

**LINKING THE SOCIAL AND THE SPATIAL IN FOREST  
RELATED CONFLICTS:**

**The Case of Eastern Mau Forest Adjacent Communities, Kenya**

A thesis submitted in partial fulfillment of the requirement of Doctor of Philosophy degree in  
Environmental Governance and Management

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This thesis is my original work and has not been presented for award of degree in any other

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In Memory of Claude Benard Muthee Kamau

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## List of Abbreviations and Acronyms

CBS- Central Bureau of Statistics

CIPEV -Commission of Inquiry into Post-Election Violence (The Waki commission)

DRSRS- Department of Resources Survey and Remote Sensing

EAWS-East African Wildlife Society

FAO-Food and Agriculture Organization of the United Nations

FGD-Focus Group Discussion

FRA-Forest Resources Assessment

GOK –Government of Kenya

ICS-Interim Coordinating Secretariat

ILRI- International Livestock Research Institute

ITC- International institute for GeoInformation Science and earth observation

IUCN-International Union for Conservation of Nature

KI-Key informant

KFS-Kenya Forestry Service

KFWG-Kenya Forests Working Group

KIFCON -Kenya Indigenous Forest Conservation Project

OPDP-Ogiek People Development Programme

SIT-Social Identity Theory

SoK-Surveys of Kenya

STAKE-Stabilizing Kenya through solving forest related conflicts

TJRC-Truth Justice and Reconciliation Commission

UN DPA- United Nations Department of Political Affairs

UNDP-United Nations Development Programme

UNEP- United Nations Environment Programme

UNIFTPA-United Nations Interagency Framework Team for Preventive Action

USGS- United States Geological Surveys

WRI-World Resources Institute

WWF-World Wildlife Fund for Nature

## Abstract

Conflicts over natural resources are increasing in number and severity. This problem has been compounded with the increasing population and scarcities of natural resources in developing countries. Whereas studies have attempted to explain the sources of conflicts in Kenya, majority are limited by the fact that they address causes of conflict in a single dimension (for example; either resource or ethnicity). However, several conflict authors suggest that conflicts are usually complex and multifaceted and it pays to address them in different dimensions. In contributing to advancement of knowledge on the sources of conflicts, this study was planned to investigate the sources of conflicts with the guidance of social identity theories. The study further sought to highlight the role of beliefs, values and attitudes of different parties to conflict in the context of geographical factors.

The research employed a mixed methods data collection strategy. Methods of data collection included semi-structured and unstructured interviews, questionnaires, observation, and geo-coded transect walks. The respondents included community members residing adjacent to the forest reserve in Eastern Mau, as well as key informants involved in the conservation or peace efforts within the community such as forest officers, local administration and nongovernmental representatives. Qualitative data obtained in this study were organized in NVIVO soft-ware where they were analyzed by way of thematizing. Quantitative data was organized in an SPSS soft-ware where analyses of frequencies and correlations between variables were done. The study further employed positional data analysis techniques to project conflicts as observed and reported on maps. This was done by overlaying spatial data (collected during transect walks,

where villagers identified some of the conflict hot spots) on the land cover/use maps and generating a composite map that visualized conflicts in relation to geographical features.

When viewed through a social perspective, study findings show that conflicts in Eastern Mau (whether violent or latent) form an ethnic identity pattern. An application of the spatial tools to the study results reveals geographical variations in forest conflicts. Some conflict are shown to have occurred in the context of resource (pasture and land) competitions while others seem to have been motivated by competitions during national elections with no indication of direct bearing to the forest resource. This study envisions that identity as a fundamental need plays an important role in determining the different perceptions (for example on natural resources and election processes) and that variations in these perceptions can be the basis for conflict behavior. The study concludes that conflicts in forestry context are likely to escalate whenever the social (identity) factors interact with the geographical (spatial) factors.

The study recognizes that in the past, there have been some success stories of community initiated and driven conflict resolution processes in the study area. Therefore, the study recommends that ongoing efforts on national cohesion and integration should consider integrating traditional conflict resolution mechanisms as well as mediation processes in Kenya's peace building process especially in potentially conflict zones.



## **CHAPTER 1: INTRODUCTION**

### **1.1 Background**

Conflict occurs when individuals or groups of persons pursue goals that clash or are incompatible. It is an expressed struggle between interdependent parties who perceive incompatible goals, scarce resources, and interference from others in achieving their goals (Wilmot & Hocker, 2001). Barnes (2005) identifies conflict as perceived divergence of interests, a belief that the parties' current aspirations are incompatible. When parties' differ in terms of their goals and their differences are not addressed, misunderstandings can emerge leading to conflicts. Conflicts range from clashes between people due to ideological differences between religions, ethnicities, and political groups. Conflicts can also represent the disparity between social classes, that is, the "haves" and the "have-nots" (Bercovitch, 2009).

Conflict scholarship can be revealed in the works of early thinkers such as Charles Darwin (1809-1882), Karl Marx (1818-1883) and Sigmund Freud (1856-1939) which suggest that conflict is an inevitable part of society. Darwin emphasized 'the competitive struggle for existence' and 'the survival for the fittest'. According to Darwin, 'all nature is at war, one organism with another....' (Quoted in Deutsch & Coleman, 2000). Darwin's work was to later influence scholarship in political geography with one of his followers Fredrich Ratzel (1844-1904) suggesting that a country's (a nation was equated to a living organism) search for territorial expansion was similar to a growing organism's search for space (Husain, 2001). Thus, conflict between nations was seen as a contest for territory within which to expand, with the fittest thriving. In explaining the territories occupied by nations, Ratzel coined a concept known as '*Lebensraum*' meaning 'living

space'. *Lebensraum* was later appropriated by the German school of *Geopolitik* in the 1920s and 30s and used to justify the Nazi programme of territorial expansion. This concept, which has come to be known as social Darwinism in various literatures, points to the influence of the spatial (space) factors on human conflict.

Karl Marx stressed on class struggle, and as the struggle proceeds, 'the whole society breaks up more and more into two great hostile and antagonistic classes: bourgeoisie and proletariat' (Deutsch & Coleman, 2000). Marxism sees history as a series of dialectical struggles with economic factors being primary determinants of that history. Marxism presumes that 'space' and 'society' interact. Thus, Marxism also gives credence to the argument of the spatial factors operating closely with the social in human conflict. However, Marxist philosophy is a positivist approach, which lays emphasis on materialism as the important factor in the social struggles. Marx writes: 'it is not consciousness (ideas) that determines life, but life that determines ideas...'. (Husain, 2001). This observation suggests that in human interactions, it is the spatial 'material' factors (and their ability to satisfy life needs) which determine the direction of social processes (for example, occurrence of conflict). These ideas relate to perceptions and attitudes that precede (conflict) behavior. Marxist philosophy was instrumental in the revolutions around the world that led to replacement of capitalist with communist regimes in regions such as Eastern Europe and China.

Freud on his part was interested in the psychological factors in conflict. He studied the various psychodynamic forces for control over the ego. Freud and his followers portray the human mind

as a reservoir of psychic energy that is channeled into various activities (Folger, *et al.*, 2009). This energy is the impulse behind different human behavior such as verbal attacks. Freud's psychodynamic perspective argues that aggressive energy frequently arises from feeling of guilt or frustrations emanating from unfulfilled needs or thwarted desires (Folger, *et al.*, 2009). Freud further suggests that one of the ways through which people deal with aggression is through attack on others. However, apart from attack on others, Freud suggests that individuals with thwarted desires are likely to engage in 'defense mechanisms' such as day dreaming and despair (Folger, *et al.*, 2009). Thus, Freud unlike Darwin and Marx (who emphasized on the external spatial factors), explains conflict phenomena in terms of 'what goes on in the mind' which include perceptions, beliefs, values, ideology and other psychological states that people have acquired through their experiences. This is a socio-psychological perspective to conflict study.

Works by relatively recent social thinkers (like Rubin *et al.*, 1994; Collier & Hoeffler, 1998, Deutsch & Coleman, 2000; Pruitt & Kim, 2004; Vindelhøy, 2012) suggest that conflicts have the tendency to both disintegrate and transform society. These works have also noted that conflicts at all levels are part of life and can have both positive and destructive aspects. Therefore, since it is not possible to live without conflicts, the different authors have suggested the importance of learning how to manage them.

Natural resource conflicts are those conflicts arising from competing claims over a single resource, overlapping and nested claims, conflicting sources of legitimacy and negotiations over the meaning of the resources (Dietz, *et al.*, 2003). Natural resource conflicts date back into

antiquity. Violent conflicts can be traced back to the advent of civilization. Early conflicts were a contest to control the most and best resources as noted by Boulding (2000). Since the end of the Cold War, resource based conflicts have grown rapidly in number with armed groups in at least 18 conflicts relying on revenues from diamonds, timber, cotton, and a range of agricultural crops such as cocoa (UNEP, 2009). Inequalities associated with land access have been central to conflicts in countries such as El Salvador, Guatemala and Nepal (Bruch, *et al.*, 2003). Inequitable distributions of oil and gas revenues have led to secessionist conflicts in areas such as Indonesia's Aceh and southern Sudan (Collier & Hoeffler, 2012). Rustad & Binningsbø (2010) observed that between 1946 and 2008, 40% to 60% of all intrastate conflicts were linked to natural resources. In a context of multi ethnic groups, conflicts are likely to emerge. The problem is further exacerbated when the different groups of people try to access shared resources that are scarce or perceived as scarce.

Conflicts are common in forest management. It is believed that forest conflicts are inherent in forest management because of their multi-purpose and therefore with many stakeholders (local communities, different government agencies in the forest administration, civil society, and the private sector) often having competing interests (Marfo, 2009). Marfo (2009) argues that forest conflicts are inevitable especially in contexts where there are competing rights, claims, interests, values and power struggles. Such competitions are quite often enmeshed in complex institutions and multiple legal systems of land tenure ship (Schmid, 1998). In many instances, forest management is usually subject to unclear, overlapping, competing or contradictory legal

frameworks. Rising tensions and disputes arising from forest resources related issues can undermine institutions- and rules that govern resource use.

In more recent times, attempts have been made to conceptualize conflict in forestry context. For example, Raitio (2008) suggests that forest resource related conflict could be understood as frame conflict whereby parties differ in their views, experience, or understanding of conflict. She further proposes that forestry conflict is perception and value driven. Whereas Lewicki, *et al.* (2003) attempted to distinguish conflict from non-conflict situations by suggesting that disagreements (for example in forest management just like in any other situations) are a fact and do not necessarily translate into conflict. They however conceptualize conflict as a situation in which a party feels impaired or restricted by the behavior of another party because of differing perceptions, emotions, goals, values, or interests.

From the conflict literature, two main sources of conflict are easily identifiable; namely access to resources and identity prejudices. There are those who argue that all conflicts are resource based. These proponents subscribe to the realistic conflict theory (RCT) which proposes that prejudice arises from social competition over scarce resources. Some of the most often cited examples of ‘resource wars’ in Africa include conflict in Liberia and the Democratic Republic of Congo. However, Sandole (2006) observes that abundant (or scarce) resources and their mismanagement are not the root sources of conflicts but rather comprise secondary causes and are a means through which belligerents prolong the war. Sandole further argues that by emphasizing on resources as the main source of conflict, researchers risk considering the symptoms rather than

the causes of conflicts. Many studies on conflicts according to Sandole, hypothesizing that conflicts are resources based, are aimed at determining causation where there is only a statistical correlation. This approach is limited and thus cannot transcend the symptoms and capture the complexity of complex conflicts.

The proponents of the idea that ‘all conflicts are identity based’ argue that identity is a key factor in conflict because as one of the most crucial needs is an extremely strong catalyst for social mobilization. The scholars observe that quite often identity has to be invoked when handling political and societal challenges. Some of the most cited identity conflicts include the Israeli-Palestinian intractable conflict and the Côte d’Ivoire 2010 electoral crisis (Doucey, 2011). According to Rothbart & Cherubin (2009) identity relies on a common set of narratives, symbols, and a shared sense of group differences. Those who emphasize the role of identity in conflict discourses subscribe to the Minimum group paradigm<sup>1</sup>, which suggests that identity causes violent conflict by invoking shared normative commitments that center on notions of in-group purity and out-group vice. This distinction between ‘us’ and ‘them’ leads to strong competition among different players. When conflicts rely on the mobilization of identities, individuals simply cannot take a neutral stand, either because they have a strong sense of belonging to their ethnic group, or because they fear being seen as *de facto* members of the enemy’s group (Folger *et al.*, 2009). Thus, whenever an identity is at stake in conflict there cannot be free riders. Identity conflicts are known to deeply polarize and fracture society. Political leaders are believed to often manipulate identity for electoral purposes. Sandole uses the term ‘ethnocentrism’ to describe this

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<sup>1</sup> For a detailed explanation of the minimum group paradigm and RCT see section 2.4.1 of the literature review

political manipulation. He defines ethnocentrism as “the power used by the privileged to maintain themselves and their groups at the expense of others,” (Sandole, 2006). However, manipulation of identity by elites does not imply that people mobilized are always ignorant and not capable of invoking their sense of belonging in the absence of their leaders. Groups often find a special resonance in identity discourse since they can identify themselves with the narratives that emphasize shared values and collective fears. The denial of identity as human need can increase the probability that a conflict will become intractable and violent (Azar & Moon, 1986). Doucey (2011) however argues that it is misleading to consider identity salience *per se* as a source of conflict. Doucey observes that identity is a social construct, which is dynamic and in reality always fluctuating as it is subject to alliances, mobilizations and manipulations. She further argues that on one hand, identity is a medium of mobilization through which groups of individuals can express their concerns and collective fears. On the other hand, identity can provide a forum for political leaders or ‘warlords’ to achieve their political objectives and to legitimize their actions.

Kenya’s recent past has been marred with conflicts that escalated during national elections. For example, in the year 2007, following a disputed election, the country witnessed the most violent inter-group clashes ever since independence from colonialism. Despite being violent, this conflict was just one of the many ethnic conflicts that often occurred every election year. Following the intervention of the international community through mediation by former United Nations secretary general, Mr Koffi Annan, the political leaders of the warring factions, agreed to a power sharing settlement, which led to a cease fire, and the country returned to normalcy. Prior to the

year 2013 elections, two of the political leaders<sup>2</sup> who were in the opposing camp previously (and had been perceived to represent the interests of their respective communities), entered into a political coalition as they sought to clinch the country's top leadership. During the 2013 general elections clashes between the two communities were not witnessed. This was the first time since the advent of multipartyism in early 1990s that fighting was not witnessed between the two communities during national elections. The questions that emanate from this turn of events are: is access to resources and power the main source of conflicts in Kenya? Alternatively, are conflicts motivated by ethnicity? What about political agreements in crisis resolution processes? Are power-sharing arrangements aimed at making political belligerents stop fighting, or can they also help to address the population's needs and fears? It is against the above background that a study was planned with an aim of answering some of these questions. However, to unmask the root sources of conflicts in a multi-ethnic and resource diverse environment, the study sought to inductively investigate the local's needs and fears in a social –ecological perspective.

The study was conducted among the communities living adjacent to the Eastern Mau forests in Kenya and it is part of a project entitled: Stabilizing Kenya through solving forest related conflicts (STAKE). STAKE is a research project at the Wangari Maathai Institute for peace and Environment Studies that is aimed at investigating the multiple drivers of forest related conflicts around the Mau Forest Complex in Kenya. The first theme of STAKE involves a study of the different legal frameworks in forestry management in Kenya as well as the role of the Forest Act 2005 in changing patterns of forest related conflicts. The second theme focuses on an in-depth

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<sup>2</sup> Mr Kenyatta, from the Kikuyu community was supporting the incumbent president, Mr Kibaki for re-election. Mr Ruto, from the Kalenjin community was supporting the Opposition candidate, Mr Odinga.



study of the development and underlying drivers of forest related conflicts at the community level. The third theme involves a household level survey research to explore the livelihoods impacts of the Forest Act 2005. Last but not the least is a synthesis of the research to develop and disseminate recommendations and tools for inclusive governance approaches. This study was aimed at addressing the second theme, which is analyzing forest related conflicts using Eastern Mau in Kenya as a case.

## **1.2 The research problem statement**

Human conflicts are increasing in number and severity; there are growing conflicts between nations as well as between groups of people within nations. This problem has been compounded with the increasing population and scarcities of natural resources in developing countries (Jong, *et al.*, 2006; Harwell, 2010). Conflicts over the use of natural resources and their causes are central issues in the Eastern and Central Africa (Kameri-Mbote, *et al.*, 2007).

Kenyan conflicts revolve around pastoral activities in the arid and semi arid lands, land, and access and utilization of forest resources (Daniels & Bassett, 2002). In northern Kenya, for example, there has been a cycle of cattle raids, inter-communal water and pasture conflicts as well as banditry as observed by Wiesmann, *et al.*, (2000); Kiteme & Gikonyo (2002). The two works also document conflicts over water in Kenya's highland and lowlands. It is also widely observed in academic discourses and common parlance that land has been a source of many inter-group conflicts in Kenya since colonial times (GOK, 2009b; Macharia, 2009). It is has been documented that conflicts over land between ethnic groups in Kenya have been orchestrated and

escalated at the national level for political purposes, in particular in connection to elections (Onoma, 2008; Kanyinga, 2009). A complicated land-ownership history, degradation of the forest characterized by excision of state forest and extensive illegal, irregular and ill-planned settlements and increasingly strained relationships between tribes “opened the gates” for political manipulation of the beliefs, perceptions and attitudes of citizens. As a result, violence and ethnic cleansing among different tribes occurred after the 2002 and 2007 elections (Ajulu, 2002; UNDP, 2008).

Odhiambo & Nyangito (2002) explain that after Kenya’s independence from colonialism, large parts of the country were set aside as trust lands being managed by local authorities on behalf of local people. In the many years that followed independence, such trust lands were progressively allocated to individuals thereby changing communal tenure into private land tenure (GOK, 2005). The drive towards privatization of public land has been one of the sources of conflict in Kenya’s natural resource management (Odhiambo & Nyagito, 2006). Land conflicts have been recently witnessed in different parts of Kenya including the Tana delta at the coast and Mount Elgon in the west. The Rift Valley, one of the most ethnic diverse regions in Kenya has in the past witnessed land related conflicts that have culminated in tribal clashes that escalated during general elections (for example in the years 1992, 1997, 2002 and 2007) as observed by Ember (2008); Bratton & Kimenyi (2009); Kanyinga (2000 & 2009) and Gutiérrez-Romero (2010).

Several studies have attempted to propose the sources of conflict in Kenya and most of them explicitly cite ethnicity (Machira, 2001; Ajulu, 2002; Bratton & Kimenyi, 2009; Kanyinga, 2009;

Gutiérrez-Romero, 2010) and competition over resources (Kanyinga, 2000; Omolo, 2002; Kanyinga, 2009; Landau & Misago, 2009; Boone, 2011; Mworira & Ndiku, 2012) as the drivers to conflicts. Some use power politics (Kanyinga, 2009; Landau & Misago, 2009; Boone, 2011) and historical factors such as colonialism (Kanyinga, 2009; Mkhabela, 2011) to explain current conflicts in Kenya. Others have related conflicts to recent trends in climate variability and change (Theisen, 2012). Whereas these studies have attempted to explain the sources of conflicts in Kenya, majority are limited by the fact that they address conflict in a single dimension (for example; either resource or ethnicity). Indeed several conflict works (such as Rubin *et al.*, 1994; Deutsch & Coleman, 2000; Pruitt & Kim, 2004) suggest that conflicts are usually complex and multifaceted and it pays to address them in different dimensions. Further, the role of beliefs is often ignored in conflict analyses and yet conflict theorists such as Galtung (1996) emphasize the significance of perceptions and beliefs in conflict.

In light of the above, this study was aimed at contributing to existing knowledge on conflict sources by combining both the social and spatial dimensions. Since natural resource competitions (spatial factors) and identity (social factors) as conflict, sources have been emphasized in previous works albeit separately, the question that this study was interested in addressing is; what happens when the social disagreements and spatial factors interact in forestry context? The study works on the preposition that forest resource conflicts are spatially varied but also needs to be viewed in social perspectives.

The search for solutions or ways to manage these conflicts can help to improve present and future accessibility, productivity and sustainability of the natural resource base for regional development within forest ecosystems and beyond. However, as noted by Kanyinga (2009) most investigations (for example by researchers and media analyses) into the causes of conflicts in Kenya tend to examine factors which are immediate rather than fundamental for instance the vote count as the trigger of the violence, rather than on what predisposing conditions existed prior to the conflict. In addition, most previous works tend to dwell more on manifest conflicts compared to latent conflicts in Kenya. However, conflict theorists such as Rubin *et al* (1994); Folger, *et al.*, (2009); Collins (2011) have suggested that conflicts develop in stages (or cycles) of escalation and latency and it is important to understand the different stages when analyzing conflict sources. Thus, this study sought to help improve our understanding of the fundamental sources of conflicts that bedevil the natural resources, structure and dynamics of conflicts and actors with an aim of suggesting possible resolution strategies. To improve an understanding of the causes of social conflicts in the context of natural resources, it was necessary to carry out a study using both inductive and deductive approaches in light of existing and often conflicting theories, hypotheses and media views and reviews on the causes of conflicts in Kenya. The results from this study are useful in guiding policy, governance and management of the forested areas as well as the rest of the country.

### **1.3 Research questions**

The research sought to answer the following broad questions:

- i. What kinds of conflict are witnessed in the forestry context?
- ii. Can a spatial pattern of conflicts be identified?
- iii. What role do perceptions and attitudes play in conflict patterns?
- iv. How does the ethnic composition influence conflict patterns?
- v. Which are the key factors that influence and sustain conflicts?
- vi. What are some of the existing conflict management strategies in place?

### **1.4 General objective**

The overarching objective of the research was to improve understanding of the development and underlying drivers of forest related conflicts.

#### **1.4.1 Specific objectives**

1. To identify and assess existing forest resource use conflicts
2. To assess the spatial factors contributing to conflicts
3. To examine the role of social factors in conflicts
4. To evaluate the existing conflict management strategies

### **1.5 Justification**

Forest resources are often linked to people's livelihoods, identities and security in many parts of the world. Hence, conflicts over forest resources control, management and use, merit a scientific analysis. The Mau forest complex is the single most important water catchment in Rift Valley

and Western Kenya. Through the ecological services provided by its forests, the Mau Complex is a natural asset of national importance that supports key economic sectors including energy, tourism, agriculture and domestic water supply (UNDP, 2008). The total capacity of developed, currently being developed and proposed hydropower plant sites on the rivers from the Mau Complex have been estimated at 190 megawatts (GOK, 2009a). The market value of electricity generated from developed and planned hydropower plants on rivers originating from the Mau complex are projected to be Kshs 5.3 billion annually (Kipkoech, *et al.*, 2011). The catchment area through its supply of water to wildlife sites and Important Bird Areas (IBAs), has contributed to tourism development in Kenya and Tanzania. For example it is estimated that in the year 2007 the Maasai Mara National Reserve and the Lake Nakuru National Park generated Kshs 5 billion total revenues with entry fee alone contributing about 1.16 billion (GOK, 2009a). By regulating the climate of the surrounding areas, the catchment supports agricultural production (through growing of cash crops such as tea, rice, wheat, barley, pyrethrum; subsistence crops; and livestock). Agriculture is the backbone of the economy of the peoples of Rift Valley as well as western regions. Kipkoech *et al* (2011) estimated that crop and livestock production from the two regions contribute over Ksh 100 billion annually to the economy of Kenya. Last but not the least, the catchment through maintenance of the water cycle in rivers and ground water supplies water to urban areas such as Nakuru, Naivasha and Mau Mahiu towns. These benefits among many others<sup>3</sup> make the Mau forests complex an important catchment and conservation area.

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<sup>3</sup>For a detailed discussion on the value of the Mau forests complex, see section 2.2.2 under the literature review chapter

Despite its critical importance for sustaining current and future economic development, the Mau Complex has been impacted negatively by extensive illegal, irregular and ill-planned settlements, as well as illegal forest resources extraction, which have generated tensions among different stakeholders in the region (Akotsi & Gachanja, 2004; GOK, 2005). The Eastern part of the complex has suffered the most from degradation. The Eastern Mau is also characterized by multi-ethnic groups with competing interests and needs, a situation that encourages breeding of tensions and conflicts associated with tribal clashes (GOK, 2009b). The study was aimed at unmasking the sources of social conflicts in Eastern Mau area with the aim of contributing to their management thereby realizing peace and stability within the Rift Valley and beyond. The study based its assumption on the fact that conflict management within a forest complex should be an integral part of sustainable resource conservation and management (Daniels & Bassett, 2002).

### **1.6 Scope and limitation**

There are various classes of social conflicts including but not limited to; interpersonal, intrapersonal, intergroup and intra-group. This study addresses itself to intergroup conflicts that involve different groups of people who interact in a common space. Thus, the inter-ethnic conflicts that have a bearing on forest resources are studied in this project. Forest related conflicts can be understood in a variety of ways including spatial, social, economic, political, ecological and psychological perspectives. The analyses of forest conflicts in this study mainly involve the spatial and social perspectives. The social analyses involve interrogating the perceptions, beliefs and behavior of the stakeholders to conflicts with a view of understanding how they 'frame' or

construct the conflict phenomena. Thus, the approach here is inductive with an in-depth study of the communities living adjacent to the forest. Spatial analyses involve mapping out the resources together with associated conflict phenomena. The resource is however not limited to the present public forest reserve but extends to lands that were formerly under forest cover but have now been converted to settlements. This is because social conflicts sometimes transcend natural and administrative boundaries. Since analyses from this study are limited to social and spatial variables in multi-cultural settings, the findings cannot be generalized to other contexts for example economic conflicts.

## **1.7 Key concepts**

### *Conflict*

Conflict is a relationship involving two or more parties who have, or perceive themselves to have, incompatible interests or goals (Engel & Korf, 2005). Conflict is present when parties perceive that their interests are incompatible, express hostile attitudes, or pursue their interests through actions that damage the other parties (Schmid, 1998). For instance, Yarn (1999) observes that whereas conflict is a state, a dispute is a process. Parties who have opposing values, needs or interests are in a state of conflict. However, these conflicts may be latent (meaning that they are not acted upon) or manifest, in which case it is brought forward in the form of a dispute (Spangler & Burgess, 2012). This thesis was aimed at understanding the sources of both disputes and conflicts in Eastern Mau. The two terms are therefore used interchangeably in the thesis.



### *Intractable conflicts*

Conflicts that persist for a long period time resisting attempts aimed at resolving them. These conflicts usually are about fundamental value disagreements, domination issues and/or denied human needs – all of which are nonnegotiable problems (Engel & Korf, 2005). In this thesis, intractable conflicts are those that seemed to recur during electioneering periods.

### *Violent conflict*

Violence is the threat or use of strong physical force. Violent conflict can consist of actions, words, attitudes or structures that cause damage and prevent people from pursuing their livelihoods and well-being (Engel & Korf, 2005).

### *Identity conflicts*

Identity conflicts develop when an individual or a group of persons feels that its sense of self is being threatened or denied legitimacy or respect. Examples of identity conflicts include religious, ethnic and racial conflicts (Conflict Research Consortium, 1998). In this study, the main type of identity highlighted is ethnicity, which is a sense of belonging within a community.

### *Incompatible goals*

Incompatible goals are what people want and that cannot be achieved simultaneously (Conflict Research Consortium, 1998).

### *Indicators*

Indicators are predictors, precursor events and other telling signals used in forecasting of conflicts (Schmid, 1998). In this thesis, indicators are broadly classified under ‘violent clashes’ and ‘latent conflicts’.

### *Interests*

Interests are what a party in a conflict cares about or wants. These are the underlying desires and concerns that motivate parties to take certain positions. While people’s positions are what they say they want (such as “I want to settle here”), their interests are the reasons why they take a particular position (for example “because I want to settle in my ancestral land”). Parties’ interests are often compatible, and hence negotiable, even when their positions seem to be in complete opposition (Engel & Korf, 2005). Rubin *et al*, (1994) suggest that before one party’s interests can clash with those of the other, these interests must be translated into aspirations. Aspirations have been defined as a behavioural representation of the things that a person or group strives for or believes it must succeed (Rubin, *et al.*, 1994)

### *Perceptions*

Oxford Dictionary (Pearsall, 1999) defines perception as “a way of regarding, understanding or interpreting something”. Perception is fundamentally individual to each person. Often, people have divergent perceptions of what occurred based on their assumptions, expectations, experience and history. In this thesis, other terms that are used to mean perceptions include beliefs, perspectives and attitudes.

### *Root causes*

Root causes are the fundamental needs, values and interests of parties to conflicts. There is a distinction between the root causes and contributing factors, which constitute dynamics such as communication problems that are usually extraneous to the conflict, although they confuse the core issues and make them more difficult to understand and deal with (Conflict Research Consortium, 1998).

### *Stereotyping*

A stereotype is an assumption that an individual has one or more characteristics because most members of the group to which the person belong have (or are thought to have) those characteristics. It is a generalization process that helps people to categorize and understand their world, but it often leads to errors. When stereotypes are inaccurate and negative (as they often are between groups in conflict), they lead to misunderstandings which make resolving the conflict more difficult (Conflict Research Consortium, 1998).

### *Triggering events*

A trigger is an event that initiates (“ignites”) a conflict. It can be a simple statement that is misinterpreted or can be major event such as the assassination of a leader or election fraud (Conflict Research Consortium, 1998).

### *Natural resources*

Natural resources refer to oil, minerals, forests, water, and fertile land that occur in nature and can be harnessed for economic gain (UN DPA & UNEP, 2015). Natural resources are considered a significant source of income and power; land in particular, is essential to the livelihoods of millions of people (UN DPA & UNEP, 2015). However, when poorly managed, distributed or controlled in an unfair or unequal manner, natural resources can also be a major driver of conflict (UN DPA & UNEP, 2015). In this thesis, natural resources entail forest resources such as tree products, grass, watering points and land formerly occupied by the forest reserve that has now been converted to other uses.

### *Forest adjacent communities*

The Forest Act, 2005 (GOK, 2007) defines a forest community as ‘a group of persons who-

- a) have a traditional association with forest for purposes of livelihood, culture or religion;
- b) are registered as an association or other organization engaged in forest conservation’;

Whereas the proposed forests Conservation and Management Bill of 2014 (GOK, 2014) defines a community as ‘a clearly defined group of users of forest land identified on the basis of ethnicity, culture or similar community of interests...’ In this study, forest adjacent communities include groups of people who have historically been known to dwell in the forest such as members of the Ogiek, or are currently occupying land that had been previously under forest cover such as Kikuyu and Kalenjin members (including absentee landlords) or depend on the forest resources such as pasture as is the case of the Maasai.

### *Forest excision*

Excision is a legal term used in land allocations in the Kenyan context. This can be done legally, through a notice in the Kenya Gazette and Legal Notices (*de jure*) or in practice (*de facto*) (Morjaria, 2012). Excision is used in this thesis to mean the reduction of land area from the forest reserve. The words excision and allocation are used interchangeably in this thesis.

## 1.8 Thesis structure

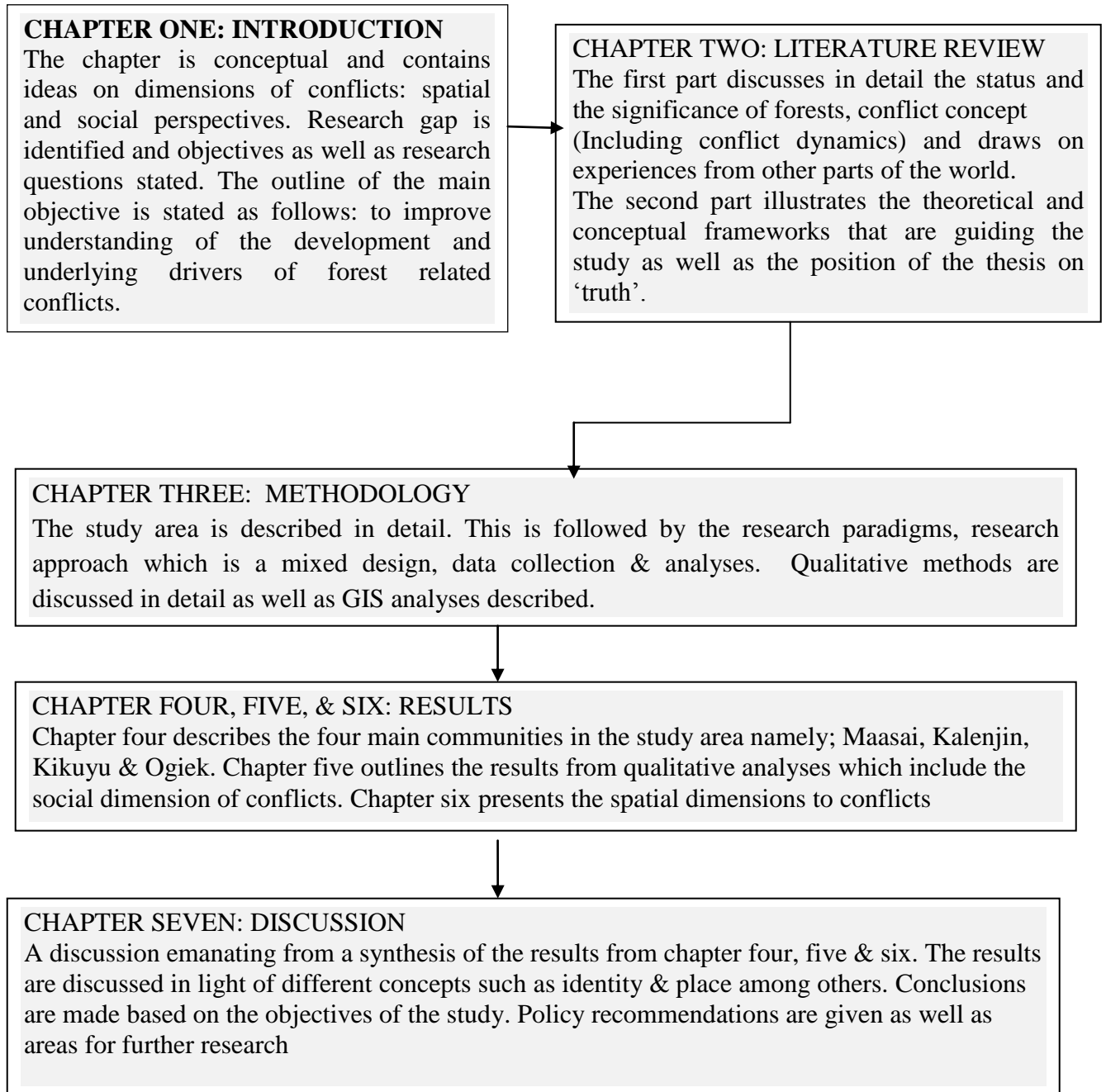


Figure 1: Organization of thesis

## **CHAPTER 2: LITERATURE REVIEW AND THEORETICAL FRAMEWORK**

### **2.1 Introduction to the literature review**

There is an avalanche of conceptual literature on conflicts. However, most of the work is found on general social conflict. Since forest resource disputes and disagreements often involve groups of people, the review aims at understanding forest conflict in the general social conflict framework. A lot of the available literature on forest related conflicts is found mainly in the context of Central and South America, and parts of Asia. Therefore, the review is biased towards these regions. Conflicts are complex human phenomena and no single theory is sufficient to explain the dynamism of human relations. Hence, the thesis subscribing to pragmatism employs all the possible models in a framework that can be used to understand the dimensions and sources of forest resource conflict. It is also assumed in this thesis that in many conflict situations people often looks out for 'truth' about phenomena. Therefore, an understanding of the various forms of truth is necessary as well as the position and direction taken by the thesis in so far as truth is concerned.

### **2.2 The state of global forest resources**

As forests provide ecological, economic and social services, they play an important role in supporting livelihoods (Lebedys, 2008). About 350 million of the world's poor people (out of which 60 million are indigenous) rely on forests intensively for their subsistence needs (FAO, 2010a). These people rely on traditional medicines derived from forests, they also practice hunting on forested land thereby supplying more than a fifth of the population's protein requirements (FAO, 2011). A further one (1) billion people rely on woodlands, homestead trees

and agro forestry for their livelihoods (FAO, 2010a). While more than two (2) billion people use wood energy for cooking, heating and food preservation (FAO, 2010b). Most importantly, forests are vital components of environmental systems as they provide a variety of services and functions such as buffering floods and droughts, regulating water supplies, mitigating against the effects of green house gas emissions, and harbouring biodiversity (FAO, 2012). The Global Forest Resource Assessment of the year 2010 revealed that the world forests cover stands at approximately four (4) billion hectares, which is about 31 percent of the earth's land surface corresponding to an average of 0.6 ha per capita (FAO, 2010a). Out of the total global forest area, about 35.7% is classified as primary forest (see appendix H).

At the regional level, South America accounts for the largest expanse with about 624 million hectares (76.3 % of global forest cover) of primary forest (FAO, 2010a). The region is followed by North and Central America, and Europe, Asia, Africa and Oceania respectively (FAO, 2010a). Albeit more than one-third of the world total forest area is classified as primary forest, this area has reduced by more than 40 million hectares over the last ten years (FAO, 2010a). The decrease of primary forest area, which accounts for approximately 0.4 percent annually, is due to conversion into other land uses (such as farmlands), selective logging and other human interventions (FAO, 2012). Between the year 2005 and 2010, South America accounted for the largest proportion of the net global loss of primary forest, followed by Africa and Asia. However, within different regions, the degradation of primary forests is highest in Eastern and Southern Africa (FAO, 2010a).



### 2.2.1 Kenya's forests

Kenya's closed canopy forest cover is yet to reach the internationally recommended threshold of 10 percent. According to a World Bank (2012) report, Kenya's forest cover occupy 6.07% of the land area while the Global Forest Resource Assessment (GFRA) of the year 2010 (FAO, 2010a) puts the figure at 5.9%. The GFRA further put Kenya's primary forest at 654, 000 hectares (1.1 % of land cover) down from 700,000 hectares (1.2% of land cover) a in the year 2005 representing an annual loss of 1200 hectares. The loss of Kenya's primary forest cover has been attributed to subsistence activities (such as fuel wood and building material) and agricultural expansion (WRI, *et al.*, 2007).

### 2.2.2 The forests of Mau Complex

The Mau Forest Complex which is estimated at 400,000 hectares is not only the largest forests block in Kenya but also forms the largest single block of closed-canopy forest in East Africa (GOK, 2009b). The Mau Complex is made up of 22 forest blocks, 21 of which are managed by the Kenya Forest Service (KFS) while the Maasai Mau, which is trust land is managed by the local administration of Narok County. The Mau ecosystem has been rated as the most important of all the water towers in Kenya (UNDP, 2008; GOK, 2009d). The Mau Complex forms the upper catchments of the main rivers west of the Rift Valley. The rivers include Mara, Nzoia, Yala, Nyando, and Sondu which drain into Lake Victoria, Kerio which drains into Lake Turkana, Molo which drains into Baringo, Ewaso Ng'iro South into the Lake Natron and Njoro, Nderit, Makalia, and Naishi which feed into Lake Nakuru (Table 1 & Figure 2).

Table 1: Rivers flowing from the Mau forest ecosystem

<b>RIVERS</b>	<b>LAKE</b>	<b>COUNTRY</b>
1. Nzoia River 2. Yala River 3. Nyando River 4. Sondu River 5. Mara River	Lake Victoria	Kenya Uganda Tanzania Nile basin countries
6. Kerio River	Lake Turkana	Kenya
7. Ewaso Nyiro River	Lake Natron	Tanzania
8. Njoro River 9. Nderit River 10. Makalia River 11. Naishi River	Lake Nakuru	Kenya
12. Molo River	Lake Baringo	Kenya

Lake Victoria is transboundary not just to Kenya, Uganda and Tanzania but also in the Nile basin countries (Table 1). Lake Victoria supplies water to the White Nile which is a tributary of the great Nile River that flows across Rwanda, Burundi, Democratic Republic of the Congo (DRC), Tanzania, Kenya, Uganda, Ethiopia, Eritrea, Central African Republic, South Sudan, Sudan and Egypt. The water in the Nile (the longest river in the world) is important for the economies of the twelve countries through which the river traverses. For example, According to the Integrated Water Resources Management Plan of the Arab Republic of Egypt (2005), the Nile River supplies about 97 % of the annual water resources for the northern Africa state. This positions the Mau forests complex as an important conservation area for not only East African countries but also the Nile Basin countries.

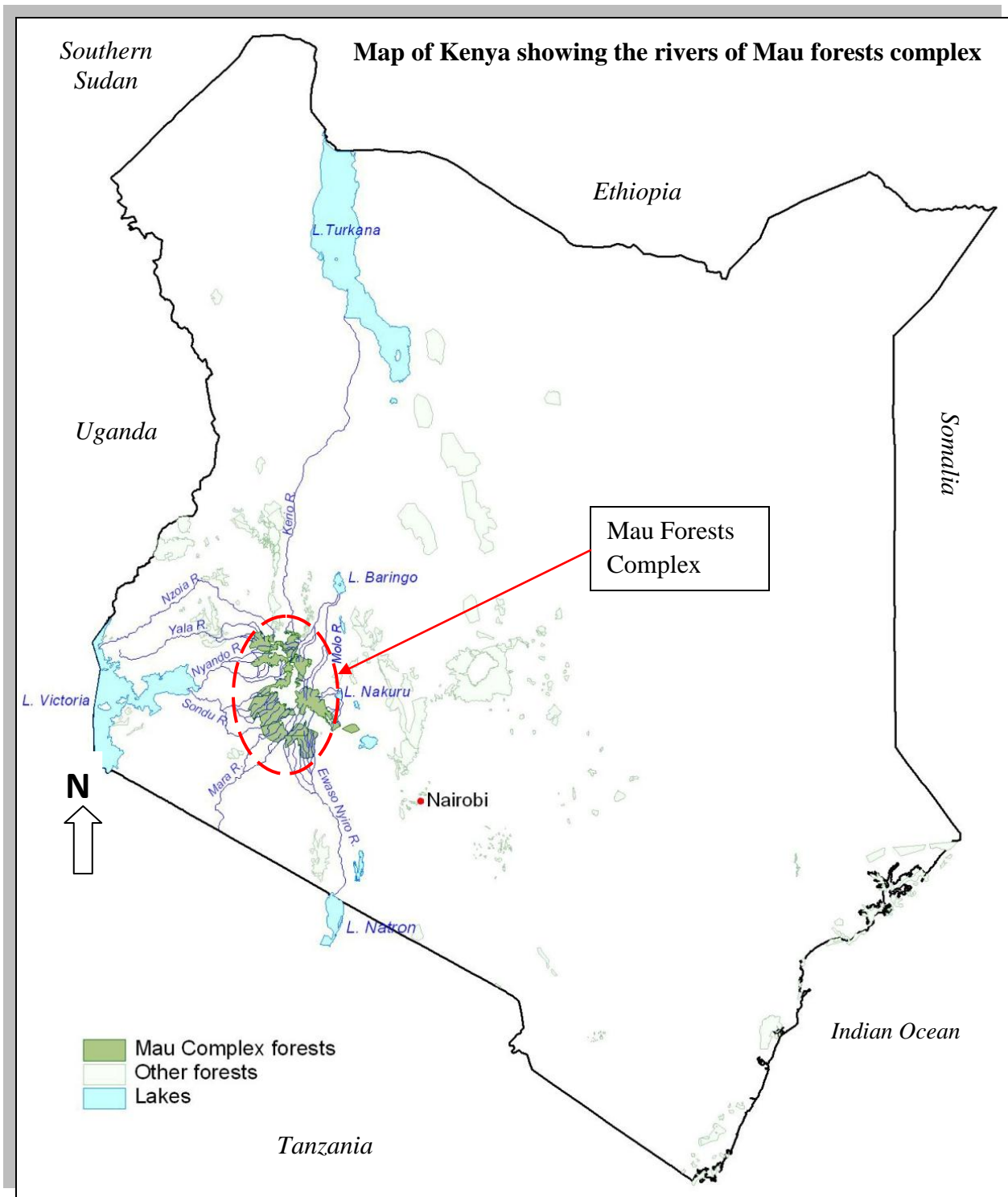


Figure 2: Map showing the various rivers of the Mau forests catchment

## **Resource potentials of the Mau forests Complex**

The forest ecosystems of the Mau Complex provide invaluable ecological services, in terms of river flow regulation, flood mitigation, water storage, and recharge of groundwater, reduced soil erosion and siltation, water purification, promoting biodiversity and micro climate regulation (WRI et al, 2007; Lebedys, 2008). These services support key economic sectors, including energy, tourism, agriculture (cash crops, subsistence crops, and livestock) as well as water supply to urban centres and industries. The forests also provide other major environmental services, including nutrients cycling and soil formation. At the global level, the forests play a key role in climate regulation. They are major reservoirs and sinks of CO<sub>2</sub> (carbon dioxide), the main greenhouse gas (GHG) behind global warming and climate change. Globally, deforestation is estimated to contribute 20 to 25 % of the total anthropogenic GHG emissions (FAO, 2006). Reducing emissions from deforestation is just becoming a potential source of funding through carbon trading in the voluntary market. Some of the identifiable resource potentials of the Mau forest complex are discussed below:

### *Biodiversity and Tourism*

The rivers flowing from the Mau Complex are the lifeline for biodiversity and major tourism destination areas. For example, to the east of the Mau complex, several rivers flow into Lake Nakuru National Park, the second most visited protected area in Kenya and a Ramsar Site classified as an Important Bird Area with over 450 species (GOK, 2009d). While the rivers that flow in the south of Mau, that is, the Mara and Ewaso Ngiro South cut across important wildlife sites. The Mara traverses the Maasai Mara National Reserve in Kenya and Serengeti National

Park in Tanzania, while the Ewaso Ngiro flows through the Nguruman escarpments into Lake Natron. Maasai Mara is world famous for big game and great wildebeest migration. It is also an Important Bird Area with over 450 species (UNDP, 2008). Serengeti is a world Heritage Site and famous for big game and great migration as well as an Important Bird Area with over 540 species (UNDP, 2008). Nguruman escarpments are also considered important as they serve as a world corridor for migration of birds shuttling between the North and southern hemispheres. Lake Natron is the main breeding area for the lesser flamingos in the Rift Valley. The remaining Mau Rivers are also the lifeline for a number of other conservation areas of which the tourism potential is not yet fully developed, including Kakamega National Reserve; Kerio Valley National Reserve; South Turkana National Reserve and Lake Baringo. Kakamega Forest National Reserve is the only remnant in Kenya of the Guineo-Congolian forest ecosystem and has high biodiversity (of birds, butterflies and indigenous plants) (GOK, 2009d). Baringo is an Important Bird Area with over 470 species, South Turkana National Reserve has scenic landscape and plentiful of wildlife (GOK, 2009d). Other *Important Bird Areas* that depend on rivers flowing from the Mau Complex include Koguta Swamp (Kenya – Sondu River); Kusa Swamp (Kenya – Nyando River); Mara Bay and Masirori Swamp (Tanzania – Mara River) (GOK, 2009d).

### *Energy*

The potential of hydropower generation on rivers that have predominantly their upper catchments in the Mau Complex has been estimated at 535 megawatts, a potential that represents 57 % of the total current installed capacity (GOK, 2009d). Among the rivers flowing from the Mau Complex, the Sondu River and the Ewaso Ngiro River have the largest hydropower potential estimated at

209 and 220 megawatts respectively (GOK, 2009d). The total capacity of these developed, currently being developed and proposed hydropower plant sites in the Mau Complex catchments by the year 2009 was estimated at 189.4 megawatts with an average annual energy production of 960 gigawatts hour (GOK, 2009d). The sale value of the average energy production on these sites was projected to be in the range of Kshs 10 billion per year (GOK, 2009d).

#### *Agriculture – Cash crops*

One of the main cash crops grown in Kenya is tea. Across the country, tea (*Camellia sinensis* (L.) *Kuntze*) growing areas are located near montane forests. Indeed, for optimum tea growth, three climatic conditions must be met: constant moisture, soil temperature between 16 and 25 °C and air temperature between 10 and 30 °C (Shoubo, 1991). These climatic conditions are found in areas adjacent to forests. West to the Rift Valley, the tea growing areas are located in the Kericho Highlands, Kisii Highlands, Nandi Highlands, Cherangani Hills and Mount Elgon. The year 2007 sale value of the tea from western Kenya was estimated at Kshs 12.4 billion (UNDP, 2008). In western Kenya, the tea sector provides jobs to 50,000 persons and a livelihood to 75,000 small farmers, supporting both together some 645,000 dependents (UNDP, 2008). It is estimated that 2/3 of the tea produced in western Kenya is growing in areas that benefit from the ecological functions of the Mau Complex, including the maintenance of favourable micro-climatic conditions (constant moisture, air temperature, soil temperature) (UNDP, 2008). Rice is another important cash crop that depends on the Mau Complex ecological services. In 2006, 5,234 hectares of rice was cultivated in the deltas of the Yala and Nyando rivers of which the Mau Complex forms parts of their upper catchments (UNDP, 2008). The estimated 2006 market value

of the rice produced in those deltas is estimated at Kshs one (1) billion (UNDP, 2008). Being the third most important staple food in Kenya after maize and wheat, rice contributes significantly to food security in the country (UNDP, 2008).

#### *Agriculture – Subsistence livelihoods*

The rivers flowing from the Mau Complex cross 478 sub-locations where the total population is estimated at over 5.5 million (Akotsi & Gachanja, 2004). Directly or indirectly, a significant proportion of that population depends on the water flowing in these rivers for their subsistence livelihoods. People who live within five kilometres from the forests of the Mau Complex depend, partially or totally, on the forests of the Mau Complex for firewood, grazing and medicinal plants (Akotsi & Gachanja, 2004).

#### *Water supply to urban areas*

The Mau Complex is the single most important source of water for direct human consumption, urban areas and industrial activities in Rift Valley and Western Kenya. Major urban areas depending upon the water flowing from the Mau Complex include Bomet, Egerton University, Elburgon, Eldama Ravine, Kericho, Molo, Nakuru, Narok and Njoro (Akotsi & Gachanja, 2004). Some of the main urban centres or settlements depending upon the water flowing in the Ewaso Nyiro River (north) include Archer's Post, Ol Donyo and Kipsing Trading centre, including tourist facilities in the protected areas such as the Maasai Mara National Reserve (Akotsi & Gachanja, 2004). The above resource potentials have been estimated by Kipkoech *et al*, (2011) to

contribute to more than 100 billion Kenyan shillings annually towards the economy of the country (Table 2).

Table 2: A summary of the estimated value of the benefits from Mau ecosystem

<b>SN</b>	<b>Identifiable benefits</b>	<b>Million Kshs per year</b>
1.	Climate regulation and carbon fixing	7,120
2.	Recreational	3,584
3.	Cultural values	64
4.	Genetic resource	1,312
5.	Soil erosion control	7,840
6.	Other ecosystem services	44,304
7.	Tourism sector	5,264
8.	Livestock support	8,552
9.	Fisheries production support	1,688
10.	Energy	10,528
11.	Subsistence agriculture	7,200
12.	Agriculture-Tea	13,056
	Total	110,512

(Source: Kipkoech *et al*, 2011)

### **Threats and challenges to Biodiversity in Mau Forest**

Despite the ecological, social and economic roles played by the Mau forests locally, regionally and internationally, the ecosystem has consistently faced threats from wanton and extensive legal and illegal excisions. The excisions have been followed by settlements, farming as well as clear logging. For example, in the year 2001 alone, 61,023 hectares were excised throughout the complex (KFWG, *et al.*, 2005). In addition, some 43,700 hectares were believed to have been



encroached upon illegally in the same period (KWFG *et al.*, 2005). The Eastern Mau forest block, which originally covered about 66,000 hectares of the Mau complex, was the most affected by excisions and forest encroachments. Various reports (for example KWFG *et al.*, 2005; GOK, 2009a; GOK, 2009b; ICS, 2010) have identified the following as the root causes of deforestation and degradation of forests in Mau complex:

- i. Inadequacy in the existing laws and policies especially about providing incentives to communities to participate in conservation efforts.
- ii. Demographic factors—the increasing population and the shrinking of productive agricultural land resulting in people migrating from densely populated regions to forests.
- iii. Realization of the value of tree products that formerly was unmarketable
- iv. Poverty levels that has forced poor households into using biomass energy sources such as firewood and charcoal.
- v. The perception that the resources (for example land) are scarce, which has made forest adjacent communities and those from far to encroach on forests and harvest forest resources to secure their present and future livelihoods.

It is often cited (for example by KWFG *et al.*, 2005; GOK, 2009a; GOK, 2009b; ICS, 2010) that the interaction of the above factors under the influence of dynamic political landscapes has sustained conflict in Kenya's forested multicultural landscapes. The conflicts do not only undermine conservation efforts but also limit access and utilization of the potential resources explained above. For example, when residents are displaced from their fertile lands following violent conflicts, agricultural production is undermined in the region.

### **2.3 Introduction to forest resource conflicts**

Forest resource conflicts are disagreements and disputes over access to, control over and use of forest resources (Engel & Korf, 2005; de Koning, *et al.*, 2008). They can be constructive if they help a community to clarify interests and needs for addressing perceived injustices or inequities in forest resource distribution (Jones, 2005). However, some forest resource conflicts if not addressed effectively can undermine trust among the citizens and increase insecurity as well as forest degradation. The causes of community based forest resource conflicts are often many and closely linked. While some form the core, others are underlying or contributing factors/drivers. Forest resources are increasingly subject to intense competition (FAO, 2003). Some of the structural factors responsible for competition as observed by Jones (2005) include demographic change, market pressures and environmental alterations that cause people to change their livelihood strategies.

McNeely (2010) suggests that in areas where the population is burgeoning, forest resources often need to be shared among more users with differing interests. Farmers for example would seek to expand their land for agricultural activities; pastoralists would need to extend their grazing into the land adjacent to the forest while city dwellers would need more timber for furniture. Harwell (2010) documents that forest resource conflicts emanate from unsustainable use such as clearing of forests, overharvesting of forest products, overgrazing of pastures, rapid conversion of forests into farms or the fencing of formerly communal lands. Structural changes that can contribute to conflicts include an influx of outsiders, for instance members of neighboring communities,

nomadic herders, migrant farmers and unemployed labourers or displaced persons, seeking to make use of local forest resources.

Forests require large landmasses and as a result, they have competed for space with other land uses, especially agriculture. For example, the United Nations Framework on Climate Change (UNFCCC) (FAO, 2006) identifies agriculture as a crucial factor affecting deforestation both at the global and regional scale. Agricultural expansion includes such activities as conversion to cash cropping, pastureland, shifting cultivation, which in particular causes forest degradation (Hosunuma *et al.*, 2012). Conversion into pastureland for ranching is more prevalent in Southern America (Pfaff, 2012). One of the outcomes of agriculture expansion into formerly inaccessible forest frontiers has been the human-wildlife conflicts. Evidence of human-wildlife conflicts is provided by studies in Kenya (such as Sitati & Walpole, 2006) and other regions of the world (Distefano, 2005; Michalski, 2006; Dickman, 2010).

Forests have also been a subject of disagreements among institutions and between different groups of people. In Russia, forest conflicts revolved around tenure and government authority (Fondahl *et al.*, 2001). Whereas Ross & Smith (2002) explain that in Canada, the main concern was about Negotiating tenure and reducing logging in natural forests. In Cameroon, a paper by de Blas & Perez (2008) suggested that the debate in forestry management was about dealing with illegal logging and reforming concession policy. Other works (For example, Anthony, 2005) have brought to the fore the question of recognizing indigenous rights in forestry management drawing examples from Latin America.

The existence of forests has also provided refuge for illegal activities such as drugs and armed groups in Southern America, Asia and Africa. McSweeney, *et al.*, (2014) note that forest degradation in parts of Honduras, Guatemala, and Nicaragua is related to narcotic drug activities. As a result of increased loss of forest loss due to narcotics trafficking, the United Nations Education and Science Commission (UNESCO) listed Honduras's Ri'ó Pla'tano Biosphere Reserve as a "World Heritage in Danger" in 2011 (McSweeney, *et al*, 2014). In Guatemala's Peten region, increased deforestation is linked to drug trafficking activities such as construction of large ranches by drug barons inside Laguna del Tigre National Park (McSweeney, *et al*, 2014). McSweeney and colleagues (2014) drawing examples from Central America further provide a hypothesis that deforestation is linked with conflicts that involve criminal activities. The argument put forward is that conservation work done by government agents, environmental groups and indigenous peoples is hampered by the presence of potentially violent criminals. As a result, illegal loggers and poachers have their day in the forest. Fjeldså, et al (2005) writing on drug crops in Colombia and Peru, makes a similar observation. Fjeldså explains that species conservation has been hampered by drug trafficking activities especially in the Santa Marta and Perijá mountains, Darién in Colombia, and Marañón and Huallaga valleys in Peru.

One of the approaches of managing the problem of drugs and forest degradation has been to spray chemicals on the drug crops. However, McSweeney, *et al*, (2014) cite that this is not effective as the chemicals often harm wild plants and animals, livestock, and people. Brosius, (1997) working in Malaysia observed that forest evictions as a way of managing deforestation

and forest degradation quite often infringed on the rights of indigenous peoples whose livelihoods depended on the forest resources. Fjeldså, *et al* (2005) suggest that the root causes to the conflict needs to be addressed which includes dealing with the international drug markets, providing a long-lasting solution to armed conflict, and provision of opportunities to the rural poor to improve their income.

### 2.3.1 Forest Resource conflict analyses

Conflict analysis involves mapping the actors in conflicts and their interrelationships (Mason & Rychard, 2009). The process focuses on assessing needs and fears of stakeholders to conflicts allowing for a clear comparison of their similarities and differences. The United Nations Interagency Framework Team for Preventive Action (UNIFTPA, 2012) proposed a framework for mapping and analyzing conflicts that includes context, causes, actors as well as the dynamics of conflicts (Table 3).

Table 3: UNIFTPA conflict analysis framework

<b>Context</b>	<b>Causes</b>	<b>Actors</b>	<b>Dynamics</b>
<i>Where?- spatial dimension Timeline?- Temporal dimension</i>	<i>What is the conflict about? Why is there a conflict? What are the root causes? What are the triggers of conflict?</i>	<i>Who is involved? Who benefit from the conflict?</i>	<i>How does the conflict change over time? What are the power relations? What are the incentives and constraints?</i>

(Source: UNIFTPA, 2012)

The above framework has informed the study on what type of questions to interrogate during the synthesis of information from various sources. Conventionally conflict mapping involved

Participatory Rural Appraisal techniques (Mason & Rychard, 2009). Recent developments in spatial analysis technology have made it possible to use positional data in visualizing conflicts on maps as illustrated by Mohammed & Ventura (2000); Kyem (2004); Bryman (2008). Therefore, the study has integrated geographical data into the traditional social mapping techniques in a mixed methods approach in order to better understand the Eastern Mau forests conflicts which seem to be not only intractable but also complex in nature.

## **2.4 Theoretical framework**

Several theories drawn from different disciplines have addressed themselves to the complex subject of social conflicts. However, in most cases no single theory is sufficient to explain social conflicts especially in complex environments (for example multi-ethnic settings with myriad of contested issues, as is the case of Eastern Mau forests). Since conflict is a *perceived* incompatibility of goals, conflict theories are in essence attempting to explain a social-psychological phenomenon. Hence, analyzing social conflicts (be it in natural resource management or any other disciplines) should not fall short of understanding intergroup relationships from a social-psychological perspective. The conflicts theories reviewed in this study are organized broadly in terms of conflict sources/causes and conflict dynamics as explained below:

### **2.4.1 Social Identity Theories**

Identity is related to self-awareness and self-consciousness. It is suggested that identity affects the way people perceive the world and that during conflict situations people are looking through

"identity frames" (Schaller & Neuberg, 2008; Folger *et al*, 2009). Social identities are made stronger by in-group and out-group distinctions. In-group or "Us" is a group of people who share a sense of belonging, a feeling of common identity, while the Out-group or "Them" is a group that people perceive as distinctively different from or apart from their in-group (Schaller & Neuberg, 2008). Examples of identity groups include nationality, gender, race, ethnic groups, religion and language. These groups are along which wars are most often fought. Social identification is a perception of membership within a group of persons (Ashforth & Mael, 1989). It has been argued that social identification leads to behaviors that are similar with the identity, support for institutions that embody the identity (Stets & Burke, 2000; Ashforth & Mael, 1989). Social identity often leads to stereotypical perceptions of self as well as others outside the group (Brown, 2000; Stets & Burke, 2000). Social identity therefore postulates that in-group; out-group distinction is necessarily based on belonging.

It has been suggested that for an intergroup conflict to occur the parties to the conflict must have a sense of collective identity about themselves, each side believing the fight is between "us" and "them" (Schaller & Neuberg, 2008). Examples of identity-based conflicts have been cited as those between the Palestinians and Jews in the Middle East, and the Ivory Coast post election violence (Doucey, 2011). Identities are collective so that people feel injured when other persons sharing their identity are injured or killed. Several analysts (for example, Klopp, 2002; Omolo, 2002; Mkutu, 2008; Kanyinga, 2009; Mworira & Ndiku, 2012) have attributed most conflicts in Kenya to ethnic identity differences. Individuals often have multiple identities, but the identities are not all equally significant to them. For example a young Kikuyu woman may have at least

three possible identities namely; Kikuyu ethnicity, youth and female. However, these identities may be exploited differently at different times. For instance, in case members of the Kikuyu community are under some perceived attack from an institution or ‘outside’ party, the woman (if she feels a strong belonging to the ethnic group) is likely to respond by siding with the community. It has been observed that conflicts related to highly significant identities are likely to persist, since threats to those identities are not easily put aside (Rubin *et al*, 1994). Social Identity theories are broadly classified into two namely; minimal Group paradigm and realistic Group conflict theory.

### **Minimal Group Paradigm**

The Minimal Group paradigm argues that group identification is sufficient to instigate intergroup conflict and that competition for scarce resources is not necessarily the source of conflicts (Ashforth & Mael, 1989). The Minimal Group Paradigm espouses prejudice as the source of intergroup conflicts. Prejudice is an attitude (usually negative) toward members of some group, based solely on their membership in that group (Folger *et al*, 2009). Prejudice often leads to stereotyping, which is a generalized belief about members of a group. Stereotyping can in turn lead to discrimination, which is defined as behaviors directed towards people based on their group membership. Thus, it is argued that perceiving members of a different group unfavorably (negative attitude) and holding certain beliefs about that group (stereotypes) can result directly into conflict (Folger *et al*, 2009). For example, the stereotypes (internal “beliefs”) can make an individual think that the difference between themselves and the other party is something



incompatible. An example of social identity as the cause of conflict is the proposition that ethnicity leads to conflicts.

### **Ethnicity as an example of social identity**

That conflicts in Kenya (just like in any other plural society) are fought along ethnic lines is undisputed. However, the debate has been whether ethnicity *per se* is the source of conflicts or is just a platform used for the parties in conflict to achieve their goals. Primordialists, those who believe that ethnicity has ancient roots and is impossible to change (Lentz, 1995), favour the former argument. Instrumentalists who argue that ethnicity is a social identity constructed under specific historical-political circumstances (Lentz, 1995) favour the latter. Ethnicity as an example of the minimal group paradigm takes the primordial perspective in explaining the sources of conflicts. The instrumentalists, who are also known as constructionists, insist that ethnicity is not suprahistorical and quasi-natural membership in a group. Thus, they argue that researchers must not naively adopt the conflict stakeholders' own discourses of ethnic identity based on family, a common history and cultural similarity (Lentz, 1995).

Instrumentalists argue that it is leaders who often are responsible for furthering the discourse on ethnic identity through use of the media for their own political benefits (Lentz, 1995). Osaghae (1991) rejects the idea that ethnicity is just an ideology but rather it is a reality of every multi-ethnic society which manifests both in cultural and non-cultural ways. He further argues that ethnicity which can sometimes be used as a major manipulative tool in the competition for societal resources, is not an exclusive preserve of the elite but also available to non-elites who

can utilize it at their own convenience (Osaghae, 1991). A similar argument is advanced by Ake (1993) who suggests that indeed ethnic identities exist in reality and not just socially constructed. Halevy, *et al.* (2008) provide empirical evidence that suggest that altruism within the group makes members to bond and compete against the out-group members. This implies that members are prepared to fight for the group to preserve their identity regardless of whether they will benefit as individual members in the group or not.

### **Identity as an ‘unmet Human Needs’ can lead to social conflicts**

Needs are the essentials or preconditions for human survival. These essentials go beyond just food, water, and shelter to include safety/security, love/belonging, identity and recognition, freedom, participation, distributive justice and cultural security (Sandra, 2003). Burton (1990) & Kelman (2009) posited that conflict stems from unsatisfied human needs. According to Burton, interests are about material goods that can be traded or satisfied by gaining power. On the other hand, needs as non material entities and necessarily not in short supply, cannot be traded, suppressed, or bargained for (Deutsch & Coleman, 2000; Ramsbotham, 2005). Burton suggested that in conflict, people represent their interests, but not their underlying needs; however, they will use power and coercion to meet those needs.

It is suggested that intractable conflicts (that is, conflicts that persist for a long time and seem not to have a solution) occur when people are unsuccessful in their efforts to satisfy their unmet needs on the individual, group, and societal level. For example, it is argued that the Israeli-Palestinian conflict involves the unmet needs of identity and security (Sandra, 2003). The

Palestinians perceive that their legitimate identity has been denied. Israelis on the other hand feel they have no security because of suicide bombings and that their state is not recognized by many of their close neighbors (Sandra, 2003; Doucey, 2011).

### **Realistic Group paradigm**

The realistic conflict theory (RCT) argues that prejudice arises from social competition over scarce resources. Unlike the minimal group paradigm the RCT believes that people are selfish by nature and out for own gain (Baumeister & Vohs, 2007). Thus, the theory argues that competition between groups for scarce resources produces inter-group conflict and without such competition, inter-group conflict would fade. Although RCT believes (just like the minimal group paradigm) in a party's prejudice and discrimination toward other groups, it suggests that people tend to have negative attitudes towards members of an out group only when they are seen as competing with their own group for available resources (Sedanius & Pratto, 1999). Groups may be in competition for a real or perceived scarcity of resources such as land, money, political power, or social status (Whitley & Kite, 2010). Emotions can arise as groups see the struggle over resources as having a zero-sums fate, in which only one group is the winner and the other loses (Brief, *et al.*, 2005). As such, the length and severity of the conflict is determined by the perceived value and shortage of a given resource. The following concepts on competitions over natural resources suggest the rationality of human beings as postulated under the RCT.

## **Property rights**

Rights refer to particular actions that are authorized. In as far as common resource property is concerned; the most relevant rights are ‘access’ and ‘withdrawal’ (Schlager & Ostrom, 1992). Access has been defined as the right to enter a defined physical property while withdrawal is the right to obtain the ‘products’ of a resource. If a group of fishermen hold rights of access, they have the authority to enter the water resource (for instance a lake) (Schlager & Ostrom 1992). In regard to common pool resources, collective choice property rights include management, exclusion and alienation (Schlager & Ostrom 1992). Exclusion is the right to determine who will have access right and how that right may be transferred. Alienation is the right to sell or lease either or both of the management or exclusion rights. This concept has been instrumental in helping to understand how communities claim that they are the rightful owners of the land which was formerly under the forest reserve in Mau.

## **Resource Access**

Ribot & Peluso (2003) define ‘access’ as the ability to derive benefits from things. Following this definition, access is related more to a ‘bundle’ of powers as opposed to the property theory which is related to a ‘bundle’ of rights. The concept focuses on ability rather than rights, a formulation, which brings attention to a wider range of social relationships that can constraint or enable people to benefit from resources without focusing on property relations alone. The access concept tries to analyze who actually benefits from things and through what processes they are able to do so. Concerning access to natural resources, there are a range of powers embodied in and exercised through various processes and social relations that affect people’s ability to benefit from

resources. Some of the powers that determine access to resources include the material, cultural and political-economic factors. Some individuals or groups of people and institutions control access to resources while others must maintain their access through those who have control (Agrawal, 2001). In a forestry context access to resource has strong link to political influence and ethnic orientation, which in turn generate conflict between those who yield political power and those who perceive themselves as alienated. Social identity theory predicts certain intergroup behaviors resulting from perceived group status differences, and the perceived legitimacy and stability of those status differences. Social identity can reveal itself as people utilize and exploit natural resources in ways that are defined symbolically (Buckles & Ruskan, 2005). People do not only compete over land, forests, and water just because they are material resources, but also because they are part of a particular way of life (Buckles & Ruskan, 2005). For instance, land can be considered as part of farmers' life and so are grasslands to pastoralists or trees to loggers. These symbolic dimensions of natural resources quite often lend themselves to the different discourses that are revealed in competitions and contradictions that become the subject matter of conflict in a multi-social groups setting.

#### 2.4.2 The ABC conflict triangle

Although conflicts are thought to be dynamic (ever-changing), interactive social processes and that no two conflicts are the same, conflict analyses reveal that conflicts often share similar patterns and stages of development (Engel & Korf, 2005). For instance, it is generally agreed that conflicts are about perceived incompatible goals (Rubin *et al*, 1994) and that people react differently to these perceived incompatibles (Rubin *et al*, 1994; Folger *et al*, 2009). Galtung

(1996) proposed a theory that attempts to explain the components of conflicts. Galtung's (1996) theory attempts to explain conflict behavior as driven by attitudes and contradictions. The theory suggests that every conflict could be viewed as a triangle with contradictions, attitudes and behavior as its vertices (Figure 3).

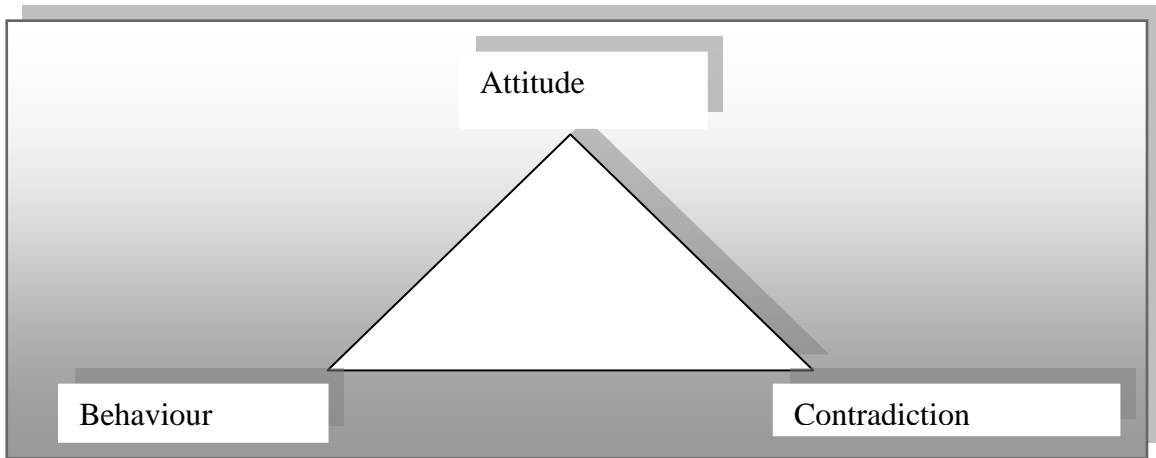


Figure 3: Galtung ABC conflict triangle

(Source: Galtung, 1996)

Contradiction refers to the underlying conflict situation which includes the actual or perceived competing interests between the conflict parties generated by what Ramsbotham *et al.* (2005), call 'a mismatch between social values and social structure'. Daniels & Walker (2001) see this contradiction as the substance of conflict. Attitudes include parties' perceptions of each other and of themselves. Attitudes can be negative or positive, but in violent conflict parties tend to develop demeaning stereotypes of the other. Attitudes are often influenced by emotions such as fear, anger, bitterness and hatred. Behavior can involve cooperation or coercion, gestures signifying conciliation or hostility. Violent conflict behavior is characterized by threats, coercion and destructive attacks for instance as witnessed in the Kenyan post election related conflicts (Landau

& Misago, 2009; Theisen, 2012; TJRC, 2013). Galtung (1996) argues that all the three components have to be present together in a full conflict. Several concepts can help to better our understanding of the interaction between the three elements of the Galtung ABC conflict triangle. For instance, the theory of planned behavior (Ajzen, 1991) describes the relationship between attitudes and behavior while the theory of cooperation and competition (Johnson & Johnson, 1989; Deutsch & Coleman, 2000) explains the context (contradictions) within which human relations occur. To explain how conflict behavior is unfolded in time, conflict escalation (for example, as explained by Rubin *et al.*, 1994) becomes relevant. The three concepts are discussed in detail in the following paragraphs.

### **Theory of planned behavior**

Ajzen, (1991), proposed a theory to analyze stakeholder attitudes and perceptions (Figure 4). The Theory of Planned Behavior (TPB) postulates that the behavior of humans is always preceded by attitudes, perceptions and beliefs. TBP seeks to investigate how individuals' intentional behavior can be understood as a consequence of attitudes, norms and level of behavioural control (Ajzen, 1991). Positive attitudes (such as cooperation and conciliation) of stakeholders especially of politicians and those in positions of influence in the community give "legitimacy" to the integration efforts that are necessary to addressing conflicts (Mitchell, *et al.*, 1997). The Theory has been extensively used within a wide range of fields, including applications such in natural resource management (Vogt, *et al.*, 2005), conservation practices (Beedell & Rehman, 2000) and others such as agriculture (Fielding, *et al.*, 2008; Bond, *et al.*, 2011).

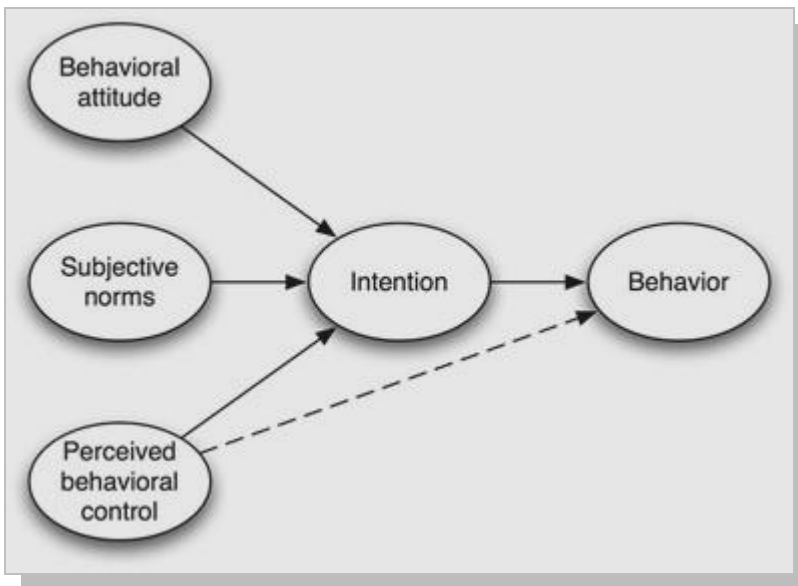


Figure 4: The Theory of Planned Behavior

(Source: Ajzen, 1991)

Part of the conflict analysis involves selecting and assessing information about individuals or groups of people interested, or involved in an issue, and may have an influence on the issue, or suffer from the consequences of it (Mitchell *et al.*, 1997). Stakeholders in forest resource conflict should therefore be categorized based on their influence and interests in forest resources (Clarkson, 1995; Mitchell *et al.*, 1997). Different stakeholders can have different beliefs, values and perceptions toward the forest resources as well as toward other stakeholders. This in turn can lead to different attitudes emerging that may be influential in conflict behavior. Attitudes can often be observed in the way a person responds to other people, ideas and experiences (For example with or without respect, trust, caring, sensitivity, willingness to listen, among others) (Engel & Korf, 2005). Since the Eastern Mau is an area with multi identity groups, it is expected that beliefs, interests and values vary across the region, a situation that is likely to influence how



people perceive or frame issues. The different perceptions in turn are expected to influence the way different parties relate to one another.

### **Cooperation and competition**

Some Conflict scholars (Johnson & Johnson, 1989; Deutsch & Coleman, 2000) view conflict dynamism as occurring in the context of competition or cooperation. The theory of cooperation and competition was formulated around two ideas, namely; goal interdependence and type of action taken by the parties involved in goal attainment (Deutsch & Coleman, 2000). Social interdependence exists when each party's outcomes are affected by the actions of others (Johnson & Johnson, 1989). There are two types of social interdependence; namely; cooperation (positive interdependence) and competition (negative interdependence) (Johnson & Johnson, 1989). Cooperation is working together to achieve some shared goals, while competition on the other hand is the change of pace or interlude from the ongoing cooperation of human interaction (Johnson & Johnson, 1989). For competition to occur, there must be perceived scarcity. Thus, the theory of cooperation and competition suggests that human conflict is likely to occur where there is negative social interdependence (competition) as compared to positive social interdependence (cooperation). Several works (Rubin *et al.*, 1994; Deutsch & Coleman, 2000; Daniels & Walker, 2001; Pruitt & Kim, 2004; Vindeløv, 2012) suggest that as humans interact, competitions are inevitable and therefore, conflicts have become part of human relationships. Therefore, it is expected that natural resources (such as Eastern Mau forest) contexts with multi interest groups (for example grazers and agriculturalists, conservationists) will attract competitions especially when the resource is perceived to be diminishing.

## **Conflict escalation**

Conflict is believed to develop in stages (Rubin *et al*, 1994, Engel & Korf, 2005, Ramsbotham *et al*, 2005; Folger *et al* 2009). However, conflict does not always progress in a strictly linear manner, that is, from stage A, to B, to C, and so on (Rubin *et al*, 1994; Engel & Korf, 2005). Instead, conflicts often occur in spiral fashion, sometimes moving backwards and forwards between different stages, bypassing a stage altogether, or staying at one stage for a long time before suddenly moving on (Engel & Korf). Most works cite latency, escalation, stalemate De-escalation and post conflict as the main stages of conflicts (Rubin *et al*, 1994; Brahm, 2003; Engel & Korf, 2005; Ramsbotham *et al*, 2005; Folger *et al* 2009; Collins, 2011). The theory of escalation suggests that conflict has three main stages namely; latency, escalation (manifest) and de-escalation (Figure 5). Escalation is increased intensity of conflict. Escalation is characterized by the disputants changing from relatively gentle opposition to heavier, more confrontational tactics (Rubin *et al*, 1994). The immediate phase after escalation is known as De-escalation (Rubin *et al*, 1994, Collins, 2011) and is the diminution of conflict intensity.

Latent stages are described as potential threats that are not open- (Engel & Korf, 2005). Latent conflict may constitute social tensions, differences and disagreements that are undeveloped. Latent conflicts can be through such communication strategies as slander, stereotyping and nicknames (Engel & Korf, 2005)

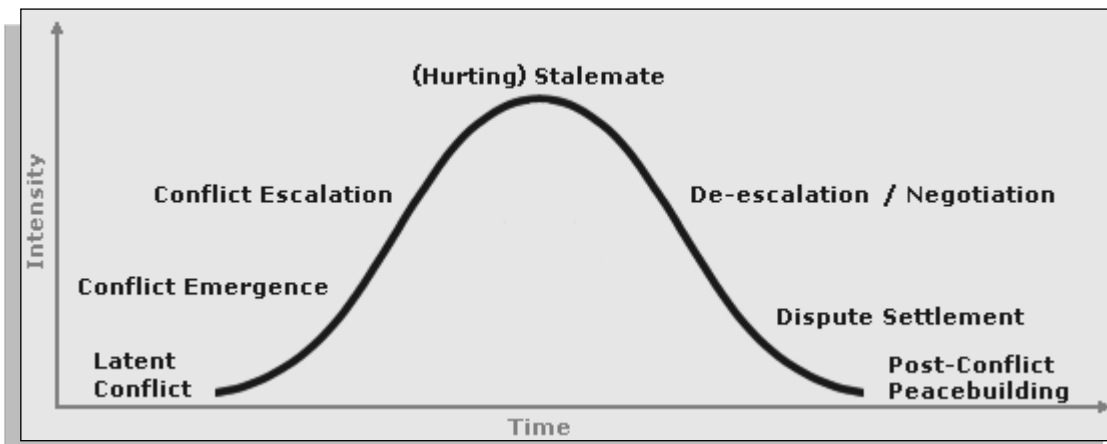


Figure 5: Conflict stages

(Source: Brahm, 2003)

There is always potential for conflict whenever people have different needs, values, or interests; this is the "latent" conflict stage. If a 'trigger event' occurs then there would emerge a violent (or escalated) conflict. Escalation may be followed quickly by settlement or resolution, or it may be followed by further escalation, which can become very destructive (Engel & Korf, 2005). Escalation, however, cannot continue forever. De-escalation can be temporary or can be part of efforts employed towards conflict resolution. However, sometimes escalation may lead to a stalemate. A stalemate is an impasse in which the conflict parties refuse to compromise on their positions (Engel & Korf, 2005). Finally, in case an agreement is reached to end the conflict peace building efforts are initiated in order to repair damaged relationships with an aim of reconciling former opponents (Engel & Korf, 2005).

The various issues surrounding human conflict present a complex scenario that a single theory is insufficient to explain them. For example, quite often conflicts do not only involve multiple

actors drawn from the community but also external forces that include state agencies as well as geo-political institutions. Therefore, it was necessary to organize all the social concepts into a framework (Figure 6) that can help to understand the dynamics and sources of forest related conflicts.

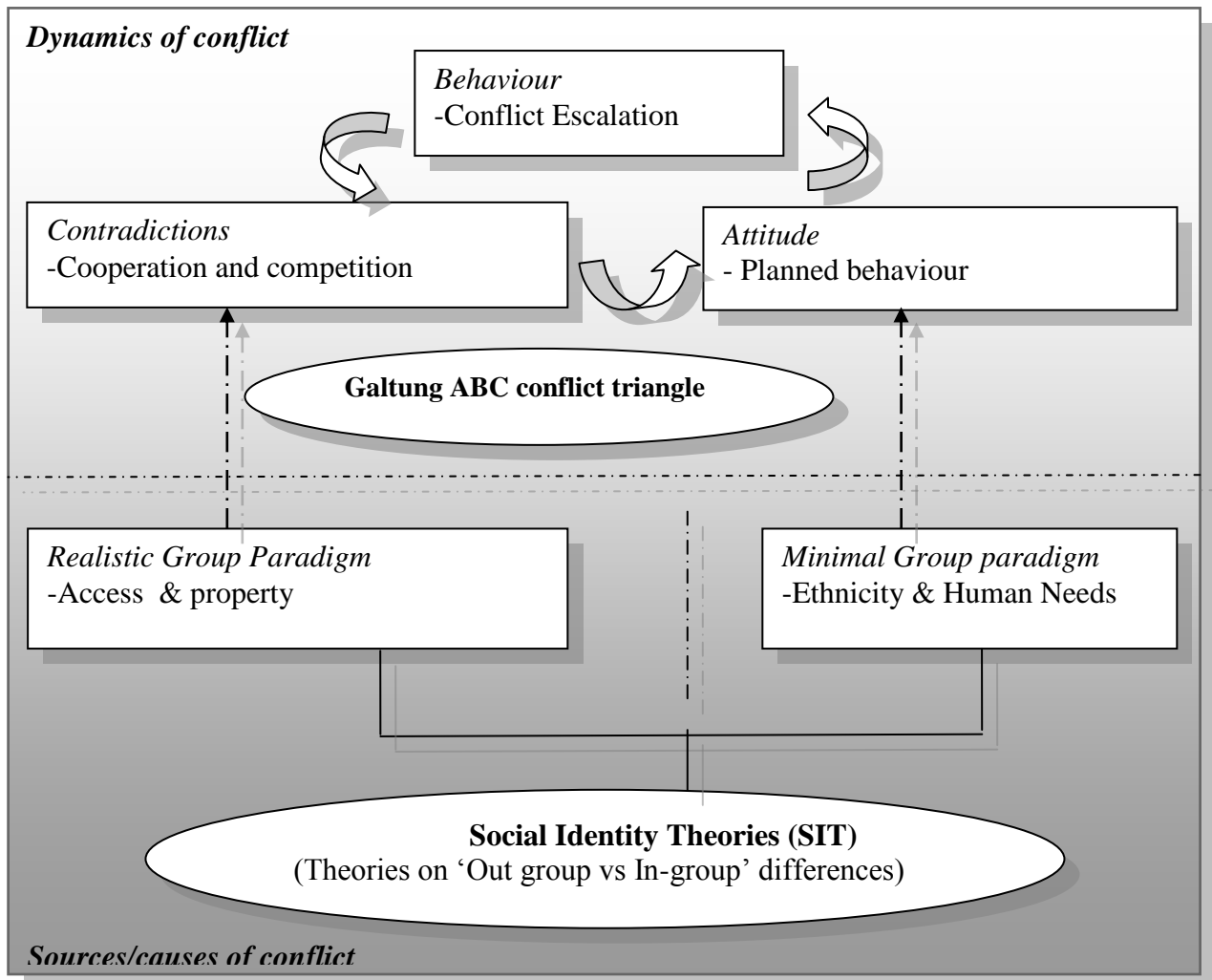


Figure 6: Links between theories and concepts on the sources and dynamics of conflicts

(Researcher, 2015)

The framework above that guided the study is based on a preposition that all intergroup conflicts are identity conflicts. Thus, the study leaned heavily on social identity theories (SIT). However, as shown in the lower part of the framework, identity plays out differently, for example, the minimal group theorists would suggest that ethnicity (or other unmet human need like recognition) in itself is a sufficient ingredient for conflict sustenance. It is thus expected that in the absence of resource competitions, various ethnic groups would still engage in conflict. On the other hand, the realistic theorists suggest that ethnicity alone is an insufficient driver of conflict but substantial issues such as resource competitions are the main incentives for in-group cleavages and out group hatred. The broken line between the two set of theories imply that it is often difficult to tell whether conflict has its origin from purely identity *per se* or from identity based access to resources. One of the strengths of SIT is that they contribute to our understanding of causes of group differences and hence conflict. On the other hand, SIT is insufficient to explain conflict in a holistic way. For example, the theories tell us little about dynamics of conflict, which is why other theories on conflict were employed to help in the understanding of other conflict elements other than the causes. Therefore, the upper part of the framework illustrates the concepts that attempt to explain how conflict plays out and they are organized around the elements of Galtung's ABC conflict triangle. This means that whereas identity is a source of intergroup conflict, the dynamism of this conflict can be viewed to have three elements namely; attitude, contradictions and behavior. The elements operate in a spiral manner rather than on a straight line. In other words, rather than saying that conflict behavior often originates from attitudes, it is possible that previous experiences (such a history of conflict between two communities) would be a source of certain attitudes that lead to conflict behavior. However, it is

postulated that the entry point for theories on property rights or access into conflict dynamism could be through the ‘context’ vertex of the conflict triangle. While for ethnicity *sensu stricto* to cause conflicts in the absence of any substantial issues such as competition over resource, it has to enter the conflict triangle through the ‘attitude’ vertex. Again, the broken line between the upper and lower parts of the framework implies that it is sometimes difficult to differentiate the sources of conflict from the dynamics of conflict. The theoretical framework discussed above influenced the choice of concepts that guided the analysis of forest resource conflicts. The concepts include the underlying sources (causes of conflicts), which are in most cases hidden and the structure and dynamics of conflicts which can be overt.

## **2.5 Truth and conflicts**

Truth has been generally defined as being in conformity to reality or actuality (Merriam-Webster, 2005). *Truth which is often portrayed in words is important in everyday life.* In conflicts literature, truth is defined as transparency, revelation and clarity (Deutsch & Coleman, 2000). Truth is often sought for and believed to be of public good. *Aristotle (384 – 322 BC)* (quoted in Neuhaus, 1996), *one of the earliest great philosophers said:*

*‘...our public responsibility as citizens-as people who accept some responsibility for our part in the earth –is that we are always to be engaging one another and deliberating the question of how we ought to order our life together..’*

The fact that we are to be deliberating the question of how we ‘ought to’ as rational, reasonable beings means that there must be something to deliberate; there must be a truth. Socrates also offered the following advice:

*‘let us follow the truth withersoever it leads’* (cited in Collins, 2009).

Truth is much sought for especially in pursuit for justice and fairness. For instance in the last three decades at least 32 truth commissions were established in 28 countries, majority of which had experienced violent conflicts (Amnesty International, 2015). In Kenya a Truth, Justice and Reconciliation Commission (TJRC, 2013) was established following the post election violence of the 2007/2008. The aim of the commission was to inquire into gross violation of human rights and historical injustices that occurred in Kenya since independence to February 2008 (TJRC, 2013). However, the commission in its findings acknowledged that what constituted truth was often subject to contestations and multiple conflicting narratives. Thus, the approach taken to overcome this challenge was to get ‘as complete a picture as possible’ (TJRC, 2013). Just as the TJRC report acknowledged of the challenge of determining what can be taken as ‘truth’, the various claims have been put forward in an attempt to address such questions as what constitutes truth and how to identify truth. The various claims generally attempt to answer the questions of whether truth is subjective or objective, relative or absolute (Glanzberg, 2014). Albeit there are several theories that attempt to explain criteria for measuring truth, four main ones that have inspired the epistemological understanding of the conflict phenomena in this thesis are reviewed.

### *Correspondence theory*

The correspondence theory argues that a belief is true if and only if it *corresponds to a fact* (Marian, 2013). The theory relies on propositions as the primary bearers of truth. According to this theory, there are true propositions and false ones, and that facts are true propositions. Thus, a belief is said to be true if there *exists* an appropriate entity (a fact) to which it corresponds. If such an entity does not exist, the belief is deemed false. Truth is assumed obvious since it is expected to conform to reality as suggested by thinkers such as Rene Descartes, Immanuel Kant and William James. Concerning truth, Descartes (1639, cited in Marian, 2013) explains:

*“I have never had any doubts about truth, because it seems a notion so transcendently clear that nobody can be ignorant of it...the word ‘truth’, in the strict sense, denotes the conformity of thought with its object”.*

According to Kant (1787, cited in Marian, 2013):

*“The nominal definition of truth, that it is the agreement with its object, is assumed as granted”.*

While to William James (1907, cited in Marian, 2013):

*“Truth, as any dictionary will tell you, is a property of certain of our ideas. It means their ‘agreement’, as falsity means their disagreement, with ‘reality.’*

Some scholars have gone further to vouch for identity theory instead of correspondence by arguing that true propositions do not correspond to facts, they *are* facts. Thus, there is no



“difference between truth and the reality to which it is supposed to correspond (Dodd, 2000). Hume (1739, cited in Marian, 2013) also rejected correspondence theory arguing that whereas ‘facts corresponding to reality’ apply to truths from some domains of discourse, for example the domain of science, they fail for others, for example the domain of morality. Hume together with other scholars rejects the idea that reality contains moral facts.

In social conflict resolutions, court systems usually work with facts presented as evidence in determining the case between disputing parties. Such an approach has been designated as ‘traditional’ by Vindelov (2012) and attempts to find objective truth as a basis for conflict resolution between parties. In other words, judgment has to be done based on ‘true’ facts as presented before the court. In such an approach, the party who has not presented evidence well must accept that the description of reality is wrong and that they have lost the case.

### **Coherence theory**

Coherence theory holds that a belief is true if and only if it is part of a coherent system of beliefs (Young, 2013). As opposed to the correspondence theory, coherence truth rejects the idea of propositions. Thus, truth is a matter of how beliefs are related to each- other and not a matter of the world providing a suitable object to mirror a proposition (Young, 2013). The coherence theory is typically associated with idealism (the idea that that reality is mental). According to Joachim (1906, cited in Young, 2013) one of the idealists: ‘Truth in its essential nature is that systematic coherence which is the character of a significant whole’. Joachim further claimed that what is true is the “whole complete truth.” Therefore, individual judgments or beliefs are

certainly not the whole complete truth but just part of the truth. Coherence theory proposes some kind of holism about content. This means that any individual belief or judgment gets its content only in virtue of being part of a system of judgments. However, these systems are only true to a certain degree, measuring the extent to which they express the content of the single ‘whole complete truth’ (Young, 2013). Therefore, any real judgment we might make will only be partially true. Coherence theorists think that nobody knows the truth but a little tiny bit of truth as narrated in the following famous illustration:

*...five blind men are walking along and they encounter an elephant. Everyone grabs a different part of the elephant, and the one with the trunk says, ‘elephants are like snakes-long and flexible’. Another person says ‘I don’t think so. Elephants are more of stumps of trees’-because he has the leg. Therefore, they are all arguing about what the elephant is .... (Keller, 2008)*

In social conflict situations, mediation has been suggested as a ‘new’ paradigm in conflict resolutions (Vindelov, 2012). In this new approach, it is acknowledged that each party knows part of the truth, but that neither knows the whole theory (Vindelov, 2012).

### **Pragmatist theories**

Pragmatists such as Charles Sanders Peirce, William James, and John Deewey hold in common that truth is verified and confirmed by the results of putting one’s concepts into practice (Glanzberg, 2014). The following assertions are associated with pragmatists: ‘truth is the end of inquiry’, ‘truth is satisfactory to believe’ and ‘truth is what is verifiable’ (Haack, 1976). Unlike

the correspondence theory, pragmatism rejects the idea that truth is transcendental (Haack, 1976). Pragmatism asserts that truth can only be defined in terms of their function in experience. For instance, according to William James (1907, cited in Feynman, 1994), truth is a quality whose value is confirmed by its effectiveness when applying ideas to practice. The pragmatists believe that the current reality is composed of knowledge and error. For example, Pierce (1901, cited in Feynman, 1994) uses the term 'fallibilism' in reference to truth. The fallibilistic views of knowledge suggest that because of the changing nature of reality and how human minds conceive of it, it is impossible to guarantee an expected result from a specific experiment (Husain, 2001). In other words, past successes do not guarantee future successes. Therefore, according to pragmatists when prediction fails, the underlying assumptions and hypotheses should be reevaluated and modified. John Dewey (1938 cited in Boydston, 1986) suggested that truth is self-corrective over time and should be submitted for testing to clarify, justify, refine and/or refute current propositions.

### **Constructivist theory**

Social constructivism proposes that all knowledge is constructed by social processes and that it does not reflect any external "transcendent" realities as held by correspondence theories. The constructivists hold that truth is historically and culturally specific, and that it is in part shaped through the power struggles within a community. In rejecting the idea of universal or absolute truth, Friedrich Nietzsche in his 1873 essay "*Über Wahrheit und Lüge im außermoralischen Sinn*" (On Truth and Lies in a Nonmoral Sense) claims that what people call "truth" is only "a mobile army of metaphors, metonyms, and anthropomorphisms" (Wicks, 2008). According to

Nietzsche, truth is nothing more than conveniently invented and fixed conventions which individuals or groups of people in the society use for practical purposes, especially those of repose, security and consistence (Wicks, 2008). Other thinkers who held that reality is socially constructed include Giambattista Vico, Karl Marx and most recently Stephen Hawking. Vico who is credited with the phrase "*verum ipsum factum*"(truth itself is constructed) believed that history and culture are manmade (Venene, 2002). Whereas recognizing that it was possible to have an objective truth, Marx also acknowledged the existence of multi 'truths'. However, he distinguished between true knowledge (scientific) and knowledge that has been distorted through power or ideology (Held, 1980). In trying to relate multiple realities to the existence of the universe, Stephen Hawking contends that 'the universe does not have just a single existence or history but rather every possible version of the universe exists simultaneously' (Hawking & Mlodinow, 2010). This view of truth is in line with relativism 'people believe because it is true for them' (Neuhaus, 1996) and perspectivism. The concept of perspectivism can be best illustrated using Nietzsche statement 'there are many eyes, so there are many truths.....'(Neuhaus, 1996). Everything is a matter of perspective, where you are coming from, how you see it. Perspectivism also recognizes the fact that gender, race, class among other factors are fundamental in determining one's perspective. Within the society perspectives (or perceptions) about phenomena may vary among individuals and/or across different groups of people. The perceptions could be the truth, parts of the truth or may not be close to the truth but are still firmly held by the people. Whenever individuals and/or groups of people perceive that their goals and aspirations are incompatible, regardless of whether these perceptions are true or not, conflicts are likely to arise (Engel & Korf, 2005). In most cases parties to, and the observers

of conflicts usually interpret or construct (perceive) conflicts differently, depending on their perspectives and interests (Engel & Korf, 2005). Therefore, conflicts are about perceptions and the different meanings that individuals or groups give to events, policies and institutions (Engel & Korf, 2005).

### 2.5.1 The position of thesis on truth

Whereas this thesis appreciates the possibility of there being some absolute truth that could be defined through correspondence or coherence theories on truth, it posits that it is difficult for such truth to be tested or proved in social context. More so, when dealing with complex human phenomena such as intergroup conflict, it is not easy to distinguish between provable (redoubt of the indubitable, of the undoubtable) facts based narrations and myths as held by different groups of people. Indeed each group hold dearly to what they believe as if it were ‘true’ regardless of whether they can prove it or not. This study appreciates the fact that it is possible that there are different perceptions of the reality on natural resources (for example on utilization of forest resources, migration patterns of different communities into the study area and who are the rightful owners of the forest) across different stakeholders, for example the government, researchers and the different communities in the study area. This is in line with the social constructionist theories on truth. Nevertheless, the study relying on logic rejects the idea that two or more contradicting accounts of the same phenomenon or event can both be true. This position also draws inspiration from Aristotle’s *law of noncontradiction*, which states that ‘A thing cannot both be and not be in the same way and at the same time’. On the other hand this thesis does not necessarily accept that no one of these different perspectives constitute reality, that is, there is no

‘one’ truth but ‘many’ truths as relativism would suggest. The study believes that one can only rightfully say that ‘this’ or ‘that’ is wrong when she has the truth. For example, Keller (2008) in response to the often-narrated story of the reality of elephant cited above under the coherence theory argues that only somebody who was not blind (and had the complete picture of what an elephant was) could tell that not all the blind men possessed the whole truth about the elephant. Hence, there is a difference between saying that ‘no one has the truth’ and that ‘it is difficult to know who has the truth’. The former statement suggests that the proponent has the truth and that other peoples’ truths do not correspond to this truth. However, a claim that ‘no one has truth’ not only is an exclusive truth claim but also self-contradictory. The second statement, which is favored by this study, believes that whereas there could be some absolute truth, it is difficult to establish a criterion for testing this absolute truth in some realities of life. However, to scientists, researchers and other stakeholders, the study believes in pragmatism to the extent that this group of people should re-evaluate what has been in the past presented as the reality on conflict causes (especially where interventions based on past results have failed) with an aim of contributing towards problem solving. Therefore, the stand of this thesis is that it is possible to encounter multiple narrations (perceptions and perspectives) from the different parties to conflict. These narrations are more often than not incoherent, inconsistent or at worst contradicting. Understanding the variations in perceptions is necessary in explaining factors that have sustained conflict. However, determining whether any one of the narrations is true (that is close to reality) or not, is beyond the scope of this thesis.

## 2.6 Conceptual framework

This study presents a multi-ethnic context within which different stakeholders are expected to have competing interests over forest resources. Such a scenario of competing interests quite often leads to conflict as explained by Pruitt and Kim (2004). In order to understand the sources and drivers of forest resource conflict, this study employed a conflict tree analysis (Figure 7). A conflict tree is a visual tool used to inspire discussion and reflection on the core problem of conflict in terms of its causes and effects (Hammill, *et al.*, 2009). The conflict tree diagram visualizes the structure and dynamics of conflict: the core problem (the trunk); its underlying causes (the roots); and its impacts (the branches). The roots of the tree represent the underlying and substantial issues that may be said to revolve around access and rights to forest resources. The tree trunk represents the core problem of conflict and its manifestation. The different parties to the conflict (represented by **P**) may have different perceptions (in regard to the forest or towards other parties), which in turn lead to different attitudes (represented by **A**) that contribute to conflict behavior as explained by Galtung (1996). The crown of the tree represents the effects of conflict with regard to forest conservation, livelihoods as well as peace and stability. Since the distribution of forest resources vary in space it is therefore hypothesized that the underlying issues that contribute to the occurrence of forest resource conflict are expected to have a spatial pattern.

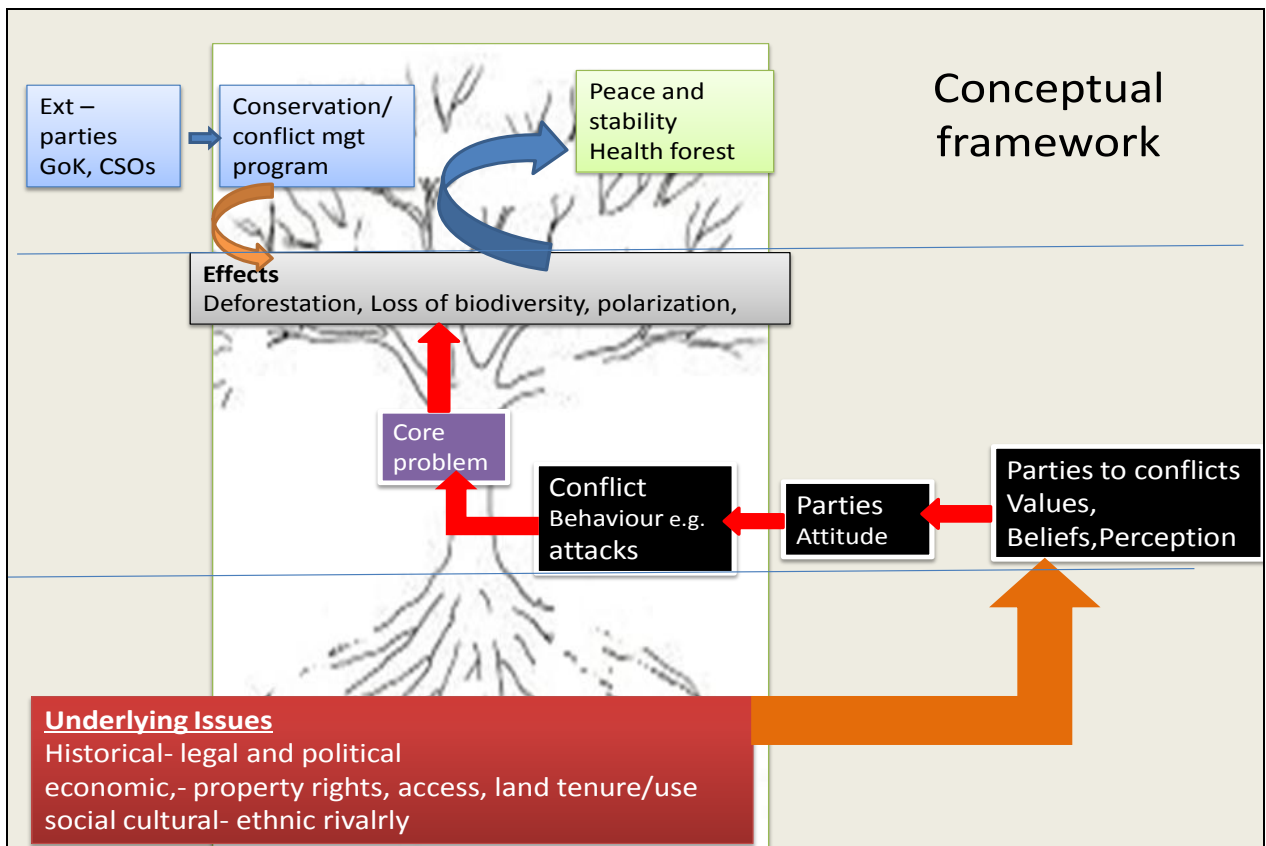


Figure 7: Visualizing Eastern Mau conflicts through a problem tree

(Researcher, 2015)

In forest resources, the right to withdraw may involve some authorized actions by a few individuals practicing lumbering or collection of dead wood for fuel. In a forestry context, it is expected that different groups of people (stakeholders) perceive themselves to have different access and withdrawal rights to the forest products. Access is perceived to be mediated by identity for instance, membership in a community. This may strengthen the ethnic ties and encourage exclusion and alienation leading to conflicts. For instance, the forest indigenous community may have a perception that they should have exclusive rights to access the forest and



utilize the forest for their gathering and hunting activities. Another identity-based access is when rights or claims are attached to or explicitly detached from particular localities or professions. Local users are often completely excluded from protected areas particularly if they are perceived by other stakeholders as bound to extract resources (Ribot & Peluso, 2003), although conservation and development activities often expect them to protect the natural resources (Agrawal, 2001). Thus, it was necessary to investigate the role of different initiatives such as conservation efforts and forest community conflict management strategies by different stakeholders evaluate their efficaciousness in terms of achieving peace and conservation.

## **2.7 Key questions emerging from the literature review**

Forests play important economic and sociological roles to millions of people worldwide. However, these resources have been faced with threats mainly from conversion into other land uses. For example, Kenya's natural forests have been reduced over time following expansion of both commercial and subsistence agriculture. At the same time, conflicts in Kenya have been reported in the popular media virtually every year since the advent of multipartyism. Natural resource rich and multi-cultural regions such as the Mau forest complex have always witnessed the highest intensity of these social conflicts. From the review of the conceptual issues in literature, conflicts originate from resource competitions and/ or shared identity values or fears. The former is understood in this thesis as spatial dimension while the latter is the social dimension in conflict. In light of the trend of conflicts in Kenya, forest resource dynamics and the various theories reviewed in this chapter, the following questions merit the attention of this thesis: Now that forest degradation for example in South America has been linked to criminal

activities, what are the links of forest resource degradation in Kenya and the occurrence of conflict? How can forest resource conflict be understood in light of the fact that all social conflicts are identity conflicts? Is there ethnicity in the forest? What happens when the spatial factors interact with social factors in multi-cultural contexts? Are the spatial factors that matter the most or the social factors when it comes to sustaining conflicts in multi-ethnic contexts? What about truth? How do the different perspectives (perceptions) contribute to sustenance of conflict? These questions have been inadequately addressed in the existing literature and the remaining section of this thesis will aim at providing answers to most of the questions using empirical evidence from the study area.

## **2.8 Hypothesis**

- i. H0: Attitudes DO NOT play a significant part in conflicts
- ii. H1: Attitudes play a significant part in conflicts

## **CHAPTER 3: METHODOLOGY**

### **3.1 Introduction to methodology**

Social conflict occurs when individuals who are mobilized in a group because of their shared values or fears engage another party or parties in a way that shows inter-group differences. When the primary motivation for group mobilization is resource access (such as forest access), the resulting conflict will be deemed to be resource based. However, when the primary motivation for conflict is to preserve group identity, the conflict is deemed identity based. Since this study is interested in investigating the interaction between the social factors (group perceptions, attitude and behavior) and the spatial factors (resource dynamics and access) in conflict situations, the study site had to possess multi-cultural identities as well as natural resource rich attributes. Eastern Mau forest complex was selected as the study site by the STAKE project (as mentioned earlier) since it is the most degraded forest ecosystem in Kenya. The areas surrounding the forest had also witnessed resource competitions that culminated over the years into violent clashes involving different ethnic groups. It is therefore thought that solving conflicts that have marred the region is closely tied with saving the forest. It is expected that results and conclusions from this study can be generalized to similar contexts in Kenya and beyond.

According to Creswell (2010), a research methodology contains the following sections: research paradigm that the investigator subscribes to, strategies of inquiry and research methods. Departing from a pragmatist school of thought, the study used multiple sources of information in trying to understand the social conflict phenomenon. However, efforts were made to stay as close as possible to the phenomenon under investigation. Therefore, during data collection, an

inductive approach was employed largely. This was meant to capture as much as possible the differences that exist as different groups of people interact. For those working with social realities and largely utilize qualitative data in an inductive approach, the most imminent question they are faced with has to do with the role and place of theory in their study. Researchers always have to prepare and gather background information (concepts and theories) about the phenomenon under study before going to the field. However, to ensure that the information collected in the field is not biased towards fulfilling pre-conceived assumptions, it pays to shelve the background information, face the fieldwork with an open mind and discover new meanings that people attach to phenomena. The information collected and analyzed can then be interpreted and discussed in light of the background information. In this study, data collection and analysis were biased in favor of qualitative methods. Spatial data was also acquired to explain the social phenomena which had been analyzed qualitatively. A synthesis of the data analyzed was then done and discussed in light of theories on social conflict.

For those heavily relying on qualitative methods, several authors (Lincoln & Denzin, 1994; Merriam, 2002; Berg, 2004; Herr & Anderson, 2014) have underscored the importance of self reflection as part of the research process. To be self-reflexive is equated with “coming clean” as a researcher about how race, class, gender, religion, and personal/social values influence the researcher’s understanding of the power dynamics of the research setting, the phenomena under study, and the researcher-respondent relationship. For this study, the researcher’s reflection is captured in the last section of the methodology section before the conclusion.

## **3.2 The Study Area**

### **3.2.1 Location and extent**

The gazetted forests of Eastern Mau lie between Longitude  $35^{\circ} 40' 0''$  E &  $36^{\circ} 10' 0''$  E and Latitudes  $0^{\circ} 18' 0''$  S &  $0^{\circ} 40' 0''$  S (Figure 8). The Eastern Mau Forest block is one of the two largest forest blocks in the Mau Complex, covering about 66,000 hectares (out of which 35,301 hectares were excised in the year 2001 for settlements) (UNDP, 2008). However, in this study, the area was extended to include land outside the forest-protected area. This was necessary since the study was planned to take place among the communities living adjacent to the forest reserve. Therefore, the study area covers some 125,389.2827 hectares and lies between Longitude  $36^{\circ} 40' 0''$  E &  $36^{\circ} 10' 0''$  E and Latitudes  $0^{\circ} 20' 0''$  S &  $0^{\circ} 40' 0''$  S. The nearest major urban establishment to Eastern Mau forest complex is Nakuru town, a commercial centre approximately 30km away. However, two major trading centres serve the areas adjacent to the Eastern Mau forests namely; Njoro town located in the northeastern part of the study area and Mau Narok centre located in the southeastern part of the study area. The key landmark in the study area is Egerton University, located near Njoro town and attracts people from different ethnic groups. The presence of the university in Eastern Mau is expected to have contributed to increase in population of the people in the study area and increase the demand and value of land.

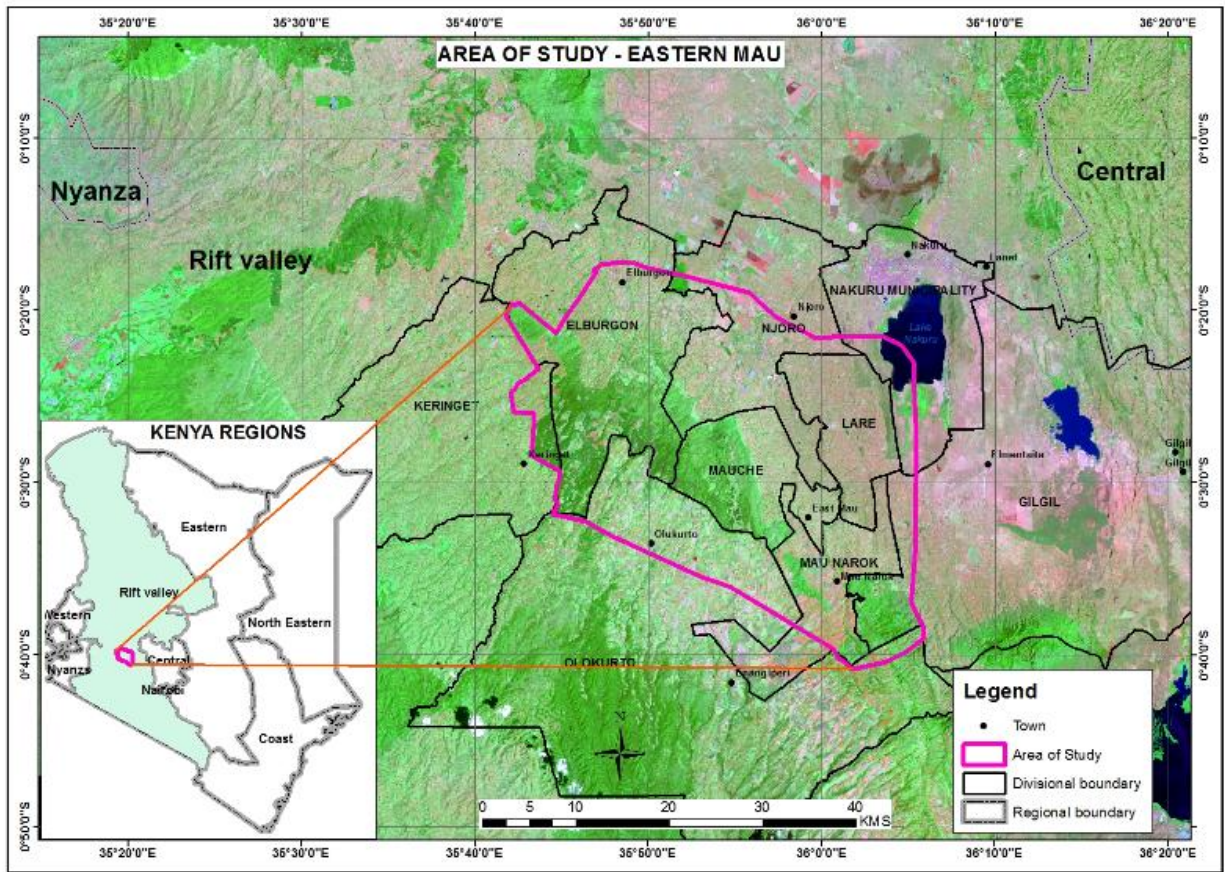


Figure 8: The study area-Eastern Mau

(Researcher, 2015)

### 3.2.2 Topography, Soils and Climate

Hills and minor scarps characterize the topography of Mau forests landscape with the Mau escarpment being the most imposing relief feature. The area is part of the highest part of the Rift Valley with altitude ranging from 1,800 meters above sea level to nearly 3 000 meters above sea level. In Eastern Mau, the landscape is generally gently undulating to undulating with slope of between 2-4% extending over an area of approximately 40ha (Kimotho, 1990). However, some areas are generally low lying, with slopes ranging from 1-2% and extending over approximately

58ha (Kimotho, 1990). The soils of Eastern Mau can be categorized into two groups based on altitude that is, high altitude and low altitude soils. The high altitude soils are mainly *Luvic* and *Plinthic Phaeozems* (Kimotho, 1990). These soils are generally well drained, deep to very deep, dark greyish brown, friable sandy clay loam underlying a dark brown top soil which ranges from 5-36cm in depth (Kimotho, 1990). The soils are strongly to slightly acidic with pH-H<sub>2</sub>O (1:2.5 suspension) ranging from 5.2-6.3 (Kimotho, 1990). The low altitude soils are mainly *Dystric Gleysols* and *pisoferric phase*. These soils are poorly drained, deep, very dark grey, firm clay with many medium distinct dark yellowish mottles underlying dark greyish topsoil, which ranges from 10-25cm in depth (Kimotho 1990). Perched ground water can be found on the surface in some places. The ground water contributes to the high density of drainage network (Figure 9).

The Eastern Mau receives a relatively cold and wet climate with a mean temperature of 10-15°C and annual average rainfall of about 1000mm. Rainfall is fairly continuous but peaking in April. The Eastern Mau is the main upper catchment of the four rivers (Makalia, Naishi, Nderit and Njoro) that flow into Lake Nakuru (Figure 9). The cool and wet climate with deep fertile volcanic soils of Eastern Mau has made the region very attractive for a wide range of agricultural practices. This probably explains the increasing influx of immigrants into the region for the last two decades.

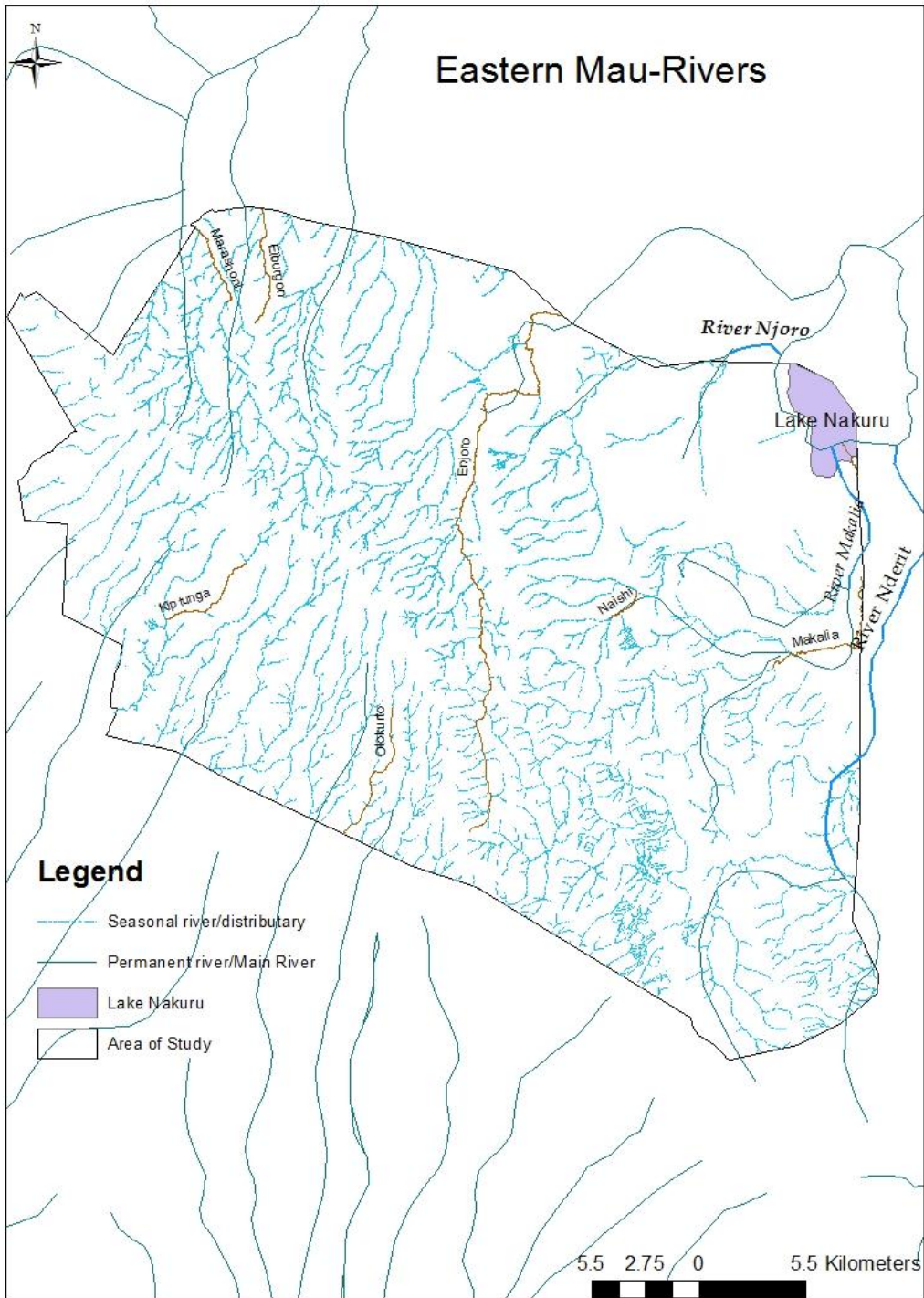


Figure 9: Drainage network in the study area



### 3.2.3 Vegetation and land cover

The high altitudes of the Eastern Mau (above 2300 meters) are covered with montane forest, which give way to thickets of African bamboo (*Arundinaria alpina* K. Schum) mixed with forest and grassland, and finally to montane *sclerophyllous* forest near the escarpment crest, about 3000m (Birdlife International, 2013). The Eastern Mau highlands have been heavily and destructively logged, most recently for plywood from Parasol Tree (*Polyscias kikuyuensis* Summerh). Over logged areas are colonized by pioneer species such as soccerball fruit (*Conopharyngia stapfiana* (Britten) Stapf), woodland water berry (*Eugenia guineensis* (Willd.) Baill. ex Laness.) and Lace-leaf (*Neoboutonia melleri sensu D75*), whereas patches of primary forest contain African olive or ‘Loliondo’ (*Olea europaea* L. subsp. *cuspidata* (Wall. ex G. Don) Cif.), red stinkwood (*Prunus africana* (Hook.f. ) Kalkman), Smooth-barked-flat crown (*Albizia gummifera* (J.F. Gmel.) C.A. Sm.) and the Real yellow-wood (*Podocarpus latifolius* (Thunb.) R.Br. ex Mirb.) (Birdlife International, 2013). Significant parts of the high red cedar (*Juniperus virginiana* L.)–*Podocarpus*–*Olea* forest have been encroached and cleared, although some sections remain in good condition (Birdlife International, 2013). Although a large part of the study area is still classified as forest reserve (see the gazetted forest boundary in Figure 10) the year 2014 satellite image analysis indicate that some of the areas are occupied by cultivated fields. The Eastern Mau landscape is used for growing of Maize, potatoes, peas, and wheat, grazing of cattle, shoats and building of homesteads. These economic activities can sometimes be in competition for land with the forestry.

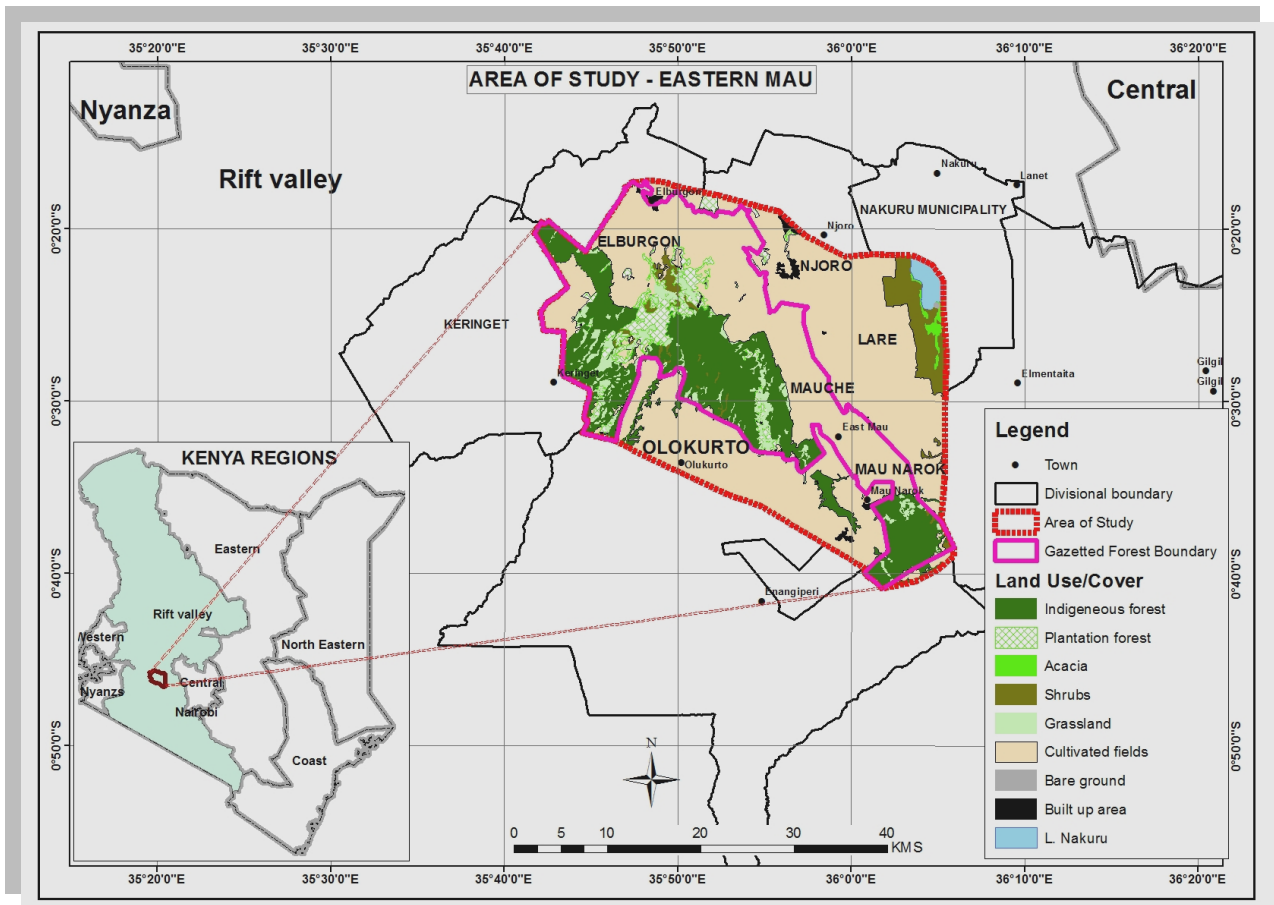


Figure 10: Eastern Mau land cover/land use map  
(Researcher, 2015).

### 3.2.4 Administration boundaries and Population

The study area traversed two counties that border the Eastern Mau forest reserve namely; Nakuru and Narok. In Nakuru County, the study area lie within five administrative divisions namely Elburgon, Lare, Mauche, Mau Narok, Kihingo and Njoro. Whereas in Narok County, the area covered lies within Olokurto division. From the Nakuru side, the Eastern Mau forest reserve is

bordered by five administrative locations (all named after the different blocks<sup>4</sup> of Eastern Mau forest) these include Mariashoni, Teret, Kihingo, Nessuit and Sururu. From the Narok side, the forest is bordered by Entyani location, which is largely a grassland ecosystem.

Table 4: Population distribution by division in the study area

DIVISION	Male	Female	Total	Area in Km2	Density	Households	Persons per Household
Elburgon	41,124	40,216	81,340	420.5	193	19,623	4.1
Lare	14,499	15,322	29,821	139.1	214	6,832	4.4
Mauche	12,697	12,391	25,088	159.3	158	4,994	5
Mau Narok	22,063	22,322	44,385	184.5	241	10,479	4.2
Kihingo	7,026	7,622	14,648	34.4	426	3,488	4.2
Njoro	25,150	25,600	50,750	109.6	463	13,048	3.9
Olokurto	22,221	22,105	44,326	1,218.30	36	8,625	5.1
<b>TOTAL</b>	<b>144,780</b>	<b>145,578</b>	<b>290,358</b>	<b>2,265.7</b>	<b>247.29</b>	<b>67,089</b>	<b>4.41</b>

(Data source: GOK, 2009c)

Table 5: Population distribution in locations bordering the forest

Location	Male	Female	Total	Area in Km2	Density	Households	Persons per Household
Mariashoni	6,619	5,835	12,454	245.6	51	2,630	4.7
Kiptunga*	2,147	1,859	4,006	149.3	27*	904	4.4
Teret	3,791	3,636	7,427	71.8	103	1,417	5.2
Sururu	4,529	4,427	8,956	25.2	355	1,753	5.1
Nessuit	6,929	6,559	13,488	75.2	179	2,744	4.9
Entyani**	3,246	3,293	6,539	102.1	64	1,249	5.2

\*Kiptunga location is extensively covered by the forest reserve and hence its low population density compared with other locations.

\*\* Entyani location borders Longoman forest block

(Data source: GOK, 2009c)

<sup>4</sup> Of the five original forest blocks, Kiptunga is the only one remaining intact and less encroached upon. Teret and Mariashoni have been completely converted into agriculture and settlement. While Sururu and Nessuit still have some pockets of forest intact although large portions have been degraded (personal observation during field visits)

Based on the population census of the year 2009 households (GOK, 2009c) (modified in Table 4) the total population from the seven divisions of the study area was placed at 290,358 accommodated in 67, 089 households. Thus, the population density of the study area in 2009 was 247.29 persons per km<sup>2</sup> ranging from a high of 463 persons per km<sup>2</sup> in Kihingo division of Nakuru County to a low of 36 persons per km<sup>2</sup> in Olokurto division of Narok County. The average number of persons per household in the study area during the 2009 census was 4.41. However, there was a slight variation in average household size across the divisions with Olokurto in Narok having the highest household size of 5.1 members while Njoro in Nakuru having the lowest with 3.9 members per household. Since 58,464 households in six divisions inhabit an area of 1047.4 km<sup>2</sup> in the Nakuru county side of the Eastern Mau forest reserve, the available land per household is 1.80 hectares and per individual within the household is 0.42 hectares. On the other hand, in Narok county side of the forest has 8,625 households in Olokurto division occupying 1,218.30 km<sup>2</sup> of land. Thus, the available land per household is 14.13 hectares and per individual within the household is 2.77 hectares. From these figures, it is apparent that the areas bordering Eastern Mau forest from Narok county side have lower population densities compared to the areas bordering Eastern Mau forest from Nakuru county side. This observation seems to point to an expected high pressure on land for the predominantly agricultural populace of Nakuru County. However, available land seems to be relatively large for the residents of Narok County who are predominantly agro-pastoralist community. The high population density in some parts of Eastern Mau is likely to have led to pressure over land and thus presenting a fertile ground for conflict related to access to land.

### **3.3 Research Paradigm**

Every discipline is influenced by a certain way of thinking or paradigm. Thomas Kuhn (1977) postulated the concept of a paradigm as a group of researchers having a common education and an agreement on "exemplars" of high quality research or thinking. Hagget (1979) defines a paradigm as a metatheory of scientific tasks and methods which regulates the research of most practitioners in a given field. The paradigm tells researchers what they should be looking for and which methods are relevant in the given field of inquiry. In other words, paradigms are beliefs shared by a community of practitioners. The beliefs which are responsible for guiding action have been referred by various authors as philosophical world views, ontologies, epistemologies, (Creswell, 2009 & 2010) or broadly conceived research methodologies (Guba & Lincoln, 2005). Creswell (2010) identifies three main research paradigms as postpositivism, social constructionism and pragmatism.

Postpositivism represents the thinking after positivism challenging the traditional notion of the absolute truth of knowledge (Philips & Burbules, 2000). Positivism, which is also called empiricism, is a philosophical viewpoint that limits knowledge to facts that can be observed and to the relationships between these facts. Positivists advocate that science can only concern itself with empirical questions. Empirical questions are about how things are in reality. The assertion by positivists that value free and objective research is possible was criticized by proponents of humanistic approaches (those that place emphasis on people's capabilities, and creativity) and led to rise in postpositivism. Post positivists accept that theories, background, knowledge and values of the researcher can influence what is observed. However, they propose that since objectivity is

an essential aspect of competent inquiry, researchers must examine methods and conclusions for bias (Creswell, 2009). Both post positivists and positivists hold a deterministic philosophy in which causes probably determine effects or outcomes. Thus, there is need to identify and assess the causes that influence outcomes. The post positivist thinking has represented the traditional form of research and its assumptions hold true more for quantitative research than qualitative research.

Qualitative research is rather based mainly on the philosophy of Social constructionist, or the social construction of reality. Social constructivists hold the assumptions that individuals seek to develop constructed understandings of the world they live in. Social constructivists also hold that understanding, and meaning is developed not separately within the individual, but in coordination with other human beings (Creswell, 2010). However, these meanings are varied and multiple across people groups, leading the researcher to look for complexity of views rather than narrowing meanings into a few categories or variables (Creswell, 2009). The two most important elements of the philosophy of social constructivist are that human beings rationalize their experience by social constructs of the world and that language is the most essential system through which humans construct reality. The objective of the qualitative research is to rely as much as possible on the respondent's views of the phenomena being studied. Such an approach uses more of the open-ended questions, and allows the interviewer to listen carefully to what people say or do in their life setting. The subjected phenomena meanings created by individuals are formed through interaction with others. Thus, constructivist researches often investigate the process of interaction among individuals. The social constructivist researchers also lay emphasis

on the specific contexts in which people live and work, in order to understand historical and cultural settings of participants. The social constructivist worldview has been widely criticized because of subjectivity on the part of the researcher. The background of the researcher shapes their interpretation, and recognizing this fact makes them position themselves in the research to acknowledge how their interpretation of meanings by people flows from personal, cultural and historical experiences. Rather than start with theory or hypotheses as is the case of postpositivism, social constructivists generate a pattern of meaning or inductively develop a theory.

A third and most recent worldview that guides research is from the pragmatic school of thought. Pragmatism is a philosophical perspective, which is essentially concerned with construction of meaning through experience (Husain, 2001). Pragmatism was developed in America after the civil war in 1870 and it rejects the idea that the object of thought is to describe, represent or mirror reality but rather thoughts are tools for prediction, action and problem solving (Burke, *et al.*, 2007). Pragmatism appreciates the existence and usefulness of the physical (natural) world as well as the emergence of the social and psychological world that includes culture and human institutions as well as subjective thoughts (Burke *et al.*, 2007). According to Husain (2001), a pragmatist believes that a particular ‘concrete’ situation is important in obtaining scientific knowledge and for understanding the world. Pragmatists hold that whereas ‘general’ laws and theories are useful as guiding principles in an inquiry (Husain, 2001), research as Creswell (2009) puts it always occur in social, historical and political contexts in which man is central. In pragmatism, researchers do not focus on the methods *per se* but rather they emphasize on the

problem and seek to use all approaches available to understand the problem (Creswell, 2009). Hence, inquirers who hold the pragmatic philosophical view would draw from both quantitative and qualitative assumptions in their study, which is characteristic of a mixed methods strategy in research. In recognizing the centrality of human element in man-environment interaction, pragmatists use value based scientific methodology that incorporates human attitudes, beliefs and norms to solve practical problems in the society. This position of centrality of man in human – environment relations is supported by Vidal de Lablache (Husain, 2001) who contends that ‘our thoughts determine our acts, and our acts determine the previous nature of the world (environment). Therefore, this study seeking to understand human relations (as manifested in conflicts) in the context of natural resources has been widely influenced by pragmatism as a research paradigm.

### ***How different paradigms shaped the analysis of social conflicts in Eastern Mau Forests***

Human conflicts are complex social phenomena that can be understood through multiplicity of dimensions that include, but not limited to, physical and social aspects of the environment within which they occur. Furthermore, natural resource conflicts involve various elements that are found both in the social environment (such as beliefs, values and attitudes) and the physical environment (such as land, pasture, forests). The former represent underlying causes of conflicts and can be best understood through qualitative methods of study while the later, also referred to as proximate causes (Lambin, *et al.*, 2003; Chowdhury, 2006), can be best understood by quantitative analyses such through remotely sensed (RS) and spatial (GIS) data sets. Based on this understanding, the study therefore employed both quantitative and qualitative methods in



understanding natural resource access conflict in a forestry context. The study recognizes that social conflict is manifested through behavior and that it is important to interrogate different attitudes, interests, prejudices, and group values that lead to different behavior patterns through qualitative methods. The study also appreciates that different experts and thinkers (such as Skidmore, *et al.*, 1997; Schumacher, *et al.*, 2000; Kyem, 2004; Barton, *et al.*, 2005; Chowdhury, 2006; Bryman, 2008) agree that human attitudes, interests, prejudices, and group values vary in space and time. Thus, spatial structures (and laws) are valid in this study and they have provided a framework during research planning (for instance, choice of study area and sampling strategy) and data collection and analysis (for example, in linking conflict intensity to natural/physical features). On a similar note, when comparing the influence of positivism and social constructionism on the study, the research takes some distance from positivism. A positivistic approach of assessing perceived incompatibilities among conflict stakeholders is seen as inadequate, since such an approach relies on observable and objective (value-free) principles for data collection and knowledge making (Bryman , 2008). Such an approach is not perceived here as compatible with the complex and dynamic nature of conflicts as human phenomena (Bryman, 2008) which can be best analyzed through an understanding of how different people frame (construct) the issues that lead to conflict (Bryman , 2008 ).

### *The Role of Theory*

The research presented in this thesis adapts both inductive and deductive approaches to study conflict in Eastern Mau. The research is primarily inductive as the observations and empirical findings of the local communities' experiences with conflicts provides the starting point, and are then used subsequently to advance theory (Bryman 2008). The inductive element of the

research is also seen during data collection where the qualitative data was first collected using open conversational interviews. This was then followed by administration of household questionnaires as well as acquisition and interpretation of spatial data based on insights gained from the qualitative data. However, the empirical study itself did not take off on completely bare ground; extensive review of literature on forestry related issues and conflict theoretical concepts formed the basis for the study. Important concepts taken from the conflicts literature include elements of conflicts (Galtung, 1996), social identity discourses in the African context (Osaghae, 1991; Ake, 1993; Lentz, 1995) and *access* (Ribot & Peluso, 2003). These and other key concepts related to social interactions are central in natural resource conflicts, the perspectives of which have influenced the thesis as described in greater detail in the literature review as well as in the discussion. In general, theory in this study is used not to influence the direction of data collection process but as a way of ‘linking up’ the study findings with other similar works as explained by Walcott (2001).

### 3.3.1 Strategies of Inquiry

To understand the causes of resource conflict under the mixed methods approach, this study employed a mixed methods strategy. The Journal of Mixed Methods (Morgan, 2006) defines mixed methods as ‘research in which the investigator collects, analyses, mixes, and draws inferences from both quantitative and qualitative data in a single study or a program of inquiry’. The design involves discovery of patterns (induction), testing of theories or hypotheses (deduction) as well as relying on the best set of explanations for understanding phenomena (abduction) (de Waal, 2001). The underlying principle for mixed methods research is that

researchers should mindfully create designs that effectively answer their research questions. The aim of mixed methods or multimethodology is as Johnson & Turner (2003) put it, not to replace either quantitative or qualitative approaches but rather to benefit from the strengths and minimize the weakness of both in a single research. Several methodological writers (for example, Onwuegbuzie, 2006; Greene & Hall, 2010; Tashakkori & Teddlie, 2010) have observed that mixed methods research is recently gaining enormous popularity. The practice of mixed methods research has been necessitated by the fact that today's research world has become interdisciplinary, complex, and dynamic (Newman, *et al.*, 2003; Niglas, 2004; Brannen, 2005; Morgan, 2006; Andres, 2012). In this study, both qualitative and quantitative data were acquired during data collection phases. However, the weighting between the two methods was in favour of qualitative methods. Such an approach of mixed methods research is referred by Creswell (2009) as a concurrent embedded strategy since one method which is given less priority is nested within the predominant one. In this study, the quantitative method was embedded within the qualitative method (Figure 11).

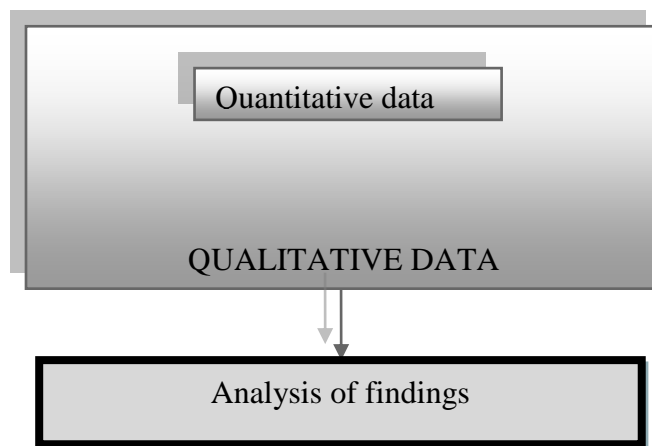


Figure 11: Concurrent Embedded design

(Adopted from Creswell, 2009)

### **3.4 Research methods**

#### **3.4.1 Selection of respondents**

Selection of participants for qualitative data collection was done by snow balling among the community members. However, apart from the local citizens, efforts were made to include key decision makers (such as the police and resource managers), community leaders, different age groups, occupations, politicians, gender, and ethnicities. For purposes of sampling, the area under study was divided into four (4) cases based on the forest blocks that are bordered by the different communities of Eastern Mau where conflict have been witnessed before. The forest blocks included Sururu, Likia extension, Longoman/Nessuit/Kiptunga and Longoman/Teret. The four forest blocks also formed the spatial extent of the area used for analysis of conflicts using Geographical Information System (GIS) tools as illustrated in section 3.6.3. Before the actual field data collection, a reconnaissance study was planned during which a list of respondents was generated with the help of local leaders. However, the list of suggested respondents could not be followed in every detail: suggestions of new informants were received along the way, and not all those who were suggested were available for an interview. Still, during the actual field study, the researcher serendipitously found more people who had desired qualities of key informants and included them in the list of respondents. The total number of respondents who participated in the interviews across the four cases was fifty five (55) (Table 6) (a detailed profile of the respondents is given in appendix F)

Table 6: Categories of respondents

Category	Number of respondents		Total
	Gender		
	Male	Female	
Community key informants (village elders, youth and women representatives, teachers)	18	9	27
Government Agencies (forestry sector)	6	1	7
Administration (police)	5	0	5
Administration (Chiefs, Assistant Chiefs)	6	1	7
Nongovernmental organizations and CFA leadership	8	1	9
<b>TOTAL</b>	<b>43</b>	<b>12</b>	<b>55</b>

The interviewees (Table 6) cannot be considered as a representative sample as considered in quantitative measurements. Instead, the interviews were aimed at giving a representative picture of the phenomena under study. The number of interviews conducted was considered sufficient for answering research questions in the study, because after conducting several interviews in each case, very little additional information was available from additional interviews that would have affected the general observations made. Being suggested by local leaders during the reconnaissance study as well as selection of respondents based on the researcher's own experiences in the field, the interviewees chosen for the research were expected to give a rather balanced representation of different views on the resource conflicts in each case.

### 3.4.2 Sampling

Sampling consists of selecting some part of the population so that inferences about the population can be drawn from analyzing the parameters of the selected sample (Nachmias & Nachmias, 1996). The population and sampling frame used to determine sample for this study were all households. According to Nachmias & Nachmias (1996) usually sampling units have numerous

attributes, one or more of which are relevant to the research problem. For this study, households that had lived in the study area for six years or more (the last violent conflict was witnessed in the year 2008) were considered in the 2013/2014 field data collection. In terms of sample size, it depends on the homogeneity of the population, the type of relationships to be established and what the researcher wants to do with the findings (Kumar, 2005). According to de Gier (2004) a sample size of at least 30 is large enough to represent a homogenous population. The quantitative data was meant to supplement (or explain) the findings from the qualitative data. In addition, during the pilot study, over 90% of the people were found to have witnessed conflicts in the study area and could therefore ably give an account of events. Hence, the population was considered homogenous in terms of knowledge base and experience on conflict and a sample size of 60 was planned. Systematic sampling of the households drawn from Sururu, a village bordering the forest was employed to determine the specific households where the questionnaire was to be administered.

### **3.5 Data collection**

A number of tools were used within the strategy of mixed methods to gain an understanding of resource conflicts in Eastern Mau. These included qualitative methods (open conversational interviews, Focus group discussions, key informant interviews, geo-coded transect walks and observation) as well as quantitative data (household questionnaires and spatial analyses in a GIS and Remote sensing environment). The different methods were employed in order to gain understanding of conflicts within Eastern Mau from different perspectives.

### 3.5.1 Interviews and FGDs

Conversational interviews were carried out to understand the main viewpoints and positions people hold in relation to resources (such as land, the forest and water) in Eastern Mau. The interview is an important tool for understanding the meanings that people construct out of their lived world (Kvale, 2007). To ensure that interviews were systematic and for meaningful comparison, an interview guide was used to initiate conversations on key topics and to focus each interview on comparable themes (Kvale, 2007). The conversation guide was composed of questions about respondents' experience of the area, what the area meant to them, and what kinds of changes they had seen. Probes were also employed to gain detail understanding and for clarification as well as discovery of new meanings that the community constructed out of the phenomenon under study. To complement the open conversational interviews with the members of the community, Semi structured interview guides were prepared and administered to key informants who were supposed to be particularly knowledgeable about conflicts and natural resources in the study area. The key informants involved parties who were thought to be either internal or external to the communities and were nonetheless parties to the conflicts, or had influence in changing patterns to conflicts for instance, government and nongovernmental organizations working towards peace and/or conservation of the forest. These included local government officials, police officers, and Community Forest Associations (CFAs) leaders.

The data collected through interviews were validated through focus group discussions (FGDs). Barbour (2007) suggests that the object of FGD is to interview a group, which is seen as holding a consensus view. Members of similar ethnic identity were interviewed together in order to

access narratives as told by different parties to conflict in the study area. During the focus group discussions, the study sought to understand the role of stereotypes, interests, values, and beliefs and how they contribute to intergroup conflicts. All the interviews (key informant and FGDs) were carried by the researcher out with the help of a field assistant. The field assistant's roles were to record notes and help in translation in case a respondent wished to explain some information in one of the local languages.

### 3.5.2 Participatory mapping and observation

Participatory (community) mapping was used to map local knowledge of shared resources and related conflicts and hence help to visualize conflicts in spatial dimensions. Maps are instrumental in addressing local resource use conflicts (Kyem, 2004; Bryman, 2008). Community participatory mapping was done with the help of villagers. Participants were selected based on desired qualities such as involvement in village leadership, longevity in the village, women representatives, involvement in Community activities (such as Community Forest Associations) and willingness and availability as suggested by Shrestha (2006). During the mapping process, participants were involved in geocoded transect walks. A transect walk involves systematically walking with local people through the area they use, and observing, asking and listening (Waters-Bayer & Bayer, 1994). Geo-coded transects involve walking with a hand held Geographical Position System (GPS) receiver to collect spatial data and write all observations and attributes associated with the positional data in the field book. This technique has been used by Mohammed & Ventura (2000) in documenting indigenous tenure systems. In this study, a GPS device was used to record positions of resources and conflicting areas.



Observation as a technique in data collection was integrated in the entire field data collection process. A checklist was prepared in order to assist the researcher in collecting information by means of observation. Observation gives the researcher an opportunity to gather live data from live situations rather than at second hand (Dewalt & Dewalt, 1998; Angrosino, 2007; Creswell, 2009). The study used observation to understand such phenomena as the distribution of settlements, the forest's state in line with use and access, as well as the behavior of groups of people in different parts of the study area.

### 3.5.3 Questionnaires

The aim of the questionnaire data collection was to investigate in a household survey among individuals selected systematically, the attitudes that are held concerning the forest resources and inter group relations. The questionnaire utilized structured questions based on the theory of planned behavior (Ajzen, 1991) that were meant to tease out on ethnic cleavages among residents living adjacent to Sururu forest block. The questionnaire contained questions on feeling of sense of belonging to an ethnic group and resources access (Appendix E). The help of five data enumerators who were trained prior to the field data collection administered the questionnaire.

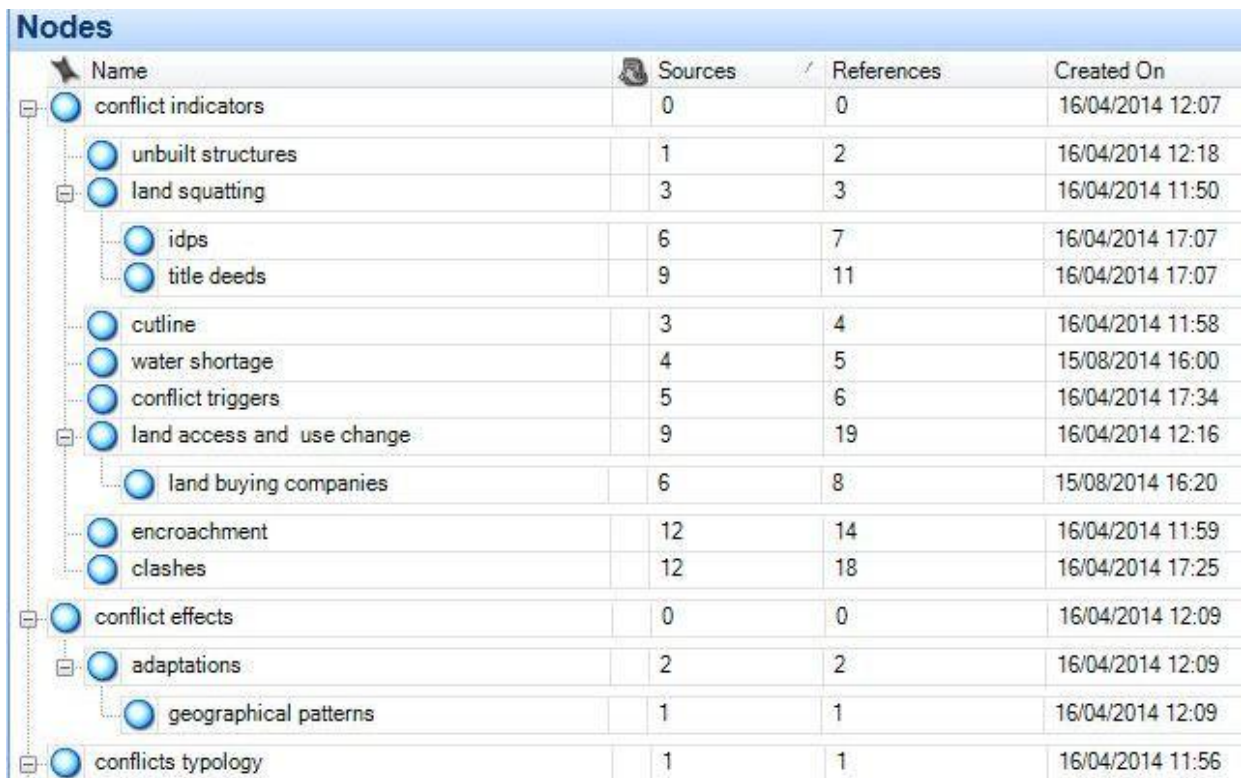
### 3.5.4 Grey data

Apart from first hand data acquired in the field, secondary data was obtained as it relates to various issues affecting the residents of Eastern Mau. The researcher obtained letters, official documents and other communications between residents and the government in the past especially on matters relating to forestland from key informants in formal organizations.

### 3.6 Data analysis

#### 3.6.1 Qualitative data

All conversations from interviews and FGDs were recorded and transcribed verbatim by the researcher. The qualitative data (which also included secondary data) was organized in a computer program (NVIVO 10) and analyzed based on significant concepts and themes as suggested by Gibbs (2007) and Flick (2007). An overview of the codes and themes extracted from the Nvivo analysis is presented below (Figure 12).



Name	Sources	References	Created On
conflict indicators	0	0	16/04/2014 12:07
unbuilt structures	1	2	16/04/2014 12:18
land squatting	3	3	16/04/2014 11:50
idps	6	7	16/04/2014 17:07
title deeds	9	11	16/04/2014 17:07
outline	3	4	16/04/2014 11:58
water shortage	4	5	15/08/2014 16:00
conflict triggers	5	6	16/04/2014 17:34
land access and use change	9	19	16/04/2014 12:16
land buying companies	6	8	15/08/2014 16:20
encroachment	12	14	16/04/2014 11:59
clashes	12	18	16/04/2014 17:25
conflict effects	0	0	16/04/2014 12:09
adaptations	2	2	16/04/2014 12:09
geographical patterns	1	1	16/04/2014 12:09
conflicts typology	1	1	16/04/2014 11:56

Nodes				
Name	Sources	References	Created On	
conflicts typology	1	1	16/04/2014 11:56	
ethnic	1	1	16/04/2014 11:58	
ogiek vs Maasai	7	12	16/04/2014 12:01	
Ogiek vs Kikuyu	7	9	16/04/2014 12:02	
Maasai vs Kikuyu	8	9	16/04/2014 12:01	
Ogiek vs Kalenjin	10	16	16/04/2014 12:00	
Maasai vs Kalenjin	13	16	16/04/2014 12:00	
kikuyu vs kalenjin	15	22	16/04/2014 12:00	
class conflicts	5	8	16/04/2014 11:57	
KFS vs community	11	24	16/04/2014 12:02	
pasture cattle rustling	15	19	16/04/2014 11:57	
conflict interventions	1	1	16/04/2014 12:13	
community intervention	18	28	16/04/2014 17:10	
NGO intervention	19	32	16/04/2014 17:09	
government intervention	20	38	16/04/2014 17:09	
institutions	23	39	16/04/2014 18:50	
communication	3	3	16/04/2014 11:59	
place names	2	4	15/08/2014 16:23	
rumours	4	5	29/04/2014 11:40	
nick names	5	7	16/04/2014 12:08	
metaphors	5	9	16/04/2014 17:30	
beliefs	16	30	16/04/2014 17:48	

Nodes				
Name	Sources	References	Created On	
role of women	3	7	15/08/2014 15:57	
role of youth	7	11	15/08/2014 15:30	
cooperation	9	12	29/04/2014 12:11	
migration patterns	10	14	16/04/2014 17:21	
spatial patterns	13	21	16/04/2014 17:22	
role of politicians	14	16	15/08/2014 15:46	
historical issues	17	26	15/08/2014 16:10	
forest and resources access	20	36	16/04/2014 17:15	

Figure 12: NVIVO themes

Figure 12 shows the overview of categories (themes) extracted from Nvivo. Each node (blue bullet) links to the information “coded” under a common theme in interviews, notes, photographs and other documents gathered during the field study.

The process of making inferences based on systematically and carefully identifying special characteristics (themes or categories) within the interview text is known as content analysis (Gray, 2009). Thus, in this study content analysis involved open coding of data and attention to emergent themes that could answer the research questions. Open coding involved naming and categorizing conflict through close examination of data. In the process of open coding, comparisons were made and a specific set of questions was asked keeping in mind the original objectives of the research. The aim of comparisons and questioning the data was to uncover whether the data fit with objectives. In some cases new unanticipated results emerged from the data which was still relevant to the study. This analytical procedure is useful as it links different themes to data in a systematic evaluation and re-evaluation of the interviews (Gibbs, 2007; Kvale & Brinkmann, 2009). Thorough thematizing of qualitative material helps the researcher to capture the fullness of experiences and actions studied, and as presented by Charmaz (2005) codes are immediate short, and define the action or experience described by the interviewee. Qualitative data analysis also involved a narrative analysis. Narrative analyses focus on the meaning and the linguistic form of texts (Kvale, 2007). In this study, the analysis involved a reconstruction of the many stories told by different interviewees into a 'narrative' as a richer, more condensed and coherent story. Special attention was paid to how the stories were told drawing out metaphors, nicknames and other figures of speech as expressed by the respondents.

### 3.6.2 Data analysis from questionnaire

Data enumerated in the questionnaires was organized in Statistical Package for Social Scientists (SPSS 18.0) based on a selected set of variables. The information was then analyzed using

descriptive tools such as the mean and percentages in order to discover emerging patterns. Thereafter, attempts were made to draw inferences from the emergent patterns using the correlation tool of Tau ‘b’ coefficient. Since the data obtained from the questionnaire was measured at ordinal level (using the likert scale), an ordinal measure of relationship was applied to the data. Most ordinal measures are based on the pair as a unit of analysis and the relative ranking of the two parts of the pair on both variables. Using two variables in the data obtained from Sururu village, the following is an illustration of types of pairs:

Questions and expected responses

Question 1: I feel more secure with members of my own ethnicity (Feeling of ethnic identity)

- 1. Strongly Agree
- 2. Agree
- 3. Disagree
- 4. Strongly Disagree

Question 2: If you were denied access to the forest by members of another community what is the likelihood that you will confront those who have excluded you? (Belief in-group fighting over resource access)

- 1. Strongly can
- 2. Can
- 3. Cannot

Construction of pairs using variables from the above two questions

Table 7: Illustration of construction of pairs for ordinal measures of relationship

***Feeling of ethnic identity (x)***

		<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>	<b>Column 4</b>
<b><i>Belief in fighting over resources (y)</i></b>		Strongly Agree	Agree	Disagree	Strongly Disagree
Row 1	Strongly can	(1,1)*	(1,2)	(1,3)	(1,4)
Row 2	Can	(2,1)	(2,2)	(2,3)	(2,4)
Row 3	Cannot	(3,1)	(3,2)	(3,3)	(3,4)*
	Total				

### **Key**

\* Cell designated (1,1) means row 1, column 1 and would contain the number of respondents who answered 'strongly agree' to question 1 and 'strongly can' for question 2. On the other extreme, (3,4-meaning row 3, Column 4) would contain the number of respondents who answered 'strongly disagree' to question 1 and 'cannot' to question 2.

Types of pairs (After Nachmias & Nachmias, 1996)

1. Pairs that display the same order on both  $X$  and  $Y$ ; they will be denoted as  $N_s$
2. Pairs that display an inverse order on  $X$  and  $Y$ ; they will be denoted as  $N_d$
3. Pairs tied on  $X$ , denoted as  $T_x$
4. Pairs tied on  $Y$ , denoted as  $T_y$

One of the recommended measures of relationship for data that are not normally distributed at ordinal level is the **Kendall's tau-b** coefficient. The coefficient '**tau-b**' is a statistic obtained from sample data; as such it estimates a population parameter. **Tau-b** is subject to sampling fluctuations and thus the test of its statistical significance is an assessment of the likelihood that the obtained correlation is due to sampling error.

To obtain **Kendall's tau-b**, the following formula is employed:

$$r_b = \frac{N_s - N_d}{\sqrt{(N_s + N_d + T_y)(N_s + N_d + T_x)}}$$

**Tau-b** varies from -1 to +1; whereby +1 shows a strong positive relationship and -1 is a strong negative relationship. Zero indicates no relationship between two variables under investigation.

### 3.6.3 Remote sensing/GIS analyses

#### *Satellite Imagery*

Land cover data for this work was constructed from processing raw satellite images from the Landsat satellite images. Landsat was launched in the early 1970's by the United States (US), National Oceanic and Atmospheric Administration (NOAA) with an aim of observing and studying natural and man-made changes on the Earth's surface. The raw satellite images are obtained in different spectral (color) bands of the electromagnetic spectrum. When the bands are combined in a specific manner (known as false color) the reflectance patterns at different wavelengths allows the researcher to distinguish vegetation from non-vegetation surfaces.

#### *Data acquisition*

The first step employed in land cover/use analysis in the study was defining an area of interest. The polygons of the study area were loaded in the US Geological Survey website to determine the index (path and row) of the image required for analysis. Images were then selected based on the years of acquisition and cloud cover. Images that were taken with the lowest percentage of cloud cover were preferred as they minimized the shadow effect on objects on the earth surface. Based on the information derived from qualitative study, five different years (Table 7 & 8) were considered critical for image analysis as they fell within a period marking key events which could help in understanding of forest resources conflict. However, since Landsat was first launched in 1970s, it was not possible to obtain images for the study area at Kenya's independence in 1963. Furthermore, in the event a desired year had an image with high cloud cover, the closest year with cloud free image was considered.

Table 8: The sample images for land cover change analysis

<b>SN</b>	<b>Year of acquisition</b>	<b>Key events</b>	<b>Justification</b>
1.	1976	1963- Kenya's independence from Colonial rule	The image represent the land cover/use under the first post independence government
2.	1986	1978-Death of first Kenya's president (from Kikuyu community) and appointment of Kenya's second president (from Kalenjin community)	The image was meant to capture any land cover changes after the second president of Kenya took over power
3.	1995	1992-First general election under multipartyism and violent conflicts witnessed in Eastern Mau. 1995-2001 increased forest excisions.	The image to meant capture conditions in the study area before the famous forest excisions peaked
4.	2003	2001-end of government excisions. 2002- general elections and violent conflicts witnessed	The image to show changes in land cover/use after the government officially stopped forest excisions
5.	2014	2007-general elections and violent conflicts. 2013-general elections; violent conflicts not witnessed in the study area	The image to capture the current conditions of Eastern Mau

The images were having a spatial resolution of 30 meters with Enhanced Thematic Mapper and Operational Land Imager having a panchromatic band of 15 meter spatial resolution. The Kenya topographic maps based on 1969 aerial photography at a scale of 1:50,000 were used as auxiliary data.



Table 9: Remote sensed images used during data analysis

SN	Year	Satellite/sensor description	Path and row	Date taken
1.	1976	Landsat 1-Multispectral Scanner (MSS)	P181R060	25/01/1976
2.	1986	Landsat 5 Thematic Mapper (TM)	P169R060	28/01/1986
3.	1995	Landsat 5 Thematic Mapper (TM)	P169R060	21/01/1995
4.	2003	Landsat 7 Enhanced Thematic Mapper (ETM+) sensor with eight spectral light image bands	P169R060	04/02/2003
5.	2014	Landsat 8 Operational Land Imager (OLI) sensor with eleven spectral light image bands	P169R060	25/01/2014

Landsat images are captured based on a predefined grid composed of array of paths and rows (Table 8). Each image is identified by the path and row covering where the image falls. The Eastern Mau Forest boundary vector file was uploaded on United States Geological Surveys website and overlaid on Landsat satellite imagery grid to identify the image covering the area of study. Eastern Mau Forest is covered by path 169 and row 60 of the grid. The year of image acquisition was set as 1976 and all Landsat images acquired from January 1976 to January 2014 were assessed and screened for suitability in terms of cloud free, seasonality and time interval between the five different years to be used in the study. Based on the screening and assessment that was done, images for January 1976, January 1986, January 1995, February 2003 and January 2014 were selected and downloaded.

### **Satellite image processing**

After acquiring Landsat satellite imagery covering the area of study the images were processed to make them ready for interpretation. This processing involved image-to-image geo-rectification, image layer stacking and image sub-setting.

### *Image Geo-rectification*

Different satellite images of the same area captured at different times tend to have some shift between them because of some differences in sensor flight heights at the time of capture. To avoid having errors when carrying out change detection procedures the different images used were geo-rectified to ensure one on one image overlap and registration.

This process was done by picking four points on features that were seen to be appearing on all images. The 2014 image was taken as the master image onto which the rest of the images were registered. This image was displayed in ESRI ArcGIS soft-ware and a point layer digitized on top of the four points identified. Ground geographic coordinates of the digitized points were generated in the same soft-ware. Ground Control Points (GCPs) were digitized on the corresponding four points on the images captured in 1976, 1986, 1995 and 2003, and the geographic coordinates for these points as identified on 2014 image assigned to the GCPs as output image coordinates. The geo-rectification tool was then selected under image geo-referencing tools and ran. This process removed the shift that was between the images by moving the 1976, 1986, 1995 and 2003 images to exactly the same position occupied by 2014 image.

### *Image Layer Stacking*

Landsat satellite images come as single raw image bands, which represent different light channels of the electromagnetic spectrum. All ground features give grey color reflectance of between white and black on a raw image band. To be able to clearly distinguish different features different

light channel bands are combined to give color composite images, a process referred to as layer stacking (image compositing).

This process involves combining three different image bands to give the desired color image depending on the application that the resulting image is to be used for. This combination of light channels is done in the same way red, green and blue light channels combine to give visible light, commonly known as RGB combination (R for red, G for green and B for blue light channels respectively). The result of this process is either a natural (true) color or false color image. A natural color composite has features depicted in natural or true color as they appear to a human eye in reality. False color composites have features appearing in colors other than the color seen by a human eye in reality. False color composites are the best for land cover and vegetation studies because they provide good color contrast between different land color types

For purposes of interpreting and analyzing land cover false color composites of bands 4, 3 and 2 were used for the 1976, 1986, 1995 and 2003 images captured by Landsat 5 and 7 sensors. Whereas the 2014 image which was captured by Landsat 8 sensor, the combination used to give a similar false color composite was for bands 5, 4 and 3 which corresponds to bands 4, 3 and 2 in Landsat 5. This process of layer stacking was carried out in ESRI ArcGIS soft-ware using image processing tool under image processing toolbox by selecting and inserting the required image bands and assigning output image name to the resulting composite image.

### *Image Sub-setting*

The satellite images were clipped based on the area of study boundary to only interpret and analyze the image parts within the bounds of the study area. This also helped to reduce image processing time and storage space in the computer. This clipping involved use of a vector layer that defines the extent of the study area in an overlay spatial analysis function. The overlay function used in this sub-setting was arithmetic. The arithmetic option used was multiplication in which the part of the image within the area of study was multiplied by one while that falling outside multiplied by zero. This led to the image parts in the area of study to retain their digital values while those outside the area of study were removed by acquiring a value of zero resulting into a clipped image. This process was carried out in ESRI ArcGIS soft-ware using image clipping tool under image processing toolbox. The process was repeated for all the images used in the study.

### **Preliminary Image Interpretation and Classification**

The processed satellite images were interpreted and classified based on interpreter guided visual image interpretation of the layer stacked color composite images. These images had different land cover types bearing different spectral reflectance displayed as different image colors. The process of interpretation and classification was done by computer digitization of polygons around homogeneous areas of the images and assigning them corresponding land cover types. This process gave rise to status of different land cover classes within the area of study for the different years under study (1976, 1986, 1995, 2003 and 2014). The different land cover classes that were

identified during the preliminary image interpretation include grassland, shrub land, cultivated fields, indigenous forest, plantation forest, bare ground and built up area.

The saved vector files were then imported into Idrisi Andes soft-ware where all polygons falling in every land cover class vector file were automatically assigned numbers equal and corresponding to the number of polygons. The polygon numbers were reclassified to have all polygons in any land cover class vector file assigned same number. The classes identified during interpretation were seven; therefore, all vector file polygons were reclassified into seven class numbers. Grassland polygons were assigned class 1, shrub land class 2, cultivated fields class 3, indigenous forest class 4, plantation forest class 5, bare ground class 6, and built up area class 7. The reclassified vector files were then rasterized by copying raster parameters from the respective Landsat images that they were interpreted from. This was done using vector to raster data conversion tool in Idrisi Andes soft-ware. The raster files generated for the different land cover classes were then combined using spatial analysis overlay function of addition option. This gave rise to two raster files for every year that images were analyzed, one for preliminary interpretation and another for final interpretation.

#### *Land cover area computation.*

Area covered by different land cover types interpreted was computed in hectares in GIS soft-ware. This was done for all the years covered by this study, that is; 1976, 1983, 1993, 2003 and 2014.

### **Integrating Remote Sensing and Spatial (geo-coded transect walk) data**

Spatial data mainly observation points were classified into conflict hotspots as identified by villagers during geocoded transect walks. These included grazing areas, water points, as well as roads and junctions. The spatial data was overlaid with land cover/land use maps generated from the remote sensing land cover/use maps to determine the relationship between some spatial factors and features (such as proximity to the forest, community boundaries) and conflict occurrence.

### **3.7 Research validation process**

The process of validation in this study involved using different methods (that is, open and focused interviews, community mapping and secondary data) in understanding the same phenomenon (conflict). Another form of testing whether the tools used measured what was supposed to be measured was through construct validity. The items contained in the in the open and focused interviews were both fact-finding and opinion based questions. It is possible that occasionally facts were expressed when answering opinion-seeking questions or vice versa. This did not offer a great challenge to the study since the focus was in the rhetoric or discourse about conflicts, which may include conflict facts as well as opinions on conflict.

### **3.8 Researcher's Reflection**

I have always had passion in environmental conservation. Prior to my PhD study, I had always appreciated working with farmers and enjoyed the scenery as I traversed through rural

landscapes. When I came across the STAKE<sup>5</sup> project call, I immediately saw an opportunity through which I could work among rural communities in the Mau forest complex. However, the opportunity was not without its challenges. First, my past academic experience (during my MSc degree in Biogeography, I was exposed to mainly quantitative methods) involving mainly a search for facts as evidence for truth. In this new venture, where I needed to understand how people related to one another in a forest resource context, qualitative methods were seen as the best strategies of inquiry into perceptions and attitudes. This was a new experience and I had to redefine what I always considered as the ‘truth’. I realized that dwelling on the facticity of history in the study of conflict among the communities adjacent to the forest was not yielding much as there seemed to be many historical accounts among different respondents. Therefore, I had to dwell more on the differences in the narrations among the respondents and not attempt to report the accounts as facts. However, my background in geography helped me to conceptualize the differences in spatial dimensions. To a geographer, places are unique and they can be studied so. Therefore, I sought spatial patterns in the narrations, perspectives and contradictions identified from the data collected. This allowed me to understand social phenomena in a qualitative approach using my geographical lenses. One of the strong points in my venture as a PhD student working on social conflict was the interdisciplinary nature of my program. I had an opportunity of working with advisers from different fields such as Law, Forestry, Conflict Resolution (especially Mediation), Sociology and Geography. It is through this interaction that I was exposed to different ways of analyzing conflict (for example; spatial dimension, social dynamics, qualitative versus quantitative approaches).

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<sup>5</sup> STAKE-Stabilizing Kenya through solving forest related conflicts

Secondly, since the work reported in this thesis has partly relied on qualitative methods where the researcher is the main instrument for data collection, it is possible that there were biases during data collection (especially from the respondents) as well as during data analysis. Some of the main biases that are common and can affect the responses from the interviewees include age, sex or the ‘outsider’ identity of the interviewer. However, in this study, I consider that if there could have been any biases then they would have stemmed from my identity as an ‘outsider’ in the study area. I recall two specific cases during data collection:

#### *Case I*

When my research team visited Teret location in Eastern Mau, no one was willing to speak to us, not even the area chief. Even after presenting an introduction letter from the deputy county commissioner of Njoro, the chief insisted that the letter<sup>6</sup> had to specifically include her geographical area of administration before she could give us audience. My research team and I complied. We went back to the deputy county commissioner who drafted another letter of introduction that included the area covering Teret location. Later on, I learned from the chief during an interview that people in Teret always lived in apprehension since they expected to be evicted<sup>7</sup> from their settlement any time soon. Thus, whenever they spotted ‘strange’ people around, they tended to think that they were the Kenya Forestry Service (KFS) agents out to

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<sup>6</sup> A letter of introduction to the research student was general and didn’t specify the area divisions.

<sup>7</sup> Mauche division (Teret is part of Mauche) covers land which was formerly under forest reserve but was excised by the government and converted into settlements in the 1990s. By the time of data collection, the land was under caveat and it was speculated that it would be returned to KFS as a forest reserve.



survey the land and effect the evictions. After several trips to Teret, my mission was made clear to the residents and they welcomed me. I was thus considered neither as an outside ‘enemy’ (e.g. KFS) nor an inside ‘enemy’ (e.g. competing ethnic group) but as a student who needed to be told the ‘truth’.

### *Case II*

When I visited one old man in Entyani village, however much I tried to keep the interview more open and conversational; the respondent was not at ease with me. Therefore, I decided to stick to the probe questions I had prepared and then left the homestead. The following day, my field guide, who was well known in the Entyani village, told me that the old man had inquired from her my real intentions and the purpose of my questions. After confirming that I was not from Eastern Mau and that I was interested in ‘people and the forest’, the old man requested through my field guide that I go back for more information. During my second and subsequent visits in Entyani, the old man not only narrated to me how his community related with their neighbors but also showed me some accolades he had won as a champion<sup>8</sup> for the environment.

As qualitative data involves a bulk of textual information, it is expected that subjectivity from the researcher is inevitable during data analysis. The main bias during data analysis could have stemmed from the language I was using during qualitative data collection. The language used was mainly the second language of the interviewees. It is possible that some terms that were spoken by the respondents could have carried a different weight if spoken directly from their first

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<sup>8</sup> The old man took my research team and me on a tour of a natural forest he had maintained in his farm and some ancient caves in the neighborhood.

language. It is also possible that through translating the scripts from the language of the interview (Kiswahili) to English, the meanings of some terms was diluted or changed. However, the use of second language during interviews may also be positive. For example, the respondents may have felt uncomfortable to use certain words in their local language, as that would mean disrespect. However, such words can be loosely spoken in the second language of the respondent without feeling of guilt. This is important especially when dealing with frustrating situations such as in conflict events that carry with them emotions and negative attitudes. It is expected that during conflict (especially violent clashes), the warring parties do not have kind words or names for each other.

### **3.9 Conclusion**

Social conflicts sometimes know no bounds. As such, the study area traverses administrative boundaries to include Narok County although the forests fall under Nakuru County. This is because agro pastoralist communities from Narok County also border the forest from Entyani location of Olorurto district. The study area is rich in natural resources through its cool and wet climate as well as fertile soils that are likely to support a wide variety of agricultural practices. Population distributions across the study area varies with locations in Nakuru county having higher densities compared to those in Narok county, a situation that is likely to lead to competitions over land for agriculture. The forest reserve as part of the study area has witnessed degradation through excision and encroachment. The physical as well as human attributes of the study area seem to present a fertile ground for natural resource competitions to occur.

Since environmental management straddles the natural and social sciences, the problems it addresses, which includes natural resource conflicts are best tackled by combining both scientific and social research methodologies. Scientific methods also referred to as quantitative tend to be numerically based and are preferred by practitioners in the natural sciences whereas social science researches have taken the qualitative perspective and tend to be values-based. Complex social phenomena like natural resource conflicts are difficult to understand from a narrow methodological approach. Therefore, this study being inspired by pragmatism as a worldview was planned to take a mixed methods design. The research employed a concurrent embedded strategy whereby both qualitative and quantitative data were simultaneously acquired from the field. Thus, data collection methods included open-ended as well as focused key informant interviews, Participatory mapping involving geo-coded transect walks, Focus Group Discussions (FGDs) as well as secondary data. A mixed methods data analysis was carried out and involved content analysis through drawing of themes and categories as well as a narrative analysis for qualitative data and Geographical Information System (GIS) analysis from the spatial data.

## **CHAPTER 4: SOCIAL-CULTURAL ANALYSIS OF THE EASTERN MAU FOREST COMPLEX ADJACENT COMMUNITIES**

### **4.1 Introduction**

As part of understanding the sources and dynamics of social conflicts, it is necessary to first identify the actors involved, their attributes and how these attributes are likely to contribute to conflict patterns in space and time (*see Conflict analysis framework by UNIFTPA, 2012 in the literature review section 2.3.1*). Conflict in Eastern Mau seems to involve different stakeholders among them the different groups of people residing adjacent to the forests. The people that live adjacent to the Mau forests are a meshwork of different ethnic identities. Thus, this study in its bid to understand the underlying causes of resource access conflicts, explores differences among the different ethnic groups that can be fertile grounds for conflict. Different ethnic communities are chosen as stakeholders for analysis based on the researcher experiences in the field. The respondents were ready to converse freely (before being probed to do so) about their own identity as an ethnic group as well as their relationships with other ethnic groups.

The study also seems to point to variations in perceptions across ethnicities especially on events such as migration into the Mau forest area, culture, mode of production as well as political alignments. Therefore, four variables (that is, history, culture, production and politics) were chosen as the basis of analyses for variations among the different communities of Eastern Mau in an attempt to understand how such differences played out during conflicts. However, in case a community had one or more unique attributes (outside the four variables) that distinguished it from the others, or lacked sufficient information to sustain discourse on any of the four selected

variables, such an observation is reported explicitly. The information described in this section was collected through open conversational interviews, focus group discussions, and researcher observation. The analysis of data is generally descriptive seeking to present the narratives as provided by the community informants and/or as observed by the researcher. In some few cases, the results have been complimented by review of secondary literature. As there may be variations or conflicting narrations by different sources, it is important to note here that the aim of this analysis is not to present one absolute 'truth' but rather to describe all the perspectives as narrated by the respondents with the aim of understanding how the different communities perceive the different issues in relation to their neighbors. Indeed the different perceptions are arguably what precede different attitudes and hence conflict behavior. Some quotes from the narrations by different respondents are presented in this section. The quotes are meant to represent similar sentiments that were prevalent during field data collection. They are however not meant to be generalized to the entire community of the respondent. Albeit there are multiple ethnic groups living adjacent to Eastern Mau forests only the most significant ones in terms of population and history in relation to the forests are considered for discussion in this section and they include Maasai, Kikuyu, Kalenjin and Ogiek. The four ethnic groups have also been reported to be involved directly in violent clashes in Eastern Mau at one point or another.

## **4.2 Maasai**

### *History and location in Mau*

Maasai are an African Nilotic-speaking ethnic community of semi-nomadic people located in Kenya and northern Tanzania. In Eastern Mau blocks, the Maasai settlements are located at the

fringes of the southern part of forests. The area they occupy is part of the Narok County. They however graze their animals within the Longoman and Kiptunga forest blocks of Mau in Nakuru County. The Maasai claim to be friendly to the Mau and have existed in harmony with the forest since time immemorial. As such, the Maasai consider themselves indigenous to the Mau forests, tracing not only their economic activities but also some socio- cultural practices to the forest as far back as the pre-colonial times as described below by a Maasai elderly key informant:

*'.....It was agreed a long time ago between the pioneer (European) settlers and our forefathers on the location of the forest (Mau) boundary. Also it was agreed that forest be protected since it serves as a catchment area for water. However, throughout the ages we have depended on the Mau in different ways. For example, during the initiation ceremony, when the youth are graduating from childhood to adulthood, a bull is slaughtered under the Mutamaywa (African Olive tree- Olea africanan) tree. Thus, it is a taboo to destroy or cut down the Mutamaywa.....'*

Box 1: Interview extract from an interview session in Ntyani in Olokurto, Narok County on 8-2-2014

The Ogiek (an ethnic group who considered themselves to have been the first to inhabit the Mau forest) were in agreement with the opinion that the Maasai were always friendly to the forest. The Ogiek further claim that their earliest neighbors in forest were the Maasai. The Ogiek recall that, during dry periods Maasai would enter the Mau forests to graze their animals especially in the glades (open grassland areas within the forest). Whenever they took their animals to Mau forests, they would construct temporary settlements within the forest. Today, albeit inhabiting the

open plains of Narok County, the Maasai can be seen grazing their animals in various parts of Mau forest blocks (Plate 1):

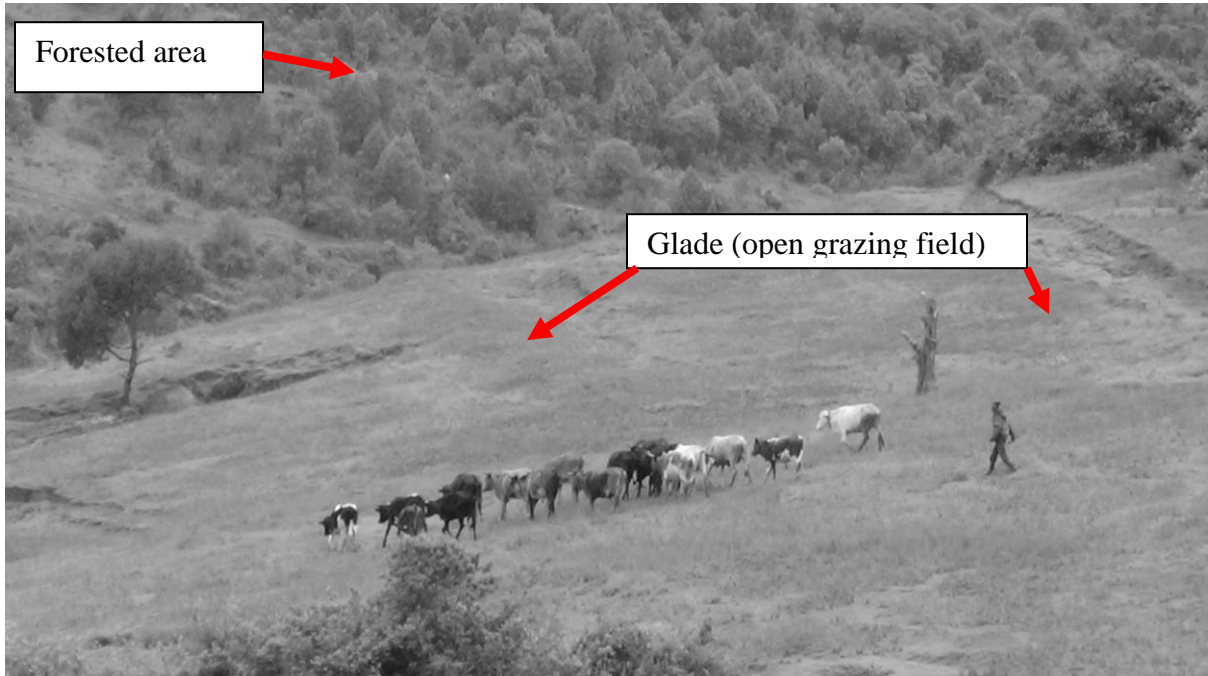


Plate 1: A Maasai herder in Likia forest extension

(Photograph taken on 16-11-2013)

As the Maasai move from place to place in search of pasture and water for their animals they come across and interact with different ethnic groups that live adjacent to Mau forests namely, the Kalenjin, who also graze animals within the forest, the Kikuyu, mainly a farming community and the Ogiek, formerly hunters and gatherers but who now practice farming.

### *Cultural practices*

It is agreeable (among the Maasai, their neighboring communities, and researcher's field observation) that the Maasai in Eastern Mau still hold to their traditional practices. Within the

Maasai society there is a *laibon* or a spiritual leader who acts as a link between the people and God (*Enkai*). The *laibon* is called upon to intercede on behalf of the community for example in appealing for rains during drought. Maasai culture is explicitly manifested through the age-set and age-group regime. This was narrated by the key informants in the study area and is consistent to what has been reported before by Asiema & Situma (1995); Hodgson (2003). Maasai males conceive their age-sets as passing through three main stages of life cycle. The first age set is called *Ilaiyok* (boyhood) which starts from a herding age of about 4-6 years, to circumcision age of about 14-15 years of age. The second age group is known as the *Ilmuran* (or moran-hood), from circumcision to well beyond marriageable age at twenty years. The last age set is known as *Imoruak* (elder hood) which comprises of junior elder-hood and the *Ildasati* (retired elder). Thus, duties within the Maasai society are shared such that the boys are responsible for herding livestock while warriors (*Ilmuran*) are in charge of the security for the community. However, during drought season, both warriors and boys are involved in herding livestock. The elders are supposed to direct and advise on various issues affecting the society. Female members of the Maasai community usually perform the roles of making the houses, supplying water, energy, milking cattle and cooking for the household.

For the purpose of this thesis, I will focus on the description of the Maasai moran-hood an age set perceived by the neighbors to Maasai to be physically active and capable of being directly involved in violent conflicts. Indeed, during Maasai traditional ceremonies the *Morans* could be seen standing behind other members holding spears (Plate 2).





Plate 2: Morans during a Maasai ceremony in Ntyani, Narok County

(Photograph taken on 15-12-2013)

According to the Maasai, a teenager graduates into the moran age group through the *emuratare* (circumcision). The *emuratare* operation is a physical ordeal done without anesthesia and carried out in the public during which the candidate is not supposed to show the slightest sign of pain. After the operation, the Maasai boys lead a secluded way of life in the ‘bush’. The newly circumcised *Morans* from one or more localities spend most of their time in a camp known as the *manyatta*. In the *manyatta*, the *Morans* learn under the instruction of junior elders the traditions and expectations of social life in their society, the age-set brotherhood as well as animal husbandry skills. The *Morans* are also taught military values of bravery and respect as well as how to use shields and spears (and most recently bows and arrows<sup>9</sup>) as a prelude to armed

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<sup>9</sup> The use of bows and arrows as weapons of war was borrowed by the Maasai from their neighbouring Kalenjin communities

service. Thus, the *Ilmoran* age set is known for its defensive role for the community territory. Traditionally, the *Morans* protected livestock and community members from raids as well as from attacks by wild animals. Apart from their community protection roles, groups of *Morans* were known for raiding their neighbors for cattle. This aspect of *Morans* involvement in community raiding for cattle (also known as cattle rustling) is perceived by their neighboring Kalenjin community to be part of the conflicts witnessed in the recent past within the Mau forests. The Kalenjin claim that most ethnic clashes within the forests take place in the month of December, which happens to be the time the young Maasai are graduating from *Moran-hood*. The Kalenjin also believe that cattle raiding is part of the Maasai socio-economic activity which enables them to replenish livestock lost due to raids by other communities, drought and diseases, as well as to prove the military prowess and daring of the *Morans* as reported by a middle aged woman from the Kalenjin community:

*‘.....whenever they (Morans) graduate, we normally have problems here. They must raid animals from our area. When they are in seclusion they are given leaves from Ontiani tree which make them so daring. They are thus capable of doing anything.....’*

Box 2: Interview extract from a session during a transect walk from Tach-asis in Maucho, Nakuru County to Ntyani in Olokurto, Narok County on 15-12-2013

However, during an FGD with members of the Maasai community, they were of the opinion that it is the Kalenjin who usually raid the Maasai cattle and not the other way round. This finger

pointing shows that neither of the two communities is able to take the responsibility on who is really the aggressor when it comes to cattle rustling.

### *Mode of production*

The Maasai lifestyle centres on their cattle with a man's wealth being measured in terms of cattle and children rather than money. Although traditionally known to derive their livelihoods from only nomadic pastoralism (moving from place to place in search of pasture and water), the study findings showed that the Eastern Mau Maasai practiced both sedentary agriculture and livestock keeping. The Maasai normally accessed the Eastern Mau forest blocks for pasture. However, the Kalenjin and Kikuyu were of the opinion that the Maasai were always being favored by KFS compared to other communities. For instance, during a public meeting<sup>10</sup> speakers of Kikuyu, Ogiek and Kalenjin descent complained to the forester openly about them having to pay for the pasture in the forest while the Maasai with their large herds of livestock never paid to graze in the forest. The Maasai, on the other hand claimed that they never degraded the forest through poaching. Elsewhere, during a transect walk, a Maasai key informant concurred with the same opinion through a rhetoric question to the researcher as follows;

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<sup>10</sup> The researcher attended the meeting, which was presided over by the forest officer in Tach Assis area of Kapkembu location in Njoro division in October 2013. During the meeting, members drawn from different communities freely talked about various issues as they related to forest resource access.

*‘.....which scenario would you rather have, the Maasai who do not destroy trees being allowed to graze in the forest without paying for pasture or others (Kalenjin and Kikuyu) who pay to access grass in the forest but in the process destroy trees through poaching?.....’*

Box 3: Interview extract from a session during transect walk from Sigotik IDP camp to Roshina inside Longoman forest on 30-01-2014

Apart from keeping large herds of animals (cattle, goats and sheep), the Maasai also grew subsistent crops like peas, maize, potatoes and vegetables. Some Maasai practiced commercial farming involving wheat and barley. It was not uncommon to come across households with more than 100 acres of land among the Maasai of Eastern Mau. However, majority of Maasai had rented out their land for commercial farmers to other ethnic groups engaged in wheat and barley farming. The Maasai in Eastern Mau were also involved in trade of their farm produce. They took their cereals, potatoes and vegetables to main market centres such as Mwisho wa Lami, Likia centre, Mauche centre and Kihingo trading centre. At Mwisho wa Lami, for example, there were brokers mainly from Kikuyu and Maasai communities who acted as middlemen linking the Maasai farmers and suppliers (of farm produce) to other parts of the country. The farm produce were transported mainly to Nairobi and Mombasa cities. The Maasai usually traded their animals at Likia, Mauche and Kihingo centres. It seemed that by the Maasai engaging in business with the Kikuyu the relationship between the two communities was expected to be cordial.

### *Political alignments*

Politics in Kenya are thought to take ethnic dimensions with different communities being associated with different political party outfits. Until the year 2002, the Maasai had always been aligned to the ruling party-that is- the Kenya African National Union (KANU). Whereas their Kalenjin neighbors were also affiliated to KANU, the Kikuyu neighbors favoured the opposition through various party outfits. According to the Maasai, they were whipped into massively supporting KANU by most of the leaders who were revered in the community such as William Ole Ntimama, George Saitoti and Julius Ole Sunkuli who were part of the government. However, with the retirement of the long serving KANU president, the loyalty of the Maasai was divided between KANU and other parties in opposition. Thus, during the 2002 general elections, majority of Maasai are thought to have voted for the opposition party, National Alliance of Rainbow Coalition (NARC) that clinched the presidency. During the 2007, the Maasai are believed to have again voted against the incumbent in favour of the Orange Democratic Movement (ODM). Earlier in 2005, ODM had successfully marshaled the support of Maasai in rejecting a new constitution during a national referendum. ODM had argued that the constitution did not adequately address the needs and priorities of the citizenry. For instance, those opposed to the then proposed constitution argued that it was not sufficient to enable Kenya deal with historical injustices surrounding land, a resource cherished by the Maasai. However, in the year 2013 general elections, the Maasai in Eastern Mau, like others in different parts of Rift Valley are thought to have had divided party affiliations with some voting for the Jubilee coalition (of The National Alliance-TNA and United Republican Party-URP), a coalition favoured by mainly the Kikuyu and Kalenjin communities while others voted for the Coalition of Restoration of

Democracy-CORD, to which ODM was party. It should be noted here that from the field observation by the researcher, the Maasai who border the Eastern Mau forests do not share any constituency (political unit) with other communities. Thus, any inter-ethnic conflict that is politically motivated and involves the Maasai is most likely to be influenced by the overall national events than by local politics.

### **4.3 Kikuyu**

#### *History and location in Mau*

Albeit considered to have first inhabited the central highlands of Kenya some members of Kikuyu ethnic group have over time migrated to different parts of the country. It is believed that during the British rule in Kenya, some Kikuyu migrated into the Mau forests area where they worked as casuals on farms owned by colonialists. Some were later employed as forest workers when the colonial government introduced forest plantations within the Mau complex.

Today within Eastern Mau, the Kikuyu are located in the eastern most parts of the forest blocks extending their settlements towards Lake Nakuru. The areas they occupy are mainly what were previously referred to as white highlands. These were the first forested areas to be excised by the British colonial administration and allocated to white settlers for agricultural purposes. When Kenya gained her independence in 1963, some of the white settlers decided to return to Europe and therefore the land they owned was passed to the then newly formed African government. Such redeemed lands were managed by the Agricultural Development Corporation (ADC) on behalf of the Kenyan government.

According to the Kikuyu, they formed associations through which they pooled funds that enabled them to buy land that previously belonged to the white men as informed by one of the community informants below:

*.....the land here initially belonged to a white man and many people came from different areas and formed Lare Company and bought the land. Each bought according to the number of shares they had in the company and they all have titles.....*

Box 4: An Extract from an interview session in Likia location, Nakuru County on 13-11-2103

Other examples of land buying companies (associations) used by the Kikuyu to access land in Mau include NDEFFO<sup>11</sup>, *Mutukanio*<sup>12</sup> and *Nyakinywa*<sup>13</sup>. However, the Kalenjin views members of the Kikuyu community as intruders in Eastern Mau who travelled for long distances from their original ancestral lands such as Nyeri and Kiambu in central region. The Kalenjin also argue that the Kikuyu were given the former white highlands by the first president of Kenya Mr Kenyatta, himself a Kikuyu. They further claim that the Kikuyu bought Eastern Mau forestland for a ‘song’ through the ‘*Nyakinywa*’ initiative. The ‘*Nyakinywa*’ was a women dance group drawn from central region which is thought to have been entertaining Mr Kenyatta with songs and in return

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<sup>11</sup> NDEFFO (acronym for Nakuru District Ex-Freedom Fighters) is a location in Eastern Mau thought to have been acquired and first settled in 1970s by individuals from Kikuyu community who were involved in the fight for Kenya’s independence from the British rule

<sup>12</sup> Mutukanio means mixture in Kikuyu. Shareholders to the land buying company were of mixed ethnicity

<sup>13</sup> One of the Locations bordering the Teret forests in Eastern Mau is divided into two, that is, upper Teret occupied by the Kalenjin and lower Teret also known as Teret Nyakinywa and inhabited by the Kikuyu.

the president would reward them with government land in various parts of the country. This belief is contested as it seems to contradict the procedures that are supposed to be followed in settlement of landless people by the Settlement Fund Trustees in Kenya.

### *Cultural practices*

Kikuyu unlike the Maasai seemed not to overtly engage in their traditional cultural practices. Thus, the conversation analyses reported here are based mainly on past experiences of the elderly Kikuyu respondents. Traditionally, becoming an adult in Kikuyu society involved undergoing an initiation ceremony. The ceremony included a period of being away from home for circumcision and some form of schooling. Members who were initiated into the community during the same period formed an age set also known as '*Riika*'. Today, the Kikuyu prefer to engage modern medical practitioners in circumcising their children. Thus, compared with their neighbors, members of the Kikuyu ethnic group residing in Eastern Mau seemed not to explicitly engage in their traditional cultural practices today. However, like other Kenyan ethnic groups, the Kikuyu have some traditional beliefs that inform a few aspects of their lives for example in naming of children. Such beliefs are drawn from the Kikuyu mythology (Box 5). Although myths are not considered as facts (since it is hard to verify them), they can be considered as significant in understanding interactions within and between communities. For instance, when they are believed by the community and passed down to posterity, they are likely to strengthen in-group bonds by providing a sense of belonging (identity) in a group among members. By naming their children after the nine daughters of *Mumbi*, the Kikuyu (whether consciously or unconsciously) subscribed to some shared beliefs. Thus, it become easy for members of the Kikuyu community



residing in Eastern Mau to consider themselves as ‘Kikuyu’ and not any other ethnicity although they had abandoned their traditional cultural practices. Thus, compared with the Maasai who may have drawn their group identity from both their beliefs (myths and so on) as well as their present cultural practices, the Kikuyu were more likely to draw their identity from their beliefs.

.....Upon their settlement around Mount Kenya, the community prospered in agriculture quickly thanks to the fertile volcanic soils around the mountain. The Kikuyu believed that their prosperity was because God was smiling at them from Mount Kenya. Indeed, the mountain has a snow peak which the Kikuyu people once believed to be a sign God was watching them. The Kikuyu believe that all creation began at the summit of Mount Kenya (known in Kikuyu as Kirinyaga). Thus, Kirinyaga became the resting throne of God the creator (Ngai) after he descended from the heavens to survey his creation. It is from the mountain that Ngai called forth a man named Gikuyu who would then become the father of the Kikuyu people. Ngai told Gikuyu that all lands around Kirinyaga would become the man’s home and his descendants forever. Gikuyu, under the instruction of Ngai went to an orchard of fig (Mugumo) trees where he found and married Mumbi. Among the fig trees, the couple begat nine daughters Wanjiru, Wanjiku, Wambui, Wanjeri, Wangari, Wacera, Waithera, Wairimu, and Nyambura (Traditionally all Kikuyu girls should be given one of these names). The fig grove which would then be known as Mukuru wa Nyagathanga, the birthplace of all Kikuyu, is still revered as a sacred place to date. After bowing before the mountain and making sacrifices under a mugumo tree, nine young men were given by Ngai to the nine daughters of Mumbi who married them producing the separate clans. However, all the clans were united under the name Nyumba ya Mumbi in honour of their mother.

Box 5: The Kikuyu mythology on their origin and community land as narrated by an elder

#### *Mode of production*

Field observations showed that the Kikuyu engaged in farming of a variety of crops such as corn, potatoes (Plate 3), peas, beans, carrots and keeping of livestock such as cattle, goats and sheep on small scale.



Plate 3: Residents of Mau Narok trading in potatoes

(Photo taken on 13-11-2013)

Since majority of the community households were located at a relatively far distance from the forest compared to other communities (more than five kilometres as is the case of residents of Lare division in Njoro district), they had to travel for long distances for them access forest resources. For example, in Ntyani where majority of inhabitants are Maasai, majority of farmers who were engaged in PELIS<sup>14</sup> farming within the forest were from the Kikuyu community (Plate 4).

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<sup>14</sup> PELIS-Plantation Establishment for Livelihoods system is whereby farmers are allowed to grow crops in a young plantation. However, when the tree saplings have reached a certain age, the farmer is expected to move to another location. This is a form of shamba system.



Plate 4: A Kikuyu PELIS farmer (left) and the researcher in a potato field in Longoman forest (bordering Ntyani, Narok County)

(Photo taken on 15-12-2013)

However, a small number of households were situated near the forest (for example those bordering Sururu forest block of Mau) and had the benefit of access and utilization of products such as pasture, fuel wood and water in rivers such as Nderit that traverse the forest. Apart from subsistence farming, some Kikuyu were engaged in commercial farming of flowers, dairy, wheat and barley (Plate 5):



Plate 5: Commercial farming in Mau Narok involving wheat, barley and vegetables

(Photo taken on 14-12-2013)

Lastly, some members of Kikuyu community seemed to derive their livelihood from businesses in shopping centers such as Mwisho wa Lami, Mau Narok, Likia, and Kihingo. The products traded in these markets include food crops as well as forest products such as firewood and charcoal (Plate 6).



Plate 6: Trade in fuel wood at Kihingo Market, near Teret forest block

(Photo taken on 20-11-2013)

As observed earlier, it was reported that the Kikuyu and Maasai engaged in business especially of farm produce and thus the two groups were likely to have a cordial relationship. However, compared to the Maasai, the Kalenjin were proximate to the Kikuyu in a number of ways. First, the two communities were immediate neighbors (spatially speaking). Secondly, both groups were farming communities. Thirdly, during the interviews it was common for members from both communities to express perceived insufficiency of land to expand their farming activities which pointed to common needs. These conditions were likely to form a fertile ground for breeding of conflict between the two communities.

### *Political affiliation*

Prior to the 1990s, Kenya was a one party state and thus ideally members from the different communities who wished to be elected into political leadership were expected to use one political outfit that was KANU. Come early 1990s, there was push from the civil society as well as members drawn from the opposition to have many parties competing during national elections. The move received external support with international donors deciding to suspend new aid and balance of payment until the Kenyan regime reformed its political system. As a result, the KANU government allowed the formation of other political parties. Thus, the 1992 general elections were held under multipartyism and members of the Kikuyu community are perceived to have voted for the opposition parties Forum for the Restoration of Democracy (FORD) and Democratic Party (DP). In subsequent elections of 1997 and 2002, the community is believed to have also voted for the opposition parties, that is DP and NARC (National Alliance of Rainbow Coalition) respectively. However, the opposition party (NARC) won the presidential elections for the first time in Kenya's history. In 2007, the community is believed to have been united behind the incumbent on a Party of National Unity (PNU) ticket who won the re-election as president. In 2013, the Kikuyu and Kalenjin entered a coalition through their leaders in Jubilee (coalition between The National Alliance-TNA and United Republic Party-URP) and clinched the presidency in a heavily contested and disputed general election.

Although the Kalenjin and Kikuyu had entered into a coalition (Jubilee) in the run up to 2013 elections, the former believed that they were not well represented in leadership at the local level since the latter formed majority and had dominated politics in Eastern Mau by clinching most of

the elective positions. They often cited that the governor (for Nakuru County), Member of Parliament for Njoro constituency as well as three out of the five members of county assembly in Njoro Constituency were from the Kikuyu community. The scenario presented by these findings was likely to breed competition over political leadership in the area by both Kikuyu and Kalenjin, which could be a source of strained relations.

#### **4.4 Kalenjin**

##### *History and location in Mau*

The Kalenjin<sup>15</sup> are a Nilotic ethnic group inhabiting the Rift Valley and Kenya's western highlands. Prior to the 1950s several 'Nandi-speaking' peoples inhabited Kenya but existed as separate ethnic groups of Keiyo Elgeyo, Endorois, Kipsigis, Marakwet, Nandi, Pokot, Sabaot, Terik, Tugen and Sebei. During the 1950s these groups of people united to assume the name 'Kalenjin' and thus formed a major ethnic group in Kenya. Today, Kalenjin form the third largest community in Kenya after the Kikuyu and Luhya. Among the Kalenjin sub-tribes, Kipsigis are the largest at about 39% of the community followed by the Nandi at approximately 22%. Other sub-tribes are as follows: Tugen, 11%; Keiyo, 9%; Pokot, 7.5%; Marakwet, 6.6 %; Sabaot, 3.3%; and Terik 1.6% (GOK, 2009c).

The Kalenjin claimed ownership to the forestland in Eastern Mau citing the proximity of Eastern Mau to their places of origin compared to other communities. The Kalenjin believed that large chunks of land in the South Rift Valley region including the entire of Mau forests complex belonged to their ancestors. The community further claimed to have started residing in Mau

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<sup>15</sup> The term Kalenjin means- *I say to you*

forests in the early 1970s in forest villages. The forest villages were settlements within the forest where forest workers and their families used to reside. It is thought that although the Kalenjin resided together with other ethnic groups such as the Kikuyu and Kisii in forest villages, when the government started settling individuals on former white highlands, only members of the Kikuyu community were allocated land as informed by a Kalenjin a respondent below:

*.....When people entered Lare forest in 1972 the Kalenjin stayed with the Kikuyu. When the government came to resettle people only a few of Kalenjin benefited. They (government officials) were strict and demanded that only those with identification documents written on 'Lare' were supposed to be resettled. Majority of Kikuyu and a few Kalenjin had earlier on obtained identification cards with Lare as their place of origin. The rest of us were left out.....*

Box 6: An extract during an interview session in Teret location, Nakuru County on 15-11-2103

On the other hand, both the Kikuyu and Maasai claimed that the migration and settlement of the Kalenjin into Eastern Mau began in the mid-1990s and culminated during the year 2001 forest excisions<sup>16</sup> that were presided over by the government which was then headed by president Moi, himself from Kalenjin community. During the 1990s some parts of Mau forest (adjacent to the former white highlands, then being occupied by Kikuyu) were degazetted by the government with the aim of resettling the landless (for instance, people who had been displaced by tribal clashes in Rift Valley). Thus, the greatest chunk of formerly forestland was allocated to members of the Kalenjin community mainly from neighboring counties such as Kipsigis (Bomet, Kericho

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<sup>16</sup> The process of excising the forest involves hiving off a parcel of forest land and degazetting it by the government for different purposes among them settling the landless



and Transmara counties), Nandi (Nandi county), and the Tugen (Baringo county). However, while agreeing to being brought into Eastern Mau by the government as part of managing forest diseases in the mid 1990s, the Kalenjin further explained that not all Kalenjin members in Eastern Mau were given land as some purchased land from their fellow tribesmen. Apart from those Kalenjin who were allocated land by the government, there were those who came to Eastern Mau later than the year 2001 after the excision and land adjudication had stopped and are believed to have encroached into the forest illegally and constructing settlements. Such groups of Kalenjin members were evicted from the forestland to pave way for rehabilitation of the Mau following recommendations by the 2009 Task force on restoration of the Mau. Indeed the internally displaced persons (IDP) camps with Kalenjin members who claimed to have been evicted from the forest could be observed at the forest fringes in Eastern Mau (Plate 7).



Plate 7: Internally displaced persons Camp at Sigaon in Mauche Sub-county for people who claimed to have been evicted from the Longoman forest.

(Picture taken on 20-11-2013)

### *Cultural practices*

The Kalenjin traditionally believed in a supreme God called *Asis* or *Cheptalel*. Below *Asis* was *Elat*, who controlled thunder and lightning. Beneath *Elat* were the spirits of the dead, *Oyik* believed to intervene on behalf of the living. The Kalenjin used diviners (*Orkoik*) to appeal for rains or end floods through sacrifices of meat and beer called *Koros*. Traditionally the Kalenjin society was organized around small groups. Each group also known as *koret* was composed of twenty to one hundred homesteads. A *koret* was administered by a council of adult males known as *kokwet* and a spokesman called *poirot ap kokwet*. For one to be chosen as the spokesman, he had to possess certain qualities including speaking abilities, knowledge of tribal rules, forceful personality, richness, and high social standing. The *poirot ap kokwet* expressed the group's opinion and decisions. Thus, before any decision was taken, members were congregated and consultations made after which the group's common stand was articulated by the *poirot ap kokwet*. The concept of *poirot ap kokwet* could also be observed in the perception of Kalenjin by the Kikuyu who viewed the former as people who always took a common stand during ethnic clashes and were ready to follow instructions as directed by the community leaders. The Kikuyu also described the Kalenjin as secretive and warlike. They further believed that as a Kikuyu you could not count on Kalenjin friendship during times of ethnic fighting. A case was cited where a Kalenjin man handed his Kikuyu friend to his kinsmen when the two communities were warring although the two friends had agreed to shield each other during the 2007/2008 post-election violence.

Concerning initiation, members of the Kalenjin community were traditionally expected to undergo initiation before graduating into adulthood. The initiation ceremonies (or *tumdo*) were traditionally held about every seven years and all candidates initiated during the same year would form an *ipinda* or age set. After circumcision, male youths were secluded for some periods of time during which they learnt under the guidance of elders the various skills necessary for adulthood. After the period of seclusion, the youths entered a period of warrior-hood during which they acted as the military force of the tribe. From the study findings, some Kalenjin members still initiated their youth in the traditional way involving secluding the candidates in the ‘bush’ (Plate 8).



Two teenagers with bodies painted grey a sign that they had recently been initiated into adulthood

Plate 8: Kalenjin youth who had recently undergone initiation in Longoman forest

(Picture taken on 15-12-2013)

However, not all families among the Kalenjin practiced the traditional initiation ceremony. Others instead initiated their male youths through the alternative way as reported by a respondent in Eastern Mau:

*‘.....today some of us take our children through a Christian (alternative) way of initiation. The process is slightly different from the traditional way in that instead of spending three months in the bush (in seclusion), the candidates are taken to a church for one month where they are taught various skills and societal values. The initiation takes place during the month of December to coincide with a school holiday.....’*

Box 7: Interview extract from the session during a transect walk from Tach-asis in Mauche, Nakuru County to Ntyani in Olokurto, Narok County on 15-12-2013

#### *Mode of production*

The Kalenjin traditionally practiced livestock herding. In Eastern Mau, the community members were engaged in the growing of crops such as corn, potatoes, peas and carrots as well as herding of small number of cattle (on average, 3 heads for each household), sheep and goats. Cereal crops such as corn normally take long to mature in cold highland climates compared to crops grown in warm tropical climates. Therefore, as members of Kalenjin community in Eastern Mau waited for corn to mature, they resorted to other livelihood activities for sustenance until harvest time. Some of the activities included trade in livestock and taking up casual laborer jobs in flower farms and other industries in urban centres within Nakuru County. However, based on an account by one local administrator in Teret location (bordering the forest), some youthful members of the

community engaged in forest poaching<sup>17</sup> within the Mau, and were always at loggerheads with the forest managers.

The Maasai and the Kikuyu believed that the Kalenjin were responsible for the degradation of the forest in Eastern Mau through extraction of timber, poles and fuel wood for commercial purposes. They claimed that before the Kalenjin community started migrating into Eastern Mau in the 1990s, the forest was intact. They further claim that the parts of the forest bordered by the Kalenjin in areas such as Teret blocks have been destroyed thanks to Kalenjin youth. Although some Kalenjin respondents concurred with these claims of Kalenjin youth poaching the forest, a few contested that it was only the Kalenjin who were destroying the forest. An account by one Kalenjin elder in Tach-asis (Kapkembu location) is an example of this variation in opinion:

*'....The Kalenjin only go to the forest during times of hardship, for example, before harvesting of corn some people do not have any other source of livelihood....But for the Kikuyu, you will always see them come to the forest in season and out of season...I will like to challenge you to come to Longoman at a spot where I will show you on Saturday, you will observe for yourself how the Kikuyu do a lot of illegal business of firewood and timber from the forest.... ..'*

Box 8: An extract from an interview during transect walk from Tach-asis in Mau, Nakuru County to Longoman forests on 5-12-2013

During the field experience, the researcher observed<sup>18</sup> that women and children drawn the Kikuyu, Maasai and Kalenjin often visited the forest in Longoman and Sururu to collect firewood

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<sup>17</sup> Forest poaching is a common term used in Mau to refer to the illegal extraction of forest materials such as timber and poles

and pasture. Although some of them had tickets issued from KFS allowing them to access forest resources, majority of those observed were illegally accessing the forest. Such forest users would normally throw away the firewood stacks that they were carrying and take off whenever they spotted the research team during transect walks in the forest, probably mistaking the research team for KFS guards. However, the researcher observed that the youth who were ferrying tree poles<sup>19</sup> from the forest were mainly Kalenjin and Kikuyu. This observation was reconciled with an opinion by a forest guard in charge of Longoman forest block who reported that the Kalenjin youth often worked with the Kikuyu when deforesting the Longoman. The guard observed that whereas the Kalenjin were involved in the cutting of trees, the Kikuyu were in charge of taking the tree products to the market. This finding points to a relationship of cooperation at the youth level between the Kalenjin and Kikuyu.

### *Political affiliation*

Although the evolution of Kenya into multiparty politics in the early 1990s witnessed several Kenyan communities being identified with different political movements in the opposition, the Kalenjin are believed to have preferred remaining in the Kenya National Union of Africa (KANU) the ruling party headed by President Daniel Moi from the Kalenjin community. In the year 2002, when Mr Moi was retiring, although majority of the Kalenjin are thought to have voted for KANU, the opposition party won the elections and hence the community members found themselves in the opposition for the first time in many years. However, in the year 2007

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<sup>18</sup> It is possible to distinguish among the different ethnic groups based on the language they speak, mode of dressing as well as physical appearance. For example Kikuyu women would always cover their heads with some cloth

<sup>19</sup> Whereas, communities have been allowed to access firewood and pasture in the forest by paying some fee to KFS, it is illegal to cut down tree poles in the forest.

during the national presidential elections, the Kalenjin are perceived to have abandoned the independence party KANU for another political outfit, Orange Democratic Movement (ODM) with the hope that if it formed the government, the community concerns and needs would be addressed.

The election results were highly contested between ODM and Party of National Unity (PNU) being headed by the incumbent president. As a result, election related ethnic violence was witnessed in the country and in Eastern Mau members of the Kalenjin community clashed with the Kikuyu (Majority of the Kikuyu were believed to be supporting PNU). The post election skirmishes were solved with the leaders of the two main contesting parties agreeing to form a government of coalition with PNU producing the president and ODM, the prime minister in a power sharing deal. Prior to the 2013 general elections, ODM had lost popularity among the Kalenjin in Eastern Mau as well as in other parts of Rift Valley. Part of the of the reason believed to have led the Kalenjin fallout from ODM was that the Prime minister (also ODM party leader) had spearheaded and supported the evictions of illegal Mau forest settlers. Thus, in 2013, majority of the Kalenjin voted for the Jubilee coalition of the National Alliance (TNA, led by a Kikuyu) and the United Republican Party (URP) led by a Kalenjin. The coalition won the presidency in a once more heavily contested and disputed election against the Coalition of Restoration of Democracy (CORD), a partnership involving ODM and affiliate parties. This scenario also suggests cooperation between the Kalenjin and Kikuyu in political processes. However, this cooperation at the community level was influenced by the decisions of political leaders at the national level from the two communities. This finding therefore indicates that

leaders in the community can have an influence in determining group cleavages (for example a community voting as a block) and inter-group relations (for example the Kikuyu and Kalenjin deciding to vote for the same political party).

#### **4.5 Ogiek**

##### *History and location in Mau*

Ogiek<sup>20</sup> are an ethnic group who traditionally engaged in hunting and gathering. The Ogiek are also referred to as ‘*Ndorobo*’, a derogatory name given to them by the Maasai people with whom they lived together for a long time. The term ‘*Ndorobo*’ is derived from *Illtorobo* meaning a poor person. Since the Maasai measured a man’s wealth in terms of the size of herd that a man owned, they considered Ogiek poor, as they had no cattle.

When they first entered the Mau forests complex, the community met and coexisted with the Maasai. Owing to their nomadic lifestyle, the Maasai preferred the dry plain grasslands while the Ogiek (hunter-gatherers) occupied the wet forested areas. However, from the 1950s, the Ogiek were joined by other communities from neighboring regions such as the Kikuyu from Central Kenya and the Kalenjin (majorly Kipsigis, Nandi and Tugen from parts of Rift Valley). Other groups of Ogiek are thought to be associated with several forest formations in Kenya such as Kakamega and Mount Elgon in Western Kenya, Kinare and Mount Kenya in Central Kenya, Arabuko Sokoke forests at Kenya’s coastal area as well as upper Eastern Kenya highlands in Marsabit County. Based on the narrations by Ogiek elderly key informants, although groups of Ogiek in the different geographical locations have been separated for centuries and no longer

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<sup>20</sup> The term Ogiek means ‘caretaker of the universe’



have links with each other, they all share certain recognized and distinct features such as their livelihood dependence on the forest. This phenomenon has also been observed by Ashdown (2009). Within the Mau forest complex, it was observed that members of the community were mainly found in areas adjacent to the Mau forests in the following areas of Nakuru county; Nessuit, Sururu, Tinet, Mariashoni and Bararget.

Over the periods of time, some members of Ogiek in Kenya have been assimilated by their neighboring dominant communities such as the Samburu in Upper Eastern, Maasai in Narok County, Kikuyu in Central region and Kalenjin (Kipsigis and Nandi sub-tribes) in Rift Valley, mainly through intermarriages with these communities (Ashdown, 2009). For instance, the Ogiek who have lived near Maasai for a long time do not only speak Maa<sup>21</sup> language but also have acquired other Maasai practices such as cattle rearing. Similarly, the Eastern Mau Ogiek communities have more affiliation to the Kalenjin people especially the Kipsigis and Nandi than they are to any other tribe. Despite the influence from their neighbors, the Ogiek have maintained certain endemic characteristics especially those relating to hunting and the socio-cultural significance of honey.

### *Cultural practices*

Ogiek society can be considered to be traditionally organized at different levels namely; tribe, sub-tribe, clan, family and household. Each of Ogiek sub-tribe<sup>22</sup> was composed of various clans

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<sup>21</sup> Maa is the language spoken by the Maasai who are the southernmost plain Nilotes

<sup>22</sup> The names of sub-tribes of Ogiek living alongside other communities today in Nakuru County are Ogiek op morisionig, Ogiek op tiepkwerereg, and Ogiek op kipchorwonig, while those coexisting alongside the Maasai in Narok County are Ogiek op kaplalach, Ogiek op kapsopuleg and Ogiek op omotik.

while the various clans were made up of several families. Each clan (known as *oret*) was represented by an animal and occupied a defined territory (*Konoito*). The animal which was allocated to a clan using the totem system was not supposed to be hunted by a member of that clan. Strict rules were also observed during hunting across clan boundaries in order to guarantee sustainability of the game and also prevent conflict through equitable resource as can be derived from the following narration by an elderly Ogiek man:

*‘.....In case a group of men from one clan were out hunting in the forest and the animal being chased crossed into another clan’s territory, the men were supposed to stop and report to the owners of the territory. The new territory owners would then take up the chase and if the animal was caught, it was shared amongst the two clans.....’*

Box 9: Interview extract from a session in Nessuit area, in Njoro Sub-county of Nakuru County on 9/12/13

Two or more families that make up an Ogiek clan are made up of individuals who are able to trace their ancestors. Thus, those who share the same ancestral roots are considered to come from the same lineage and will be part of a family (or *kap*) named after the ancestor. The *kap* forms an important social unit among the Ogiek. It is today still instrumental in matters as appertains to land holding, marriage negotiations and compensations during disputes. The oldest person in the family acts as its spokesman. As will be discussed later in this thesis, under manifestations of conflicts land disputes especially in the Ngongongeri<sup>23</sup> area of Eastern Mau are an example of

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<sup>23</sup> The Ngongongeri land dispute, a conflict of contested land ownership involved one family (known as Rana) of Ogiek clan pitting rich farmers from other communities in the western part of Eastern Mau

group cohesion at the lineage (family) level rather than the entire Ogiek tribe. Governance at clan level among the Ogiek was through a council of elders who presided over matters to do with land, security, and dispute resolution. For example, in governing access and use of land the clan elders used community norms to limit disposition.

Like their neighboring Maasai community, Ogiek also were required to be initiated into adulthood through an age set system. The initiation ceremony for boys was known as *Tumdo op werik* while for the girls was *Tumdo op tipig*. After the ceremonies, the candidates who were referred to as *Torusiek* were kept in isolation from the community for a period of about six months after which they could marry or get married. The Ogiek referred the newly initiated young men of the same age set as *murenik*. Like *Morans* of the Maasai, *murenik* were responsible for defending the community against invasion and attack from the enemy. The age set system of the Ogiek also bound together all the *murenik* for hunting, honey collection and other leisure activities such as dancing. The young men would later in life graduate into the eldership age set. The oldest living age set among the Ogiek had the role of linking the living and the spirits of the dead.

#### *Mode of production*

Traditionally, the Ogiek derived their livelihood from hunting and gathering in the forest as well as bee keeping. They further engaged in trade through honey, medicinal herbs and animal products such as hides and skins. They also practiced the making of pots as well as iron ore products such as arrowheads, bows, spears and knives. The Ogiek also depended on the forest for

construction of their homes. The Ogiek home (also known as *kog*) was composed of structures made of barks of trees and roofed using the covers of bamboo trees called teleg. The women were involved in the process of collecting materials as well as building the houses (the process of building is known as *kegusta*). The houses were round in shape and small and were referred to as *Koot op teleg* or *Koi po teleg*. Today most of the Ogiek community members use modern materials such as iron sheets and cement to construct their homesteads. Although Ogiek traditionally depended on hunting and gathering in the forest for their livelihood, their reduced access and use of the forest occasioned by creation of forest reserves and ban of hunting in Kenya, the community has been slowly changing and adapting to new lifestyles. Thus, Ogiek have evolved into an agro-pastoral community with permanent settlements and practicing subsistence cropping of corn, potatoes and livestock of sheep, goats, and a few cattle. Other household members have taken up professions in urban centres. Nevertheless, despite these changes in lifestyle the Ogiek still practice harvesting of honey, wild plants, roots, berries, and medicinal herbs from the forest. Honey for instance, which is gathered by placing beehives made from hollow logs in trees plays a great socio-economic role in Ogiek society. The Ogiek uses honey as food and as an ingredient in the brewing of traditional beer. Honey is also traded with neighboring communities.

#### *Political affiliation*

Ogiek have always been in the same political outfits as their Neighbours the Kalenjin (at least until the year 2007). However, the community broke ranks with the Kalenjin and supported

CORD coalition in 2013 arguing that the leader<sup>24</sup> of the outfit was best suited to address their concerns, which included conservation of the Mau through evictions of illegal settlers. The community as will be seen later in the thesis had always treated their neighbors the Kalenjin (mainly Kipsigis sub-tribe) with suspicion as they considered them intruders into their ancestral land. Ogiek also believed that the Kalenjin were out to assimilate them and thus lose their identity as well as ancestral land. However, because of their small population compared to the major tribes of Kalenjin and Kikuyu, they had little impact on deciding the winners of elective positions in the region. They cited that although the Kenya constitution that was promulgated in the year 2010 provided for special political units meant to cater for marginalized peoples, Nessuit ward which was created for the Ogiek was still being represented by a Kalenjin. According to the Ogiek, there was a high influx of Kalenjin into Nessuit prior to the general elections and hence the community was outnumbered and their candidate was defeated by a Kalenjin when the votes were cast.

### *Ogiek 'perceived' land struggles*

During conversations with members of the Ogiek community, they were quick to narrate about their struggles to retain their ancestral land. The community felt that they had been denied their habitation in the Mau forests which were their home since time immemorial. The Ogiek felt that their cultural identity was being threatened by their eviction from the forest. The community further claimed that they had been consistently displaced from their ancestral land (forestland) by the government since the colonial times under the pretext that they were degrading it. The

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<sup>24</sup> Earlier, in the year 2009, the CORD leader had spearheaded the eviction of Mau forest illegal settlers with the aim of rehabilitating and restoring the forest.

community also claimed that whenever the forest was excised with aim of settling the Ogiek who had been evicted from the forests the resettlement exercise ended up benefiting other communities who were not originally from Eastern Mau. For instance, part of what Ogiek considered to be once their territory was land near Narok County (south East of Mau forest complex) which was annexed by the Colonial government into a community reserve. The reserve (also known as the Maasai Mau Trust land) was placed under the management of the local government of Narok which was predominantly Maasai County.

The Ogiek's narration of their struggles has also been highlighted by various authors such as Wachira (2008); OPDP (2012). For example, Wachira (2008) cites that in 1932, the Carter land commission recommended that the Ogiek be moved from the forest and absorbed into tribes with whom they had the most affinity. An Ogiek key informant also cited that in 1972, the government planned to settle the Ogiek into the Lake Nakuru Settlement Scheme. However, the community refused to take part in the process which also included other tribes, fearing forced assimilation. As a result it is believed that other communities (majority being the Kikuyu) were settled under the scheme in Lare division. Later on, the government came up with a resettlement plan for landless including the Ogiek which was dubbed the Kenya Indigenous Forest Conservation Project (KIFCON). The project was carried out between 1988 and 1999.

Under the KIFCON plan, 107,000 hectares of forest land in the Mau was degazetted and excised. However, the Ogiek claimed that they were never settled on the land but instead, the land was allocated and title deeds issued to companies and individuals from other communities (mainly the

Kipsigis and Tugen sub tribes of Kalenjin). In 2001, the government once again came up with a plan to excise land in the Mau Forest for purposes of resettling communities who had been displaced following tribal clashes in other parts of the Rift Valley region. The Ogiek were also supposed to benefit under the new excisions. According to OPDP (2012) the Ogiek expressed their reservations with the location, planning and implementation of the settlement programme. Despite this, the Government went ahead with the excisions and settled other communities on the land, majority being from the Kalenjin community. Apart from being aggrieved by the perceived dispossession of their ancestral land, the Ogiek felt that there were deliberate efforts to exterminate their culture which was based on the forest. The community claimed that by having restricted access to the forest, their livelihoods had been disrupted as they were forced to adopt farming and yet they traditionally depended on honey and hunting within the forest.

The Ogiek have argued that the government through various legislations since the colonial era had been a threat to their survival by introducing legislations that restricted their ability to practice hunting and gathering activities. One of the laws that threatened the Ogiek's livelihood as argued by Situma (2008) was the Act of 1942 which stated that capturing or killing any animals, setting or being in possession of any trap, snare, gun or net, or digging any pit, for the purpose of catching any animal, or using or being in possession of any poison or poisoned weapon were prohibited. The same applied for the extraction of other natural resources in the forest areas. Thus, in contradiction to Ogiek customary law, cultivation and removal of honey, which was central to Ogiek culture, was prohibited. Permission to undertake these activities could on the other hand be granted by the Chief Conservator of Forests in consultation with the Game

department. All these perceived struggles by a community points to underlying feelings of marginalization and injustices. Such feelings present hidden issues which if not addressed can escalate to conflict.

#### **4.6 Conclusion**

This section has focused on a description of four ethnic groups thought to be major and direct stakeholders to conflict in Eastern Mau. The four, that is, Maasai, Kikuyu, Kalenjin and Ogiek are the main forest adjacent communities who have in the past been reported to be involved in ethnic clashes or other conflicts involving forest resources such as land. The description has centered mainly on perceptions that the communities held of themselves and of their neighbors. In some cases, especially relating to migration into the Mau, there were conflicting accounts as reported from the perspective of different communities. These differing accounts represent different perceptions and are believed to contribute to different attitudes that are precursor to conflict behaviors. However, in some cases some facts such as modes of production by the different ethnic groups as observed by the researcher have been also reported in this section. In terms of history and location, regardless of how the different communities found themselves in the Mau area, each one of them claimed to have inhabited Eastern Mau long enough to consider the region as their home.

Although each community is unique in terms of their origin and cultural beliefs and practices, there are notable similarities across the four major ethnic groups of Eastern Mau. For instance the age-set system was traditionally found among all the four communities. And among the Maasai,



Kalenjin and Ogiek, the male graduates after initiation became defenders ‘warriors’ of their respective communities. However, over time majority of traditional practices had been abandoned or modified among the communities. For instance, some Kalenjin preferred an alternative initiation ceremony where candidates spent time in the church instead of being secluded in the bush. The Ogiek had changed their lifestyle of hunting and gathering in the forest and practiced farming of crops and built homes using modern materials such as iron sheets as opposed to the traditional tree barks. Generally, Kikuyu had abandoned majority of their traditional customary practices such as kinship ties while majority among the Maasai still held to their community traditions such as moran-hood as well as herding cattle through nomadism. The Kalenjin and Ogiek could be said to fall in between, that is abandoning some practices while retaining others. Differences in cultural values and practices among different ethnic communities are bound to precede conflict especially in the context of natural resource competition as will be discussed later in this thesis. Table 4.1 below provides a summary of the comparison among the four ethnic groups that are direct stakeholders to conflicts in Eastern Mau.

Table 10: Comparison among major communities of Eastern Mau

Group	Origin	Cultural practices	Mode of production	Politics (after 1992*)	Perception by neighbors
Maasai	Narok County-Rift Valley	Still held to many cultural practices including initiation ceremonies	<ul style="list-style-type: none"> <li>• Pastoralism</li> <li>• Commercial and Subsistence farming</li> </ul>	1992 & 1997-KANU 2002-NARC 2007-ODM 2013-Divided votes between CORD & Jubilee	The Kalenjin believed the Maasai were cattle rustlers
Kikuyu	Central Kenya	They had abandoned majority of cultural practices such as traditional circumcision ceremonies	<ul style="list-style-type: none"> <li>• Commercial and</li> <li>• Subsistence farming</li> <li>• Business enterprises</li> </ul>	1992 & 1997-DP 2002-NARC 2007-PNU 2013- Jubilee	The Kalenjin believed that the Kikuyu were ‘intruders’ into Eastern Mau
Kalenjin	Rift Valley	Some members practiced traditional initiation while others preferred alternative ‘modern’ ways	<ul style="list-style-type: none"> <li>• Subsistence farming</li> <li>• Small scale livestock keeping</li> </ul>	1992, 1997 & 2002- KANU 2007-ODM 2013- Jubilee	<ul style="list-style-type: none"> <li>• The Kikuyu believed Kalenjin were secretive and warlike.</li> <li>• The Ogiek believed that the Kalenjin (especially Kipsigis) were out to intrude into their land.</li> <li>• The Maasai and Kikuyu believed that the Kalenjin were responsible for degrading the Mau forests through poaching of tree products</li> </ul>
Ogiek	Mau forests	Still held to many cultural practices including initiation ceremonies	<ul style="list-style-type: none"> <li>• Subsistence farming</li> <li>• Small scale livestock keeping</li> </ul>	1992, 1997 & 2002- KANU 2007-ODM 2013-CORD	<ul style="list-style-type: none"> <li>• The Maasai traditionally believed that the Ogiek were poor people since they had no cattle</li> <li>• The Maasai, Kalenjin and Kikuyu believed that Ogiek were harmless people</li> </ul>

\*The year that national elections were held for the first time under multipartyism

## **CHAPTER 5: SOCIAL FACTORS OF FOREST RELATED CONFLICTS**

### **5.1 Introduction**

Chapter five of this thesis is intended to expose conflict dynamics in the study area through space and time. It is necessary to understand how communities perceive the conflicts as they occurred in space and time, which in turn will form the basis for discussing the possible sources of such conflicts. This section of the thesis is presented with an assumption that different parties perceive conflicts; thus, the beginning point of understanding conflict dynamics should be to interrogate what parties perceive to be conflicts. The information reported in this chapter is from the analysis of interviews with community informants, FGDs, conversations during the transect walks, and household survey through a questionnaire testing the role of attitudes in conflicts. The first part of the chapter reports the indicators of conflicts in space and time as narrated by the various individuals or groups of people. Such information is presented from analysis of qualitative data. The second section highlights stakeholder attitudes in conflicts as captured by the household questionnaire. It should be noted that this section is not intended to favour any one of the opinions but rather to present the different perspectives with an assumption that variations in perceptions is partly what has sustained conflicts in the study area. Hence, the quotations cited in the text are just examples of similar sentiments that were narrated by different respondents on the same theme.

### **5.2 Conflict Indicators**

From data collected in the field, the following indication of conflicts and resources use, access and control were observed:

1. Intensity of conflicts that is, violent and latent conflicts. Violent conflicts escalate or de-escalate with time, types of parties involved and conflict management strategies

involved. Latent conflicts are observed through the way groups communicate their values in their day-to-day conversations.

2. The resources that the conflicts seemed to be associated with (such as roads, rivers and other water points, grazing areas and land) and can be projected on maps as hot spots. The indicator gives clarity on which resources are involved in conflict, why and when those resources are in conflict.

The first indicator has been analyzed both qualitatively and quantitatively by drawing on the experiences and narrations as presented by the responses during key informant interviews and focus group discussions (FGDs), as well as information from a household survey and is discussed in this section. The second indicator can be understood from analyses of spatial data and will be presented later in the next section of the results chapter.

### 5.2.1 Violent clashes and their triggers

Findings from the field research indicate that one of the manifestations of conflicts in Eastern Mau has been through violent clashes. During the clashes, different ethnic groups usually antagonize one another with the result being loss of lives and destruction of property. Majority of responses also indicate that the clashes were characterised by evicting or attempting to evict members of another community from an area. The results also reveal a number of triggers to violent clashes between ethnic groups in Eastern Mau such as rumours, general elections, resource competition as well as stock theft. The following is a timeline of violent clashes and their associated triggers as reported by the respondents.

## 1992-1995

Majority of respondents reported that the first ever ethnic violence they could remember in Eastern Mau occurred in the year 1992. Prior to 1992, various communities residing adjacent to the Eastern Mau forests coexisted without major incidences of violent clashes. The 1992 violence which happened to coincide with the year of multiparty elections in Kenya involved members of the Kikuyu, Kalenjin and Maasai communities. In Lare area of Eastern Mau, fighting erupted between members of Kikuyu and Kalenjin communities. The respondents cited political party affiliations as the trigger to the conflict. Members of Kikuyu community are said to have been supporters of the then opposition party Forum of Restoration of Democracy (FORD) Asili, whereas the Kalenjin were firmly behind the ruling political regime of Kenya African National Unity (KANU). As a result of the inter-ethnic violence in Lare, the Kalenjin vacated the area to join their kinsmen elsewhere as reported by one middle aged Kalenjin respondent:

*'.....In 1992, there were clashes during the electioneering period which involved the Kikuyu and Kalenjin in Lare area. The Kalenjin left Lare and joined their kinsmen who lived in Teret settlement scheme.....'*

Box 10: Extract from FGD session at Teret center in Mauche division of Nakuru county 17-03-2014

During the 1992 clashes members of the Ogiek community were also reported to have vacated Lare area. The Ogiek key informants explained that that albeit Lare settlement scheme which was established in early 1970s was meant for resettling the Ogiek, who were then dwelling in the forest, only 60 of their households benefited with most of the land being allocated to members of Kikuyu community. Thus, following the 1992 clashes it is believed that the last

of 60 Ogiek households left Lare fearing for their lives as they believed their numbers were too small to mount any significant defense should clashes occur again. After the Lare violence, there was an influx of more members of Kalenjin community into Eastern Mau against the resistance of the residents from other communities. An account by a Kikuyu elderly respondent explains that:

*‘.....1992-1993 was purely a tribal clashes period. When the clashes were over more Kalenjin were brought in this area. At Sururu forest block, they were chased away by the Maasai and they eventually settled in Mauche settlement scheme.....’*

Box 11: Extract from an FGD in Likia on 17-03-2014

The Kalenjin while agreeing that they started settling into the Eastern Mau in early 1990s also claimed that there had been an outbreak of aphids which were destroying the plantations hence the government decided to convert the affected areas into a settlement scheme. Apart from their violent clash with the Kalenjin, the Kikuyu were also involved in fighting with the Maasai in Likia area of Eastern Mau in 1992. The Kikuyu had attempted to deracinate the Maasai from Likia area which culminated into violent clashes. The Kikuyu were fighting to retain land for farming whereas the Maasai wanted the land reserved for pasture to be accessed by their livestock. In the 1992 clash, violence started with a Maasai family being exterminated by the Kikuyu following trespass of cattle belonging to the former into a Kikuyu farm as narrated during a Maasai FGD (Box 12). The Kikuyu respondents confirmed about their clashes with the Maasai. However, they were of the opinion that it was the Maasai who were the aggressor in the violent conflict.

*‘.....We clashed with Kikuyu in 1992 through 1995. The Kikuyu killed a Maasai man with his 4 children and buried them in one grave. They also cut and injured the cattle belonging to the family. Following the incident, we had a strained relationship until the year 1995....’*

Box 12: An extract from an FGD session in Mathangauta on 18-03-2014

### **1997-1998**

Violent clashes which started in 1997 and de-escalated in 1998 involved members of the Kikuyu and Kalenjin communities. The fighting again occurred during the national electioneering period in Kenya. According to a Kalenjin FGD, members of Kikuyu community travelled from as far as Nakuru town (about 10 km away) to come and help their tribesmen defeat the Kalenjin. They further revealed that the 1997 fighting started with young members from both sides of the conflicting parties antagonizing each other. The results from interviews trace the 1997-1998 fighting in Eastern Mau from the influx of Kalenjin into the then newly degazetted forestland, which was bordering the Kikuyu and Maasai communities.

### **2001-2009**

The study results indicate that the period running from 2001 through 2009 was marred by violent clashes, which involved all the four main communities that resided adjacent to Eastern Mau forests. In the year 2001, the fighting was between the Maasai and the Kalenjin, which was the first ever-reported clash between the two communities. The ethnic clashes however stemmed mainly from cattle rustling as reported in a Maasai FGD (Box 13). Concerning the issue of cattle rustling and conflicts between the Kalenjin and the Maasai, each community through their respondents in the interviews, was quick to point an accusing finger at the other party. For instance, the Kalenjin would argue that it was the Maasai who had started raiding

cattle from the Kalenjin leading to inter ethnic clashes and the Maasai on the other hand would claim that conflicts started with the Maasai raiding Kalenjin cattle while the two communities were herding inside Longoman forests.

*‘.....When the Kalenjin came in 1995 we did not fight each other because they were still new. We started conflicting from February 2001 following a stock theft incidence. On the material day, the Kalenjin stole 600 heads of cattle from the Maasai at around 4pm. We fought that day and managed to salvage 300 heads. Three Maasai were killed in the clash. We cannot tell the number killed on the Kalenjin side. The years that followed were marred by conflicts after every two months (that is at least five times in a year from 2001 up to 2009).....’*

Box 13: An extract from FGD session at Mathangauta on 18-03-2014

The clashes between the Kalenjin and the Maasai resulted in strained relations between the two communities, such that between the year 2005 and 2009 the Maasai would not cross through the Kalenjin territory as they took their livestock and farm produce to sell in the centres occupied by members of the Kikuyu community. This was reported during a Maasai FGD and also confirmed by a middle aged Kalenjin respondent as narrated below:

*‘.....For five years the Maasai could not use the shortcut to Likia via Tach-asis. Nobody could also go to Teret, a Kalenjin area. Remember Tach-asis is an area of the Kalenjin, and the Maasai would use the route via Tach-asis when taking their farm produce to the Kikuyu market in Likia. As a result of animosity between the two communities, the Maasai were forced to take a longer route so as not to traverse the Kalenjin land.....’*

Box 14: Extract from an Interview session at Kapkembu location in Maucho division in Nakuru County.

Apart from the Maasai, the Kalenjin also clashed with the Kikuyu in the year 2001. The fighting which happened at the border of Sururu and Mau Narok locations (Sururu is a



Kalenjin territory while Mau Narok is occupied by the Kikuyu) were triggered by quarrelling over Kalenjin livestock trespassing into Kikuyu territory as narrated by religious leader from the Maasai community:

*'...One violent clash here was triggered by an incident of Kalenjin cattle being maimed by a Kikuyu man. The Kalenjin cattle which had been grazing inside the forest crossed over into a Kikuyu farm and destroyed crops. The farm owner attacked the cattle, by hacking and injuring them.....in another incident a cow trying to cross river Nderit was swept away by floods all the way to Kianjoya. The Kikuyu in Kianjoya skinned and shared the meat from the cow. This angered the Kalenjin who started fighting.....'*

Box 15: An interview extract from a session in Metta village in Mau Narok division

The year 2002 which was also a general election period was a culmination of fighting between the Kalenjin and the Kikuyu which had started in 2001. According to the government key informants, the year 2001 was the pinnacle of forest excisions which led to a high number of Kalenjin immigrants being allocated forest land in Eastern Mau. The last forest block to have its parts degazetted by the government was Likia, an extension of Longoman forests. Although forest land allocations by the government had stopped in the year 2001, members of the Kalenjin community are said to have continued migrating into Eastern Mau. Likia forest extension (which was bordering the Kikuyu community of Mau Narok) was one of the frontiers the Kalenjin had started encroaching into. The Kikuyu respondents explained that they started fighting because they did not want to be sandwiched by foreigners, that is, the Kalenjin in Mauche living adjacent to Sururu forests on one side and those who had recently settled in Likia extension on the other. Thus during the year 2002 violence, the Kikuyu sought to evict the Kalenjin from Likia as reported by a middle aged Kikuyu respondent:

*‘...between 1992-2002 we tried to evict the Kalenjin from Likia since they had occupied the whole area including the Likia extension. After the (2002) fighting the Maasai and ourselves also started settling in Likia extension but the government stopped us.....’*

Box 16: An extract from interview session at Mwisho wa Lami in Mau Narok

Early 2003 also witnessed violent fighting between the Kikuyu and the Kalenjin. The fighting revolved around a water point which was usually accessed by the two communities during dry seasons. An elderly Kalenjin key informant narrated that the epicentre of the ethnic clash was at NDEFFO, a market centre that straddles the Kikuyu and Kalenjin territories as follows:

*‘.....In 2003 a Kalenjin kid dropped a watch in the borehole. The borehole at NDEFFO area is located at the border between the Kalenjin and the Kikuyu. During dry seasons, both communities share water from the borehole. That particular day, the boy from the Kalenjin community went home crying and reported that his watch had been snatched away by the Kikuyu. The Kalenjin came out and started fighting the Kikuyu in revenge.....’*

Box 17: An interview extract from a session at Teret village in Mau Narok

A Kikuyu respondent on the other hand while describing the conflict that started by the borehole explained that fighting started because of shortage of water as follows;

*.....this borehole is mainly accessed by the Kikuyu..However, during the dry season, the Kalenjin usually come down to fetch water from the borehole. In one incidence, women from the two communities started pushing each other when they realized that some people wanted to jump the queue. As a result fighting started with other members from both sides joining the conflict.....*

Box 18: An interview extract from a session at Likia centre in Mau Narok

In the year 2004 there was a major clash between the Kalenjin and the Kikuyu over land ownership in Likia forest extension. As observed earlier, Likia extension was a public forest (part of the Mau forests complex) whose parts had been allocated to individuals by the

government and others illegally encroached upon by members of Kalenjin, Maasai and Kikuyu communities. According to a Maasai key informant, the first community to be allocated land in the Likia forest extension was the Kalenjin in the year 1996. The Kikuyu and Maasai later started encroaching on the remaining portion of the forest. This eventually led to competition over land in the Likia which later degenerated into a violent conflict. One of the young Kalenjin respondents narrated how he witnessed the fighting in Likia extension in the year 2004:

*‘.....sometime in 2004, a Kalenjin had built a house in Likia. The Kikuyu went and tore down the house. This resulted in fighting between the Kalenjin and the Kikuyu. I was in class five by then schooling at Lare primary school. Lare School had a mixture of tribal identities among the pupils, with majority being the Kikuyu and Kalenjin. On the day of the attack, we heard screams and all of a sudden, some youth stormed the school. They jumped over the fence to gain access to the school. I later discovered that the Kikuyu had gone to burn houses in the extension. Of the youth who had stormed the school was one boy whom I knew. I quickly ran to him for protection. The boy was about 19 years. He later died fighting during the 2007 skirmishes.....’*

Box 19: Interview extract from a session with a young Kalenjin man in Kapkembu location in Mauche division

In 2005, the Kenya Forestry Service (KFS) guards burnt down houses belonging to Ogiek herdsmen in Longoman forest. The herdsmen were residing in the forest as they grazed their livestock and practiced bee keeping for honey. When their houses were destroyed, the Ogiek clashed with the guards. According to one Ogiek elderly respondent, the destruction of houses was an attempt to evict the community from the forest.

The Likia extension violent clashes again resurfaced in the year 2006 with fighting being reported between the Kikuyu and the Kalenjin over land. The Likia competition over land was cited by most of the respondents as classical ‘*Witemere*’, a Kikuyu phrase denoting –to hive for yourself-. Residents drawn from different ethnic groups were competing each to hive as much land as possible from the forest and using it for farming and/ or settlement. Later, the occupiers of the settled land would seek to legitimize their ownership by requesting for title deeds from the government. As a result of the competition over the forest land, the Kikuyu clashed with the Kalenjin in what was reported during the interviews as border disputes in Likia extension. The information gathered from the interviews pointed to the inter-group competitions over land that degenerated into violent clashes as narrated by the young Kalenjin respondent:

*‘.....in 2006, this area again experienced clashes. One day when I was going to school in the morning I saw a large group of people ploughing in the extension. I discovered later that it was the Kalenjin who had been ploughing and this angered the Kikuyu who started a fight again....Most people were holding two acres of land each. A few had about 5 acres. Those holding five acres were doing so in groups and they anticipated that once title deeds were issued, they would share the land. Not all people who were farming in Likia extension were from this area. Some came from as far as Nakuru town.....’*

Box 20: Interview extract from a session with a young Kalenjin man in Tach-asiss sub-location in Mauche division

The year 2006 clashes also involved the Ogiek and the Kalenjin. Several deaths were reported as a result of exchange of arrow shots by the two communities. According to an Ogiek respondent, the Kalenjin were the aggressors after having stolen sheep belonging to the Ogiek as narrated by one elderly Ogiek man:

*‘.....A particular case is in 2006 when Ogiek sheep were stolen by thieves from the neighboring Kipsigis (Kalenjin) community. Attempts to solve the issue failed leading to tribal clash between the communities. Scores died and many were injured. The government had to intervene.....’*

Box 21: An extract from interview session at Nessuit in Njoro Division

The Kalenjin key informants on the other hand reported that their relationship with Ogiek had always been good until one witchdoctor started inciting the Ogiek against the Kalenjin. The said witchdoctor used to advise the Ogiek to repossess their land which was being occupied by the Kalenjin. Hence, in an attempt to weed out the witchdoctor they clashed with the Ogiek. They only stopped fighting after they had extirpated the witch doctor as explained by an elderly Kalenjin man:

*‘.....The relationship between Kalenjin and Ogiek has always been cordial; the two are in fact one thing. Many members from Ogiek community usually sell land to the Kipsigis (Kalenjin). There was once a witchdoctor at Ndarugu River who was killed. The Ogiek witchdoctor was inciting the Ogiek to cause chaos and evict the Kalenjin from the Mau.....After his death, we stopped fighting and now co-exist in peace....’*

Box 22: An extract from interview session in Sigotik village of Mauche division

The study findings are somewhat implicit that violent clashes in Eastern Mau reached the apex in the year 2007/2008. The skirmishes which occurred during the electioneering period involved members from Kalenjin and Kikuyu ethnic groups. According to the key informants from both communities, majority of the Kikuyu in Eastern Mau had voted for the presidential candidate from the government’s Party of National Unity (PNU) while the Kalenjin voted for the Orange Democratic Movement (ODM), an opposition party. The Kalenjin had believed that the ODM presidency would help them to access resources as they felt marginalised by the

presidency of the incumbent who was seeking re-election for a second term. However, the PNU candidate was declared the winner of the elections by the Kenya's electoral commission which led to an election dispute with ODM and their supporters refusing to concede defeat. As a result, violence broke out in Eastern Mau just as in other parts of Rift Valley and beyond. During the violence, several people died, while others were injured. The 2007/2008 violence also led to some people being displaced from their homes.

During the field study in February 2014, the researcher observed several houses among farms in Metta village that did not seem to have occupants (Plate 9 and 10)



Plate 9: Some of the rebuilt but un-occupied houses in Metta village

(Photo taken on 15-11-2013)

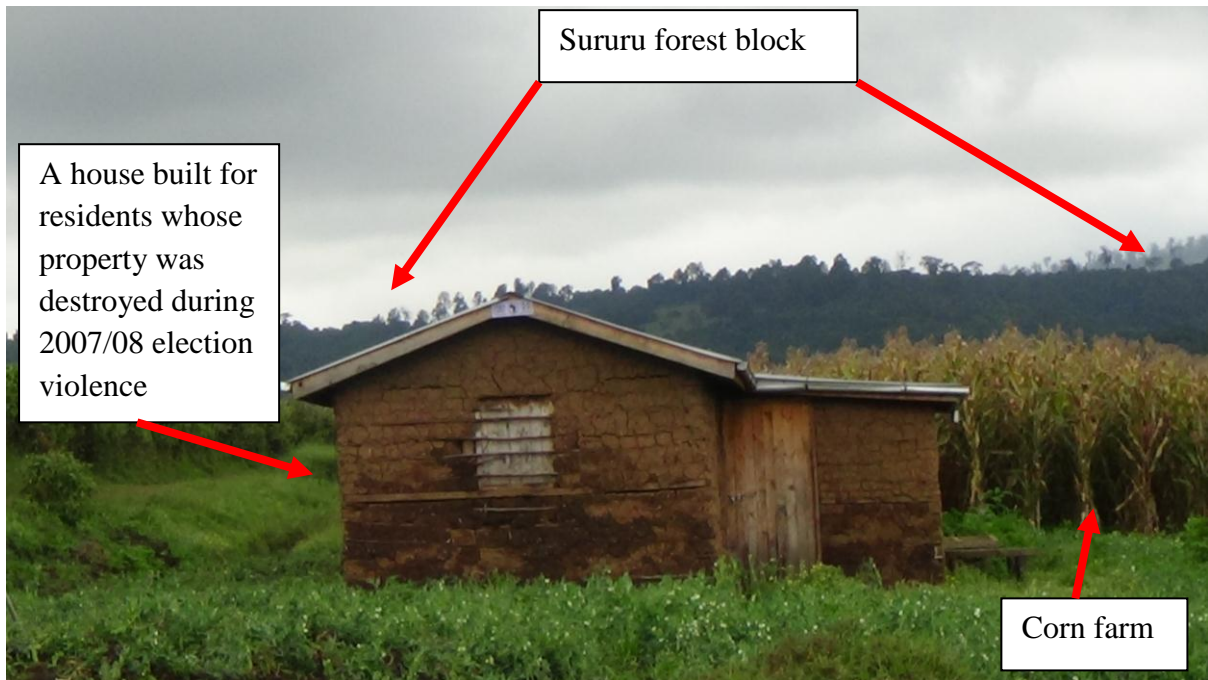


Plate 10: Rebuilt house whose owners refused to occupy in Metta village

(Photo taken on 17-12-2013)

The Kikuyu community respondents later explained that during the 2007 clashes, the Kalenjin burnt down all the Kikuyu houses in Metta village (which neighbours Sururu village that is occupied by the Kalenjin). The Kikuyu sought refuge in the nearest market centre of Mau Narok and lived there ever since until the time of data collection by the researcher. Later on, with the help of the government and Norwegian Aid agency, the houses were rebuilt and although the Kikuyu were encouraged to go back to their farms, none heeded the call. The Kikuyu usually would go working in their farms at Metta village during daylight and go back to Mau Narok Market centre in the evening. Whereas majority of Kikuyu respondents attributed the 2007 skirmishes to the disputed presidential elections by referring to the clash as ‘election violence’, the Kalenjin respondents however indicated that the fighting was a culmination of the deep rooted land injustices with one elderly Kalenjin man stating that:

*‘.....When (president) Kibaki took over (power), problems started being experienced in this area leading to tribal clashes. In 2007, the Kikuyu and the Kalenjin fighting reached its peak.....’*

Box 23: An interview extract from a session in Sururu village in Mau Narok division

During the year 2007, fighting was also between Maasai and Kikuyu. The fight was again reported in the Likia forest extension. However, unlike the Kalenjin versus Kikuyu conflict that occurred during the election period, the Maasai attribute their fighting with Kikuyu to a dispute over access to the forest land with the Kikuyu practicing farming and the Maasai grazing next to Kikuyu farms as reported during an FGD:

*‘.....the Kikuyu again started invading the forest extension in 2007. They started farming in the forest land. Whenever our boys went herding they would steal maize from the Kikuyu farms. One day the Kikuyu killed a Maasai young herder and fighting erupted in 2007.....’*

Box 24: An interview extract during FGD session at Mathangauta on 18-03-2014

**2014-**

In Early 2014, violent clashes erupted in Ngongongeri area of Eastern Mau involving land squatters (from one Ogiek clan and Turkana community), the rich farmers and the police. Ngongongeri village is located in the northern side of the study area. The village is within Nessuit ward which is an Ogiek territory. Within the village lies a 200 ha land known as the officers’ mess. During the entire period of excision of Mau forests, about 200 hectares of land were allocated to senior civil servants in the Moi government in the Ngongongeri area. The piece of land was later to be known as the officer's mess because majority of the land owners were government officers. On one hand, government respondents explained that although the



officers obtained title deeds for land from the government, they did not immediately move to settle in. The surrounding Ogiek community instead moved into the land and settled down. On the other hand, respondents from the Ogiek (from a clan that was involved in the conflict) insisted that the officer's mess in Ngongongeri was their ancestral land which had been grabbed by the rich who were now being protected by the police. The police also were reported to be harassing the land squatters as narrated by a middle aged Ogiek woman:

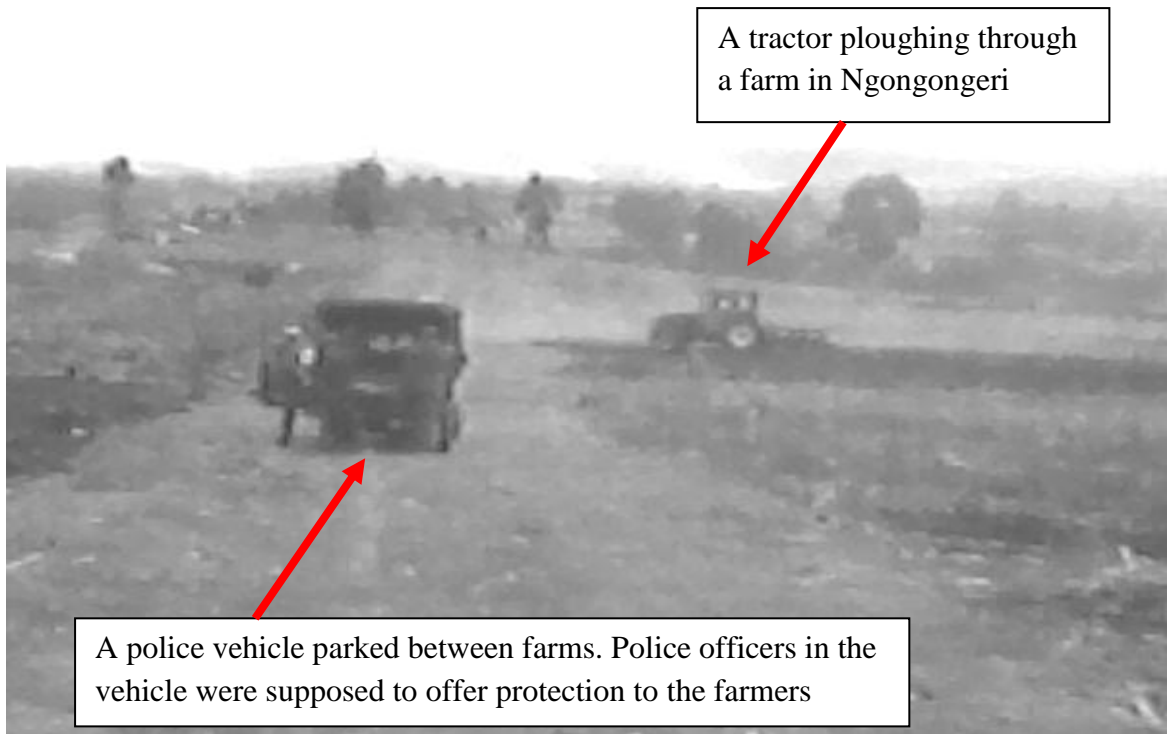
*‘.....My land was forcefully intruded and ploughed with police manning the activity. I was arrested together with my sister.....We were charged with malicious damage and also stealing a tractor. These harassments have been ongoing. After my house was destroyed by the police some of my harvest was stolen.....My sheep was attacked by police dogs and it died due to severe injuries. ....’*

Box 25: An extract from an interview session in Ngongongeri village in Njoro division

On the other hand, one of the rich farmers interviewed by the researcher claimed that the Ogiek were encroaching on land which did not belong to them. The respondent, a middle aged Kalenjin man claimed that they were allocated land by the government and that they possessed title deeds from the government. He further claimed that it was the Ogiek who were the aggressors and that he had sustained injuries inflicted by one of the local encroachers when he went to plough his piece of land in Ngongongeri.

Based on information by the government key informants, other communities such as the Kikuyu, and Turkana also moved in to settle the land which had absentee landlords. In the years that followed, the rich landlords, majority being from the Tugen sub-tribe of Kalenjin started laying claim to the land against resistance from the locals who insisted that Ngongongeri farm was part of their ancestral land and that they could not surrender it to

anyone. The dispute in Ngongongereri persisted and escalated into violent clashes. During the early 2014 conflict, one rich farmer who served in the government of Moi contested ownership of a 50 acre piece of land which was then being occupied mainly by the Turkana community members and sought their eviction. Since he had a title deed to the land which was issued by the government in 1990s, the police forcefully evicted the Turkana and burnt down their houses. During the same period, some farmers were attacked by the local Ogiek members with arrows when they went to cultivate their land. Some of the farmers were critically injured. Thus, for the farmers to cultivate their fields, they had to be given police protection. When the researcher visited the Ngongongereri area of Eastern Mau during a transect walk, one of the farms was being ploughed with a police vehicle packed by the farm margins (Plate 11 & 12). Some of the locals (not shown in the picture) were seen holding bows and arrows, watching at a distance as the farms were being ploughed.



A tractor ploughing through a farm in Ngongongeri

A police vehicle parked between farms. Police officers in the vehicle were supposed to offer protection to the farmers

Plate 11: A farmer using a tractor to plough in Ngongongeri farm under police guard  
(Photo taken on 08-03-2014)



Plate 12: The Kenya police overseeing the ploughing of farms in Ngongongeri area of Eastern Mau

(Photo taken on 08-03-2014)

The study findings have revealed that indications of conflicts in Eastern Mau have been through violent clashes occurring over the years. Based on the analysis of interviews from different parties in the study area, a figure showing conflict timelines is presented below. The figure only indicates the trend (escalation and de-escalation) of conflicts qualitatively as reported by the respondents in interviews and thus should not be interpreted as a graph of quantities.

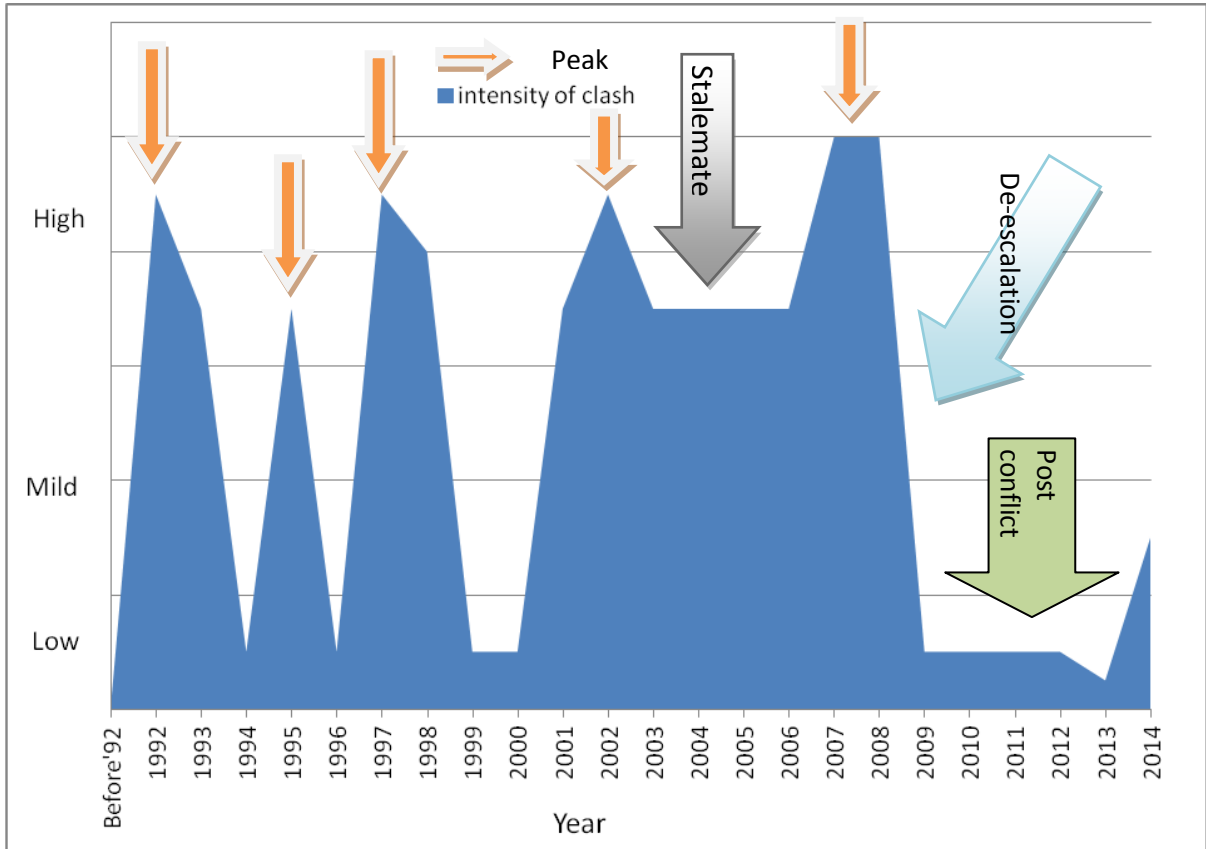


Figure 13: Visualizing the intensity of violent conflicts through time in Eastern Mau

The violent clashes are reported to have started in 1992, the year that Kenya held her first democratic elections under multiparty politics (Figure 13). The years that followed also witnessed violent clashes which usually reached their crest during the general elections (that is in 1997, 2002 and 2007). Between 1992 and 2000, the conflicts seemed to sharply vacillate between escalation and de-escalation. That is, during these periods, violent conflicts erupted in a spontaneous manner and ended fast as indicated by sharply rising and falling peaks. However, between year 2001 and 2007, the conflicts peak in Eastern Mau seemed to be maintained which is shown by the stalemate ‘arrow’ (Figure 13). One of the possible explanations to this scenario is that two periods of elections (that is, 2002 and 2007) were


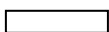

separated by another year of political activity (that is, year 2005 referendum<sup>25</sup>). The year 2007 is considered by the various respondents in Eastern Mau to have had the highest intensity of violent conflicts with many lives being lost, property destroyed and people displaced from their homes. The violent conflicts were triggered by various factors including what residents cited as rumours, national elections, and competition over resources such as pasture, water and land, as well as simple events such as a boy from one tribe losing his wrist watch in another tribe's territory. The study results also revealed that violent clashes in Eastern Mau involved different ethnic groups fighting against each (Figure 14) . However, in early 2014, clashing was witnessed between the rich farmers mainly from the Tugen sub-tribe of Kalenjin community and land squatters (mainly from Turkana and one Ogiek clan) over ownership of land in Ngongongeri area.

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<sup>25</sup> In the year 2005, there was a national referendum to change Kenya's constitution. Those opposed to the new draft cited among other things, the question of land reforms which they claimed had not been adequately addressed in the document. Just like the general elections, referendum campaigns were occasioned by tensions and distrust among different communities in Eastern Mau.

Year/ parties	Kikuyu vs Kalenjin	Kikuyu vs Maasai	Kikuyu vs Ogiek	Kalenjin vs Maasai	Kalenjin vs Ogiek	Maasai vs Ogiek
Before '92						
1992	Violent clash	Violent clash				
1993	Violent clash	Violent clash				
1994	Peaceful year					
1995	Violent clash					
1996	Peaceful year					
1997	Violent clash					
1998	Violent clash					
1999	Peaceful year					
2000	Peaceful year					
2001				Violent clash		
2002	Violent clash			Violent clash		
2003	Violent clash			Violent clash		
2004	Violent clash			Violent clash		
2005	Violent clash			Violent clash		
2006	Violent clash			Violent clash	Violent clash	
2007	Violent clash	Violent clash		Violent clash		
2008	Violent clash			Violent clash		
2009	Peaceful year			Violent clash		
2010	Peaceful year					
2011	Peaceful year					
2012	Peaceful year					
2013	Peaceful year					
2014	Ngongongeri Land clashes involving squatters from Ogiek and other communities vs rich farmers from Kalenjin community					

Figure 14: Visualizing violent inter-group conflicts in Eastern Mau through time

<b>Key:</b>	
	Violent clash
	Peaceful year
	Intractability

The conflict between the Kalenjin and Kikuyu seems to have persisted over an extended period compared to the others (Figure 14). The results also indicate that the conflicts involving the Maasai and Kalenjin seems to have emerged in 2001 and then sustained over a period of about 9 years. A part from one year (that is, 2006) during which the Ogiek fought

with the Kalenjin, the Ogiek seemed to have coexisted without violence with their three neighbouring communities. After the year 2009, the study area seemed to enjoy some relative peace until 2014 when some violence was witnessed because of conflict involving land competition.

### 5.2.2 Latent conflicts as revealed through communication

The results from the study also reveal that apart from the open and active indications of disputes and disagreements through violent inter ethnic clashes, residents of Eastern Mau have also been involved in latent conflicts through communications, especially of spoken words. Through the linguistic analysis of interviews, FGDs as well as the day to day conversations as captured by the researcher, the following section presents types of communication of values by different groups in Eastern Mau. This thesis is not intended to make judgement whether these figures of speech represent reality or not, about the subject matter. It is however assumed that these communication strategies can reveal hidden beliefs, values, perceptions and attitudes that can help to explain relationships between communities in multicultural contexts.

#### *Metaphors*

Different ethnic groups within Eastern Mau sometimes use figures of speech to express different attitudes toward their neighbours. However, it was expected in this study that such figures of speech do not literally mean what they say but are meant to suggest a similarity. The following metaphors together with the contexts within which they were used were derived from different responses.



In reference to people who were perceived to be foreigners in Eastern Mau, the term ‘*Madoa doa*’ was used. *Madoadoa* is a Swahili term meaning speckled or simply spots. The term was used to refer to persons who migrated from their ancestral lands and are now settled among a given community. Such persons are treated as outsiders. An elderly Kikuyu Man stated that:

*‘.....the Kalenjin call us the Kikuyu ‘madoa doa’ since we are scattered everywhere in Mau away from our ancestral land.....’*

Box 26: An extract from interview session at Gatimu village in Mau Narok

Members of the Kikuyu community in Eastern Mau felt that they had not known peace for a long time and hence were always prepared for an eruption of violence any time failure to which one would lose their life. A Kikuyu male teacher explained that:

*‘.....there was a term that was often used here as follows: ‘you either stay like an antelope or lie like an envelope’ because you could be moved any time’.....’*

Box 27: An extract from interview session at Lari primary school in Mau Narok division

However, an account by a Kalenjin middle aged attributed the origin of the phrase to a politician in Narok County. It is therefore possible that the Kikuyu around Likia area in Eastern Mau borrowed the phrase and used it as it seemed to adequately explain how skeptic they were about peace.

There was a perception among the residents of Eastern Mau that when the president is from a certain tribe, then the community also shares in the power of the president to govern the country. The other communities however feel helpless as they believe the ‘ruling’ tribe is

favoured and can access resources at their own will as expressed by one Kalenjin middle aged respondent in reference to competition over access to land in Eastern Mau:

‘.....the Kikuyu started saying that *‘serikali ni yetu’* and they wanted to take over the land.....’ (*serikali ni yetu* is translated as the government is ours)

Box 28: an extract from a transect walk conversation in Tach-asis sub-location in Mauche division

Communities also believed that land in Eastern Mau was given freely by the ruling class to members of their respective ethnic groups. The phrases commonly used to denote free acquisition of land included ‘they were given’, ‘they were brought here’ and ‘they bought land for a song’. For instance, Kikuyu, Maasai and Ogiek respondents always stated in their conversations that the Kalenjin were ‘given’ land by their tribesman Mr Moi, during his reign as the second president of Kenya. The Kalenjin on the other hand, explained that the Kikuyu were ‘brought’ in the Mau by Mr. Kenyatta. The following excerpt from a narration by a Kalenjin middle-aged man shows the perception that the Kikuyu freely acquired land in Eastern Mau:

*‘.....whenever Kenyatta used to come around, there were some Kikuyu women called ‘Nyakinywa’ who used to sing for him. Since the president was pleased with their songs and dancing, he gave them land in this area. That is why we say that the Kikuyu bought land in Mau for a song.....’*

Box 29: An extract from interview session in Teret location in Mauche division

However, the Kikuyu respondents denied the claims and argued that they had bought land in Eastern Mau through land buying companies after pooling together resources.

Results from interviews also revealed a perception by the Kalenjin that the government was marginalizing them from access to land resources by not recognizing their legitimate ownership of land in Eastern Mau. They cited a case when a Kikuyu government minister of land called their title deeds as ‘mere’ papers implying that titles held by the Kalenjin in Eastern Mau were not genuine. An example of the metaphor ‘titles are papers’ was cited in a narration by a female Kalenjin local administrator during a transect drive as follows:

*‘.....our title deeds are papers. In fact the Kalenjin population in a whole division (Mauche) has been earmarked for eviction.....’*

Box 30: An extract from a transect drive conversation in Teret location in Mauche division

#### *Nicknames and stereotyping*

Several nicknames and stereotypes as used by residents of Eastern Mau to refer to their neighbors as well as their meanings were derived from the data and include:

#### **Wazungu (white men)**

The Kalenjin called the Kikuyu ‘wazungu’, which and they explained that they meant the Kikuyu took on the behaviors of the white settlers (wazungu) such as imperialism. The white settlers resided in Eastern Mau before independence. A middle aged Kalenjin man stated that:

*‘.....we say that Kikuyu are ‘Wazungu’. They worked for the Wazungu and now they behave like them.....’*

Box 31: An extract from interview session in Teret location in Mauche division

### **Rumbwa or Lumbwa (dog)**

The Maasai and Kikuyu used the term ‘*rumbwa*’ or ‘*murumbwa*’ which denotes a dog to refer to members of the Kalenjin community. The Maasai explained during an FGD, that they used ‘*rumbwa*’ to refer to the greediness of the Kalenjin. They further explained that the Kalenjin had been involved in many vices of forest poaching and cattle rustling. However, the Kikuyu respondents explained that the term ‘*rumbwa*’ originated from a peace agreement between themselves and the Kalenjin which involved the slaughtering of a dog. During the said peace ceremony, it was agreed that never again should the two communities fight. However, according to the Kikuyu, the Kalenjin negated on their promise and went ahead to start a fight with their neighbors and thus the Kikuyu decided they would call the Kalenjin ‘*Rumbwa*’ after the aborted peace deal involving a dog. The peace agreement as a source of ‘*rumbwa*’ nickname was also presented in a conversation by a middle aged Kalenjin respondent as follows:

*‘.....They nicknamed us ‘murumbwa’ because there was an agreement between us about peace and a dog was slaughtered during the agreement.....so the name means the dog that was used in the peace deal.....’*

Box 32: An extract from interview session in Teret location in Mauche division

Interestingly, there used to be a railway station named Rumbwa in the Rift Valley. The station is now called Kipkelion. This implies that it is possible the term may have had a different meaning originally and that had changed over time. However, the term as used by the residents in the study area was understood in this study to have derogatory connotations.

### **Chemngende**

The Kalenjin respondents reported to be referring to the Kikuyu as ‘Chemngende’ which means ‘beans’ in order to offend them. They further explained that the term could also be used to denote people with brown teeth.

### **Ndorobo or Dorobo**

In Eastern Mau, members of the Ogiek community were commonly referred to as ‘*Ndorobo*’ by the Maasai, Kikuyu and Kalenjin. *Ndorobo* is a derogatory term given to Ogiek by the Maasai community who used to call them ‘*iltorobo*’, meaning small or a fly. The term can also be taken to mean a poor person -for in the past the Maasai considered the Ogiek to be poor because they had no cattle and thus depended on hunting and forest products.

### **Inlasilig, Intodoyok and Ankaro**

*Inlasilig* is a nickname given to the Kalenjin by the Maasai. The Maasai described *Inlasilig* as a type of shrub found in the forest. They further explained that if uprooted and thrown away, the *Inlasilig* plant would still sprout again regardless of the prevailing ecological conditions of soil, moisture and temperatures. The Maasai called the Kalenjin *Inlasilig* because they believed that whenever they were stopped from doing a certain activity such as stock theft, they would still engage in another vice such as forest poaching. Another derogatory term used by the Maasai to refer to the Kalenjin was *Intodoyok* after some insects that usually inhabited swamps or stagnant water. The term denotes the Kalenjin invasion within the Eastern Mau was likened to the *Intodoyok*. The Maasai respondents also reported to have been calling the Kikuyu as ‘*Ankaro*’ a derogatory term that inferred people with muscles and jiggers.

### **Mwizi (thief)**

The Kikuyu reported in the FGD that the Kalenjin usually called them as Wezi (singular-Mwizi) which translates as thieves. They explained that the Kalenjin believed that the Kikuyu stole land in Eastern Mau which was meant to be part of the greater Kalenjin territory.

### **Watu wa Msitu (forest people)**

The Kalenjin were referred to as the forest people by the Kikuyu. The Kalenjin however, interpreted the ‘forest people’ stereotyping as the Kikuyu belief that the land occupied by the Kalenjin was supposed to be part of the forest which was illegally excised. The Kikuyu, on the other hand believed that the people who destroyed the forest through illegally cutting of trees and encroachments were from the Kalenjin community. A similar belief by the Kikuyu about Kalenjin destruction of the forest was also revealed through interviews with the Maasai and the Ogiek. A Kikuyu forest guard reported that:

*‘.....The Ogiek usually support evictions of forest dwellers. They believe that the Kalenjin community is made up of poachers.....’*

Box 323: An extract from transect walk conversation in Longoman forest block

### **Ilmangati**

The Maasai’s *Ilmangati* was meant to collectively refer to all non-Maasai groups residing in Eastern Mau. An FGD by members of the Maasai suggested that *Ilmangati* meant an enemy.

The different names as revealed during the study are summarized below (Figure 16):

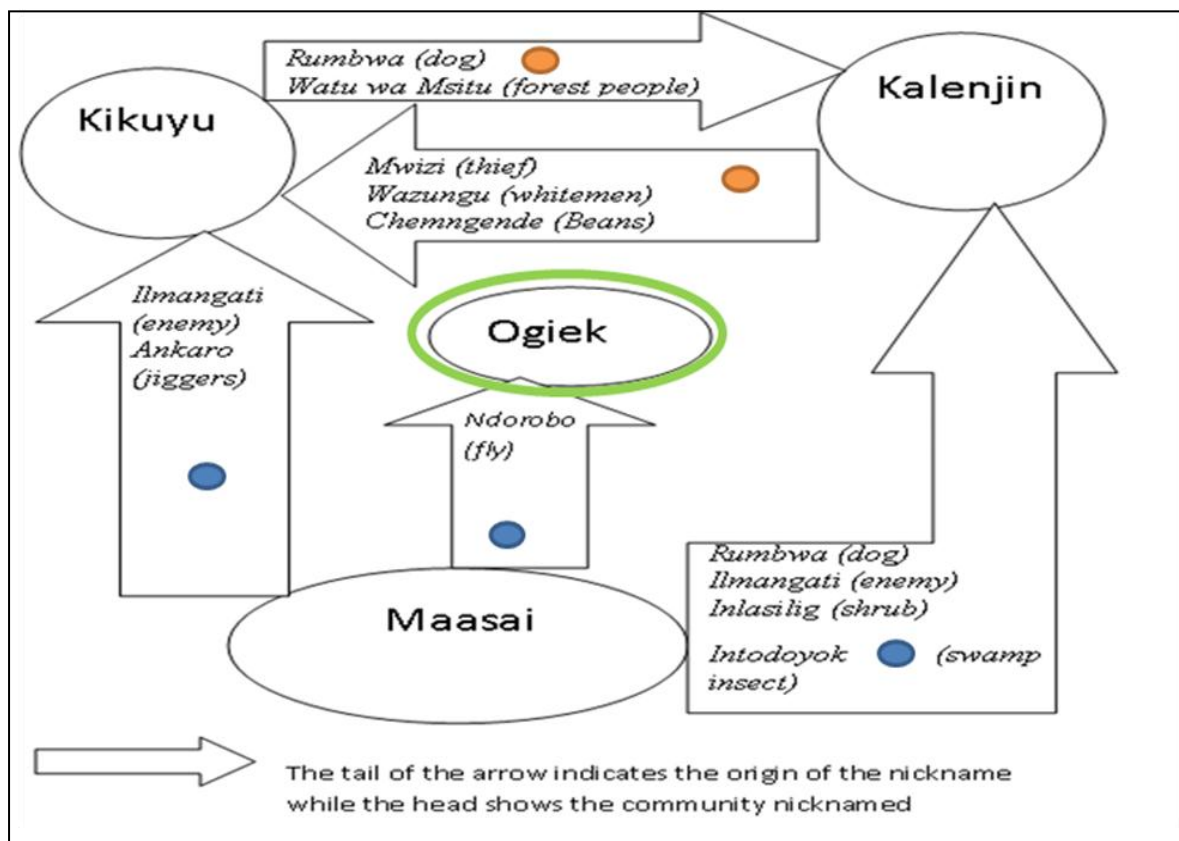


Figure 15: Visualizing nicknames as communicated in the study area

Study results seemed to suggest that the Maasai had originated most names stereotyping other communities. The Ogiek on the other hand seemed not to have originated any nicknames for the other communities in spite of them being derogatively referred to as ‘Ndorobo’ or fly. When conflicts are viewed from the perspective of how parties perceive the ‘other’, the figure reconciles with what was reported earlier on inter-group violent conflicts through time, where compared to the others, the Ogiek seemed to have coexisted well with their neighbours throughout the period of time when Eastern Mau was experiencing violent conflict.

### *Place names*

The study findings seem to indicate that one of the ways through which Eastern Mau residents communicate their belief on various aspects of their lives including identity is through naming

of places they occupy. The following is a highlight of the names of places and their associated ethnic identities.

### **Teret Nyakinywa**

Teret hills are one of the 7 blocks that form Eastern Mau forest complex. Bordering Teret hills was the Teret settlement scheme which was divided into two blocks namely; Teret Nyakinywa and Teret block two. Teret Nyakinywa was occupied mainly by the Kikuyu while Teret block two was a Kalenjin territory. Accounts by the Kalenjin respondents suggested that Teret Nyakinywa was named after the ‘Nyakinywa,’ a Kikuyu women group who used to entertain the first president of independent Kenya. The name was meant to communicate that the area was a Kikuyu territory.

### **Lare**

The Kalenjin and Ogiek key informants explained that Lare settlement scheme whose inception in the 1970s was meant to settle the forest dwellers who were mainly of Ogiek community. However, majority of those who were allocated land were from the Kikuyu community. Thus, the Kalenjin believed that the area was named Lare to enable members of the Kikuyu community who were mainly from a place called Lare in Kiambu (central region) to access the land. One elderly Kalenjin respondent narrated as follows:

*‘..... When people entered Lare forest in 1972 the Kalenjin stayed with the Kikuyu. When the government came to resettle people, only few members of the Kalenjin community benefited. The preconditions for resettlement were so stringent. For example, for one to be resettled, one needed to have a national identification card indicating that they were born in Lare. Since majority of Kikuyu had originated from Lare in Kiambu, central Kenya, they ended up benefiting from the land allocations.....’*

Box 334: An extract from an interview session in Likia location, Mau Narok division



However, one Ogiek elderly man explained that the name Lare was derived from a Maasai-Ogiek word ‘Olare’ which meant salts. He explained that within the settlement scheme, there was a salty swamp where the Maasai used to take their livestock for salt licking. Thus, to the Ogiek, Lare area was meant for settling their community members.

### **Mauche, Tach- Asis and Transmara**

Mauche, a division considered to be Kalenjin territory in Eastern Mau is a hybrid term derived from a combination of two names namely Mau and Chepalungu. Mau which stands for Mau forests has its origin from the Maasai language. Chepalungu is a region in Rift Valley which is mainly inhabited by the Kipsigis sub tribe of Kalenjin community. The Kalenjin respondents explained that majority of inhabitants of Mauche were the Kipsigis from Chepalungu and that they carried with them the name of their place of origin. Other place names include Tach- Asis (a sub-location in Mauche) and Transmara (a village in Mauche). Tach-asis is an area in Uasin Gishu in Rift Valley inhabited mainly by the Nandi sub-tribe of Kalenjin. In Tach Asis of Mauche, most of the respondents reported to be of Nandi sub-tribe. Transmara was reported to be one of the newly created villages on encroached forest land which was occupied by immigrants from Transmara area of Rift Valley.

### **Mwisho wa Lami**

Mwisho wa Lami loosely translated to mean ‘end of tarmac’ is an area within Eastern Mau that is mainly inhabited by the Kikuyu. Mwisho wa Lami sub-location borders the Maasai community on one side. The Kikuyu believe that the Maasai stopped the government from carpeting the road with tarmac from Njoro town into their territory to deter the Kikuyu from accessing and taking over their land. Thus Mwisho wa Lami was meant to mark the end of

tarmac road signifying the boundary of Kikuyu and Maasai territories. One of the Kikuyu respondents during a transect walk explained this as follows:

*‘.....The Maasai were instructed by their politicians to stop the building of the tarmac road which stopped at Mwisho wa Lami. They were told that the tarmac road would make the Kikuyu access to their land.....’*

Box 345: An extract from transect walk conversation in Likia forest extension

### **River Ndarugu and Njoro**

According to the Maasai key informants, river Njoro which originates from the Mau hills and drains into Lake Nakuru, was named by the Maasai who were among the first dwellers of Eastern Mau. Later on, when the Kikuyu settled in Eastern Mau, they renamed the river as Ndarugu to imply that it was draining through a Kikuyu territory. A summary of some of the place names together with the associated communities (Table 10).

Table 11: Place names and associated ethnic communities

SN	Place (or phenomenon) in Eastern Mau	Resident ethnic group	Remarks
1.	Teret Nyakinywa	Kikuyu	Named after Nyakinywa, a Kikuyu women group
2.	Lare	Kikuyu	The name Lare can also be found in central Kenya, Kikuyu ancestral home
3.	Mauche	Kalenjin	Merger of Mau and Chepalungu. Chepalungu is a constituency in Rift Valley predominately inhabited by the Kipsigis sub-tribe of Kalenjin
4.	Tach- Asis	Kalenjin (Mainly Nandi sub-tribe)	There is a place called Tach-asis in Uasin Gishu county inhabited mainly by the Nandi
5.	Transmara	Kipsigis	There is Transmara county in Rift Valley occupied by the Kipsigis
6.	Mwisho wa Lami	Kikuyu	Translated as ‘end of tarmac’, Mwisho wa Lami marks the end of Kikuyu Territory. The Maasai side bordering Mwisho wa Lami is without tarmac.
7.	River	Mixed	The same river is referred to as Ndarugu (a Kikuyu

SN	Place (or phenomenon) in Eastern Mau	Resident ethnic group	Remarks
	Ndarugu/Njoro	ethnicity	name) and Njoro (a Maasai name)

### **5.3 Role of Attitudes in Resource Access Conflicts; a Case of Sururu Forests of Eastern Mau**

A questionnaire was administered to 60 respondents via face-to-face interviews to the residents of Eastern Mau living adjacent to Sururu forest block. The aim of the questionnaire was to complement the qualitative data generated in the research in order to understand both the various perceptions and attitudes on resource access and conflict and also gauge how widely shared these perceptions were. The specific statements used in the questionnaire were derived from discussions during a public meeting convened by the forest officer that the researcher attended during pilot study in the field. The statements related to belief in ethnicity and group behavior. During the analysis, no significant differences in responses were observed across age and gender groups. However, the differences in responses were observed across different ethnic groups. The results are presented in the following section.

#### *Distribution of respondents*

Out of the total number of respondents, 43 were male while 17 were female. In terms of ethnic affiliation, the number of Kikuyu residents was 43 while Kalenjin accounted for 17. Four respondents were from different ethnic groups other than Kikuyu and Kalenjin (The area is predominantly Kikuyu and to a smaller extent Kalenjin). The area was selected since it borders the forest and had witnessed recurrent violence in the past. The respondents were drawn from different age groups (Table 11).

Table 12: Age profile of respondents during the household survey

Age	Frequency	Percent
15 - 29 years	2	3.3
30 - 44 years	22	36.7
45 - 59 years	22	36.7
60+ years	14	23.3
Total	60	100.0

*Frequency of responses*

**Question 1: Which community has the first primary access to the forest?**

When asked about their perception about which community had primary access to the forest, majority of the respondents indicated that the Maasai had primary access to the forest (Figure 17). Out of the Kikuyu responses, 39% believed the Maasai had primary access to the forest, while 36% of Kikuyu believed that all communities in Mau had equal access to the forest. However, 35% of Kalenjin respondents believed that the Maasai had primary access to the forest while 24% of Kalenjin believed that the Kikuyu had primary access to the forest.

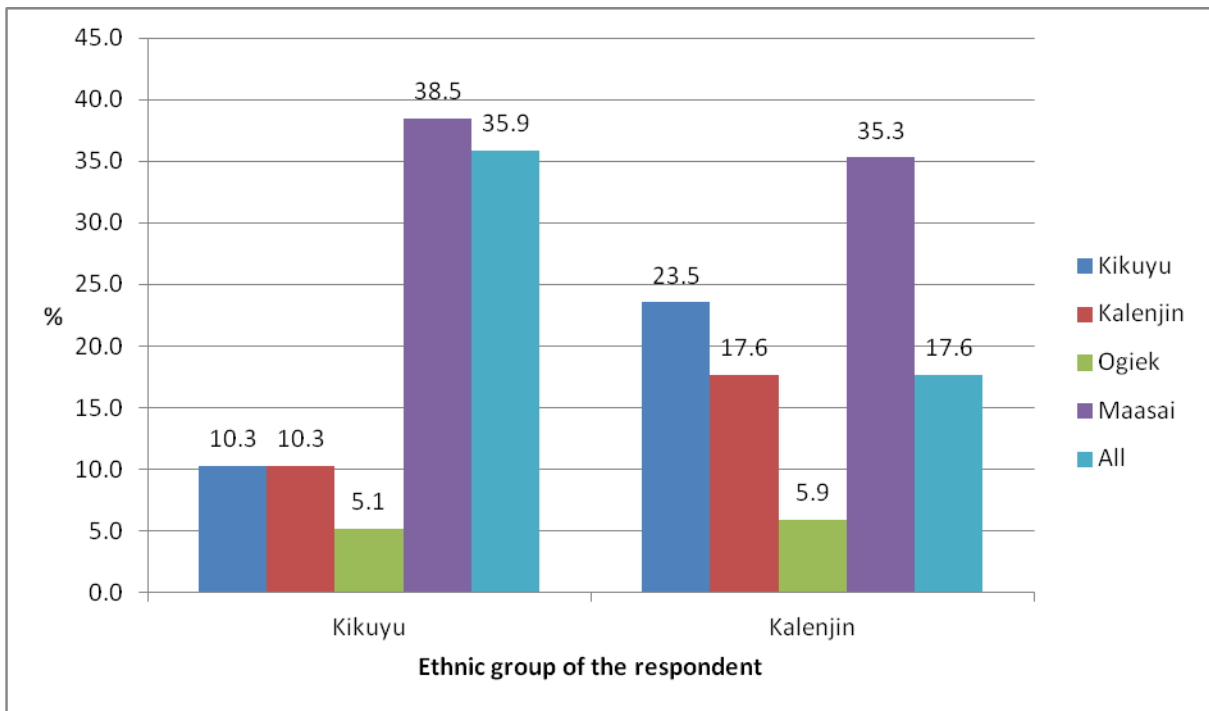


Figure 16: Percentages of responses on belief on community with primary access to the forest

**Question 1: Which community benefits the most from the forest?**

Concerning the perception on the community that benefits the most from the forest resources, 41% of Kikuyu and 35% of Kalenjin respondents responded that the Maasai were the most advantaged. However, 26% of the Kikuyu and 25 % of Kalenjin believed that all communities benefited equally from the forest resources (Figure 18):

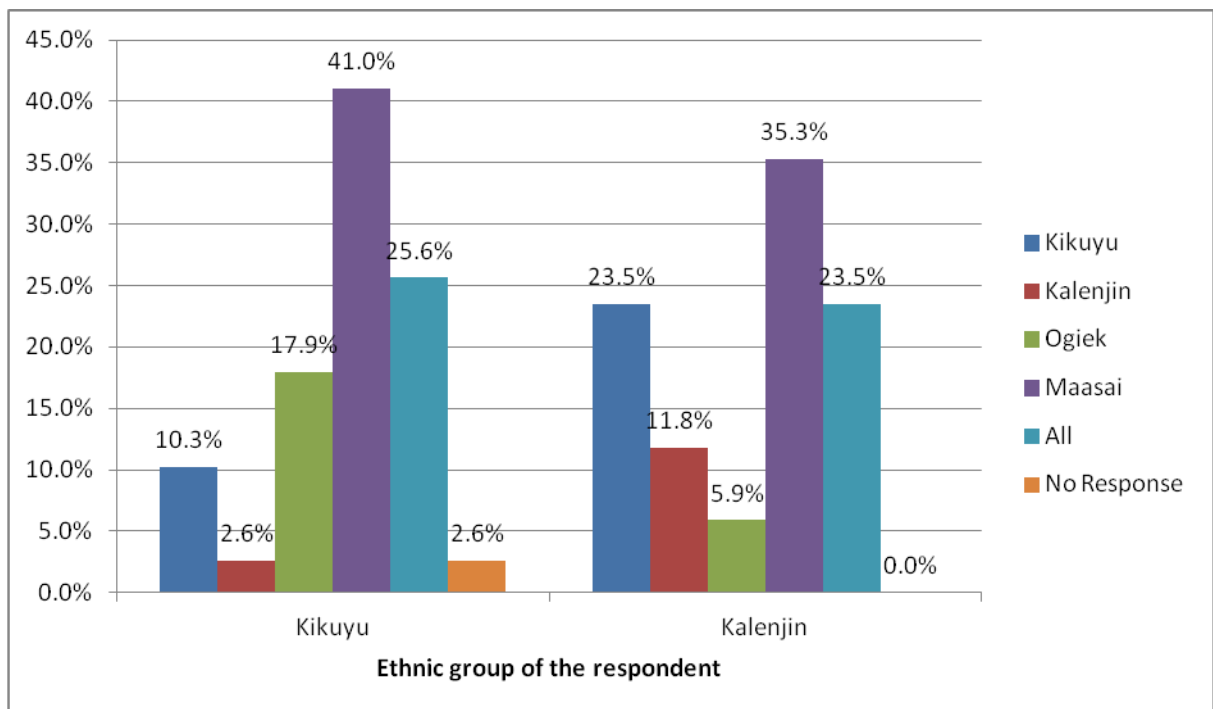


Figure 17: Perception of the community that benefits the most from forest resources

**Question 2: ‘I feel more secure with members of my own ethnicity’**

The results on ethnic identity indicate that the Kalenjin had a strong feeling of belonging to their ethnic group with 77% of the respondents strongly agreeing to the statement posed to them (Figure 19). The rest 24% were moderately in agreement with the statement ‘I feel more secure with members of my community’. The Kikuyu also had a strong feeling of security within their ethnic group with 41% strongly agreeing and 33% moderately agreeing to the

statement on ethnic cohesiveness. However, about 25% of the Kikuyu respondents disagreed with the statement that they felt secure within their ethnic groups.

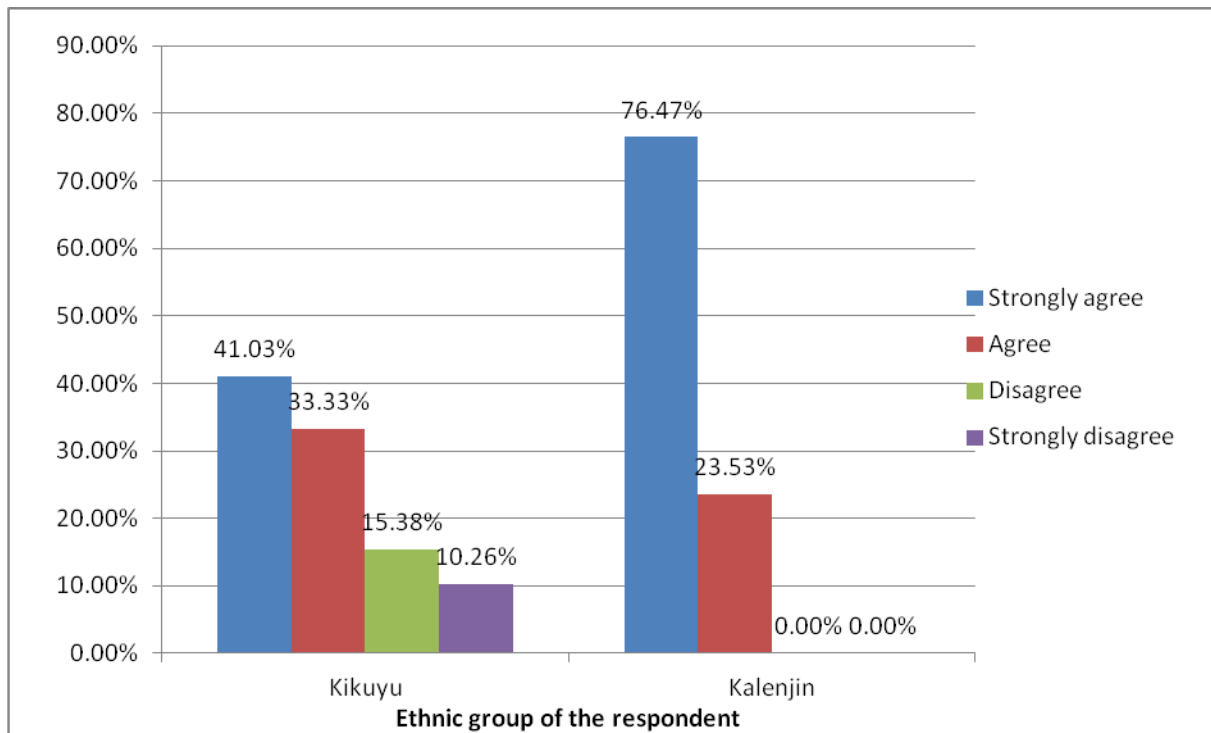


Figure 18: Percentages of responses on feeling of ethnic identity

**Question 3: ‘If members of my community are unfairly denied access to the forest, I will team up with them in search for justice’**

When the respondents were asked whether they could use force to ensure that they were not marginalized from accessing the forest resources, majority of respondents (Figure 20) from the two communities reported that they could not fight back to ensure that they accessed the forest resources. However, some of the respondents (28% of the Kikuyu and 35% of Kalenjin) reported that they were likely to use force against anyone who excluded them from accessing the forest resources.

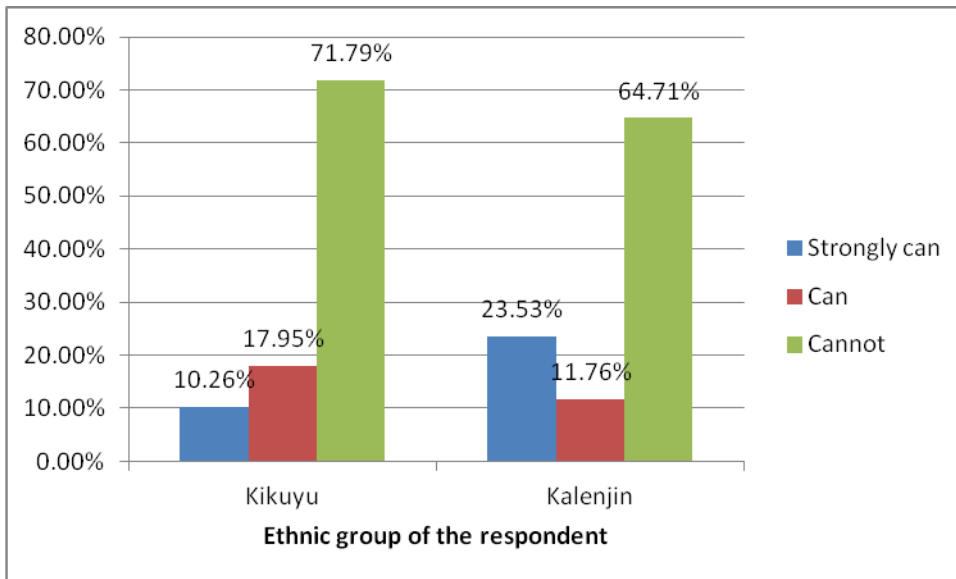


Figure 19: Percentage of responses on confronting another community over forest access

**Question 4: ‘My community has been marginalized in terms of access to the forest resources by the government’**

Concerning feeling of marginalization by the government in terms of access to resources, the two communities did not feel alienated. Majority of Kikuyu respondents at 69% and Kalenjin at 65% strongly disagreed with the statement on ethnic marginalization by the government (Figure 21).

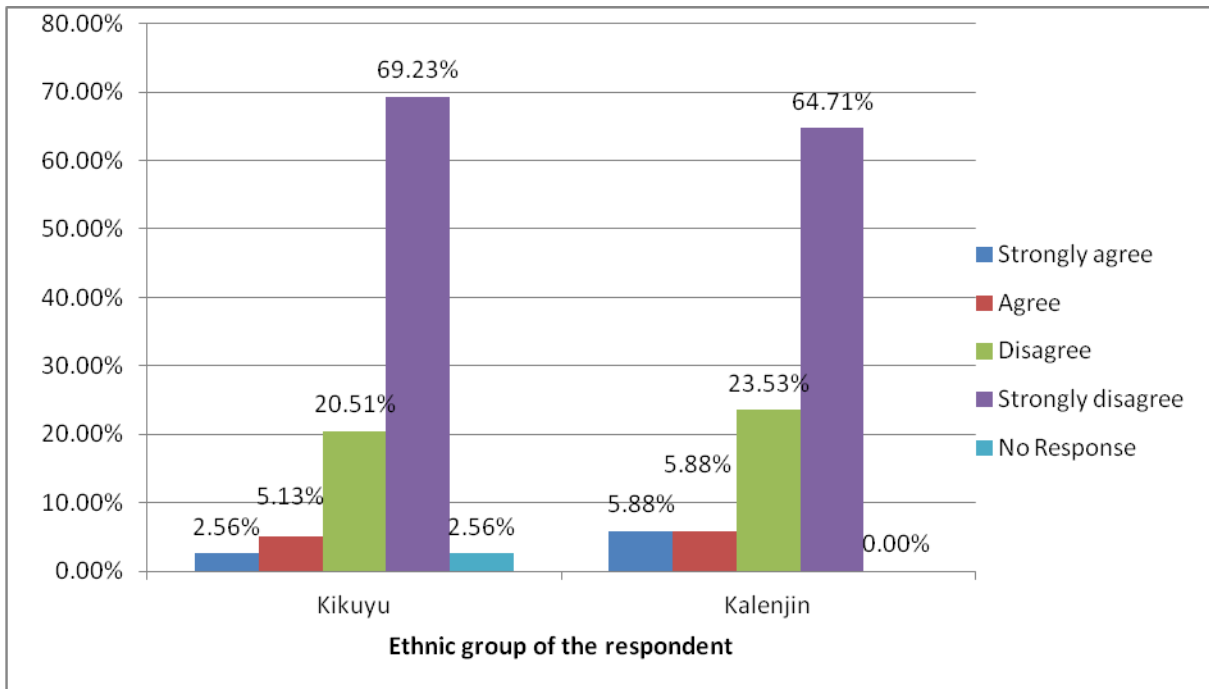


Figure 20: Percentage of responses on feeling of marginalization

### 5.3.1 Test of relationships between variables

The study sought to establish if any significant relationships existed in the responses that were given by residents sampled. Therefore, a correlation analysis was performed among all the variables under investigation with the results presented in the table below (detailed correlations are shown in appendix G):

Table 13: Kendall's tau-b coefficients of relationships between variables (N=60)

	<i>Belief in group fighting over resource access</i>	<i>Feeling of ethnic identity</i>	<i>Feeling of community marginalization</i>	<i>Perception of bias KFS appointments</i>	<i>Belief in seeking justice as a group</i>	<i>Belief in equality in access to resources</i>
<i>Belief in group fighting over resource access</i>		<b>.233*</b>	0.06	0.132	0.111	0.121
		<b>0.048</b>	0.622	0.273	0.341	0.308
<i>Feeling of ethnic identity</i>	<b>.233*</b>		0.189	0.226	-0.02	-0.059
	<b>0.048</b>		0.107	0.053	0.859	0.605



	<i>Belief in group fighting over resource access</i>	<i>Feeling of ethnic identity</i>	<i>Feeling of community marginalization</i>	<i>Perception of bias KFS appointments</i>	<i>Belief in seeking justice as a group</i>	<i>Belief in equality in access to resources</i>
<i>Feeling of community marginalization</i>	0.06	0.189		<b>.378**</b>	0.191	-0.05
	0.622	0.107		<b>0.002</b>	0.099	0.67
<i>Perception of bias KFS appointments</i>	0.132	0.226	<b>.378**</b>		0.156	0.175
	0.273	0.053	<b>0.002</b>		0.176	0.138
<i>Belief in seeking justice as a group</i>	0.111	-0.02	0.191	0.156		<b>.396**</b>
	0.341	0.859	0.099	0.176		<b>0.000</b>
<i>Belief in equality in access to resources</i>	0.121	-0.059	-0.05	0.175	<b>.396**</b>	
	0.308	0.605	0.67	0.138	<b>0.000</b>	

\*\*Correlation is significant at the 0.01 level (2-tailed)

\*Correlation is significant at the 0.05 level (2-tailed)

A test of relationships between variables in the table above indicate that there is a positive significant relationship between ethnic identity and belief in group fighting to have access to resources ( $r=0.233$ ,  $P=0.048$  at 95% confidence level). The results therefore suggest that residents who have a strong ethnic identity are likely to engage in fighting with members of an out-group especially if they feel that the out-group are acting to exclude them from accessing forest resources. However, the relationship is weak, that is the correlation coefficient value ( $r=0.233$ ,  $p<0.05$  and  $df=57$ ) is less than the critical (statistical tables) value of 0.2500 ( $p<0.05$ ,  $df=60$ ). It follows that whereas ethnic identity plays a role in resource conflicts, only about 23% of resource access conflicts in Sururu area of Eastern Mau could be statistically be explained by attitudes.

The second significant relationship from the analysis, is between feeling of community marginalization and feeling of marginalization in Kenya Forestry (KFS) appointments

( $r=0.378$ ,  $p=0.002$  at 90% confidence level). The analysis indicate a strong relationship that is the correlation coefficient value ( $r=0.378$ ,  $p<0.05$  and  $df=57$ ) is more than the critical (statistical tables) value of 0.3248 ( $p<0.05$ ,  $df=60$ ). The results thus indicate that the respondents who expressed a perception that their community had been marginalized in forest resources access also expressed to a large extent a feeling that appointments at the KFS were skewed towards certain communities.

The third significant relationship from the table is between belief in seeking justice as a group and belief in equality in access to resources ( $r=0.396$ ,  $p=0.000$ , at 90% confidence level). The results shows a strong relationship with a computed value ( $r=0.396$ ,  $p<0.05$  and  $df=57$ ) being more than the critical (statistical tables) value of 0.3248 ( $p<0.05$ ,  $df=60$ ). The finding thus indicate that residents who believe that all communities should be given equal opportunity are likely to team up and agitate for justice when they perceive that they have been marginalized from resources access.

The study results from correlation tables can be used to explain violent conflicts within a multi-ethnic and shared resource setting in which access is mediated by ethnic identity. In the above case, residents living adjacent to Sururu forests (that is, the Kikuyu and the Kalenjin) showed that a community with strong ethnic ties was likely to act together in defending their perceived rights or in seeking justice in as far as resources access was concerned.

#### **5.4 Conclusion**

The results from qualitative data revealed that conflicts in Eastern Mau had both violent and latent indications. Results also indicate that the patterns of violent conflicts varied in space

and time. However, in terms of the parties involved, an ethnic pattern emerged in the various violent clashes across the study area. The conflicts had escalated and de-escalated over time depending on occurrences of such events as national elections and resource competitions. Apart from the violent manifestations, communication strategies by different parties seemed to point to latent conflicts. Communication of values through use of nicknames and metaphors portray perceptions and feelings that different groups of people had towards their neighbours. Such feelings which could have been derived from past experiences of people with their neighbours were an indicator of conflicts which had not escalated to the levels of violence. The figures of speech reported here represent perceptions which may be shared by a few or many members of the community. The study was not intended to confirm or deny them as a representation of reality about the subject matter. However, the study showed that these communication strategies revealed group differences in the study area.

The results from the household survey carried out in one of the forest blocks in Eastern Mau showed that there existed a significant relationship between ethnicity, attitude and resource conflicts. However, the relationship was weak implying that it was insufficient to conclude that ethnicity and attitudes were the only causes of conflicts in Eastern Mau. The findings also raise the important question of the effectiveness of household surveys with structured questions as the only measure of complex human phenomena such as conflicts.

## **CHAPTER 6: SPATIAL FACTORS OF FOREST RELATED CONFLICTS**

### **6.1 Introduction**

Spatial analysis is of great value in understanding dynamics of complex phenomena like natural resources conflict and land cover change associated with anthropogenic activities. Incorporation of temporal aspects adds an important dimension of cumulative activities over the years such as increase in farming area, forest clearing or expansion of settlement areas. Geographical information systems (GIS) and remote sensing (RS) technologies are useful and have been used in the recent past to understand dynamics in natural resource conflict (Per Sandström, *et al.*, 2003; Robbins, 2003; Kyem, 2004; Ramsey, 2009; Cronkleton, *et al.*, 2010). GIS and RS can help in isolating parts of reality and facilitate an investigation in conflict studies such as identifying patterns over time, resources use and potential conflict zones. Such an approach is a system analysis according Chorley & Kennedy (1971).

The isolation of parts of the conflict and the visual presentation of those parts in maps is an important step in understanding the spatial dimension of conflict. The visual information generated could then be used by policy makers and planners to understand the areas of conflict and the spatial relations of those areas. Visualization of conflicts through maps in this study was a further step in conflict mapping exercise and it was understood as the systematic collection of information about the dynamics of a conflict and construction of a physical map to represent those dynamics. The resulting map helps us to understand the complexity of reality by decomposing some aspects of that reality in spatial references. However, the maps generated in this study do not represent the whole complexity of conflicts, which are formed by many different factors and dimensions, but are meant only to extract their spatial

dimensions. The following sections present a visualization of natural resource changes and conflict dynamics in Eastern Mau.

## 6.2 Land cover/use change in Eastern Mau

Study findings suggest that land cover changes provide a good proxy of human activities which can be associated with conflict pattern in the Eastern Mau. The results from satellite image analysis indicated significant changes in land cover between 1976 and 2014<sup>26</sup>. Significant land cover changes were observed in cultivated fields and forested lands. The greatest changes were recorded in cultivated fields which increased from 30,716ha (accounting for 25% of the study area in 1976) to 81,167ha (accounting for 65% of the study area in 2014), an increase of 50,451 ha or 40% of the study area (Figure 22). On the other hand, forests area (both indigenous forest and plantations) decreased from 54,535ha (that accounted for 43 % of the study area in 1976) to 31,123ha (accounting for 25% of the study area). This represents a decline of 23,413 ha (accounting for 18 % of the study area).

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<sup>26</sup> The period between 1976 and 2014 was used for general analysis of land cover changes. Justification for choice of satellite images of different years within this period has been given under Table 7 in section 3.6.3 of this thesis

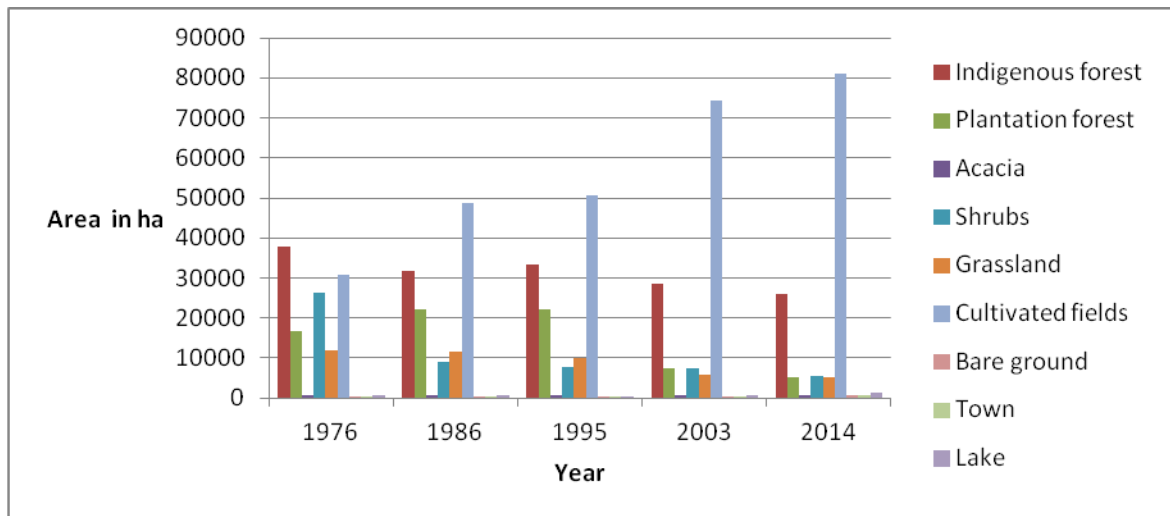


Figure 212: Land cover/use changes between 1976 and 2014

While overall, the forest cover shows a decline between 1976 and 2014, a different pattern is observed between types of forest across different decades. For example, the indigenous forest showed a gradual decline relative to the plantation area throughout the four decades (Fig 23).

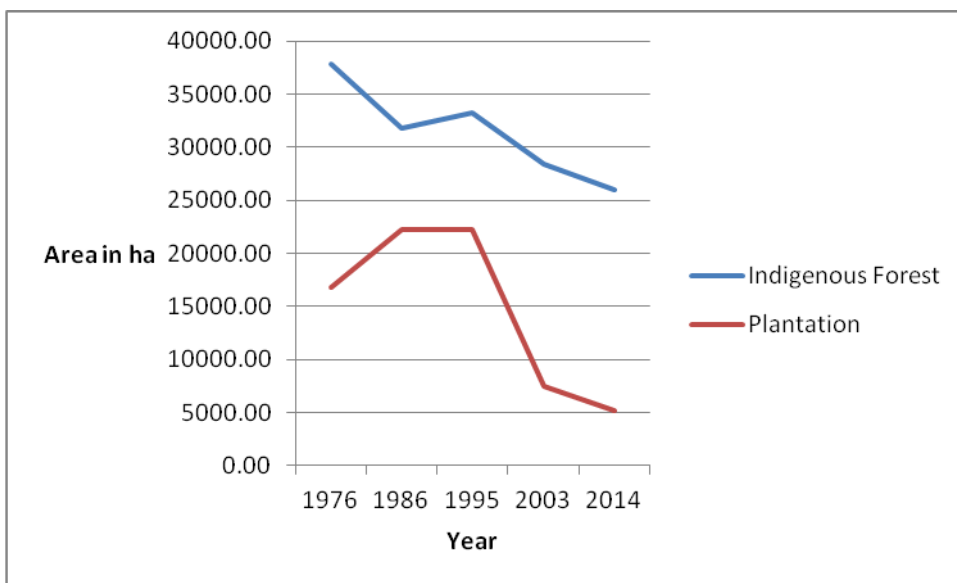


Figure 223: Forest cover change from 1976 to 2014

Initially while the indigenous forest declined in 1970s mostly cleared to provide space for plantation establishment, the 1980s showed a slight increase up to 1995. The increase in

indigenous forest cover during this period was mainly through regeneration of former settled areas following the abolition of forest villages by the government of Kenya in the early 1980s. These changes in land cover and shift in land use points to the increased human activity over time that extended into formerly forested ecosystem. This is clearly illustrated by the high expansion of cultivated areas associated with anthropogenic activities.

The period after 1995 showed sharp decline in both forest cover, which could be associated with increased anthropogenic activities in forest area. This period coincides with introduction of multi-party political system and planned movement of people into Mau area to create more votes. Multi-party politics were introduced in 1992 after prolonged agitation by politicians and the civil society. The decline in forest coverage can be attributed to the government initiated forest excisions which peaked in 2001. Increased decline continued up to the year 2014 although after the year 2003, there was reduced rate of decline. The reduced decline after 2003 can be attributed to new government following the 2002 election, with the reported decline being clearing of already settled forested area. A spatial analysis of the overall changes in land cover over the four (4) decade period reveals that the areas which experienced greatest loss of natural vegetation and plantation forests include the north western region in places such as Mariashoni location in Elburgon division and the northern parts such as in Nessuit Location of Njoro division (Figure 24). Others include eastern part of the study area in places like Lare location of Lare division and Teret location of Mauche division and the south eastern region in Likia location of Mau Narok division. Apart from experiencing degradation, these areas have also experienced inter-ethnic clashes over time as will be discussed later in this chapter.

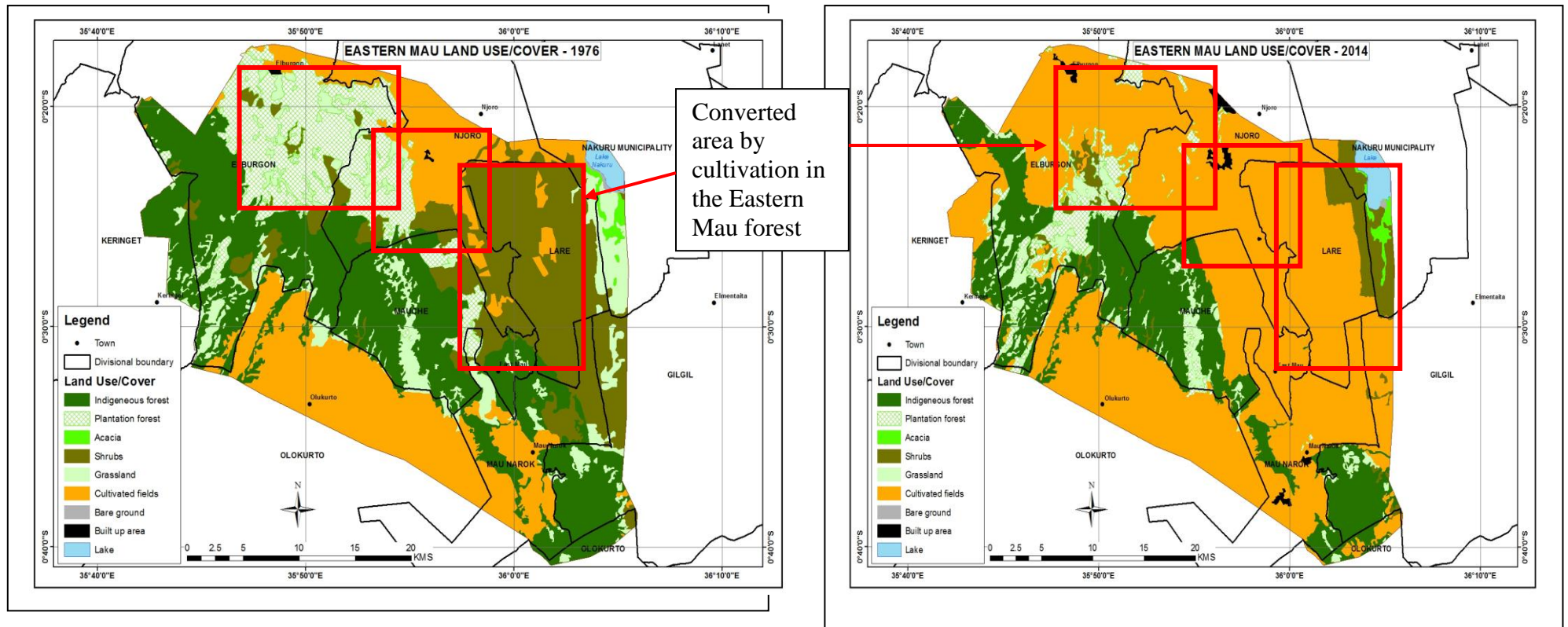


Figure 24: Land cover/use change in Eastern Mau between 1976 and 2014



## Intra decade Change detection and land cover dynamics

### 1976-1986 Period

The most prominent cover change over this period was noted in the increased area under cultivated fields and decrease in the area under shrubs, from 30719.16ha to 48857.76ha (Figure 25). Using the 1976 image as the base, the rate of conversion from shrubs into other land uses translated to 1813.86ha per year.

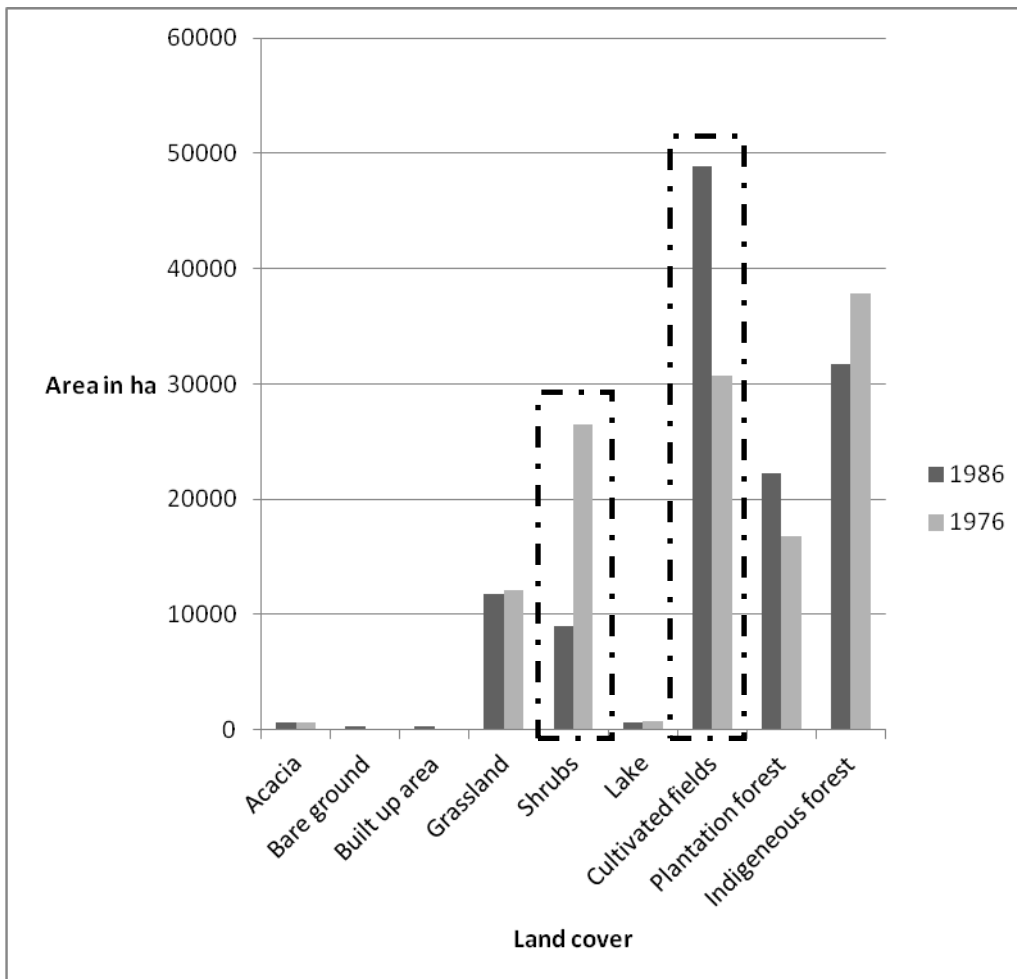


Figure 235: land cover dynamics between 1976 and 1986

Land use change analysis between 1976 and 1986 showed that shrubs contributed about 17,955 ha to conversions (mainly into cultivated fields) followed by grassland 847.08ha, with indigenous forest contributing only about 151 ha (Table 14).

Table 14: Land use change matrix 1976 and 1986 (60 meter pixel) in ha

Yr	1986										
	Land Cover Class	Acacia	Bare ground	Built up area	Grass	Shrubs	Lake	Cultivated fields	Plantation forest	Indigenous forest	Total (Ha)
1976	Acacia	<b>588.96</b>	0	0	0	2.16	0	0	0	0	591.12
	Bare ground	0	<b>109.08</b>	0	0	1.8	0	0	0	0	110.88
	Built up area	0	0	<b>108.36</b>	0	0	0	0	0	0	108.36
	Grassland	33.48	37.08	0	<b>7173.72</b>	2690.64	0	<b>847.08</b>	1113.84	169.56	12065.4
	Shrubs	6.12	8.28	10.08	832.68	<b>3580.92</b>	0	<b>17955</b>	3276	786.96	26456.04
	Lake	0	118.44	0	0	0	<b>677.16</b>	0	0	0	795.6
	Cultivated fields	0	0	164.52	84.6	304.2	0	<b>29853</b>	312.84	0	30719.16
	Plantation forest	0	0	6.48	2490.84	516.96	0	50.76	<b>13589.64</b>	83.16	16737.84
	Indigenous forest	0	0	0	1136.52	1888.2	0	<b>151.92</b>	3904.92	<b>30717.72</b>	37799.28
	<b>Total (Ha)</b>	628.56	272.88	289.44	11718.36	8984.88	677.16	48857.76	22197.24	31757.4	<b>125384</b>

Also noted was a reduction in indigenous forest coverage zone from 37799 to 31757 and increase of plantation from 16737 to 22197. This was at the expense of indigenous forest that contributed 3904 ha and grassland 1113 ha (Table 14). This trend points to some deliberate efforts to increase tree cover through *Cypressus lusitanica* and *Pinus patula* forests during the 1976 and 1986 under plantation establishment. As noted before, the period between 1976 and 1986 witnessed a heavy loss of area under shrubs in Eastern Mau. Shrubs are often at low altitudes and are easy to access. Most of these changes had occurred around Lare area which is between Lake Nakuru and the western side of the forest (Figure 26). Lare, owing to its proximity to Nakuru town may have attracted settlements faster than other regions that were adjacent to the forest reserve. No major incidences of ethnic conflict are recorded to have occurred during this period as it marked the beginning of settlements by immigrants mainly from central part of Kenya.

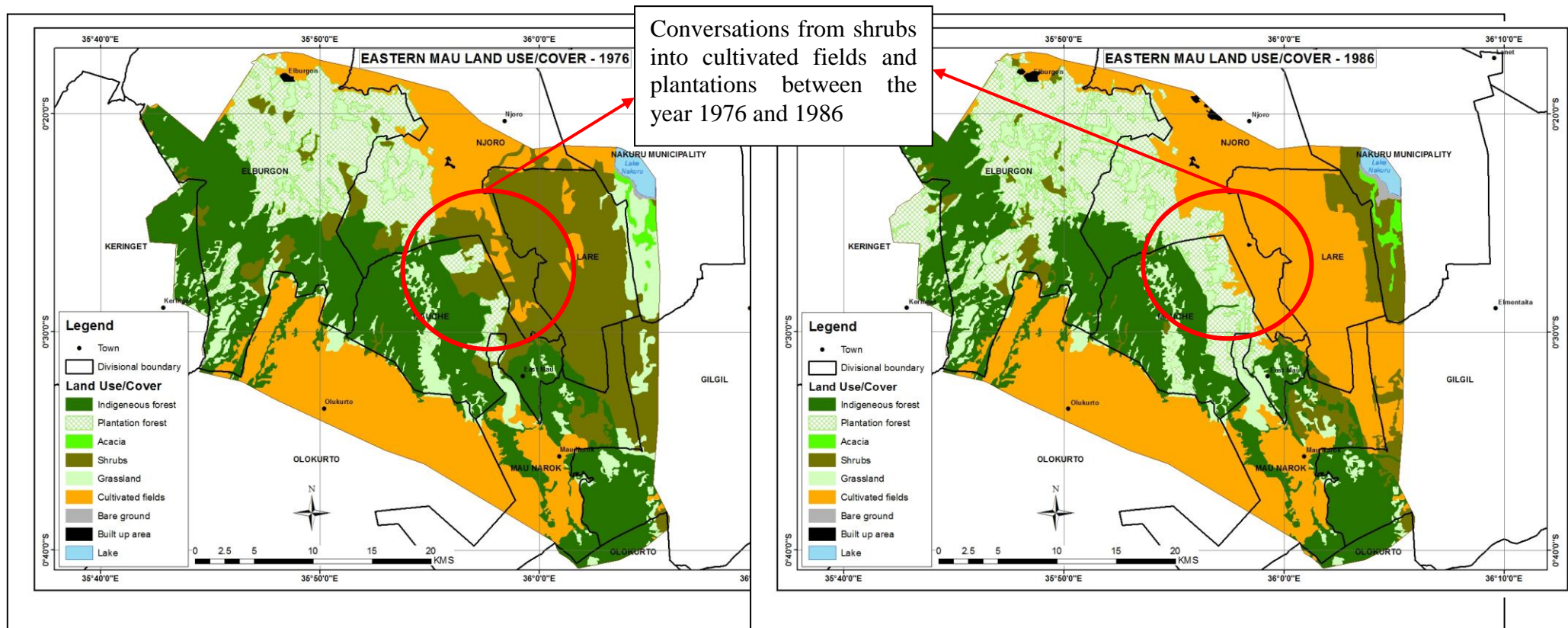


Figure 24: Land cover/use change in Eastern Mau between 1976 and 1986

### 1986 and 1995 Period

Compared with the previous period, minimal land cover changes were observed between the year 1985 and 1995. However, significant changes were recorded in the grassland, cultivated fields, indigenous forests and shrubs cover. Both the grassland and shrubs showed a decreasing trend while the indigenous forest and cultivated fields indicated an increase in coverage which had accumulated from the previous period (Figure 27).

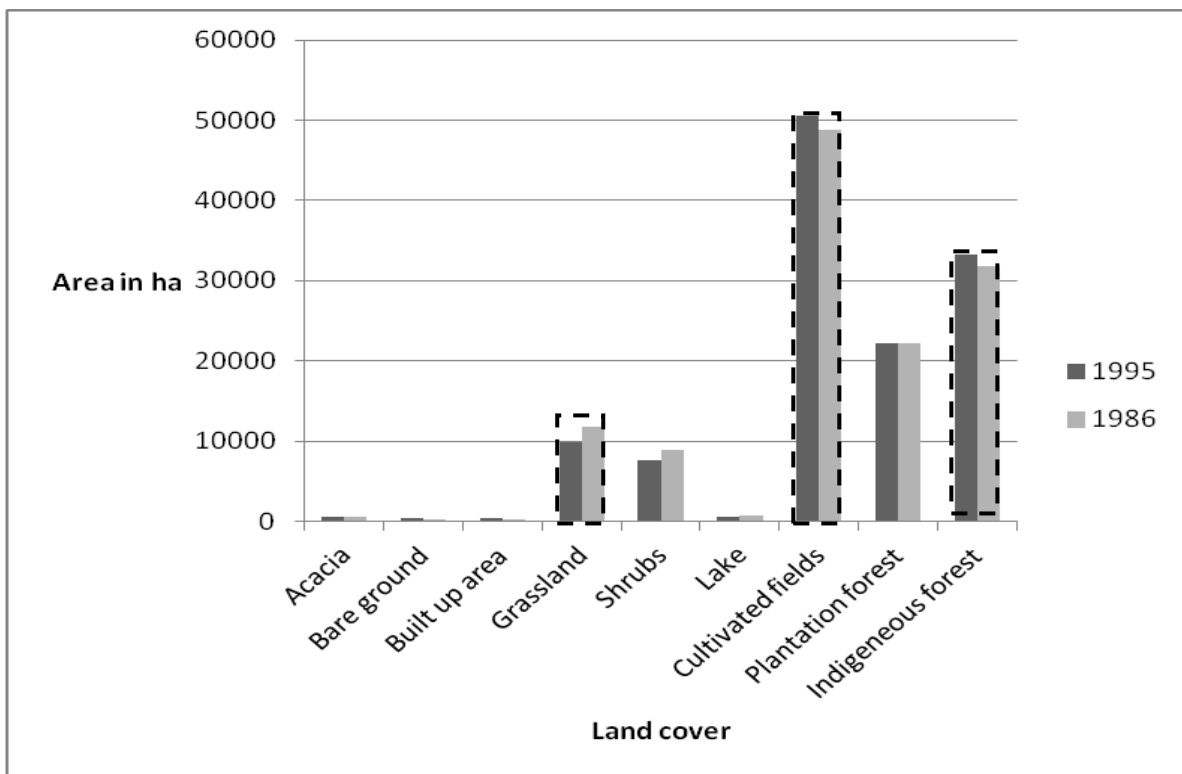


Figure 25: Land cover dynamics between 1986 and 1995

This finding suggests a mixed trend of both conversion of some parts of Eastern Mau and regeneration of other parts of the forest ecosystem during the 1986-1995 period but overall changes in forest cover was minimal over this period. From the comparison of the 1986 and 1995 imagery, and using 1986 as the base year, there was a small increase in the area under cultivation from 48857.76 ha to 50492.16 ha (Table 15). This was mainly due to conversion from grassland (1139.4 ha) and plantation forest (648.36 ha).

Table 15: Land use change matrix 1986 and 1995 (60 meter pixel) in ha

Yr	1995										
	Land Cover Class	Acacia	Bare ground	Built up area	Grass	Shrubs	Lake	Cultivated fields	Plantation forest	Indigenous forest	Total (Ha)
1986	Acacia	628.56	0	0	0	0	0	0	0	0	628.56
	Bare ground	0	272.88	0	0	0	0	0	0	0	272.88
	Built up area	0	0	276.12	0	12.96	0	0	0.36	0	289.44
	Grassland	0	0	1.08	7407.36	236.52	0	1139.4	2261.16	672.84	11718.36
	Shrubs	2.16	0	36.72	237.6	6800.76	0	175.32	663.12	1069.2	8984.88
	Lake	0	138.24	0	0	0	538.92	0	0	0	677.16
	Cultivated fields	0	0	63	139.32	73.08	0	48371.4	199.44	11.52	48857.76
	Plantation forest	0	0	0.72	2062.08	473.04	0	648.36	18905.4	107.64	22197.24
	Indigenous forest	0	0	0	36	26.28	0	157.68	101.88	31435.56	31757.4
	<b>Total (Ha)</b>	630.72	411.12	377.64	9882.36	7622.64	538.92	50492.16	22131.36	33296.76	125384

Similarly, there was an increase in the area covered by indigenous forest at the expense of shrubs (1069.2 ha) and grassland (672.84 ha) (Table 15). This trend can be explained by natural regeneration of indigenous tree species in uncultivated lands within the study area after the removal of workers from the forest and clearing of villages in areas around Likia and Mau Narok (Figure 28). The government forest management regulation changed from residential forest establishment under *shamba* system (farm system) to non-residential cultivation (NRC) under *Shamba system*. The plantation area remained almost the same due to reduced forest establishment activities. Towards the end of the 1986-1995 period, the first major inter-ethnic clashes occurred around Lare division. This event can be attributed to the 1976-1986 settlement activities that had started in the eastern part of the study area, previously occupied by shrub land.

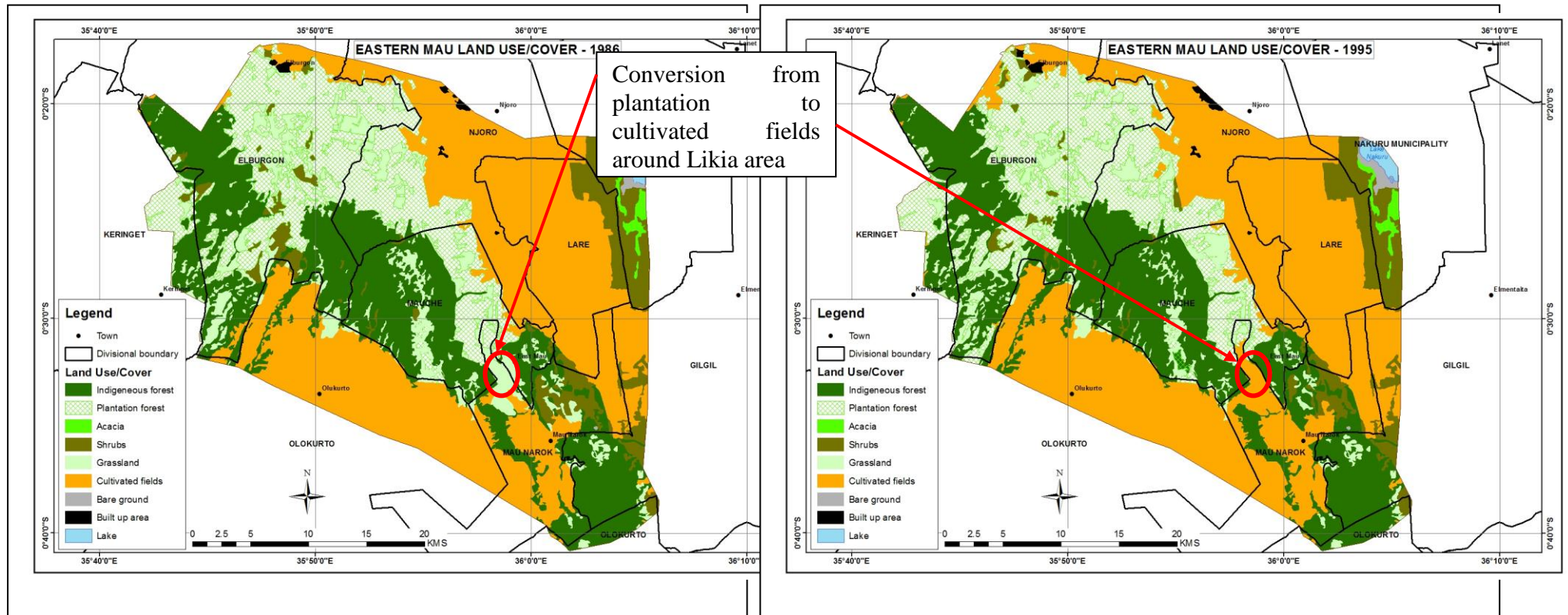


Figure 26: Land cover in Eastern Mau between 1986 and 1995

## 1995-2003 Period

This period was characterized by major forest cover changes. For example, there was a major conversion of forest into cultivated fields in comparison to the previous periods.

The area under cultivated fields increased from 50492.16ha in 1995 to 74362.32 ha in 2003 this represents a 50% increase (Table 16). This trend indicated a conversion of about 238.7 ha per year of other land cover types into cultivated fields. The increased cultivated land was mainly at the expense of plantation forest (13633.92 ha), indigenous forest (5136.12 ha), grassland (3823.2 ha) and shrubs (1695.96ha) (Table 16). This point to increased human activities in the area over a period associated with high multiparty politics activities.

Table 16: Land use change matrix 1995 and 2003 (60 meter pixel) in ha

Yr	2003										
	Land Cover Class	Acacia	Bare ground	Built up area	Grassland	Shrubs	Lake	Cultivated fields	Plantation forest	Indigenous forest	Total (Ha)
1995	Acacia	630.72	0	0	0	0	0	0	0	0	630.72
	Bare ground	0	323.64	0	0	0	82.8	4.68	0	0	411.12
	Built up area	0	0	348.84	0	0	0	28.8	0	0	377.64
	Grassland	0	0	14.4	4687.2	694.8	0	3823.2	474.48	188.28	9882.36
	Shrubs	9.72	0	2.16	39.24	5425.92	0	1695.96	270	179.64	7622.64
	Lake	0	1.8	0	0	0	537.12	0	0	0	538.92
	Cultivated fields	0	0	100.08	60.12	16.56	0	50039.64	253.08	22.68	50492.16
	Plantation forest	0	0	2.52	771.48	1096.2	0	13633.92	6444.72	182.52	22131.36
	Indigenous forest	0	1.8	0	180.72	83.16	0	5136.12	13.68	27882	33297.48
	<b>Total (Ha)</b>	640.44	327.24	468	5738.76	7316.64	619.92	74362.32	7455.96	28455.12	125384

Because of the conversions, the study area recorded the greatest loss in forest cover of 19,582ha, which represents 35% forest decline between 1995-2003 period. Plantations recorded the highest decline with 14,748.2ha (26% decline of the total forested area) compared to indigenous forests that suffered a loss amounting to 4833ha (9% loss of the total forested area). The loss in forest cover can be explained by excisions of forests within Mau complex by the government that peaked during the 1995-2003 period. The recorded increase in land designated under 'cultivated fields' was at the expense of forested land, which points to an increase in human activity and encroachment in the forest reserves. The greatest conversions were observed in the Mariashoni, Teret and Likia areas of Eastern Mau forests (Figure 29). Information generated from key informant interviews and reported earlier in this thesis, indicated that in the year 1995 and the period that followed thereafter, Eastern Mau started experiencing an influx of immigrants who then settled on formerly forest land.

Eastern Mau region witnessed increased incidences of violence during the 1995-2003 period. Some of the violent incidences that involved different ethnic groups are attributable to resource competitions in areas such as the border between Teret location (Mauche division) and Kihingo location (Kihingo division).



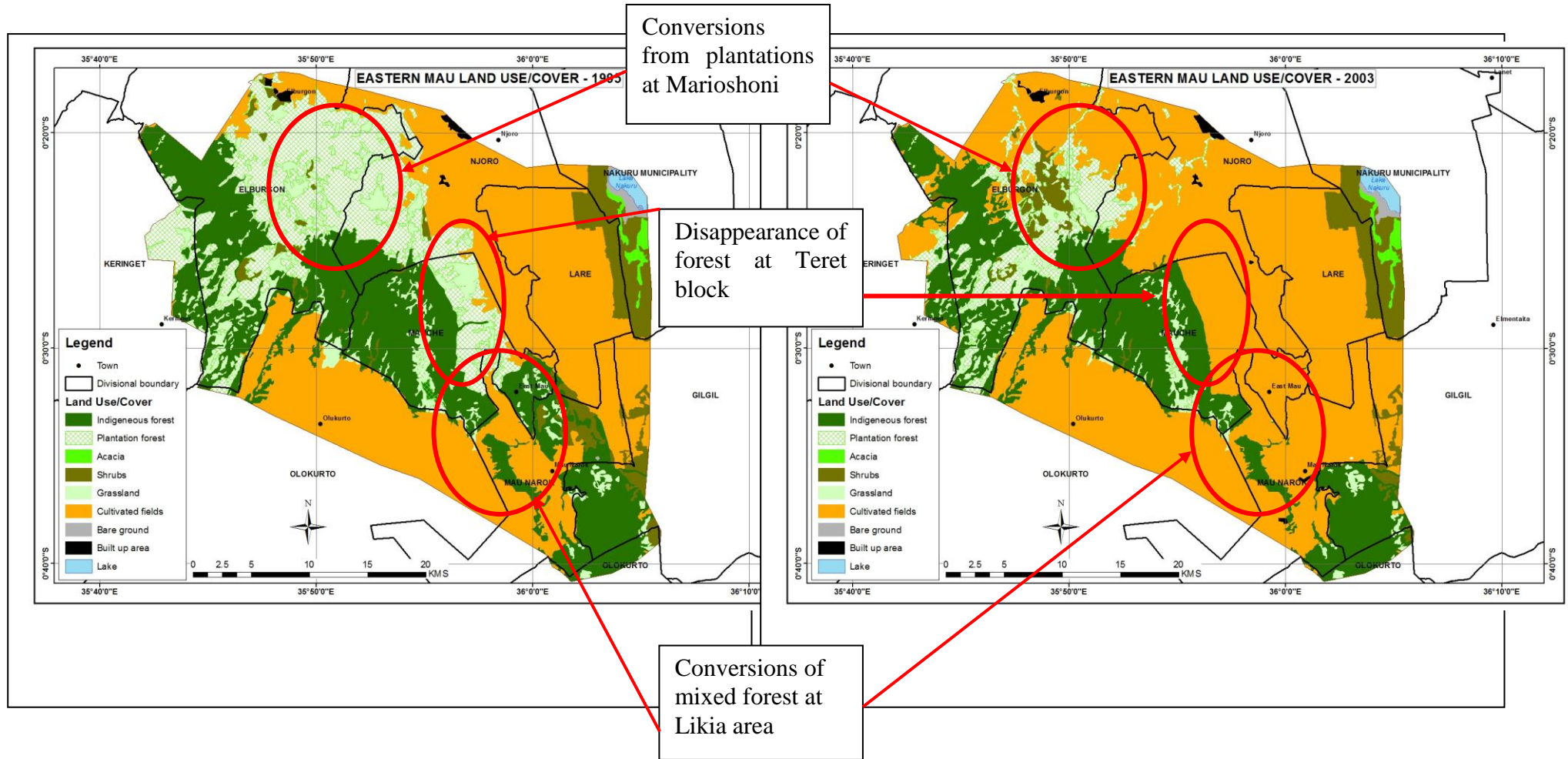


Figure 27: Land cover in Eastern Mau between 1995 and 2003

## 2003 and 2014 Period

This period continued to record increased cultivated area which hit an 80,000 ha mark at the expense of plantations that lost 3169 ha and indigenous forest 2247 ha (Table 17). A reduction in forest cover was recorded but at a lower rate compared to the previous period (1995-2003). Indigenous forests decreased by 2503ha (228ha annual loss) while plantations declined by 2314ha (210ha annual loss) resulting in loss of total forest cover of 4817ha (0.35% annual decrease of the study area) (Table 17).

Table 17: Land use change matrix 2003 and 2014 (60 meter pixel) in ha

Yr	2014										
	Land Cover Class	Acacia	Bare ground	Built up area	Grassland	Shrubs	Lake	Cultivated fields	Plantation forest	Indigenous forest	Total (Ha)
2003	Acacia	<b>517.68</b>	12.24	0	0	33.12	77.4	0	0	0	640.44
	Bare ground	0	<b>0</b>	0	0	0	321.84	5.4	0	0	327.24
	Built up area	0	0	<b>467.28</b>	0	0	0	0.72	0	0	468
	Grassland	0	0	1.44	<b>370.152</b>	43.2	0	1263.96	328.68	399.96	5738.76
	Shrubs	39.24	24.48	0	102.6	<b>5204.16</b>	200.52	1627.56	117.36	0.72	7316.64
	Lake	0	0	0	0	0	<b>619.92</b>	0	0	0	619.92
	Cultivated fields	0	0	380.52	272.88	0	0	<b>72836.28</b>	637.2	235.44	7436.232
	Plantation forest	0	0	0	510.48	52.92	0	3169.08	<b>3603.96</b>	119.52	7455.96
	Indigenous forest	0	0	0	464.76	59.76	0	2247.48	480.24	<b>25202.88</b>	2845.512
	<b>Total (Ha)</b>	556.92	36.72	849.24	505.224	5393.16	1219.68	<b>81150.48</b>	5167.44	25958.52	125384

Although the government excisions were reported to have been stopped in the year 2001, satellite imagery analysis indicate continued forest degradation which can be attributed to illegal excisions and encroachment in places such as Mariashoni and Longoman forests (Figure 30). The period running between 2003 and 2014 recorded an increase in the violent ethnic clashes. Some of the clashes were directly linked to the forest resources competition such as land in Likia area and pasture in Longoman forest block.

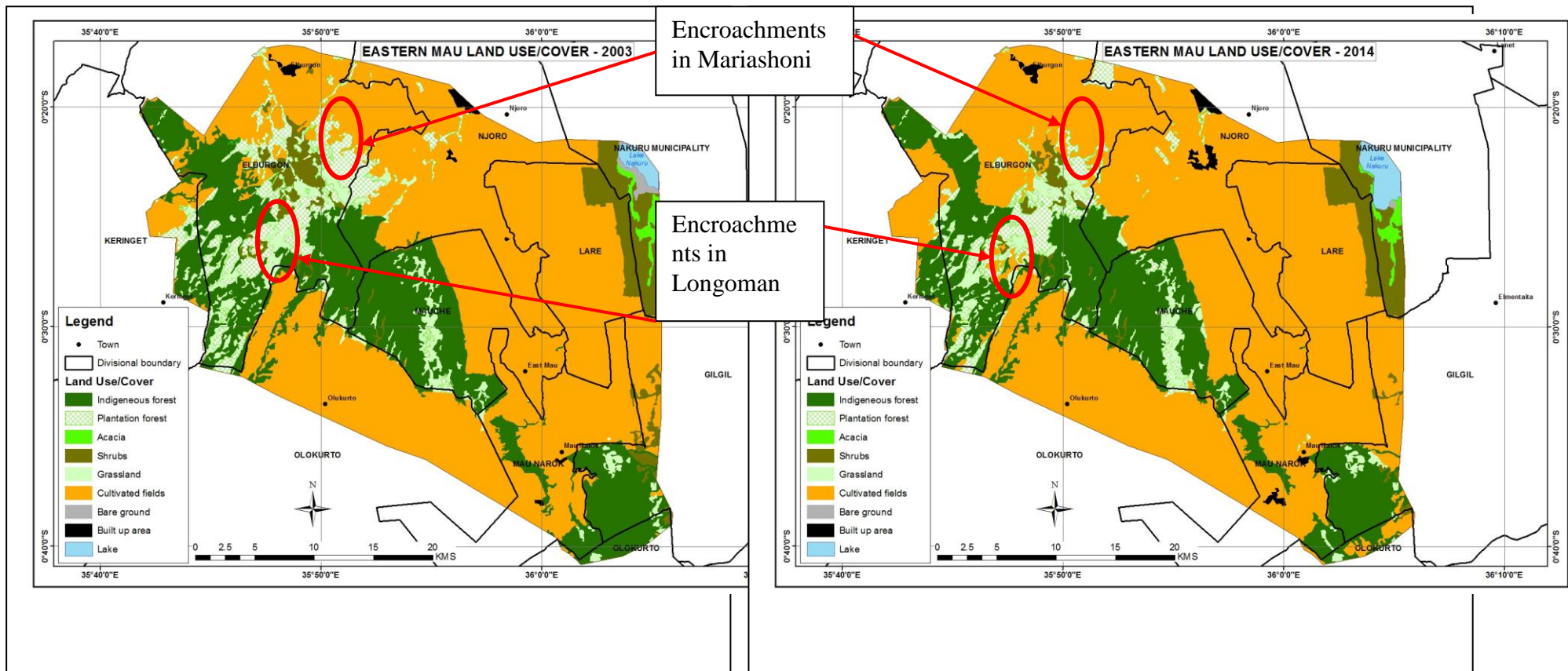


Figure 28: Land cover in Eastern Mau between 2003 and 2014

### **6.3 Migration patterns and placement of communities**

From the above land cover and land use analyses through time, it is apparent that human activities occasioned by human settlements started intensifying in Eastern Mau during the period between 1995 and 2003. Therefore, to better understand the influence of such settlements on conflict patterns; it was important to visualize migration and settlement patterns of different ethnic groups in Eastern Mau. The results from interviews with key informants in the study area, suggest that members of the Ogiek community were the first to settle within Eastern Mau, followed by the Kikuyu and Kalenjin communities. Although different respondents presented different accounts of community immigration into Eastern Mau, it was evident during the field study that the Kikuyu, Ogiek and Kalenjin lived side by side in the lands bordering the forest in Nakuru County. The Maasai settled on the lands bordering the Eastern Mau forests from the side of Narok County. In addition to these four main communities, the researcher observed that other ethnic groups such as the Kisii, Luhya, Kamba among others were also present in Eastern Mau although in small numbers (Figure 31). The placement of communities in the study has been analyzed and visualized based on the interviews and conversations during transect walks as presented below.

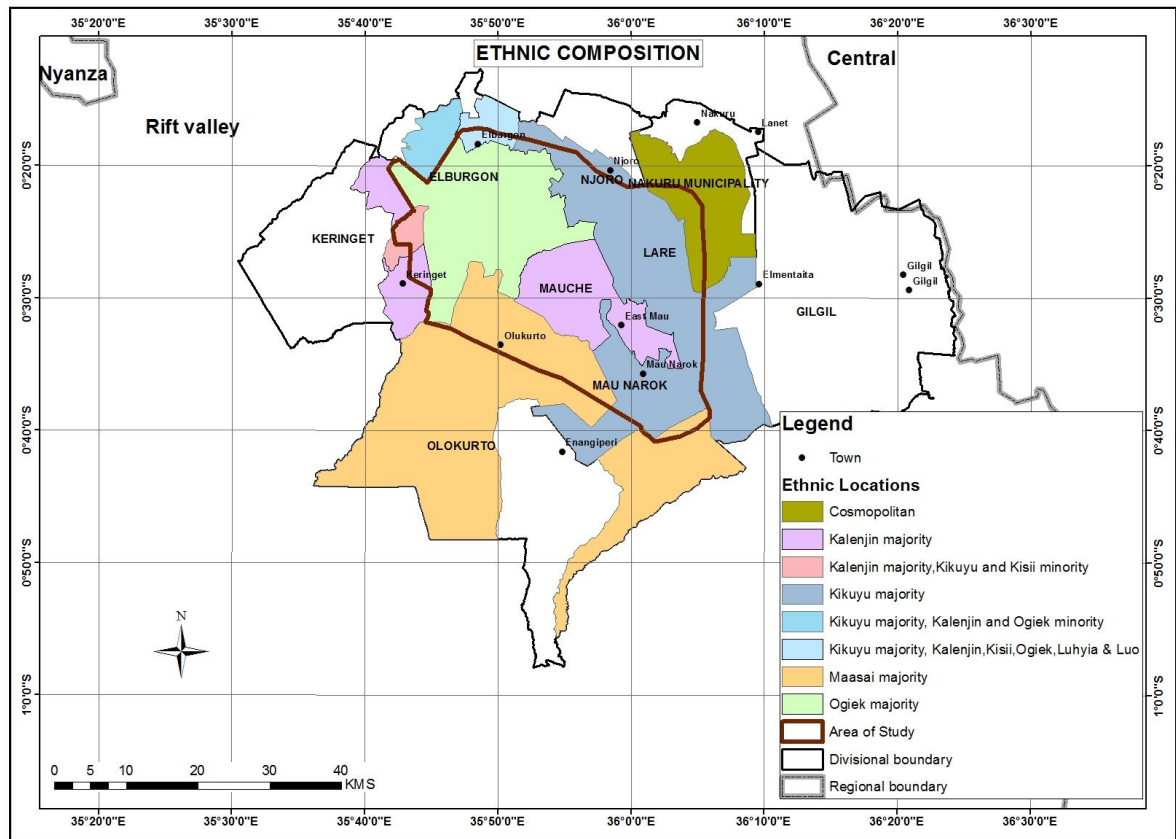


Figure 29: Current ethnic composition

(Researcher, 2014)

There was a consensus among the residents in the study area that the migration path for the Kikuyu was from central Kenya to the eastern-most parts of East Mau before moving to other parts of Mau complex (Figure 32). Kalenjin are however thought to have originated from other parts of the Rift Valley before settling in the land bordering the forest in Eastern Mau. The Maasai who interacted with other communities in Eastern Mau (which is largely in Nakuru County) were mainly from the neighboring Narok County.



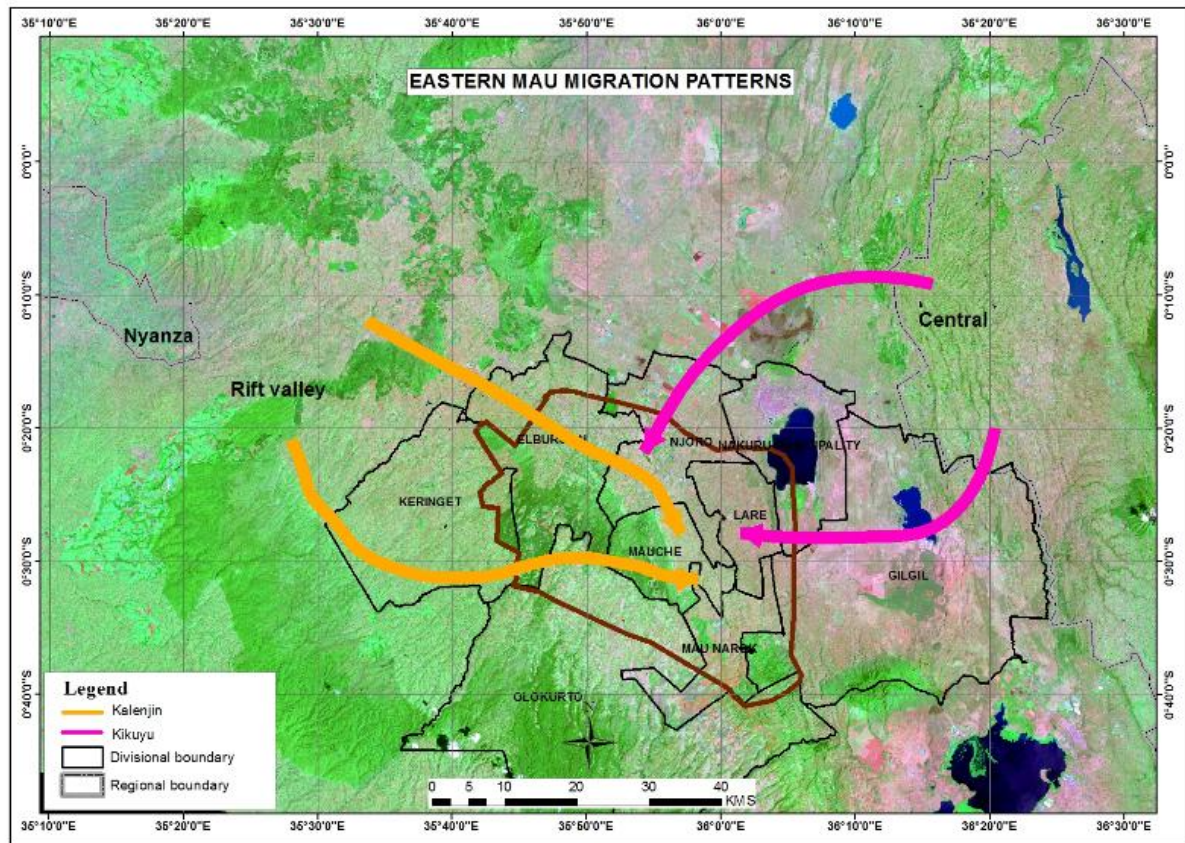


Figure 30: Visualization of settlement and migration patterns of different communities

#### 6.4 Spatial patterns of conflicts in Eastern Mau

With increased immigration of different communities in Eastern Mau and excisions of forest land in the 1990’s, also began the first violent conflict cases in the study area as reported by key informants during the interviews. The years that followed the mid 1990’s were dominated by recurrent violent conflict involving members of different ethnic groups in different places and at different times. The specific points and regions, which were identified and narrated to the researcher by Eastern Mau residents during geo-coded transect walks were designated as ‘hotspots’ and are visualized together with associated natural and/or human phenomena (Figure 33).

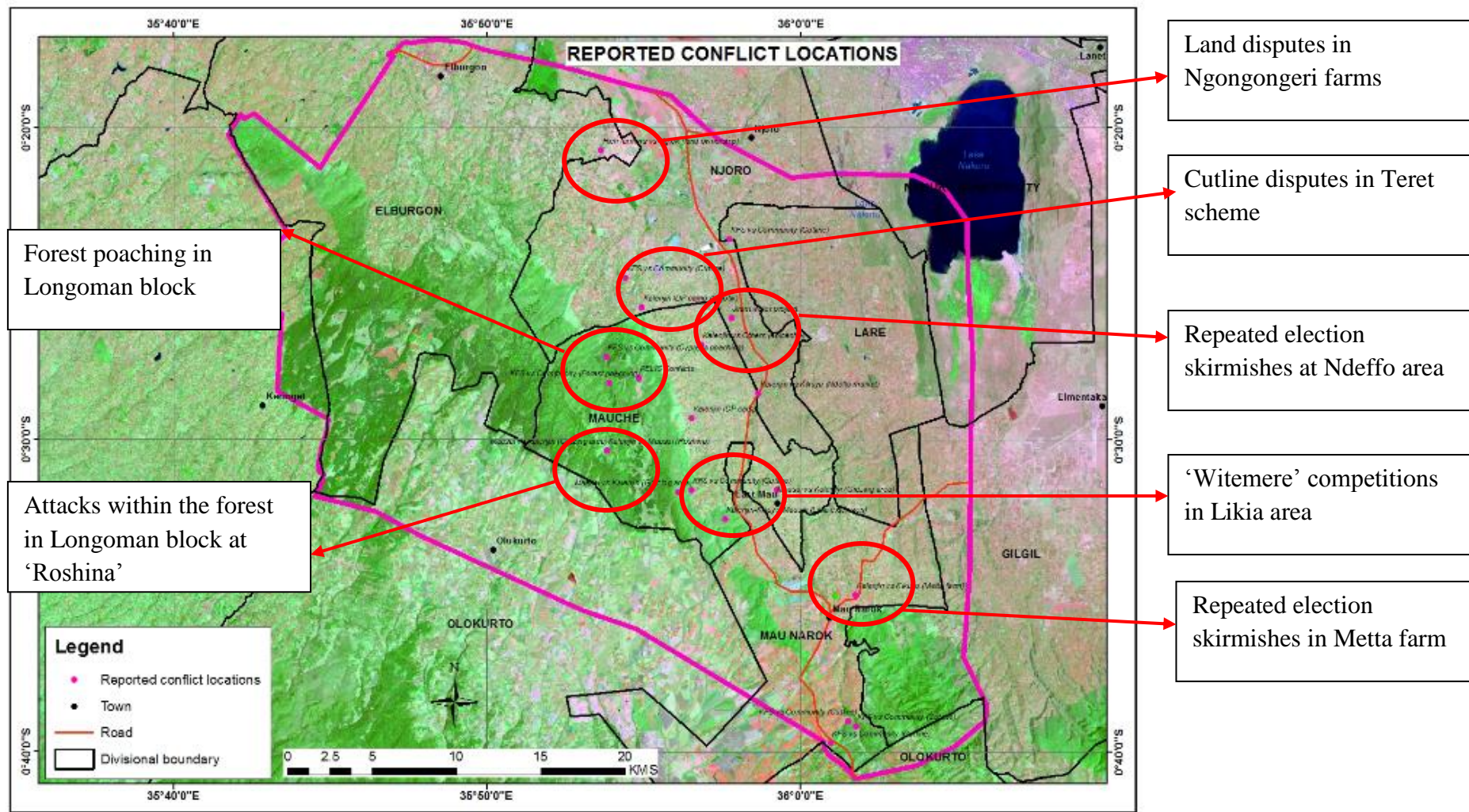


Figure 31: Location of violent conflict spots as identified by the respondents during transect walks

Findings indicate that when considered on a spatial scale, two types of conflict pattern emerge. The first pattern represents conflicts that occur at locations within or near the forest. This category is represented by letter 'L' that is, land related clashes, or 'G'-grass or pasture related clashes and 'P' representing poaching of forest products such as poles (Figure 34). The second category seems to occur at some relatively far off distance away from the forest when compared to the first pattern. However, they seem to be situated along the highway or at the administrative boundaries. This set of conflicts is represented by letter 'E' since unlike the first category, the conflicts were reported to occur during election periods. Thus, they are designated here as 'elections' related conflicts.

A further analysis of spatial patterns of violent conflicts reveal that the conflict 'hotspots' (or areas hard hit by violent conflicts) are located at the boundary of different communities or where there are shared resources as explained by the following cases:

### **Metta farm conflicts**

Metta village is located in Mau Narok division; a region dominated by members of Kikuyu community, and is sandwiched between Sururu forest block and Sururu village. Sururu village, although located in Mau Narok division administratively, lies in Mauche ward<sup>27</sup> (however, Mauche division is a Kalenjin zone).

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<sup>27</sup> A ward is the smallest political unit in Kenya and is represented by an elected member of county assembly.



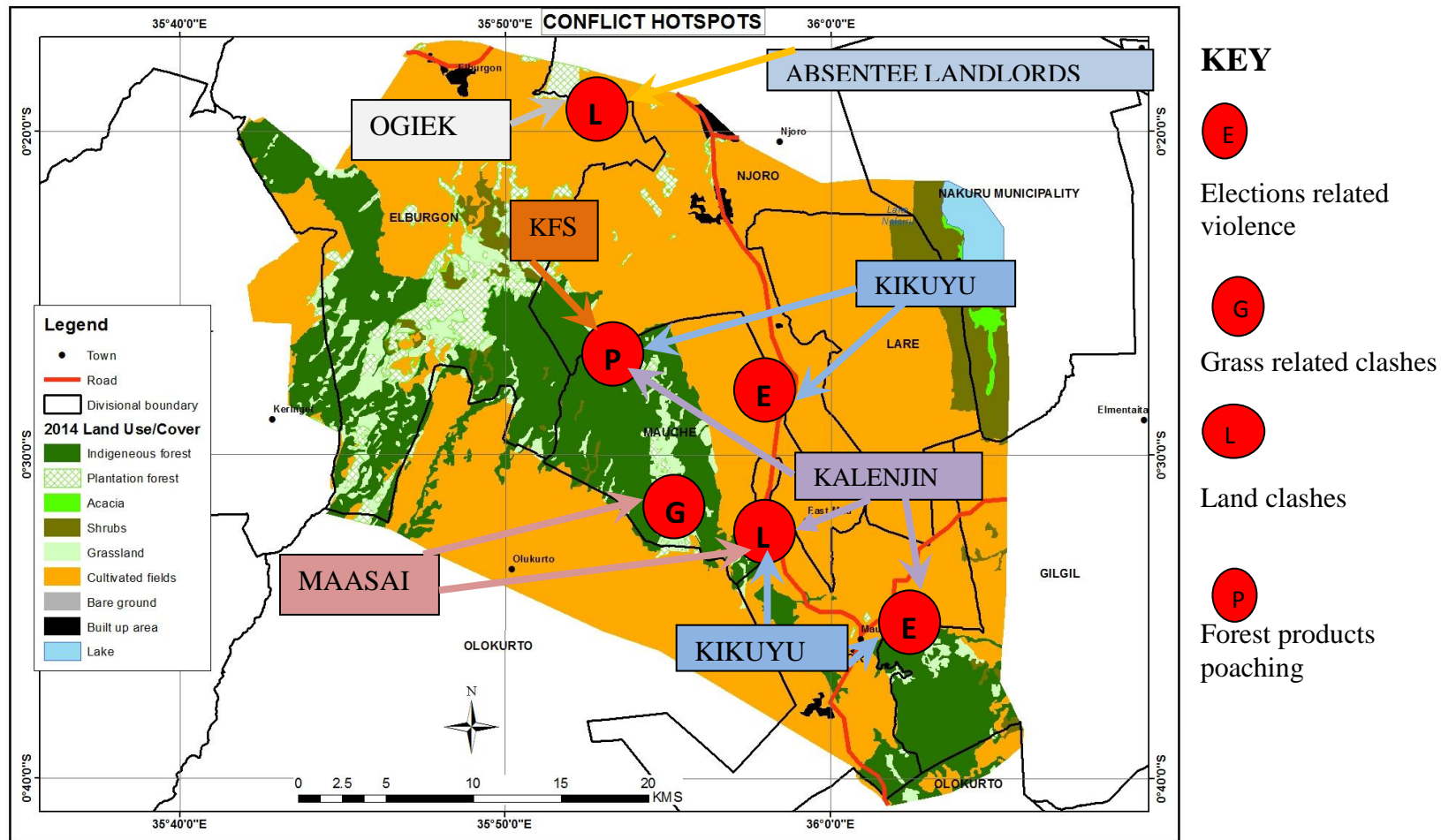


Figure 32: Conflict hotspots (red circles), their contexts and parties involved in Eastern Mau

This spatial placement of the two communities presents a potentially fertile ground for violent clash in the event of conflict. Sururu forest was among the forest blocks that suffered from government excisions that started in early 1990s and peaked in 2001. The Mau Narok-Gilgil road traverses Metta and Sururu villages and is used by Kikuyu and Kalenjin members. Metta farm, in Metta village has been designated as a hotspot because of the recurrent violent clashes between the Kalenjin and the Kikuyu. For example, during the 2007/2008 post election violence, the village suffered from inter-ethnic clashes with loss of lives and property destruction being witnessed.

### **Likia extension - *Witemere***

One of the blocks making up the Eastern Mau forests in the south is the Likia extension. The forest is bordered by three communities, that is, the Kalenjin to its north, the Kikuyu in the south and east, and the Maasai to the western side. Astride the Likia forest extension, is the Likia market centre which is located along the Mwisho wa Lami-Njoro road. The forest extension suffered from massive encroachments by members of the three communities. As reported earlier in this thesis, individuals and groups of people competed in hiving off portions of the forest for farming purposes in what was popularly referred to as ‘Witemere’<sup>28</sup> among residents in the study area. Some Kikuyu respondents however, reported that fighting during the ‘Likia clashes’ were meant to repulse the Kalenjin from settling in the Likia extension and thus encircling the Kikuyu. They argued that if the Kalenjin were left to encircle them, the Kikuyu would lack escape routes in the event of future attacks from their neighbors. In Likia, fighting was also witnessed between the Maasai and their neighbors. Whereas the Kalenjin and Kikuyu converted the land to crop farming, the Maasai grazed

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<sup>28</sup> Witemere is a Kikuyu phrase loosely translated as ‘cut for yourself’

through the remaining parts of the forest, and sometimes their livestock would stray into the farms destroying crops and triggering violent clashes between the grazing community and their neighbors. In the year 2010, the government moved in to contain the Likia conflicts by driving out all the people that had occupied the Likia forest extension and reclaimed the land by planting trees (Plate 13).



Plate 13: Part of regenerating forest in Likia extension

(Photo taken on 16-11-2013)

### **Ndeffo market conflict**

Ndeffo market which is located along the Mwisho wa Lami-Njoro road straddles two locations, that is, Kapkembu location on one side of the road and inhabited by the Kalenjin, and on the other side of the road lies Lusiru location, which is predominantly a Kikuyu territory. The market centre had suffered from destruction every time the Kalenjin and the Kikuyu clashed. By the time of data collection, some structures, which had been destroyed

during past violent clashes between the Kalenjin and Kikuyu, had not been rebuilt (Plate 14). The violent clashes were also characterised by property destruction as reported by key respondents from both the Kalenjin and Kikuyu communities, and also observed by the researcher during transect walks in the field:



Plate 14: Ruins of property destroyed at NDEFFO during the 2007 clash between the Kikuyu and the Kalenjin

(Photo taken on 20-11-2013)

The picture above shows relics of the destroyed buildings belonging to a member of the Kikuyu community. According to a narration by a Kalenjin elderly man during a transect walk, the property which was located within the proximity of the boundary between Kalenjin and Kikuyu at NDEFFO was destroyed by Kalenjin fighters.

About fifty meters from the Market centre lay a borehole which provided water to the two communities especially during the dry season (Plate 15). The respondents during two focus group discussions involving the Kikuyu and the Kalenjin respectively reported that the borehole had been an epicenter to some of the violent conflicts whenever residents from the two communities competed to access water.



Plate 15: Borehole at Ndeffo market centre which supplies water to both the Kalenjin and Kikuyu

(Photo taken on 20-11-2013)

### **‘Roshina’ boundary in Longoman forest**

The violent clashes between the Maasai and the Kalenjin were reported to have occurred inside Longoman forest. The study findings point to competition over pasture and stock theft inside the forest as factors that triggered the conflicts between the Maasai and Kalenjin. As reported earlier in the section on ‘manifestation of conflicts’, when the Kalenjin settled next to Longoman forest in 1995, they had a cordial relationship with the Maasai (the two

communities lived opposite each other with the Longoman forest block separating them). However, with time, the forest area reduced and therefore herders from both sides had to move deeper in the forest in search of pasture and water. Thus, from the year 2001 just before forest excisions were stopped officially by the government, the Maasai and the Kalenjin started clashing with much of the fighting occurring inside the forest. During transect walks inside Longoman forest, members of both Kalenjin and Maasai communities separately identified a region called 'Roshina' which they described as the place where there had been intense fighting between the two communities between 2005 and 2009. Elders from the two communities in trying to put an end to the recurring conflicts held a meeting in the year 2009 and decided to demarcate the forest with a boundary at Roshina. The Roshina boundary was meant to separate the Maasai herdsman from the Kalenjin herdsman. The Maasai respondents however explained that should one community herd their animals across the boundary into their neighbors' territory, then fighting could easily erupt.

### **Longoman encroachments and evictions**

Results indicate that Longoman was one of the remaining forest blocks in Eastern Mau which has both indigenous and exotic trees. The results from field observations pointed to forest degradation with pockets of poles 'poaching'. An interview with the forest guards revealed a conflict between the community and Kenya forestry service over illegal extraction of the tree products. According to the forest guards manning the Longoman, a great number of their arrests composed of the youth drawn from different communities residing adjacent to the forest. The guards further explained that members of the Kalenjin community were mainly involved in the cutting of the tree poles and collaborated with the Kikuyu youth who

transported and sold the poles. A transect walk through the forest revealed several pockets of deforestation evidenced by tree stumps that had been cut at breast height (Plate 16).



Plate 16: An example of tree stumps indicating illegal poaching of cypress poles in Longoman forest

(Photo taken on 22-11-2013)

Apart from forest poaching, the Longoman forest had in the past suffered from illegal settlements. Along the forest boundary, laid two internally displaced persons (IDP) camps namely Sigaon and Sigotik (Plate 17). The camps contained families mainly from the Kalenjin community who claimed to have been evicted from the forest and that they didn't have a 'home' to go to. Earlier, in the year 2010, the government on the recommendation of the taskforce for the restoration of the Mau (ICS, 2010) evicted households who had been illegally residing in Longoman forests. The case of Longoman forest disputes pointed to a conflict that involved institutions (for example Kenya forestry service efforts in reclaiming a forest reserve) and the community trying to access the forest resources. However, the different



ethnic groups were in cooperation as they poached forest resources against the existing rules and regulations on extraction of forest products.

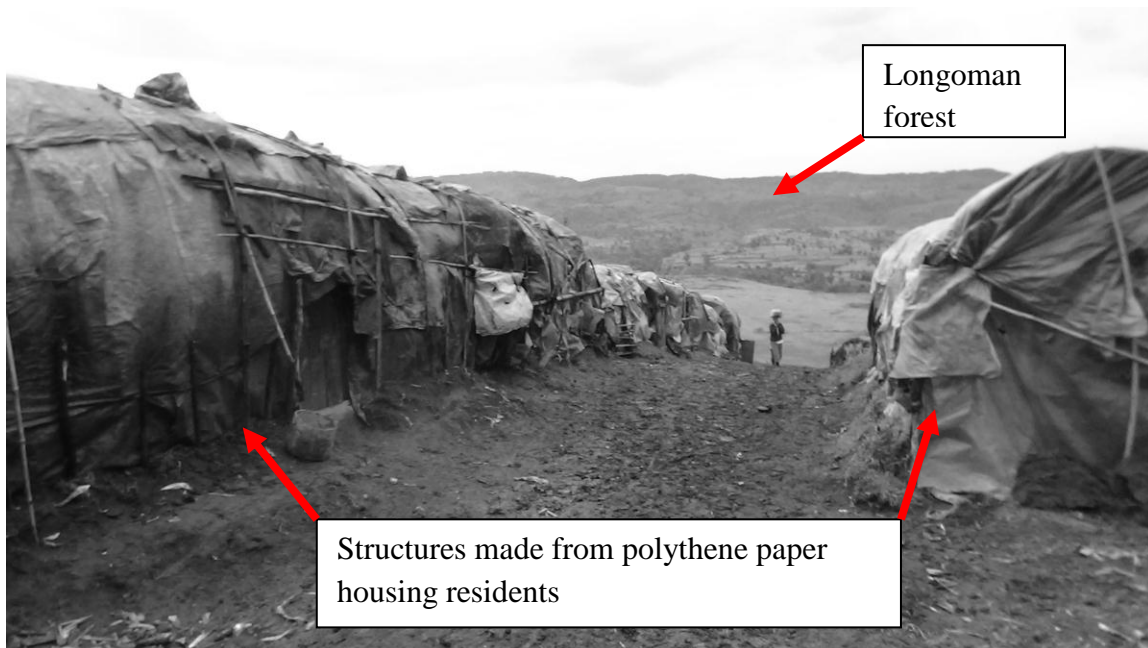


Plate 17: Part of the IDP camp at Sigotik village in Njoro Sub-county for people who claimed to have been evicted from the Longoman forest.

(Photo taken on 22-11-2013)

### **Officers' mess in Ngongongeri**

As explained before under the conflict indicators, government respondents reported that the 200 ha land in Ngongongeri area was allocated to some senior civil servants during the 1990's forest excisions. However, the officers who were mainly from the Kalenjin community did not move into the land to settle immediately. Over time, some members of the neighboring Ogiek community moved into the land and settled. In the 2000's, the 'absentee landlords' started moving into the land with the aim of setting up farms. However, they met resistance from the local Ogiek members who would attack them with arrows. The local Ogiek members however, explained during an interview that the disputed land belonged to their ancestors and that the rich farmers had grabbed it and were using the police to shield them as they forcefully



farmed the land. In early 2014, there were reported snippets of violence involving the rich farmers, the police and the Ogiek squatters<sup>29</sup>. In one incidence, the police burnt down the settlements to local squatters who had been residing on a 50 acre piece of land. The police argued that the land belonged to one of the rich farmers who possessed a title deed and that by the locals squatting on the said land were committing trespass. In another incident, some local squatters attacked and injured a farmer who had visited the land with an intention of cultivating. The police moved in and arrested the suspected locals who had attacked the farmer. Following the tension that had been building up in Ngongongeri, the rich farmers sought the shielding of the police as they cultivated their land.

## **6.5 Conclusion**

The study findings have shown that Eastern Mau had over time suffered from natural resource decline in space. The period with the most decline (that is, between 1990's and 2000's) coincided with increased cases of violent clashes. The findings also indicated an emerging spatial pattern of violent conflict. The conflict cases (hotspots) within Eastern Mau have indicated that when different ethnic groups are in competition in access to public resources (either legally or illegally), violent clashes are prone to occur. In particular, the 'Roshina' clashes inside Longoman forest and the 'Witemere' encroachments of Likia forest extension have showed how resource degradation can be accompanied by violent conflicts. The results from this section speak to a growing literature on the links between natural resource degradation and conflicts. However, albeit the conflict that had occurred proximally to the forest resources (that is; land, pasture and tree products) could be directly linked to

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<sup>29</sup> The Ogiek are referred to as squatters in the text because although they had built structures on the disputed land, they did not possess the title deed which legally entitled them to the resource. The title deeds were issued to the rich farmers by the government.

competition over natural resources, the distal conflict (not close to the forest resource) in this work seem to be motivated by other factors apart from the forest resources. An example of distal conflict was the one reported by respondents to have occurred between the Kalenjin and the Kikuyu and seemed to be intractable, escalating every election year. This thesis in the next sections will address the factors that sustain natural resource proximate or distal conflicts.

## **CHAPTER 7: INTERSECTION OF SOCIAL AND SPATIAL FACTORS IN CONFLICTS**

### **7.1 Introduction**

Results reported in the previous chapters of this thesis have indicated a social-cultural and spatial pattern of conflicts among communities residing adjacent to the forest. In some cases, the resource conflicts were seen to be spatially explicit while in others (for example election related violence) the social factors (for example ethnicity) were more predominant. Chapter seven presents a discussion on the interaction of the geographical and social factors in sustaining forest related conflicts. However, it is also pointed out that a third set of intervening factors (institutional and policy) are necessary in determining the escalation or de-escalation of forest related conflicts. To lay the foundation for the chapter, elements of conflicts are explained followed by a proposed typology of conflicts. Lastly, the chapter presents existing conflict management practices in Eastern Mau and assesses their efficaciousness.

The mismanagement of natural resources is contributing to escalation of conflicts. In the Mau forests of Kenya, mismanagement of land and forest resources has been manifest through forest excisions and land adjudication processes that are contested by different communities. This thesis has illustrated that natural resource conflicts are about struggles and competitions between communities. The competitions are likely to lead to conflict if one or more parties have a feeling of marginalization in access to the resources. The perceived marginalization of people groups is one of the underlying issues that sustain natural resource conflicts in Kenya and other regions with multi-cultural settings.

This study further illustrates that access to natural resources is often mediated by social identity. Groups of people who consider themselves as 'native' to an area have a place attachment as part of their social identity. Such place-identity claims can be used as inclusionary and/or exclusionary strategies in access to natural resources. Therefore, failure to address these perceptions of place- based identity in natural resource management can be one of the factors contributing to sustained conflict in a diverse social landscape.

## **7.2 Elements and sources of Eastern Mau conflicts**

It is generally agreed that conflicts normally arise from complex situations where many different factors are involved. Thus, conflicts are often considered to be specific to the context, multi-dimensional and caused by a combination of various factors. Attempts have been made to classify causes of inter group conflicts. For example, Engel & Korf (2005) suggest three categories, namely; political and institutional factors, socioeconomic factors and resource and environmental factors. While the United Nations Interagency Framework Team for Preventive Action (UNFTPA, 2012) has conveniently classified sources of conflicts as land disputes, politics, religious and cultural differences and the distribution and use of resources. Daniels & Walker (2001) acknowledge that incompatible goals (conflicts) can be based on one of the seven factors namely; history, facts, interests, values, person, jurisdiction and culture. However, it is highly unlikely that a conflict has only one cause and every conflict is probably the result of the convergence of different factors. Instead of focusing on conflict causes *per se* in understanding conflicts some writers, render that conflicts ought to be considered based on their components. For example, Rubin *et al*, (1994) while acknowledging that the social identity plays a role in intergroup conflicts, they also propose that conflicts could be understood from two fronts, namely; conditions that encourage

conflicts and conditions that discourage conflicts. The Galtung's (1996) ABC conflict triangle suggests that every conflict situation has three facets namely; Attitude, Behavior and Contradiction. The conflicts management progress triangle designed by Daniels & Walker (2001) explains the importance of considering the substance, procedures and relations in any conflict. In the progress triangle, the substantive dimension of conflict concerns the sources of conflicts and what the conflicts are about (such as resources and power). The procedural dimension concerns the way in which conflict has occurred, aspects of space and time, and how it develops (institutionally or personally). The relations dimension includes stakeholders and relations between them, power distribution, and the knowledge and skills they possess. The manifestation of conflicts in Eastern Mau can be explained using the elements in the conflict triangle and to some extent the progress triangle. Therefore, before unearthing the specific causes, what Daniels & Walker (2001) call the substantive issues in conflict, it is necessary to understand how the conflicts Eastern Mau have been developing using the elements of behavior, context, attitude and relations. These elements of conflicts are the indications of conflict just like the tree trunk and leaves of a tree are always visible as opposed to the roots, which are always hidden.

#### *Behavior and context*

Over time conflicts had been witnessed in Eastern Mau and manifested through violent behavior (loss of lives and property destruction) involving the Kalenjin and Kikuyu communities as witnessed especially during general elections of the years 1992, 1997, 2002 and 2007. Violence was also witnessed through fighting after cattle raids between the Kalenjin and the Maasai in Longoman forests between the year 2001 and 2007. Other conflict behaviors in Eastern Mau involved the local Ogiek physically attacking the rich farmers (who

were once absentee property owners) following contestations over land ownership in Ngongongeri area in early 2014. During the same period, the police were also involved in the conflict as they burnt down the houses belonging to land squatters (other than the local Ogiek) so as to evict them from the land that the rich farmers were legally laying claim over.

The Kenya Forestry Service, a government agency together with the provincial administration (the Kenya police) evicted the forest dwellers on recommendation of the taskforce for the restoration of Mau of the year 2009 (G.O.K, 2009a). In other instances, according to Kalenjin respondents, the authorities destroyed by burning down the settlements that had encroached across the forest cut-line in Teret area of Mauche division in early 2014. The violent manifestation of conflicts in Eastern Mau across space and time marks the escalation stage in the development of conflicts. Various authors (Vindelov, 2012; Ramsbotham, *et al* 2005; Rubin *et al*, 1994) have suggested that conflicts develop in stages with escalation being characterized by outbreak of direct violence. All these physical confrontations among conflict parties are a manifestation of conflict behavior and they occur within specific contexts such as elections (as is the case of violence between the Kikuyu and Kalenjin), or resource competitions (the conflicts between the Maasai and Kalenjin, Ogiek and rich farmers). The contexts present incompatible goals -what Galtung (1996) calls contradictions. However, to Daniels & Walker (2001), these contexts present procedural (institutional) issues in a conflict. Elections as procedures that involve people as well as formal institutions provided fertile grounds for violent conflict behavior between the Kalenjin and Kikuyu communities. The government excision of forest blocks and subsequent encroachments led to scarcity (or perceived scarcity) of land and pasture resources in Ngongongeri area and within Longoman forest leading to resource competitions.

### *Attitudes and relations*

In conflict situations, violent behavior is often linked to perceptions, beliefs and attitudes held by the party waging war, what Vaughan & Hogg (2005) referred to as the principle of consistency. It is expected that the behavior of people is consistent with their perceptions and attitudes. Azjen (1991) also suggest that behaviors are often planned. However, the feelings, beliefs and attitudes are not always translated into violence especially in the absence of trigger factors. For instance, the violence between the Kalenjin and Kikuyu consistently occurred during electioneering periods since the 1990s until late 2000s. Outside the election years, there seemed to be some coexistence between the two communities. However, a closer interrogation of the relations between the two communities revealed some latent conflicts expressed through figures of speech such as stereotyping, metaphors and nick names that had negative connotations. Thus, it can be said that such communication styles in the absence of violence is a latent stage that occurs before escalation. Apart from different conflict manifestations (in terms of latent and escalation) different relationship patterns among communities in Eastern Mau can be observed in space and time. The relationships are as a result of the different conflict styles employed by the communities as they interact with one another. Communities exhibit two main conflict styles that is, assertiveness (also termed as competition) which is the degree to which the style attempts to satisfy the party's concerns and cooperation- the degree to which the style attempts to satisfy the other party's concerns. However, consistent with Folger *et al* (2009) proposal, other styles such as compromising, accommodating and conflict avoidance are also noted.

As reported before under conflict indication, the relationship between the Kikuyu and the Kalenjin was characterized by competition and antagonizing each other from early 1990s. The competition, which was occasioned by violent clashes every election year, persisted for nearly two decades. However, in the year 2013, the two communities were aligned to one political outfit and thus it became the first time after the introduction of multiparty democracy that the two communities did not fight during general elections.

Except for the Likia forest extension clashes over land, the Kikuyu and Maasai considered their relationship always cordial. The two communities engaged in trade at Mau Narok and Likia market centers. The Maasai who were mainly agro-pastoralists often sold their livestock and crop yields to the Kikuyu, who in turn supplied the goods to the local markets and other regions such as Nakuru town and Nairobi city. This kind of relationship is considered as positive social interdependence by Johnson & Johnson (1989) and is less likely to result into conflicts.

Prior to the year 2001, the relationship between the Kalenjin and the Maasai was always cordial. However, competition over grazing grounds in the forest commenced and the two communities started fighting until the year 2009. After the year 2009, the two communities decided to stop fighting and started cooperating. The style employed by the two communities can be said to be that of compromising. The Ogiek were seen to be accommodating towards their neighbors and always employing conflict avoidance strategies. In spite of their grievances about losing their ancestral land in Eastern Mau to other communities, they chose not to rise up in arms against the perceived outsiders.



### **7.3 Classification of causes of conflicts in Eastern Mau**

Conflicts in Eastern Mau were caused by a combination of factors and it was very difficult, in most cases, to highlight dominant and less dominant causes. It was also difficult sometimes to distinguish causes of conflicts from conflict symptoms. This thesis broadly classifies possible causes of conflicts in Eastern Mau as; socio-cultural factors; natural resources and other geographical factors, policy and institutional factors. Each of these factors may constitute either a cause, dynamic of conflict or both.

#### **7.3.1 Social cultural factors**

The socio-cultural factors identified in this study represent the social identity issues of conflicts in Eastern Mau. These factors revolve around perceived unmet but nonnegotiable needs and collective fears as suggested by Kelman (2009). One of the universal and nonnegotiable needs have been identified as social identity (Burton, 1990; Folger *et al*, 2009). Since the results reported in this thesis have identified that Eastern Mau conflicts form an ethnic pattern, it then follows that all conflicts in the study area are identity conflicts. However, identity is often underlying and hidden and what is observed is the symptom or the circumstance surrounding a conflict behavior. Such underlying factors are suggested by this study be the root sources of conflicts. The grievances of members of Ogiek community about losing their ancestral land present a case of social-cultural conflict.

The conflict involving the Ogiek perception of being dispossessed of their land by government and other communities can be understood from the perspective of place attachment, place identity, and communities of place versus communities of interest. Place attachment is an affective bond that people establish with specific areas where they prefer to

remain and where they feel comfortable and safe (Scannel & Gifford, 2010). Which, however, have understood Place identity, as a component of personal identity, a process, through interaction with places; people describe themselves in terms of belonging to a specific place. Researches (such as Manzo, 2005; Rollero & De Piccoli, 2010; Windsong, 2010) have observed positive correlations between these variables in populations that have maintained ongoing interactions over long periods.

The Ogiek by the virtue of having a longer history in Eastern Mau were expected to have a higher place attachment than any other community residing adjacent to the Mau forests. This can be observed in the way the community had consistently resisted evictions from the forest. The community had also maintained a narrative of their value for the forest and expressed fears about excisions and conversion of the forest into settlements. The community further maintained that they were friendly to the forest and did not degrade it. The same opinion about Ogiek being 'friendly' to the forest was not however disputed by their neighboring communities including the Kikuyu, the Maasai and the Kalenjin. The findings about the Ogiek who had lived longer than other communities in Eastern Mau having a higher affection and attachment to the forests are in harmony with the following studies:

Based on the work of Hernáñez, et al. (2007) in Tenerife, Canary Islands, it was evident that identity and attachment tend to coincide in natives, while individuals from other places give higher scores for attachment than for identity. The results are also consistent with Brown & Raymond (2007) working to determine the place attachment among different categories of residents indicating that place attachment was highest among the long term residents in Otways region of Australia. Brown & Raymond (2007) further revealed that aesthetic,

recreation, economic, spiritual, and therapeutic values spatially co-locate with special places and thus likely contribute to place attachment. Because of their identity and attachment to the Eastern Mau, the Ogiek believed that they should be granted exclusive rights of access to the forestland. This study illustrates that place attachment can form part of the identity based claim over a resource as well as a basis for exclusionary strategies in access to natural resources by those who perceive themselves as communities of place against those perceived as communities of interest. A community of place (or place-based community) has been defined as ‘a community of people who are bound together because of where they reside, work, visit or otherwise spend a continuous portion of their time’ (Ramsey & Beesle, 2007). The Ogiek perceived themselves to be a community of the Mau. This argument is supported by their constant efforts to be recognized as the indigenous community within Eastern Mau dubbing it their homeland. They on the other hand perceived the other communities, especially the Kalenjin to be the communities of interest who had come to Eastern Mau to destroy the forest and settle. Ramsey & Beesley (2007) distinguish the community of interest from spatial community by the fact that the former is not by bound by space.

The tussle over land ownership in Ngongongeri area of Eastern Mau between the local Ogiek squatters versus the absentee land lords lends credence to the argument of use of perceived identity- based -place attachment for excluding others from accessing natural resources. The Ogiek believed it was their right to own the piece of land in Ngongongeri (part of the excised land in Eastern Mau that was allocated to civil servants in the 1990s), since it was once within the forest where the community resided. Some members claimed to have been born and raised on the disputed land. The Ogiek’s perceived place attachment to Ngongongeri flows from their cultural heritage. On the other hand the officers, although they did not occupy the piece

of land immediately after it was allocated to them by the government, lay claim to Ngongongeri on the basis of possessing title deeds which were issued by the government of Kenya. The property owners mainly from the Tugen sub tribe of Kalenjin with some from other tribes did not claim the land by their identity through place of origin, as did the Ogiek. Instead, their common economic interests in the land mainly through farming activities could identify them. In fact, some of the landlords had sold off their land to other people who had then started some farming ventures. Thus, in the Ngongongeri context, the absentee landlords were deemed by this study to be a community of interest.

Identity as a cause of conflict can also be seen in the conflict between the Kalenjin and Kikuyu. The two ethnic groups had been involved in many violent conflicts than any other communities residing in Eastern Mau. Violent clashes had occurred between the two communities during the national elections of 1992, 1997, 2002 and 2007. In the Kalenjin versus Kikuyu conflict, the 'us' versus 'them' attribute of identity based conflict was observed mainly through communication by the two parties. Folger *et al* (2009) suggests that communication plays an important role in social categorization. The two communities called each other nicknames, some of which had negative connotations such as 'people of the forest', 'dog' or 'thief'. Apart from nicknames, other figures of speech included metaphors such as 'you were brought (by your political leaders) here (in Eastern Mau)'. Places in Eastern Mau had also been in the past named in a manner likely to suggest (or assert) the identity of inhabitants. These communication strategies, although not necessarily a source or trigger for conflicts *per se*, are an indicator of perceptions and attitudes of the different communities that suggest that 'we' are different from 'them'. It has been suggested that for an intergroup conflict to occur the parties to the conflict must have a sense of collective

identity about themselves, each side believing the fight is between "us" and "them." Identities are collective so that people feel injured when other persons sharing their identity are injured or killed. Some individuals for example the Palestinian suicide bombers are even prepared to sacrifice their lives to preserve their identity group (Doucey, 2011).

It has been observed that conflicts related to highly significant identities are likely to persist, since threats to those identities are not often taken lightly. Such conflicts which persist through time and seem to not to have solutions are also said to be intractable. While agreeing with several works that link conflicts to ethnic identity in Africa (such as Eifert, et al., 2010; McGarry & O'leary, 2013) and specifically in Kenya (Bratton & Kimenyi, 2009; Mkutu, 2008; Shibia, 2010) this study suggests that in most cases ethnicity *per se*, in the absence of intervening variables (such as incitement by politicians and other institutional factors) does not cause conflict. Evidence from the Kikuyu and Kalenjin conflicts suggests that whenever ethnic conflict emerged in Eastern Mau, there had always been political machinations behind it. Indeed violent conflicts between 1992 and 2007 occurred during electioneering periods save for few cases. Politicization of ethnic identity often takes place in a context that is characterized by perceived inequitable access to resources. Such perceptions lead to the emergence of the "in group" and the "out group" attitudes with the latter trying to break the perceived inequality as the former responds by building barriers to resource access that ensure the continuation of its perceived privileged position. At the centre of the identity based conflicts are the elites who invoke ethnic ideology in the hope of establishing a reliable support base to fight what could be purely elite interests. For instance, Eastern Mau like other parts of Rift Valley had suffered from perceived and elite championed historical land injustices (GOK, 2005; TJRC, 2013). The Kalenjin believed that the Kikuyu were brought

from the central Kenya and settled in the Rift Valley (a region perceived to belong to the Kalenjin community) by the administration of first president of independent Kenya, himself a Kikuyu. The Kikuyu on the other hand believed that the Kalenjin were brought from other parts of Rift Valley to settle in Eastern Mau by the administration of second president, himself a Kalenjin. They also believed that their kinsmen first settled in the Eastern Mau way before Kenya's independence from the white rule. The two different but firmly held narratives became a basis for politicians during campaigns to present themselves as 'saviors' for their respective communities, who would promise that if elected they would champion for the correction of the 'historical injustices'. Some members among the Kalenjin and Kikuyu believed that correcting the historical injustices would involve expelling some communities from their settlements in Eastern Mau, a perception that led to ethnic tensions characterized by collective fear and mistrust among the two communities. Thus, elections in Kenya provided platforms for ethnic polarizations with ethnic voting patterns emerging. Since the ethnic landscape among the Kalenjin and the Kikuyu was often highly polarized during elections, it was easier for violence behavior to break out. This scenario of perceptions, beliefs and attitudes preceding some conflict behavior in a context of political processes (elections) fits in the Galtung's (1996) model that proposes that conflict usually has three elements of Attitude, Behavior and Context.

The case studies involving the Ogiek struggles in Eastern Mau as well as the Kalenjin versus Kikuyu conflicts have shown that identity based conflicts are made possible by feeling of marginalization, presence of leadership and polarization. The Ogiek believed that they had been marginalized and denied their rightful access to the forest and land in Eastern Mau. The Kikuyu believed that the Kalenjin wanted them expelled from Eastern Mau as they were

considered to be ‘outsiders’ in the Rift Valley while the Kalenjin believed that the Kikuyu government was out to evict them from their settlements in Eastern Mau (for example Mauche division) and restore those areas to forests. All these fears and concerns amount to siege mentality. Christie (2011) defines siege mentality as a shared feeling of victimization and defensiveness. In terms of leadership, the Ogiek found a voice to articulate their perceived threatened identity through the Ogiek council of elders as well as courts whereas national elections provided an opportunity for the Kalenjin and Kikuyu to be mobilized along ethnic lines by leaders seeking various political positions. Rubin *et al* (1994) suggested the availability leadership as one of the conditions that encourage conflicts. Feelings of marginalization and political leaders seeming to champion for the course of their respective communities led to enhanced cohesiveness within the in-group among the Kikuyu and the Kalenjin with the result being polarization of the ethnic landscape especially during elections. In the Eastern Mau conflicts, it is possible that the political leaders through mobilization of their followers whipped up ethnic emotions to the extent that in-group disagreements about the other party were minimized.

### 7.3.2 Natural resources and other geographical factors

Conflicts over natural resources are inevitable especially where resources are scarce and used by different groups to sustain their livelihood. Conflicts can arise from competitions among people over the same resources. The competitions can lead into disputes and disagreements if the resources are perceived to be unfairly distributed or insufficient to meet the needs of the parties involved. The Maasai and Kalenjin communities in Eastern Mau were involved in ethnic fighting over pasture within Longman forests between the year 2001 and 2009. The two communities both kept free ranging livestock and thus had the same interests in the forest

(that is, through pasture needs). Vindelov (2012) reckoned that conflict of interests occur not because parties have different values but rather that they share the same view of the worth of the resources under dispute. The period of peace between the Maasai and Kalenjin could be attributed to sufficiency of pasture within Longoman forests and little contact between herders from the two communities that would have led to competitions. The remotely sensed image analyses of land cover in Eastern Mau indicated that about 60% of forestland was lost to agriculture and settlements between 1995<sup>30</sup> and 2014. The findings were consistent with several works reporting on the general forest loss in the entire Mau forest complex (Lambrechts, et al., 2007;GOK, 2009b; Oyieke, 2009). The conflict between the Maasai and the Kalenjin can therefore be explained in part by two possible factors, namely; competition over resources occasioned by scarcity and the juxtaposition of the two communities.

Reduction in pasture meant that the two communities had to compete over the limited resource in the forest, a situation that is likely to have led to conflicts. Each group felt that their interests (ample grazing grounds) in the forest were being threatened by the presence of the other party. These interests represented the underlying (hidden) needs, that is, pasture for livestock. Inter group conflicts can stem from threatened underlying needs or what Burton (1990) referred to as unsatisfied human needs of one or both parties. The findings in this study are consistent with Collier & Hoeffler (2012) model that stresses the significant relationship between strains on natural resources and the outbreak of violent conflicts.

The two communities were separated by the vast forest (bordering the Longoman on the eastern side were the Kalenjin in Mauche division, while to its western side were the Maasai

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<sup>30</sup> The Kalenjin are believed to have started settling in Eastern Mau in excised forest land from mid 1990s. Excisions peaked in the 2001



from Narok County). Forest excisions and encroachments that peaked from mid 1990s until early 2000s, led to the physical distance between the two communities being reduced and thus the herders from both sides of the forest would meet quite often than before, a situation that led disputes.

Apart from reducing the distance between the Maasai and the Kalenjin, the excisions and encroachments led to the shrinking of the forest as well as the forest resources such as pasture. One of the early works by Hardin (1968) contended that ‘complete competitors cannot coexist’. When the grazing area shrank and there was limited space forcing the Kalenjin and Maasai to share the same space, they became fierce competitors and hence frequent physical confrontation.

Apart from the Maasai versus Kalenjin conflicts in the forest, the inter-group conflicts involving the Kalenjin and the Kikuyu consistently occurred at the boundary of the two communities where such shared resources as market centers and roads were found. For example, as reported before, one of the hotspots for violence between the Kikuyu and Kalenjin was NDEFFO market, located along the Njoro-Mau Narok road. The market centre was situated at the boundary of Mauche division (predominantly Kalenjin) and Mau Narok division (Kikuyu territory). The settlement alignment of communities may not constitute root causes of conflicts *per se* but could have provided conditions that encouraged conflicts. These conditions are seen as correlates of inter-group conflicts. Hoeffler (2012) suggests that to prevent conflicts, it is better to understand the correlates of conflicts rather than causes.

### 7.3.3 Policy and institutional factors

The way a society is structured in terms of policy and institutions can create both the root causes of conflict (underlying sources) and the conditions (trigger factors) in which it's likely to occur. In Eastern Mau the government's decision to excise parts of the forest with the aim of resettling communities provided an arena for ethnic competitions over land and other natural resources. The conflicts that were witnessed in the Likia area in Mau Narok division in the 2000s present a case where groups of individuals from different communities competed over land in the Likia extension. Although Likia forest block, an extension of Longoman forests was part of the closed canopy forest under the government forest reserve, groups of individuals started hiving off sections of the forest illegally. This scenario best fits in Ribot & Peluso (2003) explanation of the difference between property rights and access to natural resources. Whereas rights are claims or entitlements to a resource (property), access is about the ability to utilize the resource. Some of the mechanisms suggested under Ribot and Peluso's (2003) access theory include illegal access. As reported before in this thesis the term which was commonly used by the residents of Eastern Mau to the illegal access of forest land was '*witemere*' loosely translated as 'hive for yourself'. *Witemere* occurred when individuals or groups of people decided to hive off some land that was under public management and convert it into private ownership outside the legal norms of acquiring land. Therefore, competition for land under Likia extension (*Witemere*) which started in early 2000s, immediately after the government excisions had been stopped in Eastern Mau forests, was a good example of illegal access. However, it is possible that government excisions, which had occurred in other parts of the forest-motivated residents of Eastern Mau to illegally, access the forest for their use. This was done in anticipation that when the government legitimized the transfer of land ownership from public to private ownership through title deeds issuance, that

Likia extension would also be considered. However, access to the Likia forest was based on ethnic groupings with the Kalenjin and the Kikuyu encroaching on it from the northern and the eastern side respectively, while the Maasai accessed the forest from the southern side. The Kalenjin and the Kikuyu started doing some farming on the hived off land while the Maasai utilized the land for grazing purposes. Violent conflicts erupted in the year 2004 when the Kalenjin and Kikuyu differed over the location of the boundary separating their territories within Likia extension.

The Maasai were also involved in the fighting with such trigger factors as their livestock grazing through Kalenjin and Kikuyu farms and as a result the herders got killed by the farmers. The violent conflicts among the three communities were sustained until the year 2010, when the government decided to intervene and evict all the settlers from the Likia extension and replanted the forest to restore it to its original state. The *witemere* conflicts support the theory that identity based access to resources can be a basis for exclusion or inclusion (Ribot & Peluso, 2003) which can contribute to conflicts in the rural areas (Lund & Sikor, 2009). However, the way natural resources are managed can either encourage or discourage conflict occurrence. For example, in the Eastern Mau case, the government had opened up the forest for allocation of land to individuals (and some communities) in a poorly planned manner as observed by various works (such as GOK, 2005; Yamano & Deininger, 2005; Morjaria, 2012; TJRC, 2013) and thus lacking legitimacy (or simply losing interest) in stopping further encroachments long after the excisions had been stopped. By the government opening up the Eastern Mau forest through excisions, they not only led to the Likia forest extension ethnic competitions, but also contributed to other forms of resource disputes elsewhere in Eastern Mau. These included forest encroachments through illegal settlements in

the forest and subsequent forceful evictions by the government, and illegal logging in Longoman forest resulting into conflict between KFS and the community. The government excisions also led to a series of land disputes with the Ogiek opposing the settlement of other communities in the degazetted land. These findings are consistent with reports of various commissions appointed by the government to investigate the causes of ethnic clashes in different parts of Kenya spanning a period of two decades (these include; GOK, 1992;GOK, 1999; GOK, 2005;GOK, 2008; TJRC, 2013) that cite land adjudication problems as one of the sources of conflicts in the wider Rift Valley region, Eastern Mau included.

#### **7.4 Typology of Eastern Mau conflicts**

The nature of conflicts in Eastern Mau (violent ethnic clashes, indigenous community grievances and government disputes with the community) and how they differ in space and time makes it difficult to differentiate those that are related to competitions (or conflicting goals) over Mau forest resources and those that are based purely on relationship issues (for example ethnicity). However, in trying to unearth the root sources of the various conflicts, it was possible to identify three truths. First, verifiable facts such as Mau forest excisions as they occurred in space and time (leading to forest degradation) which was confirmed through remotely sensed images. Secondly, agreeable facts between conflicting parties for example both the Kalenjin and the Maasai agree that they used to fight over cattle theft within the forest and stopped in the year 2009 after negotiations between their leaders. And thirdly, differing perceptions among the conflicting parties for example the Kikuyu believed that they were legitimately settled in Eastern Mau through land buying companies while the Kalenjin were settled on formerly forest land by the government illegitimately. On the other hand the Kalenjin believed that the Kikuyu were settled by the government without any payments

while the Kalenjin are legitimately settled in eastern Mau as the region is part of the original Kalenjin territory. All these different perspectives were considered in the analysis of conflicts in Eastern Mau. Therefore, in order to understand better Eastern Mau conflicts and their nature, a basic typology of conflicts is proposed. From the proposed approach it is not implied that a conflict that belong to a certain group has only that aspect and do not participate in other groups, but rather it is a way to simplify the reality in order to understand better the core problem of each conflict.

Two basic categories in the typology are established in trying to answer two questions: which conflicts are directly in relation with the forest resources access? In addition, which conflicts are more in relation with ethnic relations? Within the first category (forest resource access-directly-related conflicts), several subcategories have been established in relation to the aspect of the forest resources that constitutes the main matter of conflict. In this way forest, resource access refers to the utilization of land (formerly forestland, or land bordering the forest), pasture or tree products. The second category is indirectly related to the forest, as the issues that were observed were more to do with the symptoms of the conflict such as ethnic relations than forest resource access (Figure 33).

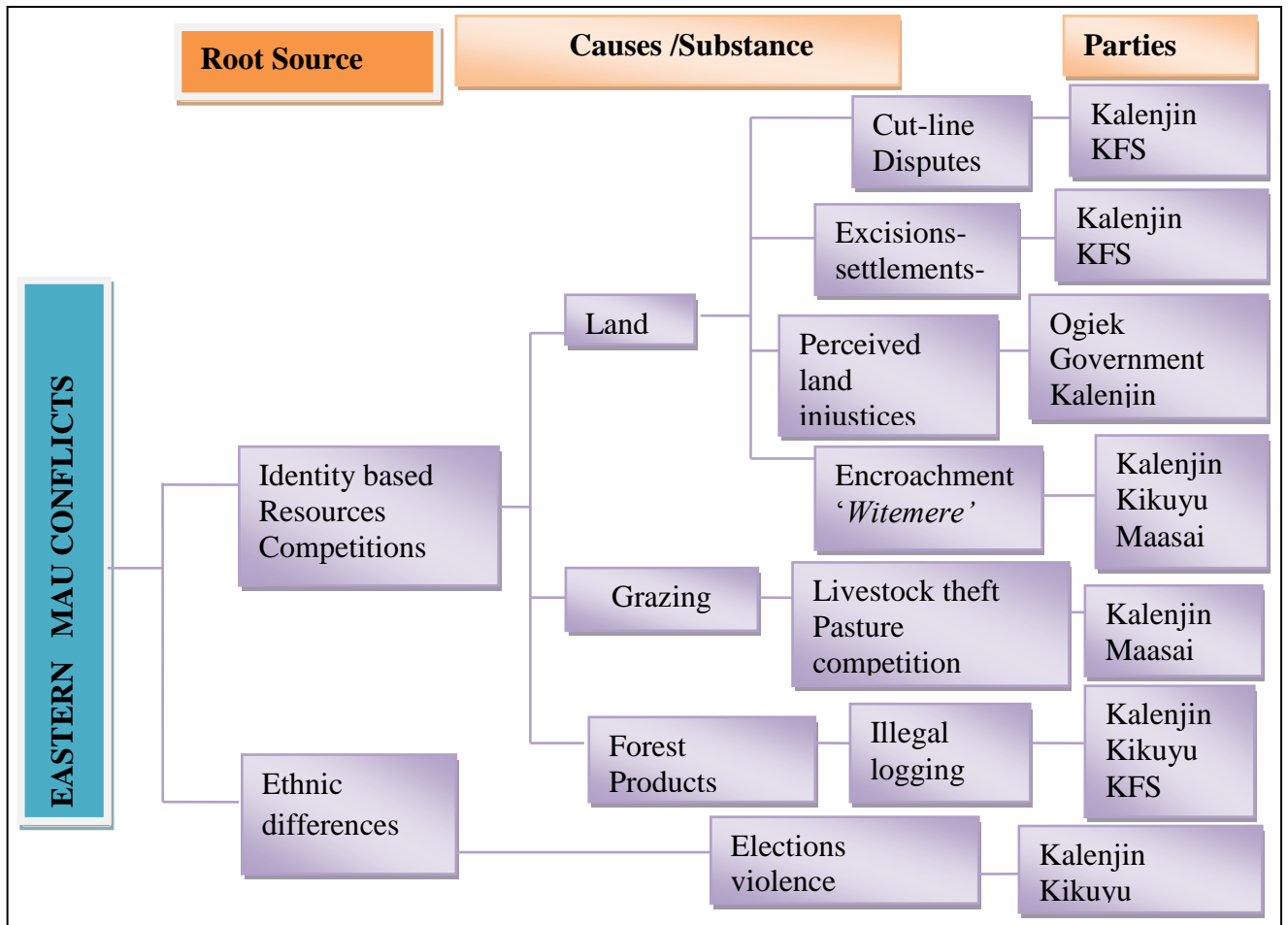


Figure 33: Typology of Eastern Mau conflicts

*Forest resource access*

**Land**

The government and the Kalenjin community residing adjacent to the forest were embroiled in disputes over the location of the boundary of the forest. For example, whereas the government agency, Kenya Forestry Service (KFS) argued that some settlements in Teret area (located in Mauche division) had been built beyond the cut-line, the owners insisted that their houses were outside the forest boundary. The conflict escalated sometimes with KFS guards burning down the houses that were perceived to be inside the forest boundary. Another conflict over access to land was witnessed between the community and the government and involved evictions of people from the forest. After concerns were raised in the international as

well as local media about the destruction of the Mau forests complex, a task force was formed in 2009 with the aim of advising the government on among other issues on the long-term solution for uncontrolled human settlement in and around the forest complex, including relocation of populations as may be necessary for the conservation of the forest complex (GOK, 2009a).

The taskforce noted that whereas the 2001 forest excisions were meant to settle the Ogiek and the victims of 1990s land clashes in Rift Valley, the beneficiaries included non deserving people. Therefore, some of the recommendations of the taskforce were that encroachers should be removed from the forests immediately and non-deserving persons who benefited from illegal and/or irregular allocations of land in the Mau forests should surrender their land. As a result, a government agency known as the interim coordinating secretariat (ICS) was set up to implement the recommendations of the taskforce. One of the areas, which the ICS was supposed to restore back to forestland, was Teret block, which was by then settled by residents of Mauche division. Thus, the situation led to great anxiety over possible relocation (and eviction) of settlers within Mauche division.

The Ogiek community was also involved in a conflict with the government. The community believed that they had been shortchanged repeatedly by being evicted from the forest and not being settled on their ancestral land. The community claimed that since the colonial times they had been consistently forced out of their heritage in the forest. They further claimed that other communities had been settled on former forestland on their behalf. The community believed that the Kalenjin community was the main beneficiary of the land meant for Ogiek settlement. Thus, they expressed negative attitude towards the Kalenjin whenever they

articulated their land grievances. As was observed before in this study, the Ngongongeri area of Eastern Mau witnessed a conflict involving some members of the Ogiek community and some rich farmers over ownership of a piece of land known as the officer's mess. The conflict escalated into violence with the locals attacking the rich farmers who had started farming in the disputed land.

Competition over land was also witnessed among Kikuyu, Kalenjin and Maasai in Likia extension of Longoman forests. The three communities encroached on the forest reserve in what was commonly known as *Witemere*-hive for yourself land. The conflict escalated into violence when the Kalenjin and Kikuyu could not agree on the boundary between the two communities within the encroached land. The Maasai also clashed with the Kikuyu when livestock from the former trespassed into the latter farms.

### **Grazing related conflicts**

Conflicts between the Kalenjin and Maasai involved competition over pasture within Longoman forest blocks of Eastern Mau. The conflicts that occurred between 2001 and 2009 involved the two communities accusing each other of livestock theft. Whenever a herder from one community lost livestock and suspected the other community of stealing, this became the basis for violent clashes. These conflicts were however correlated to forest degradation that had peaked during the 1990s-2001 period.

### **Illegal logging**

Some community members living adjacent to the forest were engaged in illegal logging and thus were always on a collision course with KFS. Based on an account of the KFS guards,



most of the perpetrators were the youth from Kalenjin and Kikuyu communities. The forest poachers cooperated in their actions, with the Kalenjin youth cutting the poles deep into Longoman forests and the Kikuyu transporting them to the market. The KFS guards would arrest the Kikuyu youth transporting poles from the forest. However, the youth who were caught cutting poles in the forest resisted arrest and in some incidences, they became violent and attacked the guards with machete. The armed guards in response would shoot at the forest poachers. The KFS guards often complained that whenever they arrested the forest poachers and opened charges against them in courts of law, the penalties were always lenient, such as the defendants being committed to community service for one month or less, after which they went back to forest poaching. The finding that conflicts in Eastern Mau are resource related is in harmony with Kanyinga (2009) argument that land has been a source of conflicts in Kenya, citing cases drawn from the coastal area as well as the Rift Valley region. Kanyinga concludes that political leadership in Kenya has not been keen to address the land question which remains a hot spot that, unless addressed in a democratic manner, may well ignite recurrence of violence. This thesis relates with Morjaria's (2012) work on deforestation and electoral competition (election conflicts) in Kenya. However, whereas Morjaria implies that deforestation was motivated by political competitions, evidence presented in this thesis especially on the spatial dimension of conflicts, moves further to suggest that some conflicts (such as those between Maasai and Kalenjin) in Eastern Mau were motivated by perceived resource scarcity following periods of consistent deforestation.

### **Forest resource indirectly related**

The conflict between the Kalenjin and the Kikuyu though intractable, were not directly related to the forest resources. There were differing perceptions on the causes of clashes between the

Kalenjin and Kikuyu that had persisted each election year between 1992 and 2008. Some residents were of the opinion that their conflicts were related to perceived injustices over land. These opinions are consistent with the reports of commission of inquiry into post election violence as well as the TJRC reports on the causes of ethnic conflicts in the Rift Valley region. Such opinions suggested that the Kikuyu believed that the Kalenjin were given Eastern Mau forestland by the government illegitimately while the Kalenjin believed that the Kikuyu were in Eastern Mau illegitimately as their homeland was in central Kenya. Thus, tension existed between the two communities with each group believing that the other wanted them out of the Mau. Some opinions suggested that conflicts were caused by political differences. In 1992 when the two communities started fighting in an election year, the Kalenjin were perceived to be in the ruling party while the Kikuyu were in the opposition. The status was repeated in the year 1997 elections. In the year 2002 and 2007, the Kalenjin were perceived to be in opposition while the Kikuyu were thought to be aligned to the ruling party. The proponents of political differences as a source of conflicts further argued that the fact that in the 2013 general election the two communities did not clash because they were both in the same political party, is evidence enough that politics play a major role in conflicts.

All the issues discussed above that point to some conflicts in Eastern Mau not being directly related to forests suggest that such conflicts occur due to purely identity reasons. Identity has manifested itself through political party affiliations. This finding of the thesis is consistent with findings from other works written on the subject of conflicts and identity. For example, following the violence witnessed in Kenya after the 2007/2008 elections in Kenya and the 2008 xenophobic attacks in South Africa, Landau & Misago (2009) explain that the two cases had a strong ethnic component. They further argue that mobilization of groups was not just

political opportunism by the elites but a fundamentally different form of politics that brings together nation and ethnicity in novel ways that, while creative, are also deeply dangerous.

## **7.5 Conflict management practices**

Since conflicts in natural resource management (NRM) are inevitable, conflict management practices are established to mitigate and handle conflicts occurrences. Within Eastern Mau, several approaches have been attempted with the aim of addressing conflicts in the region. The conflict resolution mechanisms can be categorized broadly under formal and informal initiatives. The formal mechanisms represent actions by the government as well as other stakeholders that involve formal institutions such as natural resource legislations and court processes which are aimed at addressing the problems in NRM. The informal mechanisms on the other hand involve efforts at the community level to address conflicts using such instruments as customary practices and inter-group dialogues.

### 7.5.1 Formal practices

#### *Evictions and settlements through excision of forests*

As a way of conserving the Mau forests, the government from the colonial period to the post independent Kenyan administration had at various times tried to evict the forest dwellers, majority of who were the Ogiek. Whereas the evictions were meant to safeguard the forest and its role as an important catchment area, they often resulted in grievances by the Ogiek of being denied access to the forest as their cultural heritage. To address the plight of the Ogiek, the government decided to degazette portions of the forest with the intention of resettling the community (Table 18).

Table 18: Purposes of the settlement schemes in the 2001 excisions in Eastern Mau Forests based on the Report of the Inter-Ministerial Committee on Forest Excisions

Name of Scheme	Area [ha]	Intended Beneficiaries	Number of Intended Beneficiaries	Actual beneficiaries	Remarks
Sururu	5,852	Ogiek families	2,600 families	Kalenjin majority	First Ogiek settlement in Mau in 1994
Likia	2,290	Ogiek families	900 families	Kalenjin majority	Started in 1995
Teret	2,117	Not stated	850 families	Kalenjin majority	Established in 1995
Sigotik	1,812	Not stated	600, against 1,500 families demanding settlement	Kalenjin majority	Started in 1994 not finalized due to disputes.
Nessuit	4,730	Not stated	1,500 families	Ogiek majority	The Ogiek were already resident in Nessuit
Ngongongeri	4,100	Not stated	1,400 families	Ogiek majority	Started in 1996.
Marioshoni	8,300	Ogiek families	1,500 families	Ogiek majority	Started in 1996 put to hold in 1997 through Court Injunction.

(Source: modified from GOK, 2009a)

The above figures are part of the 61,622.7 ha (that is 29,201 ha<sup>31</sup> in Eastern Mau and 32421.7 ha from other parts of Mau complex) that were excised in the entire Mau forests complex between 1994 and 2001 as provided in official government records (GOK, 2009a). Various gazette notices on forest excisions by the government outlined the aims of degazetting the Mau forest reserves as being the settlement of the Ogiek who had been evicted from the forest as well as persons who had been displaced by the 1992 tribal clashes in the Rift Valley. Of course this argument has been disputed by some scholars (such as Morjaria, 2012) who claim that excisions were meant to settle the Kalenjin to neutralize the influence of the Kikuyu in

<sup>31</sup> Another report by UNDP (2008) puts the excised land from Eastern Mau at 35,301ha

elections as they were considered to be in the opposition party. For instance, Sururu, Likia, Teret and Sigotik schemes are mainly inhabited by the Kalenjin community although originally meant for Ogiek settlements. However, regardless of their intent and purpose the excisions were preceded by more incidences of violent clashes between the Kalenjin and Kikuyu (who had now become neighbors) as well as grievances from the Ogiek community about losing their ancestral land to other non deserving persons. The excisions also attracted a public outcry about the destruction of the Mau forests. A total of 16 objections to the excisions were received from various stakeholders including the World Bank, IUCN-The World Conservation Union, WWF, East Africa Wildlife Society and the Kenya Forests Working Group (GOK, 2009a).

A taskforce on the restoration of the Mau forests complex was set up in 2008 by the Kenyan prime minister with an aim of making recommendations to the Government on among others; long term solution for uncontrolled human settlement in and around the forest complex, including relocation of populations as may be necessary for the conservation of the forest complex (GOK, 2009a).

In line with the Task Force recommendations, an Interim Coordinating Secretariat (ICS) was established in the Office of the Prime Minister in 2009 to coordinate the implementation of repossession of forestland in the Mau. The repossession of forest land was scheduled to take place in phases. Phase I concerned the repossession forest areas that were excised from Eastern Mau Forest Reserve in 2001, but were yet to be allocated or occupied (ICS, 2010). Phase II concerned the repossession of forestland that have been encroached by illegal squatters. These squatters had no documentation to support their occupation of the forest. The

remaining phases were to include eviction and possible compensation of settlers who were in possession of title deeds. However, these phases received opposition from the political leaders from the affected areas. The planned evictions also led to community tensions and the great anxiety over possible relocation of settlers. For example, there was anxiety by the Kalenjin in Teret settlement scheme who believed that all their land (that is, Mauche division) would be affected by the evictions.

#### *Court cases*

The Ogiek resorted to the courts in an attempt to stop perceived loss and degradation of their ancestral lands. In 1997 the community members filed a case before the High Court in Nairobi seeking an injunction to prohibit further allocation of the Ogiek's ancestral lands and the settling of non-Ogiek persons in Mau forests. They argued that their eviction from the forest was a violation of their constitutional rights to life, equal protection under the law, and the right to non-discrimination.<sup>32</sup> The High Court ordered a stop to the evictions, but the order was violated soon thereafter with the allocation of title deeds to non-Ogiek settlers. In 1999, five thousand members of the Ogiek community went to court to protest their eviction from their perceived ancestral lands near Tinet (western Mau).<sup>33</sup> The Court in its ruling dismissed their claim stating that the Ogiek right to life had not been contravened by their eviction from the forest as it was 'themselves who wished to live as outlaws with no respect for the law conserving and protecting forests'. The Ogiek had submitted to the court describing their unique relationship to the Mau forestlands, upon which they depended for their cultural

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<sup>32</sup> Joseph Letuya and 21 Others v Attorney General and 5 Others, Nairobi High Court Misc. Application No 635 of 1997.

<sup>33</sup> Francis Kemai and 9 Others v Attorney General and 3 Others Nairobi High Court Misc. Application No 238 of 1999

identity and livelihood. However, according to the court, the forestland in question did not belong to Ogiek as it was a protected area.

In 2002, Ogiek community members again filed a case at the High Court in order to stop the planned excision of Mau forests.<sup>34</sup> The community contested the excisions on the grounds that they were a threat to the environment. The case remained pending at the High Court for a long time.

The community believed that the government was out to frustrate their efforts in seeking for restitution for their ancestral land since none of the cases was heard on the merits because of procedural delays and non-response by the Kenyan government. As a result the community decided to seek for justice outside Kenya. The community submitted a communication to the African Commission on Human and Peoples' Rights in 2009. Among the allegations lodged at the regional commission were violations of Articles 2 (right to non-discrimination), 14 (right to property), 17 (right to culture), and 21(right to free disposition of natural resources) of the African Charter on Human and Peoples' Rights. In 2012, the Commission referred the Ogiek's case to the African Court of Human Rights based in Arusha, Tanzania.

On 17<sup>th</sup> March, 2014 the Environment and Land Court sitting in Nairobi determined the suit that was commenced by way of an originating summons of 1997 filed by the applicants representing members of Ogiek community living in Eastern Mau. The applicants who numbered 22 sought from the court eight orders among them; an order that the government evicts from Sururu, Likia and Teret forests all persons who had been purportedly allocated the land belonging to the Ogiek community. During the ruling, the court granted orders for the

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<sup>34</sup> Republic v Minister for Environment and 5 Others ex Parte Kenya Alliance of Resident Associations and 4 Others; Nairobi High Court Misc. Application No 421 of 2002

resettlement of landless Ogiek by the government outside the critical catchment areas and biodiversity hotspots<sup>35</sup>. However, on the question of eviction of non-deserving persons allocated land in Eastern Mau, the court upheld the recommendations of the report of the Government Taskforce on the Conservation of the Mau Forest Complex of 2009. Whereas the ruling sounded like a victory trumpet for the Ogiek community *prima facie*, it should be noted that eviction of people from Eastern Mau would have been a toll order. In some cases, the eviction would have affected a very large area (for example the whole of Mauche division was said to have been allocated to non-deserving people). It should also be noted that whereas the ICS, a government agency was tasked with implementing the Government Taskforce report recommendations, its efforts had been earlier on slowed down by political agitations to stop the Mau evictions.

The legal approaches to the disputes in Eastern Mau between the community and the government did not yield much as they were characterized by delays. Also, litigation as a mechanism for resolving natural resource conflicts are ineffective especially in handling such issues as safeguarding cultural heritage on one hand and protecting the environment on the other. Since in court cases, there are winners and losers (Vibeke, 2012) in the event that the outcomes of the cases did not favour the Ogiek, the community was likely to feel more marginalized.

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<sup>35</sup> Joseph Letuya and 21 Others v Attorney General and 5 Others, Environment & Land Court, Nairobi ELC Civil suit No 821 of 2012.



### 7.5.2 Informal practices

#### *Customary conflict resolution*

In traditional African society, each community resolved their conflicts in one way or the other before the emergence of nation or court system. After the emergence of the state and the court system, some communities especially in rural Africa still resolved their conflicts with little or no interference from the state. Examples of conflicts that can be solved through customary mechanisms include interpersonal, tribal, land and family disputes. The customary conflict resolution processes are typically based on consensus building where discussions are open and where information is shared and clarity sought. Community authorities mainly elders are often the mediators. In Eastern Mau some conflicts were resolved through customary mechanisms.

In the year 2006, during the violent clash between the Ogiek and Kalenjin that was triggered by alleged sheep theft, the elders from both sides held a meeting and resolved to put an end to the conflict. The conflict had been triggered by an alleged Ogiek livestock theft by the Kalenjin. As a result, the Ogiek started fighting the Kalenjin leading to loss of lives on both sides. After the meeting between elders from the two communities, the stolen livestock were returned to the Ogiek owners and thus fighting was stopped.

Grazing related clashes between the Kalenjin and the Maasai that occurred consistently between the year 2001 and 2009 was brought to an end when the elders from the two communities met within Longoman forest and resolved to put to an end their fighting. During the conflict resolution meeting which occurred in 2009, both parties decided to demarcate the grazing grounds within the forest at a place called *Roshina*. As a result, the forest was divided

into two sections using river Njoro as the boundary and the Kalenjin were asked to graze on one side of the river and the Maasai on the other. Following the resolution to 'divide up' the forest, fighting between the Maasai and Kalenjin was stopped. Previously there had been several unfruitful efforts by the government through provincial administration to stop fighting between the two communities. Boege (2006) observes that customary resolution mechanisms are credited with legitimacy by the communities in which they operate as they provide for inclusive and participatory approaches to conflicts.

## **7.6 Study Conclusion**

Just like a tree with hidden roots and visible trunk and leaves, conflicts in Eastern Mau have the elements that are observable for instance as manifested through violent behavior, and hidden sources that are considered as the root causes of conflicts. The visible conflict elements have been seen to vary in space and time with specific contexts acting as their triggers. Such contexts include elections or perceived resource scarcities. The sources of conflicts in Eastern Mau are many and complex. They also vary in space and time. This thesis has developed a typology of conflicts based on causes. However, behind all the causes of conflicts, the study argues that there are fundamental issues that have to do with identity. The causes are broadly classified as resource related and non-resource related. Under the resource related, there are issues of land, forest products and grazing. It is believed that the different perceptions that lead to groups fighting one another physically or through communication are as a result of competitions over natural resources. This is in line with the realistic identity theories on conflicts. The conflicts between the Kalenjin and the Maasai have been classified under this category of resource competitions. On the other hand, some conflicts in Eastern Mau occurred in the absence of shared resources for example the clashes involving the

Kalenjin and the Kikuyu. These conflicts have been designated in this thesis as resource indirectly related. In such conflicts, identity issues (ethnicity) are thought to be the main motivation for intergroup conflict. Since conflict management is part of human relationships, this study has documented some of the conflict approaches employed in the study area. These are broadly classified under formal and informal practices. The formal practices involved actions by the government, or community to address the various problems in Eastern Mau. These have been discussed as excisions, settlement of communities and evictions of people on forest land by the government as well as court cases lodged by the community (mainly the Ogiek) in search for justice against perceived dispossession of land in Eastern Mau. Informal practices have entailed inter-community initiated conflict resolution attempts.

Theoretical as well as empirical evidence in existing literature outlines the role of identity and resource (and power) as the main sources of inter-group conflict. The scientific contribution of this thesis is twofold. First, to reinforce the definition of conflict using experiences from the field as ‘perceived’ incompatible interests and goals between parties. Whenever two parties hold different narratives, there is a likelihood of prolonged strained relations between them. For example, by keenly listening to the narrations by the different communities residing adjacent to Eastern Mau forests, it is evident that the parties which have always been antagonizing each other hold different perceptions on how the forest needs to be managed, who the rightful owners of the forest should be, who was the first to settle next to the forest, and who has been marginalized in terms of resource access nationally. These perceptions are expressed in the day to day interactions between individuals or groups of people and also through figures of speech (nick names, stereotypes and place names). In the same context of differing and sometimes conflicting narrations, absolute (objective) truth does not help to

change the stories as held by the parties. For example, even when the Kenya Forestry Service officers show the local citizens a map indicating the outline, the residents will still contest on the exact location of the forest boundary. Therefore, in conflict situations, attempting to pursue absolute truth may be an exercise in futility. To this effect, external parties working in social conflict situations (such as researchers, arbiters and mediators) need to listen keenly to the needs and perceived fears of the parties so as to address the root cause of conflicts instead of conflict symptoms.

Secondly, the work contained in this thesis links 'place' to 'identity' in understanding the causes of natural resource conflicts. Whereas there have been attempts to link place attributes to identity (for example by Cheng *et al*, 2003), such attempts have remained at conceptual levels. This study using cases drawn from Eastern Mau in Kenya provides empirical evidence to the effect that in natural resource conflicts, identity issues and place values are inextricably enmeshed. Indeed, the study findings support the idea that place based identity plays a major role in conflict sustenance. Group cohesiveness (social factors) can be influenced by shared values in a place (spatial attributes). On the other hand, interest in a place (for example shared values in a resource) can be influenced by common identity.

#### 7.6.1 Theoretical implications of the study findings

Study findings in this thesis confirm the assertion of social identity theory (SIT) that all conflicts are identity conflicts. This implies that underlying all conflicts are identity issues. This thesis drawing its experiences from the Eastern Mau, suggests that ethnicity is a reality as primordialist theorists on ethnicity would believe. The thesis also concludes that politicians and other so called 'elites' in the community may sometimes use ethnicity as a tool to achieve

their goals as instrumentalists believe, for example, inciting residents of Eastern Mau to vote along ethnic lines during elections. However, this tool is not a reserve of the elites as the community members are well informed and sometimes organize themselves along ethnic lines in order to achieve their goals. For example, in the Maasai versus Kalenjin conflict over pasture in the Longoman forests evidence showing that politicians were involved in mobilizing communities along ethnic lines is virtually non-existent. In fact the reverse was found to be true, that is, attempts by the elites (government officials and the political leaders) to end the conflict had failed until members from both communities decided to allow their local elders to mediate between them and found a solution on how they were going to relate and coexist in the forest.

In contributing to the environmental conflict theory, this thesis has argued that resource scarcity and environmental degradation may well lead to conflict, but such direct effects may be mitigated (or exacerbated) by other social and/or political factors. The study has identified the political processes by which the government exacerbated (e.g. through excisions) resource conflicts in the study area.

## **7.7 Recommendations**

### **7.7.1 Policy implications of the study findings**

Taking cognizance of the fact that differences in perception by different ethnic groups as evidenced by the different narratives as held by the residents of Eastern Mau, the study recommends that the operations of the National Cohesion and Integration Commission (NCIC) should be out scaled into the various parts of the country to ensure that potential conflict zones benefit from the cohesion and integration process. Thus, there is need for

policies that would enable the commission to increase its presence in the various parts of the country. In the same vein, the study recommends that the District Peace Committees (DPCs) which were set up after the 2007/8 post election violence should be well constituted to ensure equal representation of ethnic groups residing within specific geographical areas. If well represented in the DPCs, this thesis argues that each community will be provided with an opportunity to negotiate for their interests. The recognition of communities in the decision making process allows them to allay fears that they have been marginalized.

To improve the ability of communities to access forest resources, the study recommends that Participatory Forestry Management (PFM) should be fast tracked to ensure that communities living adjacent to the forest have a feeling of being involved in the management of the forest. It is this feeling that will make them 'own' and take care of the forest as the resource to benefit them and their posterity. On-farm forestry should be prioritized by the various forest conservation agencies to ensure that the pressure on forest reserve is eased. On-farm forests are likely to offer the same economic functions as forest products such as fuel wood and building poles that can benefit the youth and other groups by providing them with a source of livelihood.

To manage identity as unmet needs contributing to conflicts, this study recommends mediation among the different parties as a conflict resolution mechanism. This thesis proposes that different communities and other stakeholders (including external parties such as the government and Nongovernmental organizations) interested in solving inter-ethnic conflicts should consider providing necessary and sufficient conditions (including policy

frameworks) that would ensure the success of mediation processes in conflict hotspots in Eastern Mau and the rest of Kenya.

#### 7.7.2 Further research

During the study, the researcher found out as reported before in this thesis, that there were some existing conflict management strategies. One of the successful strategies reported by the community members was the mediation process that involved the Maasai and Kalenjin in negotiating how to end fighting between their members. The study recommends an identification and deeper analysis of similar community initiated strategies of natural resource conflict resolution with the aim of suggesting their integration into the conventional practices such as court processes. Such an analysis should seek to understand the dynamics, parties involved and how different customary practices are employed in the local conflict resolution process.

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## 9.0 APPENDICES

### A .Unstructured Interview guide

#### (Mainly for community members)

Purpose: this Group Discussion (or conversation between the researcher and the community key informant) is intended to be used for studying community access to forest resources in the Eastern Mau. All responses will be treated with confidentiality.

Place Name \_\_\_\_\_

Category (e.g. ethnicity or age group).....

Date \_\_\_\_\_ KI/FGD number \_\_\_\_\_

Coordinates: X \_\_\_\_\_ Y \_\_\_\_\_ (use GPS readings)

Distance from the forest \_\_\_\_\_ (Apron. in KMs)

*As members of the community, describe to us how your lives relate to the Mau forests*

**(Possible probe questions-only meant to clarify issues that are raised during the conversations and not to prompt or influence the direction of the responses)**

- i. What are your livelihood sources in this area?
- ii. How do different groups relate here?
- iii. Are there disagreements, competitions or cooperation?
- iv. If there are disagreements, Please explain to us the issues at stake and the parties involved.
- v. Around what time do these disagreements escalate into violence?
- vi. Has there been a time when different communities living here antagonized one another over access to forest resources?
- vii. How is ownership of land in this area?
- viii. Which community settled first in this area?
- ix. Around what time did the first immigrants arrive, and from where?
- x. How have you related with your neighbouring communities since the first immigration?
- xi. As members of the community, how have you been disadvantaged in as far as access to forestland is concerned

B. Semi structured Key informant interview guide

**(For respondents from organizations)**

*(Applicable to key informants from CFA, KFS, Local administration, Kenya water towers Agency, Nema, and The police)*

Purpose: this interview is intended to be used for studying the sources of forest resource conflicts in the Eastern Mau. All responses will be treated with confidentiality.

Organization Name \_\_\_\_\_ Name of Interviewee \_\_\_\_\_ Title \_\_\_\_\_

Date of Interview \_\_\_\_\_ Interview number \_\_\_\_\_

Organization Coordinates: X \_\_\_\_\_ Y \_\_\_\_\_ (use GPS readings)

Distance from the forest \_\_\_\_\_ (Aprox. in KMs)

SN	QUESTION	POSSIBLE ANSWERS <i>(probe without reading the answers to the respondent)</i>
O1	Briefly explain your role, if any (as an individual or institution) in conservation and peace in Eastern Mau	Maintaining law and order <input type="checkbox"/> Advocacy <input type="checkbox"/> Forest management <input type="checkbox"/> Tree planting <input type="checkbox"/> Other (specify) _____
O2	Where are your specific areas of operation in Eastern Mau	Specify and mark on maps
O3	Why those areas?	
<i>O4 &amp; O5: Only applicable to CFAs</i>		
O4	Describe the ethnic composition of your CFA	
O5	Describe the ethnic composition of leadership within your CFA	
<i>O6-O16: APPLICABLE TO ALL RESPONDENTS</i>		
O6	What is the total size of land in the village <i>(or location, zone, district etc)</i> , land under forest management and other land uses? <i>(For government agencies: Provide any quantitative data, maps and reports)</i>	Forest _____ Agriculture _____ Pastureland _____ Woodland _____ Grassland _____ Other (specify) _____
O7	Which community settled first in this area	
O8	Approximately, around which period of time did the first immigrants come	
O9	How are the relations between the different communities in this area	Competition <input type="checkbox"/> Cooperation <input type="checkbox"/> Other (specify) _____
O10	How do people from villages access	Briefly explain _____

SN	QUESTION	POSSIBLE ANSWERS <i>(probe without reading the answers to the respondent)</i>
	and use forest?	
O11	Are there reported disputes/cases over forest resources use and access?	Yes <input type="checkbox"/> No <input type="checkbox"/> <i>(If yes proceed to the next question, If no skip to O14)</i>
O12	Who are involved in the disputes?	Mention the parties
O13	How often do the cases occur? <i>(For the Police and court clerk: Provide any quantitative data such as number of court cases, Occurrence Book and so on)</i>	1. Very rare 2. Rare 3. Often 4. More often
O14	Mention any organizations that you collaborate with that are involved in peace and conservation initiatives in Eastern Mau	Likia Peace initiative Njoro Peace Committee Egerton University Other (specify)
O15	Briefly explain your achievements and challenges in ensuring conservation and peace in eastern Mau	Achievements _____ _____ Challenges _____ _____



### C. Observation guide

SN	Category	Includes	The researcher should note
1.	Shared resources	Pasture (behavior during grazing), borehole, springs,	Anything that might indicate competition or cooperation in the access and utilization of resources
2.	Appearance of homestead	Fences, homestead patterns within the village	Type of fencing, distance between homesteads
3.	Appearance of individuals	Clothing, gender, age, physical appearance	Anything that might indicate membership in groups or sub-populations of interest to the study, such as profession, social status, socio-economic class, religion, or ethnicity
4.	Verbal behavior and interaction	Who speaks to whom and for how long; who initiates interaction; languages or dialects spoken; tone of voice	Gender, age, ethnicity, and profession of speakers; dynamics of interaction
5.	Physical behaviors and gestures	What people do, who does what, who interacts with whom, who is not interacting	How people use their bodies and voices to communicate different emotions; what individuals' behaviors indicate about their feelings toward one another, their social rank, or their profession
6.	Personal space	How close people stand to one another	What individual's preference concerning personal space suggest about their relationships
7.	Human traffic	People who enter, leave, and spend time at the observation site such as a market	Where people enter and exit; how long they stay; who they are (ethnicity, age, gender); whether they are alone or accompanied; number of people
8.	People who stand out	Identification of people who receive a lot of attention from others	The characteristics of these individuals; what differentiates them from others; whether people consult them or they approach other people; whether they seem to be strangers or well known by others present

D. Observation Chart

<b>SN</b>	<b>Phenomenon (e.g. markets, logging, farms, shared resources such as pasture, borehole, spring etc)</b>	<b>Distance from the forest (in KMs)</b>	<b>X</b>	<b>Y</b>	<b>Observed behavior (e.g. segregation, cooperation etc)</b>
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					

E. Household questionnaire

**PERCEPTIONS ABOUT ACCESS TO THE FOREST RESOURCES**

**Do not read out the choices to the respondent. Circle the answer. Specify any answer outside the list of possible choices**

1	<p>Which community has the first primary access to the forest?</p> <p><i>(Ni Kabila gani hupata nafasi bora ya kuingia kwenye msitu?)</i></p>	<p>1. Kikuyu</p> <p>2. Kalenjin</p> <p>3. Ogiek</p> <p>4. Maasai</p> <p>5. Other (Specify)_____</p>
2	<p>Which community benefits the most from the forest?</p> <p><i>(Ni kabila gani hufaidi zaidi kutokana na msitu)</i></p>	<p>1. Kikuyu</p> <p>2. Kalenjin</p> <p>3. Ogiek</p> <p>4. Maasai</p> <p>Other (Specify)_____</p>
3	<p>If you were denied access to the forest by members of another community what is the likelihood that you will confront those who have excluded you</p> <p><i>(Ikiwa utazuuliwa kuingia kwenye msitu na kabila Fulani, kuna uwezekano upi yakwamba utakabiliana na kabila hilo?)</i></p>	<p>1. Naweza sana</p> <p>2. Naweza kiasi</p> <p>3. Siwezi</p>

**EXPLAIN TO WHAT EXTENT YOU AGREE OR DISAGREE WITH THE FOLLOWING STATEMENTS**

*(NIELEZEE NI KWA KIWANGO GANI, UNAKUBALIANA NA KAULI (TAARIFA) NITAKAZOKUSOMEA)*

**Read the statement and ask the respondent to choose from the possible responses**

**Please read out the choices to the respondent and circle the answer.**

4	<p>I feel more secure with members of my own ethnicity</p> <p><i>(Najisikia salama zaidi na wanakabila langu)</i></p>	<p>2. Nakubaliana Sana</p> <p>3. Nakubaliana kiasi</p> <p>4. Sikubaliani Kiasi</p> <p>5. Sikubaliani nayo hata Kidogo</p> <p>6. Other (Specify)_____</p>
---	---	--

5	<p>My community has been marginalized in terms of access to the forest resources by the government</p> <p><i>(Kabila langu limebaguliwa kutokana na kuingia kwenye msitu)</i></p>	<ol style="list-style-type: none"> <li>1. Nakubaliana Sana</li> <li>2. Nakubaliana kiasi</li> <li>3. Sikubaliani Kiasi</li> <li>4. Sikubaliani nayo hata Kidogo</li> <li>5. Other (Specify)_____</li> </ol>
6	<p>To what extent do you agree or disagree that appointments in Kenya Forest Service is skewed towards members of certain communities?</p>	<ol style="list-style-type: none"> <li>1. Nakubaliana Sana</li> <li>2. Nakubaliana kiasi</li> <li>3. Sikubaliani Kiasi</li> <li>4. Sikubaliani nayo hata Kidogo</li> <li>5. Other (Specify)_____</li> </ol>
7	<p>To what extent do you agree or disagree that if members of your community are unfairly denied access to the forest, i will team up with them in search for justice?</p>	<ol style="list-style-type: none"> <li>1. Nakubaliana Sana</li> <li>2. Nakubaliana kiasi</li> <li>3. Sikubaliani Kiasi</li> <li>4. Sikubaliani nayo hata Kidogo</li> <li>5. Other (Specify)_____</li> </ol>
8	<p>To what extent do you agree or disagree that all communities in this area should be allowed to access the forest resources?</p>	<ol style="list-style-type: none"> <li>1. Nakubaliana Sana</li> <li>2. Nakubaliana kiasi</li> <li>3. Sikubaliani Kiasi</li> <li>4. Sikubaliani nayo hata Kidogo</li> <li>5. Other (Specify)_____</li> </ol>

F. Profile of respondents  
(Interviews)

Category	Number of respondents										Total
	Gender		Ethnicity					Age			
	Male	Female	Ogiek	Kalenjin	Maasai	Kikuyu	Other	Youth	Middle age	elderly	
Community key informants (village elders, youth and women representatives, teachers)	18	9	5	9	4	6	3	4	12	11	27
Government Agencies (forestry sector)	6	1	0	2	1	4	0	1	4	0	7
Administration (police)	5	0	0	1	0	0	4	1	4	0	5
Administration (Chiefs, Assistant Chiefs)	6	1	2	3	0	2	0	0	3	3	7
Nongovernmental organizations and CFA leadership	8	1	3	0	2	3	1	3	5	0	9
<b>TOTAL</b>	<b>43</b>	<b>12</b>	<b>10</b>	<b>15</b>	<b>7</b>	<b>15</b>	<b>8</b>	<b>9</b>	<b>27</b>	<b>14</b>	<b>55</b>

## G. Correlation analysis

GET

FILE='C:\Users\Admin\Dropbox\nvivo outputs\kweyu-data sets-2014\kweyu-data sets-2014\quantitative\Raphael Final Data.sav'.

DATASET NAME DataSet0 WINDOW=FRONT.

NONPAR CORR

/VARIABLES=community benefits denied\_access secure marginalized appointments unfairly access

/PRINT=KENDALL TWOTAIL NOSIG

/MISSING=PAIRWISE.

## Nonparametric Correlations

### Notes

Output Created		11-Mar-2015 03:51:34
Comments		
Input	Data	C:\Users\Admin\Dropbox vivo outputs\kweyu-data sets-2014\kweyu-data sets- 2014\quantitative\Raphael Final Data.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	60
Missing Handling	Value Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.

Syntax		NONPAR CORR /VARIABLES=community benefits denied access secure marginalized appointments unfairly access /PRINT=KENDALL TWOTAIL NOSIG /MISSING=PAIRWISE.
Resources	Processor Time	00:00:00.016
	Elapsed Time	00:00:00.015
	Number of Cases Allowed	74898 cases <sup>a</sup>

a. Based on availability of workspace memory

[DataSet1] C:\Users\Admin\Dropbox\nvivo outputs\kweyu-data sets-2014\kweyu-data sets-2014\quantitative\Raphael Final Data.sav

## Correlations

	Which community has the first primary access to the forest?	Which community benefits the most from the forest?	If you were denied access to the forest by members of another community what is the likelihood that you will confront those who have excluded you?	To what extent do you agree or disagree that you feel more secure with members of own ethnicity?	To what extent do your community has been marginalized in terms of access to the forest resources by the government?	To what extent do you agree or disagree that appointments in Kenya Forest Service is skewed towards members of certain communities?	To what extent do you agree or disagree that if members of your community are unfairly denied access to the forest, i will team up with them in search for justice?	To what extent do you agree or disagree that all communities in this area should be allowed to access the forest resources?
Kendall's tau_b	Which community has on the first primary access to the forest?	Correlation Coefficient						
		Sig. (2-tailed)						
	N							
	60	60	60	60	60	60	60	60
	1.000	.631**	-.151	-.012	-.055	-.224	-.032	.146
		.000	.190	.914	.630	.051	.769	.192



Which community benefits the most from the forest?	Correlation Coefficient	.631**	1.000	-.167	-.201	-.114	-.139	.025	.095
	Sig. (2-tailed)	.000	.	.143	.070	.315	.221	.820	.394
	N	60	60	60	60	60	60	60	60
If you were denied access to the forest by another community what is the likelihood that you will confront those who have excluded you?	Correlation Coefficient	-.151	-.167	1.000	.233*	.060	.132	.111	.121
	Sig. (2-tailed)	.190	.143	.	.048	.622	.273	.341	.308
	N	60	60	60	60	60	60	60	60
To what extent do you agree or disagree that you feel more secure with members of own ethnicity?	Correlation Coefficient	-.012	-.201	.233*	1.000	.189	.226	-.020	-.059
	Sig. (2-tailed)	.914	.070	.048	.	.107	.053	.859	.605
	N	60	60	60	60	60	60	60	60

To what extent do you agree or disagree that your community has not been marginalized in terms of access to the forest resources by the government?	Correlation -.055	-.114	.060	.189	1.000	.378**	.191	-.050
	Coefficient .630	.315	.622	.107	.	.002	.099	.670
	Sig. (2-tailed) .60	.60	.60	.60	.60	.60	.60	.60
To what extent do you agree or disagree that appointments in Kenya Forest Service is skewed towards members of certain communities?	Correlation -.224	-.139	.132	.226	.378**	1.000	.156	.175
	Coefficient .051	.221	.273	.053	.002	.	.176	.138
	Sig. (2-tailed) .60	.60	.60	.60	.60	.60	.60	.60
To what extent do you agree or disagree that if members of your community are unfairly denied	Correlation -.032	.025	.111	-.020	.191	.156	1.000	.396**
	Coefficient .769	.820	.341	.859	.099	.176	.	.000
	Sig. (2-tailed)							

access to the N forest, i will team up with them in search for justice?	60	60	60	60	60	60	60	60
To what extent do you agree or disagree that all communities in this area should be allowed to access the forest resources?	.146	.095	.121	-.059	-.050	.175	.396**	1.000
Correlation Coefficient								
Sig. (2-tailed)	.192	.394	.308	.605	.670	.138	.000	.
N	60	60	60	60	60	60	60	60

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

H: Trends in global primary forest cover (2000-2010)

Region/sub region	1 000 ha		% of land cover	Annual change (1 000 ha)		Annual change rate (%)	
	2000	2010		1990–2000	2000–2010	1990–2000	2000–2010
Eastern and Southern Africa	7 024	6 430	17.8	-57	-59	-0.78	-0.88
Northern Africa	14 098	13 990	17.9	-118	-11	-0.80	-0.08
Western and Central Africa	32 540	27 527	<b>9.6</b>	-520	-501	-1.47	-1.66
<b>Total Africa</b>	<b>53 662</b>	<b>47 947</b>	9.9	<b>-695</b>	<b>-572</b>	<b>-1.21</b>	<b>-1.12</b>
East Asia	26 456	25 268	27.6	-172	-119	-0.63	-0.46
South and Southeast Asia	83 587	81 235	7.6	-348	-235	-0.41	-0.29
Western and Central Asia	3 083	3 201	<b>18.6</b>	16	12	0.53	0.38
<b>Total Asia</b>	<b>113 127</b>	<b>109 705</b>	2.8	<b>-504</b>	<b>-342</b>	<b>-0.43</b>	<b>-0.31</b>
<b>Total Europe</b>	<b>5 360</b>	<b>5 438</b>	<b>26.2</b>	<b>18</b>	<b>8</b>	<b>0.34</b>	<b>0.14</b>
Caribbean	206	205	4.2	NS	NS	-0.07	-0.02
Central America	5 226	4 482	23.0	-54	-74	-0.98	-1.52
North America	273 795	275 035	40.5	-113	124	-0.04	0.05
<b>Total North and Central America</b>	<b>279 227</b>	<b>279 722</b>	<b>39.8</b>	<b>-167</b>	<b>50</b>	<b>-0.06</b>	<b>0.02</b>
<b>Total Oceania</b>	<b>39 191</b>	<b>35 493</b>	<b>18.6</b>	<b>-222</b>	<b>-370</b>	<b>-0.55</b>	<b>-0.99</b>
<b>Total South America</b>	<b>653 691</b>	<b>624 077</b>	<b>76.3</b>	<b>-3 096</b>	<b>-2 961</b>	<b>-0.46</b>	<b>-0.46</b>
<b>World</b>	<b>1 144 258</b>	<b>1 102 382</b>	<b>35.7</b>	<b>-4 666</b>	<b>-4 188</b>	<b>-0.40</b>	<b>-0.37</b>

\*NS-Not Significant (Source: FAO, 2010a)