

**IMPACT OF COMMUNITY FOREST ASSOCIATIONS ON FOREST
RESOURCES MANAGEMENT IN KENYA**

Titus Musungu Wamae
Reg. No. Z51/69885/2011

A Thesis submitted in partial fulfilment of the requirements for the degree of
Masters of Arts in Environmental Law of University of Nairobi, Kenya.

November, 2013

DEDICATION

This thesis is dedicated to my Wife, Lilian and my lovely Daughter, Ivy. Their love, patience, support and understanding have lightened up my spirit to undertake my Masters Studies and complete this thesis.

ACKNOWLEDGEMENTS

All praises belong to God Almighty. By his will, I got a lot of support and encouragement from individuals as well as from organizations which enabled me undertake my study at the Centre for Advanced Studies in Environmental Law and Policy (CASELAP), University of Nairobi.

My sincere gratitude goes to my supervisors Dr. Collins Odote and Prof. Nicholas Oguge who laid the foundation of this thesis. I am greatly indebted to their assistance and guidance in preparing the research proposal, methodology and formulating the write up style of the thesis. Thank you for your valuable patience and time spent in discussing, editing and guiding during the write up of the thesis.

The Wangari Maathai Institute (WMI) for Peace and Environmental Studies under the Stabilizing Kenya by solving forest related conflicts (STAKE) project supported my field work. I am grateful for the great generosity of WMI. I am grateful to the STAKE Project Coordinator Dr. Thuita Thenya and my field work Supervisor Prof. Raphael Wahome from the Institute who ensured that I was comfortable throughout the field work period. Special thanks to Ms. Lilian Kong'ani for her superb coordination of the entire field work.

My deepest gratitude goes to Mr. Jackson Kimeu, Sururu Station Forester for his invaluable and insightful comments during the field work. I would also like to send my regards to all the great people I got the opportunity to meet during my fieldwork. Special thanks to Corporal Yegon whom I traveled with to all the different locations. It was a great joy and I learned a lot from all of you.

Special thanks to all my friends and classmates for making my study a success. Finally, special thanks to all the staff at the Centre for Advanced Studies in Environmental Law and Policy (CASELAP) for their support.

ABSTRACT

This study sought to assess the impact of Community Forest Associations (CFAs) on forest resources management in Kenya by exploring the experiences of implementing Participatory Forest Management (PFM) under the Constitution of Kenya 2010 and the Forests Act, 2005. In recognition of the importance of forests, the Constitution obligates the State to increase tree cover to 10% of the country's total land area, the internationally recommended minimum for ecological sustainability. It devolves the country into 47 counties. One of the objects of devolution is to recognize the rights of communities to manage their own affairs and further their development. The Constitution therefore reinforces the Forests Act, 2005 that aims at decentralizing the management of forests through formation of CFAs. The study focused on Sururu CFA involved in participatory forest management (PFM) of Sururu forest block as part of Mau forest in Kenya. Semi structured questionnaires were administered to randomly selected 36 CFA and 32 non-CFA members. This was complimented with facilitation of 10 focus group discussions and 10 key informant interviews. Data collected indicate that Sururu CFA is responsible for diverse management activities in forest protection, monitoring and management, yet access to decision-making, revenue streams, and overall resource control rights are vested in the Kenya Forest Service. Furthermore, the viability of Sururu CFA is threatened by leadership wrangles, local institutional overlaps, and the splintering of groups. The findings suggest that the benefits of participation in Sururu forest management tend to accrue unevenly among different groups of local people. This is due to weak legal framework, unequal access to information and differences in initial resources and social position. Four major recommendations arise from the study: First, there are challenges relating to the clarity of the forest-related mandates of the national and county governments as envisaged under the Constitution. These challenges should be addressed to avoid potential conflicts between the national and county governments over management of forests. Second, institutions created under laws related to forest management such as Community Forest Associations (CFAs) under the Forests Act and the Water Resources Users Associations (WRUAs) under the Water Act need to be harmonized to remove overlaps in their jurisdictions to manage forests. Third, KFS needs to devolve its structures to correspond to the county government structure. Fourth, the linkage between the National Land Commission

(NLC) and KFS requires clarity so as to harmonize responsibility for forest governance and implications of land management for that governance.

Keywords: Livelihoods, Decentralization, Community Forest Associations, Participatory Forest Management

TABLE OF CONTENT

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENTS	iv
ABSTRACT	v
TABLE OF CONTENT	vii
ACRONYMS	xi
CHAPTER ONE	1
INTRODUCTION	1
1.1. Background	1
1.2. Statement of the Research Problem	4
1.3. Research Questions	6
1.4. Objectives of the Study	6
1.5. Justification of the Study	7
1.7. Thesis Structure	8
CHAPTER TWO	9
LITERATURE REVIEW	9
2.1. Introduction	9
2.2. Community Forestry in Kenya	10
2.2.1. Historical Background of Community Forestry	10
2.2.2. Sustainability of Community Forestry	11
2.2.3. Nature and Function of Community Forestry	12
2.2.4. History of Community Forestry in Kenya	16
2.2.5. Participatory Forest Management in Kenya	17
2.2.6. Gaps in the Literature	18
2.3. Policy, Legal and Institutional Framework for Forest Management in Kenya	19
2.3.1. Historical Developments on Forest Legislation in Kenya	19
2.3.2. The Constitution of Kenya 2010	22
2.3.3. Forest Policy, 2007	28
2.3.4. Forests Act, 2005	30

2.3.5. Institutional Framework for Forest Management in Kenya.....	33
2.4. Role of CFAs under the Forests Act, 2005	36
2.4.1. Defining a Forest Community	36
2.4.2. Forest Community Participation in Conservation and Management.....	37
2.4.3. Concept of the Shamba System in relation to Community Forest Management.....	40
2.4.4. Requirements for CFAs Participation in Forest Management.....	42
2.4.5. Community Forest Management Plans.....	43
2.4.6. Community Forest Management Agreements	45
2.4.8. Termination of the Management Agreement.....	47
2.4.9. Non-residential Cultivation Permits	49
2.4.10. Land Tenure and Forest Governance.....	50
2.4.11. Community Forest Tenure Rights.....	54
2.5. Analytical Framework	56
2.5.1. Theoretical Framework.....	56
2.5.2. Conceptual Framework.....	59
CHAPTER THREE	62
STUDY AREA AND METHODS	62
3.1. Introduction.....	62
3.3. The Study Area	63
3.3.1. History of the Forest	63
3.3.2. Geology and Soils.....	65
3.3.4. Biodiversity.....	66
3.3.5. Forest Adjacent Communities.....	67
3.4. Target Population and Sample Size	67
3.5. Data Collection Methods and Instruments.....	68
3.6. Data Analysis.....	68
CHAPTER FOUR.....	69
RESULTS AND DISCUSSION.....	69
4.1. Introduction.....	69
4.2. Analysis of Sururu Community Forest Association	69
4.2.1. Formation and Legal Status	69

4.2.2. Governance and Management.....	70
4.2.3. Membership	71
4.2.4. Sururu CFA Rules.....	71
4.2.5. Education	72
4.2.6. Conflict and Resolution	73
4.2.7. Resource Mobilization and Fundraising.....	73
4.2.8. Benefits Sharing.....	73
4.3. Analysis of the Household Participation in Forest Management.....	74
4.3.1. Factors Determining Sururu CFA Membership.....	74
4.3.2. Land Access, Use and Productivity	79
4.3.3. Distance and Access to Forest Resources and Products	80
4.3.4. Forest Contribution to Community Livelihood	82
4.3.5. Policy and Legal Framework	83
4.3.6. Participation and Equity.....	87
5.3.7. Overall Changes since PFM.....	91
CHAPTER FIVE	92
CONCLUSION AND RECOMMENDATIONS	92
5.1. Introduction.....	92
5.2. Conclusion	92
5.3. Recommendations.....	94
REFERENCES	96
ANNEX: QUESTIONNAIRE	101

LISTS OF TABLES AND FIGURES

List of Tables

Table 1: Summary of Area Covered by Sururu Forest	65
Table 2: Level of Education.....	78
Table 3: Land Access, Use and Productivity	79
Table 4: Contribution of Sururu Forest to Household Economic Conditions	83
Table 5: Awareness on the Existence of the Forests Policy and Act.....	84
Table 6: Participation in Forest Conservation Activities.....	88

List of Figures

Figure 1: Conceptual Framework	60
Figure 2: Household Headship and Gender	75
Figure 3: Level of Education	77
Figure 4: Ethnic Composition of Sururu.....	78
Figure 5: Distance of Homesteads for the Forest Boundaries	81
Figure 6: Benefit Sharing.....	85
Figure 7: Forests Act on Deterring Offenders	86
Figure 8: Level of Illegal Activities.....	86

ACRONYMS

CASELAP	-	Centre for Advanced Studies in Environmental Law and Policy
CBD	-	Convention on Biological Diversity
CFA	-	Community Forest Association
CPR	-	Common Pool Resources
DDC	-	District Development Committees
EIA	-	Environmental Impact Assessments
FCC	-	Forest Conservation Committees
GDP	-	Gross Domestic Product
EMCA	-	Environmental Management and Coordination Act
FAO	-	Food and Agricultural Organization
FCC	-	Forest Conservation Committee
FD	-	Forest Department
FMA	-	Forest Management Agreements
FPIC	-	Free Prior Informed Consent
IDS	-	Institute of Development Studies
KEFRI	-	Kenya Forestry Research Institute
KFS	-	Kenya Forest Service
KFWG	-	Kenya Forest Working Group
KNBS	-	Kenya National Bureau of Statistics
KWS	-	Kenya Wildlife Service
MASUFA	-	Mau-Sururu Forest Association
MASULICOFA-	-	Mau-Sururu-Likia Community Forest Association
MoU	-	Memorandum of Understanding
MFW	-	Ministry of Forestry and Wildlife
NACOFA	-	National Alliance of Community Forest Associations
NEMA	-	National Environment Management Authority
NET	-	National Environment Tribunal
NGO	-	Non-Governmental Organization
NLP	-	National Land Policy

NMK	-	National Museums of Kenya
NRC	-	Non-Resident Cultivation
NTFP	-	Non-Timber Forest Products
PFM	-	Participatory Forest Management
PRA	-	Participatory Rural Appraisal
SPSS	-	Statistical Package for Social Sciences
WMI	-	Wangari Maathai Institute
WRUA	-	Water Resource Users Associations

CHAPTER ONE

INTRODUCTION

1.1. Background

Forests are very valuable in terms of biodiversity and as economic resources globally.¹ Forest ecosystems play at least five important roles.² First they are important refuges for terrestrial biodiversity; a central component of the earth's biogeochemical systems; and a source of ecosystem services essential for human well-being. Second, forests play a significant role in the global carbon cycle and, consequently, in conditioning global climate change. Third, more than three quarters of the accessible freshwater in the world comes from forested catchments. Fourth, forests play important cultural, spiritual, and recreational roles in many societies. Fifth, the rural poor are dependent on forest resources for sustaining their livelihoods. As many as 300 million people globally, most of them very poor, depend substantially on forest ecosystems for their subsistence and survival.³

In Kenya, forests are a critical component for the realization of the right to a clean and healthy environment provided for in the Constitution - a provision in the Bill of Rights.⁴ They provide multiple environmental, economic, social and cultural benefits which enhance opportunities for poverty alleviation and economic development envisaged in Vision 2030.⁵ Forests contribute to a wide range of sectors, accounting for 3.6% of Gross Domestic Product (GDP), compared to the current official figure of 1.1%.⁶ The forest sector provides 18,100 direct jobs in Kenya and contributes 7.8 billion Kenyan shillings to the economy per year.⁷ Forests provide important attractions for the tourism industry because they serve as important wildlife habitats, as well as

¹ MEA, 2005

² *Ibid*

³ *Ibid*

⁴ Article 42, Constitution of Kenya 2010

⁵ Kenya's Vision 2030 is the country's development programme covering the period 2008 to 2030. Its objective is to help transform Kenya into a "middle-income country providing a high quality life to all its citizens by the year 2030". The Vision is based on three pillars: the economic, social and political

⁶ UNEP, 2012

⁷ FAO, 2010

provide aesthetic and biodiversity benefits.⁸ They play an invaluable role in contributing to the livelihoods of adjacent communities by providing them with various ecosystem goods⁹ and services¹⁰.

For the past several years, Kenya's forest cover has often been cited as 1.7 percent. Indeed policy documents have quoted Kenya's forest cover as falling anywhere between 1.7% and 3%. This percentage refers to the closed canopy forest only. Others such as state plantations, woodlands and private plantation forests together with the coastal mangroves comprise 4.2%. When all these are taken together, they constitute 5.9%¹¹ which is the estimated total national tree cover.¹² The annual rate of forest cover loss decreased from 0.35% to the rate of 0.31% for the period 2005-2010.¹³ Out of the total forest cover, only 1.7 million hectares are gazetted and managed by Kenya Forest Service (KFS).¹⁴ The forests outside gazetted areas are estimated to be 0.18 million hectares and are mainly situated in high and medium potential areas where the human population and agricultural production are concentrated.¹⁵ There has been an increasing rate of forest destruction and consequential decline in forest resources in Kenya due to poor governance of the forest sector. The colonial administration established the Forest Department in 1949 headed by the Chief Conservator of Forests to superintend matters affecting the forest sector. However, the next half a century saw massive reduction in the country's forest cover from 60% to just about 2% in the 1990s due to several factors including increased population, land use changes, inappropriate legal frameworks, and corruption, among others.¹⁶

Therefore, improving forest cover and reducing forest degradation have surfaced as a significant element of Kenya's development strategy.¹⁷ Central to this is the government's recognition of the critical role played by the forest adjacent communities in ensuring that the forest cover in the

⁸ *Supra*, note 6

⁹ Timber, poles, fuel wood honey, medicine

¹⁰ Conservation of biological diversity, water and soil and habitats for wildlife

¹¹ MFW, 2012

¹² FAO, 2010

¹³ *Ibid*

¹⁴ *Ibid*

¹⁵ Ruotsalainen, 2004

¹⁶ Ongugo and Mwangi, 1996, Luke and Robertson, 1993

¹⁷ DRSRS and KWFG, 2006

country is maintained above the current alarming levels.¹⁸ The Forests Act, 2005 provides for engagement of local communities in forest management through CFAs. It requires members of a forest community to enter into partnerships with the KFS through registered CFAs. The associations are registered only if their objectives-composition of their management committee, election procedures, and purpose for which their funds may be used are considered satisfactory by the KFS. Members of a forest community and local residents who form such associations may apply to the KFS for certain rights in relation to management and utilization of particular forest areas and forest produce rights. The associations are also granted use rights to the forest resources on the condition that these rights do not conflict with the conservation of the forest.¹⁹ Communities also have exclusion rights subject to management plan submission and contracting with the KFS.

Studies on the roles of CFAs in the country have presented the different challenges faced in implementing the PFM process.²⁰ Further examination of CFAs roles in the decentralization process of Kenyan forests has highlighted the emerging issues which have slowed down the development of PFM process such as the right for communities to license extraction and movement of forest products, arrest and prosecution of offenders in forests under PFM, and cost and benefit sharing among others.²¹ However, community perceptions on CFA capacity to meet PFM objectives and their views on these emerging issues have not been captured adequately. In addition, sufficient understanding of the changing perceptions and attitudes of local communities towards PFM process is lacking. For example, we do not clearly understand perceptions of households in regard to CFA.

Understanding factors influencing community participation in forest management may be critical to forest managers and decision makers. Factors motivating their participation in decisions and activities for preservation of state forests or protected areas may be likewise important. A better understanding of community members' motivation for participation in PFM is fundamental to the development and implementation of management strategies that are both sustainable in the

¹⁸ MENR, 2007

¹⁹ GoK, 2007

²⁰ *Ibid*

²¹ Ongugo *et al*, 2008

long term and sensitive to the local needs.²² Participation of local community members in management of protected forests may vary according to socioeconomic and demographic backgrounds of the individual. Individual community member's characteristics may influence decision making on whether or not to participate in PFM.

1.2. Statement of the Research Problem

The Constitution of Kenya 2010 brings significant change to the country's environmental governance and particularly the forests sector. Article 69 outlines the obligations of the government in respect to environment which includes increasing tree cover to 10% of the country's total land area, the minimum recommended for ecological sustainability. In line with improving governance, the Constitution's Preamble declares and affirms that the sovereign power belongs to the people of Kenya. Under Article 6, it devolves²³ Kenya into 47 counties²⁴ and further provides that the national and county governments are distinct and interdependent.²⁵ Article 10 lists the various values and principles of national governance to include amongst others: sharing and devolution of power; participation of the people; protection of the marginalized; and sustainable development.

The Constitution therefore reinforces the Forests Act, 2005 that aims at decentralizing²⁶ the management of forests by focusing on institutional arrangements that shape the balance of powers between the central government, local authorities and local communities.²⁷ The Act establishes Community Forest Associations (CFAs)²⁸ as partners in forest management, and thus represents a positive move for the local communities and this has already begun to act as a catalyst in their involvement in the management of forest resources.²⁹ It thereby also responds to

²² Dolisca et al, 2006

²³ Devolution is the transfer of powers from the central government to local units.

²⁴ First Schedule, Constitution of Kenya 2010

²⁵ Fourth Schedule, Constitution of Kenya 2010

²⁶ Decentralization is transforming the local institutional infrastructure on which local forest management is based. Three basic elements of decentralization are accountability, discretionary power, and security.

²⁷ ARPIP 2009, KFS 2010, Thenya 2007

²⁸ Section 45, Forests Act 2005

²⁹ Ongugo et al. 2007

calls by scholars and development agencies for increased community participation in forest management (PFM) to promote equitable and sustainable governance.³⁰

However, despite having this innovative legislation to promote community-based forest resource management in place, CFAs are unable to provide a significant contribution to efficient use, equitable allocation and sustainable forest management and livelihood improvement of the poor and marginalized people. This is due to their failure to take into account broader socio-economic and environmental issues. Major challenges include lack of defined structure and hierarchy at local, regional, and national levels; diversity of origins, cultures, languages, and aspirations bringing mistrust and suspicion among members; fair responsibility and benefit-sharing challenges; and lack of transparency among officials.³¹

The implementation of the Act has therefore not been smooth. Many issues remain unresolved, such as the transfer of power and resources between the traditional bureaucracy to community, and the sharing of costs and benefits between Kenya Forest Service (KFS) and communities. The benefits that accrue from conservation areas are not all obvious nor are they divided equitably among the different stakeholders. Communities based in areas adjacent to forest reserves have often had limited access, mainly restricted to forest products subsistence. This has occurred while other entities, often external to the community, have been able to generate substantial revenue from these reserves, especially by securing licenses for timber extraction.³²

The purpose of this study is to examine the role of CFAs and their impact on the management of forest resources at the local level. It seeks to understand the current challenges related to CFAs, the impacts of devolution introduced by the Constitution and how they can be reformed to result in efficient use, equitable allocation, and sustainable management of forest resources. The Constitution revolutionizes the entire system of governance by devolving authority to county governments and decreeing the need for citizen participation in decision making. We used a case study of Sururu forest which is part of the Mau forest complex.

³⁰ Danida 2007, Ribot 2006

³¹ Koech *et al*, 2009

³²ARPIP 2009

1.3. Research Questions

The study sought to understand how CFAs can result in efficient use, equitable allocation, and sustainable management of forest resources.

The study specifically answers the following questions:

- i. To what extent does the Constitution of Kenya 2010 and the Forests Act, 2005 devolve significant control over decision-making and benefit flows directly to communities?
- ii. How has the design and operationalization of CFAs affected community involvement in forest governance?
- iii. What is the impact of the establishment of CFAs on households' access to and income from forest resources?
- iv. Does local level heterogeneity (physical attributes of resource and both economic and social heterogeneity among CFAs) obstruct the evolution of productive and egalitarian institutional arrangements at the community level?
- v. What are the additional policy, legal and institutional options that can ensure equitable and efficient forest management outcomes among the poorest community members at the local level?

1.4. Objectives of the Study

The main objective of the study is to investigate CFAs, their determinants and their impacts on sustainable forest resource management. The specific objectives are:

- i. To analyze the extent to which the Constitution of Kenya 2010 and the Forests Act 2005 devolve significant control over decision-making and benefit flows directly to communities;
- ii. To examine the determinants of CFAs formation and analyze their impact on the effectiveness and sustainability of forests governance at the local level;

- iii. To assess the socio-economic impacts and livelihoods implications of community forest management on the community households;
- iv. To examine whether there is significant relationships between local level heterogeneity (physical attributes of forest resource and both economic and social heterogeneity) and CFAs.
- v. On the basis of the findings, to recommend policy, legal and institutional options for enhancing community participation on sustainable management of forests.

1.5. Justification of the Study

Forests enhance conservation of the environment, biodiversity, water, and soil resources while significantly contributing to the livelihoods of forest adjacent communities. Therefore, the livelihoods of the local people within the forest, their rights, interests, constraints, and relationships should be understood. This will constitute a basis of defining sustainable forest management policies and laws. The promotion of the participation and the involvement of local communities may improve their livelihood, reduce forest related conflicts and hence reduce poverty.

This study aims to extend the understanding of the Participatory Forest Management in Kenya under the Constitution and the Forests Act, 2005. The topic is relevant as the changes in the legal framework used in forest conservation interventions may affect the position of the local people in resource access and control, and the different social groups among them. As a result of the conservation interventions, the population affected by them may eventually become more included or excluded from the decision-making and the control of forests and related resources.

The study also comes at an appropriate time when the country is implementing the Constitution promulgated in August 2010. The Constitution brings significant change to the country's environmental governance, particularly the forests sector through devolution. Both the forests Act 2005 and Forests Policy 2007 are currently being revised in order to align them with the Constitution. The subsidiary legislation and the operating rules and regulations required to effectively implement the Act are also in the process of being developed.

The study therefore makes a useful contribution in demonstrating how legal reform can contribute to sustainable forest management and improved community livelihoods. The study is opportune due to ongoing policy and legal reforms because it provides policy and legislative recommendations to facilitate and promote efficient and equitable forest resource management regimes. All these will help to better inform policymakers about institutional support structures that would facilitate more equitable participatory forest management at the local level.

1.7. Thesis Structure

The thesis is sectioned into 5 chapters. Chapter 1 gives an introduction and presents the problem under study. Chapter 2 reviews the literature to develop the conceptual and theoretical response to the research questions and identifies the gaps in the literature that informed the study. It also examines Kenya's forest sector and the policy, legal and institutional environment. It examines in detail the extent to which the Forests Act 2005 provides for community participation in forest management. Lastly, it discusses the main theories and concepts applied in this study. Chapter 3 describes the study area, justification of the study area and the methods used in this research. Chapter 4 discusses the results of the study. Chapter 5 draws conclusions, and makes recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

This chapter comprises 3 sections. In the first section, we undertake an extensive review of literature to develop the conceptual and theoretical response to the research questions. In particular, the section examines the sustainability of community forestry, reviews academic literature, and explores the history of community forestry in Kenya. Based on the review, we establish the gaps in the literature that informed our study.

The second section reviews the policy, legal and institutional framework for forest management in Kenya. We provide a historical background of the legislative framework governing forest management in Kenya from the colonial period and critically assess the constitutional foundation for forest governance arguing that Kenya's constitution provides anchorage for sustainable management of forest resources. The establishment of a devolved system of government with division of roles between the national and county government and its implications for forest management is also discussed. An analysis is done of the forests policy and legal framework highlighting key provisions relevant to Participatory Forest Management (PFM) in Kenya. We also review the institutional framework that provides the enabling environment for the development in the sector.

In section 3 , we analyze the Forests Act, 2005 and the role of CFAs. The focus is on the legal provisions and mechanisms available for participatory forest management to guide the attitudes and choices of local communities towards sustainable forest management. In particular, we review forest classification, tenure and administration. This is important to highlight whether the Forests Act has mechanisms to guide implementation of sustainable forest management by local communities. This is instrumental because the state not only holds the largest proportion of forest tenure and user rights, but the state simultaneously exercises institutional policy making, planning and decision making roles over the forest sector.

2.2. Community Forestry in Kenya

2.2.1. *Historical Background of Community Forestry*

Historically, conservation strategies have been dominated by attempts to fence off or reserve areas for nature and exclude people from the reserved areas.³³ This protectionist model has been labeled the ‘fortress conservation’, ‘coercive conservation’ or ‘fence-fine’ and for a long time has dominated mainstream thinking in conservation. It involved the creation of protected areas (national parks, game reserves and national forest reserves), the exclusion of people as residents, prevention of consumptive use, and minimization of other forms of human impact. Broadly, this approach viewed development objectives of local communities as being in direct conflict with the objectives of conservation.

In recognition of the problems associated with the fortress approach, since the 1980s community forest, as a new discourse has arisen that stresses the need to incorporate the needs and aspirations of the local people in conservation.³⁴ Unlike fortress conservation that viewed people as a ‘threat’ to conservation, the community forestry approach views them as potential partners in conservation.³⁵ This approach has two distinct elements. First, it allows people adjacent to the protected area or others with property rights to participate in the conservation process and second, to link the objectives of conservation with the local development needs of the people.³⁶ This approach recognizes the moral implications of imposing costs on local people and the pragmatic problem of hostility of marginalized or disadvantaged local people to conservation organizations practicing fortress conservation strategy.³⁷

³³Adams and Hulme, 2001

³⁴Hutton and Leader-Williams 2003

³⁵Supra note 33

³⁶Supra note 34

³⁷Supra note 33

2.2.2. Sustainability of Community Forestry

The concept of resource co-management in general and forests in particular, that incorporates community participation has been around for decades and has changed in theory, practice, and terminology over the past years.³⁸ Community forest co-management has fallen under many titles, including community-based conservation,³⁹ community-based natural resource management,⁴⁰ community-based ecosystem management,⁴¹ social forestry,⁴² sustainable forest management,⁴³ collective forest management,⁴⁴ joint forest management,⁴⁵ community forestry,⁴⁶ and participatory forest management.⁴⁷ Different perspectives exist on how co-management should be implemented to ensure it is efficient, equitable, sustainable, and structured for both biophysical and socio-economic successes. It is the effective nature of co-management policies and laws that help separate it from traditional exclusionary, fortress conservation policies.

All the above terms are applied quite often in reference to the involvement of local communities in forestry activities. In particular, social forestry is identified when there is an institution or mechanism in which communities or community members are organized to manage forest resources.⁴⁸ Social forestry integrates synonymous terms such as communities, community members or local people and their participation in forestry activities. Community forestry too, directs its focus on the role played by the communities, and local people in forestry activities.

³⁸ Glasmeier and Farrigan, 2005

³⁹ Berkes, 2004

⁴⁰ McCall and Minang, 2005

⁴¹ Gray, et al. 2001

⁴² Riddle, et al., 1995

⁴³ Colfer, et al., 2001

⁴⁴ Bahuguna, Luthra, and Rathor, 1994

⁴⁵ Naik, 1997

⁴⁶ Charnley and Poe, 2007

⁴⁷ ASFMT, 2002

⁴⁸ Lestari, 2008

2.2.3. Nature and Function of Community Forestry

The Food and Agriculture Organization of the United Nations (FAO) adopts a broader conception of community forestry, as ‘any situation which intimately involves local people in a forestry activity’.⁴⁹ This FAO definition embraces a broad spectrum for community forestry activities to include woodlots and other forest products for local needs; growing trees at farm level; artisanal forestry activities that generate employment and wages; the livelihood activities of forest dwelling communities; and activities in public forests that enhance forestry activities at the community level for rural people.

Community forestry, in this sense, also aims to facilitate local communities to mitigate poverty by accessing additional food sources, fuel or financial gain. Alistair Sarre argues that this community forestry therefore aims to increase both the involvement and reward for local people.⁵⁰ This increment is achieved by seeking a balance between the interests of forest vitality, local community socio-economic interests, and increasing local responsibility and decision making in the management of a forest resource. The view is supported by the Convention on Biological Diversity Programme of Work on Forest Biodiversity, focusing on sustainable use of forest biodiversity which aims to enable indigenous and local communities to develop and implement adaptive community management systems to conserve and sustainably use forest biodiversity.⁵¹

While community forestry is often employed as justification and illustration of active roles for local people in forestry activities within and outside formally classified forests, there has been academic debate on its actual utility. Arguing in its favour, Alistair Sarre speaks of community forests as ‘increasing the involvement of local communities’ and ‘increasing their responsibility’ over the health and quality of the ecosystem. FAO broadens the parameters of community forestry as the involvement of local people in forestry activities, including tree growing outside formal forests, at farm level, and participation in public forests. Arguments in favour of community forestry therefore suggest that local communities will play individual and collective

⁴⁹ FAO, 1997

⁵⁰ Sarre, 1994

⁵¹ CBD Programmes of Work, 2004

roles in decision making, with responsibilities over forest vitality, integrated with pursuit of local social, economic and cultural objectives.

Antonio Contreras disagrees with the acceptability of community forestry in resolving sustainability and poverty challenges.⁵² While he agrees that such measures normally aim to empower local people, Contreras, points to the original objectives for initiating participation of local communities in forest activities, in the first instance, as being the ones that undermine its success.⁵³ In his view, people empowerment programmes are structural responses to the inability of the state to fulfil its contract with the people. Contreras notes that following the collapse of top-down, trickle-down development processes that favoured the state against communities there were attempts in the 1980's to revise development approaches. He argues that such revision can be viewed as part of hegemony maintenance whereby the state deliberately restructures power relations in order to maintain a position of moral leadership when faced with a political crisis marked by increased resentment' among the population. In the case of the onset of community forestry programmes that involve local communities, Contreras argues that the state tackled challenges to its forest tenure dominance by instituting reforms. These reforms, according to him, on the surface, purport to empower the poor and powerless but in reality serve to regain the consent of the governed' by reorienting them away from the cause of their discontent.⁵⁴

In spite of the contrasting view, the role of community forestry continues to be validated. Wily and Mbaya concede that community forestry is part of the community empowerment paradigm of development but they advance different justification.⁵⁵ They argue that it arose from recognition that governments lack the resources to carry out large scale enforcement of the coercive forest laws typical of the 'fortress conservation' model, and that governments require assistance to carry out forest management.⁵⁶ These coercive enforcement mechanisms have also faced resistance as top-down approaches incompatible with emerging principles of democratic governance.⁵⁷ Governments have also been under pressure to take measures addressing rural

⁵² Contreras, 2000

⁵³ *Ibid*

⁵⁴ *Ibid*

⁵⁵ Liz Wily and Sue Mbaya, 2001

⁵⁶ *Ibid*

⁵⁷ Supra note 8

poverty and food insecurity, which when coupled with fortress forest conservation and failed enforcement abilities, result in higher level of degradation as people engage in short-term, albeit illegal and destructive use of resources in desperate search for livelihood.

The 1992 UN Forest Principles further support the utility of community forestry in the furtherance of sustainable forest management, and tackling rural poverty. The statement calls on governments to promote and provide opportunities for the participation of interested parties, including local communities, indigenous people, individuals, forest dwellers and women, in the development, implementation and planning of national forest policies. The principles further urge that such forest policies should recognize and support the identity, culture and the rights of indigenous and local communities, and the role of women.⁵⁸ The policy measures should also promote conditions to enable these local communities to have an economic stake in forest use, perform economic activities, and achieve and maintain cultural identity, and social organization, as well as adequate levels of livelihood and well-being, through, inter alia, those land tenure arrangements which serve as incentives for the sustainable management of forests.

The concern with providing responsibilities and incentives to local communities to enhance sustainable forest management is a current issue with regard to protected state forests in Kenya. For example, the Mau forests National Task Force and the Interim secretariat responsible for rehabilitating the forest complex have separately addressed the role of local communities in sustainable management of these protected state forests. The Task Force, in its 2009 report, noted that communities living within five kilometres from the Mau complex forests (forest adjacent communities) depend on these protected forests for diverse basic needs such as water, firewood, pasture, or vegetables.⁵⁹ The report also noted that these socio-economic activities of local communities, such as firewood collection, overgrazing livestock, or illegal logging for timber and charcoal, have been associated with degradation of protected state forests.⁶⁰ To overcome these challenges, the 2009 Task Force report⁶¹ recommended that participatory forest

⁵⁸ *Ibid*

⁵⁹ RoK, Mau Task Force Report, 2009

⁶⁰ *Ibid*

⁶¹ Its proposals are echoed by a December 2010 briefing report of the Interim Secretariat

management should be fast-tracked to enhance the livelihoods of the communities. In particular, community forest associations should be supported to actively participate in forest management.

The April 2010 brief by the Interim Coordinating Secretariat on Mau forest restoration⁶² noted that these measures are intended to ensure that the forests play the role that they can and should play in creating and sustaining employment and alternative livelihoods in and around the forests. The common recommendation is therefore that people residing in areas adjacent to the protected forests should be involved in reforestation and afforestation activities. The government should also promote on-farm forestry to reduce the pressure and dependency on forest resources.⁶³ The Task Force report also recommended that forest adjacent communities should receive payments for environmental services provided by forests as a result of their (communities') role in forest conservation.⁶⁴

The imperatives favouring community forestry are therefore multiple. As explained by Wily and Mbaya,⁶⁵ there is evident inadequacy of the state as sole manager of public forests. The long duration the Kenyan state has held dominant forest tenure rights and decision making over forest management have resulted in higher levels of degradation and deforestation. There is a high level of poverty and population increase amongst communities inhabiting agricultural lands adjacent to forests, thereby resulting in illegal forest activities that are destructive. With community forestry, either within state forests or at farm-level, members of the local community obtain legal responsibilities to safeguard the environmental quality of the forests, and integrate this concern with their socio-economic and cultural objectives.

In this sense, community forestry has higher utility where law and policy seek the objective of sustainable forest management, whereby forests are enhanced to retain their health and vitality in order to regenerate; and to provide for the social and economic requirements of local communities.

⁶² Republic of Kenya. Rehabilitation of the Mau Forest Ecosystem: Executive Summary (Nairobi: Interim Coordinating Secretariat, Office of the Prime Minister, April 2010

155

⁶³ Supra note 12

⁶⁴ *Ibid*

⁶⁵ Supra note 8

2.2.4. History of Community Forestry in Kenya

The role and participation of local people in community forestry has been in place for a long time. Community forestry can be examined through communities that have historical claims to forest lands, and typically inhabit those forests. There are also those communities that inhabit agricultural or pastoralist lands adjacent to forests, and either legally or illegally, utilize the forest resources for socio-economic, cultural and environmental functions.

On a broader scale, scholars Harrison and Suh report on research findings that local groups living in the farthest corners of Asian countries have been practising community forestry for centuries.⁶⁶ They point towards China, India, Indonesia, Nepal, Philippines and Thailand where local people were managing their forests long before colonial times. Local history in Kenya places most, if not all communities, as having been actively involved in management of their local forest resources. In Central highlands where colonial government expropriated land for allocation to large scale farming by European settlers, the land use practices of the local Kikuyu community were depicted as being too destructive to allow them to stay next to the forest.⁶⁷ In spite of finding vast fertile farming and forest lands upon arrival, the colonial administrators accused indigenous farming of extensive destruction. For instance the Kikuyu shifting cultivation approach supposedly reduced large tracts of woodland, caused soil erosion, reduced rainfall and disturbed stream flow. In actual sense, the greater justification to exclude indigenous communities was to provide more land for white highlands (colonial agricultural settlements), and forest land for timber harvesting. The colonial government also had significant security concerns as forests provided cover for Mau Mau freedom fighters waging a guerrilla warfare campaign.⁶⁸

They were therefore determined to end the direct roles of communities in forest management. Subsequent land expropriation and later extensive land reform programmes resulted in parceling out of land, which was then registered as individual, privately owned, and mainly agricultural

⁶⁶ Steve Harrison & Suh Jung ho, 2004

⁶⁷ Castro, 1995

⁶⁸ *Ibid*

land. This is a situation replicated amongst other agricultural communities, and a lot of these people live adjacent to the now protected state or local authority forests.

2.2.5. Participatory Forest Management in Kenya

In Kenya, as in other developing countries such as India, Indonesia, and Nepal⁶⁹ forest community responsibility to co-manage environmental resources is institutionalized, albeit with varying results. Kenya's 2010 Constitution states "every person has a duty to cooperate with state organs and other persons to protect and conserve the environment and ensure ecologically sustainable development and the use of natural resources." The Forests Act, 2005 provides for participatory forest management as a form of community forestry by requiring a member of any forest community together with other persons resident in the same area, to register a Community Forest Association (CFA) as a Society.⁷⁰ This is to enable the CFA to obtain legal status before applying to the Director of the Kenya Forest Service (KFS) for permission to participate in the management of a forest.⁷¹

PFM is defined by the Kenya Forest Working Group (KFWG) as "a forest management approach, which deliberately involves the forest-adjacent communities and other stakeholders in management of forests within a framework that contributes to community's livelihoods".⁷² While the Forests Act provides for PFM, there are no parameters either explicit or implicit that account for decentralization of power to local communities. Yet the decentralization of power is necessary for co-management to be successful.⁷³ It can be assumed that the formation of CFAs by forest-adjacent communities is a large part of the necessary decentralization. CFA formation is a way for communities to become organized at the local level and financially self-sufficient that would provide adjacent communities the empowerment needed to participate in forest co-management. However, communities who organize into CFAs have not automatically provided a

⁶⁹ Chhatre & Agrawal, 2008; Ribot, Agrawal & Larson, 2006

⁷⁰ Section 46(1)

⁷¹ Section 46(2)

⁷² KFWG, 2009

⁷³ Ribot, Agrawal and Larson, 2006

consistent voice or role in PFM. Decisions on how the PFM process continues after initial formation and implementation are for CFAs largely out of reach.⁷⁴

2.2.6. Gaps in the Literature

Conservation areas are largely administered by government in developing countries including Kenya. Efforts are made to meet people's needs in conservation by involving them in decision-making, allowing them to share benefits of conservation, and providing them with measures to mitigate any adverse effects of conservation. However, in many cases people's perceptions of these efforts are rarely elicited, analyzed and included in decision-making processes through policy and legal frameworks.⁷⁵ It is widely acknowledged that communities living adjacent to protected areas are critical to the success of conservation efforts.⁷⁶ Local communities are thought to have the knowledge, information and incentive required to manage and conserve the resources on which they depend upon.⁷⁷

Previous studies have focused on proposals for a range of natural resources management tactics, such as appropriate development opportunities,⁷⁸ emphasizing local community involvement,⁷⁹ analyzing economic aspects of community involvement in sustainable forest management,⁸⁰ potential effects of decentralization reforms on the conditions of Kenya's forest resources,⁸¹ emerging values of forests Kenya,⁸² and community driven development,⁸³ improving governance in PFM,⁸⁴ impact of participatory forest management (PFM) on the wealth of households.⁸⁵ None of these studies has focused on the impact of community institutions (CFAs) on forest management and livelihood implications of forest adjacent dwellers.

⁷⁴ Ongugo, 2007

⁷⁵ Chase et al. 2004

⁷⁶ Agrawal & Gibson 1999, Ferraro 2002, Ostrom 1999, Robertson & Lawes 2005, Wiggins et al. 2004

⁷⁷ Johnson 2001, White & Martin 2002

⁷⁸ Abbot et al., 2001

⁷⁹ Western 1994; Getz et al., 1999

⁸⁰ Mogaka et al,2001

⁸¹ Ongugo, P.O and J.W. Njuguna, 2004

⁸² Mbuvi et al., 2007

⁸³ Kakuru & Kimani 2007, World Bank, 2009

⁸⁴ Ongugo et al, 2007

⁸⁵ Matiku et al., 2012

Scoones defines sustainable livelihoods to take the form of (i) improved well-being and capabilities resulting from reduced poverty due to increased household incomes and (ii) ensured livelihoods sustainability which results to enhanced household livelihoods adaptation, vulnerability and resilience due to natural resources base sustainability.⁸⁶ PFM is an arrangement where key stakeholders enter into mutually enforceable agreements that define their respective roles, responsibilities, governance, policy, institutional structures, benefits and authority in the management of defined forest resources.⁸⁷

This study aims to address the above gaps through assessing the impact of CFAs on sustainable forest management in Kenya and the livelihood implications on the adjacent communities. It seeks to understand the current challenges related to CFAs, and how they can be addressed through policy and legislative reforms to result in efficient use, equitable allocation, and sustainable management of forest. We argue that what makes social systems of common pool resource management (forests) successful is sustaining the resource and distributing its benefits to the community members that affect institutional durability and long-term management of the resources at the local level.

2.3. Policy, Legal and Institutional Framework for Forest Management in Kenya

2.3.1. Historical Developments on Forest Legislation in Kenya

Forest management in Kenya officially began when the country was declared a British Protectorate in 1895. Prior to 1895, the use of forest resources was controlled by a system of traditional rules enforced by a council of elders who ensured the sustainable use of communal forest resources through sanctions and fines. Characteristic of traditional systems of management were those pertaining to religious and cultural systems.⁸⁸ This is exemplified by the observed historical and indigenous people's conservation practices, some of which are still practiced to date. For instance, the *Mijikendas* of Kenya's coastal region clearly zoned the forests into areas open for utilization and those for preservation. The preserved zones, known as the *Kayas*, were

⁸⁶ Scoones , 1998

⁸⁷ Warah, 2008

⁸⁸ Ongugo and Mwangi, 1996, Luke and Robertson, 1993)

only open for cultural and religious rites. These sacred *Kayas* still exist to date and some are now gazetted and managed under the National Museums and Heritage Act Cap 216 by the National Museums of Kenya (NMK).⁸⁹

The first forest legislation in Kenya was passed in 1891, and dealt with protection of the Mangrove swamps of Vanga Bay before being extended to protect mangroves throughout the coast. In 1897, the Ukamba Woods and Forests Regulations were published and subsequently amended in 1900 and 1901. These regulations reserved trees within five miles around the court-house in Nairobi, and within two miles of the railway line, except on private land.

In 1902, the East Africa Forestry Regulations were published. These regulations amongst other things:⁹⁰

- Provided for the gazettment and de-gazettment of forest areas.
- Listed forest offences and provided for the arrest and punishment of offenders.
- Allowed for the “compounding of offences” whereby the Conservator could, by agreement with the offender, accept a sum of money in compensation for the offence, instead of taking the offender to court.
- Authorized the issue of licenses to permit any act otherwise forbidden by the Regulations.
- Permitted the utilization, free of charge, by bona fide travellers, of dead and fallen timber for fuel.⁹¹

The 1902 forest regulations were replaced with the Forest Ordinance, 1911. In 1915 and 1916, Ordinances dealing with the recruitment and terms of service of Forest Guards were published. The Forests Ordinance was revised in 1941. The new Ordinance was largely a revision and expansion of the 1911 Ordinance, but included new features in making provision for the creation of nature reserves within forest reserves and for Forest Guards’ terms of service to be controlled by rules under the forest ordinance instead of separate legislation. An important introduction was the provision of a Forestry Advisory Committee to advise the Governor on forestry matters.

⁸⁹ Section 2(d), The National Museums and Heritage Act Cap 216

⁹⁰ Logie, J.P. and Dyson, W.G. 1962

⁹¹ GOK, 2004

Amended Ordinances were passed in 1949 and 1954, which mainly made alterations to fit in with constitutional changes taking place in the Colony at the time. These changes transferred responsibility for forestry from the Governor, first to a member of the Legislative Council and, in 1954, to a Minister.

The Kenya Government had no formal forest policy until 1957 when White Paper No. 85 of 1957 was published. It stated the Government's Forest principles in ten headings as Reservation; Protection; Management; Industry; Finance; Employment; African Areas; Private Forests and other forests not Under State Ownership; Public amenity and Wildlife Research and Education. The first forest policy (1957) was restated in 1968 (Session Paper No. 1 of 1968). This policy was reviewed in accordance with the Kenya Forestry Master Plan recommendations of 1994, and a 2007 policy is in place.

In 1964, the Forests Ordinance was amended and adopted as the Forests Act 385, which provided for the establishment, control and regulation of central forests and forest areas in Nairobi and on unalienated government land under the Forestry Department. This Act has been repealed with the Forests Act 2005.

For many years, access to state forests was tightly controlled by forest guards who ensured continued forest health through exclusion, and only activities approved by the Forest Department were carried out. Under this arrangement, the local people and other stakeholders had 'no stake' in the management of these forest estates, this is because the existing Forests Act (Cap 385 of the Laws of Kenya) and the 1968 Forest Policy did not recognize stakeholders' participation in management of state forests as a viable option. Despite this shortcoming, Kenya's forests were highly rated in the 1970s and 1980s. It is because of this that Kenya's first policy was branded as a model for many developing economies that lacked such a policy and even an orderly and credible forestry service. Kenya ranked highly alongside countries such as Chile in plantation development.⁹² Most problems currently facing the forest sector started in 1990s and 2000s when many of Kenya's forests were plundered and mismanaged. The total area of closed forests, for example in 1962, was 6,500 square miles (1,683,500 ha), excluding internal grasslands,

⁹² Mugo *et al*, 2010

representing 2.7% of the total land area.⁹³ Estimates based on remote sensing indicate that Kenya's closed forest cover stood at a critical 1.7% in 2001.⁹⁴ The current problems facing the forestry sector are therefore partly due to historical load and general poor governance which are not only forest sector problems.

2.3.2. The Constitution of Kenya 2010

The Constitution of Kenya 2010 was promulgated on 27 August 2010 after being adopted by 67% of voters at a referendum held on 4th August 2010. This document contains eighteen chapters and six Schedules, where the chapters elaborate on the following: sovereignty of the people and supremacy of the constitution; the republic; citizenship; the bill of rights; land and environment; leadership and integrity; representation of the people; the legislature; the executive; judiciary; devolved government; public finance; the public service; national security; commissions and independent offices; amendment of this constitution; general provisions; and transitional and consequential provisions. The six Schedules present information on the counties, national symbols, national oaths and affirmations, distribution of functions between national and county governments, legislation to be enacted by Parliament, and transitional and consequential provisions. Environmental provisions are included in Chapter Four, under 'Rights and Fundamental Freedoms', Chapter Five, under 'Environment and Natural Resources', and Chapter Ten, under 'Judicial Authority and Legal System'. The Fourth Schedule also includes environmental provisions under 'Distribution of functions between National and County Governments' and the Fifth Schedule titled 'Legislation to be enacted by Parliament'.

i. Environmental Rights

The Constitution guarantees socio-economic rights⁹⁵ and an enforceable fundamental right to a clean and healthy environment.⁹⁶ It states that every person has the right to a clean and healthy environment which includes the right to have the environment protected for the benefit of present

⁹³ KFWG 2005

⁹⁴ UNEP, 2001

⁹⁵ Article 43

⁹⁶ Article 42

and future generations through legislative and other measures, particularly those contemplated in Article 69 and also to have obligations relating to the environment fulfilled under Article 70. In enforcing environmental rights, the Constitution provides that one may apply to court for redress if the right to a clean and healthy environment under Article 42 has been, is being or is likely to be denied, violated, infringed or threatened.⁹⁷ It thus gives every Kenyan access to a court of law to seek redress in environmental matters.⁹⁸ Even the stringent legal requirement as to *locus standi* which had hitherto been a major setback in seeking environmental justice has been done away with by providing that an applicant does not have to demonstrate that any person has incurred loss or suffered injury.⁹⁹

The right to a clean and healthy environment was merely implied in the previous (1964) constitution under the ‘right to life’¹⁰⁰ since the Constitution did not contain explicit environmental provisions.¹⁰¹ The improvement made in the 2010 Kenyan Constitution is first and foremost, the statement that a clean and healthy environment is everyone’s right, as well as further elaboration on what exactly is meant when conferring this right. The right to a clean and healthy environment was previously acknowledged in the Environmental Management and Coordination Act of 1999 (EMCA). However, the elevation of this right to constitutional status has only been achieved in the 2010 Kenyan Constitution.

ii. Forest Governance under the Constitution

The Constitution has far reaching implications for forest governance in the country. Foremost, it proclaims that the people of Kenya are respectful of the environment as our heritage and are determined to sustain it for the benefit of future generations.¹⁰² Article 10 of the Constitution lists the various values and principles of national governance to include amongst others: sharing and

⁹⁷ Article 70 (1)

⁹⁸ Article 70 (1)

⁹⁹ Article 70 (3)

¹⁰⁰ Article 71 of the 1964 Constitution

¹⁰¹ P. Kameri-Mbote, *Towards Greater Access to Justice in Environmental Disputes in Kenya: Opportunities for Intervention* (Geneva: International Environmental Law Research Centre, Working Paper 2005-1, 2005); A. Mumma, *Constitutional Issues relating to Natural Resources* (Nairobi: Constitution of Kenya Review Commission, 2003)

¹⁰² See the Preamble to the Constitution of Kenya 2010

devolution of power; participation of the people; protection of the marginalized; and sustainable development. By placing sustainable development within the content of national values, the Constitution has made the drive towards environmental sustainability and particularly forest resources a constitutional and national imperative. On sovereignty, the Constitution accords all sovereign power exercised at the national and county levels, to the people of Kenya and provides that the Kenyan people may exercise their sovereign power either directly, or through their democratically elected representatives.¹⁰³ It underscores the fact that devolution of power and improved access to public goods and services is a core aspect of the supremacy of the Constitution and sovereignty of the people.¹⁰⁴

The Constitution specifies two sets of obligations in respect to the environment.¹⁰⁵ The first set spells out obligations that the Kenyan State must implement including ensuring sustainable exploitation, utilization, management and conservation of the environment and natural resources, and ensure the equitable sharing of the accruing benefits.¹⁰⁶ This provision acknowledges the role of the state in ensuring sustainable development as well as the importance of equitably sharing benefits derived from the environment. The state shall also work to achieve and maintain a tree cover of at least 10% of the land area¹⁰⁷ of Kenya and utilize the environment and natural resources for the benefit of the people of Kenya.¹⁰⁸ Further, the Constitution decrees the need for protection and enhancement of intellectual property in, and indigenous knowledge of, biodiversity and the genetic resources. It is expected that the State will work with its agencies such as KFS and the Ministry of Forestry and Wildlife (MFW) to protect genetic resources and biological diversity.

The second set of obligations spells out a duty for people, cooperating with others and the State organs, to protect and conserve the environment and ensure ecologically sustainable development and use of natural resources.¹⁰⁹

¹⁰³ Article 1 (2)

¹⁰⁴ Article 6

¹⁰⁵ Article 69

¹⁰⁶ Article 69(1)(a)

¹⁰⁷ Article 69(1)(b)

¹⁰⁸ Article 69(1)(h)

¹⁰⁹ Article 69(2)

iii. Agreements Relating to Natural Resources

The Constitution states that ‘any treaty or convention ratified by Kenya shall form part of the law of Kenya under this Constitution’.¹¹⁰ It further expounds on the agreements relating to natural resources in two parts. The first part states: A transaction is subject to ratification by Parliament if it – (a) Involves the grant of a right or concession by or on behalf of any person, including the national government, to another person for the exploitation of any natural resource of Kenya; and (b) Is entered into on or after the effective date. Kenya is party to various international environmental treaties such as the Convention on Biological Diversity (CBD), which are designed to protect various aspects of the environment, including biological diversity, natural resources, and combating desertification, among others. Article 71 of the constitution subjects the exploitation of natural resources to further scrutiny by Parliament, thereby increasing control on the use of natural resources in the country. The second part states: ‘Parliament shall enact legislation to give full effect to the provisions of this Part.’ The timeframe provided for this is five years.¹¹¹

iv. Forest Governance under Devolution

In conformity with the provision on devolution, the Constitution divides the territory of Kenya into 47 counties. The governments at national and county level are expected to work in a distinctly inter-dependent manner based on consultation and cooperation¹¹² while respecting the functional and institutional integrity of the other level of government. They are obligated to assist, support and consult and to liaise between each level of government in order to exchange information, coordinate policies, administration and enhance capacity.¹¹³ In mandatory terms, The Constitution requires both levels of government to cooperate in performance of functions and exercise of powers, including setting up joint committees, and authorities.¹¹⁴ The Intergovernmental Relations Act, 2012, recently enacted to give full effect to these articles of the Constitution, proposes to set out coordination forums and committees to bring together different

¹¹⁰ Article 2 (6)

¹¹¹ Fifth Schedule

¹¹² *Ibid*

¹¹³ Article 189 (1) (a, b &c)

¹¹⁴ Article 189(2)

county governments, as well as different administrative levels within a county, in order to enhance cooperation.¹¹⁵

Key sectors on natural resources and environmental conservation including forestry are to be managed by the county government.¹¹⁶ At the county level, the Constitution requires every county government to decentralize its functions, and the provision of its services to the extent that it is efficient and practicable to do so. This provision strengthens CFAs as an institution through which forest management functions could be decentralized at local level to ensure that local community needs are well addressed. However, it will be necessary to determine the specific responsibilities of the national and county governments, because each level of government exercises distinct authority over different categories of forests, and water resources. Illustratively, the constitution defines public land to include government forests, and water catchment areas (held by national government),¹¹⁷ as well as trust lands vested in County governments, now defined as community land¹¹⁸ which in some cases comprise local authority forests, under Forest Act, 2005.¹¹⁹ The national government will also exercise competence over national forest, and agriculture policy, while county governments undertake implementation, making them responsible for community and on-farm forests. Bearing in mind the importance attached to socio-economic and ecological roles of all types of forests, including the trees outside formal forests, this constitutional obligation bears upon the Kenyan state to pursue mechanisms for increasing total acreage of private and on-farm forests, including on land that is dominantly applied to other uses, such as agriculture.

v. *Public participation in Forest Management*

The Constitution expresses the importance of public participation¹²⁰ and the need to institutionalize it in all governance processes through access to decision making and access to

¹¹⁵ See Part II of the Act.

¹¹⁶ Fourth Schedule of the Constitution

¹¹⁷ Article 62(1)(g).

¹¹⁸ Article 63(2)(d)(iii).

¹¹⁹ Section 24

¹²⁰ Article 10 (1) (a)

public information.¹²¹ One of the key functions of the county governments¹²² is supposed to be ensuring and coordinating the participation of communities in governance at the local level and assisting them to develop the administrative capacity for the effective exercise of the functions and powers and participation in governance at the local level.¹²³ Such participation has to be planned for and institutionalized in the governance process. It must not be limited to sharing information with the county residents; rather there should be a focus on meaningful engagement of the citizenry. In so doing they are to be the mechanism for facilitating the betterment of livelihoods. County governance, and indeed all governance under the Constitution, is underpinned by accountability and effective engagement of citizens.

The Constitution provides for the need for public participation in the management, protection and conservation of the environment.¹²⁴ Notably, the Government of Kenya acknowledges the role of public participation in democratic governance and sustainable development.

vi. Legislation Relating to the Environment

Article 72 of the Constitution states that: ‘Parliament shall enact legislation to give full effect to the provisions of this Part.’ The timeframe provided for this is four years and it is presented in the Fifth Schedule.

Among the legislations that have been enacted include the Environment and Land Court Act Number 19 of 2011¹²⁵ as a superior court of record with both original and appellate jurisdiction to hear and determine matters relating to the environment and the use, occupation and title to land.¹²⁶ The Court will be guided by a number of principles including the principle of sustainable development, pre-cautionary principle, the principles of land policy¹²⁷ under, the principles of

¹²¹ Article 35

¹²² Article 174

¹²³ *Ibid*

¹²⁴ Article 69 (d)

¹²⁵ The Act was enacted pursuant to Article 162 (2) b of the Constitution of Kenya 2010

¹²⁶ Section 13(a)

¹²⁷ Article 60(1)

judicial authority;¹²⁸ the national values and principles of governance;¹²⁹ and the values and principles of public service¹³⁰.

Both the Forests Act 2005 and Forests Policy 2007 are currently being revised in order to align them with the Constitution. The subsidiary legislation and the operating rules and regulations required to effectively implement the Act are also in the process of being developed. These policies, laws and regulations should clearly show the rules for access and use rights for sharing of revenues between KFS and CFAs.

2.3.3. Forest Policy, 2007

A narrow and restrictive Forest Policy (1964) governed the forestry sector since independence. The Policy is contentious in the powers given to the Minister to de-gazette forest reserves without consultation. Community participation in the form of PFM is neither encouraged nor explicit. This Policy also remains restrictive in terms of new management approaches and strategies for partnership and expansion into new areas.

In recognition of the above policy challenges, Sessional Paper No.9 of 2007 on Forest Policy was adopted two years after the enactment of the Forests Act. This Policy seeks to address the threats to Kenya's forests by increasing the area under forest cover by 10%, an acceptable level by international standards and aims to enhance the contribution of the forest sector in the provision of economic, social and environmental goods and services. The principles underlining the policy include: traditional and cultural values; community participation; intra and intergenerational equity and; market value of forest products among others.

Three specific objectives that are related to CFAs include:

1. Contribution to poverty reduction, employment creation and improvement of community livelihoods through sustainable use, conservation and management of forests and trees
2. To contribute to sustainable land use through soil, water and biodiversity conservation and tree planting through sustainable management of forests and trees

¹²⁸ Article 159

¹²⁹ Article 10(2)

¹³⁰ Article 232(1)

3. To promote the participation of the private sector, communities and other stakeholders in forest management to conserve water catchment areas, create employment, reduce poverty and ensure the sustainability of forest management.

The policy accords priority to subsistence issues, especially those associated with domestic energy, shelter and fodder. It acknowledges that non-wood forest products are often the only source of nutrition for rural communities when food is scarce. Moreover, the policy undertakes to increase opportunities for women and youth in forest training, education, and forest management. It identifies the challenges of achieving sustainable forest management in light of population growth and poverty which give rise to illegal logging, illegal charcoal production, and encroachment for agriculture and settlement purposes.

The sessional paper espouses the need for participatory approaches to forest management. Accordingly, it requires the government to facilitate the formation of community forest associations to manage community forests,¹³¹ by bestowing to local people user rights over forest resources. Security of tenure is expected to encourage investment in better-farming practices, by individual farmers and collectives. Additionally, the policy aims to achieve sustainable management of natural and riverine forests within farmlands, through application of soil and water conservation technologies.¹³²

The key elements of the forest policy that include the involvement of CFAs include:

- Involvement of adjacent forest communities and other stakeholders in forest conservation and management
- Provision of appropriate incentives to promote sustainable use and management of forest resources

¹³¹PS 1.6.3

¹³²PS 1.2.5

2.3.4. Forests Act, 2005

The Forest Act, 2005, is the main statute governing forest management and conservation in Kenya. It replaced the Forest Act of 1942,¹³³ which was grossly ill-equipped to deal with the ever-increasing challenges in the forest sector. The Act provides for the establishment, development and sustainable management including conservation and rational utilization of forest resources for the socio-economic development of Kenya. It was enacted after the Environmental Management and Coordination Act (EMCA), 1999 which is a framework environmental law; the first legal instrument in Kenya that provides for an appropriate legal and institutional framework for the management of the environment.

i. Forest Administration under the Forests Act, 2005

There are three types of forest tenure in Kenya; Government gazetted forests, local authority forests and private forests. The Constitution categorizes three types of land: public, community and private land. It defines public land to include government forests, and water catchment areas (held by national government),¹³⁴ as well as trust lands vested in County governments, now defined as community land¹³⁵ which in some cases comprise local authority forests, under the Forests Act, 2005.¹³⁶

ii. Decentralization, Devolution and Public Participation in Forest Management

The Forests Act 2005 has improved the manner in which decisions are made in the forestry sector especially with regard to consultations. This is a complete departure from the previous situation where decisions were made by the Minister with no regard to the Forest Department, or by the Director of Forestry. The Act has decentralized forest management by creating Forest Conservation Committees (FCCs)¹³⁷ in the established 10 conservancies (under Heads of Conservancy) and 71 zones (under Zonal Managers), and by creating Community Forest

¹³³ Former Chapter 385, Laws of Kenya, now repealed.

¹³⁴ Article 62(1) (g)

¹³⁵ Article 63(2)(d)(iii).

¹³⁶ Section 24

¹³⁷ Section 13(4)

Associations (CFAs)¹³⁸ in the existing 150 forest stations country wide. The decentralization will enable KFS to concentrate on its regulatory functions. Further decentralization is envisaged after establishment of the County Governments.

The Forests Act provides for public consultation and broader community participation in the formulation of forest management plans. The Act requires KFS to consult with the local forest conservation committees in preparing and adopting management plans.¹³⁹ The Participatory Forest Management Guidelines of 2007 mandates KFS to create awareness about PFM within the main stakeholders from the forest area. These stakeholders may be formally organized into a group, company or association, but equally they may simply be forest adjacent households and individual farmers. The Guidelines also require KFS to conduct a socio-economic survey and participatory resource assessment in the proposed forest area, analyze the data and present the results to the stakeholders.

Under the third schedule, the Forests Act requires public consultation for all major forest decisions, and prescribes an elaborate procedure for the public to present various issues before decisions are made and published. Among others, public consultation is required for Joint Forest Management Agreements,¹⁴⁰ variation of boundaries of revocation of state or local authority forests among others. An important feature of the Act is its recognition of the potential contribution of sustainable forests to poverty reduction, and to the maintenance of vital environmental services. The Act provides for broad-based collaboration with forest communities, recognizing their traditional cultures and values. Furthermore, the Act takes a comprehensive approach to forest ecosystems management, employing Environmental Impact Assessments (EIA) and multi-year result-oriented forest management agreements.

The Act requires delineation of forest conservancy areas and creation of forest conservation committees¹⁴¹ and provides the functions of these committees, which include informing the

¹³⁸ Section 46(1)

¹³⁹ Section 35(5)

¹⁴⁰ Section 46

¹⁴¹Section 13(1) and 13(2)

Forest Board as well as taking into consideration the ideas, desires and opinions of local people on matters relating to conservation and use of resources within the conservancy area.¹⁴²

The Act mandates the Director of Forests with the approval of the Board, to enter into an agreement with any person for the joint management of any forest.¹⁴³ The Forest Board shall, before entering into an agreement, call for an independent inventory of a forest and other relevant data to enable it to determine the true value of such forest.¹⁴⁴ The Act allows a member of the forest community, together with other persons resident in the same area, to register a community forest association (CFA) under the Societies Act.¹⁴⁵ Furthermore, it provides that an association duly registered under section 46(1) may apply for permission to participate in conservation and management of forest under the jurisdiction of State or local authority.¹⁴⁶ The application shall contain the association's proposal relating to: (i) the use of forest resources; (ii) methods of conservation of biodiversity; and (iii) methods of monitoring and protecting wildlife and plant populations.¹⁴⁷

The Act stipulates that the management agreement may confer the association "use" rights such as: (i) collection of medicinal herbs; (ii) harvesting of timber or fuel wood for domestic use; (iii) harvesting of timber or fuel wood; (d) harvesting of grass or grazing; (iv) undertaking of agroforestry practices; (v) plantation establishment through non-resident cultivation; (vi) contracts to assist in carrying out specified silvicultural operations; and (vii) development of community wood and non-wood forest based industries.¹⁴⁸ An association may, with the approval of the Director of Forests, assign all its rights under a management agreement to a suitably qualified agent on mutually agreed terms.¹⁴⁹ The Act provides for setting charges and retention of income from forest resources at the local level¹⁵⁰ and further provides for the

¹⁴²Section 3(3)

¹⁴³Section 36(1)

¹⁴⁴Section 37(6)

¹⁴⁵Section 46(1)

¹⁴⁶Section 46(2)

¹⁴⁷Section 46(3) (e)

¹⁴⁸Section 47(2)

¹⁴⁹Section 48(1)

¹⁵⁰Section 13(3d) and 13(3e)

establishment of a Forest Management and Conservation Fund to support community-based forest projects.¹⁵¹

Evidently, the Forest Act of 2005 provides institutional and regulatory procedures necessary for reorienting forest management from a command-and-control strategy to a pro-community and stewardship-oriented strategy through:

- Identification and adoption of specific mechanisms for the implementation of stewardship policy mandates, including community participation through community forest associations, mechanisms for joint forest and concessions over state forests;
- Delegation of direct authority, and imposition of responsibilities on forest officials and individuals and entities operating within the forest sector;
- Empowering implementation, oversight and enforcement of stewardship contracts;
- Multi-year joint management agreements that allow different combinations of user rights or bundles; and
- Financial incentives through retention of income from forest resources at local level to finance community projects.

To strengthen the capacity of CFAs in their formation and in participatory forest management (PFM), a PFM plan manual, PFM guidelines, and CFAs formation and registration manual have been published by KFS. Charcoal rules, on-farm forestry rules and sustainable forest management rules have also been gazetted, and eucalyptus guidelines developed.

2.3.5. Institutional Framework for Forest Management in Kenya

A range of institutions and organizations are directly involved in forest management and conservation of forests in Kenya. The key ones are the Kenya Forest Service (KFS), Kenya Wildlife Service (KWS), Ministry of Forestry and Wildlife (MFW), the Kenya Forestry Research Institute (KEFRI), National Museums of Kenya (NMK), local authorities, Community Forest Associations (CFAs) and private entities. The majority of Kenya's forests are found in gazetted

¹⁵¹Section 18

areas. The management of Gazetted Forest Reserves is vested in the KFS. The Forests Act 2005 established the KFS as a semi-autonomous body, which has the overall responsibility for formulating policies regarding the management, conservation and utilization of all types of forest areas in the country. Its mission is to enhance conservation and sustainable management of forests and allied resources for environmental stability and socio-economic development. The core functions of KFS are to:

- Sustainably manage natural forests for social, economic and environmental benefits.
- Increase productivity of industrial forest plantations and enhance efficiency in wood utilization.
- Promote farm forestry and commercial tree farming.
- Promote efficient utilization and marketing of forest products.
- Promote sustainable management of forests in the drylands.
- Protect forestry resources and KFS property.
- Develop and maintain essential infrastructure for effective forest management and protection.
- Develop manpower for the forestry sector.
- Develop forestry resources for education, research and community development.
- Build capacity on formation and operationalization of conservation institutions.
- Collect all revenues and charges due to the Service in regard to forest resources, produce and services.

There are closed canopy forests gazetted as National Parks and National Reserves managed by the KWS. The KWS is a semiautonomous government organization responsible for the protection of the nation's wildlife under the Wildlife (Conservation and Management) Act 1985. The Ministry of Forestry and Wildlife provides policy guidance to both KFS and KWS. KEFRI's mission is to enhance the social and economic welfare of Kenyans through user-oriented research for sustainable development of forests and allied natural resources. KEFRI has five programme areas; Plantations; Natural Forests; Dryland Woodlands Forestry; Farm Forestry and Information Dissemination. National Museums of Kenya (NMK) is mandated under the National Museums Act (Cap. 216) to serve as a national repository for things of scientific, cultural, technological and human interest. NMK is responsible for the surveying and gazetting of forests

of cultural and biodiversity significance as national monuments, including Kayas in the Kenya Coast. In 1991, KWS and the then Forest Department (replaced by KFS) signed a Memorandum of Understanding (MoU) for management of important biodiversity forest areas. The NMK became part of the tripartite MoU when it was added to the KWS/FD MoU in 1996. This MoU has expired. There also exists a MoU between KEFRI and KFS. Within this partnership, policy and technical liaison between the two institutions is ensured. The Forest Conservation Committees (FCC) are established by the Act¹⁵² in respect of each conservancy area to assist in the conservation and management of forest conservancy areas. The core functions of FCCs include;

- inform the board on the ideas, desires and opinions of the people within the forest conservancy areas in all matters relating to the conservation and utilization of forests within such area;
- monitor the implementation of this Act and other forest regulations within the area; and
- review and recommend to the Board applications for licences and renewals; and regulate the management of forests in the relevant conservancy areas, including the setting of charges and retention of income.

The Forests Act 2005 provides for engagement of local communities in forest management through Forest Management Agreements (FMAs) signed between KFS and CFAs. Under this arrangement, local communities from a particular forest station form an association and register under the Societies Act (cap 108). The CFA then prepares and submits a forest management plan to KFS for approval before negotiation on FMA is initiated.

CFAs can also be given a concession by KFS to manage a particular forest block for a term agreed between the CFA and KFS. The concessions allow the CFA to manage and sustainably utilize the forests.

¹⁵² Section 13(4)

2.4. Role of CFAs under the Forests Act, 2005

According to the Forests Act (2005), a member of a forest community may together with other members or persons resident in the same area register a Community Forest Association (CFA) under the Societies Act.¹⁵³ The registered Association may apply to the Director of Kenya Forest Service (KFS) for permission to participate in the conservation and management of a state forest or a local authority forest.¹⁵⁴

2.4.1. Defining a Forest Community

The Forests Act, 2005 does not define a ‘community’, however it goes ahead to define a ‘Forest Community’ with two dimensions. In the first dimension, a forest community is defined as ‘a group of persons who have a traditional association with a forest for purposes of livelihood, culture or religion’.¹⁵⁵ In the second dimension, a forest community is defined as ‘a group of persons who are registered as an association or other organization engaged in forest conservation’.¹⁵⁶ The second legal dimension in definition of forest community can be interpreted as having a connection with forest adjacent communities for whom statutory legal associations based on similar community interest would facilitate participation in sustainable forest management.

In Kenya, with the history of land tenure reform and internal migration patterns, communities living adjacent to state forests may not necessarily share the traditional ethno-cultural homogeneity. Instead, they may share contemporary socio-economic, cultural and environmental interests. The Constitution of Kenya 2010, in reference to community land and forests, includes a community identified on the basis of similar interest. The second legal dimension in definition of forest community, highlighted above, can be interpreted as having a connection with this category of community. This category represents contemporary forest adjacent communities for whom statutory legal associations based on similar community of interest would facilitate participation in sustainable management of forests. Therefore in light of the constitutional

¹⁵³ Section 46 (1)

¹⁵⁴ Section 46 (2)

¹⁵⁵ Section 3

¹⁵⁶ *Ibid*

foundation, it is viable that these contemporary forest adjacent communities have a stronger legal basis to pursue stronger forest tenure rights, or even conversion of particular state forests into land managed or used by specific communities as community forests.¹⁵⁷

2.4.2. Forest Community Participation in Conservation and Management

The Forests Act provides for a member of any forest community together with other persons resident in the same area, to register a Community Forest Association (CFA) as a Society.¹⁵⁸ This is to enable the CFA to obtain legal status before applying to the Director of the Kenya Forest Service (KFS) for permission to participate in the management of a forest.¹⁵⁹ In addition to providing details of membership, the constitution and financial regulations, the Act requires that applications presented, explicitly details the proposed use of the forest, methods of biodiversity conservation, monitoring and protection of wildlife and plant population. The Association is also expected to present a management plan for approval. In so doing, the Act seeks to devolve management of forests to the community level and to allow the community to directly participate in protection, conservation and management of the forest, formulating and implementing programs consistent with its traditional user rights.¹⁶⁰ CFAs are supposed to assist KFS in enforcing the provisions of the Forests Act and any rules and regulations made pursuant thereto, among other functions. They are also required to update KFS of developments, changes and occurrences within the forest that are critical to its biodiversity conservation.

The Forest rules set out details on the implementation process. They provide that KFS may facilitate the formation of a CFA based on existing community structures.¹⁶¹ This is an important provision, considering that local communities may lack the capacity to register CFAs. The contribution of KFS would therefore be instrumental. The 2009 Manual on forming and registering CFAs,¹⁶² and the 2007 Participatory Forest Management (PFM) Guidelines¹⁶³ suggest

¹⁵⁷ Constitution of Kenya, 2010 article 63(2) (d) (i)

¹⁵⁸ Section 46(1)

¹⁵⁹ Section 46(2)

¹⁶⁰ Section 46(3)

¹⁶¹ Rule 45(2) of The Forests (Participation in Sustainable Forest Management) Rules, 2007

¹⁶² See, Kenya Forest Service Manual on forming and registering CFAs

¹⁶³ Participatory Forest Management Guidelines, 2007

that an external facilitator or a local community leader may initiate the process.¹⁶⁴ However, it is not clear on whom the external facilitator would be, they could possibly represent the KFS, a Non-Governmental Organization (NGO) or donor agency.

Furthermore, the Forest Rules make reference to a CFA based on existing community structures.¹⁶⁵ This contrasts with the Forests Act¹⁶⁶ which requires that the Associations be registered under the Societies Act, Cap 108. The Societies Act imposes its own complex registration procedures requiring every society to apply for registration within 28 days of formation in the manner prescribed in the Societies rules. Notably, prior to making an application for registration, a society must draft, and adopt a constitution which they should attach to the application. The Societies Act specifies 16 matters that must be included in a Constitution.¹⁶⁷ The process of registering Societies is administered by the Registrar of Societies¹⁶⁸, a statutory office that is administratively under the Office of the Attorney General. This means that power and functions of registration and regulation of CFAs, in their character as societies, are vested in another sectoral ministry, but there are no legal mechanism put in place to reconcile the procedure.

The Forest Act and the Forest rules are unclear on how to reconcile existing community structures with registration under statutory provisions. The PFM guidelines suggest that a facilitator should identify existing community structures (formal or informal) that can be transformed to form a CFA.¹⁶⁹ Presumably, such structures may also include present day methods of community mobilization and organization, similar to how people for instance elect the local dispensary committee or school committee. If that is not possible, the forest community should proceed to form a new CFA, for registration under the Societies Act.

Moreover, there is a challenge of institutional overlaps at the local community level. The Forests Act 2005 provides for formation of CFAs at forest station level. Under the Water Act 2002,

¹⁶⁴ Rule 45(3) of the Forest Rules

¹⁶⁵ Rule 45(2)

¹⁶⁶ Section 46, Forests Act 2005

¹⁶⁷ Section 9 of the Society's Act, Cap 108

¹⁶⁸ Section 8 of the Society's Act, Cap 108

¹⁶⁹ Participatory Forest management Guidelines, 2007

water catchment committees are formed to manage catchment areas gazetted under the Act. Water Resource Users Associations (WRUAs) are also being formed at local level. Almost all the water catchment areas are gazetted forest reserves and therefore the area under which WRUAs and CFAs operate overlap. The double gazettement of forests as forest reserves (under the Forests Act) and national reserves (under the Wildlife Act) leaves room for manoeuvres when dealing with the two laws. For example, the Wildlife Conservation and Management Act prohibits extractive uses of forests, which the Forests Act permits under section 46 (2). In law, an offender can only be charged using one law. There are certain policies and legislations (e.g. the Agriculture Act) that tend to focus on economic development and will allow clearance of natural habitats to attain their goals without consideration of environmental issues. This has resulted in clearance of prime forests for establishment of tourism facilities, roads and agricultural project.

The Societies Act requires all societies to comply with its provisions including the adoption of a constitution,¹⁷⁰ and filing periodic returns to the Registrar.¹⁷¹ The Registrar also has powers and discretion to require mandatory changes to the constitution of a society,¹⁷² and to declare a society as illegal or prohibited.¹⁷³ The registration of CFAs under the Societies Act therefore presents multiple challenges.

First, the process is not simple, particularly drafting a constitution with a list of very specific provisions. These provisions are standard, as the general category of societies includes church organizations, and until recently political parties.¹⁷⁴ The community may therefore need legal expertise, if there is no facilitator or such facilitator lacks the legal knowledge required to prepare a proper constitution. This becomes an additional expense to the community. More importantly, since CFAs are involved in sustainable forest management and utilization, it would serve them better if the mandatory requirements addressed closely linked issues. Even though section 46 requires the forest community to submit their proposals on forest conservation, it is

¹⁷⁰ Section 19(1)

¹⁷¹ Section 30

¹⁷² Section 19(2)

¹⁷³ Section 4(1)

¹⁷⁴ Section 2 of the Societies Act defines a society to include any club, company, partnership or other association of ten or more persons, whatever its nature or object, established in Kenya or having its headquarters or chief place of business in Kenya.

not specifically required that the constitution of the CFA, registered under Societies Act, should reflect sustainable forest management as a primary objective.

Second, the administrative role of regulating these associations, as societies, principally falls under the Registrar of Societies to whom they must submit returns, or notify on elections. The requirement for these associations to additionally report to, register with, and comply with directions from KFS raises the operational costs for communities. CFAs carry a double load of complying with two statutes. It would be viable for amendments to be made to the Societies Act, to authorize the Director of KFS to receive annual returns, or monitor regular elections, youth and gender equity, and compliance with the objectives of sustainable forest management. This would consolidate the oversight role to be played by KFS.

The reference to existing community structures in the Forest Rules is not clear. This would have had a better effect if the Forests Act provided for a generic form of association for registration, and KFS as the administrator and regulator. However such a stipulation has to distinguish that existing community structures are not necessarily the traditional or cultural based mechanisms.

Once a CFA is registered, its application to the Director of KFS should include: a list of the members of the association; a constitution; financial regulations; the forest area in which the association proposes to undertake conservation and management; proposals on use of forest resources, biodiversity conservation methods, and methods to monitor and protect wildlife and plant populations.¹⁷⁵ In the event there is no management plan prepared for the area in question, or if the association proposes a new one, a draft management plan will be included in the application submitted to the forest service.

2.4.3. Concept of the Shamba System in relation to Community Forest Management

The word *shamba* is a Swahili word which means garden in English language. The *shamba* system, first introduced in Kenya in 1910, is a method of forest plantation establishment in which resident forest workers were allocated deforested areas to plant food crops for 2-3 years

¹⁷⁵ Section 42(3), Forests Act

within which period the canopy closes up and the seedlings become established.¹⁷⁶ The produce from the *shamba* was considered part of workers emolument as they tended the young trees. The system was revised in 1975 when resident workers were permanently employed by the Forest Department (FD), and were required to rent *shambas*. The system was suspended by a Presidential decree in 1987¹⁷⁷ and reintroduced in 1994 as Non-Resident Cultivation (NRC)¹⁷⁸ with the non-residential component being an attempt to reduce the risk of cultivators claiming squatter rights on forest land.¹⁷⁹

Strong influence of politicians and administrators from the Forest Department and the District Development Committees (DDC) overshadowed the management, leading to large areas being cleared for cultivation with little meaningful replanting of trees.¹⁸⁰ In 2000, the FD reissued NRC management guidelines and established an inter-institutional task force with representation from the FD, Kenya Forestry Research Institute (KEFRI) and Kenya Wildlife Society (KWS) to review the implementation of the NRC. Following the recommendations of the task force, the NRC was banned in October 2004.

The legal concept of the *shamba* system is anchored in the Forests Act, 2005. The Act provides that a member of forest community may, together with other members or persons resident in the same area, register a CFA and apply to the Director of KFS for permission to participate in the conservation and management of a state forest.¹⁸¹ The Forests (Participation in Sustainable Forest Management) Rules 2009¹⁸² guide the implementation of the above provision. The Rules classify community participation into two forms. The first form involves community forest management agreements whereby a local community is authorized to participate in forest conservation and management, based on user rights assigned by KFS¹⁸³. The second form

¹⁷⁶ Kagombe and Gitonga, 2005

¹⁷⁷ Oduol, 1986

¹⁷⁸ Supra, note 158

¹⁷⁹ Obare and Wangwe, 2010

¹⁸⁰ Supra, note 158

¹⁸¹ Section 46

¹⁸² Legal Notice No. 165 (6 November 2009)

¹⁸³ Rule 43

involves the issuance of permits to CFAs, allowing its members to engage in non-residential cultivation of forest plantations, as they tend and grow tree seedlings¹⁸⁴.

2.4.4. Requirements for CFAs Participation in Forest Management

There is contradiction between the Forests Act and the Forest Rules regarding how participation of a CFA in sustainable forest management should commence. The Act anticipates a situation where registered CFAs may apply to the Director for permission to participate in conservation and management of a state forest.¹⁸⁵ On the contrary, the Forest Rules appear to reserve the authority to, and empower KFS whenever circumstances make it necessary or appropriate to do so, to invite CFAs to participate in the sustainable management of state forests.

The Forest Rules therefore attempt to reverse the letter and spirit of the Act that grants a legal basis for any forest community to proactively apply for registration of its CFA. This contradiction can be problematic because even though the Forest Act was enacted in 2005, the *shamba* system is relatively still in the infancy stages of implementation. This implies that the current version of the *shamba* system is very much in a transitional phase from the 1942 law that generally excluded local communities from state forests. A process of legal and policy transition and reform, such as the current one, is therefore always difficult because of the entrenched power of the status quo¹⁸⁶ based on the culture of the previously exclusionary forest regulatory framework.

Since the Forest Rules have been enacted as guidelines, they are most likely to be the operational guide available to most frontline forest officers dealing with these situations. The wording of the Rules gives KFS an upper hand in determining which local communities will engage in state forest management and utilization. If the Rules are followed as written, communities could be locked out by KFS, for instance, declining to extend invitations for anyone to participate in forest management. If the substantive statute is followed instead, any CFA that applied for community participation and was denied permission can declare a dispute and, as provided for by the Forests

¹⁸⁴ Rule 50

¹⁸⁵ Section 46, Forests Act

¹⁸⁶ Charles *et al* 1997

Act¹⁸⁷, appeal to the National Environment Tribunal (NET) to make a final determination. The NET is established under the framework environmental law, EMCA.¹⁸⁸ The decisions from this Tribunal have a final appeal at the High Court,¹⁸⁹ which provides an additional avenue for communities to access environmental justice for objective determination, and review of administrative decisions by forest officials.

2.4.5. Community Forest Management Plans

When submitting an application to participate in sustainable forest management, a CFA is required to include a draft management plan. This is permissible if there is no forest management plan for the area, or when the CFA proposes a new plan.¹⁹⁰ The legal concept of a management plan under the Forests Act¹⁹¹ requires KFS to prepare a management plan with respect to each state forest. Section 3 of the Act defines a management plan as a systematic programme showing all activities to be undertaken in a forest or part thereof during a period of at least five years, and includes conservation, utilization, silvicultural operations and infrastructural developments. ‘ This definition and requirement of a management plan reveals an attempt to give effect to the objectives of sustainable forest management by integrating forest conservation with socio-economic activities. However even though the state forest management plans are intended to guide human decisions to sustainable forest practices, the statutory definition of management plans does not overtly refer to the objective of sustainability, or an explicit obligation or responsibility to safeguard forest health or vitality.

The Forests Act requires CFAs to protect, conserve and manage a state forest pursuant to an approved management agreement and the provisions of the management plan for the forests.¹⁹² The reference to management plan here suggests those plans made for state forests by KFS under section 35. However, the Forest Rules introduce the term community forest management plans¹⁹³

¹⁸⁷Section 63(2)

¹⁸⁸Section 125

¹⁸⁹Section 130

¹⁹⁰Section 46(4)

¹⁹¹Section 35

¹⁹²Section 47

¹⁹³Rule 44

which are prepared by the CFA in partnership with KFS to govern implementation of a community forest management agreement.¹⁹⁴

The basis for this community forest management plans is derived from the fact that under the Forest Rules, each CFA can only be allowed authority over a management unit which ideally a forest area under one forest station,¹⁹⁵ several of which could be found in one state forest. A community forest management plan can therefore only be prepared with respect to the specific forest management unit allocated to a particular CFA.¹⁹⁶ This implies that several community forest management plans would be prepared over several sections/units of a state forest under management of different CFAs. This further suggests that community forest management plans are site-specific and therefore subordinate to the overall management plans that are strategic for the entire state forest.

It can therefore be interpreted that the Act¹⁹⁷ refers to these site-specific community forest management plans, which CFAs are required to adhere to, in their function to protect, conserve and manage the forest. The legal interpretation that is necessary in order to obtain congruence between the Forest Act and the Forest Rules, on the sustainability object of management plans, is however a fairly difficult exercise. The nature, scope and sustainability objectives of community forest management plans should be apparent from a basic reading of the statute and rules. This is because these plans represent the operational guide for local communities on how their collective or individual actions and decisions can integrate forest vitality with socio-economic and cultural values.

¹⁹⁴Rule 2

¹⁹⁵Rule 44

¹⁹⁶Rule 44(2)

¹⁹⁷Section 47

2.4.6. Community Forest Management Agreements

Community forest management agreements are one of two legal mechanisms through which a forest community may apply to participate in the *shamba* system. An agreement in this sense entitles the community, through a CFA,¹⁹⁸ to conserve and utilize a forest for purposes of livelihood, cultural or religious practices. Before concluding the forest management agreement with the Forest Service, a CFA is required to collaborate with KFS to prepare a community forest management plan, which will be adopted by both parties to guide the implementation of the agreement.¹⁹⁹

The *shamba* system is only practiced in state forests, and this highlights the issue of forest property and tenure rights, which are typically important to the legal decision making ability over forestry activities. State forests fall under the public tenure category, which pursuant to section 21 of the Forests Act are vested in the government. They are under the administrative authority of the Kenya Forest Service. According to the Forest Rules, any state forest that is subject of a community forest management agreement with a CFA remains the property of the Kenyan state.²⁰⁰

The forest tenure rights obtained by CFAs can therefore only be limited rights, as assignees of the state under a permit.²⁰¹ Section 46(2) of the Forests Act highlights this, providing that a registered CFA may apply to the Director for permission to participate in the conservation and management of a forest. The community forest management agreement embodies the permit‘ or permission‘ and at the determination of the Forest Service, sets out the exact user rights that the CFA is entitled to exercise over the duration of its permit. The decision making capability of the forest community with regard to forest activities is therefore predicated on the scope of the user rights allocated to the particular CFA, and any other statutory limitations.

¹⁹⁸ Rule 43

¹⁹⁹ Rule 45(2(a))

²⁰⁰ Rule 68

²⁰¹ It is important to note that a CFA may only assign any rights obtained under a management agreement only with the written consent of KFS.

Neither the Forest Act nor the Forest Rules set out a specific duration for the permission but Rule 43(2) indicates that the community forest agreement shall be in the form and content of the model agreement set out in the schedule to the Forest Rules. Clause 4 of the model agreement is also not explicit on the actual duration. In the interim period, as the capacity of communities to sustainable management forests is evolving, it may safeguard long-forest health to set out definitively shorter durations for the agreements, to allow for review of progress. However, in the longer term, with communities investing time, skills and resources in sustainable forest management, it will be necessary for the agreements to last longer, possibly over a decade. Illustratively, if a community obtains tenure rights over a portion of degraded indigenous forest, it may take decades for those trees to mature hence justifying longer term agreements.

2.4.7. Monitoring and Enforcement of the Management Agreements

The Act requires CFAs to assist KFS in enforcing the provisions of the Forests Act, any rules and regulations in particular in relation to illegal harvesting of forest produce.²⁰² This implies that the responsibility to enforce the law is vested both on the CFA collectively and on the individual members. However, neither the Act nor the Rules offer any proposal how this enforcement role maybe performed. It is unclear whether the enforcement is against members of the CFA, or the general public. Enforcement against the public, who are not affected by any disciplinary provisions that may be contained in the constitution of a particular CFA, would require extensive collaboration with forest officers.

However, for state forests generally, KFS is mandated to monitor compliance with the law, and enforce any provisions of the Forests Act. The Forest rules specifically require KFS to monitor and evaluate the implementation of the community forest management plan. This may result in revisions or alterations to the management plan.²⁰³ If there is a breach of the agreement, it may also be subject to termination of the community roles in forest management.

²⁰² Section 47(1) (d)

²⁰³ Rule 48

2.4.8. Termination of the Management Agreement

The Forests Act empowers the Director of KFS to terminate a community forest management agreement, or withdraw a user right from a CFA if there is a breach of any of the conditions of the agreement. According to the model forest management agreement, one obligation for a CFA is to protect, conserve and manage the assigned forest based on the agreement, and the community management plan.²⁰⁴ Therefore, the failure to fulfill the responsibility to exercise forest conservation is a legal subject for termination of the agreement. KFS also has discretionary powers to terminate an agreement, where the Director considers such action as necessary for purposes of protecting and conserving biodiversity.²⁰⁵

KFS must give a notice of 30 days to a CFA when commencing termination or withdrawal of a user rights to show cause why the action should not be finalized. If a CFA is aggrieved with the decision at this point, it may appeal to the Board of KFS. One difficulty concerns a contradiction arising from the Forest rules, and the draft model agreement on community forestry management agreements. Clause 15 of the model agreement, which provides for termination of agreement, fails to expressly stipulate that the CFA has additional recourse to the Board for a final appeal, which the Forest Act clearly sets out.²⁰⁶ Instead, Clause 14 of the model agreement directs a different legal avenue, providing that: (a) when the forest service is dissatisfied, it should submit the dispute for arbitration in accordance with the Arbitration Act;²⁰⁷ and (b) In the case of the forest association being dissatisfied, it may in the first instance appeal to the Board. In this case, if the decision of the Board is not acceptable to both parties, the matter should be submitted for arbitration under the Arbitration Act.

If the procedure set out in the Act is applied, any CFA that is aggrieved with a decision by the Board of KFS can declare a dispute, and refer the same dispute for determination by the National Environment Tribunal (NET).²⁰⁸ NET has rules of procedure²⁰⁹ that have simplified the rules of

²⁰⁴ Clause 12

²⁰⁵ Section 49(1) (b)

²⁰⁶ Section 49

²⁰⁷ Arbitration Act, Laws of Kenya, Act No. 4 of 1995.

²⁰⁸ Section 63(2)

²⁰⁹ The Environmental Management (National Environmental Tribunal Procedure) Rules, 2003

evidence and technicalities, thereby making it possible for the public to represent themselves. It is therefore a good, affordable legal avenue to resolve any disputes by CFAs. It is a violation of the Forests Act to introduce the provisions of the Arbitration Act through the Forest rules.

To demonstrate the role of NET in dispute resolution is the dispute that arose between KFS, NEMA and CFAs, which was filed before the NET. The *National Alliance of Community Forest Associations (NACOFA)*²¹⁰ v. *NEMA & Kenya Forest Service*²¹¹ filed an appeal at the tribunal on 19th November 2010. The appeal arose after KFS was served with a notice by NEMA under section 12 of EMCA, which empowers NEMA to issue instructions to any lead agency to perform a function that the lead agency is required by law to perform, but which in NEMA's view the agency has not performed. In this case, NEMA instructed KFS to secure state forests and stop further degradation and illegal human activities.

Prior to the instruction from NEMA, KFS had allowed forest adjacent communities to exercise user rights for grazing and pay a monthly fee. However, at the end of the month in October 2010, when community members went to make payments, KFS informed them that the user rights would not be renewed for another month. There was no notice given, even the 30 days required by the Forests Act.²¹² When the matter came up for hearing, the tribunal was informed that NEMA did not specifically require KFS to terminate grazing rights. Further, the Forest Service argued they did not have to give notice to the communities, because while community forest management agreements had been prepared, only one out of sixteen had been signed.²¹³

This implied that the agreements were not enforceable *inter partes*, as between the communities and KFS. The tribunal declined to order KFS to allow communities to resume grazing, but asked it to issue a notice confirming whether the step was permanent or temporary. It is noteworthy that the tribunal highlighted with concern the fact that KFS did not take preparation and signing

²¹⁰NACOFA is a community alliance registered as a society, to act as a focal point for all Community Forest associations (CFAs) in Kenya

²¹¹NACOFA v. NEMA & KFS (Tribunal Appeal No. NET 62 of 2010). (NET, —Community forest associations judgment)

²¹²Ibid

²¹³Ibid

of community forest management plans seriously, and noted that there is potential for forest adjacent communities to contribute meaningfully to forest management efforts.²¹⁴

2.4.9. Non-residential Cultivation Permits

Non-residential cultivation permits are the second legal avenue through which community forestry, for forest-adjacent communities, has been given effect under the Forest Act. This aspect of the shamba system is similar in format to the failed pre-2005 shamba system, as they are both adopted from the Taungya system, which was first developed in Myanmar.²¹⁵

According to the Forest rules, non-resident cultivation is restricted to areas of state forests intended for the establishment of industrial plantations²¹⁶ presumably those that have either not been replanted, or have been degraded. KFS is required to identify and zone off the earmarked forest areas that qualify for cultivation. These forest areas are then demarcated into individual plots with a minimum of a quarter hectare with a maximum determined on a case by case basis. KFS must then prepare a sketch map of all the plots, which will be prominently displayed at the local forest station.²¹⁷

In a bid to ensure transparency in the process, allocation of plots by KFS is to be done using a balloting system organized through the forest associations, after which the selected persons will be issued with written permits. By law, the chosen method of allocation must give preference to the poor and vulnerable members of the community.²¹⁸

There is an express provision prohibiting the allocation of plots for cultivation in certain forest areas. This include areas within important water catchment or sources of springs; on slopes exceeding thirty percent gradient; within 30 metres on either side of a river course or wetland, spring or other water source; or in firebreaks, road reserves, natural glades, natural forest areas and areas under mature plantations.

²¹⁴ *Ibid*

²¹⁵ Taungya or agroforestry is a system where forestry practices are combined with agriculture.

²¹⁶ Rule 50

²¹⁷ Rule 51

²¹⁸ Rule 46

While the issuance of non-resident cultivation permits has been restricted to degraded industrial plantations, Kenya is a country that has a very low combined forest tree canopy cover averaging 1.7%.²¹⁹ According to the National Task Force investigating degradation of the ecologically important Mau forests complex, afforestation and rehabilitation of the degraded indigenous forest areas is an urgent task.²²⁰ The Task Force focused significantly on the roles and participation of previously excluded forest adjacent communities, noting that the actions of these communities contributed to the degradation to a large extent. In this particular case, the 2009 taskforce report recommended that people residing in areas adjacent to the Mau forests complex should be involved in reforestation and afforestation.²²¹

With the constitutional mandate to increase and maintain the national forest tree cover to at least 10% of the total land area,²²² the non-resident cultivation permit system can be adopted for communities to practice agroforestry with indigenous trees. This will assist KFS to rehabilitate, reforest and afforest other state forests in Kenya that are administratively classified as forests, but do not have tree cover or biodiversity. It will also enhance the role of community forestry, and its utility to the realization of sustainable forest management.

2.4.10. Land Tenure and Forest Governance

Land tenure has impacts on land use as well as the management of forest resources. Kenya's Constitution categorizes land as private, public and communal. Depending on the tenure, users of such land have various rights of use, abuse and disposal. The type of tenure adopted has great effect on land use, as it determines the degree of security of tenure to the persons holding the land, the scope of authority one may exercise to sustain and improve the environment and the flexibility of the system to local community activities and promote equitable sharing of benefits. Tenure also defines the methods by which individuals or groups acquire, hold, transfer or transmit property rights in land.

²¹⁹ Mau Task Force Report, 2009

²²⁰ *Ibid*

²²¹ *Supra*, Note 186

²²² Article 69 (1) (b)

There are three main tenure regimes in Kenya:

i. Community Tenure

The constitution vests community land in communities identified on the basis of ethnicity, culture or similar community of interest.²²³ It provides that any unregistered community land be held in trust by county governments on behalf of the communities for which it is held. Community land comprises: land lawfully registered in the name of group representatives under the provisions of any law; land lawfully transferred to a specific community by any process of law; any other land declared to be community land by an Act of Parliament; land that is lawfully held, managed or used by specific communities as community forests, grazing areas or shrines; ancestral lands and lands traditionally occupied by hunter-gatherer communities; and land that is lawfully held as trust land by the county governments.²²⁴ The constitution also predicates any disposition or use of community land on legislation specifying the nature and extent of the rights of members of each community individually and collectively.²²⁵

The National Land Policy (NLP) designates all land in Kenya as public land, community land and private land. The policy defines community land as “land lawfully held, managed and used by a specific community as shall be defined in the Land Act”. Community is defined as a clearly defined group of users of land, which may, but need not be, a clan or ethnic community. These groups of users hold a set of clearly defined rights and obligations over land and land-based resources.²²⁶ In the National Land Commission Act, community is a clearly defined group of users of land identified on the basis of ethnicity, culture or similar community of interest as provided under Article 63(1) of the Constitution²²⁷, which holds a set of clearly defined rights and obligations over land and land-based resources. The NLP particularly identifies subsistence farmers, pastoralists, hunters and gatherers as vulnerable groups who require facilitation in

²²³ Article 63 (1)

²²⁴ Article 63 (2)

²²⁵ Article 63 (4)

²²⁶ National Land Policy of Kenya, 2009

²²⁷ *Ibid*

securing access to land and land based resources; participation in decision making over land and land based resources; and protection of their land rights from unjust and illegal expropriation.²²⁸

ii. Private Tenure

Private tenure refers to registered land held by any person under any freehold or leasehold tenure, or any other land declared private land under an Act of Parliament.²²⁹ Freehold tenure confers the greatest interest in land called absolute right of ownership or possession of land for an indefinite period of time, or in perpetuity. Leasehold tenure is an interest in land for a definite term of years and may be granted by a freeholder usually subject to the payment of a fee or rent and is subject also to certain conditions which must be observed, such as those relating to developments and usage. In Kenya a leasehold title can be granted for a maximum period of 99 years.

iii. Public Tenure

This is where land owned by the government for its own purpose and which includes un-utilized or un-alienated government land reserved for future use by the government itself or may be available to the general public for various uses.²³⁰ Notably, public land includes all minerals and government forests other than those lawfully held, managed or used by specific communities. Also included as public land are government game reserves, water catchment areas, national parks, and protected areas; all roads and thoroughfares; and all rivers, lakes and other water bodies.²³¹

The Constitution and National Land Policy present an opportunity to craft new land laws for the protection of all the three tenure regimes. Already, parliament has enacted the Land Act and the Registration of Land Act to govern all private and public land. The Constitution also requires parliament to enact within five years from August 2010 when the constitution was promulgated,

²²⁸ *Ibid*

²²⁹ Article 64 of the Constitution of Kenya 2010

²³⁰ Article 62 (1) of the Constitution of Kenya 2010

²³¹ *Ibid* (f), (g), (h) and (i)

legislation to govern Community Land.²³² Pursuant to this, there is a draft Community Land Bill which is yet to be tabled in parliament.

iv. Relationship between Tenure and Forest Governance

Under the Forests Act, 2005, all forests in Kenya other than private and local authority²³³ forests are vested in the state to be managed by the Kenya Forest Service (KFS) subject to the rights of the user.²³⁴ The Minister for the time being responsible for forests may declare any unalienated government land or land purchased or acquired by the government as a state forest.²³⁵ Private forests are pegged to ownership of land while community forests management is predicated on the registration of a Community Forest Association.²³⁶

Land tenure is inextricably linked to many forest governance factors, thus it is difficult to disentangle tenure from forest governance. Most fundamentally, the various land tenure systems are composed of many different property right bundles, and specific bundles affecting forest outcomes in different ways. Understanding tenure requires an understanding of the extent to which, and the ways in which, national legislation is actually applied on the ground. It also demands understanding of other systems of resource tenure that may not be reflected in legislation but may enjoy legitimacy for local people. A notable example is the customary rights to land which prior to the promulgation of the Constitution, was not recognized in law. In fact, in relation to forest tenure, there is still a disjuncture between the provisions of the constitution and those of the Forests Act. While the constitution provides for public, private or community land, the Forests Act categorizes forests as state, local authority or private forests. The Forests Act is however currently under revision in order to align it with the provisions of the Constitution.

²³² Article 63 (5)

²³³ Under the new devolved system of government, the local authorities ceased to exist. The local authority forests are now classified under community forests and are held in trust by the county governments on behalf of people resident in the county.

²³⁴ Section 20, Forests Act

²³⁵ Ibid section 22

²³⁶ Section 46, Forests Act

2.4.11. Community Forest Tenure Rights

Property rights in the state forests remain vested in the state in the case of community forest management agreements. The permit only confers user rights, and a tenancy not exceeding three years with respect to a particular plot.²³⁷ This three year period would have to change to a much longer period if this programme was expanded to include rehabilitation of indigenous forests, ostensibly to ensure there is sufficient time for the indigenous trees to mature.

Individuals authorized to take part in this programme are only given user rights in the form of a cultivation permit. They are not authorized to lease or sublet the allocated plot and must pay annual rental fees. The cultivation permit may be terminated if any conditions are violated. This cultivation permit only authorizes the forest community to plant annual crops such as maize, non-climbing beans or potatoes. Cultivators may only use hand tools for land preparation and cannot erect any structures on the plot, except in areas with high incidences of wildlife-induced crop damage.²³⁸ Since the cultivation permits are issued in plantation forests, a primary responsibility is to plant tree seedlings after the completion of one crop season.

The permit holders therefore have specific sustainability obligations that include looking after tree seedlings, or replanting in cases of low survival rate of seedlings, controlling illegal forest activities, and preventing or fighting forest fires. The Forest Service and community forest associations carry out monitoring of the tree growth and development.²³⁹

The overall administration and implementation of non-residential cultivation is hinged to the permit holders being members of a CFA, and is therefore undertaken through mechanisms similar to community forest agreements. Holders of cultivation permits have no property or tenure rights over the trees that they plant and look after in the allocated plots and therefore obtain no financial benefit from the sale of the trees and timber.

²³⁷ Rule 55

²³⁸ Rule 47(1)

²³⁹ Rules 49 & 50

2.4.12. Enforcement Mechanisms

Although the Forests Act provides for PFM, the enforcement mechanisms under the Act are dominantly coercive. Forest officers²⁴⁰ wield significant enforcement powers including powers to search and arrest anyone entering a state and local authority forest without permission. Officers also have powers to execute warrants of arrest.

Under the Act, a ‘disciplined officer’ refers to forest officers who have undergone paramilitary training, and are subject to code of conduct for uniformed officers.²⁴¹ These officers are granted enforcement powers over state and local authority forests. However, it is important to note that the administration over local authority forests is vested in local authorities²⁴² meaning that the local authorities would ordinarily recruit and train their own forest guards, to undertake policing and enforcement duties. The statutory definition of forest officers is not broad enough to include local authority forest guards. Therefore, unless they have otherwise been designated ‘disciplined officers by KFS, they may lack the authority to enforce this law. Alternatively, it could be argued that the law is to be read *mutatis mutandis* such that since local authorities are empowered to apply and enforce the Forests Act, then by extension they possess the mandate to organize how this power is executed. Further to the designation of competent officers, the Forests Act sets out a list of activities that are prohibited within the confines of protected forests except where a person has a licence or permit.²⁴³

It also sets out vast sanctions and penalties to be imposed upon conviction, including imprisonment, fines and forfeiture of property used in the commission of offences. Any person convicted for causing damage to forest resources may be required to pay compensation upon conviction, forfeit property used in commission of offence, and in the case of illegal cultivation of crops, forfeit the crops to the state.²⁴⁴

²⁴⁰ Forest officers are defined under Section 3 to include Director, a forester, a disciplined officer of the Service, or an honorary forester.

²⁴¹ The First Schedule, to the 2005 Forest Act

²⁴² Section 24

²⁴³ Section 52

²⁴⁴ Section 55

Unlike its predecessor, the current forest law provides a system of incentives in addition to the vast sanctions. Any person who registers and operates a private forest, for instance, is eligible for tax rebates and government grants. The functions of KFS particularly the development of community development and capacity building of conservation institutions show that KFS is required to engage with communities in furtherance of sustainable forest management objectives. This engagement with local communities is a significant incentive because the Forest Act has authorized the granting of forest access and user rights to communities. These access and user rights permit local communities to engage either in forest management, or regulated cultivation of food crops or both through community forest associations.

2.5. Analytical Framework

2.5.1. Theoretical Framework

We used the theory of common property rights as our theoretical framework to understand the role of CFAs in contributing to sustainable forest management and securing the livelihood of the local people.

The term “common property regime” (CPR) represents a set of institutions, regulations and management practices subject to collective decision making. It is the regime that distinguishes common resources, for example forest resources from open access resources when it is out of tenureship, which is unregulated and free for anyone to use.²⁴⁵ These resources include groundwater basins, irrigation systems and pastures. They are usually large and have multiple actors using them simultaneously and usually only include some potential beneficiaries.

Bromley (1989) categorized property rights into three sets of variables, “nature and kinds or rights, individual and groups to which these rights are vested in, and the object of social values to which property relations pertains”. Forest rights are differentiated by different actors and with each actor having different interests in the forest resource based on the social setting of the environment.

²⁴⁵ Adhikari, 2001

‘Common property rights’ refers to the kind of tenure that exists, not the resource itself.²⁴⁶ These rights take up a large share of communal access and allocation of use. In the case of forest resource management, the right could be based on the user right of the timber and non-timber forest resources based on the access of individuals and communities.

A property right can be described as “the authority to undertake particular actions related to a specific domain”.²⁴⁷ Those rights are legitimized and recognized either by statutory law (formal property rights) or local arrangements (informal property rights). Ostrom (1990) cited the intellectual root of common pool resource problems when she said that "what is common to the greatest number has the least care bestowed upon it". Common property resources, however, provide essential ecological, economic, and sociopolitical services, as well as sustain millions of commons resource dependent livelihoods.²⁴⁸ These resources are the source of livelihoods for most poor and marginalized resource-based communities as they do not have access to other non-natural resource assets such as training and education, technological and scientific developments and population control. This shows the difference between developed countries and developing countries in managing resource use for sustainability. Deininger (2003) confirms this by establishing the fact that the developing world shows a pervasive manifestation of ineffective property rights, which leads to unsustainability. However, Demsetz (1967) explains that common property rights can benefit or harm to societies.

Therefore, the State creates new property rights in the form of privatization with a cost of internalization of externalities. Common property resource appropriators can create and sustain the management institutions that ensure equitable access and livelihood of the resource.

In her analysis of the problems in the management of common pool resources such as access to forest resources, Ostrom (1990) stated in her book, *Governing the Commons: The evolution of institutions for collective action* identified the following eight design principles as prerequisites for a stable common pool resource arrangement:

1. Clearly defined boundaries.

²⁴⁶ Fuys *et al.*, 2006

²⁴⁷ Supra Note 5

²⁴⁸ Beck and Nesmith, 2001; Adhikari, 2001; Fuys *et al.*, 2006

2. Congruence between appropriation and provision rules and local conditions.
3. Collective-choice arrangements allowing for the participation of most of the appropriators in the decision-making process.
4. Effective monitoring by monitors who are part of or accountable to the appropriators.
5. Graduated sanctions for appropriators who do not respect community rules.
6. Conflict-resolution mechanisms which are cheap and easy to access.
7. Minimal recognition of rights to organize.
8. Organization in the form of multiple layers of nested enterprises, with small, local common pool resources at their bases.

In the context of forest rights in a common pool environment, rights could be further analyzed and considered from at least two standpoints: (a) the ability of a group to exercise its property right to forest resources, in relation to competing claims from other interests (including the state), and (b) the ability of forest fringe communities to exercise their rights - particularly access rights – to the forest with regard to other interests, such as timber companies. In the case where the timber company benefits from total power, the timber company plays the role of privatization of the resource use and decides to use the resource to benefit the forest fringe community or maximization of their own private profit interest.

The issue of forest management as a common pool resource is critical for environmental sustainability, even though it is still a contested debate and has recently moved from its original solution-based and problem-solving approach to socio-ecological system and much more context specific.²⁴⁹

The above theory set the foundation of this study. The theory provides an insight in the analysis of the relationship, local people's participation, user rights and benefits from forest resource use. Given the different property rights perspectives of natural resource management, this study explores the role of Sururu CFA in the management of Sururu forest. The basic purpose is to examine and explain the impact of Sururu CFA and its impact on rural livelihoods and sustainable forest management.

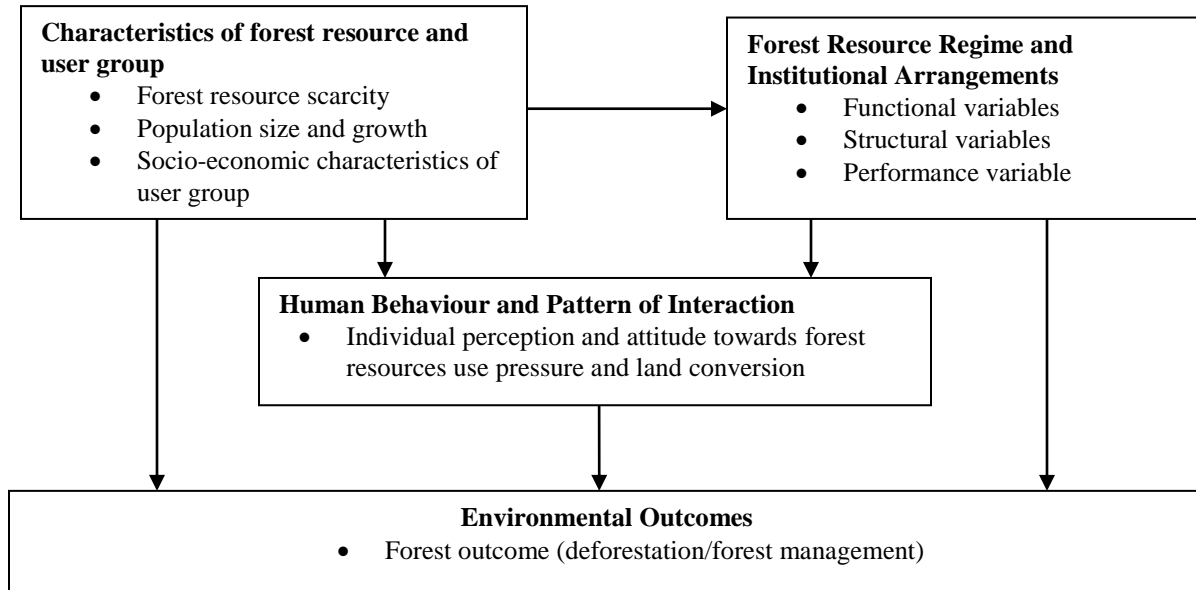
²⁴⁹ Agrawal *et al.*, 1999; Ostrom, 2007

2.5.2. Conceptual Framework

In order to explain the impact of CFAs on forest resource management, the relationships between the community level variables need to be explicitly defined. The relationships between these broad categories of variables are presented in Figure 1. We used this framework to guide our analysis. The physical characteristics of the resource include area of forest, type and species composition, which determine the productivity of the resource system. By physical attributes of resource we mean the state of the resource such as levels of scarcity, size of the resource system and the natural boundness of the resource.

Characteristics of user groups focus both on social and economic attributes of households and community such as group size, assets holding and income inequality, ethnicity, proximity of the resource users and the location of resource, which we considered source of heterogeneity. We treated all these variables as the exogenous variable of our model, which determine the local level natural resources management institutions, and institutional arrangement of collective action. Physical attributes of resources and socioeconomic characteristics of user groups together with institutions and resource regime are responsible for shaping human behaviour in respect to resource management or exploitation. Participants react differently according to the incentives and constraints inherent in the situation. Strategic interactions among participants in an action situation produce different outcomes. Human behaviour, through the use pressure and land conversion, together with physical characteristics of resource determines successful forest outcomes.

Figure 1: Conceptual Framework



Source: Heltberg (2001) and Own Representation

We further assumed that attributes of the institutional arrangements consist of three sets of variables such as functional variables, structural variables and performance variables. Functional variables include operational rules, which directly affect the use of the resource like input rules, allocation rules, monitoring and sanctioning rules, incentive structure, fines and penalties in case of rule violation. Structural variables refer to the nature of collective choice rules which consists of information about structure of the Community Forest Association (a decision-making body), decision-making process, mode of representation in decision-making body, and social- and economic status of its leaders. Veto rights to certain individual or groups are an example of such collective choice rules. The performance variables include the size of private benefits from community forest, increased stock of trees, species composition, increased income of households from resource management and nature of access to forest for different categories of resource users.

While Kenya has had a history of community exclusion from state forests, the chapter has established there are now statutory provisions and literature supporting participation of communities in sustainable management of state forests. The provisions of the forest law allowing for community participation have resulted in reintroduction of the shamba system, whereby communities acquire user rights to engage in those forestry activities permitted by the breadth of user rights. This implies that forest communities are now obtaining some legal decision making power to make the choices over forestry activities, within the scope of the tenancy rights. This process is important, since PFM contributes to socio-economic activities that assist communities to mitigate poverty, and their conservation activities can enhance sustainable forest management.

CHAPTER THREE

STUDY AREA AND METHODS

3.1. Introduction

This first part of this chapter provides the justification for selection of the study area and gives a brief background of the study area where the research was conducted. The location of the study area and what the forest ecosystem has to offer are important to gain a holistic understanding of the rural communities' situation. The second part briefly describes the procedures of data collection and methods used.

3.2. Study Area Selection

This study chose Sururu forest as the geographical context within which the research questions were explored. Sururu forest is part of Eastern Mau Forest, which is one of the 7 forest blocks of the Mau Forest Complex. This choice is justified on four grounds. Firstly, the existence of Sururu Community Forest Association (CFA) and its long experience in PFM formed the basis for our study on the impact of the CFA on Sururu forest and at large, the Mau Complex. Secondly, Mau features a long history of competing claims over forests involving excisions, encroachments, evictions, and violent struggles between different groups.²⁵⁰ Sururu forest thus provides a good context for the study. Thirdly, Mau is the largest forest complex in Kenya and of tremendous importance to local livelihoods and to the nation in terms of a stable and sediment free water supply for hydropower generation, tea growing estates and the wider network of rivers and lakes in East Africa. The results of this study will therefore be of immediate policy and legal relevance to Kenya.

²⁵⁰ Ayoo 2007, Matiru 1999

3.3. The Study Area

Sururu forest covers 20,648.4 ha composed of 7,284 ha of forest plantation and 13,364.4 ha of natural forest. The forest falls within the Mau Conservancy situated about 30 km south of Nakuru. It is divided into 2 blocks and 5 forest beats which include (i) Station beat (ii) Gatimu beat, (iii) Lepolos beat, (iv) Kanorero beat, and (v) upper Mau beat. The forest lies between 2,400-2,900 m above sea level with an annual rainfall of about 2,000 mm spread throughout the year. Administratively, the forest is located in Mau Narok division within Njoro district.

The forest is part of the 9 forests making up Eastern Mau Forest, which is one of the 7 forest blocks of the Mau Forest Complex. Stretching westwards, Eastern Mau Forest was one of the two largest forest blocks in the Mau Complex, covering about 66,000ha, of which 35,301ha were excised in 2001 for human settlements. The block comprises of the eight forest stations of Sururu, Likia, Teret, Nessuit, Elburgon, Mariashoni, Kiptunga and Bararget. It borders Naivasha Division to the east, Narok District to the south and covers the Divisions of Mauche, Mau-Narok, Njoro, Elburgon, and Kiringet to the West.

3.3.1. History of the Forest

At the beginning of the 20th Century, there was a consensus about the sustainability of wood production from indigenous forests in Kenya. These forests were seen as very slow growing compared to the fast growing exotic plantations that were tested in earlier trials. Therefore, the early colonial settlers introduced exotic plantation development in Kenya, with which Sururu forest was one of the forest site. In 1945, Kenya started the first systematic programme of compensatory forest establishment (i.e. replacing indigenous forests with plantations of exotic species) and replanting of clear-felled industrial plantation trees for commercial purposes. The *shamba* system was introduced (a form of *taungya*), where forest workers and people living adjacent to the forest were engaged to cultivate food crops on the forest plantations for a maximum of 3 years. Over time, this inter-cropping of food crops and trees made tree seedlings to be well-tended at basically no cost to the Forestry Department (FD).The FD was able to

establish a basic national network of industrial forest plantations. The main species planted were exotic conifers (cypress and pines), along with a significant area of Eucalyptus species.

i. Pre-Gazettment

Early communities with claims of ancestral tenure were the Ogiek and Maasai who originally inhabited the forest reserves. The Ogiek are traditionally hunters and gatherers. The Maasai community frequented various parts of the forest to herd their livestock. The forest was regarded as a sacred mountain, where traditional ceremonies and rituals were performed. The caves located in the natural forest have served as shelters for both animals and people, and were used strategically during conflicts as hideouts from adversaries.

ii. Post-Gazettement Management

Mau Forest Complex, which includes 7 forest blocks identified as Eastern Mau, Western Mau, South Western Mau, Transmara, Olpusimoru, Maasai Mau, and Eburru, was gazetted in 1932. The Eastern Mau forest comprises of Sururu, Likia, Teret, Logoman, Nessuit, Elburgon, Marioshoni, Kiptunga and Baraget forests. Until 2001, the Eastern Mau forest covered an area of 65,971.5 ha of which Sururu forest occupied 20,648.4ha composed of 7,284 ha forest plantation and 13,364.4ha of natural forest.

The 2001 excisions of Eastern Mau were initiated through an “Intention to alter the boundaries” notice published in a Gazette Notice No. 889. The intention was effected through a Legal Notice No. 142 as illustrated through the Boundary Plan No. 175/388, signed and sealed by Survey of Kenya, which delineated 35,301.01ha constituting 54% of the Eastern Mau. The excision was conducted on areas adjoining western, northern, and eastern boundaries. Consequently, Sururu forest has lost 7,471.0 ha of forest land and forest resources leaving on a total of 13,177.4 ha of natural forest. As a result the plantation land that was in continuous planting and harvesting between 1972 and 1995 was excised.

The following is a summary of the original forest area in Sururu in Hectares.

Table 1: Summary of Area Covered by Sururu Forest

Forest Area	Excised/Encroached	Intact	Total
Commercial Tree Plantation	7,284.0	0	7,284.0
Natural & Grassland	87.0	13,277.4	13,364.4
TOTAL	7,371.0	13,277.4	20,648.4

3.3.2. Geology and Soils

The geology and soils in Sururu forest and surrounding areas are influenced by ancient volcanic activity. The area lies within the central Rift Valley forming the Mau escarpment. The underlying rock is volcanic but varies according to its age.

The dominant landform which influences the soil types within and around Sururu forest are: (i) Hills and minor scarp, and (ii) Lower middle level uplands. In general the area is dominated by soils which have been developed from ashes and other pyroclastic rocks of recent volcanoes. The soil type can be described as mollic ANDOSOLS though the high zones of the forest and lower zones have different variants distinctly differentiated by their parent rock, mineral composition, organic matter and soil texture classes.

3.3.3. Hydrology

Sururu forest and adjacent forest areas forms the upper catchments of River Nderit which is one of the rivers that recharge Lake Nakuru. The gazetted forests and private forests around Empatipat /Topoti areas are sources of numerous springs and streams which join to form River Nderit. The rivers are identified using different names by different communities along its course. On upper parts of Empatipat and Lepolos, there are several tributaries that drain into Kopisai river including, Olenkukungu, Olempejeto, Olomoto Narok, Mpatipat. Around Mau Narok and Sururu area the river is called Siapei or sometimes Metta. Downward in Kianjonya the river is called Kirimu 1 which is joined by Kirerua and Gathinginia. Further downwards, the river joins

Narianda river which is made of Kirimo I and Kirimo II. Kirimo III is made of Mpatipat, Olepolos and Ntumot streams. Eventually the river becomes River Nderit which flows into Lake Nakuru.

The flow regime has been described as declining due to destruction of the upper forest catchment, farming along the riparian zone, and over abstraction.

3.3.4. Biodiversity

Sururu forest is a montane forest which is composed of glades, natural forest, bamboo zone, and bush-land. Each of these zones has different flora and fauna species. The vegetation cover varies from shrubs to thick impenetrable bamboo forest. There are big numbers of indigenous trees like cedar (*Juniperus procera*), African olive (*Olea africana*), *Dombeya* spp. and plantations of exotic trees like cypress (*Cupressus lusitanica*), pine (*Pinus patula* and *Pinus radiata*), *Grevillea robusta* and *Eucalyptus* spp. The forest is also home to endangered mammals like the yellow-backed duiker (*Cephalophus sylvicultor*) and the African golden cat (*Felis aurata*). There are numerous animals, like the giant forest hog, gazelle, buffalo, leopard, hyena, antelope, monkey and small animals like the giant African genet, tree hyrax, and honey badger.

According to UNEP, 2005, between 1973 and 2003, the Eastern Mau forest lost 49% of her vegetation cover. The loss is mainly attributed to clearing of forest plantations, conversion of forestland to agricultural land, and illegal deforestation and forest degradation activities. The shrinkage of vegetation cover has reduced the diversity of trees and shrubs as illegal loggers, charcoal makers, and grazers select suitable trees and shrubs to suit their needs. Since a wide variety of trees, shrubs and grass species still exist rehabilitative forest management program to promote their diversity should be adopted.

3.3.5. Forest Adjacent Communities

Sururu forest is adjoined by Mau Narok, Sururu, Empatipat/Topoti, Lepolos, Kiambogo, and Kianjoya villages. The ethnic groups include: Kikuyus found in Mau Narok Kiambogo, Kianjoya and part of Sururu sub-location in Metta village; Maasai are found in Empatipat/Topoti and Lepolos area; Kalenjins and Ogiek communities are found in villages around Sururu location. Other minor groups include: Kisiis, Turkanas, Borans, Kambas, Luos, Luhyas, Pokots, Wachagas and Taitas.

3.4. Target Population and Sample Size

Purposive sampling technique was used to select Sururu CFA members in the forest site due to their long-term PFM experience in this study area. Focused group discussions were held in the forest site with at least 10 members drawn randomly from the CFAs and non-CFA members adjacent to the forest to provide the needed information. Interview schedules were administered to KFS staff, Government officials, CFA staff, and other stakeholders' officials selected by use of snowball sampling method.²⁵¹

For household interviews, the respondents were selected by use of stratified random sampling method whereby stratification was based on CFA membership. This was to ensure that CFA and non-CFA members were well represented during the survey. Gay proposes that for correlation research, 30 cases or more are required.²⁵² Therefore based on this premise, the semi-structured questionnaire was administered to 36 CFA and 32 Non-CFA members selected by stratified random procedure from at least 4 randomly selected villages in Sururu location.

²⁵¹ Mugenda and Mugenda, 1999

²⁵² Gay, 1981

3.5. Data Collection Methods and Instruments

Secondary data was obtained through review of relevant literature from libraries and internet including resource materials such as relevant policies and laws, journals, annual reports, books, workshop proceedings, periodicals, and PFM reports. Primary data was obtained by use of various qualitative and quantitative methods. The objectives of this study were mainly achieved by use of a semi-structured household survey. The household survey data was complemented through application of different Participatory Rural Appraisal (PRA) tools.

Household livelihood factors associated with community forest association were identified through household interviews done using structured questionnaires administered to selected households of both CFA and non- CFA members. Socioeconomic information from a cross-section of these households was obtained to gain an understanding of variations among households.

Factors such as gender, household size, farm size, homestead distance from the forest, among other factors, were analyzed comparatively for both CFA and non-CFA members. This helped to identify the significant legal livelihood factors associated with PFM. Differences between CFA and non-CFA members in their level of participation in forest conservation activities were attained using semi-structured questionnaires.

3.6. Data Analysis

This study generated both qualitative data from PRA tools and quantitative data from semi-structured questionnaires administered through household surveys. The qualitative data obtained through PRA tools was subjected to in-depth analysis and used to complement the discussion of analyzed quantitative data. The quantitative data was cleaned, sorted, summarized, and stored using Statistical Package for the Social Sciences (SPSS). The data was presented in forms of charts and tables where necessary.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1. Introduction

This chapter covers analysis of data and discusses the findings of the case study. We use data collected from the field to determine factors determining CFA membership, access to forest resources, effectiveness of the policy and legal framework for PFM, and participation and equity. The first section of the chapter presents the findings on the structure of Sururu CFA including the legal status, governance and benefits sharing. Section two presents data and analysis of the respondents' perception on PFM both for the Sururu CFA members and Non-members.

4.2. Analysis of Sururu Community Forest Association

4.2.1. Formation and Legal Status

Three CFAs, focusing on different parts of Sururu forest, were formed in 2008 as recommended in the PFM guidelines of 2007.²⁵³ These included Mau-Sururu Forest Association (MASUFA), Sururu-Nderit and Mugameli. Through the guidance of KFS, the three CFAs merged in 2007 to form Sururu CFA known as Mau-Sururu-Likia Community Forest Association (MASULICOFA) as a requirement that a forest station can only have one CFA. Legally Sururu CFA was registered in 2010 under the Societies Act with a registration certificate from the Registrar of Societies as a requirement for participation in forest management activities. It has a constitution that guides its operations. The Association has developed the forest management plan for the forest, however it has not yet signed the management agreement with KFS. It is therefore difficult for the CFA to legally engage in the management of the forest.

²⁵³ The participatory Forest Management Guidelines, December 2007, are not a set of Kenya forest service (KFS) regulations

The greatest challenge for Sururu CFA is lack of office to carry out its operations. The CFA operates from the District Officer's office in Mau Narok centre. This poses a challenge to operations of the CFA.

4.2.2. Governance and Management

Sururu CFA is managed by a committee consisting of 6 members, 2 members drawn from each of the 3 CFAs that merged to form MUSULICOFA. These are: chairman, vice chairman, secretary, vice secretary, treasurer, and assistant treasurer. The functions of the registered members depend on their positions in their respective CBOs. The functions include attending CFA meetings (which are mandatory for all members); participating in scheduled forest patrols (only committee members) to ensure that there are no illegal activities or violation of forest use rules; and participation in forest group labour activities which include working on seedling nurseries, planting and thinning of trees. The Management Committee works closely with forest officers in planning and coordination of forest activities.

The Association is also involved in the following activities:

- Sensitizing communities on conservation
- Monitoring the forest condition
- Monitoring activities carried out by members
- Training members in nursery management

Our focus group discussions with CFA members revealed that the Association has not held elections to choose the leaders. The current officials were drawn from the 3 CFAs that merged. This shows that leaders of the Association were not elected democratically. Lack of clear mechanisms to remove non-performing officials is also a big challenge for the Association.

In terms of meetings, the findings from our discussions show that Sururu CFA has not held any Annual General Meeting (AGM) since inception. This was attributed to lack of resources considering the large membership of the CFA. The Executive Committee composed all Chairmen of all the CBOs which are members of the CFA meet on the 9th of every month to discuss issues raised by members of their respective CBOs. However, it is not clear on how

members of the CBOs can follow up on their issues. 60% of the members we interviewed are not aware of such meetings and even the existence of the Executive Committee.

On representation, the CFA's Executive Committee has women representatives including the Vice Chairperson, Treasurer and 2 women members. It also has a representation of 2 youth and elders from the Maasai, Kalenjin and Kikuyu communities. This shows that women and the vulnerable groups have been represented well in the Association. The challenge is related to the way these members are appointed to the Committee. It is likely that such members are cronies of the Chairman.

4.2.3. Membership

Sururu CFA is an umbrella CFA which brings together MASUFA, Mugameli, Sururu-Nderit CFAs and CBOs in the area. As such the membership of the CFA is restricted to members of existing CBOs whose activities are related to forestry. Individuals are therefore expected to register as members with the respective CBOs to qualify to be members of Sururu CFA. Some of the groups that make up the CFA include protection group, fuel wood collectors, grazing groups, and self-help groups with nurseries. Currently, the CFA has 250 members.

The CFA charges a membership fee of two thousand shillings (Ksh. 2,000) per CBO. This works well because it is easier to get communities organized in CBOs since they have structures. 69% of the registered members reported that they pay between 50 and 350 Kenya shillings to be members of their respective CBOs.

4.2.4. Sururu CFA Rules

Majority of the members in Sururu CFA understand roles of the Association. 50% said that almost everyone understood rules, while 33% said that everyone understood rules. Only 17% said that half the people understand rules. Results also showed that from the researchers' estimation 72% of the Association's rules were easily understood by members. Rules in 22% of

the associations were relatively complex but could be understood through learning and experience with only 6% having very complex and difficult to understand rules.

It is clear from the results that most members understand the Association's rules. Members also gave their views about the nature of association rules as clear (94%), flexible (100%) and legitimate (100%). Since almost all the members perceive the association rules as fair, flexible and legitimate, the likelihood of conformance is high.

4.2.5. Education

Results indicated that majority of officials (65%) have completed primary school education level. 24% have completed secondary school education. Very few have completed tertiary or university which accounted for 6% each. The level of education is important because these leaders are expected to attend high-level meetings which are often conducted in English and requires basic literacy. They are expected to present issues affecting their communities share feedback to the community.

Further results indicate that positions among officials were mainly held by forest users. 82 per cent of the associations always had a forest user among the officials; 12 per cent sometimes had officials who were also forest users, and only 6 per cent did not have a forest user among their officials. These results indicate that the leaders of the associations identify with issues affecting the forest adjacent communities as they are also users and are better placed to make decisions regarding the forest.

Data indicates that positions among officials were mainly held for CFA members. We can therefore conclude that the CFA members identify with issues affecting the forest adjacent communities since they are also users. They are thus better placed to make decisions as regards to the forest.

4.2.6. Conflict and Resolution

Sururu CFA members have not so far experienced conflicts within the CFA. However, if conflicts arise, the CFA has mechanisms for resolving them. Such mechanisms include face to face meetings, internal committees set to handle such issues, and arbitration by KFS through the Sururu station Forester. This clearly indicates the maturity and experience of the CFA in managing its affairs.

4.2.7. Resource Mobilization and Fundraising

Results indicate that the CFA gets funding mainly from membership contribution, 56% voluntary contribution, 39%. Other sources include 6% selling of seeds and seedlings among others. The single most important source of finances for the past year was membership fees, 47% followed by voluntary contribution of funds and funds from development agencies both accounted for 18%. Voluntary contribution of funds and membership fees also scored highly as the most important sources of finances for the Association. This infers that this CFA depends highly on the good will of its members and that members were committed to supporting the Association. This could also indicate that the CFA is not well funded especially by Government and NGOs which can be attributed to the fact that the CFA does not have the capacity to source for funds or is not well networked to be able to reach potential donors.

The CFA showed low capability of keeping and maintaining records of various items. In addition, it has never submitted records to the Government.

4.2.8. Benefits Sharing

From this study, it was found that tangible benefits that were available to Sururu CFA from the forest contributed to the cohesiveness of the CFA members and improvement in the livelihoods. However, the CFA lack clear mechanisms for sharing benefits which may result in conflicts.

Benefits ensure the sustainability of the CFA and therefore the principle of benefit sharing needs to be strengthened. Further, it was evident that most CFA members had the hope that the Government will in future allow them to reap real benefits such as nonresidential cultivation within the forests and harvesting of forest products. When such benefits are exploited by the CFA, there is the possibility of members gaining from employment opportunities that they provide. Such benefits would also include improved food security and enhanced survival of the trees growing in the forest.

4.3. Analysis of the Household Participation in Forest Management

4.3.1. Factors Determining Sururu CFA Membership

i. Household Sizes

The survey covered a total of 650 household members. Out of these, 52% (338) were members of CFA households and 48% (312) were members of non-CFA households. The averages for household sizes were 6 members and 4 members per family of CFA and Non-CFA members respectively. This shows that the size of the household is a critical determinant for Participatory Forest Management (PFM). It is most likely that CFA members have a greater demand for forest products such as firewood due to their larger household sizes hence the decision to join CFA in order to increase their chances of accessing forest resources.

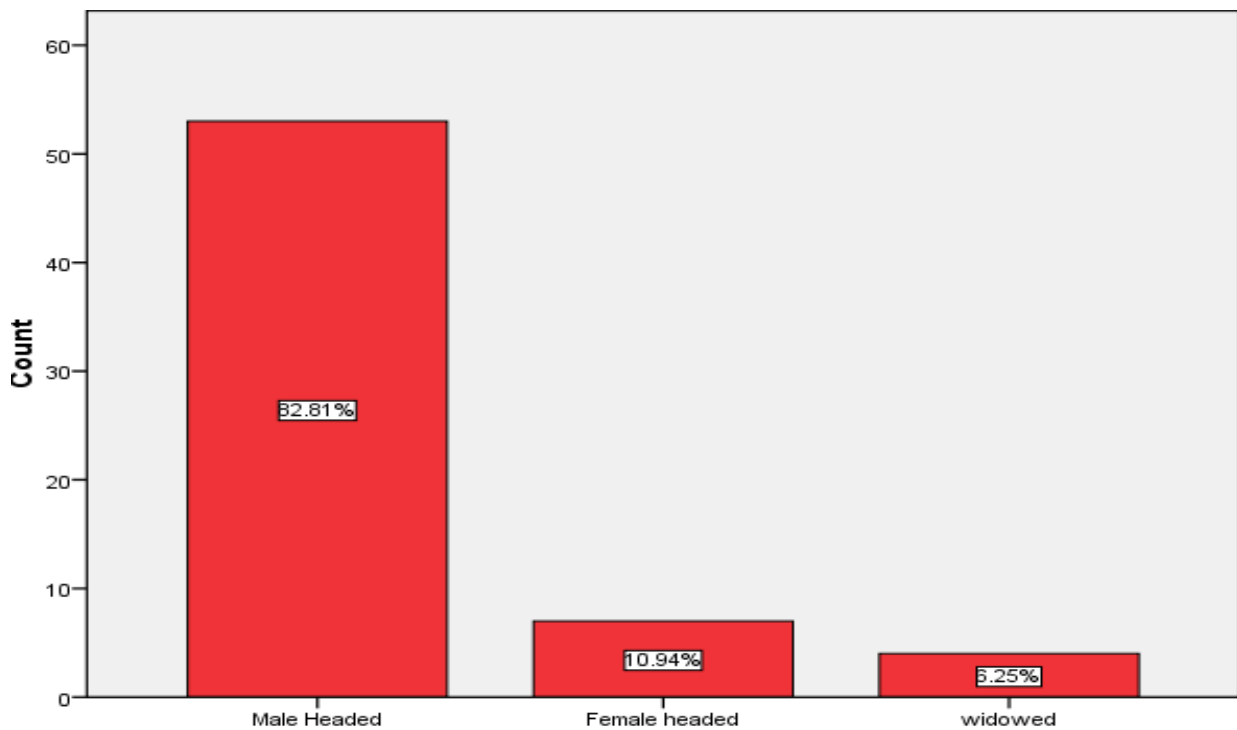
ii. Household Headship and Gender

The data shows a ratio of male headed households, at 82.8% of all households in the sample compared to 11% female headed households. Out of these, 5% of all female heads were widowed. 56.3% of CFA households are male headed compared to 43.7% female headed. The results therefore suggest that sex of the household head is an important determinant of PFM and the willingness to participate in collective action. Specifically, households headed by males are more likely to participate in forest activities and this is supported by the data which shows that 56.3% of all registered CFA members are men.

More so, gender had a significant influence on participation of community members in forest management irrespective of CFA membership ($\chi^2=3.79$, $P=0.005$). This agrees with the observation made by Coulibaly-Lingani et al. in Burkina Faso, that there is significant relation between gender and participation in forest conservation. This implies that gender is important in participatory forest management in Kenya. Male and female community members experience different circumstances that affect their participation in forest conservation activities.

The personal and household attributes of women constrain their participation in community organizations. Women compared to men are disadvantaged due to their social and household chores such as childcare, fetching water, cooking, and farming. Their role hinders them sparing time from domestic chores to participate in conservation activities or attend forest management meetings.

Figure 2: Household Headship and Gender



iii. Ages of CFA and Non-CFA Members

The data show a significant difference between the mean ages of CFA members (42.6 years) and non-CFA members (38.5 years) ($t=2.408$, $P=0.01$). This means that age is an important determinant factor in household decision to participate in PFM probably because the community respects the decision of the aged. This shows that more aged people were more interested in joining CFA than the younger people who have various commitments that they value more than participating in PFM activities through joining CFA. The older may also be interested because they have time to participate and due to the fact that they value their forests and are interested in conserving them.

At the age of 42 years, most of the community members have families whom they have to fend for; hence they depend on the forest resources to meet their domestic needs. They are also within the active age bracket at which they can participate in forest conservation activities in addition to having a better chance to access various forest products. Highest participation in forest conservation for all community members in the study site was noted for respondents within the age bracket of 35-50 years. Other studies have reported conflicting results in regard to influence of age on PFM. Thacher et al. and Zhang and Flick found that age had a negative impact in explaining the level of participation in forestry activities. This implies that young people were willing to participate in forest activities unlike in the study where the older people were the major participants through Sururu CFA.

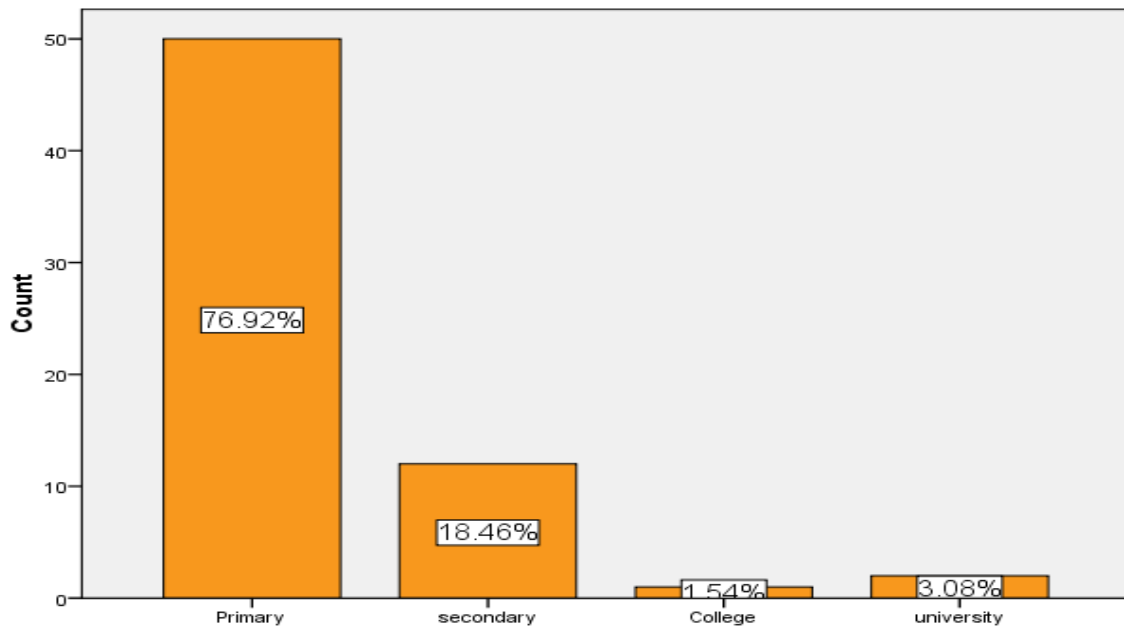
iv. Level of Education of CFA and non-CFA members

The data indicate that 76.9% household heads have attained primary education, 18.5% secondary education, 15.4% college and 3.0% university. Most of the CFA members (84.4%) had primary level of education compared to non-CFA members (67.9%). There was no association between the level of education and CFA membership. There was also no relationship between level of education and level of participation of both CFA and non-CFA members in forest conservation and their access to various forest products such as firewood, among others.

These results agree with the results of Coulibaly-Lingani et al.²⁵⁴ that education did not influence respondent's access to the forest for fuel wood extraction and grazing livestock. However, previous studies show that education level has a tendency to reduce forest dependency. A higher level of education provides a wider range of job options, hence making fuel wood collection unprofitable due to greater opportunity costs of collection.²⁵⁵

Contrary to the findings of Obua et al.²⁵⁶ that education tends to increase one's awareness of the importance of the environment and of natural resources, in this study, there was no relationship between level of education of both CFA and non-CFA members and their participation in forest conservation.

Figure 3: Level of Education



²⁵⁴ Coulibaly-Lingani et al., 2009

²⁵⁵ Adhikari, 2004

²⁵⁶ Obua et al., 1998

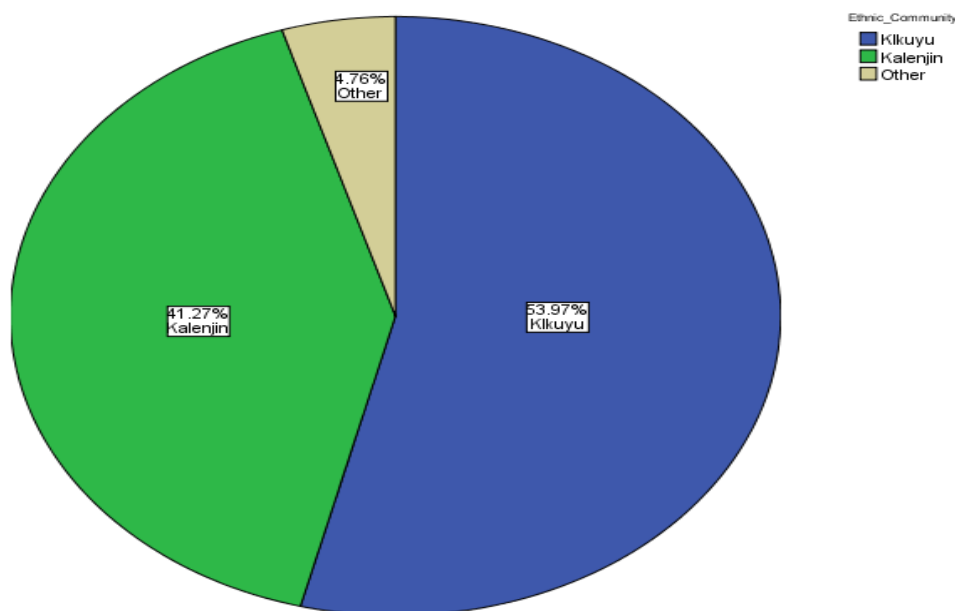
Table 2: Level of Education

Membership	Level of education (%)			
	Primary	Secondary	College	University
CFA members	72.4	12.0	12.5	3.1
Non-CFA members	69.9	24.1	3.0	3.0

v. *Ethnicity*

The data shows that 53.97% of the total households surveyed in the study are from the Kikuyu community, 41.27% Kalenjin community and 4.76% others. These statistics are reflected in the composition of CFA membership where Kikuyus (78.1%) are the majority followed with Kalenjin (21.9%) and others (5.1%). The likely reason for the ethnic difference in CFA membership could be that Kikuyus who are the largest community living adjacent to the forest were resettled by the Government in 2002. Most of the Kalenjin community members who were initially evicted from the forest lived far away from the forest boundaries.

Figure 4: Ethnic Composition of Sururu



4.3.2. Land Access, Use and Productivity

The difference between the average farm sizes for CFA members (2.31 acres) and non-CFA members (3.484 acres) was significant ($t=1.495$, $P=0.01$). Non-CFA members had larger farms available for their use probably because they had more interest in growing crops and had more livestock, hence forcing them to buy more land or rent. Being accessible to more land could also mean that non-CFA members depend less on the forests resources. This supports results for forest extraction and implies that households with large farms are unlikely to rely much on forests.

Land access seems to play a role in determining forest participation. The CFA members had accessed their land through renting (29.9%) purchase (42.6%), inheritance (15.4%), and government allocation (11.5%). The non-CFA members had accessed their land through renting (15.5%), purchase (50%), inheritance (11.5%), and government allocation (22.5%). Households that own land purchased by the household head are less likely to participate in forest activities in general and also to be members of CFA. Since only relatively wealthy households are likely to afford to purchase land, these results may also be interpreted to imply that such households are less likely to participate in forest activities than the less wealthy.

It was also noted that renting of land influenced CFA membership negatively. It also had a negative influence on growing of trees on farm and access to forest products and services. Government forestland allocation influenced CFA membership positively. Land access with longer terms and those being secure and able to provide more benefits to their holders were more likely to encourage participation in reforestation.

Table 3: Land Access, Use and Productivity

	Rented (%)	Inherited (%)	Government Allocation (%)	Purchased (%)
CFA members	29.9	15.4	11.5	42.6
Non-CFA members	11.5	11.5	19.2	50.0

4.3.3. Distance and Access to Forest Resources and Products

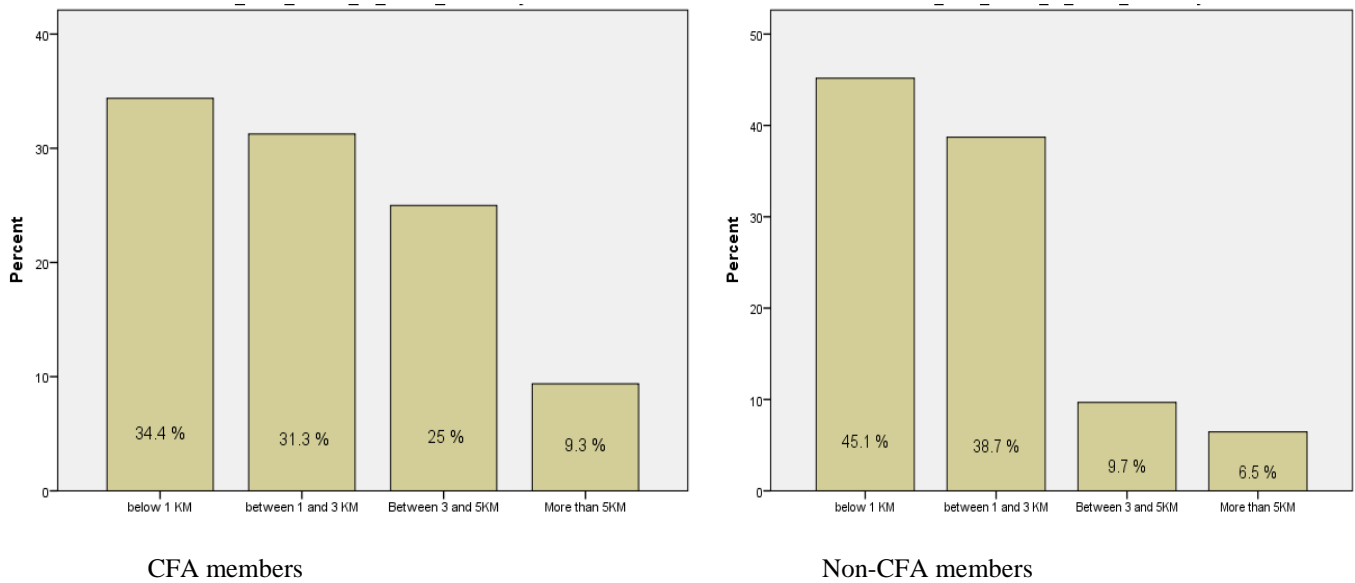
i. Distance of Homesteads from the Forest Boundaries

There was a difference between the CFA and non- CFA homestead distances from the forest. 45.1% of CFA members' homesteads were found below 1 km, 38.7% between 1-3 km, 9.7% between 3-5 km, and 6.5% more than 5 km to the forest boundaries. 34.4% non-CFA members' homesteads are found below 1 km, 31.3 between 1-3 km, 25% between 3-5 km, and 9.3% more than 5 km to the forest boundaries. The impact of homesteads distance to the forest therefore is a determinant factor in PFM. It also shows that households located far from the forest depend less on the forest than those neighbouring the forests. Membership in CFA positively predicts reliance on forests.

Considering the relationship between general participation of all community members in forest conservation irrespective of CFA membership, it was also noted that range of homestead distance from the forest had an influence on the number of community members participating in forest conservation. As the distance of homestead from the forest increased, the number of community members participating in forest conservation activities decreased. Highest number of those participating (61%) was within 0-1 km distances, reduced to 32.9% (1–3 km), 4.8% (3–5 km), and reduced further down to 1.4% (over 5 km). This result concurs with Chhetri's²⁵⁷ observation that distance of the forest from the household had inverse relationship with participation in forest management.

²⁵⁷Chhetri, 2009

Figure 5: Distance of Homesteads for the Forest Boundaries



ii. Access to Forest Products

Data indicates that most community members (85%) have access to forest products from the forest irrespective of CFA membership provided they pay the monthly fee to KFS. However, a higher percentage of the CFAs members (93.7%) had access to forest products and services from the forest compared to non-CFA members (75.2%). This implies that being a member of CFA enhanced the community members’ access to forest products, implying that PFM conferred high access to CFA members than non-CFA members.

Perceptions on the status of the quantity of the forest products from the time Sururu CFA was established show that 45.2% CFA members agree that forest products have increased compared 22.6% non-members. This shows that all the households surveyed irrespective of CFA membership believe that the forest products have reduced. The reasons given were that the community members have more access to the forest products provided they pay a fee to the KFS. This has increased the rate of collecting firewood, honey among other products. In terms of preferred access, 11.8% of CFA members preferred controlled access for outsiders to the forest

and 88.2% controlled access for both CFA members and outsiders. 100% of the non-CFA members prefer controlled access for both the local community and outsiders.

Temesgen²⁵⁸ noted that unless communities access forest resources to support their livelihoods, the pressure will rise to breaking point and further forest destruction will follow. Therefore sustainable forest management is enhanced when communities are provided with clear and recognized access rights to the forest resources.

4.3.4. Forest Contribution to Community Livelihood

i. Contribution of Sururu Forest to Household Economic Conditions

It has been argued that forests play an important role in poverty reduction through diversification of household income sources.²⁵⁹ We therefore investigated the perception of households on their economic conditions as a result of PFM. Out of the total sample surveyed, 76.9% said that their economic conditions have improved as a result of PFM. 81.2% of the CFA members said that their economic conditions have improved since the introduction of PFM, compared to 53.3% of non-CFA members. This data could mean that members of CFA have access to forest products and other economic benefits than non-CFA members and therefore participation in PFM through CFA enhances economic benefits.

The average household incomes and share of incomes from different activities by CFA members for the 12 months prior to the survey suggests that forest activities on average make a relatively small contribution to total household incomes.

²⁵⁸ Temesgen, 2007

²⁵⁹ Vedeld et al. 2004

Table 4: Contribution of Sururu Forest to Household Economic Conditions

	Improved	No change	Worsened
CFA members	81.2%	6.3%	12.5%
Non-CFA members	53.3%	40%	6.7%

ii. Community Members' Involvement in Income Generating Activities (IGAs)

There was a difference between the CFA members (60%) and non-CFA members (18.2%) in the involvement in Income Generating Activities (IGAs). More CFA members (81.3%) than non-CFA members (67.5%) had planted trees in their farms. It was also noted that training of CFA members in forest related aspects influenced growing of trees positively. Therefore, majority of CFA members growing trees had been trained in tree planting and tree nursery establishment under PFM. The CFA members had free access to seedlings from their group nurseries for on-farm planting thus enhancing their adoption of on-farm tree planting practices.

Both CFA members (87.5%) and non-CFA members (53.3) said that they would wish to be involved in more IGAs.

4.3.5. Policy and Legal Framework

i. Awareness of the existence of the Constitution

There was a significant positive relationship between CFA membership and awareness about the policy and legal framework for community participation in forest management ($\chi^2=22.227$, $P=0.001$). This implies that awareness about the policy and legal framework for forest management in Kenya is an important determinant for PFM. 81.3% of the CFA members were aware of the existence of the Constitution of Kenya 2010 in relation to environment and natural resources management, compared to 62.5% non-CFA members.

ii. Awareness of the Existence of Forest Policy

On the awareness of the existence of the Forest Policy and its provisions, the data shows that 53.1% of the CFA members were aware compared to 28.1% of non-CFA members. Furthermore, 76.7% of CFA members are aware of the Forests Act compared to 43.7% of non-CFA members.

The main sources of information on the policy and legal framework were outlined as CFA officials and KFS staff. Therefore as community members joined CFA, they increased their chances of interaction with CFA officials and KFS staff, hence enhancing their access to information about the PFM process under the policy and legal framework governing the forest sector in Kenya.

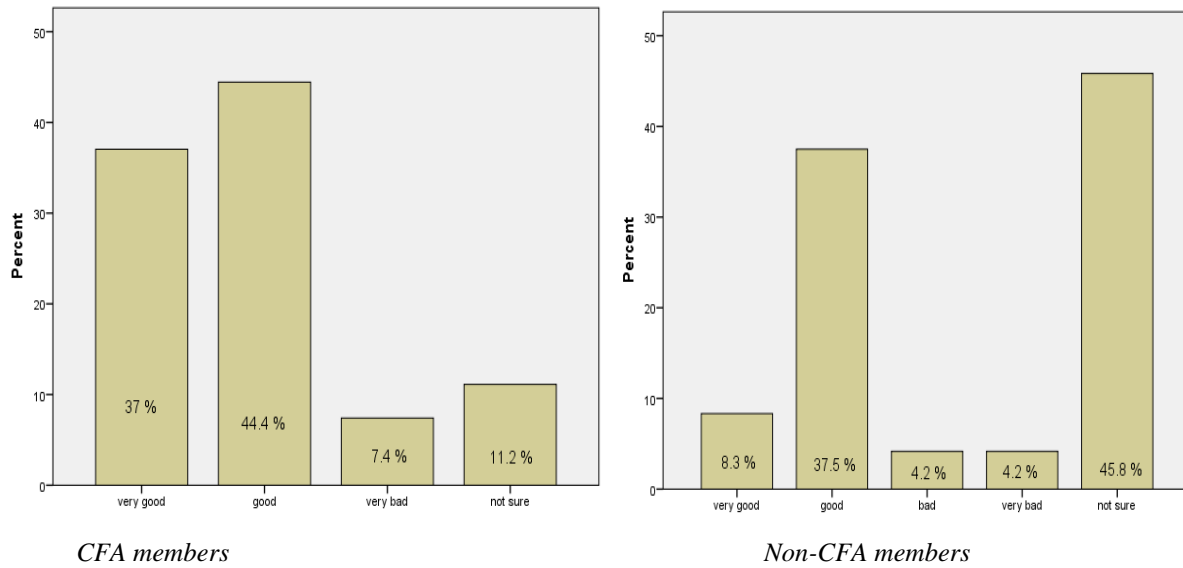
Table 5: Awareness on the Existence of the Forests Policy and Act

	CFA members (%)	Non-CFA members (%)
Constitution	81.3	62.5
Forest Policy	53.1	28.1
Forests Act	76.7	43.7

iii. Benefits Sharing

Overall the Forests Act 2005 was rated highly (23.53% very good and 41.18% good) in terms of benefits sharing by the households interviewed. However, 31(45%) non-CFA members out of the 68 households interviewed were not sure of how the Act provides for benefit sharing. It is likely that most non-CFA members are not aware of the existence of the Forests Act and therefore not even sure how the Act provides for benefit sharing. It is also likely that CFA members rated the Forests Act high in terms of community participation in forest management and not benefit sharing.

Figure 6: Benefit Sharing



iv. *Deterring Offenders*

A majority of the households interviewed (70.69%) agree that the Forests Act is effective in deterring offenders. Out of these, 83.4% and 57.2% of the CFA and non-CFA members respectively agreed that the Forests Act has helped in deterring offenders. This data could mean that the awareness of the Forests Act and its enforcement has contributed effectively arresting and prosecution offenders who undertake illegal activities in the forest. This was justified with an overwhelming 91.80% of the total household surveyed who indicated that illegal activities have decreased in the forest.

Figure 7: Forests Act on Deterring Offenders

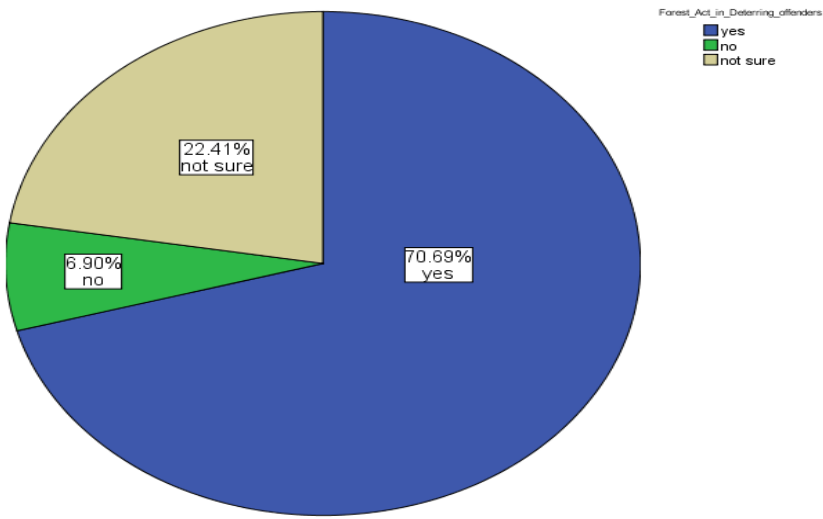
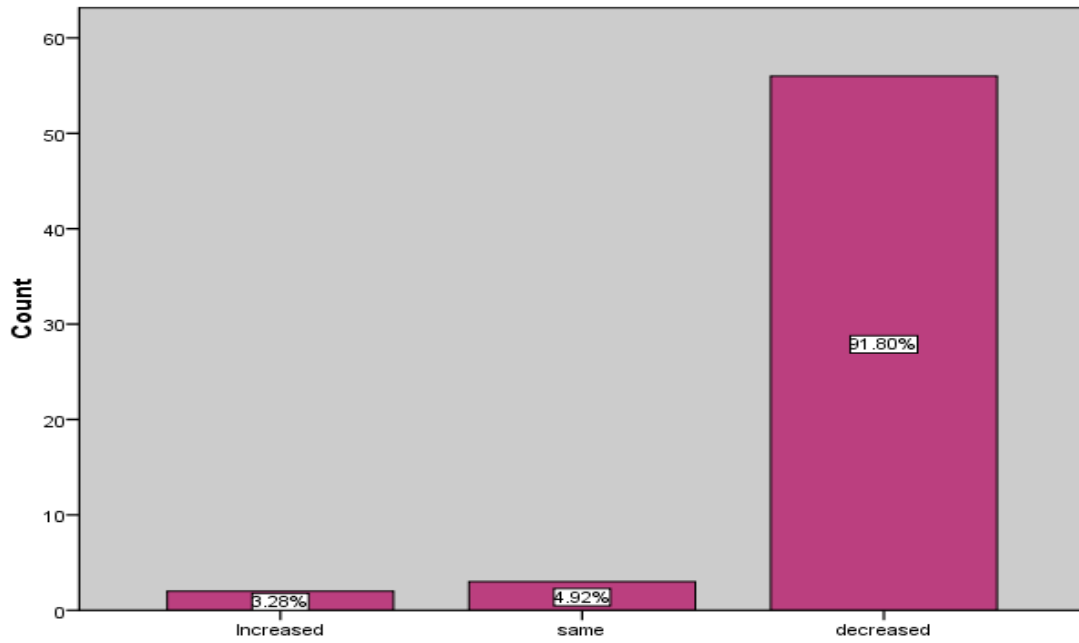


Figure 8: Level of Illegal Activities



4.3.6. Participation and Equity

i. Participation in Forest Conservation Activities

The community members living adjacent to the forest indicated that they participated in various forest conservation activities irrespective of whether they were CFA members or not. It was observed that 97.5% of the CFA members were participating in forest conservation activities compared to 85% of the non-CFA. This has an implication that for more participation of community members in forest conservation activities, the government through KFS should mobilize the community members to join CFA. The number of CFA and non-CFA members participating in forest conservation varied from one type of activity to another. Analysis of those community members participating in each forest conservation activity revealed that there were a greater percentage of CFA members participating in each forest conservation activity as compared to the non-CFA members. These activities include forest patrol, tree planting, fire-fighting, and tree nursery activities.

Therefore CFA membership encourages more participation in forest conservation than non-CFA membership and seems to strengthen the social capital of the community members living adjacent to the forest with a goal of improving forest management while improving their livelihood. Social capital includes characteristics of social organizations such as networks, norms, and trust that enable participants to act together more effectively in order to pursue shared objectives and this is apparent in the Sururu CFA.

Table 6: Participation in Forest Conservation Activities

	Every time		Most of the times		Sometimes		Never	
	CFA members	Non-CFA members	CFA members	Non-CFA members	CFA members	Non-CFA members	CFA members	Non-CFA members
Assembly, discussion, meeting	15.4	-	30.8	-	30.8	-	23	-
Plantation	38.4	30.8	-	-	23.1	15.4	47.1	69.2
Skill development and training	7.3	3.2	-	-	46.2	6.5	46.2	90.3
Protection	15.4	6.3			15	15.6	69.2	78.1
Income Generating Activities	50	6.5	8.3	6.4	33.4	16.1	8.3	71

ii. Participation in Capacity Building on Forest Management and Conservation

One of the benefits of joining PFM or living adjacent to a forest where PFM is in practice is training in forest management and other aspects related to sustainable land use and agriculture. Training influences the level of participation in forest conservation activities and depending on the type of training provided it enhances participation in specific PFM activities, such as, tree planting and tree nursery establishment and management, among other activities.

In this study, community participation in forest conservation was not influenced by education level but was positively influenced by training in forest management. The positive influence of training on CFA participation in forest conservation agrees with the observation that knowledge about forest conservation issues makes people more positive in their views. Salam et al.²⁶⁰ noted that community members often lack the appropriate technologies needed in management of

²⁶⁰Salam et al., 2005

participatory forestry through which they can maximize the potential of sustainable forest development. Training on various aspects of PFM is needed to successfully undertake PFM activities. Salam proposed that training manuals based on field experiences and incorporating knowledge possessed by the local people should be provided. Training on different aspects of PFM was positively related to sustained participation of community members. Improving and updating the skills and knowledge in PFM can encourage community members to involve themselves in sustained participation.

A strong positive association between CFA membership and training in forest management and other land use related aspects was observed (Gamma value =0.820) and the association was highly significant ($\chi^2=41.264$, $P=0.001$). Training is therefore influenced positively by CFA membership; hence joining CFA under the PFM process provides the community members with greater opportunities for training. Training does not only help the community members manage the forest appropriately and hence increase forest cover but it also provides the appropriate environment for farmers to exchange views on better agricultural production technologies and issues related to other income generating activities.

When considering factors that affect people's participation in PFM in Oromia region in Ethiopia, Degeti and Yemshaw²⁶¹ found out that awareness creation contributed to the understanding of the importance of forests, hence encouraging community members to participate in forest management actively. Having a better Knowledge about the social and economic impact of deforestation encourages people to take part in forest management actively. Training is one of the best ways to create awareness.

iii. Contribution to the Poor

In this sub-section, we seek to answer the question whether poor households depend more on forests than the less poor. To answer this question, we divide the households into three different wealth groups on the basis of total household incomes. We also construct a measure of wealth taking into account household head's education, land holding, total livestock units, household

²⁶¹Degeti and Yemshaw, 2003

assets (ownership of radio, television, motor transports etc.) and the quality of dwelling (quality of floor, roof, toilet etc.). We use factor analysis to derive a single measure of household wealth²⁶² and use the index obtained to divide the households into three wealth categories: poor, middle and rich.

A question that arises is whether poor households are more likely to participate in forest activities or even more willing to cooperate with others in forest management. By considering current income groups, only 24% of the sample not registered as Sururu CFA members were poor, compared to 63% of registered members. This analysis suggests that poorer households are more likely to participate in forest activities than the less poor.

The scoring coefficients from the factor analysis are applied to each household to estimate its wealth index. The disparities in the distribution are less pronounced, with non-CFA members being almost equally distributed across the three wealth groups. However, 51% of CFA members are in the middle wealth group, while a low 22% is in the low wealth group. The results suggests that the decision to join and participate in CFA may be based on a household's current rather than permanent income, such that households that are transitorily poor may engage in forest activities to cater for temporary shortfalls in income rather than to cater for a long term fall in permanent income. This supports studies that argue that forests play an important role in support of current consumption (as a gap filler) and also as a source of regular subsistence use.

We further investigate the dependence of poor households on forests by the income shares. First, looking at income groups, the largest share of incomes from all groups is from crop farming. The poor however also derive a substantial share of income from wages (20%) and forest crop farming (15%), but only a marginal 6% from collection of forest products. The middle income group also obtains a substantial share from crop farming, wages and forest crops, but also a much larger share (16%) from livestock products. The upper income group has only two main sources of incomes: own crop farming and livestock products. Though this group derives little income from forest crop farming, it is important to note that it obtains a relatively larger share from forest collection (8%) than the lower income groups. This supports literature that has shown that

²⁶²see Filmer and Pritchett, 2000; Sahn and Stifel, 2003

the rich may also depend more on common property resources than the poor, more so in the extraction of fodder.²⁶³

The next issue that we investigate is the relative contribution of different forest products to incomes of the various wealth groups. The data suggests that the rich on average draw larger gross value of all forest products than the poorer groups. The only exception is other products (honey, herbs, wild fruits and vegetables), but these make a negligible contribution for all households. This scenario is however reversed for asset groups with the poorest asset group drawing much more than the middle and rich groups. This suggests that the chronically poor are more likely to depend on low return forest activities than the transitorily poor.

5.3.7. Overall Changes since PFM

The respondents reported that the changes that have followed the establishment of the PFM include: regeneration of the forest (71%), building cooperation among villagers (78%), decreased logging (38%) and controlled forest grazing (32%). The respondents also reported that changes in official management of the forests over the previous 10 years had resulted in both positive and negative effects on the forests and local communities. These included: enhanced participatory management (reported by 43%), more trees planted (95%), strict rules and regulations (15%) and decreased logging (13%). The survey results indicate that CFA members were generally happy with their groups and the management, with 58% ranking the functioning of the association as good, 38% as moderate and only 3% indicating their dissatisfaction.

Participatory forest management was reported to have contributed to forest conservation through plantation of more trees (64%), improvement in water catchment areas and beautification (6%) and decreased illegal logging (14%). The respondents further reported that the main contribution of the forests to the welfare of local communities included food products (96%), wood fuel (100%), grazing and fodder (92%), increased rainfall (61%), environmental protection (56%) and construction material (7%).

²⁶³ see Narain et al. 2005

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1. Introduction

This chapter presents the summary of the findings of the main study, conclusions and recommendations arrived at. It also gives suggestions for further studies.

5.2. Conclusion

Experiences of Sururu Community Forest Association (CFA) in Participatory Forest Management (PFM) of Mau forest offer valuable lessons. They demonstrate that CFAs present a great opportunity to reduce the current pressure on forests by the adjacent communities for forest products and services. The Forests Act, 2005 provides for community participation in forest management through Community Forest Associations (CFAs). It thus represents a positive move for the local communities' involvement in the management of forest resources.

However, despite considerable efforts and progress in improving forest governance, Kenya continues to face key challenges in establishing a clear and coherent legal and policy framework for forest governance. These challenges are likely to increase as a result of the new pressures and opportunities that a changing legal regime fosters under the Constitution through devolution. These challenges can be summarized as follows:

- PFM through CFAs is constrained by elite capture and a rising heterogeneity of interests among actors.
- Lack of clarity of the forest-related mandates of national and county governments leading to conflicts.
- Unclear linkages between the National Land Commission and KFS related to community land management leading to overlapping mandates and responsibility for forest governance.

- The Forests Act, the Water Act and the Wildlife (Conservation and Management) Acts have created overlaps in the jurisdictions of related institutions to manage areas where forests are located.
- The Forests Act does not clearly show the rules for access and use rights for sharing of revenues between KFS and CFAs.
- Insecurity of tenure over community land will continue to hinder sustainable management and utilization of community land. This has direct implications for community participation in forest management as significant amount of forests fall on the community lands.
- There is insufficient enabling legislation to give effect to the involvement and participation of non-state actors including forest-dependent rural communities, civil society and the private sector, as required by the Constitution, the Forests Act and the Forest Policy

This study also demonstrates that though communities are sufficiently organized to run group affairs and have had relative autonomy in designing and implementing their governance arrangements, their current structures are limited. They require capacity building to be able to respond to new pressures and opportunities that are changing legal regime fosters. External support to strengthen within-group arrangements for benefit distribution and conflict resolution are necessary. Communities also need to comply with association constitutions especially with regard to group leadership and elections to avoid power wrangles and elite capture. External actors, both government and non-governmental, must play this critical role. These stakeholders led by the KFS must provide negotiation support and capacity building in order to improve the communities' understanding of the law.

5.3. Recommendations

Based on this study, the following recommendations are considered to be vital in enhancing sustainable forest management:

It is critical to fast track the revision of the Forests Act, 2005 to avoid potential conflict between the national and county governments over utilization and management of forests. This will help to establish a clear direction and basis for the implementation of the forest sector reforms in line with the Constitution, especially the process of devolution and related definitions of roles, responsibilities and rights of the relevant institutions at the national and county levels.

It is important to establish the rules for access and use rights of local communities concerning the forest resources and sharing of revenues between KFS, CFAs, and county governments. Rules for the establishment of the Forest Management Agreements signed between the KFS and CFAs should be simplified to ensure (i) the representative composition of the CFAs, (ii) a simple and transparent process tailored to the capacities of the agencies and communities involved, and (iii) adherence to the principle of Free Prior Informed Consent (FPIC) by the local community.

Despite the ongoing land reforms, there still exists insecurity of tenure especially in relation to community land. This has direct implications for PFM as significant amount of forests fall on the community lands. The proposed community land bill promises to address this issue by establishing Land Administration Committees and Community Land Boards to hold and manage community land on behalf of those communities. Enacting this legislation will therefore protect the rights of forest dependent communities and facilitate their access, co-management and derivation of benefits from the forests.

Also closely linked to tenure is the lack of clarity on laws regarding tenure. This includes clarities in the *bona fide* ownership of land under the different tenure regimes, or for example the criteria for defining “communities” in relation to ownership of community land. Still on land tenure, the Forest Act is not in tune with the Constitution, the Land Act and the tenure

categorization that they encapsulate. Harmonizing the Forest Act, finalizing and adopting the National Forest Policy are two critical action points.

Laws related to forest management such as the Forests Act, the Water Act and the Wildlife (Conservation and Management) Act need to be harmonized in order to remove overlaps in the jurisdictions of Community Forest Associations (CFAs) and other institutions such as Water Resources Users Associations (WRUAs) to manage areas where forests are located. It is also critical that there is clarity on the institutional structure for forest management in the country. The establishment of the Ministry of Environment, Water and Natural Resources provides an important opportunity for rationalizing hitherto disparate institutional responsibilities and lack of clarity resulting in duplicity, conflicts and sometimes neglect.

The linkage between the National Land Commission and KFS requires clarity so as to harmonize responsibility for forest governance and implications of land management for that governance. In addition, there is a need to focus on devolving the structures of KFS to correspond to the county structure that has been operationalized under the Constitution.

The constitution proposes establishment of coordination forums, and committees between different county governments, as well as different administrative levels within a county. This should be fast-tracked to avoid potential conflict between the national government and county governments over utilization and management of forest.

In terms of further research, the specific content of different rules, their enforcement, and incentives among CFA members can be better established in greater detail. In particular, contractual agreements between the communities and KFS, their nature and duration, their accountability structures and processes, their enforcement, and assessment of the capability of each party to deliver reasonably on their contractual obligations is an aspect that requires better understanding. Furthermore, the gender implications of this transition towards community contracting for forest resource management are also poorly understood, though experiences from other settings are not optimistic. There is thus a need for more studies to shed light on opportunities for increasing gender equity among members of the CFAs.

REFERENCES

Policies

Forest Policy, Sessional Paper No. 1 of 2007

National Land Policy Sessional Paper No. 3 of 2009

Legislation

Arbitration Act, Laws of Kenya, Act No. 4 of 1995.

Agriculture (Farm Forestry) Rules, 2009 (Legal Notice No. 166, 20 November 2009)

Constitution of the Republic of Kenya, 2010

Environment and Land Court Act, Laws of Kenya, Act No.19 of 2011

Environmental Management and Coordination Act, Kenya (EMCA), Act No. 8 of 1999,
Laws of Kenya

Environment (Impact assessment) Regulations, 2003

Environmental Management (National Environmental Tribunal Procedure) Rules, 2003

Forests Act, Laws of Kenya, Act No. 7 of 2005

Land Act, Laws of Kenya, Act No. 6 of 2012

Land Registration Act, Laws of Kenya, Act No. 3 of 2012

National Museums and Heritage Act Cap 6 Laws of Kenya

National Land Commission, Laws of Kenya, Act No. 5 of 2012

Societies Act Cap 108 Laws of Kenya

Water Act, Laws of Kenya, Act No. Act 8 of 2002

Wildlife (Conservation and Management) Act, Laws of Kenya, Chapter 376

Books

Angelsen, A., and Wunder, S. Exploring the Forest-Poverty Link: Key Concepts, Issues and Research Implications (Center for International Forestry Research, 2003)

Brosius JP, Tsing AL, Zerner C, eds. Communities and Conservation: Histories and Politics of Community-Based Natural Resource Management (Walnut Creek, CA: Altamira, 2005)

Castro, Alfonso Peter. Facing Kirinyaga: A social History of Forest Commons in Southeaster Mount Kenya (London: Intermediate Technology Publications, 1995)

Contreras, Antonio. Rethinking Participation and Empowerment in the Uplands in P. Utting (ed) Forest Policy and Politics in the Philippines (Quezon: Ateneo de Manila University Press, 2000)

Christie, E. Finding solutions for environmental conflicts: power and negotiation (UK, Edward Elgar Publishing Ltd, 2008)

Convention on Biological Diversity. Global Biodiversity Outlook (Montreal: Secretariat of the Convention on Biological Diversity, 2001)

Cotterell, H. The Sociology of Law (London, Butterworths, 1984)

Danida. Community-based natural resource management (Danish Ministry of Foreign Affairs. Technical Note, 2007)

Gay, L. R. Education Research: competencies for Analysis and application (Charles E. Mairill Publishing Company, Bell, A. and Howell Company. Columbus, Toronto and London, 1981)

Interim Coordinating Secretariat: Mau Forests Complex. Brief on the rehabilitation of the Mau Forest Complex (Nairobi: Office of the Prime Minister, Government of Kenya, 2010)

Kagombe, Joram and Gitonga, James. *Plantation Establishment in Kenya: A Case Study on Shamba System*. (Nairobi: Kenya Forestry Research Institute & Forest Department, 2005)

Kameri-Mbote, Patricia. *Property Rights and Biodiversity Management in Kenya* (Nairobi: Acts Press, 2002)

Kenya Forests Service. *Manual on Forming and Registering CFAs* (Nairobi: Kenya Forest Service; Kenya Forests Working Group, 2009)

Kenya Forest Service. *Participatory Forest Management Guidelines* (Nairobi: Kenya Forest Service, 2007)

Logie, J.P. and Dyson, W.G. *Forestry in Kenya: A historical account of the development of forest management in the Colony* (Government printer, Nairobi, 1962)

Okoth-Ogendo, H.W.O. *Tenants of the Crown: Evolution of Agrarian Law and Institutions in Kenya* (Nairobi: Acts Press, 1991)

Ongugo, O.P. Mogoi, J.N. & Obonyo, E. *Gathiuru and Upper Imenti Forest Blocks, Mt. Kenya: A Hope for Securing a Future through Joint Forest Management*. IFRI-KEFRI Project. Community Brief No. 1. 2004 (Nairobi, Kenya, IFRI-CRC-K, 2004)

Ostrom, Eleanor. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge (Cambridge University Press, 1990)

Scott, Anthony. *The Evolution of Resource Property Rights* (New York: Oxford University Press, 2008)

Seidman, A., Seidman, R.B., Mbana, P. and Li, H.H. (eds.). *Africa's challenge: Using Law for Good Governance & Development* (Africa World Press, Trenton, 2007)

Shively, Gerald E., 2004. "Poverty and forest degradation: introduction to the special issue," *Environment and Development Economics* (Cambridge University Press, 2004)

Thenya, T, Wandago, B.O.B., Nahama, E.T, and M. Gachanja. *Participatory Forest Management Experiences in Kenya* (Kenya Forest Working Group, 2007)

Vatn, A. *Institutions and the Environment* (Edward Elgar. Cheltenham, UK, Northampton, MA, USA, 2005)

Vatn, A. *Valuing Forest Ecosystems-An Institutional Perspective*. Kant and Berry (Eds.), *Institutions, Sustainability, and Natural Resources: Institutions for Sustainable Forest Management* (Springer, Netherland, 2005)

Wily, Liz & Mbaya, Sue. *Land, People and Forest in Eastern and Southeastern Africa at the Beginning of the 21st Century: Impact of Land Relations on the Role of Communities in Forest Future* (Nairobi: IUCN/EARO, 2001)

Articles

Agyeman, V.K., Marfo, K.A., Kasanga, K.R., Danso, E., Asare, A.B., Yeboah, O.M. & Agyeman, F. *Revising the taungya plantation system: new revenue-sharing proposals from Ghana, 2003* *Unasylva* 40-47

Ayoo, C. *Community-Based Natural Resource Management in Kenya. Management of Environmental Quality: 2007* *An International Journal* 18(5): 531-541

Glasmeyer AK, Farrigan. *Understanding community forestry: a qualitative meta study of the concept, the process, and its potential for poverty alleviation in the United States case. 2005* *Geogr. J.* 171(1):56-69

Hardin, Garrett. —*The Tragedy of the Commons*: 162 *Science* 1243

Kagwanja, P.M. 2005. Power to 'Uhuru': Youth Identity and Generational Politics in Kenya's 2002 Elections. 2005 African Affairs 105/418: 51-75.

Pretty, J., and Smith, D. "Social capital in biodiversity conservation and management, 2004 Conservation Biology, vol. 18, no. 3, pp. 631–638.

Richards, M. "Common Property Resource Institution and Forest Management in Latin America". 1997 Development and Change, Vol. 28, pp 95-117.

Ruotsalainen. A. "Kenya forest master plan. Recognition of local forest users," in Seminar Reports and Journal of a Field Excursion to Kenya, P. Pellikka, J. Ylhaisi, and B. Clark, Eds., vol. 40, pp. 21–25, Expedition Reports of the Department of Geography, 2004 University of Helsinki.

Websites

Charo Quesada, —Amartya Sen and the Thousand Faces of Poverty, para 5. (Inter-American Development Bank, 2001), <http://www.globalpolicy.org/socecon/develop/2001/1205sen.htm>

ANNEX: QUESTIONNAIRE

ASSESSMENT QUESTIONNAIRE FOR SURURU CFA MEMBERS

I am a student of MA Environmental Law at the Centre for Advanced Studies in Environmental Law and Policy (CASELAP), University of Nairobi. I am carrying out research entitled, “**Impact of Community Forest Associations on Forest Resources Management in Kenya**” for partial fulfillment of the requirement for my MA degree. The information that you will provide in this questionnaire and your personal identification will be kept confidential while using the information for research activities. So, I humbly request you to mention your own reality in this questionnaire with full confidence. Please feel free to express your personal opinion.

Titus Wamae

Village:	Name of interviewer:	Questionnaire # :
District/Ward:	Date :	Day:
Subdivision:	Starting time:	Finishing time:
Division:	Name of respondent:	

1. Basic Household Information

HH member	Type of HH	Sex	Relationship with HH head	Marital status	Age	Level of Education	Occupation	Wellbeing class

1.1. How are the different roles divided within the household? (farming, collection, diverse occupations, duties, rights etc). Specify

- Father:
- Mother:
- Children:
- Elders:

1.2. Which ethnic group do you belong to?

1.3. Which religion do you identify with?

1.4. How long has your family lived here?

1.4.1. Where did you live before?

1.4.2. Why did you move to this area?

2. General questions

2.1. Thinking back to before Sururu CFA was established, how would you rate the quality of the forest area at that time? Specify reasons.

1) very poor 2) poor 3) good 4) very good 5) excellent

2.2. Regarding the forestland now co-managed by Sururu CFA, what were the main uses of this area by members of the community before the formation of Sururu CFA?

2.3. Did this village have any prior experience with community management of any forest areas? **YES/NO** If yes, specify:

3. Policy and legal framework

3.1. Does the Constitution of Kenya 2010 provide adequate enabling environment for community participation in forest management? **YES/NO**. Specify.

3.2. Are you aware of the existence of the Forest Policy? **YES/NO**. If yes, how were you informed?

3.3. Does the Forest Policy provide adequate enabling environment for community participation in forest management?

3.4. Are you aware of existence of the Forests Act 2005? **YES/NO**. If yes, how were you informed?

3.5. How do you perceive the Forests Act 2005 in terms of local community participation in forest management? What are your reasons?

1) Very good 2) good 3) bad 4) very bad

3.6. How do you perceive the Forests Act in terms of sharing of benefits from forest resources?

1) Very good 2) good 3) bad 4) very bad

If very bad and bad, why is it so?

- a) Corruption
- b) Embezzlement
- c) Tribalism
- d) Ineffective monitoring and control of law enforcement
- e) No cooperation with the state
- f) No legal compensation mechanism
- g) Other (specify)

3.7. Do you think that the Forests Act 2005 is strong enough to deter offenders?

3.8. What are the levels of illegal activities in forest reserve after the introduction of PFM?

1) Increased 2) Same 3) Decreased

3.9. What could be the main reason?

4. Information on land tenure, use and productivity

4.1. Do you have land? **YES/NO**

4.2. If yes, is it owned, leased, or do you just have access to it? If it is not owned by yourself, whose is it?

4.3. How much?

Land tenure	Plot # 1	Plot # 2	Plot # 3	Plot # 4	Plot # 5	Plot # 6	Total
Rented							
Inherited							
government allocation							
Purchased							
Squatter							
Other (specify)							

5. Information on forest resources/products

5.1. How far is your house from the boundaries of Mau forest?

5.2. How are the boundaries of Mau forest defined?

5.3. How do you use the forest?

- agriculture
- collection of NTFP
- hunting
- spiritual purpose
- other (specify)

5.4. Who is allowed to harvest forest produce from the forest reserves?

5.5. Does your household collect any products inside the forest?

5.6. Do you pay fee to collect forest produce from the forest? If yes, who collects the fees?

5.7. In case of penalties for forest offences, who collects fines and penalty fees?

5.8. Has the supply of forest products increased over the year?

1) increased 2) decreased 3) no change

Forest product	Collector	Quantity	Subsistence use/reason/amount	For sale/amount/income	Notes (requirements/regulations)	Cost of Collecting

5.9. What challenges do you face in collecting forest resources? Specify:

5.10. Are there any important resources you have to buy, that cannot be collected?

5.11. Do you get any benefit from the protected area around your community? **YES/NO.**

If yes, what are these benefits?

5.12. How do you perceive the benefit received from the protected area?

1. Very good 2. good 3. bad 4. very bad

If very bad and bad, why is it so?

5.9. Do you have mechanisms for sharing of benefits from the forest resources? **YES/NO.** If yes, what are they?

5.10. Do you feel that the mechanisms are fair and equitable? **YES/NO.** If no, why?

5.11. What kind of access to the forest would you prefer?

- 1) Free access for both local communities and outsiders
- 2) Controlled access for Outsiders
- 3) Controlled access for both local communities and outsiders

5.12. How have poor people benefited from the distribution of forest products?

- 1) fair
- 2) moderate
- 3) low

5.13. Which major changes have there been, in relation to management of Mau forest from the time Sururu CFA was formed?

- Specify: year and what changes?

Changes	Year	Effect

5.14. How were you informed of the changes?

- Directly from the KFS?
- CFA?
- Local Chairman?
- Elders?
- Media?
- Others?

5.15. Have there been any encroachment problems from other communities or other CFAs? **YES**
NO If yes, how have they been solved?

5.16. What is the extent of the encroachment area? **ACRES**

6. Information on participation/equity

6.1. Are there local organizations/groups/individuals who participate in decision-making and management of Mau forest?

- Are you a member of such group(s)?

Name of group	Role	Year formed	No. of members	Criteria for participating	Are you member

6.2. How is the selection of CFAs members done?

6.3. How many members have a degree or other qualifications?

6.4. What trainings have members received and/or workshops attended?

6.5. What is the involvement of the poor and women in the Executive Committee?

6.6. Are all relevant stakeholder groups represented in your CFA? **YES/NO**. If yes, who are they?

6.7. What is the length of term of the Executive Committee? **YEARS**

6.8. How are decisions made regarding different activities such as: implementation of different activities; distribution of forest product, incentives?

6.9. To what extent do you participate in the following activities?

S.N	Every time	Most of the times	Sometimes	Never
1	Assembly, discussion, meeting			
2	Plantation			
3	Skill development and training			
4	Protection			
5	Income Generating Activities			
6	Others (specify)			

6.9. What is the frequency of meetings for the Executive Committee, and for the AGM?

6.10. Typically, what is the attendance for a meeting of Sururu CFA AGM? **NUMBERS**

6.11. Describe the relationship between the Executive Committee and the KFS officer with whom you normally interact.

6.12. Does the KFS give the Executive Committee enough autonomy to manage the forest in a way that best serves the community? **YES /NO**

6.13. Does the CFA management plan adopted contain any items that KFS insisted upon, even though the community does not want or need? (e.g., particular tree species or NTFP, etc.) **YES NO** If yes, specify item(s):

6.14 Are there any issues with the way local/indigenous knowledge is being used and valued in your locality?

6.15 Describe the relationship between Sururu CFA and other relevant government agencies.

1) level of trust 2) information sharing 3) equality

6.16 Describe the relationship between Sururu CFA and higher level non-government organizations e.g. research organizations or other global/national or regional NGOs?

1) level of trust 2) information sharing 3) equality

7. Livelihood Plans/Investments

7.1. What is the level of your household economic condition after the introduction of PFM?

1) Improved 2) No Change 3) Worsened

7.2. Have you been involved in any IGAs activities? **YES NO**

If yes, which ones?

IGAs Activities	Annual Income	Problem Encounter	Type of assistance needed

7.3. Further, do you want to conduct any other types of IGAs? **YES NO** If yes, what type?

7.4. Do you think that your economic status is improving through IGAs? **YES NO** If no, what are the causes?

7.5. Please describe how the Sururu CFA plans to sustain itself in the future? What investments are being made?

7.6. What is the current balance of the CFA Account, approximately? **KENYA SHILLING**

8. Market information

8.1. Where do you sell your forest products?

Type of product	Where/market	Product/ amount	Associated cost	Income

8.2. Do you face any challenges by selling at the market?

- Specify:

9. Social relationships

9.1. Have there been any conflicts within the CFA? **YES NO** If yes, how were they solved?

9.2. Is conflict over forest resources or their management an issue in your locality?

9.3. Does your CFA have conflict resolution skills and processes?

9.4. Is your CFA building trust in the community?

9.5. Is your CFA sharing information in the community? If so what type? How?

7. Constraints for the local people

7.1. What are the benefits and challenges by living close to the forest?

Suggestion

- If there is a policy reform, what would you like to be changed in priority?
- What do you suggest will solve the problem of user rights and access to resources?
- What do you suggest would help regularize the customary right of the local people to that of the forest legislation?
- What do you suggest would improve your cooperation with the state?

If anything to say, please?

1.....

2.....

3.....

4.....

5.....