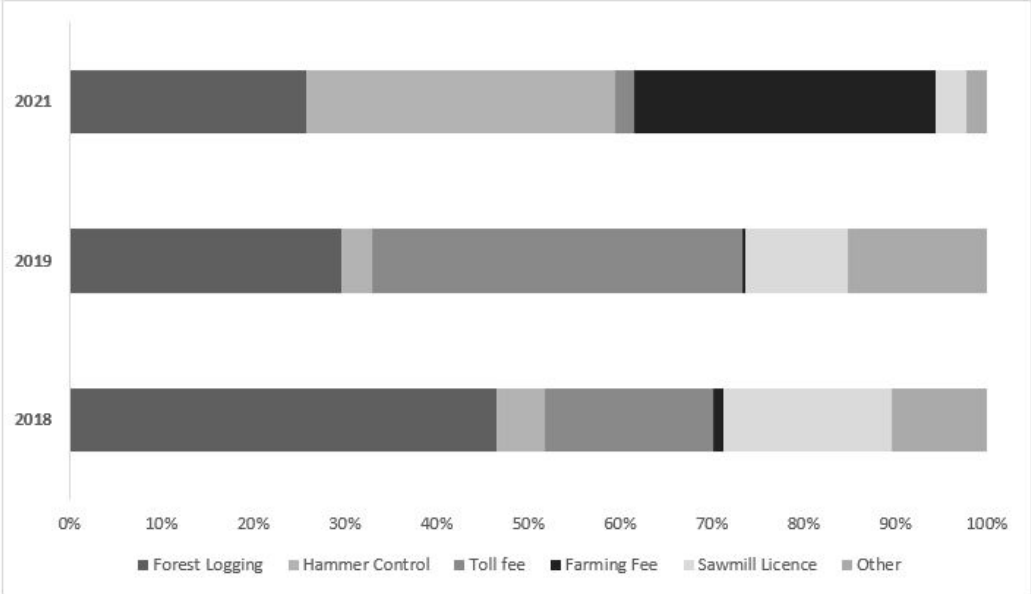
¹⁸ Interviews with Ekiti State Forestry Commission, June 2022.

¹⁹ Interviews with Ekiti State Forestry Commission, June 2022.

charges contained in the EFL were developed for the original draft bill of 2014 – the date in fact reported in the sixth schedule – and they were not revised before it was enacted two years later. Consequently, the first act of the FC upon its establishment was to review all charges included in the EFL, some of which were significantly increased to reflect currency depreciation.²⁰ However, the new rates were never formally codified or published,²¹ leading to a lack of transparency on the level of fees charged. These are considered excessive by most operators, in part due to a lack of engagement from the FC in sensitising their scope.²² This lack of transparency also affects the original classification of different species according to their economic value. This in turn determines both stumpage fees and penalties for illegal felling, as the original criteria on which the classification was made are not publicly available.²³

Due to the lack of a computerised system at the FC, mentioned in the previous section, information on the relative contribution of these different levies and charges to total forestry revenue was only available for 2018, 2019 and 2021, and is shown in Figure 1. Clearly, the relative contribution from different headings changes significantly from year to year. Collection from logging fees always accounts for a significant share of revenue collected, but for its relative majority only in 2018 (46.5 per cent). The two main sources of revenue in 2019 and 2021, respectively toll fees from the transport of logs (40.4 per cent) and hammer control fees (33.7 per cent), do not account for a very significant share in other years. One likely explanation is connected with the lack of manpower described in the previous section – faced with insufficient resources, the focus is on different tax handles over different years, depending on what is perceived to have more potential.

Figure 1 Breakdown of forestry collection across different handles, available years



Source: Authors' elaboration on unpublished data from the Ekiti State Forestry Commission.

The very significant increase in farming fees – which accounted for only 1.2 per cent and 0.3 per cent of total collection in 2018 and 2019 respectively, but 32.9 per cent in 2021 –

²⁰ Interviews with Ekiti State Forestry Commission, June 2022.
²¹ Nor revised in 2021 as mandated by the EFL itself.
²² Interviews with Ekiti Timber Traders Association, Ekiti Association of Saw Millers, and Ekiti Ministry of Agriculture and Food Security, June 2022.
²³ Interviews with Ekiti State Forestry Commission, June 2022.

requires a separate discussion. These fees originate from the Taungya farming system, a special form of agroforestry that originated during colonial times (von Hellermann 2007), in which the FC allows individuals to farm within forest reserves. In exchange, farmers commit to ensuring that trees on their concession are not illegally harvested or damaged until they reach maturity, at which point a new concession area will be leased (von Hellermann 2007). The significant increase in farming fees in 2021 is due to the combination of an expansion in the number of Taungya farms over the course of 2020, and the Covid-19 pandemic in the same year – which prevented forest officers from interacting with farmers. Being aware of this situation, in 2021 the FC focused on collecting these outstanding fees, which led to an increased relevance of this tax handle.²⁴

While in principle all forest charges should be paid by the forest operator directly to FC accounts through approved banks, the reality is quite different. The only three banks approved by the Ekiti Internal Revenue Services (EIRS) to receive payments directed to the FC do not have branches in the vast majority of Ekiti's local government areas.²⁵ Consequently, many forest operators have to travel to the capital city – where they can be sure of finding one of these banks – to comply with their obligation. An example provided by an interviewee explains the associated burden:

It cost about ₦4,000 for a taxpayer to [get] transport to the state capital from the farthest local government authority. As there are no guarantees that the taxpayer would receive the receipt on the day of payment, as this is done online and the system often has glitches, the taxpayer would also likely bear the cost of accommodation and feeding. On a very modest budget, it may cost the taxpayer between ₦15,000-₦20,000 to remit charges [of] about ₦50,000 ... To manage these costs, taxpayers aggregate charges from others and then nominate one individual to visit the capital and remit to the EIRS.²⁶

A significant amount of coordination is required to simply pay what is due affordably, and not all categories of taxpayers have the same capacity to coordinate or face the same incentive to actually comply. Property hammer holders, few in number and facing steep fines for failing to renew their annual licences, are likely to pool resources and remit charges themselves. On the other hand, neither farmers nor saw millers possess the same incentive for quasi-voluntary compliance. Consequently, forest officers developed other ad hoc strategies to enforce compliance. One of the most common seems to be for forest officers themselves to aggregate charges among millers and farmers, and then travel to the nearest accredited bank to remit. However, in addition to the fact that this process clearly gives rise to opportunities for embezzlement, the cost of compliance is only slightly reduced – the FC does not have its own vehicles, and taxpayers have to fund transport costs for forest officials to both collect the funds and remit them to the banks.²⁷ Despite the potential for kickbacks,

²⁴ Interview with Ekiti State Forestry Commission, November 2022. Interestingly, while the expansion of Taungya farming has allegedly contributed to increasing food security in Ekiti, its potential impact on forestry resources could be negative. This is because some farmers, rather than protecting the trees, either remove young trees completely or cut their branches to stop the formation of canopies, in order to prolong their concession time. Evicting these non-compliant farmers is considered practically challenging and politically unfeasible. Consequently, the FC is considering modifying the Taungya system, by setting apart small treeless portions in the reserves where the farmers can grow their crops for as long as possible, while tending the trees on the larger restricted portions. This arrangement will be mutually beneficial to both parties, promoting sustainable tree development through cheap labour from the farmers, who in turn benefit by growing their crops on rich forest land at little or no cost. This idea is already being tested in some of the state's reserves, and will be scaled-up if successful. Interviews with Ekiti State Forestry Commission, June 2022.

²⁵ Interviews with Ekiti State Forestry Commission, June 2022.

²⁶ Interviews with Ekiti State Forestry Commission, June 2022.

²⁷ Interviews with Ekiti State Forestry Commission, June 2022

forest officers claim to find this situation frustrating. While collecting and remitting charges could support meeting FC revenue targets, they have not been trained in revenue collection – on paper, forestry and tax officers should work in tandem. In practice, only about half of the 20 forest officers working in Ekiti are accompanied by someone from the EIRS, and the others have to make do without.²⁸ Decreasing staff numbers also increase the area that each forest officer has to cover, further complicating the situation – one interviewee estimated that more than 60 forest officers would be required to ensure smooth functioning of collection processes.²⁹ Given this, it is not surprising that, as shown in Table 3, the FC has not been able to meet its revenue targets once since it was set up in 2016.

Table 3 Forestry Commission: revenue targets, actual collection and performance, 2016-2021

Year	Target	Actual	Performance
2016	120,000,000	81,399,918	67.8%
2017	100,338,595	62,085,320	61.9%
2018	104,778,643	37,407,028	35.7%
2019	104,778,643	41,822,734	39.9%
2020	80,776,643	43,908,039	54.4%
2021	104,776,643	42,999,585	41.0%

Source: Authors' elaboration on data from the Ekiti Ministry of Budget and Economic Planning, all figures in nominal ₦.

It is also interesting to note that there are some discrepancies between the figures reported by the Ekiti Ministry of Budget and Economic Planning and those reported by the FC (Ekiti State Forestry Commission 2021) – shown in Figure 2. While discrepancies in aggregate figures across different MDAs are not surprising, and certainly not an issue only faced in Ekiti or Nigeria, in this case the selection of the source leads to a slightly different conclusion on current trends. After a significant drop in revenue collection in 2017, figures from the FC show a reprisal of collection by 2021 to a level close to that of 2013 (₦68.6 million). On the other hand, data from the Ekiti Ministry of Finance and Economic Development shows that revenue from the FC never really recovered from the 2017 drop.³⁰ Figure 2 also shows that, contrary to what is held by various interviewees,³¹ the contribution of forestry revenue to total internally generated revenue (IGR) in Ekiti is rather modest, averaging 0.61 per cent between 2013 and 2021 according to the Ekiti Ministry of Budget and Economic Planning.³²

²⁸ Interviews with Ekiti State Forestry Commission, June 2022.

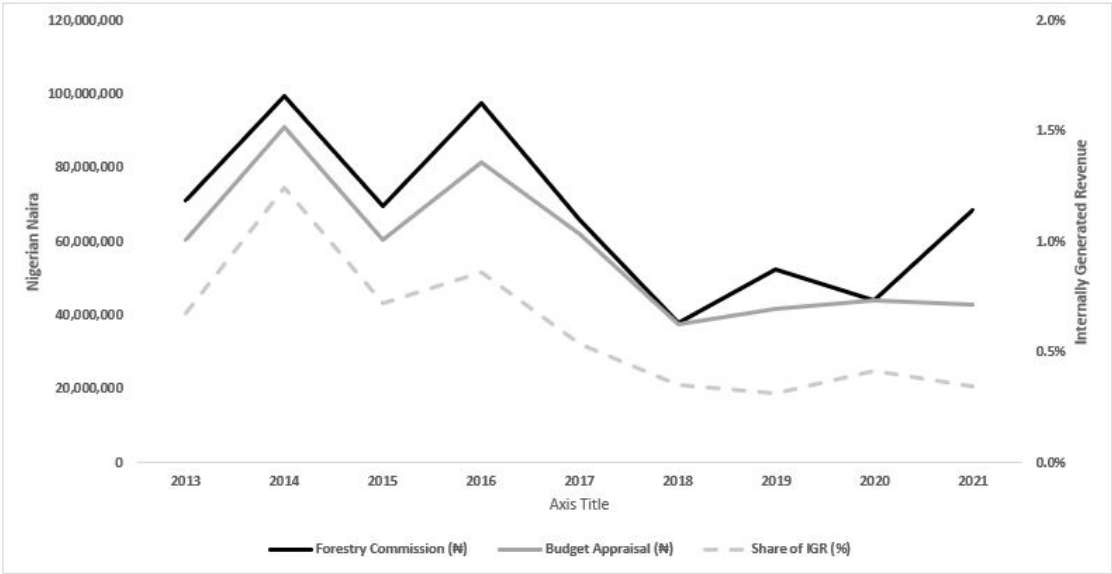
²⁹ Interviews with Ekiti State Forestry Commission, June 2022.

³⁰ Interestingly, regardless of the source the two years showing the highest revenue collection are 2014 and 2016, respectively when the EFL was first proposed and when it was eventually passed into law.

³¹ Interviews with Ekiti State Forestry Commission, Ekiti Timber Traders Associations, and Ekiti Association of Saw Millers, June 2022.

³² It is worth noting that using the figures from Ekiti Forestry Commission (2021), rather than those from the Ekiti Ministry of Budget and Economic Planning, does not significantly alter the picture, as the average over the period would be 0.7% of IGR.

Figure 2 Total forestry revenue in Ekiti, nominal terms and share of IGR, 2013-2021



Source: Authors’ elaboration on Ekiti State Forestry Commission (2021) and Ekiti Ministry of Budget Economic Planning. All monetary values in nominal ₦.

There is an argument for the contribution from the whole forestry sector to IGR to be higher than what is reported here, as the sector might be the largest direct and indirect private employer in Ekiti, and personal income taxes are collected at state level.³³ While quantifying the whole sectoral contribution is outside the scope of this study, it is worth noting that a significant share of sectoral workers – such as dealers of minor forest products, providers of services to sawmills, and food vendors catering to forest workers – are likely to be part of the shadow economy, so their contribution to IGR might not be that relevant.³⁴ While the presence of these informal actors was often mentioned during interviews,³⁵ the FC has no mandate for collection outside of the forestry charges covered in the EFL. While the decision on whether to engage them for tax purposes lies with the EIRS, more understanding of the structure of the shadow economy around sawmills should be of interest to the Forestry Commission, as it is bound to include informal loggers and millers.³⁶ It is indisputable that the direct contribution of forestry fees to IGR is minimal. However, this is not necessarily an issue, as, in the words of one of our interviewees, ‘revenue generation is not the main work of forestry [departments]’.³⁷ Unfortunately, as we will argue in the next section, this perspective does not seem to match the current approach to forestry management in Ekiti, with some dire consequences.

³³ Interviews with Ekiti State Forestry Commission, June 2022. Ekiti Forestry State Commission (2021) shows that the sector was responsible for between 10,000 and 12,000 direct and indirect jobs during the period 1996-2006, but that these have probably dwindled since then.

³⁴ Interviews with Ekiti State Forestry Commission, June 2022.

³⁵ Interviews with Ekiti State Forestry Commission, Ekiti Ministry of Agriculture and Food Security, Ekiti Ministry of Finance and Economic Development and Association of Saw Millers, June 2022.

³⁶ It is worth mentioning here that we are not advocating for the taxation of all these actors, many of whom are likely to have an income below the tax threshold. However, understanding the structure of the sector might help the EIRS to assess how best to interact with them, and whether some of them possess some revenue potential.

³⁷ Interviews with Ekiti State Forestry Commission, June 2022.

6 Missing the forest for the trees: the quest for revenue and its consequences

As mentioned in the introduction, analysis from geospatial data leaves no doubt that Ekiti has been experiencing a continuous process of deforestation. According to the analysis of Olorunfemi et al. (2020), tree forest cover decreased from 74 per cent of the state's land area in 1972, to 36 per cent in 2017. Further, data from the Global Forest Watch initiative of the World Resource Institute shows that deforestation has been increasing over the last few years – 82.6 per cent of the 60,963 ha of forest cleared from 2001 to 2022 has been lost since 2016 (Global Forest Watch 2023).

This loss was clearly perceived by all the stakeholders interviewed, and was connected to excessive commercial harvesting and insufficient investment in forest regeneration, both signs of poor management.³⁸ The lack of monitoring and enforcement capacity connected to the understaffing described earlier also led to an increase in illegal logging, which was described by many interviewees as pervasive.³⁹ Insufficient investment in sensitisation activities has led to low awareness of the benefits arising from forest preservation across the population, leading to increased threats to forested area from citizens looking for land on which to graze cattle or cultivate cannabis.⁴⁰

The overwhelming perception among many stakeholders interviewed is that the prevailing conceptualisation of forest resources as a source of revenue is strongly connected with this situation.⁴¹ This was clearly expressed by one interviewee from the FC:

The way I see it, revenue generation is the major cause of deforestation. Revenue generation is not the main work of forestry [departments], the main work of forestry [departments] is [forestry] regeneration and afforestation. But now, the major work is revenue generation. We are given targets every year, set by the state government collectively to the Commission.⁴²

The impact of setting revenue targets for the FC should not be underestimated. The literature on tax mobilisation in low-income countries shows that setting collection targets for revenue authorities can lead to a disregard of the long-term impact of collection behaviour (Fjeldstad 2001), and argues that this could be accentuated when connected to disbursement of funding (Moore and Prichard 2018). A similar mechanism seems to be at play here – the FC is incentivised to prioritise collection of forest revenue over other, arguably more important, forest activities, or risk losing access to their (statutorily guaranteed) funding. However, the consequence of this behaviour is the overharvesting of forest resources, which not only has

³⁸ This point was made quite explicitly by one interviewee from the Ministry of Agriculture and Food Security, who stated that 'Forestry management in Ekiti has been quite poor, because the rate of tree felling is far more than the rate at which trees are planted ... Trees are felled without consideration for the maturity or girth measure, and without replacements', June 2022.

³⁹ Interviews with Ekiti State Forestry Commission, Ekiti Ministry of Agriculture and Food Security, Ekiti Ministry of Finance and Economic Development and Association of Saw Millers, June 2022.

⁴⁰ Interview with the Ekiti Ministry of Environment and Natural Resources, June 2022.

⁴¹ Interviews with the Ekiti State Forestry Commission, independent forestry consultant, Association of Saw Millers, Timber Traders Association, June 2022.

⁴² Interview with Ekiti State Forestry Commission, June 2022.

dire environmental consequences, but also leaves few scattered trees of any commercial value.⁴³

One interviewee claimed that the impact of this continuous overharvesting of forest resources has yet to be appreciated by those setting targets for the FC. They are still imagining the Ekiti forests of old when thinking about the future of the timber sector.⁴⁴ It seems that the potential impact of setting these targets is ignored. This can be appreciated by comparing the loss of forest cover between 2016 and 2021 – 44,191 ha, or 12.8 per cent of the existing forest cover in 2016, with the revenue target for the FC over the same period, which decreased by 12.7 per cent from the 2016 target. While the similarity is probably a coincidence, it suggests that there might be some appreciation by the target-setter of the dwindling forest resources, but the consequence is a constant pressure for revenue.

What might not be appreciated, though, is the origin of revenue collected. Historically, the bulk of the revenue generated from forestry in the state originated from reserves, which are assumed to still be richly endowed with commercial trees.⁴⁵ However, as can be seen in Figure 3, almost the entirety (98 per cent) of timber harvested in Ekiti since 1997 has originated from 'free areas',⁴⁶ without any (recorded) commercial logging taking place in forest reserves since 2006 due to their overexploited status. Figure 3 also shows that commercial production from free areas has a negative trend, as many of the trees that remain standing are still immature, and current harvesting rates will not be sustainable. There also seem to already be signs of overexploitation of free areas. Lorry drivers claim to be loading a higher number of trees per truck than in the past. These are younger and smaller in size, and sawmill managers cannot source timber all year round.⁴⁷ These claims seem to find some support in the data available from the FC. Figure 4 shows that the five-year moving average of stump volume per tree felled decreased from 4.44m³ in 1997-2001 to 3.42m³ in 2015-2019.

These figures corroborate the fact that the government has long been neglecting its main forestry management duties, namely ensuring sustainable exploitation through enforcement of standards, regeneration and afforestation. These activities seem to have consistently received insufficient investment regardless of the amount of revenue raised. This was mentioned by the representative of forestry associations, who lamented this lack of investment despite the existence of the 'timber development levy' on each tree harvested.⁴⁸ However, as previously mentioned, the FC does not have a retention account for what it levies, and it must rely on late and erratic disbursement of funds for investment – which is often time-sensitive and takes a long time to deliver results.

⁴³ Interview with Ekiti Ministry of Agriculture and Food Security, June 2022.

⁴⁴ Interview with Ekiti Ministry of Environment and Natural Resources, June 2022.

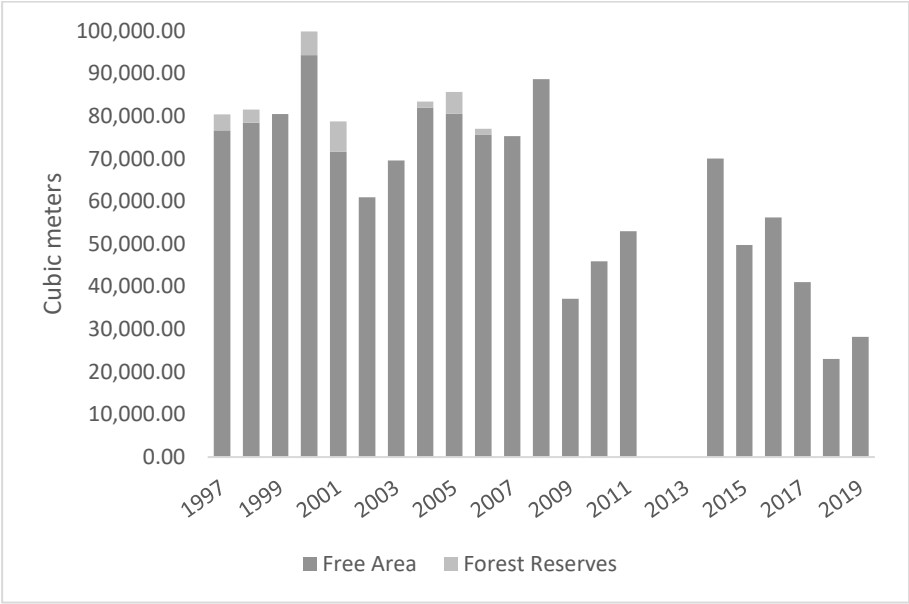
⁴⁵ Interviews with the Ekiti State Forestry Commission and the Ekiti Ministry of Environment and Natural Resources, June 2022.

⁴⁶ The term 'free areas' refers to forested areas not under government control, typically owned by individuals or families. Even though free areas are privately owned, felling trees for commercial purposes requires government permission – third parties buying these trees must obtain 'Owners Consent' from the Ekiti Forestry Commission and pay administrative charges of between ₦1,100 and ₦7,700/tree, depending on the tree species..

⁴⁷ Interviews with Ekiti State Forestry Commission and Ekiti Association of Saw Millers, June 2022.

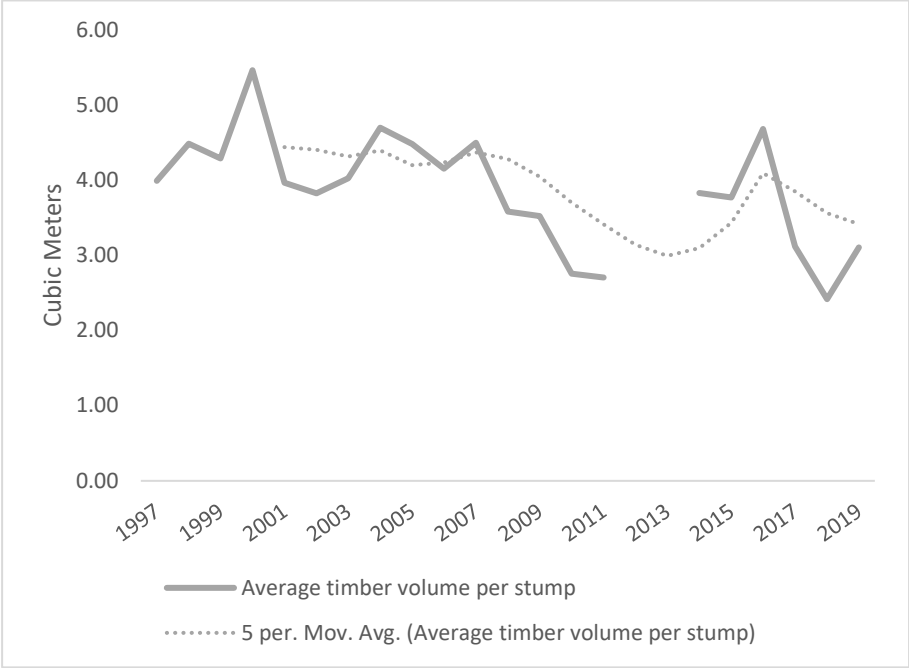
⁴⁸ Interview with Ekiti Timber Traders Association, June 2022. It must also be mentioned that interviewees from the Ekiti State Forestry Commission, June 2022, also blamed private operators for a lack of investment in the areas they managed.

Figure 3 Yearly timber harvest from free areas and forest reserves, 1997-2019



Source: Authors' elaboration from Ekiti State Forestry Commission (2021)

Figure 4 Average timber volume per stump, free areas and reserves, 1997-2019



Source: Authors' elaboration from Ekiti State Forestry Commission (2021)

The FC's inability to meet the expectations of industry operators has potentially negative consequences. Research on the connection between tax payment and service delivery in rural West Africa shows that frequent failure to meet taxpayers' expectations leads to an erosion of the social contract (van den Boogaard and Beach 2023). Something similar seems to be happening in the forestry sector of Ekiti. Most interviewees referred to a general sense of dissatisfaction among forest operators, who do not see any benefits from the charges they pay. The Saw Millers Association complained that, despite most revenue-generating forest

activities now taking place in free areas, no government investment is taking place.⁴⁹ Similarly, the Timber Traders Association complained about the lack of even a single state-sponsored training programme for their members, despite a (claimed) high compliance rate with their fiscal obligations.⁵⁰ In addition, both categories complain that the lack of investment in forest regeneration is impacting their business.⁵¹

Members of the forest communities also report their dissatisfaction with the services received in exchange for charges paid to access forest reserves. Historically, inhabitants of areas around forests have always depended on forest products, with daily forest visits to collect these representing an important cultural practice (Olujobi 2015). The EFL now requires the approval of the FC for collection of non-timber forest products, which can only be obtained after the payment of a weekly per-person fee ranging from ₦250 to ₦3,000.⁵² While various members of forest communities still access the forest without complying, those who do question what they get in return, as their communities still lack even basic public services.⁵³ While the EFL recommends the establishment of Community Based Forest Management Associations, these have not yet been organised. One explanation for this slow pace is that their establishment will probably give rise to requests for revenue-sharing formulas, a practice that has not been used in Ekiti since the late 1980s, but is still in force in other states in the region.⁵⁴

The inefficient organisation of revenue collection described in section 5 also contributes to less trust between forest operators, forest communities and the government. Government officials claim that the majority of forest operators underreport their logging activities, and generally take advantage of the lack of monitoring from uniformed forest officers, leading to a serious loss of revenue.⁵⁵ The government position is recognised by the Timber Traders' Association, which connects the presence of illegal logging to the excessive level of forest charges, rather than to the lack of monitoring by forest officers.⁵⁶ On the other hand, the Saw Millers Association claims that forest officers themselves are asking for kickbacks in exchange for ignoring illegal activities.⁵⁷ The existence of collusive practices is in turn reluctantly admitted by the FC, which stresses that these might emerge in response to threats to the security of forest officers trying to enforce the law.⁵⁸

As we can see, the government quest to extract as much revenue as possible from the forestry sector is having perverse consequences. Setting revenue targets for the FC has

⁴⁹ '[The] majority of the forest activities in Ekiti now are in the free areas, and the government does not make any meaningful contribution to the free areas nor to the communities where the trees are located, yet they demand revenue'. Interview with Ekiti Association of Saw Millers, June 2022.

⁵⁰ '[T]he TTA [Timber Traders Association] is the most revenue-generating body in Ekiti, but we are not feeling any benefits in return, not even a training organised by the state for our association. We don't even think the government recognises us ... The TTA have the most compliance in terms of remitting charges and helping the state to raise revenue'. Interview with Ekiti Timber Traders Association, June 2022.

⁵¹ Interviews with Ekiti Association of Saw Millers and Ekiti Timber Traders Association, June 2022.

⁵² It should be noted that Ekiti Forestry Commission has drafted plans to rescind some of these minor charges made on forest communities.

⁵³ Interviews with members of an Ekiti forest community, June 2022.

⁵⁴ Interview with Ekiti State Forestry Commission, June 2022.

⁵⁵ Interview with Ekiti Ministry of Environment and Natural Resources, June 2022.

⁵⁶ '[I]f the charges are reduced, operators will cut and pay for the right number of trees, but with high charges, operators pay legally for a few, then collude with illegal fellers for additional trees at lower rates. If the money is reduced, everyone will comply and penalties can be collected from anyone who defaulted ... Government arguments that some of our members buy timber from illegal tree cutters is understandable, although such practices are not condoned, but that's a practice that's a bit common across groups in the forestry sector; so it's unfair to make such an argument against one group.' Interviews with Ekiti Timber Traders Association, June 2022.

⁵⁷ Interview with Ekiti Association of Saw Millers, June 2022.

⁵⁸ Interviews with Ekiti State Forestry Commission, June 2022.

turned a body that is tasked with ensuring the sustainability of forest resources into a collection agency. The inability of the FC to meet these targets, in great part due to continuous overexploitation of forest resources, leads to funds being withheld for investment in reforestation, which further contributes to overall forest loss. In turn, the deterioration of forest resources leads forest operators to question why they are paying any charges to the FC, providing an incentive to collude with forest officers who do not have access to the tools necessary to carry out their duties. Given this situation, we now turn to discussing whether a reform of forest charges is required – or something more drastic.

7 What is the way forward?

Current suggestions for tropical low-income countries looking to optimise their fiscal treatment of forestry is to incentivise forest operators to adopt sustainable practices. One way to do this is through the creation of a ‘feebate’ system. This combines high general forest fees with rebates connected to the sustainability of harvesting and processing techniques applied by each individual or company, who would shoulder the burden of proof. Given the structure of the forestry sector value chain, both documentation on harvesting and processing techniques could be collected at natural chokepoints, such as sawmills or points of export. In this system, each individual operator would see the appeal of using the most sustainable practice available, as this would automatically reduce their tax burden and hence increase their profitability (World Bank 2021).

While this kind of system might have a theoretical appeal, it is doubtful that it could be applied in a context such as the one just described. While some forest operators did not express any opposition towards this idea,⁵⁹ given the substantial shortage of both staff and capital that the FC is currently facing, increasing complexity of enforcement seems highly undesirable.⁶⁰ Further, many forestry operators have inconsistent harvesting techniques, so rebates might have to vary across logs rather than across taxpayers, which again would be problematic in a context where monitoring capacity is extremely limited.⁶¹ The FC is currently hesitant to rely on information self-reported by forest operators. This is due to experience with a stumpage fee at different rates depending on use/location,⁶² there is no third-party certification available in the state, and the political will to set this up from scratch is probably lacking.⁶³ Further, none of the existing issues with sustainability of the sector seem to be related to the structure of the charges per se, but to the need to change the conceptualisation of the task of the FC – to ensure sustainable rates of harvesting and restore overexploited areas.

As described in previous sections, the areas that are currently most degraded are Ekiti forest reserves, in which no commercial activity has been recorded for 15 years. A potential starting point for reaffirming the stewardship role of the FC could be to enforce a ten-year ban on all timber exploitation in forest reserves, coupled with sustained reforestation activities – something the FC has already tried to advocate (Ekiti State Forestry Commission 2021).

⁵⁹ Interviews with Ekiti Timber Traders Association and Ekiti Tree Growers Association, June 2022.

⁶⁰ Interviews with Ekiti State Forestry Commission and Ekiti Ministry of Finance and Economic Development, June 2022.

⁶¹ Interviews with Ekiti Ministry of Finance and Economic Development, June 2022.

⁶² Owners of tree plantations are currently required to pay 10% of the usual stumpage fee if the timber is destined for use in Ekiti, with the fee raising to 25% of the usual if it is instead destined for use outside of the state, with the information on use self-reported upon payment. Interviews with Ekiti Forestry Commission, June 2022.

⁶³ Interviews with Ekiti Ministry of Finance and Economic Development, June 2022.

While this would have a minimal impact on revenue, its enforcement would still require a significant amount of political capital, and a will to invest in the FC's monitoring capacity. While neither timber traders nor saw millers expressed any opposition to the idea, as long as logging in free areas would still be allowed, they also doubted that the required political will to properly enforce a ban is currently present.⁶⁴ This position was shared by almost all members interviewed from the FC and the Ministry of Environment and Natural Resources, who however mentioned that the political will could be mustered in theory. In the neighbouring state of Ondo a ban has been successful in achieving a similar goal.⁶⁵

The main immediate obstacle for moving forward with such a policy is the investment in the FC required to make a ban enforceable – with current staffing levels and not a single working vehicle, monitoring a ban would simply be impossible.⁶⁶ If a ban was proclaimed with existing FC capacity, it would not be feasible to identify trespassers and apprehend illegal loggers. Forest officers trying to enforce the ban might be at risk of attack from local communities – this happened earlier with attempted localised bans.⁶⁷ Given the discussion about reducing the FC retention from 25 per cent to 5 per cent of revenue collected, and a history of under-disbursement, it seems unlikely that an increase in FC staff will happen in the foreseeable future. A ban of varying length – between one and five years – according to each reserve's state of depletion, might be slightly easier to enforce – although it would still require an increase in staff numbers.⁶⁸ Without substantial investment, the only improvement to forest stocks possible would be what is achievable by promoting a consistent tree-planting policy, and enforcing the minimum girth requirements for harvesting.

8 Conclusions

The government of Ekiti State wants to monetise its natural resources and use these to fund development interventions, as do many low-income countries inside and outside sub-Saharan Africa. Lacking any major deposits of mineral resources, forestry always constituted the main natural endowment for the state, contributing up to 40 per cent of internally generated revenue in the first years after its creation in 1996 (Ekiti State Forestry Commission 2021). This conceptualisation of forests as revenue-generating assets – a characterisation that the Nigerian National Forest Policy of 2006 recognises to be widespread – can have detrimental effects, as the timber industry also contributes to deforestation.

This seems to be the case in Ekiti, where forest cover decreased from 74 per cent of its land mass in 1972, to 36 per cent in 2017 (Olorunfemi et al. 2020), with more than 50,000 ha. of forest areas being cleared since 2016 (Global Forest Watch 2023). This was the year Ekiti State enacted its Forest Law, whose scope was to establish rules for sustainable management of forestry, and the preservation and protection of its ecosystem. The Forest Law also instituted the Ekiti Forestry Commission, which was tasked with regulating all

⁶⁴ Interviews with Ekiti Timber Traders Association and with Ekiti Association of Saw Millers, June 2022.

⁶⁵ Interview with the Ekiti Ministry of Environment and Natural Resources, June 2022. However, various newspaper articles seem to suggest that these bans in practice only lasted a few months. See <https://www.ondoevents.com/governor-akeredolu-lifts-ban-on-licensed-allottees-in-govt-forest-reserves/> and <https://www.vanguardngr.com/2021/11/ondo-govt-lifts-ban-on-forestry-activities/>.

⁶⁶ Interviews with the Ekiti State Forestry Commission, June 2022.

⁶⁷ Interviews with the Ekiti State Forestry Commission, June 2022.

⁶⁸ Interviews with the Ekiti Forestry Commission, June 2022.

activities of public bodies and private operators relating to exploitation of forest resources, and promoting their sustainable use. Afforestation and regeneration activities of the FC should be funded through retention of the various fees and levies collected, as well as through funds allocated through the state's budget.

Unfortunately, given the current rate of deforestation, the FC seems to have failed in its duties. In large part this failure seems to be connected with what the FC has mainly been asked to do, which is to mobilise revenue from the forestry sector. As has been shown, the revenue targets assigned to the FC have declined at the same rate as the forest stock, keeping pressure to mobilise revenue from timber exploitation proportionally constant as the resource was dwindling. The FC not meeting its targets has also been used as a reason not to disburse the funds to which it is statutorily entitled, which in turn has led to a lack of investment in afforestation and regeneration of degraded forests. Consequently, the number and size of commercially viable trees has diminished over time, further contributing to a decline in revenue generated, with no apparent contribution from forest reserves for over 15 years.

This lack of investment in the conservation of forest resources – nominally the main role of the FC – is leading various forest operators to question why forest charges are collected. In addition, the very process of paying forest fees – whose actual rates differ from those published in the Ekiti Forestry Law schedule – is extremely cumbersome, with banks authorised to process payment being located far away from where forest activities take place. This set-up is clearly conducive to rent-seeking behaviour from forest officers, who at times remit the charges in the name of the industry operators they are tasked to monitor. Given that the number of uniformed staff employed by the FC is well below the recommended size, and not a single functioning vehicle is available, the existence of any reliable monitoring activity can probably be questioned.

There are various ways to marginally improve this situation. An updated fee schedule could be published to improve the transparency of existing charges, the number of channels through which fees can be paid can be increased to reduce compliance cost and rent-seeking opportunities, and charges for minor non-timber products on which forest communities rely could be eliminated without any significant revenue loss. However, none of these actions will address the main issue, which is a misconception of the Forestry Commission's role. This is not to generate revenue, but to ensure that forest resources are sustainably exploited and depleted forest resources are regenerated.

Beyond the current challenges, there could be potential ways to reconcile the resource management and revenue policy imperatives, which only recently have been taken into consideration in Ekiti. One way is to institutionalise payment for ecosystem services, which have received global attention as a nature-based solution to climate change – in this case through afforestation. Supporters of this approach maintain that it has the potential to address investment issues in the sector, as well as offering partial solutions to monitoring problems by the use of technology-based solutions, such as remote sensing and tracking. Yet critical views also exist, as payment for ecosystem services relies on the same market incentives that led to the current overexploitation, and can also contribute to increasing inequality in the distribution of resource rents, and alienating existing resource users. While engaging with this debate is outside the scope of the paper, it is worth noting that Ekiti State is introducing regulatory reforms to enable forest carbon investment, and working with a US-based NGO to explore the role of technology-based timber traceability. However, the value of these interventions in this specific context can only be proven in the medium term, and must

be measured through careful baselining against the status quo. Meanwhile over-exploitation continues on a daily basis, with deforestation being compounded by landscape-level problems, such as wildfires and erosion.

The regeneration of Ekiti's forests, and especially forest reserves, will probably require a ban on any timber exploitation for a significant number of years, given their current status. To make such a policy enforceable, the number of staff employed by the Forestry Commission should be increased to internationally recommended levels. Investment should be directed to digitising their operation, and providing the tools required for monitoring and enforcement. Unfortunately, to date the will and resources to push this type of reform to a successful conclusion seem not to have been equal to the challenge. This is despite the fact that it is ultimately the best chance to not only guarantee future forest revenue, but also to preserve Ekiti's forestry endowment – which is at risk of disappearing in the not too distant future.

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