

2012

The governance and trade of wood-based products in and around the Kambui Hills North Forest Reserve



The research and analysis in this report was conducted by Energy For Opportunity (EFO) and was financed through the ACDI/VOCA and USAID funded Promoting Agricultural, Governance and the Environment (PAGE) Programme

The contents of this report are the sole responsibility of EFO and can in no way be taken to reflect the views of ACDI/VOCA, USAID or the PAGE programme

The report was compiled by

Paul Munro,
Greg Hiemstra-van der Horst

The research for the report was conducted by

Greg Hiemstra-van der Horst
Mohamed Kebbay
Aiah Kembay
Georjet Kpagoi
Paul Munro
Albert Thoronka
Simon Willans

For any further information regarding the report, please contact Energy For Opportunity at:

mail@energyforopportunity.org



Contents

Acronyms	2
1. Introduction.....	3
1.1 Overview	3
1.2 The Kambui Hills Forest Reserves	3
1.3 Methodology.....	4
1.4 Structure of the Report	5
2. Kambui Hills: background and context	5
2.1 Physical Geography	5
2.2 History of the Forest Reserve.....	6
2.3 Land Tenure Types.....	8
2.4 Wood-based commercial commodities	11
3. Actors	13
3.1 Local Actors.....	13
3.2 Government Actors.....	16
3.3 Non-Government Organisations	18
3.4 Logging Companies.....	19
4. Issues	21
4.1 Forestry Division’s Jurisdiction	21
4.2 Bad Community/Forestry Relations.....	23
4.3 Vague Boundaries	24
4.4 Corruption and Lack of Transparency	24
4.5 Low Commodity Prices	25
4.6 Chainsaw licensing.....	26
4.7 Illegal Logging	27
4.8 Fear of a Kambui Hills National Park.....	28
4.9 Timber export ban	29
5. Conclusions and Recommendations	30
5.1 Conclusions.....	30
5.2 Recommendations	31
Appendix A – Original Kambui Hills Forest Reserve Demarcation.....	36

Acronyms

ACOTIDA	Agricultural Community for Timber Development Association
ACDI/VOCA	Agricultural Cooperative Development International/Volunteers in Overseas Cooperative Assistance.
CSSL	Conservation Society of Sierra Leone
CTC	Capitol Trading Company
FAO	[The United Nations'] Food and Agriculture Organisation.
FIC	Forest Industries Corporation
FLEGT	Forest Law Enforcement, Governance and Trade
KHFR	Kambui Hills Forest Reserve
KHNFR	Kambui Hills North Forest Reserve
MAFFS	Ministry of Agricultural Forestry and Food Security
NaCEF	National Commission for the Environment and Forestry
NGO	Non-Government Organisation
PAGE	Promoting Agriculture, Governance and the Environment.
PC	Paramount Chief
PRA	Participatory Rural Assessment
RSPB	Royal Society for the Protection of Birds
SALWACO	Sierra Leone Water Company
SKFR	South Kambui Forest Reserve
USAID	United States Agency for International Aid
VFMA	Village Forest Management Associations
WAPFoR	Western Area Peninsula Forest Reserve
WHH	Welthungerhilfe

1. Introduction

1.1 Overview

The research results and analysis presented in this report seek to provide a better understanding of the dynamics surrounding the wood-based commercial trade relating to the Kambui Hills North Forest Reserve (KHNFR) and the governance regimes that influence this trade. Its findings form the basis for suggesting different approaches for donors and policy makers to improve both the reserve's management and the livelihoods of those reliant on its resources. It is hoped that the information provided here will aid in giving a greater voice to the forest edge communities around the KHNFR, in assisting in the reduction of governance conflicts and in paving the way to improved overall management of the forest reserve.

The forested slopes of the Kambui Hills North Forest Reserve (KHNFR) rise sharply up behind the urban centre of Kenema, providing a dramatic backdrop to Sierra Leone's Eastern Province capital. Gazetted in 1920, it is one of the oldest forest reserves in Sierra Leone and was the site of major timber activities and research between the 1930s and 1960s, causing Kenema to be dubbed the 'timber capital of the nation'.¹ Since the 1970s, however, the management of the reserve and its forests have been seriously neglected. Furthermore, data describing the reserve's condition and the dynamics of its everyday use has been essentially non-existent, until now. This has been a concern, as the reserve provides numerous critical benefits to surrounding communities (which includes Kenema), including potable water and exploitable resources, and is also an important sanctuary for many native floral and faunal species.

In recognition of the reserve's importance, the USAID and ACDI/VOCA funded Promoting Agriculture, Governance and the Environment (PAGE) initiative is in the process of establishing a community-driven forest management programme, called co-management, in the KHNFR. The idea behind this approach is to revitalise the management of the reserve by empowering forest edge communities so that they can participate in decision making processes. This research project is designed to help inform this initiative, providing an empirically-based analysis of the reserve's dynamics upon which to base future interventions. Previous observations made by the PAGE programme suggest that the illegal logging is rife and that there are serious issues regarding the management of the reserve.² As a result, a key focus of this research project has been to explore the nuances of these activities and the issues surrounding them.

A second report, *Land cover analysis of the Kambui Hills North Forest Reserve and its surrounds*, has been published in conjunction with this report. This second report examines the land cover changes in the KHNFR area between the years 2000 and 2010, and thus it provides important insights into environmental change in the region. Its analysis includes data collect from the field in order to provide links between forest cover change and activities on the ground. The two reports are designed to be read in tandem.

1.2 The Kambui Hills Forest Reserves

There is much confusion surrounding the names and declaration dates of the forest reserves in the Kambui Hills, so some clarification is needed. The Kambui Hills North Forest Reserve (KHNFR) is not a formally declared reserve in itself, rather it is the northern section of the 20,348 hectare Kambui Hills Forest Reserve (KHFR) that was formally declared in 1920. KHNFR represents the section of this reserve that lies north of the Bo-Kenema Highway while the section south of the Bo-Kenema Highway is

¹ See National Tourism Board of Sierra Leone *Map of Sierra Leone and Freetown* (TMB 2009).

² Ramzy Kanaan 'Illegal Logging in the Kambui Hills Forest Reserve' *Natural Resource Watch* December 2011: 2.

known as the Kambui Hills South Forest Reserve. To add more confusion to this there is also a South Kambui Forest Reserve (SKFR), which is a separate 880 hectare forest reserve declared in 1924,³ located to the south-west of the main Kambui Hills Forest Reserve (a few kilometres away from Tiwai Island Wildlife Sanctuary). This research, however, specifically focuses on the Kambui Hills North Forest Reserve (KHNFR).

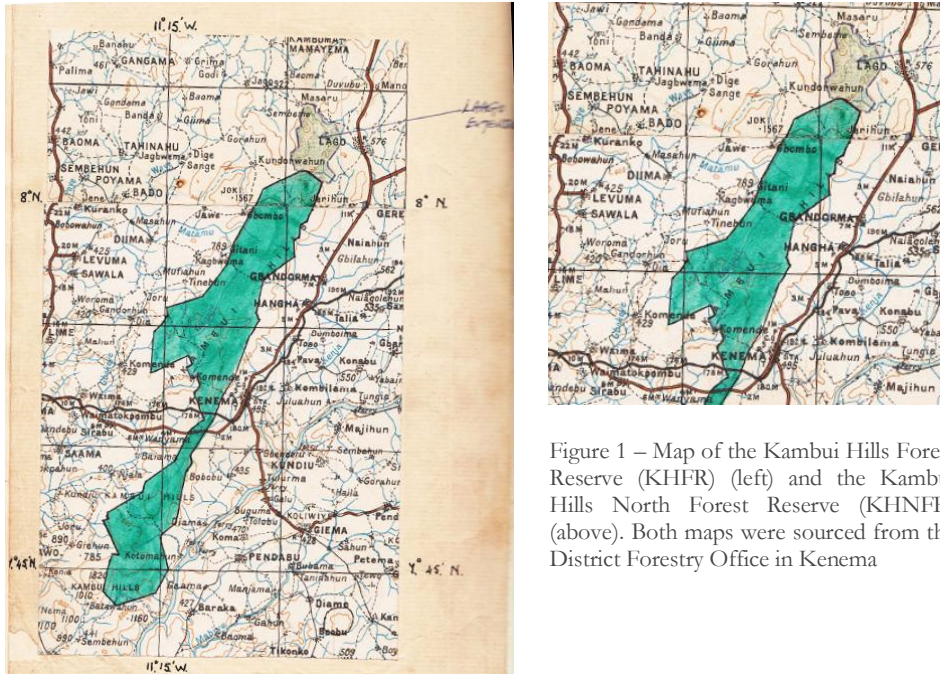


Figure 1 – Map of the Kambui Hills Forest Reserve (KHFR) (left) and the Kambui Hills North Forest Reserve (KHNFR) (above). Both maps were sourced from the District Forestry Office in Kenema

1.3 Methodology

The research for this project was conducted in December 2011 and January 2012 and involved extensive and intensive fieldwork conducted by seven researchers. The first phase of the research was conducted in December 2011 and involved village level group interviews in 43 different communities located near the KHNFR. These communities were all among those already selected by PAGE to be participants in the future co-management programme. Initial target villages were selected in conjunction with PAGE staff, and then subsequent target villages were identified through a village level snowball sampling process and examination of local area maps.

Participants in each interview group included a diverse cross-section of community members in order to ensure the representation of the full range of perspectives and experiences in each community. The interviews themselves were conducted with a specific focus on gathering livelihood data in relation to forest activities (board, pole, firewood and charcoal harvesting), community relations with other relevant political actors in the area (e.g. Forestry Division, ACOTIDA etc.), as well as general information on the non-community member individuals and organised groups who are entering and using the reserve.

In contrast, the second phase of the research involved more of a focus on elite actors, following up on issues raised during the village focus group phase. As such, interviews were conducted with Paramount Chiefs, urban vendors, government bodies (the Sierra Leone Water Company (SALWACO), district council, Kenema city council, Kenema police), the forestry division office and its forest guards, representatives from logging companies (Gava Forest Industries Corporation, Exim, Capitol Trading

³ DG Thomas “Part IV – Report on the Division of Forests” in M T Dawe (ed) *Annual Report of the Lands and Forests Department for the year 1924*, (Government Printer: Freetown 1925): 42-46

Company) and non-government organisations ((Agricultural Community for Timber Development Association (ACOTIDA) and PAGE). Follow up interviews were also conducted in villages where existing logging concession or current logging activities were present. This overall approach allowed the researchers to explore a wide range of different (and often conflicting) perspectives on current developments in the KHNFR, as well as to identify the main issues surrounding its management.

Finally, in addition to this empirical data, a broad literature review was conducted on contemporary and historical works relating to development of the Kambui Hills and the Sierra Leonean forestry sector in general.

1.4 Structure of the Report

The remainder of this report is divided into five sections. Following this introduction, section two provides a broad context for the research. It discusses the history of the KHFNR, its current status, its geography, its surrounding lands and the current status of the commercial wood-based trade. Section three gives an overview of the different actors involved in the use and management of the KHNFR. Section four provides a critical analysis of the main issues relating to the management of the KHNFR. Finally, section 5 provides a conclusion and a variety of recommendations on how the management of the KHNFR could be improved.

2. Kambui Hills: background and context

2.1 Physical Geography

Geomorphology and Geology

The Kambui Hills are a series of rounded hills stretching in a southwest to northeast line about 40 kilometres in length and five kilometres in breadth. The hills are formed by a schist of metamorphic rock intrusion in an otherwise extensive area of granite,⁴ thought to have formed during the Precambrian era.⁵ Significantly, a number of important minerals are found within these schists,⁶ such as chromite, which was found in the Kambui Hills in 1929 and mined extensively by a foreign company from 1937 to 1954.⁷ As well as gold which was found in the area in the 1930s. There are still many artisanal miners panning for gold throughout the reserve, as well as a couple of large companies showing interest in mining in the reserve. The soils derived from the schists are characterised by lateritic and gravel pans which are the results of prolonged weathering, and exist mainly on the ridges occupied by the forest reserves. The highest peak in the Kambui hills rises to 645 metres above sea level, and the western side of the hills drains into the Waanje River, while the streams on eastern side of the range drain into the Moya River.

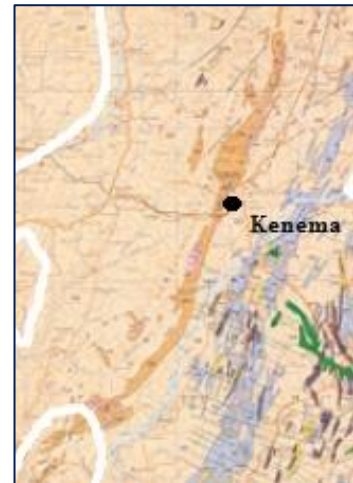


Figure 2 - Geological Map of the Kenema District. The Kambui Schist is the section in dark orange.

⁴ D A Andrews-Jones, *Geology and Mineral Resources of the Northern Kambui Schist Belt and Adjacent Granulites* (Government of Sierra Leone: Freetown, 1966)

⁵ S J Culzer 'Late Precambrian and Phanerozoic geology of Sierra Leone,' *Journal of the Geological Society* October 136 (1979): 605-618; Robert Wood, 'Early Precambrian Kambui Schist Belt, Southern Sierra Leone, and the Surrounding Basement' *Nature* 236 (1972): 14R T Odell, J C Dijkerman, W van Vuure, S W Melsted, A H Beavers, P M Sutton, L T Kurtz and R Midema *Characterisation, Classifications and Adaptation of Soils in selected areas in Sierra Leone West Africa* Bulletin 748, (Agriculture Experiment Station, College of Agriculture, University of Illinois at Urbana-Hampagin 1974).

⁶ P S Savill and J E D Fox *Trees of Sierra Leone* (Government Printers: Freetown 1967).

⁷ Winston Fordem, *The Story of Mining in Sierra Leone* (Xlibris Corporation 2011).

Vegetation

The forests of the Kambui Hills are considered to contain an expanse of tropical moist evergreen forest, a forest type that occurs across the southern third of Sierra Leone.⁸ It is more specifically described as a *Lophira/Heritiera* mixed rainforest.⁹ The hills have an annual rainfall of between 2300-2500 mm, with the bulk of the rain falling during July-October, although no month is completely dry. Common tree species found within the forest include *Lophira alata*, *Heritiera utilis*, *Piptadeniastrum africanum*, *Parkia bicolor*, *Parinari excelsa*, *Brachystegia leonensis*, and *Uapaca guineensis*.¹⁰ Prior to its extension exploitation, the forest was enumerated and shown to have contained over 120 tree species that exceeded 20cm in diameter, and of these, about ninety were in excess of 60cm in diameter. About 40 of the latter were targeted in logging operations during the late colonial and early independence eras.¹¹

Wildlife

A range of different animal species live within the forest reserve, although contemporary ecological research and anecdotal evidence suggests a dramatic reduction in large mammal populations compared to historical reports. A recent chimpanzee survey conducted by the Tacugama Chimpanzee Sanctuary, suggests that the reserve only has a very limited chimpanzee population,¹² while other primates such as Colobus and Diana monkeys are rarely seen. This is in contrast to an expedition conducted by Gerald Durrell in the Kambui Hills in the 1960s, during which he was able to capture numerous primates and even some leopards. The bird population may have fared better in the reserve, and Birdlife International lists around 90 different resident species, including the rare White-necked Picathartes and Green-tailed Bristlebill.¹³ However no comprehensive survey of birds has been conducted in the reserve for some time. As a side note, it is interesting that Kambui Hills was not mentioned in the 1972 Wildlife Act as a potential site for wildlife conservation,¹⁴ possibly due to its prominent status as a forest *production* reserve at that time.

2.2 History of the Forest Reserve

Founding of the Reserve

The Kambui Hills Forest Reserve is one of Sierra Leone's earliest forest reserves. Charles Lane-Poole, Sierra Leone's first Conservator of Forests¹⁵ and the founder of the Forestry Department,¹⁶ visited the Kambui Hills on his first tour of Sierra Leone in 1910 noting their important environmental function, but placing particular emphasis on their potential economic utility.

⁸ P S Savill, 'The composition of Climatic Forest Formations in Sierra Leone' *Commonwealth Forestry Review* 52:1 (1973): 67- 71.

⁹ J E D Fox 'Natural Regeneration of the Kambui Hills Forest in Eastern Sierra Leone. Part I. Ecological Status of the Lophira/Heritiera Rain Forest' *Tropical Ecology* 11:2(1970): 169-185.

¹⁰ Peter S Savill 'The Composition Of Climatic Forest Formations In Sierra Leone' *The Commonwealth Forestry Review* 52:1(1973): 67-71.

¹¹ J E D Fox 'Natural Regeneration of the Kambui Hills Forest in Eastern Sierra Leone. Part I. Ecological Status of the Lophira/Heritiera Rain Forest' *Tropical Ecology* 11:2(1970): 169-185.

¹² T M Brncic, B Amarasekaran and A McKenna, *Final report of the Sierra Leone National Chimpanzee Census Project* (Tacugama Chimpanzee Sanctuary, 2010)

¹³ BirdLife International Important Bird Areas factsheet: Kambui Hills Forest Reserve. 2012 (Downloaded from <http://www.birdlife.org> on 19/01/2012); also see Hazell Shokellu Thompson *The Breeding Biology and Ecology of the White-Necked Picathartes Picathartes Gummocphalus Temminick 1825, in Sierra Leone*, PhD Thesis (Open University: Milton Keynes 1997).

¹⁴ John Phillipson, *Wildlife Conservation and Management in Sierra Leone*, Prepared at the request of the Ministry of Agriculture and Natural resources, (The British Council 1978)

¹⁵ This title has been change to 'Chief Conservator of Forests', Sheku Mansaray is the current Chief Conservator of Forests in Sierra Leone

¹⁶ Which is now known as the Forestry Division.

These forests should be preserved, not only on account of the number of springs and streams that rise in the hills, and on account of the effect they have on the climate, but also on account of their close proximity to the railway. Later on, under proper management these forests should be exploited commercially.¹⁷

As early as 1914, two years after the establishment of the Forestry Department, plans were made to demarcate the Kambui Hills Forest Reserve. However the actual demarcation was delayed until 1916 due to the ill health of staff (this original declaration can be seen in Appendix A).¹⁸ As the Kambui Hills were located in what was then known as the Sierra Leone protectorate (now the provinces), the Forestry Department needed the Paramount Chiefs (PCs) of the relevant chiefdoms to formally request the reserve's demarcation. Although such cooperation was initially forthcoming,¹⁹ conflicts soon arose between the then Paramount Chief (PC) of Nongowa Chiefdom, Madam Humonyaha, and Kenema's District Commissioner. As a result, she pulled out of the agreement and started to organise farming within the forest area.²⁰ At the end of 1918, however, Humonyaha was deposed from her position as PC,²¹ paving the way for the formal declaration on the reserve in 1920.²² This made Kambui Hills the third forest reserve to be formally declared in Sierra Leone after the Colony Forest Reserve (now Western Area Peninsula Forest Reserve (WAPFoR)) which was declared in 1916 and the Kasewe Forest Reserve which was declared in 1919. An extension to the north of the reserve was later added in 1952, known as the Largo Extension.²³

Exploitation of the Reserve

Following the establishment of the reserve, Kambui Hills and the adjacent urban centre of Kenema soon became the main site for timber operations in Sierra Leone. Early on this was limited to minor plantation work and some limited timber sales to the Railway Department.²⁴ By the 1930s yemane (*Gmelina arborea*) was being planted at various sites around the reserve (under the Taungya system of mixed use farming/forestry plots),²⁵ the forest was being enumerated for economic tree species,²⁶ and some small-scale pit-sawing was being initiated.²⁷ However, the most fundamental change in operations occurred during and after World War Two, when sawmilling operations began in Kenema. Initially, during World War Two, a small sawmill was installed at Kenema. Operations expanded further at the end of the war, when two army sawmills that had been operating at Kasewe Forest Reserve and at River No. 2 (in the Colony Reserve), were dismantled and moved to Kenema. Many army personnel who had been operating these sawmills were then also moved to Kenema, making the town a key centre of forest industry activity in Sierra Leone.²⁸

¹⁷ C E Lane-Poole, *Report on Forests of Sierra Leone*, (Waterlow and Sons: London 1911): 9

¹⁸ C E Lane-Poole (1914) *Annual Report of the Forestry Department for the Year 1913* Government Printing Office: Freetown; Kenneth Burbidge (1917) *Report on Forest Administration for the Year 1916*, Government Printing Office: Freetown

¹⁹ C E Lane-Poole (1915) *Report on Forest Administration for the year 1914*, Government Printing Office: Freetown, 1

²⁰ C E Lane-Poole (1916) *Report on Forest Administration for the year 1915*, Government Printing Office: Freetown

²¹ Dick Simpson (1967) "A Preliminary History of the Kenema Area" *Sierra Leone studies (new series)* 21: 52-62; Arthur Abraham (1978) *Mende Government and Politics Under Colonial Rule: A historical study of political change in Sierra Leone 1890-1937*, Freetown: Sierra Leone University Press.

²² *The Sierra Leone Royal Gazette* "Governor's Order" LI(1920), April 3: 226-228

²³ Public Notice No. 3 of 1951 "The Forestry (Forest Reserve) (Kambui Hills Largo Extension) Order, 1952' April 17, 1952.

²⁴ L A King-Church *Annual Report of the Forests Department for the Year 1921*, (Government Printing Office: Freetown 1922) M T Dawe, *Annual Report of the Lands and Forests Department for the year 1925*, government Printer: Freetown 1926)

²⁵ Eric Macdonald (1932) *Sierra Leone Annual report of the Forest Department for the Year 1931*, (Government Printer: Freetown 1932);

W M Robertson, *Sierra Leone Annual report of the Forest Department for the Year 1937*, (Government Printer: Freetown 1938)

²⁶ Eric Macdonald (1934) *Sierra Leone Annual report of the Forest Department for the Year 1933*, (Government Printer: Freetown 1934); Further Note on Forest Enumeration Surveys in Sierra Leone, By R Bourne, Imperial Forestry Institute, Oxford, 20th December 1933 – British National Archives CO 267/644/2; W M Robertson (1937) *Sierra Leone Annual report of the Forest Department for the Year 1936*, (Government Printer: Freetown

²⁷ W M Robertson (1939) *Sierra Leone Annual report of the Forest Department for the Year 1938*, (Government Printer: Freetown)

²⁸ The Commonwealth Forestry Review "Sierra Leone" 50:1 (1971): 144-145; W D Macgregor (1946) *Report on the Forest Administration of Sierra Leone for the Year, 1945*, Government Printer: Freetown; David P. Gamble (1964) 'Kenema – a growing town in Mende country' *The Bulletin – The Journal of the Sierra Leone Geographical Association* 7-8: 9-12

Just after the war, the Forestry Department was split into two branches, the Conservation Branch whose job was to continue reservation and plantation work around the country, and the Forest Industries Branch, whose job was to assume responsibility for forest exploitation, mainly around the Kenema area.²⁹ As a result, during the 1940s and 1950s, Kambui Hills continued to be a major site for timber exploitation, in particular in the Waanje and Neaboi valleys, where the tree species yawii (*Heritiera utilis*) and hendui (*Lophira alata*) were especially targeted.³⁰ The bulk of this timber was sold to the railway department for the construction of railway sleepers and carriages, although there was also a burgeoning furniture making industry in Kenema during this period.³¹

In subsequent years, however, logging in the reserve declined. In February 1960 the last of the accessible timber in the Kambui Hills Forest had been logged and therefore the centre of supply was moved to the Gola North Forest Reserve.³² The Forest Industries Branch became a separate department in 1961 (Forest Industries Department) and then an autonomous State Corporation in 1965 (Forest Industries Corporation (FIC)),³³ which was privatised and sold to a Nigerian company in 2006.³⁴ However between 1960 and the early 1980s, no large scale exploitation occurred in Kambui Hills and instead it became a site for forestry research³⁵ and wildlife expeditions.³⁶ Formal timber exploitation in Kambui Hills was restarted in the 1980s, albeit at a more limited scale, by the Forest Industries Corporation (FIC) and by the French owned Panguma Sawmill located to the north of the reserve.³⁷ Although both of these operations ceased during the civil war which started in 1991, reports suggest that substantial logging of timber still occurred in the reserve during the war period, conducted by a myriad of different independent chainsaw operators.

2.3 Land Tenure Types

Forest Reserve

The current (1988) Forestry Act identifies three different types of classified forests, or forest reserves. The first and most common type is the “National Production Forest”, which is defined as “a national forest of which the primary management objective is production of forest produce.” The second type, “national Protection Forest” is defined as “a national forest of which the primary management objective is preservation of the forest environment and protection of soil, water, flora and fauna.” Finally, “Community Forest” although it is unfortunately not explicitly defined under the act, is any area

²⁹ D H Hodgson (1950) *Annual Report on the Forest Administration of Sierra Leone for the Year, 1949*, Government Printer: Freetown; W A Fairbairn (1950) “Sierra Leone: Report on the Forest Administration for the Years 1948” *Empire Forestry Review* 29:1(1950): 83; R S Pelly, “Forest Industries – Sierra Leone” *Empire Forestry Review* 29:4(1950): 351-360.

³⁰ D H Hodgson, *Report on the Forest Administration of Sierra Leone for the Year, 1947*, (Government Printer: Freetown 1948); D H Hodgson, *Annual Report on the Forest Administration of Sierra Leone for the Year, 1949*, (Government Printer: Freetown 1950); R S Pelly) *Annual Report on the Forest Administration of Sierra Leone for the Year, 1951* (Government Printer: Freetown, 1952).

³¹ *Sierra Leone Trade Journal* “Forest Industries Produce High-Class Furniture” 1:3(1961) : 62-64

³² Maurice H Dorman, *The Review of Government Departments during 1959*, Government Sessional Paper No.1 of 1960, (Government Printers: Freetown 1960)

³³ *Sierra Leone Trade Journal* “Corporation for Forest Industries” 5(1) (1965) : 9

³⁴ Mohamed Vandi ‘Sierra Leone: On Government's Ban On Timber Logging And Exportation’ *Concord Times*, 28 February 2008.

³⁵ J E D Fox, ‘Natural Regeneration of the Kambui Hills Forest in Eastern Sierra Leone. Part I. Ecological Status of the Lophira/Heritiera Rain Forest’ *Tropical Ecology* 11:2(1970): 169-185; J E D Fox (1971) “Natural Regeneration of the Kambui Hills Forest in Eastern Sierra Leone. Part II. Methods of Silvicultural Treatment and Analysis *Tropical Ecology* 12:1 (1971): 1-23; J E D Fox “Natural Regeneration of the Kambui Hills Forest in Eastern Sierra Leone. Part III. The Results of Silvicultural Treatment and Management Consideration’ *Tropical Ecology* 13:2(1972): 139-164 *Sierra Leone Trade Journal*, 6(3) (1966), pp.77-123 “Durham Scientists in Forestry Exhibition” p. 107

³⁶ For example see John F Oates, *Myth and Reality in the Rain Forest: How Conservation Strategies are Failing in West Africa*, University of California Press: Berkley 1999); Gerald Durrell, *Catch Me A Colobus* (London: Penguin 1972); David Attenborough ‘Expedition to Sierra Leone,’ *Zoo Life* 10 (1955):11-20; R F Inger and J I Menzies, ‘A new Species of Toad (*Bufo*) From Sierra Leone,’ *Fieldiana Zoology* 29:54 (1961): 589-594.

³⁷ A G Davies, *The Gola Forest Reserves, Sierra Leone: Wildlife Conservation and forest management* IUCN tropical forest programme. (Cambridge University Press 1987)

designated as such through agreement between a given Chiefdom Council and the Chief conservator of forests, and subsequently gazetted.

KHNFR is considered to be primarily a forest *production* reserve; meaning that an important function of the reserve is to provide timber for both domestic and international market. In the past, as described above, this was done mainly by the government, whether as a department or a state corporation. However in 2006 a forest concession in the KHNFR was awarded to a Nigerian company and commercial logging was conducted in the reserve until a timber export ban was put in place in January 2010 by the Forestry Division. Communities surrounding the reserve are able to exploit the reserve forests, however they need the permission of the district forestry office before this can occur. Currently the district forestry office claims that no activities are allowed to occur in the reserve, as they are in the process of finalising its management. A hike through the reserve, however, readily reveals that there are considerable mining (Gold, Sand and Diamond), farming, fuelwood harvesting, and logging activities occurring inside its boundaries.

The management of KHNFR has been highly neglected over the past few decades, especially since the outbreak of the country's civil war in 1991. During the 1950s and 1960s, for example, the boundaries of the reserve were regularly brushed, clearly distinguishing what was the forest reserve and what was salvage (community) land. However this activity, for the most part, ceased to occur after this and the reserve boundaries became overgrown with vegetation. In some areas piles of stones, concrete pillars, lines of Yemane (*Gmelina arborea*) or evident changes in vegetation still indicate the reserve's boundary. In many other areas, however, the boundary is unclear, creating ambiguity as to where the forest reserve ends and salvage land starts. The lack of clarity causes numerous conflicts between the Forestry Division and the forest edge communities, with both sides potentially taking advantage of this ambiguity to overstate their land claims.

Salvage Land

While the term salvage land does not appear in any legal documents or historical forestry reports, it seems to be land 'given' to communities in compensation for their restricted access rights into Kambui Hills after its declaration as a Forest Reserve. Each community has received its own tract of salvage lands available for farming and other activities, which is supposed to be managed through local community bye laws. In theory, the Forestry Division has no jurisdiction over these lands, except insofar as it has the authority to police unregistered chainsaws operating within them. Chainsaws are supposed to be registered and licensed with the Forestry Division at a total cost of Le 6 million a year. Despite lack of jurisdiction, the Forestry Division staff do claim to occasionally intervene in these lands if they feel local management practices are impacting negatively on the communities. However, most communities around the reserve complain that the Forestry Division is overly zealous in its management approach, restricting activities and charging fees to communities for use of their own salvage lands.

Protected (Community) Forests

Originally described as Native Administration Protection Forests,³⁸ and later known as "community forests" under the 1988 Forestry Act, the concept of protected forests emerged from a Forestry Department during the late colonial era. At the time, the Forestry Department was frustrated at the slow pace of the bureaucratic process required to declare forest reserves in the Sierra Leone Protectorate (now provinces). It was also under pressure to rapidly expand the country's forest estate (forest area under formal management) and so therefore developed the notion of Protected Forests. The protected forest concept was actually based on the existing Mende system of reservation known as *Salei* or *Sei* bush belts which was rooted in old native laws requiring that long strips of high bush should be maintained along

³⁸ W D Macgregor, *Forestry Report for the Year 1941*, (Government Printer: Freetown 1942)

footbaths and rivers.³⁹ Historically, protected forests were declared by Tribal Authorities (now Native Administrations) with advice from the Forestry Department.⁴⁰ Their most fundamental difference from forest reserves is that they were supposed to be both funded and administered by the Tribal Authorities, not the Forestry Department.⁴¹ In contrast to the situation in forest reserves where it was entrusted with direct management, the Forestry Department's role in protected forests was therefore restricted to the provision of advice and occasional expertise. The protected forests were designed to become permanently productive forests for local communities (providing poles and fuelwood), and were often extensively planted with yemane (*Gmelina arborea*) trees by the Forestry Department and the Chiefdom Authorities using the Taungya method.⁴² Most of Sierra Leone's protected forests were declared during the 1940s and 1950s.

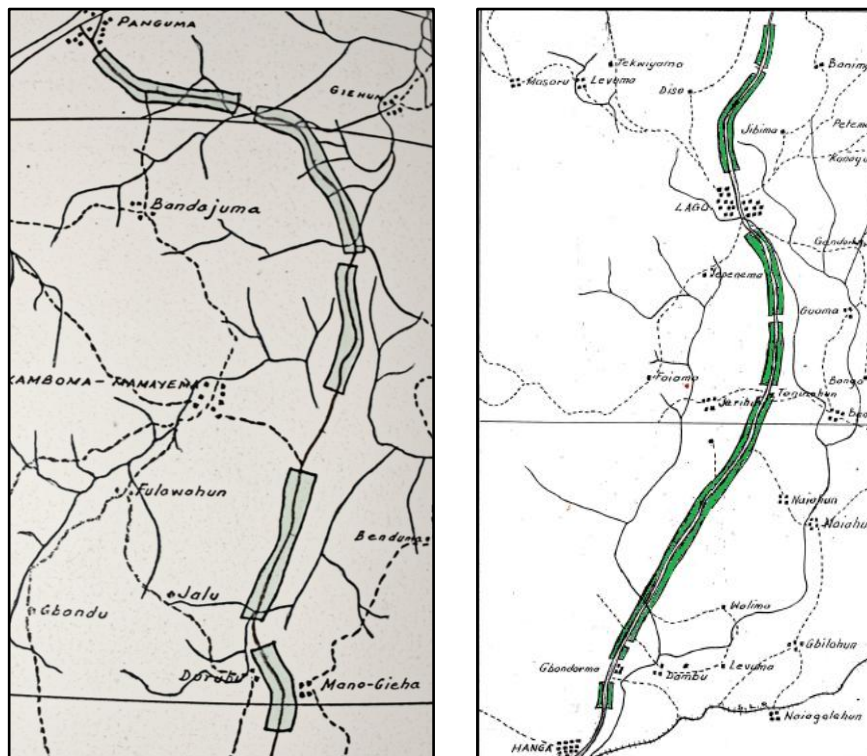


Figure 3 – Maps of the Lower Bambara Chiefdom Protected Forest No. 2 (left) and the Nongowa Chiefdom Protected Forest No. 4 (right). Both maps were sourced from the District Forestry Office in Kenema

There are three Protected Forest areas in the area of the KHNFR:

- 1) The Nongowa Chiefdom Protected Forest No. 4, which stretches along the Kenema-Kono road from just north of Hangha village to a couple of kilometres north of Largo, at a width of 330 feet on either side (see Figure 3);
- 2) The Lower Bambara Protected Forest No. 2, which is also along the Kenema-Kono road, starts at Mano N'geaya, and reaches to Panguma, once again at a width of 330 feet on either side, although communities in the area say that its 'protected forest' status has now ended (see Figure 3)) and;

³⁹ H Maughan-Brown, "Sei Bush Belt in Sierra Leone" *Farm and Forest* 4:1(1943): 8-9

⁴⁰ A F A Nicol *1956 Report on the Forest Administration*, (Government Printer: Freetown, 1957)

⁴¹ A F A Lamb, *1957 Report on the Forest Administration of Sierra Leone*, (Government Printer: Freetown, 1958)

⁴² W D Macgregor *Report on the Forest Administration of Sierra Leone for the Year, 1945*, (Government Printer: Freetown, 1946); W D Macgregor *Report on the Forest Administration of Sierra Leone for the Year, 1946* (Government Printer: Freetown; 1947) D H Hodgson, *Report on the Forest Administration of Sierra Leone for the Year, 1947*, (Government Printer: Freetown 1948).

- 3) A Protected Forest near Komende, which in interviews was referred to as the Komende societal bush. However this Protected Forest is no longer in existence, as it was felled completely by a logging company in 2006.

The 1988 Forestry Act, although a very vague document, appears to imply that Protected Forests should still be administered and run by Native Authorities. However around the Kambui Hills North Forest Reserve, the Kenema Forestry Division appears to be taking a very direct role in regulating the management and use of protected forests. There is however a conflict in the stories of various actors, with the district forestry officer claiming they do not collect fees from communities in return for the use of protected forests, while the forestry guards on the ground stated during interviews that they do collect such fees. Community members interviewed also stated that those who wish to use the protected forests for farming or tree harvesting have to apply to the district forestry office via the Paramount Chief, and then after that have to pay a negotiable amount in fees to the Forestry Division.

2.4 Wood-based commercial commodities

The classification relating to these commodities is highly varied in both formal literature and informal discussions. For this report ‘wood-based products’ is an umbrella term which refers to all of the commodities discussed here: logs, boards, poles, charcoal and firewood. The term ‘timber products’ refers to logs, boards and poles; ‘logs’ refers to timber logs that are exported, while boards and poles, among other uses, are predominantly used for domestic construction purposes. The term ‘fuelwood’ refers to both firewood and charcoal which are mainly used for cooking and food preparation.

Timber products

The trade in export logs is currently illegal in Sierra Leone on account of the timber export ban that has been in place since January 2010. Gava Forest Industries Corporation, a company that was logging within the KHNFR before the export ban, still has numerous piles of logs lying within its former concession which it is trying to guard (presumably with a view to exporting them if the ban is lifted). The logs, however, are starting to rot, and many people from nearby villages are entering the concession to harvest fuelwood from these pieces of logs. During the research, a small amount of harvested logs were found in the KHNFR in the Kona-Kpindibu Section of the Nongowa Chiefdom. The communities nearby claimed not to know who was responsible for harvesting these logs.



Figure 4 – Freshly cut logs in the KHNFR in Kona-Kpindibu Section of the Nongowa Chiefdom (left); abandoned logs that had been logged by the Gava Forest Industries Corporation (right)

In general, the trade in boards for the domestic market is not illegal. However the trade can become illegal (or have illegal aspects) if the boards are:

1. Harvested in a forest reserve or protected forest without the relevant permits

2. Harvested with an illegal chainsaw; or
3. Transported to and sold at vending sites without paying the correct permits fees.

All three forms of 'illegal board' harvesting are certainly occurring in the KHNFR and the area surrounding it. During the research, chainsaw harvesters were seen operating deep inside the KHNFR, as well as piles of boards stocked up in the forest, presumably to be eventually transferred to Kenema and Freetown at a later date. According to the District Forest Officer there are currently no permits to harvest boards or operate chainsaws within the KHNFR, meaning that these activities were evidently illegal. The Forestry Division office in Kenema occasionally organises some raids to arrest these operators, or at the very least to confiscate their boards and chainsaws. However, overall, the majority of harvested boards appeared to be coming from salvage and household lands.

From the interview data collected, it appears that only a minority of chainsaw operators pay the full annual chainsaw registration, meaning that much of the trade is potentially illegal at some point. Forestry Division staff are active in tracking down and confiscating unregistered and unlicensed chainsaws. While, the 'incorrect' payment of fees appears to be common for the trade, with some operators allegedly paying bribes to police to allow them through checkpoints without paying the formal fees, or sometimes deals are made with ACOTIDA⁴³ and forestry staff for discounted fees (without receipt) to be paid. There appears to be very limited crackdown of these forms of illegal activities. Thus, the majority of the board trade might be illegally conducted/traded at some point, however identifying this in the chain of custody is difficult. Most actors involved in the trade complained that forestry staff and police were cracking down on the trade in general, affecting many legitimate operators, and causing some stagnation in the business. This is a concern, as the head of the Forestry Division has stated that the purpose of the current timber export ban is to help stimulate domestic board production. This is evidently not happening in the Kambui region.

In terms of formal fees, chainsaw operators are supposed to pay Le 1 million per year to register their chainsaws, and Le 5 million per year for the chainsaw license. At the Bandama checkpoint they are supposed to pay a transport permit to forestry staff of Le 1,000 per one inch board, and Le 2,000 per two inch board. Each truck is supposed to pay ACOTIDA a Le 50,000 afforestation fee. In Kenema, each board vendor is supposed to pay an annual Le 500,000 retailer fee to the Forestry Division. Although, according to research participants, many of the above fees are either not paid or un-receipted 'discounted fees' are paid in place of the formal ones.

On top of this there are a range of more informal fees which vary from village to village. Every Chiefdom has its own licensing system for chainsaw operators, making them pay between Le 200,000 to Le 500,000 per year to register their chainsaws. Each board harvester, before starting operations, usually pays between Le 10,000 to Le 20,000 as a kola to the Town Chief (in one Chiefdom Section they are also supposed to pay Le 50,000 to the Section Chief). If they want accommodation in the community while they are harvesting they have to pay up to Le 100,000 per month. To harvest trees on household lands, they generally have to give the landowner between 10% and 30% of the board harvest (in a couple of communities an extra 10% of the harvest is supposed to be given to a community fund). In other villages harvesters must pay between Le 15,000 to Le 50,000 for each tree harvested to the landowner. Labourers from the village are also occasionally employed to carry boards from the harvest points to the road (usually between Le 1,000 to Le 2,000 per trip). In Kenema it usually costs Le 500 per board for storage.

The cost for boards varies greatly depending on size and wood type. White Boards (made from lighter wood types) are usually sold at the village level for between Le 6,000 to Le 12,000, and around Le 14,000

⁴³ ACOTIDA is a timber harvesters advocacy organisation. Its role is explained in more depth in section 3.3

in Kenema. Red Boards (made from harder wood types) usually sell between Le 10,000 and Le 18,000 per board at the village level; and around Le 20,000 per board in Kenema. A more thorough description of board trees species is provided in section 4.7 of the report.

The production of poles appears to be very limited in the KHNFR, with only one village visited actually being active in the trade. The poles are always harvested by the village (rather than outsiders as is often the case with boards) and the fee structure is similar to boards. The main difference is at the Bandama checkpoint they are supposed to pay between 15,000 and Le 100,000 per load of poles (varying depending on the size of vehicle), rather than having a per pole fee.

Fuelwood

Fuelwood (charcoal and firewood) is generally produced by communities near the main highways (Bo-Kenema and Kenema-Kono) and it is bought by vendors from Kenema, or by passing vehicles. Firewood is produced as a part of the farming cycle and is sold between Le 500 and Le 5,000 per bundle/pile (the size of the bundles varies considerably). In the forestry regulations there is a fee of 20,000 per cord (128 cubic feet) at checkpoints. However it appears that the actual amount paid is generally negotiated with the staff on the day.

Charcoal production is occurring extensively both in and around the forest reserve. Charcoal producers sometimes work in conjunction with board producers, using the offcuts to make the charcoal. Charcoal is usually harvested from the forest, but also occasionally for the by-products of farm clearing. The production has grown considerably in the last few years, and the trade was learnt by many of the villages from Liberian refugees who were based in the area during and just after the civil war. One village in the region is a major charcoal producer, while most of the others conduct it as a secondary activity to farming and other livelihood activities. Each charcoal pit produces between 10 and 30 bags of charcoal, while the whole charcoal production process takes about 4 or 5.

According to formal fees, charcoal producers are supposed to pay Le 200,000 per month for a charcoal harvesting license, although this policy does not seem to be enforced. At the Bandama checkpoint charcoal vendors, according to the regulations, are supposed to pay Le 2,000 for every six bags of charcoal. However it appears that they are being overcharged and pay Le 500 per bag (Le 3,000 for six bags). Charcoal is sold between Le 5,000 and Le 10,000 at the village level (the further away from Kenema and the highways the cheaper it becomes); while it is sold in Kenema and the sections of the highway near Kenema at Le 12,000 per bag. It generally costs between Le 1,500 and Le 2,000 per bag to transport charcoal from the villages to Kenema. They also need to pay Le 500 per charcoal bag to the charcoal ground owner in Kenema for the storage of their bags.

3. Actors

3.1 Local Actors

Forest Communities

There is a great diversity among the communities surrounding the KHNFR outside of Kenema. They range from recently established settlements of around 20 or 30 people to largish towns with populations in the thousands. While Mende is the dominant ethnic group, many of these villages are home to people from Sierra Leone's other ethnic groups (ie. Temne, Fula, Kuranko, Kissi, Kono, Limba, Susu etc.). From the narratives obtained through field interviews it appears that almost all of the communities were attacked and burnt during the civil war. During this time many of them fled to Kenema or refugee camps for safety. A short profile of all the villages visited is supplied in Appendix B.

The villages around the reserve are primarily farming communities who supplement their agricultural incomes with mining or forest exploitation activities. Nonetheless, there is a community that solely specialise in charcoal production, likely a reflection of the increasing value that charcoal has received as a commodity in recent years. In general, charcoal and firewood are only traded in communities that are in close proximity to Kenema or the Bo-Kenema and Kenema-Kono Highways (those in the Nongowa, Small Bo and Lower Bambara Chiefdoms). In contrast, the majority of communities visited are involved in board production in some form. Larger villages tend to have people who own their own chainsaws, while smaller villages are reliant on outside chainsaw operators from the larger towns and Kenema to harvest boards. This is mainly due to the high costs of purchasing and registering/licensing a chainsaw. The villages from the Dodo and Kandu Lekpeama Chiefdom tend to be least active in exploiting wood-based products, probably due to their isolation from Kenema. These communities also seem to be more involved in gold mining.



Figure 5 - Charcoal pit located inside the KHNFR

Relationships with KHNFR vary greatly among the communities visited. Some villages, notably those that were at some distance from its boundary, had barely even heard of the reserve and knew little about its laws. Others, closer to the KHNFR boundaries, were aware of the reserve, but are too scared to enter it and instead focus their activities in their salvage land. Still other communities openly entered and used the reserve, while a final group stated that they sometimes exploit the reserve clandestinely, occasionally in collaboration with chainsaw operators from Kenema. A couple of communities claimed they had permission from the Forestry Division (or at least from staff of the district forestry office) to use the reserve. Levels of awareness of the reserve boundary were similarly varied. Some could easily define the reserve's boundary (due to the presence of piles of rocks or planted Yemane trees), while others had no idea where the boundary was and said it was impossible to tell. On the whole, proximity to the KHNFR was a major factor in influencing their relationship with, and knowledge of, the reserve. Unsurprisingly, those closest to the reserve tended to have a better knowledge of it and use it more frequently.

Most of the communities seem to have a strong dislike for the Forestry Division, claiming that it intervenes too much into their livelihoods, though a few communities (once again those furthest from the reserve) were rarely or never visited by forestry officials. Overall, there were only a couple of communities who expressed positive views of the forestry division. While local management of forests varies greatly across the communities, in general it appears that the Town Chiefs and village elders have great influence over local forest management practices.

Native Authorities

While the Native Authorities could be listed among the government actors below, their strong linkages to the village communities make it more suitable to include them with the other local actors in this section, and Town Chiefs in particular are deeply embedded in their local communities. The Native Authorities are structured in three tiers. The highest level is the chiefdom, which is headed by a Paramount Chief, the next is the section which is headed by the Section Chief and the lowest tier is the village, which is headed by the Town Chief (sometimes referred to as a Village Chief in smaller settlements). Although the KHNFR is situated predominantly in the Nongowa chiefdom, the neighbouring chiefdoms of Small Bo, Kandu Lekpeama, Dodo and Lower Bambara also have access rights to the reserve. There is currently a boundary conflict between the Nongowa and Lower Bambara Chiefdoms, including a section of the boundary between the two Chiefdoms within the KHNFR.

Each of the chiefdoms, sections and villages create their own bye-laws in relation to harvesting of boards in the salvage and household lands in their jurisdiction. These include fees for chainsaw operators, in-kind commissions from the boards produced and kola (money) payments (*famalo*) to chiefs. For example, the Paramount Chief of Dodo claimed to have completely banned board harvesting in his chiefdom, except for household purposes. However, at least one of the villages in his chiefdom was still engaged in commercial board harvesting at the time of the interviews. Nevertheless it appears that communities tended to abide more closely with laws imposed by chiefs than by those imposed by the Forestry Division or other outside agencies. This is likely due to the chiefdom being perceived as a more legitimate and relevant governance structure for local communities. The three Paramount Chiefs interviewed, to some extent complained that they had been sidelined from the management of both the KHNFR and the protected forests, as the Forestry Division failed to inform them of their current activities and revenue from chainsaw licenses and other fees were not forthcoming.

Urban Vendors - Kenema

There are numerous fuelwood vendors (charcoal and firewood) operating in Kenema. The firewood vendors tend to be scattered throughout the city, while the charcoal vendors are clustered in one location. All the firewood and charcoal vendors interviewed were women. Charcoal vendors by far outnumber firewood vendors suggesting that in Kenema, like in Freetown, charcoal is rapidly displacing firewood as the preferred form of household fuelwood. Charcoal and firewood are sourced from a variety of locations in Kenema and the surrounding districts, including forest-edge villages near the Kambui Hills. There are also a number of pole vendors in Kenema, however it appears that only a very limited supply of poles comes from near or around the Kambui Hills forest reserve. The vendors were all male, and use primarily Kanti (*Anisophyllea laurina*) trees for the production of their poles.



Figure 6 - Board vendors in Kenema

The board vendors used to be mainly clustered along Coker Jah Street in Kenema. However, they all had to move to Fatmata Streets and Mission Streets due to government construction in the area. The vendors are mainly young males and most claimed to be registered with ACOTIDA, and they generally own chainsaws which are in operation in different villages in the Kenema and Kailahun Districts. They claim that all of their chainsaws are fully registered and licensed, and that the Forestry Division allows them to make partial payments throughout the year. Most of the vendors claimed that after an initial post-civil war boom, the board trading industry has suffered considerably, primarily due to overly exorbitant government fees and increasing crackdowns by police and the city council on their operations. Some board vendors that participated in the research also stated that since the declaration of the Gola Forest as a national park and the recent restrictions on activities in Kambui, there has been a shortage in Red Board species (which generally come from native forests). As a result their trade has now mainly shifted to White boards (*Terminalia ivorensis*, *Rauvolfia vomitoria*), which are sourced from salvage lands in Kailahun and Kenema Districts. Although village level interviews indicated that some boards are being sourced from the within Kambui Hills, it seems likely this is on a much more limited scale than before.

3.2 Government Actors

Forestry Division - Kenema

The Forestry Division in Kenema is the key government body in charge of managing and monitoring the KHNFR. Their main role is to police activities in the reserve, allocate permits for conducting activities in the reserve, collect revenues from passing trucks carrying wood products at the Bandama Checkpoint and conduct tree planting exercises around the reserve. In addition, The Forestry Division is also responsible for collecting fees for chainsaw registration and licensing (registration costs Le 1 million per year, while licensing costs Le 5 million per year). Nonetheless, major logging concessions, such as the one negotiated by Gava, appear to have been licensed through the Forestry Division in Freetown with limited participation from the Kenema office.

There are evidently high levels of conflict and disagreement between the Forestry Division and the forest-edge communities. The District Forestry Officer, for example, maintains that no resource use is currently permitted in the forest reserve as there are still issues surrounding its management – a stance which clearly exists in tension with that of many forest-edge communities who do actively use the reserve. For their own part, the Forest Guards claimed that their main function is to monitor the forest reserve, make arrests of illegal chainsaw operators and collect fees for protected forest use (although this was in contradiction of the District Forestry Officer statements) and provide advice on salvage land management. Some of the communities, however, resent what they see as unfair fees for use of Protected (“Community”) Forests and even sometimes for use of their own salvage lands. Furthermore, the Forestry Division staff claim that the salvage land, protected forest, and forest reserve are demarcated by distinct boundaries but the results of village interviews and other fieldwork suggest this is not the case in many areas. The demarcation is inconsistent, with some areas marked by piles of stones, some marked by lines of yemane (*Gmelina arborea*) trees, while other boundary markers are completely overgrown.

Kenema District Council

As a part of the Sierra Leone decentralisation policy since the beginning of the 2000s, Forestry Division now gets its support directly from the district level. The council’s role, according to its chairman, is to support whatever activity the Forestry Division plans for the Kambui Hills. They see their role as mainly being custodians of the land, with the bulk of their activity relevant to the reserve occurring through councillors’ whose wards are adjacent to the forest reserve. The Forestry Division’s guards claim that some of the councillors are involved in the illegal board harvesting occurring in the reserve, and that they therefore sometimes make it difficult for the guards to do their jobs by helped to thwart some arrests. The council also sends staff to registered houses and collect taxes from the villages surrounding the reserve. In contrast, the council representatives interviewed claimed that their jurisdiction only covers one third of the land area in the Kambui Hills and that the rest of the management is the prerogative of the city council and that the only direct fiscal benefit that they receive from forestry activities is 30% of the fees from chainsaw registration.

Kenema City Council

The Kenema City Council’s obligation is to administer the City of Kenema and any area within 5 kilometres (3 miles) of the urban area. They say that this covers around one third of the Kambui Hills, and that the rest of the reserve is the responsibility of the District Council. This claim illustrates some apparent lack of clarity over the division of jurisdiction between the relevant governance agencies, as it directly contradicts the district council claim that it itself only covers one third. In general, specific issues relating to the forest reserve are usually expressed through councillors from different wards around Kambui Hills, although for the most part the council’s role is fairly limited in terms of the reserve’s management. During 2011 the council organised the arrest of some trucks in Freetown that were transporting illegally harvested boards from the Kambui Hills. At present, however, with the national

elections just ten months away, they are being very relaxed with the enforcement of laws in relation to the reserve as enforcement is considered politically risky.

The Sierra Leone Water Company (SALWACO) - Kenema

The Kenema branch of the Sierra Leone Water Company (SALWACO) oversees eleven water catchment areas in the KHNFR. Eight of these have functioning dams that provide potable water to Kenema and nearby villages,⁴⁴ while the other three act as reserve reservoirs. According to SALWACO there has been an increase in illegal extraction activities including gold mining, illegal logging and charcoal burning occurring within the catchment areas, particularly in the dam sites closest to Kenema,⁴⁵ It is claimed that this has affected Kenema's water supply both in terms of quality and quantity, due to increased siltation of the dams.⁴⁶ SALWACO does not itself arrest people encroaching in the reserve, but rather provides information to the Forestry Division and the police. In 2011 ten illegal gold miners were arrested and jailed for three months for operating in the catchment area.⁴⁷ Since these arrests the police have deployed more personnel around the catchment areas to monitor such activities.

Kenema Police

The main police force for the area is based in Kenema and works under the Kenema City Council. They also collaborate with SALWACO, the Forestry Division, the Mines Department and the District Council to attempt to regulate illegal entering and use of the forest reserve. They conducted four raids of the catchment areas in 2011 and, as mentioned above, arrested ten people in total. The police claimed that since these raids and their increased monitoring there has been a drastic drop in illegal activities in the catchment areas.

The police run the vehicle checkpoint at Bandama, where the Forestry Division and ACOTIDA also collect fees from passing trucks with forest produce. The police operating this checkpoint come under the most criticism due to their apparent propensity to demand bribes. The board vendors in Kenema complain that police are clamping down overly harshly on the board trade and always expect bribes and tips from those transporting boards through the Bandama checkpoint. During interviews, all of the board vendors described an incident at the beginning of 2012, when a board vendor who was transporting his load to Freetown was detained for three days by the police. The vendors interviewed claimed that he had all of the correct documentation, however he failed to 'tip' the police on his way through and therefore was detained. He was finally released with the help of the district forestry office, ACOTIDA and other vendors after paying Le 750,000.

Representatives from ACOTIDA also complained about the police at Bandama, saying that they often make illegal arrangements with vendors in Kenema. They organise early 'payments' from the vendors inside Kenema and then allow their trucks to pass through with boards and poles without stopping them at the checkpoint so they can pay their required fees to the Forestry Division and ACOTIDA. When this happens, ACOTIDA representatives say they usually contact their colleagues at the Masiaka checkpoint to detain these trucks. However, trucks with boards frequently travel at night when ACOTIDA and Forestry Division staff are not working at the checkpoints.

⁴⁴ SALWACO has dams in Kondenbutihun, IDA, Ngombu, Dowalia, Souleja, Nyadeyama, and Bandama

⁴⁵ *Awoko* 'SALWACO Warns Against Logging Around Catchments' 14 April 2009.

⁴⁶ *Awoko* 'Acute Water shortage hits Kenema' 16 August 2011.

⁴⁷ Five of them were arrested during one sting operation, see: *Awoko* 'Five jailed for mining in reserve forest' 11 August 2011

3.3 Non-Government Organisations

Agricultural Community for Timber Development Association (ACOTIDA)

The Agricultural Community for Timber Development Association (ACOTIDA) was established in the Eastern Province in 2007. Its main office is in Kenema, as it is considered to be one of the most prominent locations for board production in Sierra Leone. It is ostensibly a board harvesters' and vendors' advocacy organisation, but it also appears to be involved in a range of other activities. ACOTIDA has around 70 members in Kenema, each of whom pay Le 70,000 a year for membership; these members are predominantly board vendors and chainsaw operators. ACOTIDA also collects an afforestation fee of Le 50,000 from every truck with boards or poles that passes the Bandama checkpoint, which is supposed to be used to plant trees in the area in conjunction with the Forestry Division. The forestry guards interviewed, however, claimed that they never see any of this revenue.

Although ACOTIDA reportedly works closely with the Forestry Division, one point of contestation is the licensing and registration of chainsaws. Currently, Le 1 million per year must be paid to register a chainsaw and then Le 5 million per year must be paid to Forestry Division for its license. While Forestry Division staff support the fees, ACOTIDA members feel that the rate is overly high and should be dramatically reduced and a system of partial payments introduced to spread the cost over the fiscal year.

Another issue is that there appears to be a universal dislike of ACOTIDA by its members (board vendors and chainsaw operators). They say that ACOTIDA provides them little or no benefits and that the association only operates to enrich its senior members and executives. Nevertheless they continue to pay their dues, and claim that if they do not do so, ACOTIDA will cause problems for them at checkpoints and in their daily operations. In their defence, ACOTIDA representatives claimed that the association aids unregistered chainsaw operators if they are arrested by the Forestry Division, but ACOTIDA members claimed this almost never occurs and they are left to fend for themselves.

PAGE

The USAID and ACIDI/VOCA funded "Promoting Agriculture, Governance and the Environment" (PAGE) initiative is in the process of establishing forest co-management in the Kambui Hills North Forest Reserve. The programme aims to build upon and revive existing natural resource management practices of forest edge communities, as well as to develop forest management for the KHNFR in conjunction with the Forestry Division and other relevant bodies. Through workshops with Paramount Chiefs and the local government in Freetown, PAGE identified 102 focus villages across five chiefdoms (Small Bo, Lower Bambara, Nongowa, Dodo and Kandu Lekpeama) to develop co-management (village level) approaches for the management of the forest reserve. The plan is then to cluster these 102 partner communities into 18 groups, each of which will have two representatives to represent the forest edge communities in discussions and plans about the management of the reserve. So far PAGE has conducted a number of Participatory Rural Assessments (PRAs) in forest edge villages, completed a forest inventory of the reserve and has begun to develop Village Forest Management Associations (VFMA) at each of the 102 partner communities. This current research project is funded by PAGE and is intended to directly contribute to the design and strategy of PAGE's continued intervention in the area.

Overall PAGE appears to have a good reputation with the communities visited as a part of this research. Most of the communities appreciated being able to have a direct dialogue with an organisation about forest management strategies and the different information that PAGE has so far been able to provide to them about the KHNFR and the laws that govern it. Initially some communities had apprehensions about PAGE, particularly those located close to the forest reserve, as they believed that PAGE was planning on making the KHNFR a national park which could potentially exclude them from key resource areas on which they depend for their livelihoods. However these fears now seem to have been mostly allayed. A

couple of communities said that while they appreciated what PAGE had told them, they would not take the information fully into consideration until they heard it directly from their Paramount Chief. One issue PAGE might encounter is cynicism from forestry guards, who in an interview suggested that forest management committees would not work, as it is just like asking one thief to watch another thief, as all communities are involved in illegal activities in the reserve.

3.4 Logging Companies

Gava Forest Industries Limited

Gava is a Nigerian company that purchased the old government Forest Industries Corporation (FIC) in 2005, as a part of the government's privatisation policy of the time. It was reported that Sierra Leone's former Finance Minister, James Jonah, played a major part in securing the deal.⁴⁸ Gava is owned by Lucky Nosakhare Igbinedion, who was the governor of Nigeria's Edo State. He is considered to be a very controversial character in Nigeria.⁴⁹ In 2008 he and his Gava Corporation in Nigeria had to face that country's Economic and Financial Crimes Commission for 142 counts of corruption, related to claims that he embezzled US\$24 million using front companies. His trial continues.⁵⁰ Nevertheless, the incident did not appear to have a direct impact on Gava's activities in Sierra Leone.

According to a former Gava employee, part of the agreement was that Gava would either pay all former FIC workers off or employ them as a part of Gava's new operations. The original agreement was that Gava was supposed to be given a ten square mile concession in a portion of the Gola Forest in the Kenema District. However, the Conservation Society of Sierra Leone (CSSL) and the Wildlife Section of the Forestry Division protested the concession award due to Gola Forest's pending National Park Status, and the concession site was changed to Kambui Hills North Forest Reserve (KHNFR) within the Nongowa Chiefdom. As a part of the deal, Gava reportedly was supposed to pay a certain amount of money to a community development fund and employ people from local villages.

The size and time period of the concession given to Gava in KHNFR is, however, contested. According to documentation by the National Commission for the Environment and Forestry (NaCEF – the predecessor to the current Forestry Division), Gava was given a one square mile (640 acre) concession for a period of one year, with the condition that the operation should be 'confined to one square mile until further notice'.⁵¹ In contrast, representatives from Gava claim that they were awarded a five year license (2006-2011) and a ten square mile concession to harvest in KHNFR, this is supported by most of the communities surrounding the Gava harvesting site (Komende, Ngegeru and Taninahun), who were also under the impression that the company had been given a ten square mile concession. Unfortunately, the *Gava Management Plan for the Kambui North Forest Reserve*, is ambiguous regarding the size of the concession stating that 'the forest will be divided into compartments each measuring (one) 1 square mile', implying that the concession would be larger than one square mile. The document, which is undated, was produced by Gava but was also stamped by the Ministry of Agriculture, Forestry and Food Security (MAFFS). Despite these ambiguities, the company operated for three years (2006-2009), and was only forced to cease operations by the general timber export ban in January 2010.

Gava operations began in 2006 and, according to local communities, initial activity was on a one square mile block of the protected forest and the salvage land near the community of Komende. This allowed

⁴⁸ Mohamed Vandi 'Sierra Leone: On Government's Ban On Timber Logging And Exportation' *Concord Times*, 28 February 2008.

⁴⁹ *The Street Journal* 'The Flamboyant Lifestyles Of Nigerian Politicians September' 24, 2011

⁵⁰ *BBC news* 'Wanted Nigerian hands himself in' 21 January 2008; Innocent Anaba and Emmanuel Aziken 'Nigeria: Igbinedion Reports to EFCC, Detained' *Vanguard* January 21 2008; Dan Imoudou 'The Real Story: The Re-Trial Of Ex-Governor Lucky Igbinedion' *Elendu Reports*, 23 February 2011

⁵¹ B M Kamara 'Timber license to Gava Forest Industries Co-operation [sic]' Letter to District Forestry Office, National Commission on the Environment and Forestry (NaCEF).

Gava to have a logging site, while they were constructing a 15 kilometre road to their main concession in KHNFR, an arrangement reportedly made between the Paramount Chief of Nongowa, the Forestry Division and Gava. Controversially, this included logging a section of one community's poro bush (sacred society bush), which was in the protected forest, and the villagers were told by the PC they had to move their poro bush elsewhere. According to the community, in return Gava was supposed to employ people from the village, and build them a variety of community structures. In reality, however, none of the structures were ever built and Gava only employed four people from the village, all working as chainsaw operators. Adding to their complaints, during this period nobody in Komende village was allowed to harvest boards in the community's surrounding land without approval from Gava and their protected forest has now been completely cleared of trees by the company.

After harvesting the protected forest near Komende, Gava moved into its concession in KHNFR, which was in between the villages of Ngegeru, Taninahun, and Komende, and operated in this area targeting Nyangun (species unknown), Bajii (*Terminalia Ivorensis*) and other valuable trees until the end of 2009 when the timber export ban came into force. At present, despite the cessation of logging activities, communities in the area report that Gava personnel still patrol the area of its concession, arresting people who try to harvest boards in the concession. They appear to work in collaboration with the local police from Kenema to make these arrests.

A number of communities complained that Gava had encroached onto the salvage lands during its operation in KHNFR. However they felt unable to stop them, as Gava claimed to have all the official documentation to be able to log there. In general the communities felt highly intimidated by Gava and did not feel like they could challenge the company. One community further claimed that Gava was also conducting some gold mining within its concession. Representatives from Kenema City Council also complained that Gava had never paid them monies for surface rent and a council license which the company was obliged to pay.

The export ban had a massive impact on Gava. It had to cease its operations immediately, leaving many of its staff unpaid. Some of these staff have now occupied company's staff quarters and will not leave until they receive their pay. The company's staff claimed they are not currently involved in any logging and that they have a massive stockpile of timber in the sawmill, which has been left unsold due to the export ban.

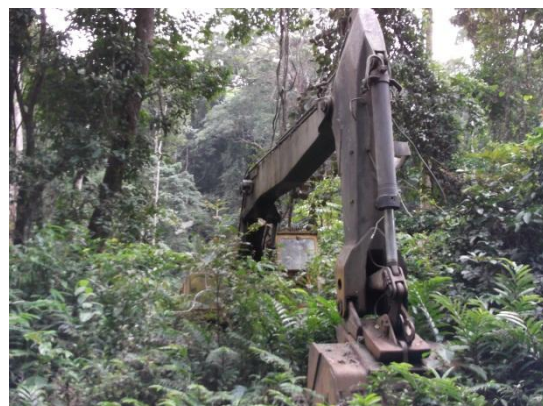


Figure 7 – Photographs of old Gava Forest Corporation machinery that have been left abandoned inside the KHNFR after the timber export ban of January 2010. Note the quick forest growth surrounding the machinery.

Exim

Exim is a Georgian owned logging company based in Panguma to the north of the KHNFR. Although it appears that Exim is not currently involved in any logging operations in KHNFR it does illustrate the politics and conflicts that can arise between major logging companies and forest-based communities. Exim started operations in 2007 and had a license to operate until 2010 but this tenure was cut short due to the timber export ban. The company took over the Panguma sawmill site (formerly known as the Katema Sawmill), an old French sawmilling operation that had been in operation since the 1950s until the start of the Sierra Leonean civil war. The Panguma sawmill had originally been associated with concessions in the nearby Dodo Hills,⁵² and during the 1980s it was also given a concession in the Largo extension of KHNFR.

In 2006 Exim signed an agreement with the Nongowa, Lower Bambara, Falawadu and Nimikoro Chiefdoms in the Kenema and Kono districts. Their subsequent logging activities took place in the Dodo Hills Reserve (Lower Bambara Chiefdom), Nimmi Hills Reserve (Nimikoro Chiefdom), Garfeli Reserve, Gobo Hills Reserve (Falawadu Chiefdom) and salvage lands in the Nongowa Chiefdom. The company also made deals with local communities to harvest logs from their household plots. They had eight chainsaws in operations, harvesting 20 to 25 trees per days, with all harvested logs being transported to Freetown and then exported to European and Asian markets. In addition, according to members of one village, Exim was also involved in some illicit diamond mining.

As a part of the agreement documents signed by Exim and the Lower Bambara Chiefdom, it was supposed to construct a number of bridges for the surrounding communities, develop a number of roads in the area and provide scholarships for some students in Panguma. However the company reportedly only ended up constructing a couple of bridges and one road during its operations. Furthermore, after the ban, the company still owed wages to many of its workers which it has still not paid. The Lower Bambara Chiefdom authorities therefore decided to expel the company out of Panguma, and since this time the company's compound has been locked up and no activity is taking place.

Capitol Trading Company

The Capitol Trading Company (CTC) is one of the largest companies in Kenema and has existed in the region for over 60 years. Initially the company was involved in diamond trading, although more recently it has also been involved in cacao and coffee trading. The company also runs a night club, hotel and restaurant in Kenema. In 2007 CTC established a board and timber trading entity, which was registered with the Ministry of Trade and Industry as well as with the Forestry Division. Curiously, the current District Forestry Officer in Kenema claims to have no knowledge of CTC despite the fact that the company has invested substantial money in building a sawmilling facility near Tissor just outside of Kenema. Prior to the timber export ban the company had been allocated concessions in Nimmi Hills (Kono District) and salvage lands in Kailahun District. The company claimed not to be involved in any logging activities at the time of the interview, and this appeared to be true from observations in the field. Although a couple of communities around the KHNFR claimed to have sold boards to CTC. However, due to the low number of purchases it is likely that these were used by CTC itself rather than sold.

4. Issues

4.1 Forestry Division's Jurisdiction

"Ivin if ar wan for cut tik insai mi rum, pas ar got go arbed from forestri fos"

⁵² *Sierra Leone Trade Journal* "Private enterprise flourishes in Sierra Leone" 4(3) (1964) : 80-81

[Even if I want to cut down a tree inside my bedroom, I need to get permission from forestry first.]

The above comment, made by a member of one of the communities near the KHNFR during a village group interview, presents a clear illustration of local frustrations with Forestry Division's intrusion into village life. In this man's view, the Forestry Division had overstepped its mandate by seeking to control not only the forest inside the KHNFR, but also the forests and lands within the community's salvage land, protected forests and even household gardens – a common complaint across almost all the communities visited. A number of the Paramount Chiefs expressed similar grievances, saying that they had been sidelined from most of the decision making relating to the forest reserve and protected forests.

In this context, the restriction of activities in salvage lands emerged as a particular concern for a number of communities. These claim that they are made to pay fees to forestry staff, in cash and bushels of rice, in exchange for their use of village salvage land. In contrast, the forestry guards interviewed denied having intervened in salvage lands, saying that the only regulation enforced in such areas has been the confiscation of unlicensed chainsaws. Nonetheless, the fact that villagers' claims regarding the collection of fees were repeated independently by many different communities and chiefs suggests that it is likely that some forestry staff may indeed be overstepping the bounds of their jurisdiction, attempting to intervene in all forested lands.

Although similar issues emerged with respect to protected (community) forests, it is clear that a closer investigation of the agreements surrounding their management is needed. Of the three protected forests near the KHNFR, only one still appears to be operating as a protected forest: the Nongowa Chiefdom Protected Forest No. 4. On one hand, the Lower Bambara Protected Forest No. 2 appears to have ceased operating as a protected forest during the civil war and is now considered to be community land. On the other hand, the protected forest near Komende Nduvuihun was essentially sold to Gava which, in turn, harvested and cleared all the trees. As a result, the distribution of authority to manage and regulate activities in the protected forests is somewhat ambiguous.

As noted in Section 2 of this report, since these forests were established in the 1940s and 1950s, under the legislation of the day responsibility for their management would have fallen to the Native Authorities with Forestry Division's role limited to occasional advisory support. Unfortunately, the current (1988) Forestry Act, is more ambiguous regarding the status of Protected Forests. Though the term 'Protected Forest' is actually not used at all in the 1988 Forestry Act, according to the FAO it is a synonym for 'Community Forest,' which is used within the Act.⁵³ In terms of the management of Community (Protected) Forests, section 19(2) of the 1988 Forestry Act states that "A community forest not on State land⁵⁴ shall be managed by the Chiefdom Council, or pursuant to an agreement with the Chiefdom Council, by a community forest association, co-operative or other association of persons *or* the Forestry Division." Further to this, section 20(1) of the Act states that "The Chiefdom Council or other entity responsible for managing a community forest shall determine the conditions including the fees and prices, under which the forest may be utilized" and section 20(3) of the Act states that "All fees and prices paid in respect of a community forest shall be retained by the Chiefdom Council or other entity responsible for managing the forest, subject to the terms of any applicable agreement under sub-section (1) or (2) of section 19. The question that arises from the above law is who officially has the right to manage the Lower Bambara Protected Forest No. 4, is it the Chiefdom Council or the Forestry Division? The law is ambiguous in terms of how this is decided, but it will most likely depend on the provisions of the specific historical agreements by which the protected forest was created.

⁵³ A Alba *Sierra Leone NFP Update – information as of 2004* (FAO: Rome 2008).

⁵⁴ 'State land' only exists in the former colony (i.e Western Area) of Sierra Leone – i.e WAPFoR in terms of forest reserves.

A number of the research participants (including some from the Kenema City Council) claimed that KHNFR was under lease to government by the communities and that the lease had either expired or was about to expire. Interestingly, Section 2 of the 1988 Forestry Act states that “[when constituting a forest reserve] in the case of land in the Provinces: (1) the Minister [of Agriculture, Forestry and Food Security] shall acquire a lease of such land for such a term not exceeding 99 years as appears to him [*sic*] appropriate to the objectives of the proposed forest.” As such, Since Kambui Hills Forest Reserve was constituted in 1920, a 99 year lease would be due to expire in 2019, the first to expire in the country after Kasewe Forest Reserve.⁵⁵ However, there is a lack of clarity around the issue of leases as well. On one hand, these reserves were constituted under the 1912 Forestry Act which does not appear to make specific provisions for the terms of forest leases. Conversely, as the 1988 Act should supersede and replace previous legislation, it is possible that the 99-year limitation (after which lease terms must be re-negotiated) may in fact apply in the Kambui Hills case. In any event, a more in-depth study of the legislation and specific documents relating the reserve constitution is needed to confirm this.

4.2 Bad Community/Forestry Relations

Currently the relationship between the Forestry Division and the forest-edge communities of the KHNFR is extremely poor. Out of the 43 communities visited, only two had a positive perspective of the Forestry Division; one claiming that they had even helped the Forestry Division catch illegal chainsaw operators, the other had trees planted in their community by forestry the previous year and they were pleased with the outcome. A handful of communities barely had any relations with the Forestry Division, saying that staff never visited their villages and the members of one community had no idea what the Forestry Division was. By far the majority of communities, however, expressed great frustration, claiming that they were frequently harassed by forestry guards, made to pay unfair fees and were restricted in the activities that they could conduct on their own lands (as discussed above). Moreover it appears that relations with villagers have particularly soured in the past few years due to Forestry Division’s increasing attempts to constrict commercial wood-based activities. At the same time, relations between Forestry and the Paramount Chiefs have also declined, as the PCs interviewed claimed that until five years ago they worked closely with Forestry staff in arresting illegal operators but since then had felt increasingly sidelined in forest law enforcement efforts.

Although Forestry Division guards all attend a training course at Njala University that includes a humans relations class, this component of the training does not appear to be overly effective. In one interview, for example, the two forestry guards stated that they believed that all the villagers are thieves and are all involved in illegal activities in the forest reserve. Such patently false assumptions are clearly problematic, undoubtedly influencing how the guards approach and relate to the communities. Most communities complained that the only time they see forestry staff is when they want to arrest chainsaws or to collect fees, and that the only outsiders to come and discuss forestry issues have been PAGE staff. Such a situation is understandable, as it is clear that the Forestry division office in Kenema is understaffed, underfinanced and under great pressure to collect revenues and confiscate chainsaws. And, to be fair, the forestry guards’ regarding comments regarding ‘thieves’ and communities, although not excusable, could have been symptomatic of their general frustration at being unable to prevent illegal activities, of which some community members are definitely involved. Nevertheless, it is apparent that greater efforts are desperately needed to improve relations with local community members and traditional authorities. This would likely not only reduce the number of frustrations and conflicts, but also assist forestry staff in achieving their own objectives, for example one of the communities that does claim to have good relations with the Forestry Division is actually proactive in helping to stop illegal chainsaw operators.

⁵⁵ WAPFoR was constituted earlier, but as it is on Crown land it falls under a different section of the law.

4.3 Vague Boundaries

The actual boundaries of the KHNFR are poorly defined and have not been brushed in many years. While in some areas boundaries are clearly marked with piles of rocks or lines of yemane (*Gmelina arborea*) trees, in most areas they are unclear. This situation makes the practical implementation of separate management strategies for different land types (forest reserve, salvage land, household land, protected forest) extremely difficult in the broader Kambui Hills area.

The vagueness of reserve boundaries are, however, also responsible for key socio-political conflicts in the area. As an example of this, in some areas around KHNFR numerous community members have been arrested for conducting activities in areas that they claim to be salvage land, but which Forestry Division staff claim are inside the Forest Reserve. These community members have then had to pay a sizeable amount of bail money to obtain their release from prison. Perhaps the most dramatic example of poorly understood and defined boundaries is the case of three villages in a heavily forested area to the west of the KHNFR boundary. These three villages actually believe that they are located inside the KHNFR. However, maps from the district forestry office clearly show that they are actually located about four kilometres outside of the reserve. The local forestry guards who patrol their area, have made a deal with communities, allowing them to exploit the forest around their villages in areas that they believe to be classified as 'forest reserve' if they pay the guards some fees first. While it is unclear whether forestry field staff are aware of the error, the collection of these fees is clearly unfair as the areas in question are not part of the forest reserve and are most likely part of these villages' own salvage lands.

4.4 Corruption and Lack of Transparency

Corruption appears to be a major hindrance to the effective management of the forest reserve. This is particularly the case in relation to chainsaw licencing/registration fees and checkpoint forestry fees, as these have given rise to an informal system of fees that likely never reach the Forestry Division or other government actors' treasuries, robbing government agencies of much needed revenues. Part of the cause of the proliferation of these 'informal fees' is the unworkable structure of official fees for the registering/licencing of chainsaws and for board production. The failure to provide realistic and proportionate fees has led to proprietors (and those that are supposed to regulate them) to develop alternative fee structures. This even appears to be happening at the formal level in Kenema, with the Forestry Division reportedly even officially allowing some chainsaw operators discounted licensing and registration fees. Restructuring the fees is unlikely to bring an end to all corruption, but it could potentially improve the revenue stream to forestry, especially if relevant monitoring activities are conducted as well.

Lack of transparency is also a major concern. The operations of ACOTIDA, for example, need further investigation. Most of its members expressed great frustration with the association claiming that it failed to provide them with tangible benefits to justify the fees it collects. A key point of concern is the fact that what actually happens to the funds from the afforestation fees collected at the checkpoints is itself unclear. Many research participants cynically suggested that the funds go into the pockets of the ACOTIDA executives. While this might not be true, ACOTIDA nonetheless has a serious public relations problem with its membership, and more scrutiny of its operations is needed. The establishment of deals with international logging companies is another area in which transparency is lacking, as such arrangements are made in Freetown offices far from Kenema and/or in an *ad hoc* fashion with district level agencies. A key problem is that local communities almost always seem to be excluded from these negotiations even if their outcomes directly affect them. How these deals are made needs to be completely restructured in order to provide greater benefits to the communities and the Forestry Division. Hopefully some steps in this direction will be made as part of the legality and verification

scheme initiatives currently underway as a part of the European Union's FLEGT support programme, but some efforts at the local level will likely be needed as well.

4.5 Low Commodity Prices

A major concern for both local communities and the Government of Sierra Leone is that they appear to be receiving insufficient financial compensation in return for the harvesting of their forest resources. As noted in the recent edition of *Natural Resource Watch*, the Forestry Division was getting short changed in its negotiations with international logging companies. Iroko (*Milicia regia*),⁵⁶ for example, which is harvested extensively in the Kambui Hills, has a current international market price of US\$1,100 to US\$1,400 per cubic metre. According to the current Forestry Division fee structure, the cumulative cost for harvesting Iroko (a Category 1 timber) is Le 48,000 (US\$11) per cubic metre; less than one per cent of the international market rate.⁵⁷ At the community level the situation is even worse. In one instance, the logging company Exim made an agreement with a landowner in one of the communities visited to harvest 15 Iroko (*Milicia regia*) trees on his land for a fee of Le 150,000 (US\$34). Alarmingly, Exim only ended up paying a Le 50,000 (US\$11.50) deposit to the landowner and subsequently refused to pay to the rest of the money due, despite harvesting all 15 of the trees. Based on an estimate of 1.5 cubic metres of wood produced from each tree,⁵⁸ the total international market value of those 15 trees would have been between US\$24,750 and US\$31,500. This means that the Le 50,000 (US\$11.50) that the owner received from Exim represents around 0.0004% of the trees' value on the international market. Another example is the case of Gava harvesting the protected forest near Komende Nduvuihun. In this instance the community had its (now former) protected forest (which also functioned as a poro bush) taken away from them and allocated to Gava, which subsequently clear-cut the area. The community was given no input into the agreement, which was arranged by the Paramount Chief, Forestry Division and Gava. Apart from some low-skilled employment for a handful of people in the community, Komende Nduvuihun received no benefit from the exploitation.



Figure 8 - The area of the former protected forest near Komene Nduvuihun. Most of the trees in the area were cut down by Gava during operations in 2006, some remnants of these trees can be seen in the above figure.

Such issues are also apparent in the context of board production for the domestic market, and village landowners often receive unfair compensation for the harvesting of trees on their land by outside chainsaw operators. It is true that some communities have been clever and started to charge high fees for

⁵⁶ Ironko is the tree's trade name. In Mende the tree is called *Semei*.

⁵⁷ *Natural Resource Watch* 'GoSL Timber Fee Schedule is Far Below Global Market' December 2011: 1.

⁵⁸ This is a conservative estimate, developed from the average bole and girth sizes reported for mature Iroko trees in the text: P S Savill and J E D Fox *Trees of Sierra Leone* (Government Printers: Freetown 1967).

chainsaw operators to operate in their areas. This has meant that harvesting has been limited, but still lucrative for the community, while forest cover has been maintained. Some others, meanwhile, have recently banned all logging on their lands to allow the forest cover to regenerate. Nevertheless many villages are 'allowing' chainsaw operators to harvest in their salvage and family lands, with only a token amount of financial compensation. Sometimes they are too afraid to challenge these operators, who often claim to have the permission of the district forestry office and the ministry to conduct these activities. The selling of fuelwood commodities (charcoal, firewood), also appears to be dramatically below the market rate in nearby Kenema in some communities, who are perhaps being taken advantage of by visiting Kenema vendors. The major problem is that communities do not sufficiently understand what the market rates are for these commodities and sometimes feel disempowered in terms of their rights to negotiate.

4.6 Chainsaw licensing

As in much of the country, the licensing of chainsaws is completely disorganised in Kenema District. The substantial fee for chainsaw registration (Le 1 million per year) and licensing (Le 5 million per year) was initiated in 2008, after an earlier ban on timber exports by the Forestry Division in August 2007. The high fee was a deliberate policy by the Forestry Division, to 'clean up the forestry sector' putting smaller operators out of business and paving the way for larger scale operators to dominate the industry. The idea behind this strategy was that it would be easier to regulate the industry with a smaller number of large operators, rather than a large number of small-scale operators.⁵⁹ It is evident, however, that this somewhat controversial policy has so far been a failure. The policy has not promoted any form of horizontal integration of the board producing market, with industry still characterized by a multitude of small-scale chainsaw owners. Instead, its outcomes have been perverse, as the unreasonably high fees have had the effect of shifting much board production into the realm of illegality, resulting in widespread clandestine (and hence difficult to regulate) chainsaw operations and increasing the space for corruption (reportedly involving not only police but also forestry officials). This is not to suggest that all forestry guards are involved, as a number of them fulfil their jobs faithfully regardless of the bribes offered, as the numerous chainsaws in the district forestry office attests. Nonetheless, this system of 'informal fees' is clearly well established with its own accepted fee structure, and interview data indicate that Le 100,000 is widely considered to be enough for two or three forestry guards.

Those that do register chainsaws often seem to be able to do so through discounted payments with Forestry Division, which ultimately make a mockery of the 'official' licensing and registration rates. The Paramount Chiefs have also implemented a parallel system of fees for chainsaw operators working in their chiefdoms (Le 600,000 in one chiefdom). While this is not problematic in principle, in practice many operators pay this fee to the PC instead of the official fees to the Forestry Division, relying on chiefdom 'assistance' if their chainsaws are confiscated.

On the whole, the fee structure for chainsaws put in place under the 2008 forestry regulations has proven to be a failure thus far. As most operators find the fees unreasonable or unaffordable, they do not register, but instead conduct their activities clandestinely, with several negative implications for the Forestry Division. First, in addition to the issue of encouraging corruption, as noted above, the failure to achieve chainsaw registration means that the Forestry Division has very limited knowledge about who owns chainsaws and how many chainsaw are operating in the district. Second, Forestry Division only receives a limited portion of the fees, as most operators avoid payment, and those that do comply often pay only a discounted amount. Finally, the limited forestry staff and resources that the Forestry Division

⁵⁹ G. Hiemstra-van der Horst, 'We are Scared to Say No': Facing Foreign Timber Companies in Sierra Leone's Community Woodlands', *Journal of Development Studies* 47:4 (2011): 574-594.

has seems to be overly focused on capturing illegal chainsaw operators, undermining the ability of the office to conduct other more productive activities.

4.7 Illegal Logging

Illegal logging is certainly occurring inside the KHNFR at a wide variety of locations. Though the causes and the of this illegal logging are complex and a diversity of actors involved, most of it is related to the creation of boards for domestic sale rather than timber for export; no doubt an impact of the current timber export ban. The preferred species for this board production in and around the KHNFR are listed below, with the species *Bajii*, *Yawii* and *Semei* being particularly popular with harvesters. The boards are generally referred to in terms of colour after they are harvested. Thus, broadly speaking, vendors define their stock as being Red Boards⁶⁰ and White Boards, with the occasional addition categories of Brown Boards⁶¹ (a variation within Red Boards) and Yellow Boards⁶² (a variation within White Boards). Red Boards (i.e *Lovoa trichiloides*, *Daniella thurifera*, *Entandrophragma angolense*) are from harder wood species, and are a higher quality and more expensive type of board. These are predominantly used in the construction of furniture, while White Boards (i.e *Gmelina arborea*, *Terminalia ivorensis*, *Ceiba pentandra*) are made from softer wood species, and are generally used for building construction, although they are sometimes also used for making cheaper varieties of furniture.

Table 1 - Trees species harvested for boards in the broader KHNFR area. Listed in terms of popularity from top (most popular) to bottom (least popular).⁶³

Species	Trade name	Krio	Mende	Temne
<i>Terminalia ivorensis</i>	Idigbo	Ronko	Bajii	Ka-Ronko
<i>Heritiera utilis</i>	Niangon	Hamɔ n	Yawii	Ka-folfol
<i>Milicia regia</i>	Iroko	Iroko	Semei	Tiami
<i>Entandrophragma angolense</i>	Gedu nohor	-	Njelei	Ka-Renda
<i>Gmelina Arborea</i>	Gmelina	Yemane	Yemane	Yemane
<i>Lovoa trichiloides</i>	African Walnut	Walnut	Wusumei	-
<i>Rauwolfia vomitoria</i>	-	-	Kowogei	Ka-Bobɔ n
<i>Ceiba pentandra</i>	Ceiba	Kɔ tin-tri	Nguwei	Am-Polon
<i>Cola nitida</i>	-	Kola	Tolei	A-Kɔ la
<i>Ongokea gore</i>	-	-	Bui	-
<i>Brachystegia leonensis</i>	Okwen	-	Gbojei	Ka-Basam
<i>Daniellia thurifera</i>	Ogea	Bungbo	Gbɛ sɛ i	Ka-Gbɛ sɛ i
<i>Erythrophleum ivorensis</i>	Sasswood	-	Ngogbɛ i	Ka-Kɔ n
<i>Khaya anthotheca</i>	African Mahogany	-	Anyan-jile	-
<i>Albizia adianthifolia</i>	West African albizia	-	Kpakpei	Ka-Pun

The biggest group involved in illegal logging in the forest reserve appears to be chainsaw owners from Kenema. They often base themselves in one of the communities on the edge of the forest reserve, paying some fees to the Town Chief and sometimes employing local villagers as labourers to carry the boards. These operators will often operate in a mixture of salvage and forest reserve land. Many of the

⁶⁰ The name probably comes from the Mende name *Njelei* for the commonly sold board species *Entandrophragma angolense*, which literally means 'red.'

⁶¹ Usually this refers to Semei (*Milicia regia*).

⁶² Mainly referring boards made from *Terminalia ivorensis*, whose Mende name *Bajii* literally means yellow.

⁶³ Local spelling of tree species varies greatly. This report used the spellings following text: P S Savill and J E D Fox *Trees of Sierra Leone* (Government Printers: Freetown 1967).

communities are aware that the activities are illegal, but due to their bad relationship with Forestry Division (and likely also due to the cash income they receive, however small), seem to be unconcerned with preventing the activity. In other cases, chainsaw operators turn up in villages and present (most likely fake) documentation that they claim gives them permission from the Forestry Division to harvest in the reserve and the villages are generally too scared to challenge such documents.⁶⁴ Other operators enter the reserve at night, sometimes conspiring with village youths, to avoid both forestry staff and community elders. It is also evident that a number of operators enter the forest near Kenema, and trek through this section of the forest, suggesting that it has perhaps been the most targeted by illegal operators; unsurprising, given its proximity to the urban centre. The area around the former Gava logging concession is also reportedly a hotspot for illegal logging activities.

Some communities on the edge of the KHNFR are also involved in illegal logging in the reserve on their own account. This is usually in the forest reserve area near their village, and is sometimes conducted in spite of the forestry division, as they believe their activities should not be restricted in the reserve. In other cases this occurs due to ambiguities in the reserve boundary, whereby communities are not aware of their encroachment.



Figure 9 - Illegal board harvesting inside the KHNFR

Many of the illegal harvesters have wealthy backers in Kenema and Freetown, and the forestry guards even accused some District Councillors of being involved in the trade, making it difficult to arrest some of the operators. Some of the forestry guards also appear to be benefiting from the trade indirectly. As one research respondent noted: “There is no proper law governing the reserve and if you are lucky you bribe forest guards when you are caught producing in the reserve but if you are unfortunate they take you to the necessary authorities.” As the research respondent further noted, “it is hard to control within the Kambui Hills Forest Reserve because even the authorities responsible to protect the reserve, including the community people, get direct benefits from this activity.”

4.8 Fear of a Kambui Hills National Park

There appears to be an overwhelmingly negative view of the Gola Forest Programme among the communities surrounding the KHNFR. A common fear in many of the communities was that the Forestry Division was planning to turn KHNFR into a national park, which would involve greater restrictions on forest activities, the relocation of some communities and the reintroduction of wild animals. It appears that the main cause of this local rumour was the increasing restriction of their livelihood activities by forestry staff over the past few years, which was interpreted as the prelude to the

⁶⁴ For other examples of this in Sierra Leone, see: G. Hiemstra-van der Horst 'We are Scared to Say No!: Facing Foreign Timber Companies in Sierra Leone's Community Woodlands', *Journal of Development Studies* 47:4 (2011): 574-594.

creation of a national park. The staff at PAGE noted this has been one of their key challenges: to convince the communities that their objective was not to create a national park, but rather to develop the co-management of a productive forest reserve.

While in the long term this might not be a major issue for PAGE and its activities, it does raise some concerns about the Gola Forest Programme. It shows that the Gola Forest Programme has a public relations issue with communities in the Kambui and potentially other parts of Sierra Leone. Whether or not the perceptions of the Gola Forest Programme are accurate is not the concern, but rather the fact that negative perceptions of the programme exist could have serious implications for the creation of other national parks in the country. Efforts are currently underway to turn the Loma Mountains Forest Reserve into a national park and community level negotiations to create this park will be extremely difficult if local residents perceive the creation of the Gola Forest National Park as something negative. This implies that the Forestry Division and the Gola Forest Programme (RSPB and CSSL) need to spread their advocacy about the programme beyond communities bordering the Gola Forest and relevant political actors.

4.9 Timber export ban

There have been two timber export bans in the recent history of Sierra Leone. The first was enacted in August 2007 and was in response to the incursion of (largely) Chinese timber merchants into northern Sierra Leone (from Guinea) to clandestinely harvest valuable timber species for export. The ban was lifted in 2008, with the announcement of new regulations creating dramatically heavier fees for logging operations and related equipment (in particular Chainsaw Fees – see above).⁶⁵ As mentioned in Section 4.6, this policy was essentially about ‘cleaning up’ the timber harvesting market, forcing smaller companies who could not afford the fees out of business, subsequently creating a market for a lesser number of larger companies who would in theory would be easier to regulate. The Forestry Division then, unexpectedly, instigated a second export ban in January 2010 which is still in force (although there was a three month suspension of this ban in mid-2011 to allow export of previously harvested timber). The reason for this second ban, according to Mr. Sheku Mansaray, the Director of the Forestry Division, is to ensure adequate supply of timber for domestic consumption. The plan is apparently to lift the ban within the next two to three years, when domestic “market saturation” has been reached, though it seems it could potentially be lifted earlier as the Forestry Division is currently developing a verification scheme for logging operations as a part of the European Union’s Forest Law Enforcement, Governance and Trade (FLEGT) support programme.

The example of KHNFR suggests that the bans and the 2008 regulations have failed to achieve some of their key objectives. First, although the 2007 ban did halt the illegal export-oriented logging occurring at the time, the 2008 policy failed to stimulate horizontal integration in the timber/board harvesting sector, which is still characterized by a myriad of small-scale operators that are operating in an even more clandestine manner. At the same time, the only large scale-logging companies legally in operation during this period, Exim and Gava, were hindered by the first ban and then had their operations completely shut down by the second ban resulting in a substantial loss of jobs in the district. Although the government is still interested in attracting foreign investment in commercial forestry, the banning, unbanning and re-banning of timber exports have created a risky investment environment unconducive to development of the country’s forestry sector.

In terms of increasing domestic board production, the stated objective of the second ban, this has clearly not occurred in the area around KHNFR. Rather the opposite has occurred. The district forestry office appears to have become overzealous in cracking down on harvesting operation in the post-ban era,

⁶⁵ See G. Hiemstra-van der Horst "We are Scared to Say No': Facing Foreign Timber Companies in Sierra Leone's Community Woodlands", *Journal of Development Studies* 47:4 (2011): 574-594.

meaning many board, some legitimate operators and some illegal operators, have found it unviable to continue in the trade, as they feel they are overly harassed. Therefore the board trade has stagnated in many areas. This suggests that there may be a lack of communication between the Forestry's Division's head office in Freetown and its district offices about the purpose of the ban.

This does not mean, however, that positive aspects cannot be built upon during the current ban. First, despite local job losses, the ending of Exim and Gava operations is possibly a blessing as the two companies appear to be dubious in terms of their operations and ownership, respectively. Also, as noted above, the current Forestry Division fee structure for exporters is disproportionately below market rates, meaning that the financial benefits realised from the exploitation of the forests is unreasonably small (or even potentially non-existent). The current European Union-funded legality and verification chain research projects being conducted by the Forestry Division as a part of the FLEGT support programme hopefully will pave the way to a better strategy for managing contracts with international logging companies.

5. Conclusions and Recommendations

5.1 Conclusions

This report has shown how the management and use of the Kambui Hills North Forest Reserve (KHNFR) is influenced by a complexity of different actors, interacting in both formal and informal spheres. The different actors include forest-edge communities, the Forestry Division, logging companies, government agencies, NGOs and native authorities, all of which have some form of stake in the management and/or exploitation of the reserve. The vague forest reserve boundaries, ambiguities in laws and poor communication between these actors have produced a range of positive and negative outcomes in relation to the reserve's management.

The end of the civil war and the two recent timber export bans seem to be important inflection points influencing management and activities in and around the KHNFR. First, in the post-civil war era, the harvesting of many wood-based products (board, poles, charcoal and firewood) have shifted from being mainly subsistence-oriented activities to being important commercial trades providing critical cash income for many village households. This change in livelihood orientation likely occurred partly as a necessity for devastated post-war communities to rebuild their lives, but was also driven by the need for wood-based resources for post-war reconstruction around the country and the rapid urban growth occurring in Kenema and other urban centres across Sierra Leone. These forces drove increased commoditisation of these resources nationally, in turn shifting local perceptions of the forest reserve and its resources toward their potential economic benefits.

Second, the two timber bans and the 2008 forestry regulations have caused a fundamental shift in forestry management practices in KHNFR. First, they caused a rapid end to international logging operations in the area as Exim and Gava, which had been operating in the region for a number of years, found that their tenures had come to a rapid end. At the same time, the dramatic increase in forestry fees has caused many board harvesters and chainsaw operators to conduct their activities clandestinely. Forestry staff also appear to have become more zealous in the post-timber export ban time period, in restricting and regulating activities in lands that appear to fall outside of their jurisdiction. This has led to a souring of relations between the Forestry Division's staff and the forest edge communities. The overall outcome has been the creation of an extensive wood-based commodity trade from within and around the forest reserve that is highly reliant on informal fees and bribes for its viability, a scenario that is not conducive to the sound management of the forest reserve.

PAGE's current co-management initiative is timely and necessary but it no doubt has great challenges ahead. Efforts are needed to reduce conflicts between the different actors, redefine boundaries, and clarify laws, before any management regime can effectively implemented. The KHNFR is an important natural resource for the region and its sound management is needed to ensure that the various stakeholders can benefit from its presence.

5.2 Recommendations

Below is a series of recommendation that relate to how the management of the Kambui Hills North Forest Reserve can be improved in future. Some of the recommendations are directed towards the PAGE project to aid in refining its co-management approach for KHNFR, while others are more generally focused on the Forestry Division, other government agencies, donors and NGOs involved in the natural resource management sector. The list of recommendations is by no means exhaustive and readers of the report are urged to use the extensive data and analysis presented above and in the appendices to form their own conclusions as well. Nevertheless the recommendations below cover the key issues that need addressing to ensure the better management of the KHNFR.

Re-demarcation of the Kambui Hills North Forest Reserve

This is perhaps the most obvious of the recommendations. The KHNFR desperately needs to have its boundaries re-demarcated, as the ambiguities of the current boundaries have been the source of numerous conflicts between the Forestry Division and forest edge communities. During this process, there should be openness towards redrawing some of the reserve's boundaries to ensure that it is focused on relevant forest areas and that each of the surrounding communities has sufficient salvage land. It would be worth developing a dialogue with Welthungerhilfe (WHH), about their recent experience in re-demarcating the Western Area Peninsula Forest Reserve (WAPFoR) and potentially even involving WHH staff in the process as they have an office and program in Kenema. However, it is important to note that there are distinct differences between the two reserves, which might influence the demarcation process. First, WAPFoR is located on crown land (the former colony) and therefore does not need to work directly with Native Authorities for the demarcation process, whereas KHNFR is located in the provinces (the former protectorate) and its demarcation has to be conducted in conjunction with the relevant Chiefdom Authorities in Nongowa, Lower Bambara, Dodo, Kandu Lekpeama and Small Bo. Second, WAPFoR is also designated as a forest *protection* reserve, and plans are underway to change its status to that of a national park, while KHNFR is designated as a forest *production* reserve and there are no current plans to change this status. Thus the 'boundaries' of the two reserves are conceptually different and this needs to be taken into account when engaging communities in the demarcation process. As a side note, during this process it would also make sense to re-demarcate the Lower Bambara Protected Forest No. 4 due to the issues discussed previously.

An important factor to consider will be the nature of the markers used in the demarcation of the boundary. In the past the boundaries were brushed, a labour intensive process. While some areas were also (and some still are) marked by piles of stones, lines of yemane (*Gmelina Arborea*) trees and concrete pillars. There is perhaps not one single perfect solution in deciding what the reserve boundary should be marked with, and hence engaging in dialogue with the communities near the boundary would likely be useful in working out which strategy or strategies might work best.

Clarify laws and fees at the village level.

There needs to be a clear clarification of the different laws governing the forest reserve, the protected forest and the salvage lands. Confusion around the laws appears to have allowed some forestry staff to be overzealous in their activities; regulating and charging fees for activities outside of their jurisdiction. Although, to be fair, the 1988 Forestry Act is very vague in terms of what their jurisdiction is, often

leading to the perception that all forests (whether classified or private) should be the sanction of the Forestry Division. The district forestry office has sent out printed copies of excerpts from the Forestry Act 1988 to different communities to inform them of the laws regulating the reserve but this has proven ineffective due to literacy constraints, and it is recommended that oral forms of communication (whether in person or through radios) be emphasized instead. Such top-down dissemination also does not address the issue of forestry staff overstepping their jurisdiction, and hence a two-way dialogue is ultimately needed. Most of the villages complained that they are rarely visited by the forestry staff or if they were the forestry staff were only in pursuit of illegal chainsaw operators or fees. Many of the communities requested a discussion to be initiated with forestry so they could both obtain greater clarity about the forest reserve and its laws and raise their own concerns.

The most effective method for establishing and confirming the laws relating to KHNFR and its surroundings at the community level would be to organise meetings at each of the villages with the communities, forestry staff and chiefdom authorities in attendance. During these meetings the laws governing the forest reserve, salvage land and protected forest (if nearby) can be discussed, bye-laws agreed upon and recorded. The development of local participatory maps would also be useful in helping to communicate and clarify the different local land tenure regimes and existing bye-laws. In relation to the 1988 Forestry Act and the historical production of the different land types, the natural regulatory regimes appear to be that the forest reserve should come under the authority of the Forestry Division, the Protected Forest should come under the jurisdiction of the Chiefdom Authorities and the salvage land should come under the jurisdiction of the village level authorities. In this context, it should be made clear when forestry staff have the authority to intervene in non-forest reserve land (i.e. the confiscation of unlicensed chainsaws). Naturally, however, this process would have to be linked with the clear re-demarcation of the forest reserve for it to be effective.

There also needs to be greater effort to communicate to the communities what the future plans are for the forest reserve. Most seem to fear the establishment of a Kambui Hills National Park – despite the fact that no such process has been formally planned – and deeply resent the restrictions placed on activities in the reserve imposed by the Forestry Division, which they see as being detrimental to their livelihoods. The district forestry office claims these restrictions are only for the interim, while better management plans are developed for the reserve. This, however, needs to be communicated more clearly and effectively to the communities, and a timeframe must be elaborated for the actual development of these plans.

Improve community/Forestry Division relations

The relationship between the Forestry Division and forest edge communities needs to be dramatically improved. Almost certainly an outside entity, such as PAGE, is needed to help facilitate such an improvement. As it stands, the venomous relationship between the communities and the Forestry Division is likely to undermine any attempt to develop co-management strategies for the reserve. As noted, during interviews the forestry guards claimed that all of the communities were thieves, stealing produce from inside the reserve, while the communities complained that the Forestry Division was overstepping its authority and putting unfair restrictions on their lives. One of the only communities that stated that they had a good relationship with the Forestry Division, claimed that they had in the past helped the Forestry Division capture illegal chainsaw operators in the reserve near their village. If this is the case, it suggests that an improved relationship and dialogue between the Forestry Division could be effective in reducing illegal logging in the reserve. This, in turn, would help to free up forestry staff from ‘policing’ work, so that they can focus their efforts on other, more productive, aspects of forestry.

Redefine target communities

PAGE currently has 102 villages listed as target communities for the future co-management program. These villages were identified through a workshop with the relevant Paramount Chiefs. However, from the village level interviews it became clear that there are some significant problems with the current list that will cause major difficulties for project implementation later, if the list (and hence clustering structure, etc.) are not redefined early on.

First, a number of these communities, particularly in the Lower Bambara and Dodo Chiefdoms, seem to simply have no relationship with the KHNFR. For them, the Kambui Hills are just an abstract area that they have little practical knowledge of. During fieldwork for the current research project, it became apparent that a key measure of a community's relationship and knowledge of the KHNFR is distance. In this case, those within three to four kilometres of the reserve tended to either use the reserve or have some knowledge of its boundaries and the laws that govern it, while those beyond this distance had little or no interaction with the reserve. The second issue is that a number of sizeable communities near the reserve seemed to be missing from the target community list, though the reason for this is unclear. Third, some of the 'communities' on the list turned out to be 'ghost towns', with empty buildings that were only occupied during the farming season, and therefore essentially acted as temporary satellite settlements for larger nearby towns.

Overall, these issues suggest that the method of getting the Paramount Chiefs to nominate the villages is flawed (perhaps due to them having an imperfect knowledge about what actual communities are in their constituencies), or at least not adequate as a stand-alone approach. Based on the results of this project, it is recommended that the list be revised by establishing a four kilometre buffer around the reserve and ascertaining all relevant villages within this geographical area (through maps and, especially, field visits).

Finally, it is also important to recognise the great heterogeneity in the sizes of the communities on the list. The smallest village visited had a population of 21, while the largest village had an estimated population of about 7,600 people. Evidently, the project's approaches to establishing effective VFMA should differ greatly between two 'villages', and hence it is recommended that size and other major differences between settlements be taken into account during the implementation of PAGE's forest co-management programme and the final clustering of the villages into 16 groups.

Work through the (lower) Chiefdom structure more

One risk associated with the current PAGE strategy of co-management is adding an extra layer of governance to an already complex governance structure. From field observations it appears that the lower chiefdom structure, in particular the Town Chiefs and village elders (and to a lesser extent Section Chiefs) are among the most directly involved in regulating actual resource management practices and would therefore be an effective governance regime to utilise. The community bye-laws put forward by the Town Chiefs appear to almost always be respected by the communities and have the potential to effect local level environmental impacts. Many Town Chiefs and village elders have enacted policies to help promote increased forest cover and could prove to be key players in the successful management of the reserve from a community level. In this vein, they could also have great influence in preventing community members from entering the reserve, and, if armed with sufficient knowledge about reserve laws, could help to prevent illegal loggers from Kenema entering the reserve near their villages. As such, it is recommended that the project take special care in considering how it engage/incorporate these critical existing authorities.

Promote new and improve on existing livelihoods

Most of the communities surrounding the KHNFR had their lives and livelihoods devastated by the Sierra Leonean civil war. Many fled their towns during the war and have only returned in the last decade

or so to start rebuilding their lives. In the post-civil war era many have looked towards gold mining, charcoal harvesting and board production as supplements to their farming activities to bring security to their livelihoods and some of the communities have established themselves in the forest reserve for these activities. This is an awkward situation to deal with since, in the long term this pattern could have a negative environmental impact, if it is not managed and regulated correctly but efforts to heavily restrict or prevent these activities could have highly negative impacts on these communities' well-being. A balance is needed, which improves the efficiency and environmental sustainability of these existing livelihoods, as well as providing some genuine new opportunities.

One method to improve on the existing livelihoods would be to attempt to address the issue of low commodity prices. Strategies are needed to help empower local communities, so that they are able to negotiate fairer prices for their commodities. Some communities are selling charcoal at Le 5,000 per bag in the villages, whereas a short distance away in Kenema a bag of charcoal fetches Le 12,000 per bag. As well, some communities are allowing chainsaw operators to harvest valuable tree species from their land (for both international and domestic markets), and are only receiving token payments in return for these activities. One factor causing these low prices is a lack of knowledge about the value of resources in local (i.e Kenema), national and international markets. Developing avenues to make this information more readily available at the community level could provide a strong bargaining chip for these communities in their dealings with other actors in these commodity chains.

The development of alternative livelihoods is also a key issue. Though there are too many options for these to be listed here, the main thing is that they need to be actual income earners and suited well to the local context. Some examples have already emerged in some of the communities and could be spread to others, such as one community providing food for the school feeding program and another that is involved in honey production. A couple of communities claimed that they were supposed to receive cassava processing equipment from Gava as a part of the logging concession deal. Though this equipment never arrived, the communities indicated that they were still very keen to experiment with different opportunities such as this. The improvement of community infrastructure, notably schools and health clinics, is also vital for the long-term improvement of community livelihoods.

A critical examination of ACOTIDA

ACOTIDA collects substantial funds directly from its members as well as in the form of afforestation fees at Bandama checkpoint on the Bo-Kenema Highway. It is supposed to be an advocacy agency for timber and board producers. However, almost all of its members expressed a strong dislike for the association, stating that they received no benefits from being with ACOTIDA. They claimed that they only maintained membership as necessity for survival, because if they did not ACOTIDA would make life in the board trade difficult for them. If the accusations are true, ACOTIDA, rather than serving as an advocacy organisation may be acting more like a 'protection racket', causing difficulties for those that do not join the association and pay fees. Although it is important to note that ACOTIDA is quite active in lobbying the Forest Division to have chainsaw fees reduced, which would no doubt bring great benefits for most of its members. However this was not openly recognised during interviews.

Forestry staff also claimed that they have never received money from ACOTIDA for afforestation or seen the association partake in afforestation activities, bringing into question why ACOTIDA is allowed to collect afforestation fees at checkpoints. According to the 1989 Forestry Regulations, it is the Forestry Division that should be collecting this fee.

Overall, the operations of ACOTIDA need a thorough investigation, in terms of the transparent use of the funds it receives, the deals it has made with forestry and the on-the-ground benefits it is providing for

its members. Collective advocacy agencies for wood-based commodity traders are important but it appears that ACOTIDA is not properly fulfilling such a role.

Restructure chainsaw and checkpoint fees

The use of checkpoints to collect fees is evidently not working. Most vendors reported that they are able to pay 'discounted fees' if they do not require a receipt (i.e bribes). Others just transport their loads at night, when ACOTIDA and forestry officials are not present at their checkpoint, bribing police to let them through. Bribing at checkpoints has appeared to have become so much the norm, that reportedly one vendor who had paid all of the required formal fees was arrested at the Bandama checkpoint for not paying the police a bribe. Similarly, the mobility of the chainsaw (allowing for it to operate clandestinely), the exorbitant size of the fee and operators' ability to avoid the fees through informal means render the fee structure essentially unenforceable. Exact figures are impossible to come by, but it appears likely that a substantial amount of the 'fees' paid never formally reach the Forestry Division.

Ironically the 'fee structure' for international companies is dramatically below the international market rates (as discussed before), while the fees paid by small-scale domestic suppliers for wood-based products appears to be prohibitively expensive. The fees need to be restructured to be more reflective of the commercial value of the trade. One good strategy for restructuring is to work out average bribe that people pay to avoid paying the official fees. This can act as a proxy of what an acceptable 'fee' might be. While this might be dramatically lower than the current official amount, if paid in full by all in the trade, it would still likely cause an overall increase in revenue for the forestry division, especially if the informal network of bribing is as extensive as the research respondents indicated. A more efficient revenue structure would benefit everyone, except perhaps those who are financially profiting from the bribes.

One problem relating to the above, is that in some areas the current legislations is too generic, in particular lumping board and timber (logs) production under similar regulation regimes. Their productions are notably different, the former is conducted by small-scale operators for the domestic market, and the latter is generally conducted by large companies for the export market. However, many of the fees are homogenous for the two differing productions. This has caused problems. For example, the Le 6 million annual fees for operating chainsaws is probably a practical amount to charge companies (such as Gava, Exim and Capitol), but is unrealistically high for small-scale operators. Thus the forestry should consider establishing different fees for commercial and individual operators. This would allow the Forestry Division to have more specific controls of the differing productions, and would help to reduce many clandestine logging activities by moving them into the realm of regulated fee paying operations. Most (illegal) small-scale operators indicated they are happy to pay fees for their operations (most are already doing so in the form of 'informal fees'), if the fees that they are charged are fairly priced. As mentioned earlier, the rates that operators are currently paying for 'informal fees' can sometimes be a good proxy for establishing formal fee rates.

Improving logging concession agreements

There needs to be greater transparency on terms of how logging concession agreements are established with international companies, as well as the subsequent monitoring of these activities. If KHNFR is to remain a forest production reserve, then this will most likely be a major concern if and when the timber export ban is lifted. At the most basic level, the fee structure needs to be raised for timber exports, as they are dramatically below international levels, and revenue from these fees needs to be effectively transferred to the relevant communities, chiefdoms and government agencies. Information about logging concessions also needs to be readily available. This would be best presented in the form of a website, which could contain a cadastre and details of logging concession agreements, forestry regulation information, maps and other relevant forestry documents all of which are, in a democracy, public information by definition. All of this information needs to be public and readily accessible. There also need to be a better

mechanism for allowing local communities to have at least a consultative role in the establishment of logging concessions on or near their lands. While most existing logging concession agreements included references to bringing benefits to relevant communities (ie. employment, roads, community structures), most of these were never fully fulfilled. Many communities complained that Forestry Division and the Paramount Chiefs were stealing all of the money that was meant for community. Whether or not this is true is hard to ascertain, but it would make more sense to ensure closer involvement of Town and Section Chiefs in the collecting of these funds, as their activities tend to be open to more scrutiny at the community level.

It is important to note that this industry could bring a lot of benefits if conducted correctly. Current harvesting techniques (whether by individuals or companies) often involve the chainsawing of selective tree species, rather than employing clear felling methods (the Protected Forest near Komende is a notable exception). Such methods employed tend to be much more sustainable and have a lesser impact than those employed in most wealthy countries. Also, provided the trees are not fully stumped they generally have a good propensity to regenerate. The photo in Figure 9 is a good example of this, showing how much a logged area of forest can regrow in a three year period. Thus there is reasonable potential for the establishment of a sustainable commercial logging industry in Sierra Leone. However it needs to be developed on a transparent basis and have sufficient institutions and mechanisms in place to ensure that economics benefits from the trade are realised properly at both the community and government levels.

Appendix A – Original Kambui Hills Forest Reserve Demarcation

It is hereby notified for general information in pursuance of the provisions of section 5 of the Forestry Ordinance, 1912 (No. 8 of 1912), that it is proposed by His Excellency the Governor to constitute that portion of the Kambui Hills comprised within the following boundaries to be a forest reserve, that is to say:- Starting from Boundary Stone No. 1 which is situated above the Para rubber plantation at Kenema and behind the District Commissioner's quarters to Boundary Stone No. 2, also above the rubber plantation but more to the South, thence to Boundary Stone No. 3 which lies South of No. 2 and to the right of the Bubbabu-Dema road, thence to Boundary Stone No. 4 which is situated between Dema and Kotumabu to the West of the road, thence to Boundary Stone No. 6 which is half-way between Kotumabu and Largo and to the West of the road, thence to Boundary Stone No. 7 which is situated close to Largo to the North-west of the village, thence to Boundary Stone No. 8 which lies to the West and a little northerly of No. 7, about four hours from Largo village on the Largo-Wyema road, from thence to Boundary Stone No. 9 which is situated close to the village of Wyema or Waterloo and to the East, thence to Boundary Stone No. 10 lying North of No. 9 to the East and close to the village of Jala in Little Bo Chiefdom, thence to No. 11 which is three and a half hours from Kennema on the Kennema-Commendi road and is to the East of Commendi and close to that village, thence to No. 12 which is to the East of Tynahun and two and a half hours from that village, thence to Boundary Stone No. 13 which is on the steep hill immediately above Gedai to the East, thence to Boundary Stone No. 14 which is to the East of the Bumbu-Masao road and about two hours from Gedai village, thence in a north-easterly direction to Boundary Stone No. 15 which is situated on the Largo-Masao road on the steep hill to the last beyond Masao and about two and a half hours from Largo, thence to Boundary Stone No. 16 which is to the South-East of No. 15 and is situated on the steep hill immediately above Largo village and one hour away, thence in a southerly direction to Boundary Stone No. 17 which lies on the hill immediately above Hangha, thence further South again to Boundary Stone No. 18 which is just above the 1915 farm belonging to Madam the Chief of Kennema, thence to Boundary Stone No. 1 which was first described.

It is intended to constitute such land a forest reserve for the use and benefit of the native communities within the limits of whose occupations the intended reserve is situated. The District Commissioner of the Railway District is hereby appointed Reserve Settlement Commissioner to enquire into and determine the existence, nature and extent of any rights claimed by or alleged to exist in favour of any person or native communities if brought to the knowledge of such Reserve Settlement Commissioner affecting the lands or the rights in or over the lands, which it is proposed to constitute a forest reserve.

2nd January, 1917.⁶⁶

⁶⁶ As printed in the *The Sierra Leone Royal Gazette* XLVIII:1664 (January 1917): 1: