



WEALTH DISTRIBUTION, POVERTY AND TIMBER GOVERNANCE IN UGANDA

A Case Study of Budongo Forest Reserve



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ACODE Policy Research Series, No.26, 2007

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This report arises out of ACODE's research undertakings meant to influence policy processes in biodiversity conservation through generation of policy relevant information. It highlights the nature-wealth-power dynamics and the intricacies along the timber product chain from Budongo forest and points out critical gaps that policy processes ought to target. The report provides an analytical outlay of winners and losers associated with timber from Budongo forest. Our hope is that it will spur policy makers and implementers to redress the imbalances.

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ACRONYMS AND ABBREVIATIONS

ACODE	Advocates Coalition for Development and Environment
BUCODO	Budongo Forests Community Service Organization
CBO	Community Based Organization
CCA	Commodity Chain Analysis
CFM	Collaborative Forestry Management
CFRs	Central Forest Reserves
DFO	District Forestry Officer
DFS	District Forestry Services
ENR SIP	Environment and Natural Resources Sector Investment Plan
ENR	Environment and Natural Resources
FAO	Food and Agriculture Organization
FD	Forestry Department
FID	Forest Inspection Division
FORRI	Forestry Resources Research Institute
FSSD	Forest Sector Support Department
GCC	Global Community Chain
GDP	Gross Domestic Product
Ha	Hectares
KCC	Kampala City Council
KICODA	Kapeka Integrated Community Development Association
LCs	Local Councils
LFRs	Local Forest Reserves
LGs	Local Governments
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MEMD	Ministry of Energy and Mineral Development
MES	Ministry of Education and sports
MFPEd	Ministry of Finance, Planning and Economic Development
MGLSD	Ministry of Gender, Labour and Social Development
MLG	Ministry of Local Government
MPS	Ministry of Public Service
MTTI	Ministry of Tourism, Trade and Industry
MUK	Makerere University, Kampala
MWLE	Ministry of Water, Lands and Environment
NAADS	National Agricultural Advisory Services
NARO	National Agriculture Esearch Organisation
NBS	National Biomass Studies
NEMA	National Environment Management Authority
NFA	National Forestry Authority

NGOs	Non Governmental Organizations
NPFs	National Park Forests
NTSC	National Tree Seed Center
NTSC	National Tree Seed Centre
NWFP	
NWP	Nature, Wealth and Power
PEAP	Poverty Eradication Action Plan
PMA	Plan for Modernization of Agriculture
PRIME WEST	Productive Resources and Investment for Managing Environment in Wesren Region
UDHS	Uganda Demographic Household Survey
UIA	Uganda Investment Authority
URA	Uganda Revenue Authority
USAID	United States Agency for International Development
UWA	Uganda Wildlife Authority
WID	Wetlands Inspection Division

EXECUTIVE SUMMARY

This study was motivated by the fact that many communities that directly depend on natural resources have remained in abject poverty despite the increasing economic value of these resources. This is happening in key resources areas such as fisheries, wildlife-based tourism and forestry products. In the forestry sector, the prices of timber for example have increased three fold over the last decade. In spite of this trend, both the Poverty Eradication Action Plan (PEAP) and the Environment and Natural Resources Sector Investment Plan (ENR SIP) present a case for increased budgetary allocations to the forestry sector in particular and other natural resources sub-sector in general. In this paper, it is argued that increased government and private sector investment in natural resources management is essential for the sustainable management of natural resources. However, such investments will not lead to dramatic reduction in poverty levels largely because the current policy and institutional framework does not address the power imbalance and the associated economic marginalization of poor resource users.

This case study applied the Nature, Wealth and Power (NWP) analytical framework and the Commodity Chain Analysis (CCA) methodology to analyze the current interactions among the stakeholders engaged in timber production and trade. The key influences that determine losers and winners from wealth generated in the timber business are examined. It is argued that the current structure for management and exploitation of key forest products such as timber is skewed in favour of the politically powerful stakeholders and those that have already accumulated wealth, hence leaving natural resource dependent communities at the margins of the current economic boom. Unfortunately, neither the PEAP nor the current forestry policy framework is able to address these unequal power relations and economic imbalances. Consequently, increased budget allocations will not substantially change the poverty levels of the poor people in this sector and this will continue to undermine conservation and sustainable management of forestry resources in the country.

The study makes the following policy relevant observations:

1. Most of the investments have mainly been in government related institutions with little or no investments in community forest initiatives. This will have a negative impact on government forest reserves as the private/community forests get depleted.
2. The amount of monetary gains accruing from business transactions along the timber commodity chain is mainly influenced by ownership of the natural resource and capital (natural and capital stock). In the context of this study, ownership was either through traditional or legally acquired rights

over the resource, forceful community influence due to social or political status of an individual and official positioning backed up by Government posting or authority. Capital was considered in terms of both skills and tools for exploitation, financial abilities and social capital or networks with other influential actors. The table below presents a summary of percentage shares received by the different actors.

3. Despite the substantial investments that Government has made in the natural resource (forestry) sub sector, there are no guarantees that the poor will indeed reap significant benefits or that the entire stock of the environment will be sustained. The new policy packages and law enforcement mechanisms have hit the rural poor most especially with regard to access to the forest-related natural resources and distribution of proceeds. For example, access to forest resources in Central Forest Reserves is largely through official channels of buying piles of logs by auction or unofficial channels encapsulated by corruption as well as political or elite patronage. All these channels directly exclude poor people that would be targeted by PEAP driven investments. Even the small numbers of poor communities who manage to avoid detection and penetrate the reserves reap minimal benefits as they are either carrying illegal timber for the wealthy or can only pick low value products such as herbs and off cuts for construction and charcoal-burning.

4. The new grouping of forest reserves into community, local government, private, central government and national park forests leaves the community and local government forests more exposed to exploitation mainly on account of inadequate law enforcement. The local forests have no effective administrative systems, as the process of forming the necessary structures is complicated and subject to manipulation by various interest groups. Although districts have been progressively establishing their District Forest Services (DFS), the process is extremely slow and does not reflect the depth of the deepening crisis of forestry degradation and widespread poverty.

5. It was apparent that, except in a few areas, most forests did not belong to any private individual since landholdings quite often ended at the edge of the forests. Early acquisitions of land treated forests as wastelands with little or no private value and were instead associated with pests and diseases and were largely left as communal reserves.

6. More recently, the increasing population has meant enhanced forest clearance for settlement and cultivation. Practices such as growing of upland rice have also worked against the community and district forest reserves partly because of arguments that forest soils are the most appropriate in terms of fertility and availability. Contrary to expectations and what seems to be common knowledge, the destruction of forests is mainly through charcoal burning and

cultivation. These two practices tend to eliminate entire tree species regardless of age and size. Lumbering on the other hand is very selective in terms of age, size and length of straight sections of tree trunks.

7. The case of local forest reserves, which are managed by the district authorities, was endangered by inadequate facilitation of the District Forestry Services. Though rules and regulations had been well developed and manuals for environmental protection and management were available in a number of areas, the required personnel at the district and within the communities were either absent or poorly facilitated. As a consequence, there was no significant Government presence in both community and local forest reserves, which increased the rate of exploitation and indeed destruction of these two forest categories.

8. Forestry resources governance in Uganda has been characterized by a high concentration of power over Central Forest Reserves in the central government and a corresponding lack of local participation in forest and tree management across all categories of forests. Insecurity over land and tree tenure is also contributing to degradation of forests in Uganda. Since most of the people in the Budongo area do not own the land but only use it on a tenancy basis, they are apparently discouraged from planting trees. As a result, there are largely no incentives for the local communities to protect trees including on private land. A combination of this lack of clarity on natural resources tenure and excessive reliance by the state on punitive law enforcement measures partly explains the extent to which the communities are discouraged from engaging in tree planting and re-forestation programmes.

Based on the study, a number of policy recommendations are made. These recommendations if implemented can ensure sustainable management of forests, enhance equity in resource ownership, access and use and optimize positive outcomes from poverty eradication programmes targeting forestry dependent communities:

1. There is need to ensure that local level institutions especially the District Forestry Services and local community structures are fully functional and empowered to engage in resource planning, revenue management and utilization. Given the widespread nature of community forests, local authorities including the sub-county chiefs and parish chiefs should be considered as a potential resource that can be empowered both legally and through training and financial support to police and enforce community level practices that are harmonious with environmental sustainability and poverty eradication.

2. The findings show that the extent to which different stakeholders or individuals along the timber commodity chain gain from the forest is largely

determined by the nature and scope of political power and economic influence enjoyed by those groups or individuals. This has increased the marginalisation of the forest dependant communities who do not have the political and economic power. Therefore, the study recommends a more systematic and transparent system that enhances equal access and control to resources for all actors along the timber production and trade chain. This will ensure that forest management programmes are economically relevant to a broad range of stakeholders, poverty responsive and sustainable development compliant.

3. Future legal and policy reforms need to re-emphasize the principle of subsidiarity for both the management of the natural resources as well as the allocation of the revenues accruing from the exploitation of forestry resources. At the moment, local governments and local communities are participating in the management of natural resources merely as agents of the central government and its affiliate agencies. In order to change the current practice which works against the poor resource users, Government should improve the incentives structure for local people and increase the amount of revenues retained at the local level. This could be done through granting more access rights or ensuring that the local communities indeed receive a good percentage of forest concession and revenues accruing from timber harvesting. Though it is indicated that a certain percentage (about 30%) of the revenue collections by the Government were to be remitted to the local communities, there was no evidence that this was happening. With district local revenues reduced by the abolition of graduated tax, officials indicated that such special transfers to the communities would remain a distant reality.

4. Timber production and trade takes place in the context of complex legal, policy and administrative institutional arrangements. The complex interplay of institutions and policy regimes at the ecosystem level combined with variability in power and wealth relations clearly shows that natural resources management can not be left to the whims of market forces. Government interventions are necessary to ensure strong and adequately resourced institutions that are able to make scientifically prudent and economically sound resource management decisions. Yet, the selective building of institutions such as the National Environment Management Authority (NEMA) and the National Forestry Authority while leaving other key actors such as the District Forestry Service and the Forestry Inspection Division (FID) works against institutional efficiency. It is therefore important that all institutional players along the timber production and trade chain be strengthened to ensure that appropriate synergies are built, strengthened and enhanced to ensure equity and sustainability in the management of forestry resources.

5. There is an urgent need to increasing equity in the distribution of revenues accruing from timber production and trade and ensuring adequate monetary benefits for the poor stakeholders especially local communities, producer groups and local governments. However, achieving this requires new forms of institutional organizations and local community structures that clearly link community marginalization with political agendas and market driven interests. At the local level, new forms of institutional organization must focus at creating representative local structures that have the skills, civic competence and knowledge to challenge the status quo.

CHAPTER ONE

Introduction and Study Design

1.0. Introduction

In 1997, Uganda published the first Poverty Eradication Action Plan as the overall policy and planning framework for the country. The publication of the PEAP was hailed as a major breakthrough that created the first ever opportunity for integrated policy formulation and targeting of budget resources to eradicate poverty. A package of policy measures targeted at accelerating economic growth, increasing the incomes of poor people and enhancing good governance was seen as a means for reducing widespread poverty. This planning strategy has been maintained through a series of revisions to the original PEAP with the current version covering the period 2004-2008. Within a decade, official figures have shown mixed results in poverty levels falling from 56% in 1992/3 to 34% in 2000 rising to 38% in 2003¹ and then falling to 31.1% in 2005/06 according to the 2006 Uganda Demographic and Housing Survey (UDHS)²

The PEAP process has consistently articulated the relationship between sustainable management of the environment and natural resources and increased economic production and growth. Over the years and through effective lobbying and advocacy from environmental management institutions and civil society, the narratives on the environment and natural resources contained in the PEAP have continued to improve. These narratives clearly show the increasing recognition that proximity to a natural resource and involvement in a given socio-economic activity can result in different levels of wellbeing. There is an increasing perception that additional investments in the natural resources sector could result into corresponding gains in poverty reduction, improved wellbeing and invariably improvements in the state of natural resources in the country.

However, an ongoing argument is that in spite of living within proximity of a rich natural resource endowment, many people have remained in abject poverty because of being disenfranchised and marginalized by market conditions and those who wield more political and socio-economic power. Access and control over resources are major factors in the distribution of wealth especially with regard to natural resources. Therefore, it is possible to have active engagement in an activity and yet not realize the benefits depending on the structure of the value distributional mechanism. Local people, especially the poor, often lack power to have access and control over natural resources, have no equipment and other capital resources and cannot easily access end-user markets, all of which are required to realise the economic benefits from natural resources.

¹Ministry of Finance, Planning and Economic Development, (2004). Poverty Eradication Action Plan 2004/5-2007/8. p12

²Uganda Bureau of Statistics, (2007). Uganda Demographic Household Survey 2005-06.

Indeed, notwithstanding the level of investments in improving the livelihoods of rural poor, realization and retention of benefits intended to accrue from a number of Government interventions in natural resources remains low among communities that mostly depend on these resources. Most of the additional economic or monetary value created from natural resources is instead captured by the established power centers at the expense of the poor. This possibility casts doubts on the assumption that increases in the economic value of natural resources have the potential to lead to a corresponding increase in the incomes of the poor households that depend on the resource. Instead, one foresees an increased exploitation of the natural resources as the poor struggle to survive in their ensuing marginal conditions.

In light of the above, it is important to look beyond the mere link between investments in natural resources and poverty reduction to understand the power relations that govern the access and distribution of wealth accruing from the said investments. Consideration should be given to the resource, economic considerations and governance dimensions of natural resource management.³ Natural resource management involves the interaction of the resources themselves, policies, institutions, and knowledge and skills of the different people involved. This calls for programs that integrate nature (environmental management), wealth (economic concerns), and power (good governance).

This report is structured along chapters. Chapter one covers the background, research design, study objectives and methodology, while chapter two describes the state of the forest resources and institutional frameworks for management of forestry resources in Uganda. Chapter three presents analysis of the research findings, while section four presents the key conclusions and a set of policy recommendations.

1.1. Study Hypothesis, Objectives, Methodology and Conceptual Design

1.1.1. Study Hypothesis

This study was designed to explore the validity of the assumption among policy makers and practitioners in economic policy and planning that investments aimed at increasing the value of natural resources per se would lead to poverty eradication and environmental sustainability. This assumption is clearly visible in the changing narratives in the various volumes of the PEAP.⁴

³USAID (2002), *Nature, Wealth and Power: Emerging Best Practice for Revitalizing Rural Africa*. Draft discussion document. Washington D. C.

⁴For detailed discussion on the ENR narratives in the PEAP, see O Mugenyi, G Tumushabe & L Waldman. 2005, 'My voice is also there': *The Integration of Environmental and Natural Resources into the Uganda Poverty Eradication Action Plan*, 2005 IDS Paper.

The first hypothesis that informed this study, therefore, is that mere increase in public investments in natural resources will not lead to corresponding gains in poverty reduction. Rather, there is need to understand and undertake reforms that address issues of power and wealth relations that marginalize poor resources users and are sustained by the current institutional and legal structures for resource exploitation.

A second and inter-related hypothesis is that the rural people rarely benefit from commercial exploitation of natural resources. Instead, the monetary benefits from natural resources are usually concentrated in the hands of a few intermediaries such as moneylenders, transporters, wholesalers, and government agents. The bulk of the benefits are often divided among private commercial actors and government agents as profits, taxes, fees and unofficial patronage or gifts.

1.1.2. Study Objectives

The main objectives of the study is to influencing policy and decision-making to ensure that PEAP-related investments and policy decisions are better targeted at the poor by supporting sustainable Environment and Natural Resources management. The specific objectives of the study are;

- (i) To identify reasons that explain why people who derive a livelihood from core activities related to timber extraction like lumberjacks, local transporters (within the forest) and pit sawyers have remained poor notwithstanding the increase in the value of the resource.
- (ii) To identify and describe the main actors engaged in the business of timber production and marketing and determine the income gains/losses that accrue to them in the business of timber from Budongo forest
- (iii) To identify factors that determine income gains/losses for different actors in the business of timber from Budongo forest and, to propose appropriate policy responses.

1.1.3. Study Design and Methodology

1.1.3.1. NWP Analytical Framework

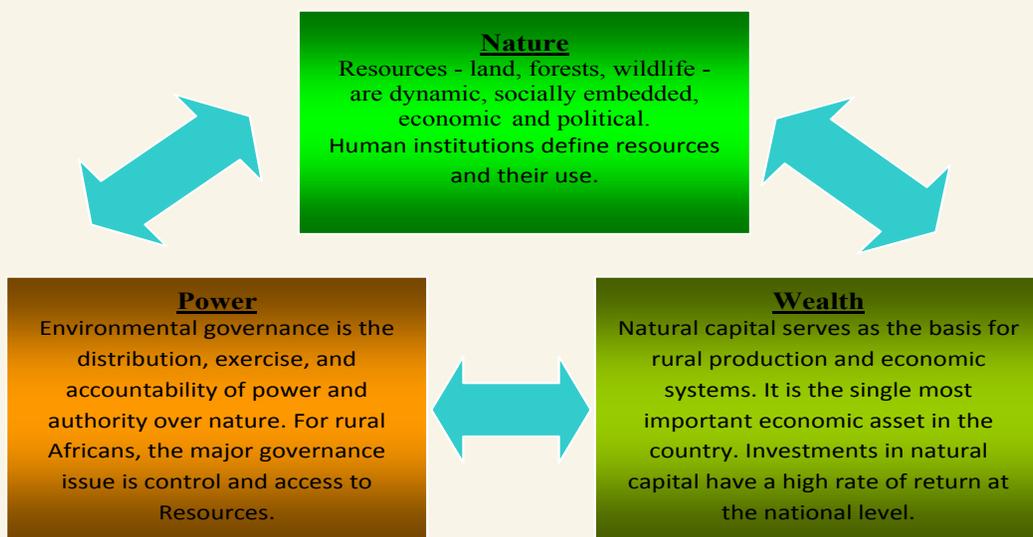
The study was undertaken using two key methodological approaches. First, the study adopted the Nature, Wealth and Power (NWP) analytical framework which ensured that critical underlying issues that span the ENR governance domain were identified and examined. The adoption of the NWP analytical framework was considered essential for this study for a number of reasons. First, in this framework, the various aspects of nature such as land, water, forests, minerals, wildlife, wetlands, etc are treated as being dynamic and socially embedded. Natural resources are seen as having political and economic dimensions to an extent that human institutions define access to and use of these resources.

As a result, accessibility and use of what may appear to be naturally available for all may be limited by human and economic rules that govern communities.

On the other hand, wealth is treated as the foundation for productive economic activities that support livelihoods of the rural poor. The value attached to wealth is derived both from the stock (actual market value of the asset) and the flows (value derived from using the asset itself). For sustainability of livelihoods, conservation should address the stock value of the natural wealth, which determines the exploitable value (flows) of the natural resource that feeds into the regular incomes of the communities. Whereas the current generations benefit from current exploitation activities, future generations require continued existence of the natural resource in order to realize similar benefits.

For its part, power, which can be cultural, socio-economic or political, is a major factor in the distribution process of both natural resources and the associated wealth. Individuals with little power tend to get marginalized in the wealth distribution process to the extent that they might even lose part of their own entitlements. When a person has a weak bargaining position, it is possible to derive an amount of money that is less than the value the individual has added to the commodity. The NWP framework is presented in figure below.

Figure 1.0: The Nature, Wealth and Power Conceptual Framework



Source: USAID (2002)

The NWP framework enables one to study the full range of issues impacting on environment and natural resource management, key economic actors, and the manner in which the exercise of power affects income gains of different individual along the commodity chain.

Specifically for this study, the framework provided a better understanding of the following issues:

- a) The current and potential value of timber,
- b) The use of timber in the rural household economy.
- c) The way in which the trends in the proportion of the value of timber derived by the rural populations have evolved.
- d) The effect of the policy and institutional changes in empowering the rural populations for the management of local natural resources.
- e) The changes, if any, in the behaviour and performance of the market chain associated with timber.

1.1.3.2. The Commodity Chain Analysis

Over the last decade, the economic value of major natural resources has increased tremendously. For example, fish has emerged as a major export commodity and foreign exchange earner competing with coffee, tourism and capital transfers. The contribution of the fisheries sector to the national Gross Domestic Product is now estimated to be in the range of US\$143 million per annum.⁵ The prices of timber have also increased exponentially following the dramatic growth in the construction industry. Indeed, growth has been registered in many other ENR based enterprises including tourism, charcoal trade, and the crafts industry. In spite of this trend, natural resources dependent rural communities continue to sink deeper into abject poverty with the PEAP recognizing some of these communities such as those engaged in fishing as “the poorest of the poor.”

To understand and try to explain this phenomenon, the analytical framework adopted for this study was supplemented with the Commodity Chain Analysis (CCA) methodology. The CCA is generally defined as a series of interlinked exchanges through which a commodity and its constituents pass from extraction through production to end use.⁶ The methodology allows examination of how regulatory policies, institutional and market mechanisms affect the distribution of rents, wages and profits from natural resources.

The commodity systems (or commodity chains) approach has been increasingly adopted in the social sciences as a method of analyzing the dynamics of change in various economic activities. By considering the entire chain, the CCA makes a departure from previous approaches, which tended to focus on individual sectors or sector components, such as agriculture or food processing, as the object of analysis. This form of analysis for example looks at the food commodity as the starting point, and traces production from the inputs to agriculture, through the farm production process, food processing, distributors and consumption.

⁵Department of Fisheries Resources DFR; MAAIF

⁶Ribot 2005, Policy and Distributional Equity in Natural Resource commodity Markets: Commodity Chain analysis as a Policy Tool., WRI

⁷Friedland, W. 1984. Commodity systems analysis: an approach to the sociology of agriculture. Pp.221-35 in H. Schwazweller ed. Research in rural sociology of agriculture. Greenwich, CT: JAI Press.

The commodity chain analysis (CCA) developed out of the world-system theory, which is based on the dependency theory and Marxism⁸. It seeks to explain the dynamics of the capitalist world economy by viewing it as a one social system - 'a world system'⁹. Both the dependency and world system theories are based on the concepts of core (powerful and wealthy) and periphery (weak and poor) regions. The core regions dominate and exploit the peripheral regions such that there is an unequal exchange of resources between the two. Therefore, the CCA developed as a method for examining the unequal exchange, by looking at the international production of commodities whereby the chains represent the 'key mechanisms of exchange'¹⁰.

The commodity chain concept has a relatively long history and has been used in relation to a wide range of industries and commodities¹¹, and continues to be a popular and persistent way of making sense of any industry in both academic and policy circles. Taking a longer historical perspective suggests that the current usage of the commodity chain idea in agro-food studies and in economic geography more widely, can instead be traced back to two sources in the 1970s. These sources are distinct, although sometimes wrongly conflated, and were developed for quite different purposes.

The first source of the commodity chain idea, based on Wallerstein's world systems theory¹², and further developed by Hopkins and Wallerstein¹³, looked at the "network of labor and production processes whose end result is a finished commodity". The authors looked at ships and wheat flour in order to address the question of "whether or not there are substantial historical/empirical grounds for the claim that by the seventeenth and eighteenth centuries, world-economic forces were organizing production over a growing proportion of the 'world' delimited by the scope of their operations". The aim was partly to trace "whether and to what extent a capitalist world-economy was an organizing force and structural reality" during the previous centuries. Specifically, in 1994, they set out "to depict the changes in the form of the commodity chains and ...to see whether and to what extent the structures of [specific component production process] change in accordance with the cyclical rhythms of the world economy".

With heightened interest in processes of economic globalization in the 1990s, Hopkins and Wallerstein's work was taken up by international political economists interested in tracing the development of global commodity chain.

⁸Shillington, J., Laura (2002), *Non-Timber Forest Products, Gender and Households in Nicaragua: A Commodity-chain Analysis*. p25

⁹Ibid. p25

¹⁰Ibid. p25

¹¹Dicken, (1998). *Global shift: transforming the world economy*. London: Paul Chapman (13th ed.).

¹²Wallerstein (1974). *The modern world system*. New York: Academic Press.

¹³Hopkins and Wallerstein, (1986) *Commodity chains in the world economy prior to 1800*. Review 10: 157-70.

They argued that “in today’s global factory, the production of a single commodity often spans many regions, with each region performing tasks in which it has a cost advantage”¹⁴. At this time, the key concepts in comparative sociology appeared to be poorly equipped that they could not support a good understanding of these newly emerging patterns of social and economic organization. A global commodity chain (GCC) approach was developed to promote “a nuanced analysis of world-economic spatial inequalities in terms of differential access to markets and resources”. It was argued that the analytical paradigm of the GCCs “is a network-centered and historical approach that probes above and below the level of the nation state to better analyze structure and change in the world economy”¹⁵. In fact, Gereffi and Korzeniewicz¹⁶ took it further by drawing a valuable distinction between producer-led chains, such as automobiles and computers, and the buyer-led chains, such as clothing, toys and trainers.

A second source for the commodity chains idea can be traced back to the ‘new political economy’ of food and agriculture, including an inquiry by Friedland and others¹⁷ into the sociology of agriculture and the comparative analysis of production systems, which set out to build an explanatory model of technological change. The analysis extended beyond the farm into a wider exploration of corporate power and agricultural production systems. In parallel with the rise of the GCC approach, the ‘commodity systems approach’ by Friedland and others was taken up and developed during the 1980s and 1990s¹⁸ and has since provided the conceptual starting point for a large number of studies on the development of the ‘international food system’.¹⁹

While the terminology may vary with authors and between times, the basic precepts of a commodity chain analysis have remained remarkably persistent, such that calls for re-conceptualization associated with consumption, culture and quality have tended to represent a refinement of the commodity chain perspective, rather than a radical departure. Despite the development of other terms (e.g. circuits, networks and assemblages) in the academic literature the commodity chain concept has continued to be widely used, being mobilized from various different, sometimes conflicting, perspectives.²⁰

Finally, an additional twist to the definition and scope of the concept of commodity circuits or chains has been borne out of a concern, particularly

¹⁴Gereffi et al, (1994), *Commodity chains and global capitalism*. Westport, CT: Greenwood Press.

¹⁵Ibid

¹⁶Ibid

¹⁷Friedland et al (1981), *Manufacturing green gold: capital, labor, and technology in the lettuce industry*. New York: Cambridge University Press.

¹⁸ Bonnano, A., et al 1994. *From Columbus to ConAgra: the globalization of agriculture and food*, Lawrence: University of Kansas Press.

¹⁹Ibid

²⁰Jackson, (2002) *Commercial cultures: transcending the cultural and the economic*. *Progress in Human Geography* 26: 3-18.

amongst geographers, that the concept of a chain is too linear, too mechanistic and too focused on the simple metric of length as opposed to other issues such as complexity or transparency. Circuits, in particular, have no beginning and no end, such that the analysis should always recognize that origins are simply constructed. Thus, the commodity circuits' concept has been used to examine the ways in which geographical knowledge of commodity systems are shaped and reshaped,²¹ leading to concerns about a "virtually endless 'circuit of consumption'"²²

Leslie and Reimer²³ in their review of different conceptualizations of the commodity chain concluded that the idea of systems provision could be blended with insights from commodity circuits such that systems of provision can be 'conceptualized as circulations: interconnected flows not only of materials, but also of various strands of knowledge and discourses'. They argued that a system of provision approach 'need not rest on reification and fixing of connections into a unidirectional chain. Rather commodity chain analysis can (and should) be employed to consider the complex and shifting power dynamics between sites or - to use the chain terminology - nodes.

For all the recent criticism, much of it favouring more complex ideas of circuits, networks and assemblages, commodity chains have retained their popularity. This is in part because of the political 'edge' they appear to offer in the critical analysis of contemporary production systems. Indeed, over the past few years, and since the development of these critiques, commodity chains have continued to be examined for countless products in a wide variety of industries from shoes, to cut flowers, and from diamonds to domestic furniture.²⁴

Bernstein and Amin²⁵, outline the following distinctive features of the CCA that are relevant to this study:

- An 'empirical, as well as theoretical focus on markets, in lieu of formal abstract neoclassic economic modelling,
- Attention to power, its sources, uses and effects in a socially differentiated environment,
- An approach to politics and political institutions as endogenous to the existence and functioning of markets, with attention to differentiated market agents engaging in competitive as well as collective or collusive action, and
- The view that regulation (both state and non state forms of control) is an endogenous feature of markets, hence shifting debates from their current focus on "*more versus less*" to the study of "*better versus worse*" forms of regulation.

²¹Cook and Crang, (1996), The world on a plate: culinary culture, displacement and geographical knowledges. *Journal of Material Culture* 1, 131-53.

²²Leslie and Reimer, (1999), Spatializing commodity chains. *Progress in Human Geography* 23: 401-20.

²³Ibid

²⁴Hughes, A., (2000), Retailers, knowledges and changing commodity networks: the case of the cut flower trade. *Geoforum* 31: 175-90.

²⁵Ribot Jesse, C., (2005), Policy and Distributional Equity in Natural Resource Commodity Markets. WRI

Using the NWP framework and the CCA methodology, this study considers the forest resource products, particularly timber, to analyze the issues of power and access to natural resources for sustainable livelihoods and poverty eradication in Uganda.

1.2. Fieldwork and Techniques of Analysis

This section introduces the steps that were taken in collecting empirical information from the actors, activities and distribution of wealth in the timber trade. Timber as a commodity moves along a chain with multiple actors. In order to critically analyse the roles and impact of the many actors, it was necessary to map out the entire chain.

Mapping along a commodity chain consists of the following steps:

- a) Identifying actors involved in the extraction, production, processing, exchange, transport, distribution, final sale and end-use of timber as a commodity.
- b) Evaluating value addition at each level.
- c) Analysing the distribution of income and profit at various levels and within each group along the chain. This was done through the analysis of prices and quantities of the goods handled by the different actors.
- d) Using the results from (b) and (c) above, analyse the mechanisms in which the wealth distribution systems are controlled and maintained.

In order to realize the above steps, the study adopted specific techniques that were considered relevant for a study of this nature.

Desk reviews were conducted in order to establish the facts about policies, laws, institutions and state of the forest resources in the country. For example, a review of existing information helped the research team to establish the trends in the nature of the resource and its contribution over time. This was necessitated by the cross-sectional nature of the study which meant that it was not possible to establish past trends in any other way.

Key informants in various Government agencies, private actors and communities provided information through guided interviews. This was aimed at obtaining information about underlying policies, processes, values and power structures among others. In addition, such people provided more literature in form of Government publications, reports and other forms of internal communication.

Focus group discussions were mainly employed at the community level and helped to gather information about local level activities, wealth structures and their trends, challenges and aspirations. The method also helped to

understand the trends with regard to the state of the resource, the local power issues, and effects of Government initiatives at the local level.

Observation (site visits) was used to observe the state of the resource, the activities and the lifestyles. This was aimed at collecting more information as well as acting as a means of verifying information from other sources.

Photography helped to capture the current state of the resources and activities for purposes of portraying visual evidence and better communication. Photographs were taken of lumberjacks, the resource, timber trucks and timber certification processes.

Market Surveys were conducted in order to establish current prices (at the time of data collection) of the selected timber in the three Kampala markets of Ndeeba, Bwaise and Kireka. The survey also enabled the researchers to establish the cost of transacting business in the major timber markets.

The study was mainly conducted in Masindi and Kampala districts. In Masindi, the fieldwork covered the areas around Budongo forest and Masindi town. In Kampala coverage included the timber dealers' depots and furniture workshops. In addition, information was collected along the routes used to transport the timber from Budongo to Masindi and Kampala.

CHAPTER TWO

Status, Trends and Institutional Framework for Management of Forest Resources in Uganda

2.0. Introduction

The interest of keeping in a good state and proper management of forest resources in Uganda is underpinned by the importance of this resource to the national economy. Uganda's economy is natural resource based with over 80 percent of the citizens employed in the agricultural sector, which is purely dependent on natural resources. In fact, the Poverty Eradication Action Plan (PEAP), which is the country's main planning framework, emphasises that environment and natural resources are key in achieving sustained economic growth and poverty eradication.

There is evidence of an increase in the value of key environment and natural resources as seen from the share of contribution to overall Gross Domestic Product (GDP). Over the last decade, the contribution of the forestry sub-sector, for example, has been estimated to be in the range of 6% to 23%.²⁶ Current projections show that the contribution of the sub-sector is substantial and is expected to increase significantly as more incentives for new investments in the industry are provided. Already, increases in the monetary value of environment and natural resource (ENR) products such as timber, honey, bush meat, and ENR-based enterprises have become a common phenomenon during the last decade of PEAP implementation.

The core of Uganda's biodiversity is mainly enshrined in the richness and wellbeing of the forest resources. The National Forestry Policy²⁷ recognises that about 11 percent and 7 percent of the world's bird and mammal species respectively are found in Uganda's forestland. This indicates that there is an enormous potential in terms of wealth creation for the country with revenues coming mainly from tourism and trade in forest products. The environmental benefits, though rarely recognised, contribute significantly to the general wellbeing of the economy. In addition, the forest sub-sector provides over 90 percent of the household energy, more so in light of the recent severe decline in hydro-power generation in the country. Thus, the current high interest in forestry, from various stakeholders such as Government, business community, local population, civil society and the international community, shows how important forest resource issues have become.

However, in spite of almost a decade of implementation of PEAP guided policy actions and interventions, there are some striking realities of slow or little progress. For example, the primary stock of Uganda's environment and

²⁶MWLE (2003) National Biomass Study. Technical Report. p3.

²⁷MWLE, (2001), The Uganda Forestry Policy. p5.

natural resources has continued to deteriorate both in quality and quantity. There is now widespread evidence of significant degradation of forests (6 percent), soils (11 percent) and other macro-ecosystems upon which the poor people derive their livelihoods. The current PEAP (2004/05-2007/08) estimates the cost of degradation of the natural resource in Uganda to be at 17 percent of annual national income.

2.1. Types, and Ownership of Forest Resources

Uganda has a total land area of 241,551 km², out of which, farmland is the most extensive, followed by grassland, woodlands, water bodies, bush land, tropical high forest (normally stocked) tropical high forest (degraded) and others²⁸. In terms of hectares (Ha), the total land area, excluding water bodies, is about 20.5 million Ha, of which 4.9 million hectares (about 24 percent) is covered by various types of forests and woodland. Table 2.1 below shows the distribution by stratum.

Table 2.1: Uganda's Land Cover Distribution by Stratum

Stratum	Area (Ha)	Percentage
Plantations Hardwoods	18,682	0.077
Plantations Softwoods	16,384	0.068
THF - Normal	650,150	2.691
THF - Degraded	274,058	1.134
Woodlands	3,974,102	16.452
Bush lands	1,422,395	5.888
Grasslands	5,115,266	21.177
Wetlands	484,037	2.004
Subsistence farmlands	8,400,999	34.779
Commercial farmlands	68,446	0.283
Built up areas	36,571	0.151
Water	3,690,254	15.277
Impediments	3,713	0.015
Totals	24,155,058	100%

Source: MWLE (2003), National Biomass Study

In terms of the biomass stock, a total of 468 million tons of air-dry biomass above ground is available in Uganda out of which 155 million tons is held in protected areas as shown in table on the next page.

²⁸(MWLE, 2003), National Biomass Study. Technical Report. p33

Table 2.2: Distribution of Stock of Biomass (, 000 tons)

Land Cover (use)	Standing Stock	Protected Areas	Private
Hardwood Plantations	1,682.7	623	1,059.6
Conifers Plantations	2,457.6	2,354	103.6
Tropical High Forest (Normal stocked)	136,491.2	104,648	31,843.3
Tropical High Forest (Depleted)	27,596.2	9,546	18,050.2
Woodlands	126,014.2	24,942	101,071.7
Bush lands	14,007.6	2,594	11,413.3
Grasslands	46,852.4	9,858	36,994.3
Wetlands	236.3	6	230.0
Subsistence Farmlands	111,824.9	1,311	110,513.6
Large-scale Farmlands	154.2	4	150.5
Built-up areas	862.8	13	850.2
Water	0.0	0	0.0
Impediments	0.0	0	0.0
Totals	468,180	155,900	312,280

Source: MWLE (2003), National Biomass Study

With regard to ownership and management, the forest estate in Uganda is organized under the following five categories.

1. Central Forest Reserves (CFRs), which are managed under Trust for the people of Uganda by the central government. The National Forestry Authority (NFA) has been established as a Government agency for managing the CFRs.

2. Private Forests are owned and managed by registered individuals, institution(s) or companies.

3. Community Forests, which are on public land, are supposed to be jointly managed by communities under defined community arrangements. The Community management structures are provided for in the National Forestry and Tree Planting Act 2003, and are declared by the Minister. This is the least developed management structure.

4. National Park Forests (NPFs) form part of the national parks and are held in trust for the citizens and managed by Uganda Wildlife Authority (UWA).

5. Local Forest Reserve (LFRs) are held in trust for the citizens and managed by the Local Governments. The directly responsible institution for managing Local Forest Reserves is the District Forestry Service (DFS).

Table 2.3 shows the broad forms of ownership by types of forest. It is clear from the table that the biggest type of forest is woodland and is largely owned and managed under private or customary arrangements. Most of the forest land still intact is found in Masindi district covering approximately half of the district area (See next section).

Table 2.3: Broad Forms of Ownership by Types of Forest (Ha)

Cover type	C F R s a n d LFRs	National Parks	P r i v a t e / Customary	Total
Tropical high	306,000	267,000	351,000	924,000
Woodland	411,000	462,000	3,102,000	3,975,000
Plantation	20,000	2,000	11,000	33,000

Source: The National Biomass study 1999

2.2. Forest Cover in Masindi District

Masindi district has one of the highest concentrations of tropical rainforests in Uganda. The district has both protected and unprotected forest estates. The total protected area of 409,600 ha is comprised of 70 ha of local forest reserve, 100,341 ha of central forest reserve, 93,417 ha of game reserves and 215,771 ha of national parks. This represents approximately half of the total land use in the district. The remaining bigger part of the forest estate in the district is categorized as private forests (customary, communal, and individual).

2.2.1. The Budongo Forest Estate

The Budongo forest estate, which was established over time (1932 – 1968), covers an area of 825 Km². The estate comprises the forests of Budongo, Siiba, Busanju and Kaniyo-Pabidi. It also occupies parts of Bujenje, Buruli counties in Masindi, parts of Bugahya County in Hoima district, and Buliisa district .²⁹

The Budongo forest estate ranks 3rd in Uganda in the biodiversity composition of all the forest reserves in the country, and is also ranked sixth in terms of the presence of rare species. The biological importance of this estate is depicted in the following aspects:

- It contributes more than 2 percent of the national protected area,
- It supports 32 species of trees that are unique to itself, and
- It also supports, at least, one unique species of conservation importance.

In terms of economic value, the estate provides a great potential and is currently the richest in terms of timber production with rare species such as mahogany. It is estimated that the stock of merchantable timber (trees whose diameter at breast height exceeds 50 cm) from 15 different species is 1,366,280 m³.

²⁹MWLE, (1997), Forest Management Plan for Budongo Forest Reserve.

The annual allowable cut is estimated at 17,078 m³ over a rotation period of 80 years. Available figures indicate that for the period from 1991 to 1996 both pit sawyers and saw millers provided an average annual off take of 11,522.82m³ of round wood (see table 2.5). In addition, the estate has a very high potential for ecotourism given the presence of rare animals such as chimpanzees, birds and other nature sites.

Table 2.4: Average Annual Off-take of Round Wood (m³)

	1991	1992	1993	1994	1995	1996	Total
P i t sawyers	-	-	-	-	402.44	4,812.97	5,215.41
S a w millers	52,843.3	5,163.7	3,242.4	871.4	669.80	1,130.93	63,921.53
Total	52,843.3	5164.7	3,242.4	871.4	1,072.24	5,943.9	69,136.94

Source: MWLE (2002)³⁰

On the downward side, the Budongo forest estate like many others continues to experience several man made problems including:

- An increase in illegal pit sawing,
- An increase in the pressure for land, which is evidenced in the current land wrangles in the Bunyoro area,
- A growing and high population in the area of the reserves. Estimates in 1991 indicated that the population density of the district was at 107 people per km².
- Increased commercial growing of sugarcanes and tobacco.

2.3. Trends in Uganda's Forest Resources

Forest resources in Uganda have declined from the original estimates of 10.8 million ha (approx: 52 percent of total land cover) in 1890 to the present 4.9 million ha (24 percent of land area). In fact, the share of tropical high forest had reduced from 12.7 percent in 1900 to about 3.6 percent by 1994.³¹ The decline has been mainly attributed to increasing conversion of forestland to agriculture, high urban demand for charcoal and policy failures.³²

Estimates indicate that by 2001, the government forest reserves had less than 740,000 ha, representing a 35 percent loss of forest cover. In addition, out of the 20,000 ha of timber plantations, only about 6,000 ha of soft wood remain standing.³³ An assessment by MWLE³⁴ conducted during the national biomass study from 1995 to 2002 revealed that out of the 1.17 million ha of CFRs, 58,000 ha have been degraded or depleted.

³⁰Budongo Forest Office file, Nyabyeya Masindi. Cited in Forest Master Plan 2002.

³¹NEMA, (1996). State of Environment Report for Uganda. p70

³²MWLE, (2002), The National Forest Plan. p7

³³(MWLE, 2001), The Uganda Forestry Policy. p2

³⁴MWLE, (2003), National Biomass Study Technical Report. p39

The results further revealed that 14 out of the 500 CFRs in the entire country had each been seriously degraded by over 1,000 ha. On the state of deforestation of the Central Forest Reserves, the same study revealed that out of the 500 CFRs, 30 had been totally deforested while out of the 192 LFRs, 65 had been completely deforested.

Statistics for the private forest sector are not readily available due to limited funding for research in this area. However, due to the shift in policy, most of the timber harvesting, both illegal and legal, occurs widely in this forest category. As if to show that the private forest estate is in severe decline, there are massive fuel wood deficits throughout the country. MWLE³⁵ indicated that Uganda had moved into a net national fuel wood deficit by 2000.

The significant reduction of activities in the CFRs has forced the local population to resort to unsustainable harvesting of wood in the private and communal forests. This trend has been amplified by the massive interest in commercial agriculture over forestry and the increasing population trend that has led to a rapid reduction in the per capita forest cover (see table 2.4).

Table 2.5: Per Capita Gross Forest distribution and future projections

Year	1991	1995	2000	2005	2010	2015	2020	2025
Population	16.7	18.6	21.4	24.5	28.2	32.3	37.1	42.6
Per capita (Forest area)	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1

Source: MWLE, 2003, National Biomass Study Technical Report

The table above indicates that by 2025, the per capita forested area will have reduced from 0.3 ha in 1991 to 0.1 ha. The projections are based on the population growth rate of over 2.9 percent.³⁶ The figure could even become smaller given the current tight control in the CFRs/LFRs as opposed to the relaxed or non-existent controls in the private forest sector. The support of development partners in the sector as seen in the next section has had some positive development though mostly in the protected reserves.

2.3.1. The Forestry Rehabilitation Project (1987 - 1992)

After many years of neglect, the Government of Uganda decided to rehabilitate forests and forestry services in order to protect the environment and ensure an adequate supply of forest products. Donor support was sought and this started with the Forestry Rehabilitation Project, which was supported by a number of donors led by the World Bank.

³⁵MWLE (2002), The National Forest Plan. p5

³⁶Uganda's population growth rate is currently estimated at 3.6%. See State of the World Population Report, 2006.

This project comprised the following six components:

Peri-Urban plantations: to establish and maintain 900 ha of forest plantations for use in nearby urban areas that would replace degraded peri-urban fuelwood and pole plantations on gazetted forestry land.

Farm forestry: to establish 3,700 nurseries in 24 districts that would produce 14 million seedlings for planting and by farmers for a variety of purposes.

Natural forest management: to re-establish 1,350km of boundaries in the natural high forest and plant them with marker trees.

Industrial softwood plantation rehabilitation: to rehabilitate 15,000 ha of softwood plantations managed on a 15 year rotation.

Training: to rehabilitate Nyabyeya Forestry College and provide in-service training for staff.

Forestry rehabilitation: to provide logistical support and infrastructure to strengthen the Forestry Department's capability to implement this project and future activities.

2.4. Reconfiguring Power Relations: A Century of Forestry Sector Reforms

Over the last century, the forestry sub-sector in Uganda has undergone a series of institutional, legal and policy reforms. At the dawn of colonialism, major changes were introduced through the various Orders-In-Council which gave the Governor exclusive jurisdiction over the management and disposal of key natural resources. The series of agreements signed between the Kingdom Governments such as the 1900 Buganda Agreement effectively dissolved the powers of kingdom authorities to manage key natural resources as these were all vested in the Crown. In the forestry sector, major policy changes were introduced. For example, the 1929 policy instrument stated that Uganda's forests would be managed to give the best financial returns. Although the colonial authorities sought to re-articulate the forestry policy in 1938, financial returns still remained the overarching objective of forestry management in Uganda. Slight changes in sector objectives were introduced by the 1974 policy instrument which sought to expand the sector objectives to include a broader objective of increasing the economic use of the national forestry estate.

What is most striking is that in spite of these reforms and no matter what systems of forestry governance was in place, the forestry policy and the attendant institutions sought to pursue similar objectives – exploitation of forestry resources by the colonial authorities and later by the African elite. A historical account of the forestry reform process since Independence clearly shows that the post-colonial governments pursued the same policy of expropriation of forestry resources and marginalization of the local forestry communities. The rules governing forestry exploitation and the institutional configuration to

operationalize those rules clearly ensured that such communities did not benefit from the economic values of the forest reserves.

For example, the abolition of Kingdom Governments in 1967 and the expropriation of local forest reserves further alienated forestry dependent communities. The subsequent centralization of these resources under the mandate of the Forestry Department ensured that forest dependent communities were far removed from key economic decision making processes.

2.5. Current Institutional Roles in the Forestry Sector

A number of institutions play different functions and roles in management of forest reserves in the country. These include both state and non-state actors such as community initiatives/groups, and donors (see table 2.6 below). Some of the institutions provide an enabling environment through policy formulation, monitoring, oversight, and regulation. Other institutions conduct delivery functions such as:

- Management of forest resources – on Government entrusted land
- Operations in forest resources – on Government entrusted land
- Collection of royalties, charges and duty.
- Capacity building – training and extension.

Table 2.6: Institutional Roles in the Management of Forest Resources

Institution	Responsibilities
Ministry of Water Lands and Environment (MWLE)	
MWLE (Currently Ministry of Water and Environment)	<input type="checkbox"/> Formulation and oversight of appropriate policies, standards and legislation for the forest sector. <input type="checkbox"/> Coordination and supervision of technical support and training to local government <input type="checkbox"/> Inspection and monitoring of local government and the NFA performance in forest sector development <input type="checkbox"/> Coordination of the NFP and cross-sectoral linkages <input type="checkbox"/> Mobilization of funds and other resources for the sector <input type="checkbox"/> Promotion, public information and advocacy for the sector
Other Central institutions	
<input type="checkbox"/> MFPED <input type="checkbox"/> MTTI/UWA <input type="checkbox"/> MAAIF/PMA <input type="checkbox"/> NAADS <input type="checkbox"/> MES <input type="checkbox"/> MGLSD <input type="checkbox"/> NEMA <input type="checkbox"/> NARO/FORRI <input type="checkbox"/> MLG <input type="checkbox"/> MPS <input type="checkbox"/> URA <input type="checkbox"/> UIA <input type="checkbox"/> MEMD	<input type="checkbox"/> Sector budget allocations <input type="checkbox"/> Management of National parks and wildlife <input type="checkbox"/> Management of the interface between Agriculture and forestry <input type="checkbox"/> Delivery of advisory services <input type="checkbox"/> Education (schools, colleges and vocational training institutes) <input type="checkbox"/> Community mobilization and labor regulation <input type="checkbox"/> Control of forestry activities in relation to environmental legislation <input type="checkbox"/> Research , with specific focus on agro forestry <input type="checkbox"/> Decentralized service through Local Government structures <input type="checkbox"/> Public sector reforms, including transition from Forest Department to the NFA <input type="checkbox"/> Taxes on forest, business and trading. <input type="checkbox"/> Investment promotion in plantation development and processing <input type="checkbox"/> Biomass energy conservation and substitution
Local Government (LG)	
LG	<input type="checkbox"/> Establish district forestry services <input type="checkbox"/> Strengthen forestry in production and environmental committees and district development plans <input type="checkbox"/> Implement international and national policies on forestry <input type="checkbox"/> Permits, licenses fees and tax collection <input type="checkbox"/> Mobilize funds <input type="checkbox"/> Develop and enforce bye-laws

	<ul style="list-style-type: none"> <input type="checkbox"/> Support and quality control of forestry extension, brokering between farmers and service providers, and providing market information <input type="checkbox"/> Manage LFRs in partnership with communities and private investors <input type="checkbox"/> Land administration, surveying, approval of community forests
NFA	<ul style="list-style-type: none"> <input type="checkbox"/> Manage CFRs in partnership with private sector and local communities <input type="checkbox"/> Advisory, research or commercial services on contract <input type="checkbox"/> Seed supply from the National Tree Seed Center (NTSC) <input type="checkbox"/> National forest inventory and other technical services through National Biomass Studies (NBS)
Service Providers	
NARO/FORRI MUK, NFC NGOs, contractors Media organizations	<ul style="list-style-type: none"> <input type="checkbox"/> Training, research and development <input type="checkbox"/> Advisory services through NAADS and other contracts <input type="checkbox"/> Advocacy, demand for Government accountability, news, communications and public education <input type="checkbox"/> Building capacity and providing an interface between government and non-state actors. <input type="checkbox"/> Providing a monitoring and watchdog role concerning the interests of poorer sections in society.
Private sector	
Includes forest owners, farmers, communities, forest industries and traders	<ul style="list-style-type: none"> <input type="checkbox"/> Forest management and tree farming investments on private land <input type="checkbox"/> Forest investments in CFRs on rented land <input type="checkbox"/> Collaborative Forest Management (CFMs) of CFRs <input type="checkbox"/> Wood and NWFP processing <input type="checkbox"/> Trade in forest products and ensuring efficient use of fuel wood

Source: MWLE (2002)

2.6. Community Level Institutions

This study included an institutional review of Government and community level initiatives that have been introduced to enhance sustainable natural resource management as well as increasing the incomes of the poor. The community level institutions focused at enhancing conservation and improving livelihoods through value retention using various community empowerment initiatives. Ensuring that communities neighbouring forests gain some benefits from these resources is underpinned by the fact that these communities represent about 15 percent of the country's total population (MWLE, 2002).³⁷ This therefore calls for greater participation of the communities adjacent to the forest resources in terms of access and control, which are the pre-requisites for improving community welfare as well as promoting sustainable management of the resource.

Generally, there are two main types of community level institutions: the Community Forest Associations that managing community forests, and Collaborative Forest Management (CFM) associations that do not own the forest and hence are formed for purposes of improving access rights and powers. The latter specifically apply to Central Forest Reserves that are controlled by NFA. There are some significant differences both with regard to the process of formation and management structure of each of these types.

2.6.1. Tengele Community Forest Association

This association is located in Nyantonzi area and was formed to sustainably manage Tengele community forest, which covers over 150 hectares of natural forest and is surrounded by four villages. This was after realizing that the forest was getting depleted and degraded. During the formation process, the local community was mobilized and trained by a local NGO – Budongo Forests Community Development Organization (BUCODO) that enabled them to form and register as an association with an administrative and management structure described in table 2.7. The villages surrounding the forest were zoned and a community forest advisor selected from each zone.

³⁷MWLE, (2002), National Forest Plan. p6

Table 2.7: Tengele CFA Administrative Structure

Administrative structures/ levels	Roles
Advisory Bodies <input type="checkbox"/> BUCODO <input type="checkbox"/> The District Forest Services	<input type="checkbox"/> Advisory, <input type="checkbox"/> Training and <input type="checkbox"/> Mobilization
The Executive Committee <input type="checkbox"/> 9 CLA chairpersons <input type="checkbox"/> 4 village forest advisors <input type="checkbox"/> Village forest committee executives	<input type="checkbox"/> Making rules and regulations <input type="checkbox"/> Enforcement <input type="checkbox"/> Mobilisation
Communal Land Associations	<input type="checkbox"/> Enforcement and <input type="checkbox"/> Information dissemination
Village Forest Committee	<input type="checkbox"/> Forest patrol and <input type="checkbox"/> Enrichment planting
Community Members	<input type="checkbox"/> Sustainable harvesting of the forest products, <input type="checkbox"/> Information feedback and <input type="checkbox"/> Patrol

The main objective for forming the group was to enhance conservation and ownership of the resource so that everybody could benefit from it. The specific objectives include: (i) maintaining the mother tree species for future generations, and (ii) ensuring that at least every community household earns a living from the forest.

The community benefits from this arrangement in terms of preservation of the resource, improved extraction processes, and income. In the case of extraction, the District Forest Officer (DFO) assists the committee in the evaluation of the resources value and enforcement of obligations of licensed pit sawyers. In monetary terms the association charges 100 Uganda shillings on every piece of timber that is extracted from the forest. In addition, a portion of the 30 percent paid to the District Forest Services by the Pit sawyers who operate in the community forest is supposed to be remitted to the community. Once the proceeds are collected, an executive committee meeting is held to decide how the money should be utilized.

Rights and Obligations of the Community Members

- Right to equitably share the revenue generated from the forest
- Rights to collect herbs, water and firewood
- The right to graze their animals and collect fodder
- To ensure that no illegal activities like pit sawing occurs in the forest.
- To ensure that community members do not practice bad habits like setting fires in the forest

The community reported having realized the following benefits since the group was formed.

- Increased revenue collection and incomes from the forest products. For example, the communities are able to make and sell crafts.
- Sufficient and organized access to fire wood
- Improved collection of herbs
- Greater ability to graze animals and also harvest fodder
- The water points in the forest have been protected such that the community enjoys clean water
- There has been reduced encroachment on the forest by outsiders
- There is a high degree of empowerment and participation by all community members and ownership of the resource has greatly been enhanced.



Figure 2.1: Members of Tengele Community Forest Association meeting with the research team. Community initiatives are very instrumental in forest conservation as they promote both improved livelihoods and sustainable utilisation of the forest resources.

2.6.2. Kapeka Integrated Community Development Association (KICODA)

KICODA is a collaborative forest management (CFM) group, located in Budongo subcounty, Kabango parish, which entered into negotiation with government (NFA) to manage part of the Budongo CFR on behalf of the neighbouring community. It is registered with the district as a CBO, and has members from three villages namely Kapeka 1, 2, and 3. The arrangement covers an area of about 8 hectares, where the land is held by government and the community owns the trees. However, the communities cannot harvest the trees without government intervention, which measure is aimed at preventing depletion of the resource.

Land allocation and other rights to the different members, where membership is based on different interests, were agreed upon during the group formation process in order to avoid any form of conflict or outsiders taking over the community benefits. The different interests groups include: apiculture, firewood collection, charcoal burning, herbal medicines and farming. Members interested in farming are given land along the boundaries where they plant crops alongside the trees.

The leadership of the CBO is by an overall chairperson who is assisted by local interest group chairpersons and committee members. The interest group chairpersons head village committees that represent other community members.

Table 2.8: Basic Steps for the Formation of a CFM group

The official process	The case of KICODA
1. Initiating the process	1: Community sensitisation on the need to conserve and sustainably utilise the forest products. This was done by BUCODO
2. Preparation of an application of a CFM group	2: NFA consultations with the community
3. Official meeting between Applicant and Responsible Body	3: Exposure of the community to the Forest management plan
4. Participatory Situation Analysis	4: Forest resource assessment: by the community and the NFA/BUCODO.
5. Negotiating and Drafting a CFM plan	5: Negotiations between NFA and the community
6. Establishment and Registration of a Community Institution	6: Formation of Community Based Organisation.
7. Negotiating and Drafting the CFM Agreement and Plan	
8. Final consultative meeting between Applicant and Responsible Body to review, finalise sign and launch the CFM Plan and Agreement	
9. Implementation of the CFM Agreement and Plan	

The major objectives of forming the association were as follows:

- To ensure community involvement in the sustainable management of the CFR and promote a fair sharing of the benefits from the forest for the whole community.
- To promote community ownership of the forest as the community felt marginalised by the big timber dealers who took away all the benefits and relegated the local people only to the provision of labour, which has little financial benefits.

According to the group, the following positive results have been recorded:

- Limited encroachment on the CFR especially in areas bordering the CFM group.
- Greater access and control of the resource by the local community
- Recognition and strengthening of the rights of the community over the management of the forest resource.
- Improved attitude of the community toward conservation of the forest resource.
- Increased planting of trees along the forest boundaries.

“ to me, the authorised person under CFM is better off because the illegal ones once arrested , all their tools are impounded and the pit sawyers are put in jail while those under the CFM arrangement are legal and can carry out timber extraction without interferencethis is the right position to take by the forest communities...”said the group chairman Mr. Achema Mansur

2.7. Local Government Level Institutions

2.7.1. District Forestry Services

The National Forestry and Tree Planting Act 2003 section 48 (1) mandates the District Council in accordance with the Local Governments Act 1997, to establish a District Forestry Office and at the same time appoint a District Forest Officer under section 48 (2) of the National Forest and Tree Planting Act 2003.

The functions of this office are outlined under subsection 3 (a-i) of the National Forestry and Tree Planting Act of 2003, and include:

- To advise the District Council on all matters relating to forestry, (SS.3.a)
- To liaise with the NFA and other lead agencies on matters relating to forestry (SS.3.b)
- To cause to be prosecuted, any person wilfully destroying any forest resources in contravention of the Act (SS.3. h)

2.8. National Level Institutions

The formal management of forests in Uganda was institutionalised in 1898 (over 100 years ago) and the Forest Department had the overall responsibility for managing and safeguarding the forest resources. The Department focused on promoting and ensuring rational and sustainable utilization, development and effective management for socio-economic development. The Forest Department has since been transformed into the National Forest Authority, effective June 30, 2004 when the NFA was launched.

2.8.1. The National Forest Authority (NFA)

The NFA is a government Parastatal body established under section 52 of the National Forestry and Tree Planting Act of 2003. Its mandate is to manage the Central Forest Reserves in Uganda. The NFA is under the Ministry of Water and Environment (MWE) and is supervised under a performance contract by the FSSD. Its mission is to manage central forest reserves on a sustainable basis and to supply high quality forestry-related products and services to the government, local communities and the private sector.

It is a semi-autonomous body with a structure comprising of the Minister (MWE) at the top, the Board of Directors, and the Executive Director NFA. It therefore reports to Government through the responsible Minister under the supervision of a Board of Directors. NFA has collaborative partnerships with other lead agencies such as the National Environment Management Authority (NEMA), Wetland Inspection Division, (WID), Uganda Wildlife Authority (UWA), and many other relevant government institutions and programs.

The NFA was set up to achieve the following specific objectives;

- Improve management of the central forest reserves
- Expand partnership arrangements such as collaborative forest management
- Supply good quality products and services
- And attain its own financial sustainability by year 4 of its existence.

The functions of NFA are outlined under section 54 (1), a-k and 54 (2), a-g of the National Forestry and Tree Planting Act of 2003. Examples among many here include;

- To develop and manage all central forest reserves,
- To promote innovative approaches for local community participation in the management of central forest reserves and,
- To establish procedures for the sustainable utilisation of Uganda's forest resources by and for the benefit of the people of Uganda.

The NFA Business Plan sets out the projected revenues and costs of establishing and running the organization. Starting from a very low revenue collection base, it will take over 4 years of investment and reorganization to build up realistic

and sustainable levels of income. To achieve its objectives and carry out its functions, the NFA has attracted support from partners like the government institutions, civil society organisations, and international development partners (donors). According the annual report of 2004/2005, several achievements of the NFA have been reported. For example;

- Over 1.1 billion shillings invested in 2,100 ha of commercial high yielding plantations,
- Increased revenue collection from forest products,
- Transparency and competitiveness in resource allocation particularly licensing timber harvesting,
- Encroachment on the Central Forest reserves has reduced significantly, and
- Increased interest from various stakeholders in investing in forestry resource development in Uganda.

Some of the major activities that the NFA has been involved in are:

1. Review of the Forestry Sector
2. Promotion of public awareness campaigns
3. Assessment of forest resources
4. Implementation of Collaborative Forest Management in pilot forest reserves
5. Issuing of long-term permits for commercial plantation development in various forest reserves

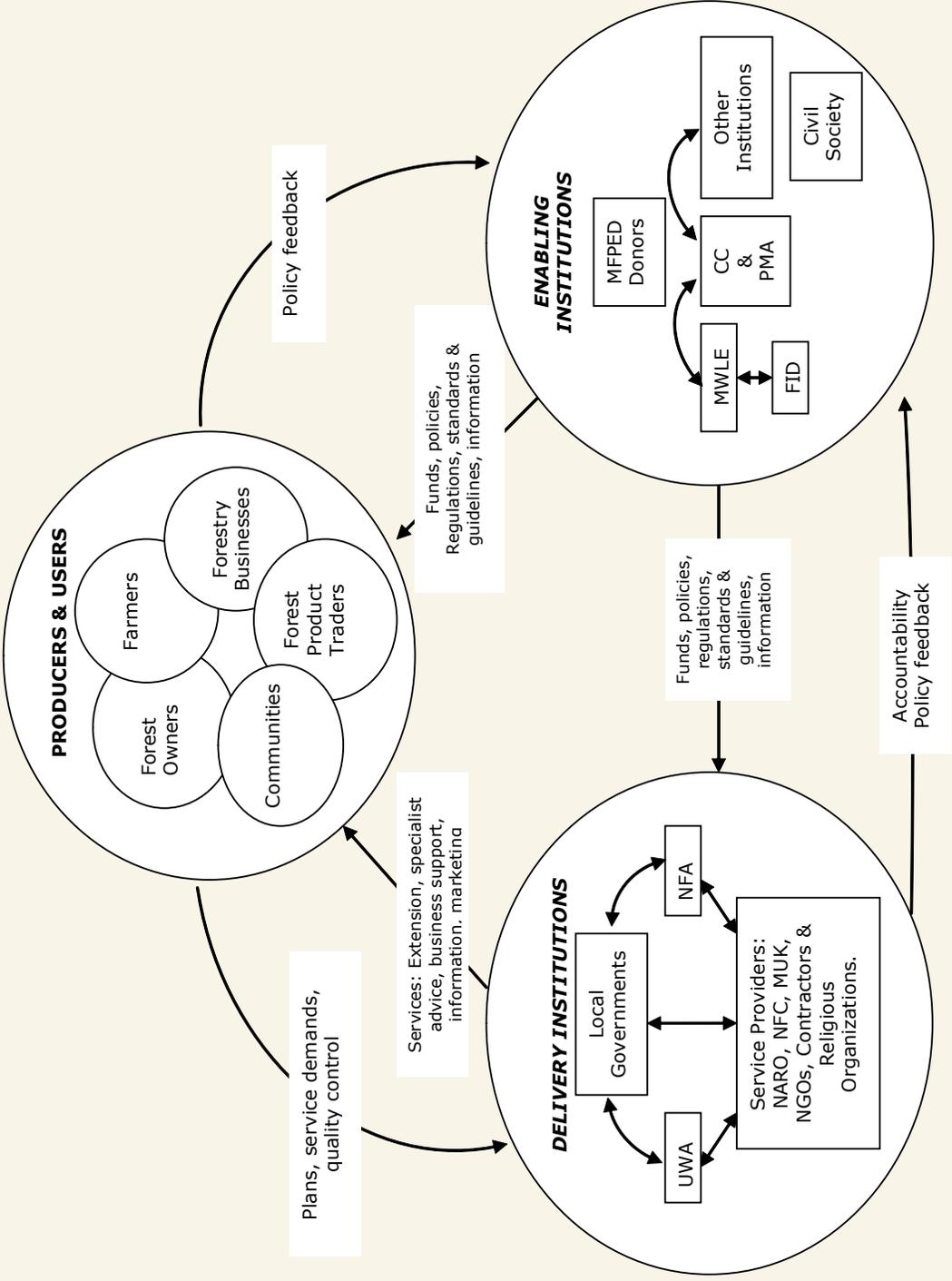
Whereas NFA continues to register success, there has been an increased deforestation on private lands. Particularly in Masindi, private forest degradation and deforestation has increased with pressure mainly from commercial agriculture and illegal pit sawyers. These shortfalls are partly linked to a number of constraints to the Sub-sector, which include shortage of staff to carry out all the activities and the long transition period affected by many activities due to staff changes.

This research discovered that the new process of bidding for timber has promoted exclusion of the local poor people, who complained that it is only the rich who can afford to bid for blocks of timber and the licences as well. This has led to marginalisation of the forest bordering communities and only helped to reinforce the position of the politically powerful and rich actors.

Therefore, the youths mostly have resorted to illegal timber harvesting in the central forest reserves causing more conflicts with NFA management. There was a physical evidence of increasing number of local people who had been arrested from the reserves especially in the Nyakafunjo sector. This development had increased the tension between NFA and the local communities including the political leadership of the area.

The community members interviewed said that most people now regard the central forest reserve as property of the Government, which they conveniently coined as 'theirs' i.e. Government. The LC authorities indicated that most community members feel a high level of disenfranchisement and therefore, do not see the value of conserving forests.

Figure 2.2: Institutional Linkages in the Forest Sector



2.9. Sustainability Implications of the Management Structure

To conclude this section, in view of the above institutional framework and based on the International Forest Research Institute methodologies, the study presents sustainability options for Budongo forest. The results, shown in Table 2.9 below³⁸, are closely related to another study on property rights and the sustainability of forests in Uganda, by Gombya-Ssembajjwe and Banana (1998).³⁹ An assessment of the 10 institutional sustainability factors across institutional arrangements indicated that communal forest ownership arrangements had more positive factors (7) compared to individual forests (6) and government forest (2). The team concluded that communal forests are more likely to be efficiently and sustainably utilized while Government forests were least likely to be sustainably managed.

Table 2.9: Team Ranking of Sustainability of Budongo Forest

Ranking of Sustainability Factors	Low	Moderate	High
Economic and population factors:			
Distance to markets for forest products	X		
Population growth rate	X		
Population pressure in surrounding area	X		
Institutional design and rule factors:			
Institutional stability and understanding of users	X		
Rapid access to low cost conflict resolution	X		
Graduated sanctions on violations enforced			X
Quality of monitoring		X	
Local users can participate in modification of rules	X		
Local users design institutions governing use of forest	X		

Source: Research Team Analysis

³⁸The IFRI methodologies are sensitive to initial patterns of degradation in forest ecosystems, and are useful for characterizing changes in tropical forest plant communities in conjunction with societal and institutional behaviour.

³⁹Gombya-Ssembajjwe W, and Banana A., (1998). Paper, presented at the International Association for the Study of Common Property in Vancouver, British Columbia, June 10-13, 1998. The authors selected a total of 12 forests in Mpigi district, which are in the same ecological zone, and which have similar vegetation composition. The twelve forests ranged over a total of four institutional arrangements which comprised of: government nature forests, government exploitation forests, individually owned forests, and communal sacred forests. The mediating factors of population density, and distance from market centers were also taken into account.

However, in the case of Budongo, even the communal forests were not spared partly due to proximity to urban areas, population increase and weak law enforcement. The intensity of human disturbances across the institutional arrangements and distances from urban centers tends to show that forest degradation begins with pitsawing, which progresses into charcoal burning before culminating into agricultural encroachment. The presence of Kinyara Sugar Works in the neighborhood of Budongo forest had attracted huge populations while restricting land available for communities to carry out agricultural production. Consequently, charcoal burning and agricultural encroachment were frequent in less protected areas of community and local district forests.

2.10. Licensing Procedures

Section 41 to 43 of the National Forest and Tree Planting Act 2003, outlines all matters concerning forest produce licensing in Uganda. It gives powers to a 'responsible body' to consider licensing for use and extraction of forest resources. Section 42 calls for a 'fair, open and competitive process' in as far as license applications are concerned. It also spells out the penalties in case one violates the Act. For example a fine not exceeding 30 currency points or imprisonment of a period not exceeding three years or both is spelt out.

CHAPTER THREE

Presentation and Analysis of Research Findings

3.0. Introduction

This chapter includes the presentation of research findings along with the analysis that yields the information required for making conclusions and policy recommendations. Commodity chain analysis facilitated understanding of the dynamics of the economy, tracing links between producers and consumers, and simplifying webs of competition. By constructing and critically studying the commodity chain, it became possible to deal with questions about which nodes in the chain have control over others, how profits are distributed among nodes in the chain, and how this is related to monopoly and competition. The above process helped the team to understand the system and locate both producers and consumers within the political economy.

The description of findings is based on the steps given in chapter one and begins with identified actors involved in the extraction, production, processing, exchange, transport, distribution and final sale of timber as a commodity. This is followed by the analysis of value additions, sharing of incomes arising from the various activities and the factors behind these processes.

3.1. The Timber Commodity Chain

3.1.1. Actors and Linkages

The timber commodity chain has several actors with different powers and entitlements, depending on their roles and skills. As can be seen in figure 3.1, the chain begins, in the Budongo forest estate, with the resource owners and those engaged in extraction processes. Specifically, this study focussed on the private forest owners, community forests and central forest reserves. With regard to extraction, the actors include pit sawyers, lumberjacks (Fundis), timber carriers (persons who carry the timber manually from the forest to collections centres at the edge of the forest) and the lorry transporters. Other actors include law enforcement agents such as the Local Councils, the local police, and the NFA patrol teams.

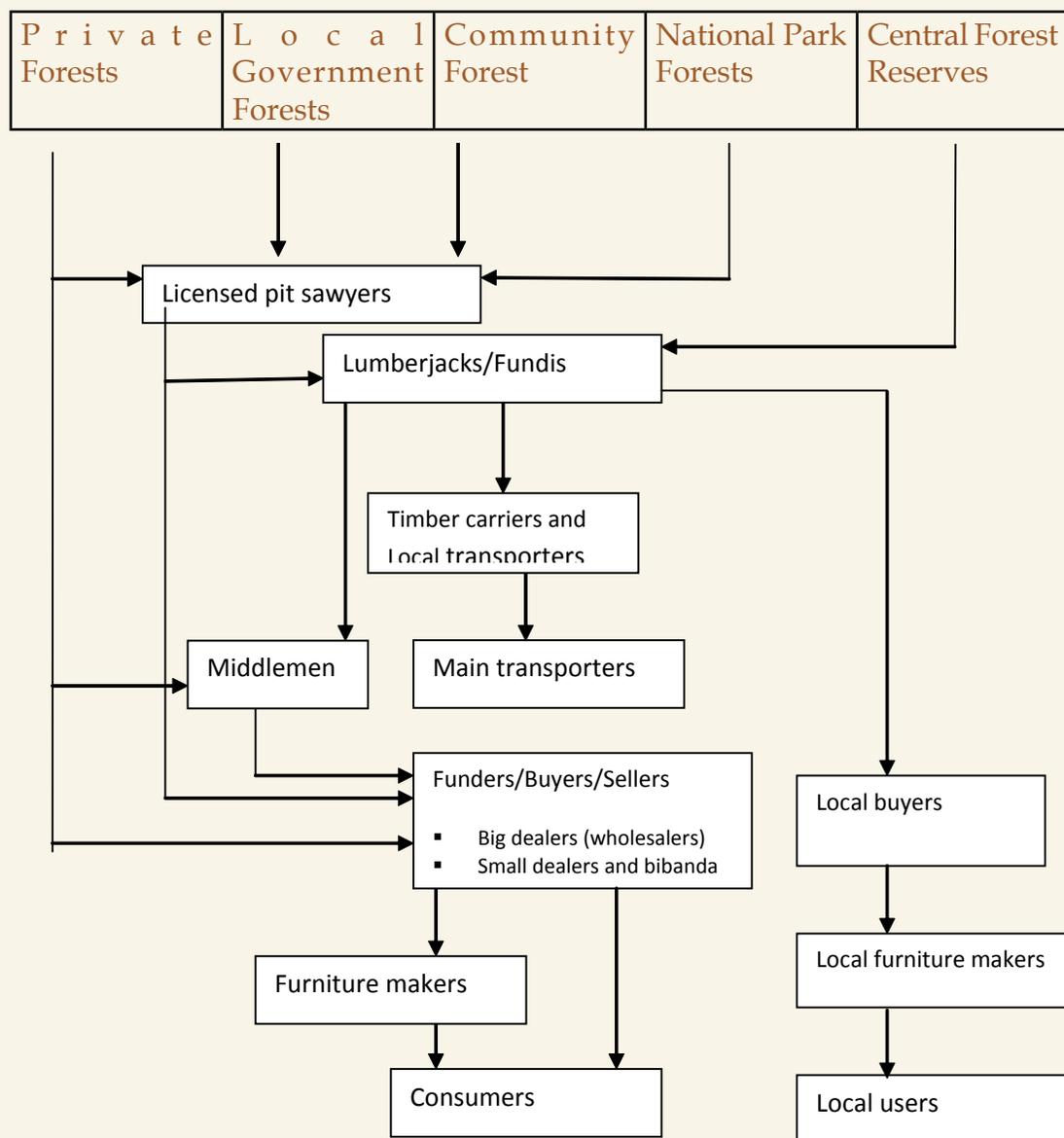
In addition, there is some degree of activity by middlemen (both local and from Masindi town) who provide limited market information and limited funding. It is worth noting that some of the timber is in fact bought and consumed at this level either in form of off-cuts, fagi (timber that does not meet standards required at the next stage) and local furniture.

The next node of the chain is Masindi town where the actors include the middlemen, the main transporters to Kampala markets, and local buyers and consumers who are synonymous with those at the first node. The middlemen at this stage mainly provide market information and connections along the entire chain (Budongo-Masindi-Kampala), funding for both local and main

transporters, and interface with the institutional and legal frameworks. Other actors include law enforcement agents such as the District Forest Officer, the police, and the NFA officers and patrol teams.

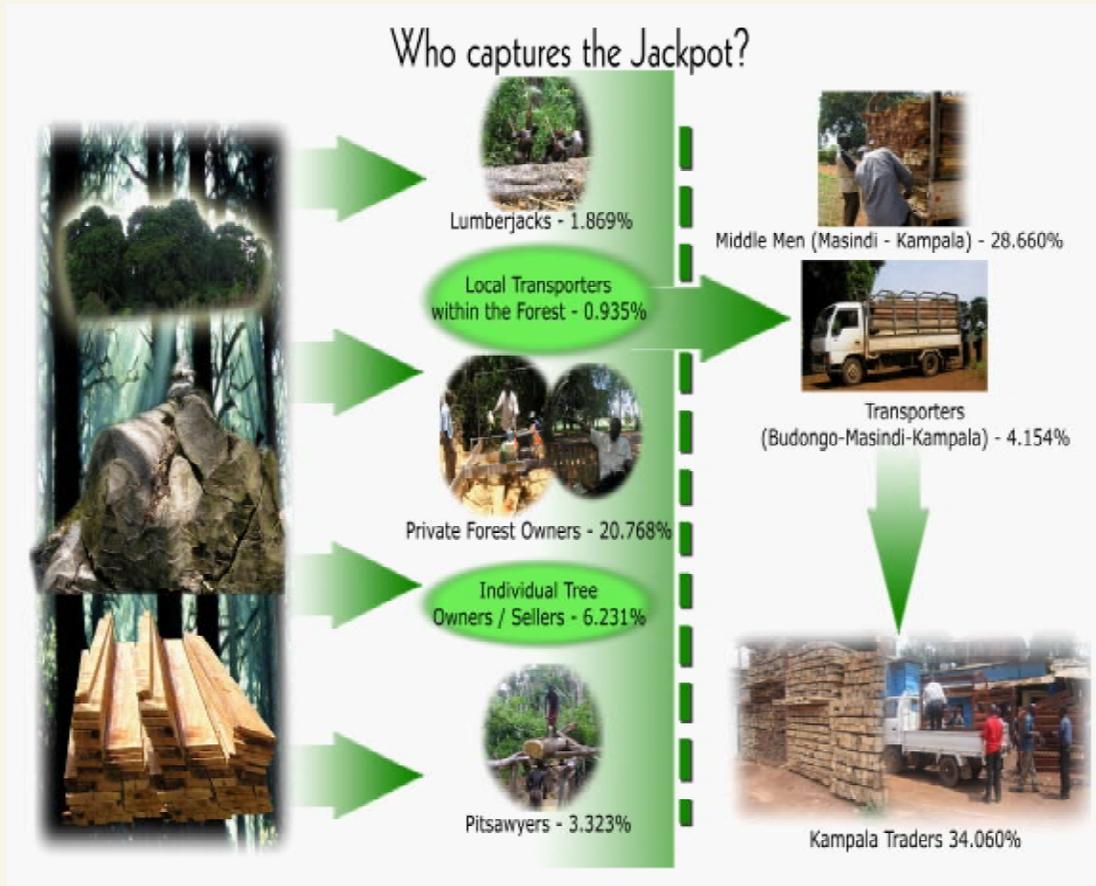
Finally, the node in Kampala includes the transporters, the middlemen, funders, buyers, sellers (big dealers or wholesalers and small dealers) and “Bibanda” (Timber Shelters) owners. Others include the furniture makers and consumers, and central level Government agencies/officers such as MWLE, FID, NFA, NEMA and URA.

Figure 3.1: The Timber Commodity Chain



Some of the actors described above such as the police, NFA patrol teams, URA and middlemen can be found in-between the different nodes. Thus, the linkages between the nodes involve a lot of activity in the area of verification of trade licences, timber standards and value addition through the movement of timber nearer to more lucrative final markets.

Figure 3.2 Visual representations of the actors and linkages in the timber commodity chain



3.2. Wealth/Value Addition and Distribution

The creation and distribution of value takes place at each of the various stages along the chain such that a good understanding of the distribution of wealth and the related power structures/centres requires focus on the major actors at each stage. The analysis is based on timber from pine and assumes a truckload of 300 pieces. Secondly, the study considers harvesting both in the private and community forests and hence the costs are computed on the basis of averages between the two categories. The results, on the basis of each stage, are indicated in table 3.1 on the next page.

Table 3.1: Value Addition and Distribution – A Case of (6X2X14) Timber from Pine

	Description of Activity	Costs (Uganda Shillings)
Node 1: Budongo		
A	Cost per tree	150,000
B	Felling fee/tax	4,500
C	Felling labor charges	15,000
D	Cutting into logs	25,000
E	Making a platform	15,000
F	Sawing into each piece	(2,500 X 150) 375,000
G	Transport (from forest to collection points/local stores)	(1500 X 150) 225,000
H	Maintenance of the saw	2,500
I	Total cost at stage 1	(row a to h) 812,000
J	Selling price per piece	5,000
K	Final cost per tree (150 pieces)	(5500X150) 825,000
L	Profit per tree at stage 1	(row k – row i)13,000
Chain linkage from Budongo to Masindi		
M	Final cost per truck (300 pieces)	(row k X 2)1,650,000
N	Loading costs	10,000
O	Offloading	10,000
P	Movement Permit	10,000
Q	Truck hire	100,000
R	Additional cost along the chain to stage 2	(row n to q) 130,000
Node 2: Masindi		
S	Total cost of the truck at stage 2	(row m + row r) 1,780,000
T	Movement permit	10,000
U	Certification (marking of the timber using a special hammer)	100,000
V	Total cost at stage 2	(row s to row u)1,890,000
Chain linkage from Masindi to Kampala		
W	Truck hire	300,000
X	Loading	10,000
Y	Unofficial fees (mainly payments to traffic police)	80,000
Z	Additional cost along the chain to stage 3	(row w to row y) 390,000

Chain linkage from Masindi to Kampala		
W	Truck hire	300,000
X	Loading	10,000
Y	Unofficial fees (mainly payments to traffic police)	80,000
Z	Additional costs along the chain to stage 3	(row w to row y) 390,000
Node 3: Kampala		
Aa	Total cost of a truck at stage 3	(row v + row z) 2,280,000
Ab	Purchase price for a truck (Revenues)	3,000,000
Ac	Offloading	30,000
	License on a trip basis	10,000
Ad	Profit of the middleman/trader	row ab - (row aa + ac) 690,000
Ae	Rent(adjusted from monthly to lorry basis by a factor of 1/6))	25,000
Af	KCC license (adjusted from annual to lorry basis by a factor of 1/34)	5000
Ag	Guarding/security (adjusted for shared security of 5)	50,000
Ah	Node 3: Kampala	(not available)
Ai	Total cost of a truck at stage 3	(row v + row z) 2,280,000
Aj	Purchase price for a truck (Revenues)	3,000,000
Ak	Offloading	30,000
	License on a trip basis	10,000

3.2.1. Observations at Node 1

3.2.1a. Pit Sawyers

The minimum profit level for the dealer at stage 1, mainly a licensed pit sawyer or the private tree owner is UGX 50,000. Additional value is gained from the sale of off-cuts to local consumers who use them for making furniture, firewood or charcoal burning, which brings the final profit per tree to about UGX 80,000.

3.2.1b. Lumber jacks

The lumberjacks, who work in pairs of two, attract a gross value of UGX 430,000 or UGX 107,500 per person per tree. Their costs include food, medicines, transport from their residences to the forest, and a commission to foremen or pit sawyers. The net pay for this category was estimated at UGX 45,000 per tree. This is a very low value compared to the manual work done, which includes felling the tree, building a platform, cutting the tree into logs, and sawing them into pieces of timber.



Figure 3.3: Lumberjacks roll a log onto a platform to convert it into timber. Despite the substantial value added at this stage, the financial benefits accrued to the lumberjacks are very meager. Moreover, they apply unique skills and physical capacity and are exposed to many risks such as accidents and snake bites.

3.2.1c. Local Transporters/Porters

The local transporters earn about UGX 225,000 as a group, which can be of 10 people giving an average of UGX 22,500 per person. This is one of the most exploited groups of actors since the cost per piece is not standardized but varies with the distance from the collection point and ability to bargain.

Additional observations for this category include the fact that: (1) there is hardly any skill required for this activity such that many people are able to participate, which increases the competition and lowers their bargaining power; (2) because of the low physical stress associated with this stage compared to other roles, there were many females and children involved, and (3) there were high risks related to contact with law enforcement officers especially in the case of illegal activities whereby timber could be confiscated and the porter imprisoned. It was noted that timber owners shifted the burden and risk of capture to the porters and preferred to pay cash on delivery of the timber.

3.2.1.1. Value Chain for a Private Forest Owner

In the case of private forest owners, the commodity chain is rather short compared to other cases. It is mostly from the forest to the market. There are neither middlemen nor pit sawyers. The owner hire a mobile sawmill at a cost of 1.5m shillings from NFA per month or precisely UGX 50,000 per day. The machine takes a total period of 3 – 4 days to extract timber and involves less waste in comparison to other methods such as the power saw. The yields from a single tree are equivalent to UGX 1 million, which is several times more than an ordinary person gets by selling a ‘raw’ tree to a pit sawyer at UGX 150,000.

Specifically, the proceeds from ‘Nzingo’ wood (hard wood), which produces 50 pieces multiplied at UGX 5,000 each, are equal to 250,000 shillings. Since each tree yields an average of about 3 logs, the total amount received is UGX 750,000 from timber alone. The balance of UGX 250,000 is obtained from off-cuts and branches. At this rate, the gross profit was estimated at UGX 500,000. This is comparable to the profit of the middleman. It should be noted that more profits are realised in case the private forest owner decides to export the timber to Kenya or other international markets.

From the above information, it is clear that if the Government invested more in private forestry development coupled with market development, then higher levels of benefits would be achieved at the community level. Such arrangements would provide incentives to ease the pressure from the central forest reserves. It also shows that, forestry is a profitable business if well handled and is one alternative way of improving rural livelihoods.



Figure 3.4: Top to Bottom: Lumberjacks manually converting a log and a private forest owner using a mobile saw mill to convert logs into timber. The mobile saw mill is more cost effective, efficient and profitable, thus the high value retained by the private owner as compared to the lumberjacks who use the traditional hand saw.

The profit figures are much higher for the private forest owner who is able to gain additional profits from the cost of the tree and also spends less (about UGX 500 per piece) on transportation from the forest to collection points. Otherwise, the rest of the cost items are standard such that there is little room for manoeuvre. Thus, if the licensed pit sawyers are to increase their profits, they can only do so through intense bargaining with the local transporters from the forest whose costs vary widely (UGX 500 – 3,000) or try to reduce the cost of the tree through various ways including illegal felling. Alternatively, it may be more viable to connive with law enforcement officers as long as the cost is less than the common price of UGX 150,000.

3.2.1.2. Conclusions for Node 1

In conclusion, the power structures responsible for wealth distribution at this node are mainly driven by the: (i) ownership of the resource as evidenced in the case of private forest owners; (ii) skills as is the case for lumber jacks; (iii) monetary capital as the case is for pit sawyers and private forest owners who can afford to employ efficient technology; (iv) market information, which includes knowledge of procedures, processes and outlets involved along the chain; (v) connections within and among law enforcement officers, whereby trees can be harvested at low costs through acquisition of illegal access; and (vi) power derived from the legal framework, which relates to law enforcement personnel. Though it was not possible to establish the exact value that accrues to this group due to the undercover nature of the transactions, both communities and traders indicated that a lot of money is paid to law enforcement officers.

3.2.2. Observations from the Linkages

The major actors in the linkage components of the chain are middlemen, transporters and law enforcement personnel. They form multiple linkages with the other actors at the nodes (1, 2 and 3) and hence play similar roles between Budongo, Masindi and Kampala. They largely operate as individuals with no defined formal or informal institutionalized groups.

3.2.2.1. Middlemen

It was observed during the interviews that middlemen have unlimited access to timber resources, mainly because of easy access to credit from timber owners, the buyers and banks. Middlemen in most cases do not have their own money, but through their knowledge of the market, they are able to convince the timber owners to provide timber on credit or get money from the buyers to finance their trade. Other than these lawful means, they practice fraud whereby they cheat the timber owners directly or indirectly through claims that the timber was of low quality – ‘fagi’.

Their ability to control the trade is partly through threats of violence, good relations with the law enforcement personnel, access to market information,

and knowledge of good customer care (use of persuasive language). For example, middlemen maintain their position of power by intimidating lumberjacks with threats and connivance with big actors including law enforcement personnel. Similarly, knowledge of the timber market mechanisms has enabled middlemen to wield a lot of power and consequently capture great benefits from whomever they interact with to the extent that the communities have accused them of exploitation.

Middlemen do not physically add value to the timber, but do so through the process of transporting timber from one place to another. During this exercise, they incur such costs as bribes to law enforcement officers, transport hire, and labor charges. In the process, they increase the final market price of timber by also adding a sizeable profit margin. In the case of middlemen between Masindi and Kampala, the estimated profit margin was up to UGX 690,000, but could be as low as UGX 500,000 due to hidden costs such as bribes, communication, mobilizations costs, accommodation and meals.

In terms of gender, men dominate this stage though there are a few powerful women as well. Youth and children play a limited role of information gathering especially with regard to sources of timber and presence of law enforcement officers. The system is highly organized in a manner that continues to strengthen the position of middlemen while undermining and marginalizing other actors especially resource owners and lumberjacks.

3.2.2.2.Truckers/Main Transporters

This is the other category of actors along the chain linkages who are largely employed by the middlemen. Their main activity is transportation of timber from the various collection points near the forest to and from depots around Masindi town to Kampala Hoima, Gulu, Adjumani, Soroti, Apac, and Arua. Their activities involve acquiring a movement permit, loading of timber on the trucks, evaluation, certification and payment of revenues to the district forest services.

“There are so many risks involved in this timber transporting business both at the source and the final market. In most cases, business is based on a gentleman’s agreement and this has caused a lot of cheating. Sometimes even your timber can be rejected and then you have to return it or just sell it at a very cheap rate, yet the transport costs are already fixed. There are also many conmen both in the forest and the big markets in Kampala. However, police has proved to be one of our major problems on the road” Said one of the transporters.

The main characteristics that were critical for success at this point included:

- The availability and access to capital,
- Patience with regard to delayed payments,
- Readiness to go through harsh conditions at different check points on the road,
- A very sound vehicle, and
- Good working relations with the law enforcement personnel especially the DFO, NFA patrol teams and the police.

The main challenges faced by transporters were identified as: (i) extraction of money by law enforcement personnel, mainly the traffic police along the roads, and (ii) dwindling supply of timber, which was affecting their income, as they could only have two trips a month compared to about four in the past. Further more, unlike the transporters from Hoima, (iii) they had failed to form organized groups, which would have enabled them to operate relatively well through gaining a strong bargaining power against both their clients and the police. Such power would also enable them to hire Lorries at favorable prices, as most of them do not have their own Lorries. Ownership of Lorries was identified as one of the aspects that enabled women to participate in the transportation of timber since they could not physically drive or work as turn boys.

The sources of funding for this category were identified as: personal savings, credit from the buyers, and loans from the banks especially for the large scale transporters. It was observed that about UGX 3 million is needed to start the timber transport business in Masindi. The money is mainly used to set up a store, buy stock and meet initial costs of transport to Kampala. The cost in Kampala, on the other hand, is estimated at UGX 10 million excluding the cost of the truck.

Considering the truck owner as an independent entity, the indication was that they obtain profits of about UGX 100,000 per trip after deducting fuel costs of between UGX 150,000 -200,000 while the driver and turn-boy earn about 50,000 per trip.



Figure 3.5: Certification of timber by the District Forestry Officer in Masindi for transportation to the big markets. Further value addition occurs at this point in form of taxes.

3.2.3. Observations at Node 2

At node 2, the major actors are the buyers/middlemen, the transporters, the District Forestry Officer, NFA, enforcement agencies (mainly the local and regular police officers), and Revenue Authority' Special Revenue Protection Services (SRPS). Some of these actors such as middlemen and transporters have already been discussed in the linkages section, and is therefore not a subject of further discussion.

Some of the mechanisms for increasing profits at this stage include ability to purchase from a variety of local timber suppliers, who can be forced to receive a relatively low price due to competition. More so, the middlemen largely control the outlet networks and so can use the information gap to their own advantage. Their major sources of costs include, vehicle hire, bribes, accommodation, purchase of licences and information gathering.

The DFO certifies the timber by marking it using a special 'Hammer', values the timber and collects the tax, which is later remitted to Kampala for distribution among the key entities including Central Government, Local Administration and later to the communities. The other actors such as the NFA, SRPS and the regular police are largely active at this point for purposes of law enforcement and initialisation of the tracking process as the timber moves to node 3.

3.2.3.1. Conclusions from Observations at Node 2

In conclusion, the power structures responsible for wealth distribution at this node are mainly driven by:

- a) Ownership of resources mainly means of transport in the case of transporters and capital in the case of middlemen. The capital may be obtained through credit from banks and/or friends, own savings, traders in Kampala, or supplier credit from local suppliers.
- b) Markets information, which includes knowledge of procedures, processes and outlets involved along the chain,
- c) Connections with law enforcement officers, and
- d) Power derived from the legal framework, which relates to law enforcement personnel. Though it was not possible to establish the exact value that accrues to this group due to the undercover nature of the transactions, traders indicated that a lot of money is paid to law enforcement officers.

3.2.4. Observations at Node 3

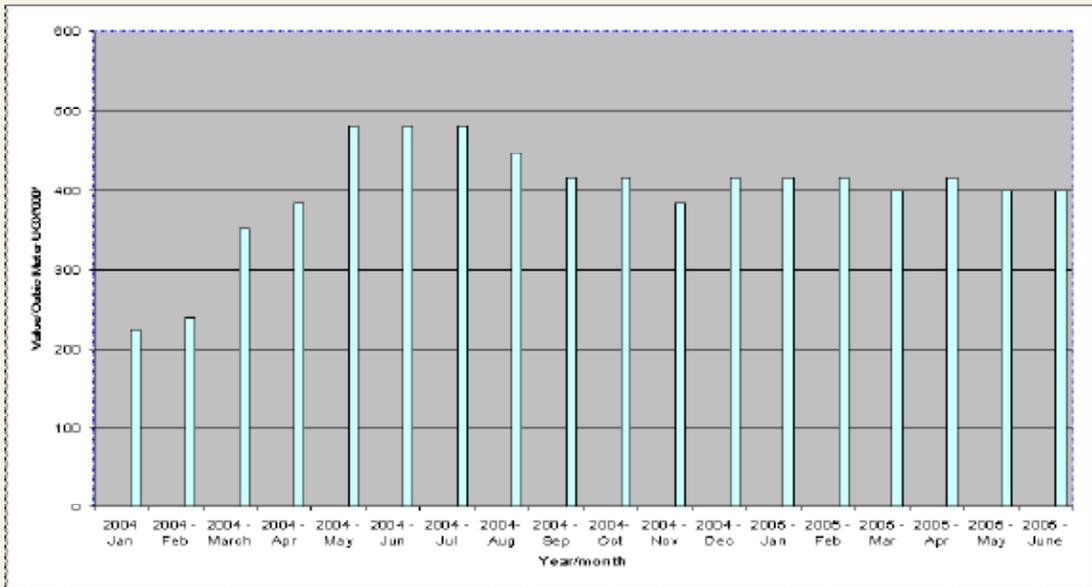
At this node, the major actors are the bulk buyers in Kampala (Bibanda⁴⁰ owners), workers such as security guards, off-loaders and attendants, small-scale urban transporters, and the consumers. The middlemen and big transporters who started their action at node 2 terminate their operations at this level. In this study, only the Bibanda owners were analyzed at this point since others like consumers have already been addressed.

The consumers, who buy from the Bibanda owners, were not analyzed mainly because most of them do not get involved for profit purposes and hence could not be useful in answering the research questions regarding the distribution of wealth from timber. They are simply a terminal point of the chain that contributes to the wealth chain through their input in the wealth structure of the Bibanda owners. Regarding those who buy the timber for profit such as making of furniture, it was not possible to trace the value attributable to the timber in their final products, mainly due to lack of records.

The Kibanda trader buys timber from the middlemen at about UGX 10,000 and sells at an average of UGX 13,000 per piece. It is worth noting that the prices vary considerably at different times of the year, though with a general upward trend as shown in Fig 3.2 on the next page. Other variations in price are due to timber quality, sizes and source in terms of place from which the timber was harvested.

⁴⁰The timber shops/marts in Ntinda, Ndeeba, Bwaise and elsewhere are locally called Bibanda (many). One is Kibanda.

Figure 3.6: Trends in Timber Prices from 2001 to 2005 (per cubic meter)



Source: NFA (2006)

Based on these observations and for a small unit lorry (Canter) of 300 pieces, the Kibanda trader is able to realize UGX 3,900,000 before any other expenses. Though the Lorry loads used at this level are bigger, in the range of 500 – 700 pieces, it was found necessary to continue with the equivalent of a small lorry to ensure consistency with the other nodes. Similarly, other expenses that are of a monthly or annual nature, such as rent and license by Kampala City Council (KCC) were adjusted based on subjective information to reflect what is attributable to a transaction of one lorry (see Table 3.1).

The major expenses at this node included purchase of the timber from the middlemen who transport it from Masindi, rent of the premises, payments to attendants and security. The middlemen largely paid the persons involved in off-loading as the Bibanda traders buy timber that is already off the lorry. Thus, the expenditures at this node were shared between the middlemen and the Bibanda owners. Similarly, the loading costs are borne by the consumer. In general, the profits of the Bibanda owners were estimated at UGX 820,000 per truck. There was no evidence of payment of VAT, as most of the traders at this node were not registered for VAT payment. Thus, they only paid other taxes mainly income tax based on the size of their business.

The other actors such as people involved in off-loading and security guards only get a meager payments that was estimated at less than UGX 3,000 – 5,000 per day. Given the large number of such people, partly due to limited requirement of skills, the best way to ensure sufficient earnings was through exclusion of ‘non members’. Only people known to belong to each timber depot (Kibanda) were allowed to work in that area. Each group for off-loading a lorry was

comprised of between 5 and 10 people. Apart from off-loading timber from Lorries, the groups also load timber for buyers and hence get extra income.

3.2.4.1. Conclusions from Observations at Node 3

In conclusion, at this node, the power structures responsible for distributing wealth from timber as a natural resource are mainly driven by:

1) Ownership of resources mainly a physical timber depot in town (the Kibanda), and capital, which could be obtained from banks and/or friends, own savings, or supplier credit from middlemen. The biggest source of funding seemed to come from own savings and supplier credit.

2) Connections with law enforcement officers were critical, especially in cases where one does not have all the required documentation or is involved in sale of illegal timber. It was observed that there is no clear distinction between those who deal in illegal and non-illegal timber.

CHAPTER FOUR

Conclusions and Policy Recommendations

4.0. Introduction

This study was motivated by the fact that many people have remained in abject poverty in spite of living within a rich natural resource endowment, and that investments in preserving the stock of natural resources through managed exploitation would not improve their plight significantly. Most of the value created from natural resources is captured by the established power centres at the expense of the poor, who, in a bid to survive in this marginal state, step up their rate of exploitation of the natural resources. As a consequence, any sustainability efforts may not be guaranteed since they would be in contradiction with the realities on the ground. The failure to benefit by the local communities and many others along the chain is partly due to disenfranchisement and marginalization by those who wield more political and socio-economic power and not necessarily the market conditions. Access and control over resources, and not proximity are major determinants of the distribution of wealth especially with regard to natural resources.

In order to test the above views, it was necessary to get a good understanding of the socio-economics, management and governance of natural resource product chains. Attainment of this objective would eventually expand options for: (i) value addition, (ii) improving distributional outcomes, and (iii) encouraging sustainable resource management.

Specifically, the results are intended to:

- o Raise awareness about the importance of natural resource products in improving rural livelihoods through reducing rural poverty and mitigating the alarming rates of environmental degradation;
- o Provide options for increasing the proportion of the monetary value of the product going to local producers; and
- o Inform processes for relevant institutional, policy, legal and administrative reforms.

In line with the above aims, the study used the nature, wealth and power (NWP) conceptual framework and the commodity chain analysis (CCA) methodology to understand the major interactions in the management and exploitation of timber as a natural resource. The CCA enabled the analysis of the series of interlinked exchanges which timber and associated products pass from extraction, production, to end use. The methodology allowed for examination of how regulatory policies, institutional and market mechanisms have affected the distribution of rents, wages and profits from timber.

While several conclusions can be drawn from this study, focus was put on drawing lessons relating to the hypotheses and objectives set out in the first chapter.

It was hypothesised that investments that are solely aimed at increasing the value of natural resources will not be adequate for both poverty eradication and environmental sustainability. Secondly, it was argued that the rural poor rarely benefit from the commercial exploitation of natural resources. The results, which have been grouped in terms of value enhancement investments, distribution of wealth and value, and policy, legal and administrative structures seem to support these initial thoughts as discussed below. A final aspect of sustainability has been added as a comprehensive assessment of the various aspects combined.

4.1. Value Enhancement Investments

Uganda has recently made substantial investments in the natural resource sector, aimed at preserving and increasing the value of the resources in a sustainable manner. In line with the goals of the sector, there have been various policy and institutional reforms ranging from creation of new structures such as NEMA and NFA along with new legal mandates.

However, it was observed that most of the investments have mainly been in government related institutions with little or no investments in community forest initiatives. This has/will have a negative impact on the very government forest reserves as the private/community forests get depleted. Logically, the government may be forced to invest more money in law enforcement, which would have been invested in community/private initiatives initially with far greater universal benefits. Therefore, there needs to be a shift in the investment criteria and allocation of resources.

4.2. Distribution of Forest Wealth and Value

The value sharing mechanism of forest resources is mainly influenced by ownership of the natural resource and capital (natural and capital stock). In the context of this study, ownership was either through traditional or legally acquired rights over the resource, forceful community influence due to social or political status of an individual and official positioning backed up by Government posting or authority. In the last category are various Government officials who use their power to determine who accesses the forest reserves, or moves the product along the various nodes and links of the timber commodity chain. These pseudo owners were found to reap great value, perhaps more than the resource owners, partly because they hardly have any investments to make in the process. Their powers are given and vantage positioning in the chain is guaranteed.

Capital was considered in terms of both skills and tools for exploitation, financial abilities and social capital or networks with other influential actors. The lumberjacks, for example, had almost monopoly rights to the felling of trees because of their skills and physical abilities. Most of these people were from

the ‘traditional strong’ tribes of Kabale and northern Uganda. It did not matter whether one had a saw (power driven or manual) since these were either provided by the pit sawyer, a group member or could be hired from within the community.

Financial capital, on the other hand, depended on the initial endowment of an individual (personal sources/ savings) or ability to access external sources such as banks and personal friends. Once one had an initial amount, it was possible to augment it with supplier credit through arrangements where timber was taken and only paid for after selling it to distant buyers in Masindi or Kampala. In this way, the rich middlemen were able to ‘borrow’ from the poor pit sawyers or communities, usually at no cost or even cheat them under the pretext that the timber was of poor quality (fagi) and could only be sold at a very low price or even discarded for free. Table 4.1 shows the percentage shares for each category of actors in the timber chain. The proportions in the table are based on analysis done in the previous chapter and demonstrate that poor people around the forest are highly marginalized and benefit the least from the resource.

Table 4.1: Average returns per actor (%)

Category of Actor	% Share
Individual tree owners/sellers	6.231
Private forest owners (who harvest & sell)	20.768
Lumberjacks	1.869
Pit sawyers	3.323
Middlemen (Masindi – Kampala)	28.660
Local transporters (within the forest)	0.935
Transporters (Budongo – Masindi – Kampala)	4.154
Kampala traders	34.060
Total	100

Source: Data Collected and Compiled by the Researchers

4.3. Institutional/ Administrative Structures

There is no doubt that the Uganda Government has invested heavily in the management of the stock of natural resources. Over the last decade alone, several institutions have been created including the National Environmental Management Authority (NEMA) and the National Forestry Authority (NFA). These institutions unlike the previous ones like the Forest Department have received substantial support and employ very highly qualified professionals.

For example through the use of direct/earmarked donor funding and empowering laws for enforcement of policy, NEMA and NFA have surpassed previous arrangements in policy design and enforcement. Boundaries of gazetted areas are better designed and policy guidelines have been developed for use at the district and lower levels. Reforestation activities are more intense and efforts to involve the communities in the management of natural resources, such as CFMs, are more visible in a number of areas.

4.3.1. Implications for Forest Management

Despite the above developments, there seems to be no guarantee that the poor can or will indeed reap significant benefits or that the entire stock of the environment will be sustained. The new policy packages and policy enforcement mechanisms seem to have hit the rural poor most especially with regard to access of the forest-related natural resources and distribution of proceeds. For example, access to the CFRs was largely through official channels of buying piles of logs by auction or unofficial channels marred by corruption (mainly bribery and political or elite patronage), none of which was affordable by the poor. Even the small number of the poor communities who managed to avoid detection and penetrated the reserves reaped minimal benefits as they were either carrying illegal timber for the wealthy or could only pick low value products such as herbs and off cuts for construction and burning of charcoal. Quite often, such people would be arrested and imprisoned with consequences that ranged from loss of useful labour time to assets, which would be confiscated, and savings as they had to bribe their way out of jail.

Secondly, it was observed that the recent categorization of forest reserves into what are known as local, district, private or central government forests, left the local and district forests more exposed to exploitation mainly on account of inadequate law enforcement. The local forests have no effective administrative systems as the process of forming the necessary structures is complicated and subject to manipulation by various interest groups. The guidelines require consensus building among the communities and all the way up to certification by the Minister. This process, apart from being lengthy, was quite often sabotaged by the local elites and the wealthy that preferred no organised systems.

It was further observed that, except in a few areas, most forests do not belong to any private individual since landholdings quite often end at the edge of the forests. Early acquisitions of land treated forests as wastelands with little or no private value and were instead associated with pests and diseases and so were largely left as communal reserves. The situation has recently changed with increasing populations but only for the worse as this has meant enhanced forest clearance for settlement and cultivation. Recent practices such as growing of upland rice have also worked against the community and district forests reserves partly due to perceptions that forest soils were the most appropriate in terms of fertility and availability.

The case of local forest reserves, which are managed by the district authorities, was not any better. However, for slightly different reasons, it was associated with inadequate facilitation of the district forestry office. The rules and regulations had, in a number of areas been well developed and manuals for environmental protection and management were available, partly on account of the involvement of NEMA. However, the required numbers of personnel to do enforcement at the district and within the communities were inadequate and poorly facilitated.

As a consequence, there was no significant Government presence in both community and local forest reserves, which increased the rate of over-exploitation and indeed destruction of these two categories of forests. Contrary to expectations and what seems to be common knowledge, the destruction of forests was found to be mainly through charcoal burning and cultivation. These two practices tend to eliminate entire tree species regardless of age and size. Lumbering on the other hand is very selective in terms of age, size and length of straight sections of tree trunks.

The forest policy in Uganda has been characterized by a high concentration of power over CFRs, and a corresponding lack of local participation in forest and tree management across all categories of forests. Insecurity of land and tree tenure could also be contributing to degradation of forests in Uganda. Since most of the people in the Budongo area do not own the land but only use it on a tenancy basis, they are likely to be discouraged from planting trees. Secondly, they are not willing to sustainably use and manage state owned forest reserves because of lack or reduced access rights. The end results appears to be a significant loss of incentives by the local communities to protect trees, discouragement of local people to engage in tree planting and reforestation projects, and excessive reliance by the state on punitive measures to enforce law. In fact, several youths in the area had been imprisoned for various durations and were rescued at the intervention of local politicians or opinion leaders.

4.4. Recommendations

It seems to be undoubtedly clear that the value enhancements efforts by the Government in terms of improved forest management policies and central level institutions (mainly NEMA and NFA) have not provided guarantees for overall environmental sustainability. Whereas the policy appears to have been comprehensive in design, covering all types of forests in the country, the implementation has had significant setbacks in terms of lack of adequate institutional structures and funding. There were hardly any institutions for the management of community forest reserves while the local or district forest reserves were associated with weak institutions.

4.4.1. Strengthening of Local Level Institutions

The study argues for urgent interventions by Government to strengthen district level institutions including the district forest office and community structures. Given widespread nature of community forests, local authorities including the Sub-county chiefs and parish chiefs should be considered as a potential resource that can be empowered both legally and through training and financial support to police and enforce community level practices that are harmonious with environmental sustainability and poverty eradication. In this way, Government will avoid putting in place new superstructures that could be costly and less responsive to local conditions.

Furthermore, the Government should improve the incentives for local people and increase the value of the resource retained at local level. This could be done through granting more access rights or ensuring that the local communities indeed receive a good percentage of forest concession revenues. Though the policy indicates that a certain percentage of the revenue collections by the Government is to be remitted to the local communities, there was no evidence that this was happening. With district local revenues reduced by the abolition of graduated tax, officials indicated that such special transfers to the communities would remain a distant reality.

4.4.2. Environmental Sustainability

The sustainability aspect may be looked at from two levels: that of Budongo the forest and the entire environment of the ecological zone. Overall, the Government measures in place had improved security of the CFR of Budongo forest, which, with more statistical information and scientific means of exploitation, was designed for greater sustainability at least in the short- to medium-term. NFA had collected good information about all the trees in the area and so was able to ensure harvesting of only the mature trees and using methods that minimised damage to other trees. Monitoring of boundaries had improved albeit with some loopholes given the size of the forest and weak community involvement.

The long-term perspective requires consideration of a broader scope that involves looking beyond Budongo forest alone, to community involvement, and the quality of legal and institutional mechanisms. The ranking by the team on potential sustainability of the forest given the observations and views obtained through out the study was not favourable. It was felt that the forest management practices in place, both by Government and the communities were very weak. The Government was operating with a heavy hand of law enforcement and institutions that were not sensitive to local conditions. As far as forest management was concerned, the local communities were largely treated as enemies of the state who had to be arrested on sight and reprimanded with harsh punitive measures.

4.4.3. Community involvement and participation

The efficiency and sustainability of forest management can be improved if local communities are involved in the management of forest resources in their vicinity. Employing locals to monitor instead of regular national staff, together with increased tangible benefits to the local communities will greatly improve the conditions of the forest. As in Ssembajjwe and Banana (1998), forests resources are more likely to be sustainably utilized by putting in place an effective structure of institutional arrangements that gives rise to an authority system meaningful at the local level. Regardless of the de jure property regime, all forests can be de facto open access regimes if there are no effective institutions and mechanisms to enforce the rules. In the absence of institutional arrangements and associated organizational mechanisms to monitor and enforce rules, a government forest reserve can be as degraded as a communal forest.

Involvement of local communities will not only increase their participation and commitment to the forest but also significantly reduce the costs incurred by Government in monitoring and protecting the forests. Monitoring of government forest reserves is costly and difficult because they are often large with wide boundaries, requiring many forest guards for effective results. Quite often, the financial and human resources are inadequate to carry out the task of policing these forests. Government officials who monitor and enforce rules are poorly paid and unmotivated to the extent that communities who choose not to comply with the rules can easily escape detection or bribe them.

4.4.4. Need to reconfigure power relations along the timber production and trade chain

It has been argued that the extent to which different stakeholders or individuals along the timber commodity chain is largely determined by the nature and scope of political power and economic influence enjoyed by those groups or individuals. Consequently, as long as this scenario continues, it is unlikely that additional investments made in the forestry sub-sector would lead to meaningful reduction in poverty levels among forestry dependent communities. Reconfiguring the power relations along the timber production and trade chain would increase economic gains for all actors along the timber production and trade chain hence making forestry management programmes economically relevant to the broad range of stakeholders, poverty responsive and sustainable development compliant.

4.4.5. Beyond Coordination: Strengthening all Relevant Institutions

Government recognized quite early that effective environmental management programs require the cooperation of all who live in the country: government, NGOs, investors, industries, and private individuals. Consequently, organizations such as the National Environment Management Authority (NEMA) were formed, specifically as the principal agency responsible for the management of the environment through coordination, monitoring and

supervision of all activities in this field. The vision of NEMA is to be an efficient and self-sustaining agency that provides assurance for the people in Uganda to live in a clean, healthy, productive and sustainable environment. The mission is to promote and ensure sound environmental management practices for sustainable development.

However, in order to achieve its vision and mission, NEMA has to heavily rely on performance of several other entities within the mainstream of Government and local communities. Information from the NEMA website indicates, "While NEMA is responsible for monitoring, planning and coordination of environmental matters, implementation is the responsibility of relevant line ministries. Environment liaison units within each line ministry are responsible for integrating environmental concerns into their sectoral plans, and implementing environmental activities within the mandate of the Ministry". NEMA is supposed to contribute to the global community by enhancing networking and capacity building in environmental management, and to the local communities through participation, as a responsible party, in local initiatives that improve the quality of the environment, and organizing events to raise local awareness of environmental problems. It follows that the success of relatively well-funded institutions such as NEMA can be hindered by skills and funding deficiencies within the complementary institutions or effectiveness of linkages with communities.

Coordination for effective results in environmental management and sustainability should be extended beyond planning and design of inter-institutional linkages based on policy and demarcation of mandates to ensuring equitable acquisition of skills, financial and other resources. Without such approaches, the core values of NEMA, which include effective partnerships with collaborating agencies and institutions, highly motivated and committed staff, and employment of cross-functional approaches to service delivery and free exchange information and experience across departments, may not be realized. The current efforts by NEMA itself to build capacities in partner institutions need to be augmenting internal mechanisms within the mainstream of Government that are aimed at building these institutions.

In conclusion, increasing the share of timber wealth retained by the poor actors will require strengthening the institutional mechanisms including forming new institutions where they do not exist. The process should include facilitation of institutions at all levels since they work in unison for a common good. Focus should be at the local levels where such institutions are required to strengthen the participation and protection of benefits for the local populace. The poor people need more power to access the resources in an organized manner and to utilize it in a sustainable way.

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