

Understanding Diversity: A Study of Livelihoods and Forest Landscapes in Liberia

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FOREWORD

It is not that long ago that the mention of Liberia conjured forth images of civil war, child soldiers and helplessness. The strife in the country and in neighboring Sierra Leone brought the world's attention to "blood diamonds" a

This paper, and the research that supported it, is an effort to help fill the gaps regarding the diverse values of these forests to Liberia's rural communities, and thus the nation itself. It is hoped that this information, coupled with the activities that are now taking place in communities as a result of this work, will demonstrate that the community "C", and the values and importance of forests for the rural and, arguably, national economies, will be elevated to a more prominent place in policy discussions regarding the long-term and sustainable use of Liberia's forests.

Stephen Kelleher
Coordinator

GLOSSARY

ABSTRACT

Community forestry is high on the forest policy agenda in Liberia. However, relatively little is known about the diverse variety of customary forest management institutions and arrangements. Similarly, while the importance of forests and forest products in rural livelihoods is generally acknowledged, there has been little systematic study and analysis of just how forests fit into rural livelihoods. There is a danger that community forestry policy will be based on a false assumption that there is some sort of vacuum of

Chapter 1

Introduction

INTRODUCTION AND BACKGROUND

Since the end of the civil war in Liberia in 2003, significant efforts have been put in to reforming the forestry sector. These efforts have been especially significant in two major ways. The first of these has been the development of new forestry policies encapsulated in the *National Forestry Reform Law of 2006* and its associated rules and regulations. Developing clear policies and rules has been partly motivated by the need to put the timber industry on a clear legal footing as a condition for the removal of United Nations

process by which it was submitted for consideration, it was not passed into law by the

acknowledgement of functioning local arrangements. There was a very real risk that policy could impose a standard model for community forests across the country. This was an issue because international experience has shown beyond any doubt the risks associated with imposing standard models where local contexts are highly varied and especially the risks of imposing new management arrangements without understanding what already exists. These risks include the potent

Forestry Pilots: A Natural Carbon Strategy for Liberia” (Sheppard et al 2009a and 2009b). These reports contain detailed and useful survey data on species, agricultural activities etc, but do not deal in detail with customary forest management practices and arrangements, such as decision-making processes. The FDA has recognized the need for a broader overview of community forestry practices and forest-livelihood linkages and proposed a “profiling study” of thirteen communities some time ago. This, however, did not occur due to lack of funding.

While community forestry management practices have not been widely documented, customary tenure systems have been very thoroughly documented in the work of Alden Wily (2007).

In recognition of the need for greater understanding of the variety of types of forest/livelihood systems in Liberia, the LLS program supported a study of seven different cases scattered throughout the country. The study aimed to cover a variety of forest/livelihood situations. While it was not intended to be comprehensive, it aimed to cover as much variety as possible in terms of:

- a variety of landscapes, including mixed secondary forest landscapes, agroforestry and a variety of forest types (tropical forest, savannah, mangrove)
- proximity of population to forests, PAs, concessions;
- proximity to markets;
- ethnicity of community.

The study aimed to document:

- forest type and condition;
- types of forest products used;
- types of products marketed;
- tracing of market chain of forest products identified in local markets;
- relative importance of forest products and other livelihood assets;
- forest access (including customary tenure);
- local forest management practices and regulations;
- decision-making processes regarding forest use.

The primary aim of the study was to provide a preliminary overview of some of the varied existing local forest management practices and particularly to demonstrate that there was no “institutional vacuum”. In other words it was intended to demonstrate that arrangements for forest management already exist.

A secondary aim of the study was to identify two landscapes to act as pilot landscapes for the LLS program.

THE LIVELIHOODS AND LANDSCAPE STRATEGY AND THE CONCEPT OF LANDSCAPE

IUCN’s Livelihoods and Landscape Strategy is a global program which aims to show that improved livelihoods and conservation outcomes can be achieved at a landscape level by addressing constraints including constraints related to forest governance, access to resources and marketing arrangements.⁵ The program works on the landscape scale rather than focusing solely on areas of forest.

The concept of landscape refers to an area with a mosaic of different types of land use.⁶ Different parts of the landscape meet different human needs and livelihood strategies tend to draw on meeting a variety of needs from different parts of the landscape. Thus, forest use cannot be seen as occurring in a vacuum separately from other elements of landscape use and management. For these reasons, the “Understanding diversity” study aimed to examine forest use in the context of wider patterns of landscape use and management.

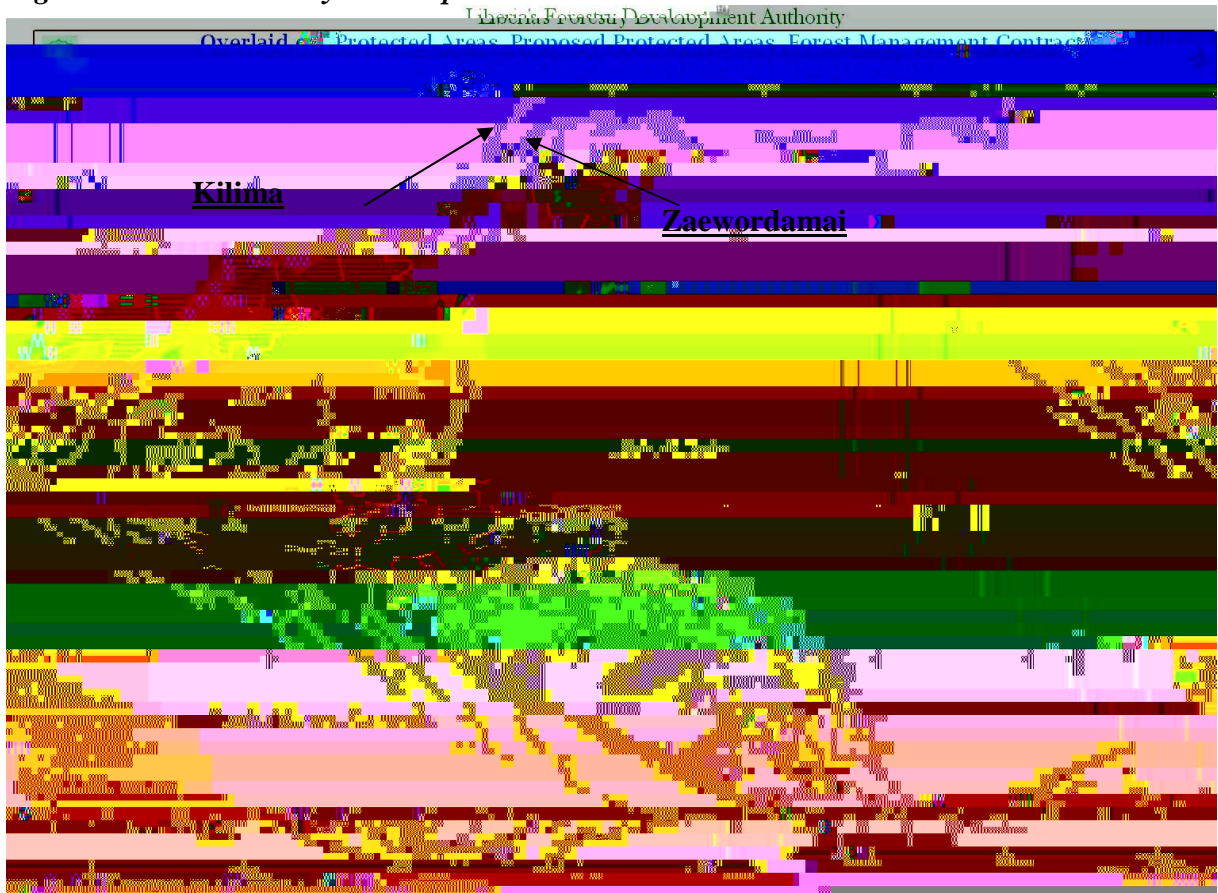
The study paid considerable attention to the general economic/livelihoods activities in each landscape in order to show how forest use and management fit into overall livelihood systems. It also examined leadership, social organization and decision-making, because these are central to understanding how resources are used and managed. Each case study presents a picture of a landscape and how people live within it, not just a picture of narrowly forest focused activities and institutions.

⁵ In this report forests are defined broadly, to include mangroves and savannah and the study includes on-farm trees as well as trees in forests.

⁶ For discussion of the landscape approach see Maginnis et al 2004 and Fisher et al 2008.

Chapter 2

Figure 1. The seven study landscapes



THE STUDY TEAM

The study team consisted of IUCN staff and consultants, officials from the FDA, an academic from the College of Agriculture and Forestry at the University of Liberia and students from that Faculty.

DATA COLLECTION AND ANALYSIS

The methodology utilized for the case studies represented a compromise between full scientific research and rapid surveys. The approach could be described as ethnographic survey, utilized a wide range of assessment tools such as participatory mapping with community members, timelines/calendars, transect walks and triangulation, and dialogue. Before the case studies were initiated, a two day training workshop was conducted for the research team, followed by a field trip to familiarize the participants with the range of tools common in rapid assessment.

Chapter 3

Zangar

INTRODUCTION

Zangar is located in the Marshall Wetlands in the Grand Bassa County, some 75 miles from Monrovia on the road leading to Buchanan. The village is located on the edge of the proposed Marshall Wetland Protected Area. It is associated with six smaller villages

a kitchen which also doubles as storage for rice seeds. Some of the houses have outside bathhouses made out of poles and raphia thatch, but all the houses lack toilets. Hand pumps or a well for drinking purposes are lacking in Zangar or any of its satellite villages, and most drinking water is fetched from the Zin River. During the rainy season, households also collect rainwater for drinking purposes. Household waste, predominantly composed of organic matter, is thrown on the outskirts of the village. Common fruit trees seen in Zangar and the other villages included cocoa, coconut, banana, pear, breadfruit, mango and citrus.

No health or educational facilities exist in Zangar or any of the satellite villages. Sick persons are either taken some 13 km away to the nearest health center across three river tributaries with rickety log bridges or put in boats (e.g. Bezon village) and taken to Marshall City, a distance that takes at least 3 hours 30 minutes by boat. Diarrhea was reported as the commonest illness followed by malaria. The community collects its drinking water from the stream and household wastes thrown on the outskirts of the village are washed into the stream at the height of the rainy season when such health problems are magnified. Domesticated animals such as pigs, goats, ducks and chickens frequent the garbage sites as most animals are allowed to roam freely in the community.

Population

The current population of the village is 223 with the vast majority belonging to the Bassa ethnic group. Other ethnic groups recorded in the village included Krahn, Mano, Grebo and Nigerian (Ibo). The current population of Zangar is lower than what it used to be before the war.

Education

Illiteracy in the village is very high, and out of a total population of 223 (minus one child who died during our stay), less than five out of 97 children were attending school. Fewer adults in the village have ever been to school.

Facilities and Employment Opportunities

A church, called the Union Baptist Church, serves the entire community and nearly every member attends this church. There are two video clubs, with most of the shows taking place at night. The electricity generated at night is also used to charge mobile phones. The youth association in Zangar has also constructed a football (soccer) pitch, and hosts soccer tournaments with surrounding communities.

The lack of a formal sector means that most people are self-employed, largely depending on the natural resources to meet their household and economic needs. Key areas of self

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Community Organizations

There are three local associations: the Zangar Town Development Association (ZDA), the Women's Development Association and the Zangar Youth Association. The ZDA appears to be defunct, with only the youth association having some functionality, largely focused on sports and paid labor. Other forms of social organization include the church, the *poro* (a secret society for men) and the *sande* (secret society for women).

LEADERSHIP AND DECISION MAKING

The leadership structure in Zangar is distributed across several key components including chief, elders, youth, sacred institutions, women's group and the church, all of whom play a critical role in decision making in the Zangar village and its six associated villages. Each of the six villages has a chief that reports to the chief and elders of Zangar village. In addition, a "bush manager" has been appointed by the elders primarily to manage access to forest resources in the six villages associated with Zangar. This was done to prevent over-exploitation of the forest resources by outsiders as well as members of the community who might want to connive with outsiders to exploit the resources. Moreover, there were security concerns, especially over people getting lost in the forests and fearing retribution from central government.

Outsiders coming into the community for the first time have to make their presence known through the local authority, primarily the chief. Most outsiders come to have their presence felt through a "stranger father" figure who will be a local resident on whose authority the outsider can count for support. It is through this "father" figure that the outsider can cultivate land and possibly come to have rights like any other resident.

The chief, who is appointed by the wider Zangar community through a unanimous show of hands, is the primary source of authority. The immediate governing structure includes the chief, assistant chief, an announcer/village crier and a messenger. This is regarded as the formal structure and links Zangar to the national governing structure at district and county levels. Providing advice to the chief and the rest of the community are six elders, all male, who have attained this position as a result of their age, length of residence, and association with the male secret society. Most members of this group are over fifty years old and have four to five children who participate in communal labor such as roadside brushing. Appointment to the position of elder requires that the individual pays a fee of L\$250 and a large bottle of beer or cane juice (local alcohol distilled from sugar cane). The fee payment is made to the existing elders and is not made available to the rest of the community members. It was indicated by the elders that their sources of income are limited, and their age limits their participation in any income earning activities such as the collection of kiss meat, harvesting of *Sclerosperma* thatch or the cultivation of sugar cane for wine production. Once an individual attains this position, he is prevented from participating in roadside brushing and bridge repairs, arduous tasks considering the number of roads and bridges that need fixing every year. Women are not part of the group of elders, and the key reason for this is that women are generally considered to be scared of making decisions, but also because membership in the male secret society

prevents women from taking part as certain key decisions are often decided on in the male sacred grove, to which women have no access.

The various institutions play a role in conflict resolution: For example, when there are conflicts between the youths, the youth leadership meets to resolve it, and if the matter is unresolved, it is then taken to the chief and assistant chief to decide the matter. If the matter is still unresolved, the elders are involved. If either the plaintiff or defendant is not satisfied with the ruling of the elders, the elders then instruct the chief to write a letter

members. Extensive use is made of poles and thatch for house construction in the community, but no sales of poles were noted. Thatch, is however, harvested for sale.

Sacred Groves

There are three sacred groves, two for the men and one for the women, but currently only two are in use. The two in use are within the immediate confines of Zangar village, one for the men and the other for the women. These two groves measure a little under three acres altogether, but the male sacred grove located some forty-five minutes walk from Zangar, close to the village of Bezon measures roughly nine acres and is not in use, although it is still maintained by the community as it contains the spiritual vestiges of the community. Any infringement is severely dealt with. Any uninitiated person that strays into the grove will be initiated, sometimes forcefully, either in the same grove, or nearby grove that has ongoing initiation ceremony. There are heads of the institutions (both male and female) responsible for the groves, although it is the responsibility of every member of the community to guard against infringement.

NATURAL RESOURCE MANAGEMENT ARRANGEMENTS

Chapter 4

Sembehun

INTRODUCTION

Sembehun is located in Grand Cape Mount County, some 145miles north of Monrovia on the road leading to Robertsport. The dominant vegetation types include rainforest located on very steep mountain slopes, coastal savannah interspersed with fresh water swamp forests, and mangroves. There is strong dependence of the community on its

Present day Sembehun is located in the territory of the Tombey clan and in Tombey Commonwealth District of Grand Cape Mount County. The district is sub-divided into Upper and Lower Tombey. Upper Tombey consists of three towns, including Bonu, Mandoe and Falie, while Lower Tombey consists of Latia, Sembehun, and Tosor. Sembehun serves as the clan head quarter while Latia serves as district head quarter. Each sub-division (upper and lower Tombey) is headed by a general town chief who serves under the supervision of the clan chief. Both the upper and lower Tombey are headed by a Paramount chief who reports directly to the superintendent.

Population

The current population of Sembehun is 1,038 persons, comprising 527 males and 511 females (adult population is 291 and children and y

community providing sand and other local materials, (cement provided by an NGO), helped to establish the new clinic. Currently, six staff members are employed at the clinic, and their monthly salaries are paid by AHA. Average attendance at the clinic per day is 25-30 persons during the farming season, but this increases during non farming season (wet season). The most common illnesses recorded at the clinic are respiratory diseases and malaria.

The community is served by a good unpaved road. Mobile reception in the village is difficult but reception is possible on the slopes of the mountain forest nearby.

In the past (1920-1930), when population was low, the entire Sembehun territory was divided into six quarters, and anyone wanting to cultivate land sought permission from the head of that quarter where he lived before clearing the land. In the 1950s, use rights to the land used for farming lasted for three years for a person who was first to clear the said piece of land, after which, it went back to everyone living in that community. After the 3 years, it was still possible to engage the land, but anyone else could go and engage the land even in different quarters. Between 1930-1950 when the population started building up, the quarter system was abandoned and replaced by a combined communal system.

In a case where cash crops are planted on a piece of land by members of the community, the crops belong to the one who planted them while the land is the common property of the community. This means any development for which the said land is deemed suitable the crops can be negotiated for to give way to community development.

Outsiders are also allowed to use community land, but have to go through negotiations with the community leadership including the town chief, elders and sometimes the rest of the community members. When negotiations are finalized, such persons are advised not to plant any permanent crops and when harvest is over, his temporary tenure rights are also over. The initial timeframe for outsiders is one year and limited to the cultivation of cassava and rice. Permanent crops are not allowed, but if one has stayed in the community for an appreciable length of time, they become members and their rights to land follow the same as the rest of the community members.

Sacred Groves

The traditional sacred institutions like *poro* and *sande*, which are organized around forests, were at one time dominant in 8(m)-3.27396(m)7.00596(a)1.96262(n)6.56299442343(9.5177(w)2.4

SEMBEHUN AND THE PROPOSED LAKE PISO PROTECTED AREA

Sembehun community and its associated landscape are located within the proposed Lake Piso PA system. In our initial reconnaissance in the surrounding communities, it was rumored by some community elders that they had been informed by some FDA individuals that once the Lake Piso PA system is enacted into law, they would be asked to move. Similar issues were raised at Sembehun, but the community members indicated that they own their land and forest. This is a source of potential conflict.

Chapter 5

Garpu Town

INTRODUCTION

Garpu Town is located in Rivercess County, some 280 km from Monrovia on the road leading through Buchanan. It is largely a forested community with large areas of the landscape still in primary rainforest. However, logging for timber has been extensively done in the past (Oriental Timber Company) as well as in the present time (through illegal chainsaw activities). Large areas of logged forest still exist side by side with primary rainforest as the dominant vegetation type. The logged forest is very rich in rattan, but little or no exploitation of it is done for commercial purposes. The community of Garpu Town is largely dependent on the forest for NTFPs such as construction materials, medicinal plants and bushmeat, as well as artesinal mining for gold. The forest is also rich in biodiversity with elephants known to roam the forests (both logged and primary).

HISTORICAL BACKGROUND AND DESCRIPTION OF COMMUNITY

It is believed that Zennoh, the great grandfather of Garpu, originated from the north-eastern part of Liberia. He migrated to Rivercess as a result of a tribal war in the eighteenth century. The first settlement was Daydanewein near Porkpeh Town where Teah was born. Within this same settlement, Teah gave birth to Yargbo. As a grown up, Yargbo migrated from Daydanewein to establish his own village called Kayah. In Kayah, Garsaynee was fathered by Yargbo in the nine

- *ARBEGNUTAA*, which means “Be fair to one another, be transparent” is a group for both men and women and they are engaged in farming, advocacy and self-help. The group was formed by SDI (Sustainable Development Institute), a local NGO operating in Liberia. There was no evidence that the group was still functioning.
- *The Concerned Citizens Caucus of Rivercess* was felt by team members to be not actually operational in the community per se, but its leader was in attendance at the community meeting we organized and so tried to slot in the group’s mission. The main objectives of the group concern human rights, advocacy, self-help initiatives, cassava farming, and reconditioning of the road.
- The *Teachers Association* aims to carry out cassava farming for the school, and to give assistance to community in farming activities. Again we felt this group was not functional and the teachers tried to slot in this group to seek help.

LEADERSHIP AND DECISION MAKING

The town chief (TC) is the primary source of authority, assisted by a deputy town chief, town crier and a secretary, forming the primary core of leadership. They are in turn assisted by elders, youth and women leaders for any major decision-making. Beyond the territorial confines of Garpu Town, matters are referred by the TC to the Unification Town Chief (UTC) who has responsibility for all the chiefs in the Dorbor Clan, of which Garpu Town is a member. If the crime exceeds the l

primary right to the use of that land and such rights can last for 5-10 years before anyone can request for use of it if it is not in production. There is no need for permission to farm in such sites after the stipulated time has expired. The person who first cleared a site can also plant permanent crops on the land. If, during the first year when the land was cleared, it was properly burnt, the individual can cultivate the land for one season and leave to fallow for several years before returning to it again to farm. If on the other hand the land was not properly burnt during the first clearing, it can be re-cleared and re-farmed for the next season, most often by the same person, because of the ease of clearance the second time around compared to clearing a primary rainforest.

Outsiders wanting to settle in Garpu Town and start cultivating land have to first seek approval from the authorities through a resident local referred to as a “stranger father”. Following a background investigation of the individual that reveals no issues of concern, the laws of the community are introduced to the individual who is welcomed into the community farming system. This allows the person to cultivate permanent crops.

Rice, cassava, pumpkin, plantain, pepper, corn and cucumber are the main food crops grown on the upland. Swamp rice farming is not done. There are swamps but lack of knowledge about swamp farming has made people pay little attention to it. However, informants indicated that they would be interested to do so if knowledge about swamp farming is shared with them. Thatch, rafters and rattans are the predominant forest products used in construction work and it is a breach of law if they are harvested and not used. Penalty results in payment according to quantity wasted.

Sacred Groves

There are sacred institutions for both male and female organized around forests in Garpu Town. The *sande* (for women) is still strong in Garpu Town, while the *poro* (for men) has declined in significance largely due to the influence of Christianity and the political situation in the past that made it illegal for such associations. However, in Garpu Town, there is another sacred institution called *nigi* organized around a river in the forest. This appears to be organized with the purpose of conducting sacred rituals. The site is venerated by both men and women and it is forbidden to fish or hunt in the vicinity of the grove.

NATURAL RESOURCES AND LIVELIHOODS

Rainforest is the dominant landscape feature in Garpu Town, and it can be further categorized into primary rainforest, logged forest and secondary forest. Freshwater swamp forests are few, with occasional areas of farm bush and cocoa plantations. The rainforest provides a wealth of forest resources including bushmeat, bitter kola (*Garcinia kola*), bush pepper (*Piper guineensis*), walnut, wild yam (*Dioscorea sp.*), medicinal plants (diverse range of species), thatch (*Elaeis guineensis*, *Raphia palmipinus* and *Raphia hookeri*), rafters and round poles (*Xylopia aethiopica* and *Harungana madagascariensis*), and timber (diverse species) exploited in the community. Gold mining is also practiced in the forest by a large number of migrants from other counties, as well as a few locals. With the exception of bushmeat, most NTFPs are harvested and

used within the community, as poor road networks limit transportation to distant market sites like Buchanan. Rattans are abundant in the logged forests and are used mostly in the production of chairs, winnows, baskets, tables

Table 3: Medicinal Plants of Garpu Town

Pepper: A cup of dried pepper is sold at L\$35 while a bag is sold at L\$5,250.

Cocoa grows well but only a few cocoa farmers are found in the community. Some cocoa growing communities are inaccessible by road and products cannot get to the market. Presently a bucket of cocoa is sold at L\$450 unlike I the past when it was sold at L\$250. Because of the high demand for rubber and associated marketing structures, some cocoa growers are thinking of converting the cocoa farms into rubber farms.

SOCIAL AND ENVIRONMENTAL CHANGES

Even though the slash-and-burn farming started quite some time ago, it did not have any significant impact on the forest due to low population density. The current increase in population due to the influx of a diverse group of people seeking gold, timber and bushmeat has led to increased pressure being brought to bear on the forest and associated natural resources. The hunting and trapping of wildlife for bushmeat is rampant (by both locals and outsiders), and there is an increased presence of pit-sawyers conducting selective logging especially in previously logged forests. Most residents were concerned

they have been no new construction). There are several school-age children in the

way for replanting. Following the end of the cutting exercise, this man migrated from Firestone and settled in Goll's Town where he is currently carrying on large-scale charcoal production using old rubber plantation trees in need of replacement. At present, many of the community members are also engaged in charcoal production for sale. A bag of charcoal is sold between L\$100-125, with middlemen frequenting the community to buy in bulk and sell for profit.

- *Rattan:* The exact quantity of this is not known, but it is found growing in specific forest regions of Goll's Town. Because there are few people actually engaged in craft production, they can collect rattan from any part of the land without reporting to anyone as long as they are residents. Rattan is used in local construction work and in the production of crafts and furniture such as winnows, chairs, tables, etc. Chairs are the main products that are in high demand. The price varies with size. The smaller

AGRICULTURE AND OTHER LIVELIHOODS

Rubber

A good number of the community members have their own rubber farms on which they survive. Yet, there are some without farms who engage in contract tapping. The proceeds are equally shared between the contractor and the farm owner. Coagulated rubber is transported to Firestone Company when farmers contact the company and ask for a car to collect the product. For every ton of rubber transported, a fee of US\$15 is charged by the company authorities. Other expenditures incurred by the farmer includes compensation fee for the driver (US\$15) and security fee (US\$10) (even though Firestone management is not aware of this and does not authorize it). A ton of rubber is sold at US\$1,300 during the wet season when production falls due to rains. On the contrary, the price of rubber drops during the dry season when production increases.

Agricultural Crops

Chapter 7

Kilima Bendu

INTRODUCTION

Kilima Bendu (Lofa County) is located in North Western Liberia and shares international boundaries with Guinea and Sierra Leone. It is approximately 289 miles from Monrovia on the road passing through Voinjama. The predominant vegetation and forest type is Guinean savannah dominated by the grass *Panicum maximum*, with scattered savannah trees like *Hymenocardia sp.*, *Parkia biglobosa* and *Lophira lanceolata* that are fire resistant. Fires are a common feature in this forest type, but control measures by the

population is predominantly of the Kissi tribe (572

Ndopa Farmers Cooperative: This consists of five towns with 62 members. The towns are Kilima Bendu, Medicorma, Woudou, Kondu and Konjo. A registration fee of L\$150 is paid by each member and is used to buy seed rice. The rice is given out to farmers as credit (one bag is repaid with two bags).

The land of Kilima Bendu was believed to have been largely forested in the past, but shifting cultivation and other practices have changed the land to savannah. In the 1980s LPMC (Liberia Produce Marketing Company) introduced oil-palm cultivation using bulldozers to clear large parts of the forest. Initially rice was planted in the area and later palm was planted after the rice was harvested. The plantation was shared among family heads by LPMC. The number of acres allocated to a

Medicinal Plants and Usage

There appears to be a great reliance on medicinal plant usage in Kilima Bendu and a good number of the elderly persons in the community are custodians of knowledge about these plants. Table 5 lists the medicinal plants identified by informants.

Table 5: Medicinal Plants of Kilima Bendu

Plants	Used for
Wamgo	tooth ache
Kunlundo	used to bathe babies, makes them stronger
Lunelay	tooth ache
Lorture	chigger
Marqueyo	stomach pain
Shambolo	snake bite
Meolo	roots used for de-worming
Kpafula	dysentery
Tehvoe	urinary tract infection

Table 6: Changes in Kilima Bendu by Presidential Administrations

Changing Factor	Presidential Administrative Timeframe			
	Tolbert 1970s	Doe 1980s	Taylor 1990s	Sirleaf 2000
Land use	Good	Good	Poor	Fair
Fire Management	Good	Good	Poor	Fair
Education	Poor	Poor	Poor	Poor
Health	Poor	Poor	Poor	Poor

cars make it to the town. Mobile communication through Libercell and Comium are possible but it is difficult to get through most of the time. Facilities available in the community include:

School: The school was established in the 1950s and named Zawordamai Fundamental Education with classes up to the fourth grade. In 1976, the school was elevated to the level of grade six and was renamed Zawordamai Elementary School. Another elevation took place in 1979 bringing the school to the current junior high level, with a name change to Zawordamai Elementary and Junior High Sch

LEADERSHIP AND DECISION-MAKING

NATURAL RESOURCES AND LIVELIHOODS

With the exception of Raphia used for commercial wine production, all of these products are available on an open access basis for community members, with no rules or restrictions.

PIT-SAWING

This activity started long ago. Pit-sawyers get permit from the county authority before going into the area for sawing activities. For every 100 planks sawn, twenty-five go to the community as benefit. The trees used are generally on agricultural land or trees in cocoa plantations. In addition to this, the person/family on whose land the log was sawn also receives benefit from the pit-sawyer. This is not specific, but negotiable between the two parties.

OTHER LIVELIHOOD ACTIVITIES

Mining

Mining was started between 1960-70 by some Guinean immigrants, but they left and did not return. In 2008, some of the Guineans who had started this initiative sent a few persons back to prospect for diamonds at the old mining site. These people along with some individuals from Zawordamai started prospecting in the area without the awareness of the town authority. They were stopped by the town chief and elders and subsequently fined L\$500 each. This was paid and deposited into the community development account.

Economic Strength of Zawordamai –Past and Present

Prior to the war, the community had a very strong economy as evident by the numerous houses with metallic zinc structures, coupled with concrete graves of dead relatives. Zawordamai is noted for growing rice, cocoa, coffee, kola nuts and sugarcane. Apart

Table 7: Prices of Some Agricultural Commodities in Liberian Dollars

Crop	Post-war price (L\$)
Cocoa	40/kg
Coffee	50/kg
Rice	40/kg

Chapter 9

Gohn's Town

INTRODUCTION

Gohn's Town is located in Grand Bassa County approximately 65 miles from Monrovia. Access to the site is extremely difficult during the rainy season. Some area of good

shelters including forty-three with thatch roof and six with zinc roof. There are five ethnic groups in the community, but the dominant group is Bassa, comprising approximately 96% of the population.

Facilities and Employment Opportunities

The road leading to Gohn's Town is in deplorable condition, with several of the log bridges needing replacement. Along some sections of the road, there are no bridges and vehicles have to wade through creeks to get back on the main road. Mobile telecommunication is absent.

There is a water pump, which was constructed by an NGO, but which goes dry during the height of the dry season. There is a two-compartment latrine constructed by Chief Zanzan Karwor with the help of the community. The same chief is helping to construct a clinic, to replace the one that was destroyed during the civil war. There is no school. However, there is a church (Christ Assembly) constructed in 2000.

One blacksmith shop built before the war exists and is used to produce local farm tools such as cutlasses, hoes, knives, etc. These tools are sold in the town and the surrounding villages at different prices depending on size. The larger size cutlass is sold at L\$150, the medium and small at L\$100 and L\$75, respectively. Knives are sold at between L\$5-20 depending on size as well.

Employment opportunities through a formal sector are absent. Most people are self-employed through the exploitation of the land and its natural resources. The leader of all traditional chiefs in Liberia resides in Gohn's Town, and provides employment opportunities for some residents on a contract basis to work on his farm.

Community Organizations

Poro and *Sande* societies continue to exist and are strong in Gohn's Town. They are frequently used to enforce community rules and regulations. For example, fighting, stealing and insulting in public are not allowed. Violators are penalized by the *poro* and the *sande*, depending on the sex of the offender. There are two separate fores262()-48.1169(s)-1.636359(

- *Kuu*: Currently comprises fifty members, both men and women who work on one another's farm rotationally. The host feeds the group during the working hours. Membership of this group is not stable, and is largely considered voluntary.
- *The Rice Harvesters' Group*: Consists of men and women who come together during rice harvest season. They go from one member's farm to another, with each person contributing one cup of rice for feeding. The host provides the sauce for the food.
- *Gohn's Town Defenders*: This is the youth football club consisting of boys and girls with a total membership of thirty. The club is basically engaged in sporting activities. However, it also helps in maintaining roads, community cleaning and construction of public facilities.

LEADERSHIP AND DECISION-MAKING

The Town Chief (TC), his co-workers and the elders are the decision makers of the town. Cases that cannot be handled by the TC are transferred to the council of elders with the involvement of the *poro* that has a final say on critical issues. Women also employ a similar method (through the *sande* society) in cases that cannot be amicably resolved

Table 9 shows some of the prices at which natural p

AGRICULTURE AND OTHER LIVELIHOODS

In addition to the exploitation of forests for a diversity of products, agriculture is practiced by almost everyone in the community to meet household needs as well as supplement incomes. The range of crops cultivated include:

- *Rice*: This is the major crop that is grown and used for both consumption and marketing. The pre-war price of rice was L\$25 per cup, but is now sold at L\$15.
- *Cassava*: also used for consumption and marketing. It can be processed into gari and fufu and sold to the middlemen and sometimes to community members. A bag of gari is sold in the community for L\$1000-1200, but sold at higher price outside.
- *Plantain*: This is also grown, but not in large quantities. A bunch of plantain is sold at L\$75-200 depending on the size.
- *Vegetables*: (cocoyam, okra, pepper, bitter ball, etc.) are planted along with rice for home use, but some are also marketed to meet family financial needs.
- *Sugar cane*: This once served as a major source of income, but farms and processing mills, distillation pots were all destroyed during the war. However, re-establishment of farms has started with Chief Zanzan taking the lead. One sugar cane crusher and a distillation pot has been bought and is awaiting maturity of the sugar cane before commencing production.
- *Rubber*: This crop was introduced into Gohn's Town after the war and many people are now engaged in establishing more farms to sustain household income when they start producing in seven years time.

SOCIO-ECONOMIC AND ENVIRONMENTAL CHANGE

Table 11 depicts the socio-economic changes that have occurred in the community taking into account timelines from four of Liberia's presidents.

Table 11: Socio-economic Conditions in Gohn's Town during Presidential Administrations

Changing Factor	Presidential Administrative Timeframe			
	Tolbert 1970s	Doe 1980s	Taylor 1990s	Sirleaf 2000
Land use	Good	Good	Poor	Fair
Housing	Poor	Good	Poor	Good
Economy	Poor	Good	Fair	Good
Education	Poor	Poor	Poor	Poor
Health	Poor	Poor	Good	Good

Chapter 10

Analysis and Conclusions

INTRODUCTION

The seven case studies present a diversity of landscapes with both existing and potential opportunities for diverse forest-based livelihood systems, as numerous products are harvested and sold for income or household consumption. Institutional arrangements have evolved for the management of these products in most of the landscapes studies. However, there was a lack of traditional arrangements for the management

Access to natural resources and land by community may m

access and use of forest resources by community members, especially the harvesting of poles and timber for construction activities. Similar arrangements involving traditional institutions like the *poro* regulating access to natural resources are not unique to Liberia, and are known to have a wide occurrence across the African landscape (Lebbie and Freudenberger 1996). After an individual consults with the bush manager, he determines availability and seeks approval from the elders. Once a verbal approval by the elders is made, the individual is informed of the quantity to harvest. In Goll's Town, harvesting and non-use of forest resources leading to spoilage leads to fines being levied by the chief.

Where scarcity of resources has been observed, there are limits to the harvesting of trees as in the savannah of Kilima Bendu, where tree cover is low. In such a situation, setting of fire is highly regulated to prevent destruction to property and natural vegetation like trees. While this management arrangement was interrupted during the recent civil conflict in the country, it appears to be resilient, as it has resurfaced and now being enforced across the community. Resilience in natural resources management has also been noted in other countries like Senegambia, Guinea and Sierra Leone (Freudenberger et al. 1997).

In cases such as kiss meat in Zangar or mangroves in Sembahun, the absence of regulations and organizational arrangements to manage resources that are perceived to be abundant reflects a common pattern in customary resource management systems generally. In such cases there is no perceived value in incurring substantial transaction costs where there is no perceived shortage.

Tenure over forests and trees is generally a form of common tenure (joint ownership by a specified "community"), with individual access to products for collection subject to regulation. In the case of swidden agriculture, there are various arrangements as to how rights to plots in forests are allocated. Generally there are individual rights to plots within common forests. However, the rules under which plots are allocated vary from place to place. The way decisions are made about allocation, and details such as the length of time plots can be farmed and what crops can be grown vary. Because of the investment of time and resources involved in opening up of mature

- Overall, the relationship between traditional beliefs and sacred groves was very strong throughout all the case study sites, except in Goll's Town.
- In the case of Zangar an individual has been appointed as bush manager. The person must be a member of the *poro* and is appointed by the elders' council.

CONCLUSIONS

The major purpose of this study was to explore the diversity of resource use systems and customary arrangements for forest management in Liberia. The underlying concern was to show that there is not a “vacuum” of local forest management institutions. In other words arrangements for allocating and distributing forest and other natural resources often exist, and these often vary in different locations.

We were also concerned to explore some of the ways forest and natural resources fit into different livelihood systems in different landscapes.

It is clear from this study that there are customary arrangements for forest and other natural resource management operating in Liberia. The existence of these systems, and the demonstrated variety should inform policy.

We suggest that the variety of resource use practices and management practices has some implications for future interventions in community forestry in Liberia:

- As there are already extensive and sometimes complex patterns of resource use and forest management practices, all interventions should begin with, or be preceded by, assessment of what is already happening in a particular locations.
- As CFM is already practiced, interventions may need to support or strengthen existing practices or they may need to assist in developing new arrangements.
- Standardized “one-size-fits-all” approaches should be avoided and adaptive and flexible learning approaches are necessary for implementation and support of CFM.
- More information like that contained in this report is needed to inform any policy frameworks related to community forest management, building on the rich traditions and knowledge of the rural Liberians and their natural resource management strategies.

The Liberia LLS program has selected two pilot landscapes on the basis of this study and will apply an action research and adaptive approach in these landscapes in order to improve local livelihoods and contribute to an improved understanding of CFM practices as a basis for community forestry policy development in Liberia.

Lomax, Tom (2008)

Forest Governance in Liberia: An NGO Perspective. Moreton on Marsh, UK and

APPENDIX 1

The Benefits of Community Participation and Involvement of the University of Liberia in the Study

A major impact of the LLS study in the seven landscapes was the collaboration with a staff member and several students from the University of Liberia. Most of the students had never participated in field assessment and most expressed their delight at having acquired practical training in their discipline as well new areas. The grave economic situation of the university precludes students and staff from participating in any practical field work, frequently limiting students to classroom setting. T432(o)-a715(i)0.44-e.036(g)-76(m)7.00- staff member who indicated tht o

APPENDIX 2

Comparative Tables Summarizing Aspects of Community Data

**APPENDIX 3: Summary of Forest Categories and Natural Resource Management
in all Case Study Landscapes**

Landscape	Forest Category	Natural Resources	Management System	Issues/Comments
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		medicines, bushmeat, snails		communities established; bushmeat hunting & some farming; large quantity of large diameter size rattan high.
	Farm Bush	Poles, fruits, medicines, ropes, bushmeat, thatch, oil palm, snails	Private property; some oscillation between private and common property although rights are with the person who first cleared the land	Some conversion into plantation forest
	Riparian Forest	Fish, bush pepper	Common property	
	Freshwater Swamp Forest	Thatch, fish	Common property	Limited technical knowledge in cultivating swamp for rice
	“Needepo” (Sacred Grove)	Cultural	Common property	Site for sacred rituals/religious ceremonies
	Plantation Forest	Cocoa, rubber, oil palm	Private property	High price for rubber is 1000000000 1000000000 (common property) cocoa holders to convert plantations into rubber plantation
<i>Goll's Town</i>	Secondary Forest	Poles, Timber, bushmeat, rattan, fruits, medicines	Common property	No visible 199717(p)-3.71693(r)4

	Sacred Grove	palm wine, thatch Cultural	Porro/Sande/community	Restricted access for non-members
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