INVESTIGATING PEOPLE-FOREST RELATIONSHIPS AROUND CENTRAL KENYA'S NYANDARWA FOREST RESERVE: UNDERSTANDING THEIR SUSTAINABILITY THROUGH INDIGENOUS KNOWLEDGE SYSTEMS

by

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Abstract

This study explored how people-forest relationships are forged around Kenya's Nyandarwa Forest Reserve, and how Indigenous Knowledge Systems of Agĩkũyũ people around the Reserve might contribute to healthy, sustainable people-forest relationships in light of the country's changing social, economic, and political situations. The study sought to examine:1) how the indigenous communities around Nyandarwa Forest Reserve traditionally understood and sustained interdependencies with the forest; 2) how these interdependencies have transformed consistent with Kenya's post-independence changes in social, economic, and political situations; 3) to what extent local, national, and international efforts to promote healthy sustainable people-forest relationships are incorporating local communities' Indigenous Knowledge Systems (IKS); and, 4) how these communities' IKS might inform the proposition of an environmental conservation framework for sustainable people-forest relationships.

The study was guided by post-colonial indigenous research paradigms anchored in decolonizing methodologies. These methodologies were buttressed by indigenous theories that consider communities as spiritual beings with multiple relations. The study was informed by the traditions and cultural heritage of the Agĩkũyũ people, and augmented by Afrocentric philosophies that underlie African ways of knowing and value systems. Data were collected from community groups, elders, the Kenya Forest Service, and archives. The data corpus was analyzed using NVIVO consistent with the study's theoretical framework and generated themes that address the research questions. In addition, the research participants contributed to the process as this study sought to elevate the community to the role of co-researchers and to create mutually beneficial long-term relationships.

Results show that the pre-colonial manifestation of Agĩkũyũ people-forest relationships were understood through land, that land continues to be a central pillar of Agĩkũyũ indigenous environmental thought, and that one of the historical values of the forest is its role in sustaining the struggle for independence. Further, the study reveals that some indigenous practices tied to sacred sites and food sovereignty have endured, different governance regimes have shifted the way people-forest relationships are

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constructed, and the Agĩkũyũ have been continuously mobilizing to protect their landscape. In the end, this study suggests how IKS can contribute to forging sustainable people-forest relationships, arguably the planet's most threatened resource.

Lay Summary

This study sought to understand how the Agĩkũyũ people of central Kenya interact with forested landscapes using local knowledge. The main goal of the study was to explore how to apply this knowledge to ensure that forests support community livelihoods, and to inquire into how communities can nourish forests. Results show that the Agĩkũyũ people do not see the forest as a place that is set apart from them, but rather as a part of their larger landscape. Further, local knowledge is produced and nourished by interacting with the land. Some of the active applications of local knowledge are in the recognition of the forest's role as a site for the war against colonialism, and in seed saving and food production practices, all of which are directly tied to forest conservation. Finally, the study shows that the Agĩkũyũ have been working to protect their landscape for over 100 years.

Preface

This dissertation is an original, unpublished, independent work by Gloria Kendi Borona. This study obtained the approval of the UBC Research Ethics Board (Behavioural Research Ethics Board; UBC BREB Number: H15-02401), and that of the Kenya National Commission for Science, Technology, and Innovation (permit no. p/15/3889/8381).

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List of Abbreviations

BREB: Behavioral Research and Ethics Board CFA: Community Forest Association FAO: Food and Agriculture Organization of the United Nations **GBM:** Green Belt Movement GMO: Genetically Modified Organisms **IBEAC:** Imperial British East African Company ICCA: Indigenous and Community Conserved Areas IIED: International Institute for Environment and Development **IKS: Indigenous Knowledge Systems** ILO: International Labour Organization IUCN: International Union for the Conservation of Nature KFS: Kenya Forest Service KWS: Kenya Wildlife Service NACOSTI: National Commission for Science, Technology and Innovation NGO's: Non-Governmental Organizations NTFPs: Non-Timber Forest Products PELIS: Plantation Establishment for Livelihood Improvement Scheme PRA: Participatory Rural Appraisal TEK: Traditional Ecological Knowledge UNEP: United National Environmental Programme UNESCO: United Nations Education, Scientific and Cultural Organization WRI: World Resources Institute

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Dedication

To my grandmother, Sarah Corũi. As our people sing:

Uthambwe na iria/may you be bathed in milk, Uthambwe na naicũ/may you be bathed in honey!

Your love has always brought me utmost joy.

Chapter 1: Introduction

1.1 Context and research questions

The most exciting and unsettling periods in culture are those uniquely creative times when humanity's fundamental story becomes inadequate to its critical questions. By all evidence, ours is such as time. New ideas take things that before, seemed separate, even opposite and invite us to think in terms of some larger more dynamic fashion while bridging new ways of being towards a new cultural maturity. (Fatnowna & Pickett, 2002, p. 67)

The 1972 United Nations conference on the human environment placed the environment on the world's agenda. Since then, various global agreements and protocols have been formulated with an aim of resolving the ever-escalating global environmental crises and attaining sustainable living. Incorporation of Indigenous Knowledge Systems (IKS) into resource use and conservation has been put forth as an important intervention in establishing a coherent and potent approach to promoting sustainable living and environmental sustainability (Christensen, 2014; Lertzman, 2010; Maathai, 2010; Pierotti & Wildcat, 2000). In recognizing this inevitable paradigm shift, Olusanya (2012) states that there is a growing global recognition that these knowledge systems can bring forth a rich legacy of intergenerational and contextual knowing, which has proven invaluable in the management of the environment over the centuries, as well as in providing a model from which we can learn not only about the earth but also the cosmos. Despite this increased global recognition of the value of IKS, their application in environmental conservation has yet to be fully understood or adequately integrated into environmental resource management (Adam, 2012; Huntington, 2000; IUCN, 2014; Ongugo, 2007).

Forests are central to addressing global environmental challenges, such as climate change, protection of biodiversity, desertification, food insecurity, health, and other livelihood functions. According to the Food and Agriculture Organization of the United Nations (FAO) (2012), there is growing awareness that an economy based on the exponentially increasing depletion of natural resources such as forests is unsustainable. Therefore, there is need for new ways of thinking about progress and development, and forest sustainability should be central to any meaningful transition (FAO, 2012). Yet,

today forests remain a resource under immense pressure globally. The World Resources Institute (WRI) estimates that the world lost more than 500 million acres of forests between 2000 and 2012 (WRI, 2014). In Kenya, for instance, forest resources have historically been a constant feature in the national discourse. The government of Kenya has over the years employed diverse strategies to protect its forest ecosystems countrywide. Some of these strategies have included: the Shamba system; the Nyayo Tea Zones; and the Plantation Establishment for Livelihood Improvement Scheme (PELIS). In the Shamba system, the landless were encouraged to cultivate crops on previously cleared forest land on the condition that they tended their crops alongside tree seedlings. The Shamba system has been repeatedly abolished and re-introduced since the 1950's through to the present day. In 2011, it was re-branded as 'PELIS' and re-introduced on a pilot basis. The Nyayo Tea Zones were established in 1986 with the aim of promoting forest conservation by providing a buffer zone of tea to check against human encroachment into forest reserves. Establishment of these tea belts entailed clearing of indigenous forests and loss of forest land. In addition, some of the areas that were cleared were found not suitable for tea cultivation and remained de-forested (Kenya Forest Service (KFS), 2010).

Despite these efforts, deforestation and forest degradation remain national challenges. The gazetted¹ forests cover a total area of 1.4 million hectares, representing about 1.7% of the total Kenyan land area. This does not meet the internationally recommended minimum of 10% of country forest cover (Musyoki, Mugwe, Mutundu & Muchiri, 2013). Therefore, improving forest cover and reducing forest destruction and degradation have now surfaced as significant features in Kenya's development strategy, underscored by the increased attention to climate change. Central to this is the Government's recognition of the critical role played by forest-adjacent communities in ensuring that tree cover in the country is maintained above current levels (Musyoki *et al.*, 2013). Community involvement in the management of resources is consistent with international practices in conservation (UNESCO, 2007). There is a general consensus that sustainable development will not be achieved by sidelining resource-dependent

¹ Designated for protection by the relevant government agency.

communities from conservation initiatives (Adam, 2012; IUCN, 2002; Maathai, 2010; UNESCO, n.d.).

FAO (2014, para. 1) points out that "It is time for forestry to shift perspective from trees to people, both for data collection and policy making." To this end, knowledge held by communities becomes a critical entry point the world over towards establishing mutually beneficial collaborations within the framework of honest engagement (Borona, 2014). In the same vein, recognizing the inadequacies of research, the Aberdare [Nyandarwa] management plan in Kenya indicates that:

Most of the research has been conducted by external researchers with minimal involvement of the local community. Very little information is available at the local level. *The community members have a lot of indigenous knowledge, which can be documented* [emphasis added]. Endeavours to involve the community in research should contribute to both their welfare and that of the forest reserve. (Kenya Forest Service² (KFS), 2012, p. 31)

This statement reinforces my desire to conduct research that is culturally appropriate, as well as research that is grounded in the desire to fully engage communities as co-researchers, with a goal of achieving sustainable people-forest relationships. By sustainable people-forest relationships, I mean a situation in which forests meet the human needs of communities living around them and in turn these communities respect the needs of the forest as well – a mutually synergistic relationship.

According to Mutangah (2015), modern trends characterized by migration from rural to urban areas, education systems, diets, medical care, and environmental changes have all contributed to the vulnerable and endangered state of indigenous knowledge systems. Ite (2003, para. 21) argues that:

Harmony between people and forests requires global and national forest managers to learn from local resource users by collectively challenging the prevailing received wisdom and negative views on the structural dynamism, policy relevance and scientific validity of local knowledge and local institutions in forest resource management.

² Kenya Forest Service (KFS) is a state corporation in charge of forest management in Kenya.

Indeed, as Fatnowna and Pickett (2002, p. 67) quoted at the beginning of this chapter write, IKS can make a significant contribution to "humanity's fundamental story" and bridge "new ways of being towards a new cultural maturity." Against this background, this study was framed to explore how people-forest relationships around the Nyandarwa Forest Reserve in Kenya and how local indigenous knowledge systems (IKS) might contribute to healthy, sustainable people-forest relationships in light of Kenya's changing social, economic, and political situations.

The study was guided by the following questions:

- How have the indigenous communities around Nyandarwa Forest Reserve traditionally understood and sustained interdependencies with the forest?
- How have these interdependencies transformed over time consistent with Kenya's post-independence changes in social, economic, and political situations?
- To what extent are the local, national, and international efforts to promote healthy sustainable people-forest relationships incorporating local communities' IKS?
- How the might these communities' IKS inform the proposition of an environmental conservation framework for sustainable people-forest relationships?

1.2 Background

This section will highlight the dynamics of forest management in the Kenyan context. This will be followed by a discussion on the study site.

1.2.1 Forest management: The Kenyan context

Kenya boasts of some of the most diverse forest ecosystems in East Africa, comprising coastal, rain, riverine, and montane forests that are biologically diverse and contain numerous local endemic species (Peltorinne, 2004). Prominent in Kenya's landscape are five major forest ecosystems known as 'water towers': the Mau Forest Complex; Mount Kenya, the Aberdare [Nyandarwa]; Mount Elgon; and Cherangani forests. These forests deliver vital services, such as clean water, timber, fuel, and food, directly to rural communities. In Kenya, over 90% of all water comes from these forested mountains and 70% of electrical power generation is derived from rivers that flow from these forests (UNEP, 2009). Ongugo (2007) argues that forest management challenges in Kenya have, to a large extent, been linked to policy formulation. From the late 1970s to the early 1990s, for example, there was an unprecedented acceleration in the destruction of forests in Kenya, which was largely blamed on a lack of appropriate and all-inclusive forest policy and legislation.

According to KFS (2007), the policies and legislation used to manage forest resources were developed in 1957 by the colonial government, changing only slightly after independence in 1968. This approach to forest governance was considered repressive and inconsiderate to less advantaged members of the various communities living in and around forest ecosystems. Thus, local communities yearned for policies and laws that would recognize and include them in the governance of the country's forests (Ongugo, 2007). As an attempt to address this yearning, the new Kenyan constitution promulgated in August 2010 has formulated a new resource management system which significantly alters Kenya's socio-cultural, political, legal, and economic spheres (Adam, 2012). The constitution now explicitly requires the government to involve communities in conserving and managing lands and ecosystems, thus opening more space for dialogue and deeper recognition of communities and their respective cultures (Wily, 2010). Other national laws, for example, the National Museums and Heritage Act 2006, Forest conservation and management Act 2016, the Participation in Sustainable Forest Management Rules 2009, the Environmental Management and Coordination Act 1999, and Environmental Management and Co-ordination Regulations 2006, recognize and encourage community participation in protecting ecosystems (Adam, 2012).

In 2007, Kenya underwent a major change in the operationalization of the Forests Act 2005, creating an opportunity for communities to be involved in forest management through Community Forest Associations (CFAs) by embracing the participatory forest management approach. The Forests Act 2005 has been replaced by the Forests Conservation and Management Act of 2016, which aligns itself with the provisions of the 2010 Kenyan Constitution. This legislation is a welcome paradigm shift from command-and-control towards greater participation and stakeholder engagement in forest management and conflict resolution over forest resources. CFAs are expected to play a critical role in safeguarding forests through protection and conservation activities. They are, in turn, supposed to receive revenues from timber and non-timber products, as well as from community-based industries ecotourism, recreation, scientific, and educational activities (Mogoi, Obonyo, Ongugo, Odera & Mwangi, 2012). This community engagement model is expected to contribute to poverty reduction, employment creation, and improvement of livelihoods through sustainable use, conservation, and management of forests. According to Ongugo (2007), there is vast potential in the indigenous knowledge of the members of the CFAs, since they have lived in and adjacent to the forest for a long time. The elders in the community often know the tree species in the forest, their uses, abundance, and diversity; such knowledge is important in education, research, and ecotourism. This, in addition to other local knowledge on timber and non-timber products, can position the community better as co-managers of the forest ecosystems with the Kenya Forest Service (Ongugo, 2007).

There is growing recognition that the use and promotion of conventional scientific methods of forest conservation alone are not sufficient. Perhaps the answers to the environmental challenges we face reside with communities and within knowledge embedded in IKS and other local knowledge systems working alongside and/or with scientific management regimes. This calls for honest engagement with local communities in a constructive manner to establish a common ground and long-term solutions. This is especially critical in the African context, where environmental resources still remain a sophisticated pedestal around which culture, religion, livelihoods, and governance are constructed (Borona, 2014).

1.2.2 The study site: The Nyandarwa Forest Reserve within the Aberdare Conservation Area

The Aberdare Conservation Area (ACA) is a volcanic, mountainous, and forested landscape that forms the easternmost wall of the Great Rift Valley, to the east of the high Kinangop/Laikipia plateau in central Kenya. It is on the tentative list for inscription as a UNESCO World Heritage site for its outstanding universal value (UNESCO, 2014). According to UNESCO (2014, para. 1):

The ACA is one of the most impressive landscapes of Eastern Africa, with its unique vegetation, rugged terrain, streams and waterfalls that create an area of great scenic beauty...its high moorlands and diverse forests demonstrate exceptional ecological processes.

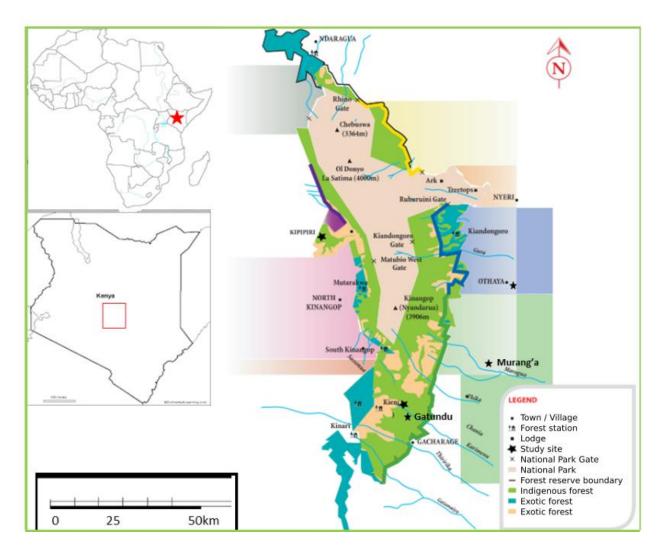
This conservation area is comprised of a national park (Aberdare National Park) and a forest reserve (Aberdare Forest Reserve), both managed by the Kenya Wildlife Service (KWS) and the Kenya Forest Service (KFS). The forest reserve is the study site. I will refer to the Aberdare Forest Reserve as the Nyandarwa Forest Reserve throughout the thesis because that is the Agĩkũyũ name for the landscape.

The National Park lies above the tree line, with some forest and scrub at lower altitudes. It is renowned for "its torrential waterfalls plunging from cloud-shrouded heights to spray-filled ravines" (UNESCO, 2014, para. 2). The Nyandarwa Forest Reserve occupies the lower slopes and almost surrounds the park (see Figure 1.1). Covering an area of 149,822.03 hectares, the Nyandarwa forest is one of Kenya's five "water towers" and plays a critical role in supporting the country's economy (KFS 2010; UNEP, 2009). It provides water to feed four out of Kenya's six drainage basins: the Indian Ocean; Lorian Swamp; Lake Naivasha; and Sasumua and Ndakaini dam (the latter supplies all the water to Nairobi City, Kenya's capital). In addition, it also supplies water for irrigation and domestic purposes to the major towns in the neighbouring regions. Together with Mount Kenya, the Nyandarwa Forest Reserve contributes 70% of the country's hydropower through the Tana River (KFS, 2012). The Nyandarwa forest was first gazetted as a forest reserve under Legal Notice No.7 of 1943. A total of 76,700 hectares of the forest was de-gazetted (in 1950 and 1968) to create the Aberdare National Park (KFS, 2012).

According to UNESCO (2014), rainfall distribution in this area is greatly influenced by the movement of inter-tropical convergence zones of air masses in the southern and northern hemispheres. The eastern Nyandarwa/windward side has an equatorial type of climate, being wet and humid, with reliable rainfall of 1,400 - 2,200 mm and extended wet seasons. On the western/leeward side, rainfall reduces sharply from about 1,400 mm at the forest border to less than 700 mm in the valley of the Malewa River, only 50 km from the forest boundary (UNESCO, 2014).

Figure 1.1 Map of study area.

Source: National Museums of Kenya (2016).



This difference in climatic conditions determines land use activities and socioeconomic conditions of communities living around the forest reserve. KFS (2012) highlights the spiritual and religious significance of the forest for local communities living adjacent to the ecosystem; many tree species of the ecosystem including the *Ficus sycomorus* (Műkűyű³), *Ficus thonningii* (Műgumo), *Indogofera erecta* (Muthaara), among others, are considered sacred and are used during the performance of traditional rituals and ceremonies (KFS, 2012). The forest is intimately linked to the struggle for independence in Kenya as it served as a hideout for Mau Mau guerilla freedom fighters, who waged the war for independence against British colonialism in the 1950s. To this end, the forest has a rich heritage that weaves into the tapestry of the making of Kenya as a nation. For example, the legendary leader of the Mau Mau, Field Marshall Dedan Kimathi, used a giant tree as a post office where the Mau Mau would leave messages for his attention (UNESCO, 2014). It also provided a camping site for the runaway Italian Prisoners of War (POW) during the Second World War (KFS, 2012).

The Aberdare Conservation Area has rich biological diversity, both in terms of plant and animal species, some of which are endemic to the area. According to KWS (2014), a total of 778 species, sub-species, and varieties of vascular plants belonging to 421 genera and 128 families have been recorded in this ecosystem. Communities currently living adjacent to the Nyandarwa Forest are mainly agriculturists who also rely heavily on the use of timber and non-timber forest products (NTFPs) from the forest reserve. The Agĩkũyũ community occupies the entire area around the forest. Other pastoralist communities frequent the area during extended dry spells (KFS, 2012). The Agĩkũyũ constitute the single largest ethnic group in Kenya (of the over 40 Kenyan communities/ethnic groups). According to KFS (2012), households' reliance on the forest depends on the distance from the forest, socio-economic status, land size, and number of trees on their farms. Main forest uses include: firewood; building materials; grass harvesting for animal fodder; livestock grazing; beekeeping; and water collection for domestic purposes (KFS, 2012).

According to UNEP (2009), illegal cultivation of crops and settlements present a major threat to the integrity of the ecosystem, having already led to the destruction of well over 6,100 hectares. Other conservation challenges include: excisions (usually

³ I choose to not italicize Gĩkũyũ or Swahili words in the text in order to disrupt English language hegemony.

highly political in nature); overgrazing; poaching of wildlife; illegal water abstraction and over abstraction; destruction of riparian areas; marijuana and tobacco cultivation; illegal charcoal production; wild fires; invasive plants; inadequate community support coupled with a lack of understanding of participatory forest management; and game damage to forest plantations (KFS, 2012). Human-wildlife conflict has long been intense around the borders of the National Park and the forest reserves. Marauding animals regularly damage crops, and occasionally kill or injure people (UNESCO, 2014). An electric fence was erected around the forest to reduce human-wildlife conflict and to prevent illegal exploitation of forest resources (UNEP, 2003). The various complexities of this forest landscape position it as a suitable and interesting case study for an investigation on the community dynamics of resource access within the framework of IKS.

1.3 The Agĩkũyũ people

The Anglicized name for the Agĩkũyũ is Kikuyu, which is the current name in use, but the elders I spoke to during the course of this project recommended that I use proper terminology. I will use the Agĩkũyũ (plural)/Mũgĩkũyũ (singular) or Gĩkũyũ (in reference to the land) as appropriate throughout the text. The term Kikuyu will only be retained when quoting from other sources. Agĩkũyũ ancestors are believed to have arrived in Kenya during the Bantu⁴ migrations of 1200 - 1600 AD. The formation of the Agĩkũyũ nation as we know it today was a result of complex migrations and remigration involving different groups of people. By 1800, however, the Agĩkũyũ people had coalesced into a distinct community (Muriuki, 1974). The original inhabitants of what is now known as Gĩkũyũ territory were Athi/Digiri hunter and gatherers. The Agĩkũyũ purchased land from, intermarried with, or assimilated the Athi/Digiri into their community (Kenyatta, 1965; Leakey, 1977). While Agĩkũyũ people are primarily agriculturalists, theirs is also a mixed economy that includes livestock-keeping. Goats, sheep, and cattle are important as they signified wealth and were used in many aspects of Agĩkũyũ life, such as ceremonies, sacrifices, and prayers. Gĩkũyũland is

⁴ A cluster of African peoples that speak closely related languages. Bantu speaking people are found in Central Africa, the Great Lakes region, and Southern Africa.

characterised by ridges and valleys. This topography had a significant influence on original settlement, land acquisition, and the ensuing land tenure.

Claim to land was laid through either of two methods: first clearance of the virgin forest (kuuna kĩrĩti) or initial hunting rights (mĩgũda ya mĩtego) (Muriuki, 1974). Among the Agĩkũyũ, land is the most important factor in the social, political, religious and economic life (Kenyatta, 1965). Kenyatta (1965) further points out that land ownership amongst the Agĩkũyũ was not communal; while the whole community collectively defended their territory, "every inch of land had its owner" (Kenyatta, 1965, p. 27). Land was owned by individuals, families, or clans. However, this form of private ownership did not give the owner(s) exclusive rights. Land was shared with other members of the community in a system that was anchored in reciprocity and pursuit of collective good. Europeans mistook this collective usage as communal/tribal ownership of land (Kenyatta, 1965). Land was tied to rites of passage or transition from childhood to adulthood. A man without land was simply a boy. [It did not help that the British were referring to grown men, including those older than they, as "boy"]. A woman became a woman through cultivation of crops and providing for her family. Without this, she was a girl. In essence, a Műgĩkűyű could not become a Műgĩkűyű without land (Elkins, 2014). Muriuki (1974, pp. 34-35) points out that:

Land was owned by the Mbarĩ, (a lineage or sub-clan depending on numbers, tracing its origin to a common male ancestor a number of generations back), and its administration was entrusted to a mũramati (guardian/custodian) who was the nominal head of the Mbarĩ. Mbarĩ ownership of land was further reinforced by the people's religious beliefs, especially reverence for ancestors, which fostered a deep attachment to ancestral lands.

The religious beliefs that Muriuki (1974) refers to above included pouring of libations and propitiation of the ancestors to ensure the well-being of the family. The only areas that were communally owned were saltlicks (for animals), rights of way, and areas for the collection of firewood. Landlessness was curbed by a system of ahoi or tenant-atwill on those that had land. Tenants-at-will were individuals who would occupy land that was owned by wealthier members of the Agĩkũyũ community. They could cultivate, raise livestock, and live on the land but they understood that they did not own it. This system of land use was tempered with the assurance that their tenancy was safe for as long as they operated within the limits of the law of the land (Kenyatta, 1965; Leakey, 1977). Ngũgĩ wa Thiong'o⁵ (2010, p. 65) writes that Agĩkũyũ people believed that Ngai had blessed them with a land of abundance. This was incorporated into Gĩkũyũ teachings, and lyricized by the Agĩkũyũ as follows:

God has given the Agĩkũyũ a beautiful country Abundant with water, food and luscious bush The Agĩkũyũ should praise the Lord all the time For he has ever been generous to them!

Muriuki (1974) further explains that, besides adequate rainfall, Gĩkũyũ land is endowed with moderate temperatures and fertile soils. The productivity of the soil was derived from the volcanic tuffs, and was rich in humus from the cleared primeval forest. It was a perfect habitat for the Agĩkũyũ who:

For a long time made it the granary of their neighbours as well as for the European and Swahili caravans who passed by or through their country especially in the 19th century...they produced food in surplus in order to be able to trade with their neighbours. Trade was an important activity both internally and externally. (Muriuki, 1974, p. 33)

According to Leakey (1977, p. 55), in 1885 the explorer, Thompson, travelled in Gĩkũyũland and wrote the following:

Enormous quantities of sweet potatoes, yams, cassava, sugar cane, indian corn, millet etc, are raised and the supply seems to be quite inexhaustible. On my return journey, I found a caravan of over 1,500 men, staying at ngongo [ridge] who remained there a month, and carried away little short of three months' provisions, yet it did not seem perceptibly to affect the supply or to raise the ridiculously low prices. Extremely fat sheep and goats abound while they (the Kikuyu) have also cattle in considerable numbers.

⁵I will use the full names of Gĩkũyũ scholars who have chosen to be named the Gĩkũyũ way whenever I refer to their work(s) in the text. The use of just a surname is inappropriate for these individuals because there is no surname as such. Ngũgĩ wa Thiong'o means – Ngũgĩ, the son of Thiong'o. The two names are joined together and cannot be separated. If I use "wa Thiong'o" that would mean any of the other children of Thiong'o or, indeed, Thiong'o's wife.

This was the land of plenty, abundant with all the good things. It is this goodness that drew non-Gĩkũyũ people to Agĩkũyũ territory. This is discussed in the following subsection.

1.3.1 The coming of "outsiders"

It is trade that brought Agĩkũyũ people into contact with the first "outsiders", the first of these being the Arabs/Swahili traders who travelled in caravans into the interior in search of ivory. The Agĩkũyũ had an immense respect for trade and were willing to supply the caravans with food. The Arabs and Swahili were later joined by European traders. While these relations started off as cordial and mutually beneficial, bad relations crept in when the "outsider" caravans started raiding the Agĩkũyũ. This opened up space for warfare between the two groups, especially after the establishment of Imperial British East African Company (IBEAC) in 1895. The IBEAC was established at the 1885 Berlin conference, during which European countries met to share what the Belgian King Leopold referred to as the "magnificent African cake" (Davidson, n.d.). The IBEAC was the precursor to the establishment of British Colonial rule in Kenya. It was this contact with the British that was to change the trajectory of the Agĩkũyũ people forever. Legend has it that Mũgo wa Kibiru and Cẽgẽ wa Kibiru (Gĩkũyũ seers) had warned the Agĩkũyũ people about the coming of people who looked like:

Small white frogs because of their oddly-coloured skins, their dress would resemble the wings of butterflies, they would carry sticks that spit fire, and they would also bring an iron snake which would belch out fire. (Muriuki, 1974, p. 137)

The IBEAC set up its first trading fort south of Gĩkũyũ land in 1895. This served as the base from which the British infiltrated in Gĩkũyũland inch by inch, and completely subdued a community, which up until then, had absolute authority over their lives. The Gĩkũyũ resisted British invasion for several years, but a combination of factors worked against them. The first of these was internal divisions and competition for power and wealth. As Elkins (2014, p. 14) reminds us:

The Kikuyu certainly did not live in a pre-colonial socialist utopia without class divisions. The competitive environment that spawned the chiefs was a direct result of the intense internal competition for resources and wealth that peaked at the time of colonization.

Tied to the above factor is a second factor, underlined by the fact that that the British misunderstood the Gĩkũyũ system of governance. The Agĩkũyũ did not have a centralised system of governance, rather there were athamaki/leaders in every ridge. People who were considerably wealthy (by way of holding large tracts of land), such as Waiyaki wa Hinga, were accorded a lot of respect by the Agĩkũyũ (Leakey, 1977). The British assumed that Waiyaki was the king/leader of the Agĩkũyũ people, but this led to disastrous consequences for Waiyaki and the community as a whole.

Waiyaki swore blood brotherhood with the empire builder, Captain Lugard, in 1890 to establish a trading post for the IBEAC on Gĩkũyũland. The agreement was based on the understanding of mutual respect especially that the IBEAC would not take away Gĩkũyũ land or property. According to Maathai (2007, p. 62), "this was quickly reneged by Lugard's porters who were then raiding nearby settlements and raping women." A series of battles were fought which culminated in the capture and eventual expulsion of Waiyaki wa Hinga. It is widely believed that he was buried alive – head first! Some Gĩkũyũ scholars (Muriuki, 1974) disagree and argue that Waiyaki simply died and was buried in Kibwezi on his way to exile and trial on the Kenyan coast, i.e., he was not buried alive. The pain and betrayal was and is still palpable among the Agĩkũyũ. As Maathai (2007, p. 62) further explains:

The Kikuyu were stunned by Waiyaki's humiliation and death. In Kikuyu culture, everybody had a right to shelter and space. People who had land were expected to share with people who did not. It was profoundly shocking that the British did not recognize the oath.

This event became entrenched in Agĩkũyũ people's consciousness and Waiyaki was later transformed into a martyr for the nationalist cause. Emotive songs of protest featuring Waiyaki were composed during the Mau Mau period to memorialize his death and inspire the struggle against colonial rule. The third factor is that Gĩkũyũ resistance was weakened by a series of natural disasters (locusts, drought, famine, and cattle plague) between 1894 and 1899, with a mortality rate estimated at between 50-95%. Those who survived moved further north. This combination of disasters account for the "empty land" which was alienated for European settlement in 1922/23 (Muriuki, 1974). This was probably the biggest setback to Gĩkũyũ resistance.

The fourth and last factor is that, at this point, Gĩkũyũ weaponry and bravery were no match for the "stick that spits fire". Besides, as Elkins (2014, p. 4) succinctly puts it, "imperial warfare more resembled big game hunting than it did combat." And, thus, began the enslavement of the Gĩkũyũ nation on their own land. Pax Britannica was now in full effect. The Union Jack fluttered in the air – a symbol of conquest, control, and oppression. For the Gĩkũyũ nation, the physical defeat was as devastating and as catastrophic as the psychological one. Loss of land was the chief lens through which the Agĩkũyũ viewed their now unfortunate state of affairs. Kenyatta (1965, p. 48) sums up the loss of Gĩkũyũland through this pithy anecdote:

Once upon a time an elephant made a friendship with a man. One day, a heavy thunderstorm broke out, the elephant went to his friend who had a little hut at the edge of the forest and said to him: "My dear good man, will you please let me put my trunk inside your hut to keep it out of the torrential rain?" The man seeing what situation his friend was in replied: "my dear good elephant, my hut is very small, but there is room for your trunk and myself. Please put your trunk in gently." The elephant thanked his friend, saying: You have done me a good deed and one day I shall return your kindness." But what followed? As soon as the elephant put his trunk inside the hut, slowly he pushed his head inside, and finally flung the man out in the rain, and then lay down comfortably inside his friend's hut saying: "My dear good friend, your skin is harder than mine, and there is not enough room for both of us, you can afford to remain in the rain while I am protecting my delicate skin from the hailstorm.

Yes, the elephant was in the hut. The British were in Gĩkũyũland. And the Agĩkũyũ were out in the rain. In the following section, I discuss how the elephant made himself comfortable in the Gĩkũyũ hut.

1.3.2 British settlement on Gĩkũyũ territory

The white man cannot speak the language of the hills and knows not the ways of the land. (Ngũgĩ wa Thiong'o, 1965, p. 8)

By the 1920s, there was a steady inflow of settlers coming into Kenya in search of fortunes and prosperity. Substantial effort was directed towards encouraging settlers to migrate to the new colony. Adverts such as the following were disseminated widely:

Settle in Kenya, Britain's youngest and most attractive colony. Low prices at present for fertile areas. No richer soil in the British Empire. Kenya colony makes a practical appeal to the intending settler with some capital. Its valuable crops give high yield, due to the high fertility of the soil, adequate rainfall and abundant sunshine. Secure the advantage of Native labour to supplement your own effort...Eventually, thousands of settlers responded to the call, migrating to Kenya in search of their fortunes. They came determined to forge "white man's country." (Koff and Howarth, 1979 as cited in Elkins, 2014, p. 3)

It is estimated that, by the time the settlers arrived, the central highlands were home to a million or more Agĩkũyũ people (Veit, 2011). Many of these were displaced to create land for British settlement. Veit (2011, p. 2) further states that:

The temperate fertile highlands – [later renamed] the 'White Highlands' – became the enclave of white immigrants (some Britons, but mainly white South Africans) engaged in large scale farming and dependent on African laborers who were mainly Kikuyu, but also Kalenjn, Luhya, Masaai, and Luo. Settlers with 1,000 British pounds in assets could receive 1,000 acres (4 km²) for free.

According to Maathai (2010), the settlers chose to settle in strategic locations near emerging town centres, in areas that had the potential for large-scale farming and livestock keeping. They were issued title deeds for their newly acquired land and those that were displaced were absorbed either into the settler farms as tenants-at-will or relocated to the Rift Valley as labourers on settler farms. This tenure system recognized private ownership of land through freehold title. While this was ideal in securing private land for settlers, it conflicted with the customary land tenure system that was already in place. Customary tenure was anchored on a complex system of nested and overlapping individual rights which was not compatible with individual ownership of land. As a result, most customary land was not registered and inevitably fell into the category of 'empty land' (Veit, 2011). According to Maathai (2010), the settlers were attracted to the highlands because of the same reasons that the Agĩkũyũ were. The weather was perfect (not too hot or cold), the soils were fertile, and there was no malaria.

As the colonial project progressed, the Gĩkũyũ people found themselves "hemmed in on all sides" (Elkins, 2014, p. 25). Prior to the colonial affront, people moved according to the prevailing conditions or needs. If there was too much pressure on land, for example, young men moved to other places and established homesteads. With the coming of the British, they found themselves locked in; "to the south, east and north were settler farms, to the west were government-controlled forests of the Aberdares [Nyandarwa] and to the south east was the expanding urban centre of Nairobi" (Elkins, 2014, p. 14). The British introduced a policy to settle Africans on 'native reserves' which were structured around ethnicity. The reserves resembled the homelands in South Africa or Native American reserves. Divide and rule was the cornerstone of the colonial administration. The Gĩkũyũ, consequently, lived in the Gĩkũyũ Reserve. Traditional farming practices, such as crop rotation and resting land/fallowing, were abandoned. These changes had a major impact on the people in myriad ways, including the overexploitation of the land base leading to severe soil erosion and food shortages. The former was to later become key focus of colonial conservation policies, such as terracing, which the Agĩkũyũ loathed and equated with oppression.

The conditions in the reserves, coupled with the colonial government's introduction of taxes, created a monumental humanitarian crisis. For the first time, a people who were self-sufficient found themselves in conditions of extreme poverty. They were now locked into a monetary economy in a race to the bottom. Money could only be obtained by working for the Beberu⁶/colonizers in their settler farms in the 'White

⁶ There are various terms that Agikuyu people used to make reference to white settlers: Nyakeru; Athungu; Comba; and Beberu. While they all mean the same thing, *i.e.*, white man or white people, the Swahili term 'Beberu' is a better metaphorical encapsulation of colonial oppression and domination. Male goats are also known as Beberu and are known for their legendary sexual greed. They are to be found mounting one female goat after the other or the same goat over and over again. They are dictatorial; they are uncompromising. The British Beberu could not have enough or looting, raping, murdering, torturing. They were the epitome of

Highlands'. As such, the colonial experiment was launched through a two-pronged approach: the colonization of land and of labour. This is further exemplified by Veit (2011, p. 5) who argues:

To protect their land, the settlers banned the growing of coffee by Africans, introduced a hut tax, and granted landless Africans less land in exchange for their labor. As the ability of Africans to provide a living from the land dwindled, there was a massive exodus to the cities. Beginning in the late 1930s, the government further intruded on ordinary Africans through marketing controls, stricter educational supervision, and additional land changes⁷.

As early as the 1920s, there was widespread dissatisfaction with the policies of the colonial government. Harry Thuku led the establishment of the Young Kikuyu Association, the very first protest movement in the colony. Their aim was to fight oppression and this was encapsulated around the recovery of Agĩkũyũ land (Veit, 2011). Harry Thuku was deported to Somalia, after which a massive protest broke out and several hundred people were killed. This was the second strike (in terms of the humiliation of Gĩkũyũ leaders) for the Agĩkũyũ in their already thoroughly embittered relationship with the colonial government. When World War I and World War II broke out, Africans were forcibly recruited into the 'King African Rifles⁸' to fight for the British. When both wars ended, the British soldiers were rewarded with huge tracts of land for their service to the crown. The African soldiers who had fought alongside the British soldiers in Burma, Ethiopia, Tanzania, and other locations in the British Empire got nothing, and to make matters worse, some of their land was given to their British counterparts. As Kariuki (1964, p. 27) states:

gluttonousness. The term Beberu is also a more apt description of the true nature of colonialism – that colonialism was a 'one armed bandit' (Rodney, 1972) that extracted without ever giving anything back. Rodney (1972) came up with this expression to challenge the unfortunate and surprisingly still pervasive notion that Africans were better off during colonialism and that they benefited from colonialism.

⁷ Several strategies were instituted to sabotage African agriculture, including burning of crops to the ground to prevent Africans from competing with white settlers.

⁸ British colonial military comprising of native soldiers in East Africa.

The African soldiers were rewarded with the colourbar, unemployment and the kipande. [Yet] there had been no colour bar to prevent us from dying for Britain in the war. Those who had been stagnant in their misery now began to look for happiness.

The kipande (Figure 1.2) was a form of identification enclosed in a metal container that had to be worn around the neck by those who worked on Beberu farms. According to Edgerton (1989, p.15), the kipande had to bear the names and fingerprints of the wearer, the past employer's recommendation and the present employer's signature; "It jingled like a bell as a person walked. The Kikuyu called it Mbugi (goat's bell), and detested it as a mark of their servility."



Figure 1.2 Kipande.

Apart from the obvious livelihood consequences, there was a bundle of other social and psychological consequences of what Elkins (2014, p. 14) aptly describes as the "British land grab." All of these events and issues, starting with the death of Waiyaki, land dispossession, racial discrimination, infantilization of the African, innumerable humiliations, pauperization of the Agĩkũyũ people, and more, coalesced and birthed the

Mau Mau⁹ revolt, described by Elkins (2014, p. 28) as "one of the bloodiest and most protracted wars of decolonization fought in Britain's 20th century empire". The central tenets of the revolt were Ithaka na Wĩyathĩ, or land and self-rule. I now turn to a discussion of the evolution of land tenure in the Kenyan context.

1.4 Land tenure: A national perspective

Land is a highly complex and emotive issue in Kenya. Beyond serving as a means of production or supporting community livelihoods, it embodies the social, cultural, and spiritual aspects of the over 40 communities that call Kenya home. Land tenure in pre-colonial times was governed through the application of customary laws that varied among the different ethnic groups. Odera (2004) argues that supreme power in overseeing land related issues, such as regulating use and excluding and negotiating rights with outsiders, was vested in the council of elders or equivalent leadership structures of the respective communities. Kenya was declared a British protectorate in 1895. To pave the way for the alienation of land for British settlers, the Crown Lands Ordinance was crafted. This piece of legislation declared "all waste and unoccupied land" as "Crown Land" (Aggarwal & Thouless, 2009, p. 3). The *terra nullius* concept was at play in Kenya as in other colonized parts of the world. According to Kenyatta (1965, p. 37):

In actual sense these empty tracts of land were pasture lands, salt licks, public meeting and dance places, the woodlands including big forests along the frontier of the Agĩkũyũ and the neighbouring tribes...big tracts of land were used for purposes other than cultivation and were equally important to the community.

An amendment of the Crown Lands Ordinance in 1939 created native reserves (also known as trust lands) which were overseen by the Native Land Trust Boards. In 1959, alienation of land to individual community members in native reserves was instituted, setting in motion private ownership of land through title deeds. This created a

⁹ The actual name of this movement was 'Kenya Land Freedom Army.' There are several explanations regarding the origin of the Mau Mau. According to the Mau Mau themselves, there was no such thing as Mau Mau. But the name has attained discursive currency and will be used throughout the text.

situation where heads of households (mainly male) became the sole owners of the land, often at the expense of spouses, female relatives, or those with customary rights of use (Wakhungu, Huggins & Nyukuri, 2008). According to Wakhungu *et al.*, (2008, p. 1), "by 1934, European settlers, who represented less than a quarter of one percent of the population at that time, controlled about a third of the arable land in the country." The colonial period marked the beginning of systematic dispossession, disenfranchisement, and land-related conflicts which continue to plague the country to this day. After independence, the un-adjudicated trust lands were managed by the county councils/local governments and the Crown Land became government land (it should be noted that the majority of forests fall into this category). The fundamentals of the colonial land tenure system described above, especially state control over land and the undermining of customary tenure, continued after independence. Land became intrinsically tied with politics, ethnicity, and massive corruption exemplified by extensive land grabbing of forestlands in the 1990s.

As a result, Kenyans have been pushing for reform in land governance and the 2010 constitution is seen as a critical step forward in setting in place significant reforms on land governance, land use, and land ownership (Wily, 2010). Of note is the recognition of customary land tenure. The constitution states that "all land in Kenya belongs to the people of Kenya collectively as a nation, as communities, and as individuals" and that "community land", which includes ancestral lands, "shall vest in and be held by communities" (Government of Kenya, 2010, p. 42, 45). All other land is either government land or private land, which can be held under freehold or leasehold tenure.

1.5 Justification for the study

In the following section, I will make a case for the need to apply indigenous knowledge in conservation. I will illustrate the deficiencies of the dominant western conservation mode and highlight the need for engaging with Afrocentric knowledge systems in understanding people-forest relationships, and general ecosystem health.

1.5.1 Indigenous knowledge in conservation

The creation of protected and conservation areas the world over followed the Yellowstone model, which is based on the belief that nature and non-human animals must be protected from human interference and that true conservation entails setting aside tracts of land from which human settlements or even humans themselves may be excluded (IUCN, 2010). This kind of approach is consistent with western thought and attitudes towards nature. Pierotti and Wildcat (2000) argue that western attitudes towards nature have their foundation in European philosophical roots that advance the narrative that humans are autonomous from and in control of the natural world. Other ways of knowing embedded in Traditional Ecological Knowledge (TEK) (Emery, 1997) or Indigenous Knowledge Systems (IKS¹⁰) (Nakashima, Prott & Bridgewater, 2000) of non-western societies view humans as an integral component of the natural world. Indeed, one of the defining elements underpinning the construction of TEK/IKS is that all things (living and non-living) are interconnected through a complex web of life. Pierotti and Wildcat (2000, p. 1336) remark that this interconnectivity is "not simply a homily or romanticized cliché but instead a realization that no single organism can exist without the web of other forms of life that surround it and makes its existence possible."

One of the critiques often directed towards these knowledge systems is that they would not take hold in the current large populations; that they only worked in the past when populations were sparser. Anderson (1996) argues that the origins of TEK are based in the knowledge that native societies existed under conditions of constant pressure on the resources upon which they wholly depended. Therefore, he argues, a means had to be found to convince communities and families to economize with respect to their use of natural resources. Hence, the argument about IKS/TEK being untenable because of high population growth falls away. We have no evidence to suggest that communities would not have adjusted to increasing populations with more innovative practices regarding resource use.

¹⁰ IKS will be used throughout this document, but TEK may be referred to as appropriate when reference to other works is made. Both terminologies represent the same thing.

According to Cajete (2000), IKS encompass both science and spirituality in the sense that the latter is the ritual representation of the community and a device for sanctioning moral and ethical codes. Lertzman (2010, p. 120) argues that the spiritual philosophy and cultural teachings of TEK are its foundation and cannot be divorced from its application. Such wisdom is critical in providing a broader philosophical and spiritual context in the terrain of ecosystem management by "inspiring an ecological sense of identity and behaviour." In the same vein, Dietz, Ostrom and Stern (2008) note that global and national environmental policy frequently overlooks community-based governance and traditional tools, such as informal communications and sanctioning, yet these tools can have a significant impact in relation to governance of common pool resources, such as forests. Pierotti and Wildcat (2000, p. 1335) emphasize that TEK is very different than the comfortable and romantic image of the Rousseauian "noble savage", or the concepts of "love of nature," "closeness to nature," "communing with nature," or "conservation of nature," all of which are commonly used to refer to indigenous communities.

One of the challenges in the application of TEK in research is the belief that TEK does not qualify as "science", and hence is not objective, culturally neutral, and does not somehow exist outside of culture/is not affected by culture. Cajete (2000) writes that the counterargument to this notion is that social scientists, in particular, must agree that nothing people do is divorced from culture, including systems of knowledge, technology, and education. Everything is contextualized in culture. TEK is a constantly evolving way of thinking about the world. Anderson (1996) explains that, although views covered by TEK are described as "traditional", this should not be taken to mean that they cannot or do not change. The essence of traditional beliefs is that they have existed long enough for long range consequences to affect them. Nothing is static about TEK. Each generation makes observations, compares their experiences with what they have been taught, and conducts experiments to test the reliability of their knowledge (Anderson, 1996). I believe that the exclusion of TEK from management of resources is a loss for humanity because it locks a majority of the world's population out of contributing to knowledge production and from crafting context-dependent resource management

interventions. With regards to research, this presents a big gap in knowledge and opportunities for exploration of other ways of knowing and understanding resource use, especially in the face of escalating global environmental challenges, such as climate change.

In the same vein, Rist, Shaanker, Gulland and Ghazoul (2010, para. 2) argue that TEK can "not only add to an existing body of scientific knowledge but can present a completely different picture of reality, especially when held within a different cosmological and ethical framework." In addition, Dei (2002, p. 8) points out that the use and revitalization of IKS offers a critique of the wholesale degradation, disparagement, and discard with 'tradition' and 'culture' in the interest of 'modernity' and the 'global space.' The dominant discourse regarding culture in Africa is that it holds back progress or development; that, the way to embrace globalization, modernity, and development is to strip yourself of all aspects of African culture and learn from the 'developed world.' Indeed, as Emeagwali (2014, p. 2) argues, modernity is perceived as a situation where progress "is conceived as a unidirectional movement toward a fixed and abstract goal called 'modernity' a haven where, supposedly, all cultural and religious sensibilities are either numbed, or totally eradicated, and, where Eurocentric values and norms reign supreme." Several authors have argued that using IKS in development enterprises enables indigenous peoples and local communities to actively participate in the decision-making process (Arora, 2006; Elías, 2012; Kothari, Camill & Brown., 2013; Maathai, 2010; Ongugo, 2007; Pretty et al., 2009; Skutnabb-Kangas, Maffi & Harmon., 2003). IKS is a powerful resource of rural peoples and, therefore, a key element in the fight against poverty and social exclusion for many rural communities worldwide. "Reliance on local knowledge and links with local cultures can make decentralized systems", such as those initiated under the new forest policy in Kenya, "more resilient in the face of changing external conditions" (Kuchli, n.d., p. 21).

At the same time, UNSESCO and Nuffic (2002) recognize the fact that culture is not static. Therefore, the incorporation of IKS into policies and programmes should not be constructed merely as a process of 'transmission', but rather as a 'generation of indigenous knowledge' or the 'social reconstruction of indigenous knowledge.'

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According to the World Bank (1998, p. iii), "knowledge as an instrument of development has not received the needed attention in developing countries in general, and Africa in particular." The need to investigate and apply this knowledge is vital. For as Lertzman (1999) argues, if the transition to ecological sustainability requires a decrease in our demand on natural capital, perhaps this can be offset with a greater supply of social and cultural capital. This social and cultural capital is embedded in IKS. As several authors (Ongugo, 2007; Adam, 2012; KFS, 2012) have noted, there is a vast body of knowledge that lies within communities and it is worthwhile to explore how this resource can contribute to resolving forest management challenges in the Kenyan context.

Agrawal (1995) argues that, if we wish to save IKS, there is need to move beyond the dichotomy of 'indigenous' vs. 'western' and seek to advocate for methods of conservation that engage with politics to bring issues of power and modification of political relationships to the core of these interventions. Preservation of the diversity of different knowledges might lie in attempting to re-orient and reverse state policies and market forces to permit members of threatened populations to determine their own futures. In rapidly changing times, traditional knowledge systems must be both consolidated and extended by modern policy tools (Elías, 2012). The IKS that I will be engaging with in this thesis are grounded in African ways of knowing. I now turn to a discussion on the need for this epistemology.

1.5.2 An examination of African epistemology

The river is flooded by tributaries. – Shona of Zimbabwe proverb

African epistemology is experiential knowledge based on a worldview and culture that is relational (Chilisa, 2012; Maathai, 2010; Owusu-Ansah & Mji, 2013). Sarpong (2002) argues that at the heart of this worldview are the values of wholeness, community, and harmony, which are deeply embedded in diverse cultural heritages. Sarpong further posits that a person becomes human in the midst of others and seeks both individual and collective harmony as the primary task in the process of becoming a "true person" (Sarpong, 2002, p. 40). Acquisition of knowledge in African societies is a collective and community-oriented endeavour. Central to African worldviews is a strong emphasis on a collective ethic anchored in communal values which acknowledge that the survival of a group of people must be supported by the spirit of interdependence and interconnectedness (Achebe, 1958; Mkabela, 2005). As Owusu-Ansah and Mji (2013, p. 2) point out, "African knowledge, and its method of acquisition, has a practical, collective, and social or interpersonal slant."

While ancient writing traditions do exist on the African continent, African epistemology is predominantly oral in nature and is transmitted from generation to generation. Forms of writing can be seen in the Ancient Egyptian, Nubian, and Ethiopian Ge'ez scripts. According to Maathai (2007), the Agĩkũyũ had a form of writing transmitted through the gichandi made from a gourd which was filled with stones and seeds, to make music when shaken. This music relayed teachings through riddles, proverbs, and wisdom. Further, its outer surface was inscribed with writings that conveyed information. Some of these artifacts were destroyed by missionaries, while others were taken to Museums in Europe and America, where they are held currently. Emagalit (2003) notes that oral knowledge has been looked down upon in part, for its oratory formulation, as well as the fact that not all of it is measurable. It has, thus, been sidelined from systematic scientific investigation because it is perceived as simplistic. Ngara (2007), however, argues that this kind of knowledge is, indeed, highly complex and vast repositories of this knowledge is stored in communities' ceremonies, rituals, story-telling, folktale recitations, demonstrations, sports, epics, poetry, riddles, tonguetwisters, dances, music, artefacts, and other cultural objects or representations.

The invocation of African epistemologies in research is supported by the philosophy of Afrocentricity outlined by African-American scholar Molefi Kete Asante in his works, *The Afrocentric Idea* (1987), *Afrocentricity* (1988) and *Kemet, Afrocentricity and Knowledge* (1990). Asante (2009, para. 3) writes:

The Afrocentric paradigm is a revolutionary shift in thinking proposed as a *constructural* adjustment to black disorientation, decenteredness, and lack of agency. The Afrocentrist asks: what natural responses would occur in the relationships, attitudes toward the environment, kinship patterns, preferences for colors, type of religion, and historical referent points for African people if there had not been any intervention of colonialism or enslavement? Afrocentricity answers this question by asserting the central role of the African subject within the context

of African history, thereby removing Europe from the center of the African reality. In this way, Afrocentricity becomes a revolutionary idea because it studies ideas, concepts, events, personalities, and political and economic processes from a standpoint of black people as subjects and not as objects, basing all knowledge on the authentic interrogation of *location*.

With respect to research, Mkabela (2005) writes that Afrocentricity is the examination of the African reality from the perspective of the African; one that places the African experience at the core, recognizes the African voice, and reaffirms the *centrality of cultural experience* (emphasis added) as the place to begin to create a dynamic multicultural approach to research. At the core of Afrocentricity is a call for respect to other ways of knowing irrespective of skin colour or geographical positioning.

Owusu-Ansah and Mji (2013) contend that the creation of a level playing field enhances the mutual exchange and synthesis of information at all levels. Further, Afrocentricity encourages cultural and social immersion as opposed to scientific distance in research, as well as the use of tools and methods indigenous to the people being studied (Owusu-Ansah & Mji, 2013). According to Mudimbe (1988), as cited in Archie (n.d.), when examining African issues, it is important to ask a fundamental question: what is the basis for discussions about Africa and from where and whom did it come? Mudimbe (1988) argues that western anthropologists and missionaries have, throughout history, introduced dichotomies not only for outsiders, but also for Africans trying to understand themselves (Archie, n.d.). Mudimbe, therefore, calls for an understanding of the construction of Africa through an examination of three general areas of exploitation: physical land and space; the domination of the mind and body; and the infusion of western ideas into already established civilizations (Mudimbe, 1988, as cited in Archie, n.d.).

Eyong, Mufuaya and Foy (2004, p. 2) contend that "what we know about Africa today stems from the ideologically coloured glasses of 'prejudiced' colonial anthropologists who documented African cultures as raw, uncooked, primitive and uncivilised in a bid to justify the high-handed colonisation scramble." Colonialism largely repressed the development of indigenous technology in Africa and destabilized some of the existing processes of technical growth and that indigenous manufacturing capability

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was deliberately undermined to facilitate European exports (Eyong, 2007). Engaging in research guided by African ways of knowing is one of the ways in which one can contribute towards a greater understanding of the African continent. Afrocentricity links with the African Renaissance philosophy¹¹, which is anchored in the belief that African people and nations can, should, and shall overcome the current challenges confronting the continent and achieve cultural, scientific, and economic renewal. At the heart of the African Renaissance is the appreciation, revival, use, and promotion of IKS. Linked to this is the drive to enhance indigenous capacity so that "the grains of the liberation culture of the continent and the restoration of African confidence as a people can be consolidated" (Kalawole, 2012, para. 4). Indeed, as Patrice Lumumba, the first prime minister of the Democratic Republic of Congo wrote, dreamed, and hoped, "the day will come when history will speak. Africa will write its own history…it will be a history of glory and dignity" (Lumumba, 1961, n.p.).

It is worthwhile noting that African epistemologies are very similar to those of indigenous peoples around the world. Gregory Cajete, a Tewa Indian from the Santa Clara Pueblo in New Mexico, for example, discusses the epistemologies of Native Americans in his books *Native Science* (2000) and *I Look to the Mountain* (1994). In reading Cajete's work in *Native science*, I substitute the word Native American with African and I find myself making sense of the text. According to Cajete (2000, p. 4):

In the past 500 years of contact with western culture native [African] traditions have been viewed and expressed largely through the lens of western thought, language, and perception. The western lens reflects all other cultural traditions through filters of the modern view of the world. In order to understand native [African] cultures one must be able to see through their lenses and hear their stories in their voice and through their experience...for native [African] people, seeking life was the all-encompassing task. While there were tribal specialists with particular knowledge of technologies and ritual, each member of the tribe in his or her own capacity was a scientist, an artist, a story teller, and a participant in the great web of life.

¹¹ This philosophy was first articulated by Senegalese anthropologist Cheikh Anta Diop, in a series of essays beginning in 1946, which are collected in his book, *Towards the African Renaissance: Essays in Culture and Development, 1946-1960* (African Union (AU), 2013). This concept was further popularized by former South Africa President, Thabo Mbeki, and is one of the underlying principles of the African Union.

Given the historically oppressive processes, African knowledge and methods of knowing have yielded results and contributions that have been discounted and undermined by multiple forms of oppression. Ngara (2007) argues that contributions made by Africa and her people to history and civilizations are conspicuously missing from scholarship and research. Yet, as Owusu-Ansah and Mji (2013, p. 1) note, "Africa has historically made a host of contributions to world civilisation which remain unknown and subliminally perpetuate the myth that African and or traditional African societies are incapable of rigorous scientific inquiry." Back to the river proverb outlined at the beginning of this section, it is worthwhile exploring the tributaries that have been sealed off. We need more water in the river. Since a river is flooded by its tributaries and the world needs and deserves a full and functional river, it is time to work towards the uplifting of subjugated African (and other) knowledge systems. The river is flooded by its tributaries!

1.6 My positionality

In framing a study to investigate the research questions in this study, I am guided by Mathaai's (2010, p. 288) call below:

I call for Africans to discover and embrace their linguistic, cultural and ethnic diversity not only so their nation-states can move forward politically and economically but so that they may heal a psyche wound by denial of who they are...It is they who must begin a revolution in ethics that puts community before individualism, public good before private greed and commitment to service before cynicism and despair.

This call is further reinforced by my eight years of engagement with diverse communities' heritages and its value as discussed in the paragraphs that follow, articulate my interest and biases towards this topic. I am inspired by the works of several scholars (Brown, 2009; Cajete, 2000; Chilisa, 2013; Freire, 2012; Kovach, 2009; Owusu-Ansah & Mji, 2013; Wilson, 2008), who argue that reflexivity and starting from one's own experience in education and research is methodologically sound. As Chilisa (2012, p. 3) writes, I, too, feel uncomfortable with research practices that "disconnect

me from multiple relations that I have with the community, living and non-living things and my life experiences". I, therefore, wish to state my positionality and explain how my life experiences have shaped my thinking, as well as interest in this type of research.

Prior to enrolling in my Ph.D. programme, I worked with and learned from diverse communities on the use, valorization, conservation, and promotion of natural and cultural heritage in East and Southern Africa. During this time, I was immersed in projects that wove together spirituality, local history, an intricate fusion of cultural and natural heritage in dynamic cultural landscapes. Through this work, I had the opportunity and privilege of interacting closely with the Abasuba people of Lake Victoria's Mfangano Island, the Iteso of western Kenya, the Abagusii of western Kenya, the Turkana of northern Kenya, the Iteso of eastern Uganda, the Warangi of Central Tanzania, and the Chewa of Malawi. My dialogues with communities interwove issues around masterpieces of art immortalized on stone, ritual, spirituality, nature, community ecological governance, livelihoods, health, peace, rites of passage, and many more aspects. I was able to glimpse into their collective memories as expressed in stories, songs, dance, folklore, proverbs, myths, cultural values, beliefs, rituals, cultural community laws, local languages, artefacts, forms of communication, and organization, experiencing a range of histories as impressive as that found anywhere else in the world.

It dawned on me that all of these communities held vast reservoirs of knowledge that they themselves did not see as important, in some cases, because it is not 'modern' or informed by formal education. I started developing an interest in an appreciation of indigenous worldviews, how they structure the ways of life for communities, and how they link to resource use and livelihoods. Basil Davidson, in his documentary series 'Africa' which highlights the continent's history, says "...unwritten rules were respected because they determine community survival...civilization is not a matter of technological advancement but of social responsibility." Similar views are shared by Kenyan scholar and writer, Ngũgĩ wa Thiong'o (1993), who writes that what prevented our cultures from being completely annihilated was that the rural masses continued to breathe life into them by refusing and resisting complete surrender in the political and economic

spheres. Davidson (n.d., n.p.) further acknowledges that, "miraculously these cultures have survived the onslaught of missionaries, colonizers and conquerors."

This is what I witnessed in my various engagements with communities and travels around the continent. My experiences sparked my interest in concepts, such as Afrocentricity and the African Renaissance discussed earlier. The ideals of these concepts shine through the work of Davidson (n.d., n.p.) who says that:

Through their long history, Africans display their creative energy and power. The energy and power of the past can be renewed. Africa is going to overcome its crises in the measure that it develops from its own roots and draws strength from its own history and skill and enterprise and independent civilizations. And as this new development begins to flower in Africa now, will the future begin to reflect once more the manifold achievements of the past.

Echoing the same beliefs, Mbeki (1996, n.p.) writes:

I am born of a people who are heroes and heroines...Patient because history is on their side, these masses do not despair because today the weather is bad. Nor do they turn triumphalist when, tomorrow, the sun shines...whatever the circumstances they have lived through and because of that experience, they are determined to define for themselves who they are and who they should be.

This is a belief that I embrace. It is clear that many communities have not forgotten their history and that their cultural traditions are still important to them. In as much as these traditions have been subjugated, underdeveloped, exploited, or undergone mutations, they still retain the potential for human and social development as they continue to echo through the ages. In 2012, I got the chance to interact and work with Aboriginal communities in Australia's northern territory. Here, I marveled at the application of IKS in the management of Kakadu National Park and other surrounding cultural landscapes. This experience strengthened my resolve to explore the potential and creativity that lies within communities through utilizing the wisdom of our coherent indigenous knowledge systems to achieve sustainable resource use and relevant development interventions.

I say 'our' to situate myself as an African, Kenyan, Mumeru woman who shares specific and collective heritages with the continent as a whole and my own community specifically. I am driven by the conviction that what will consolidate our strength is our intuition and creativity as a people in all spheres of engagement. My life experiences working on the African continent and my desire to contribute to resolving the challenges facing Africa drives me to conduct research that honours indigenous ways of knowing and ways of life of communities, while showing respect to community values systems and imperatives. Indeed, as Achebe (1972) writes, "I believe it is impossible to write anything in Africa without some kind of commitment, some kind of message, some kind of protest...my role as an African ... is to help my society regain belief in itself and put away the complexes of the years of denigration and self-abasement" (Achebe, 1972, as cited in Turkington, 1977, pp. 7-8). In essence, I perceive my research journey as an intellectual voyage of discovering who I am as an African and a commitment to use my work to contribute towards the African Renaissance.

The other reason that drives me to explore this form of scholarship is a deeply personal one. I was born and raised near a natural, indigenous protected forest in Meru County. It was only because of the waters flowing from this forest that I did not have to walk for long distances to fetch water, a task expected of girls in my community. Water is a game-changer for any woman in Africa. If you spend several hours in a day looking for water, there will be no time left to dedicate to anything else, much less education. Luckily for me we obtained access to piped water drawn from this forest just as I was about to turn five or six years old. I had just got a taste of what fetching water meant on one occasion and I clearly remember resigning myself to my fate. There was no point of having any dreams or hopes. But the water came and that changed everything! The most important factor is that this forest and its critical watersheds are protected through application of IKS. There are designated regions in this forest in which elders perform sacrifices to appease Murungu/God. This is one of those practices that has miraculously survived the missionary and colonial assault. Coincidentally, these regions are set around springs and are absolutely out of bounds to all except the designated elders. This system, therefore, protects critical watersheds, hence providing water for the community. I am a beneficiary of this forest.

I am a beneficiary of this traditional custodianship system. I am a beneficiary of IKS. Were it not for this forest and this knowledge system, I would probably not be here. I owe it to elders and this knowledge system to do something about the devaluation of

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IKS. I opened this section with the words of Wangari Maathai. I chose to end the way I started, with the words of this iconic daughter of Africa, because her poignant words are as pivotal today and for the future as they were during her initial efforts in sustainable forest management:

Those of us who have witnessed the degraded state of the environment and the suffering that comes with it cannot afford to be complacent. We continue to be restless; if we really carry the burden, we are driven to action. We cannot tire or give up. We owe it to the present and future generations of all species to rise up and walk. (Maathai, 2007, p. 295)

This call to action – to rise up and walk – is a theme and thread that is going to feature throughout this dissertation. Forests remain a resource that is under siege globally. They also remain a key to unlocking some of the most protracted environmental challenges of our time. This chapter has sought to position the research topic and questions in the greater global, national, and local contexts. It has centred communities and land as the stepping stone towards understanding people-forest relationships. In the next chapter, I present a review of literature and theoretical formulations that guided the study.

Chapter 2: Literature review and theoretical framework

2.1 Introduction

The underlying theme in this literature review on people-forest relationships and the articulation of a theoretical framework that guided my framing and analysis of the study is captured in Simpson's (2011, p.104) narrative:

If we do not live our stories and our teachings, the echoes become fainter and will eventually disappear. When the land is not being used in a respectful and honourable way, the power of her teachings are lost. Healers know that plants will disappear if one takes too much, and also if one does not use them at all. The more we tell stories, the more stories there are to tell, the more echoes that come up to the present.

The central goal of this thesis is to understand people-forest relationships through the lens of Indigenous Knowledge Systems (IKS). Imbued in this is the attempt to explore actual living practices relating to forest use and conservation among the Agĩkũyũ people of central Kenya. Further, I seek to ground this study within a revitalization perspective which aims to contribute to the reinforcement of the validity and legitimacy of Africa's IKS.

To this end, in this chapter, I present and examine the historical development of conservation discourses in Africa and how this has changed over time. Further, I highlight global conservation thought in relation to IKS. I also highlight the theoretical and philosophical frameworks including Dei's (2000) "anti-colonial discursive framework", Ngũgĩ Wa Thiong'o's (2009) "dismemberment and remembering" theory as well as the anti-colonial, and the environmental thinking of Amilcar Cabral (1970) and Thomas Isidore Sankara (1988, 1989). Further, the study is enriched by African orature and ethnophilosophy as manifested through stories and proverbs employed in framing the study and interpreting its findings.

2.2 Global conservation discourse and IKS

Proponents of IKS (Cajete, 2000; Hoppers, 2002; Kovach, 2010; Ngũgĩ wa Thiong'o, 2006; Smith, 1999) have promoted its integration into the management of

natural resources over the last two decades, both at the local and international scales, and especially in the face of escalating environmental crises. This integration, further, features in current global conservation discourse and agreements. The 1987 Brundtland Commission¹² report, for example, recognized the interdependence of ecological and political-economic systems, within which humans are key to addressing the planet's environmental problems and achieving sustainable development. The Commission asserted that:

Tribal and indigenous peoples' lifestyles can offer modern societies many lessons in the management of resources in complex forest, mountain and dry-land ecosystems. These communities are the repositories of vast accumulations of traditional knowledge, and experience that link humanity with its ancient origins. Their disappearance is a loss for the larger society, which could learn a great deal from their traditional skills in sustainably managing very complex ecological systems. (United Nations 1987, p. 19 & p .98)

The 1992 'Earth Summit¹³' in Rio de Janeiro resulted in several international agreements outlining a global policy context for sustainable development. The role of Indigenous peoples and their communities in sustainable development is explicitly recognized in these agreements, including the guiding principles on forests, the Convention of Biological Diversity, and Agenda 21 (Olusanya, 2012). Other international conventions, such as the 2008 UN Declaration on the Rights of Indigenous People and the 2003 UNESCO Convention of Safeguarding Intangible Cultural Heritage, as well as the 2005 UNESCO Convention on the Protection and the Promotion of the Diversity of Cultural Expression (of which Kenya is a signatory), have been ratified; these relate to the protection of Indigenous peoples' intellectual and cultural property, and strengthening their distinctive spiritual relationship with their traditional territories (Borona, 2014). These kinds of community-friendly policies bring back to centre stage knowledge, practices, and skills of these communities and, hence, create possibilities and avenues for meaningful partnerships with governments and other stakeholders.

¹² Our Common Future: The World Commission on Environment and Development.

¹³ United Nations Conference on Environment and Development.

The Rio+20¹⁴ conference stressed the importance of the participation of indigenous peoples in the achievement of sustainable development and recognized the United Nations Declaration on the Rights of Indigenous Peoples in the context of global, regional, national, and subnational implementation of sustainable development strategies (United Nations, 2012). The International Union for the Conservation of Nature (IUCN) recognized Indigenous and Community Conserved Areas (ICCAs) in 2003. This kind of recognition is a significant step forward in acknowledging that these community-managed areas are some of the oldest conservation spaces on earth. IUCN recently (2016) argued for stronger measures to protect sacred sites by ensuring that they are off-limits to extractive industries (Gaia Foundation, 2016).

In the same vein, the United Nations has recognized earth jurisprudence, which the Gaia Foundation (2016, para. 7) describes as "a practical philosophy for earthcentred living and governance that, like indigenous traditions, recognizes earth as our primary source of law." Despite all of these efforts, IKS has not received the recognition that it deserves in the management of forest and other natural resources. While several examples illustrate the effectiveness of applying IKS in resource management contexts, wider applications of IKS-derived information remain elusive and inadequate. In part, this is due to continued inertia in favour of established western scientific practices and the need to describe IKS in western scientific terms (Huntington, 2000).

2.3 Historical perspectives of conservation

The conservation movement can be traced back to "ethical and aesthetic preoccupations" that were far removed from communities and the ecosystems on which they depended (Kothari *et al.*, 2013, para. 15). It is only relatively recently that conservationists have begun to acknowledge, appreciate, and engage with the numerous value systems and practices which communities apply in conservation (Kothari *et al.*, 2013). Marginalization of IKS stems from the colonial encounter, imperialism, neo-colonial envelopment, and development doctrines (Hoppers, 2002; Maathai, 2010; Ngũgĩ wa Thiong'o, 2010; Nyamnjoh, 2012; Okot p'Bitek, 1966). Murphy

¹⁴ United Nations Conference on Sustainable Development: Rio+20.

(2009, p. 4) makes a case for examining imperialism (in the past and present) based on the following intersecting reasons:

(i) a more accurate account of the origins of environmentalism which emerged in the colonies and not in the imperial centre; (ii) understanding the legacies of colonialism and how these continue to shape contemporary environmental challenges; (iii) insights into generic processes of imperialism which might be operating through the environment today; (iv) a deeper understanding of the contemporary environmental crisis and how it might be overcome.

Murphy (2009) traces the linkages of environmental colonialism to the dispossession of land, livelihoods, and the destruction of the culture of Gaelic Scotland and Ireland by the Anglo-Normans in the 11th and 12th centuries. This dispossession prompted Aogán Ó Rathaill, an Irish Gaelic Poet to write "Our land, our shelter, our woods and our level ways are pawned for a penny by a crew from the land of Dover" (Murphy, 2009, p. 7).

Irish people were cast as "wild and barbarous" and "beyond the pale", which has echoes of Africa as "the dark continent" and the "wild west" in the United States of America (Murphy, 2009). The colonization of the Irish is central to understanding the colonial experiment and its impact on "language, culture and social memory" because as the first colony of England, Ireland "became a prototype for all other English colonies in Asia, Africa, and America" (Ngũgĩ wa Thiong'o, 2009, p. x-xi). As Murphy (2009, p. 8) points out:

The scale of colonialism was staggering. At its height in 1922, the British Empire included around 458 million people, one-quarter of the world's population at the time, and covered more than 33,670,000 km², approximately a quarter of the planet's land area

Colonialism had a direct impact on the environment because it was fueled by agricultural production to feed the needs, not of the colonized, but of empire. Sugar, tobacco, tea, wool, coffee, furs, feathers, gold, diamonds, groundnuts, rubber, pyrethrum – a variety of crops and other things that are not essential for human survival – were the cornerstone of colonial agriculture all over the world (Beinart & Hughes, 2007; Maathai, 2010; Murphy, 2009; Ngũgĩ wa Thiong'o, 2010). Land became a commodity for empire. As Murphy (2009) argues, this interlinkage between the land, environment, business, and colonialism resulted in the 'commodification of nature', a foreign concept to many of the colonized peoples. This commodification of nature was tied to extreme brutality as manifested by the chopping off of hands of colonial subjects who could not harvest the expected rubber amounts in King Leopold's Congo, floggings, starvation, and other forms of torture (Ngũgĩ wa Thiong'o, 2009). The Agĩkũyũ people, under discussion in this thesis, had to, for instance, produce food to support the war economy in World War II. They were encouraged to continue producing on already depleted soils, which inevitably led to an ecological catastrophe for which they were blamed and forced to resolve through punitive soil restoration programs (Elkins, 2014).

In the African context, the practice of separating communities from their environments dates to the colonial period. One of the key defining elements of the colonial regime in Africa, and indeed elsewhere, was the promotion of conservation policies that were unsympathetic to the needs of local people (Makombe, 1993). According to IIED (1994), communities' access to land-based livelihoods was criminalized. People were excluded from areas that they and their ancestors had previously inhabited, and fencing was sometimes erected to keep them away. Nelson (2003, p.65) coins the phrase "saving Africa from Africans" to interrogate contemporary conservation practices on the continent. This salvation conservation is characterized by the creation of pristine wildernesses which Nelson refers to as "gardens of Eden", "cathedrals," and "paradises" for the enjoyment of westerners.

What is the place of Africans within these spaces? They are auxiliary staff: tour guides; waiters; porters; and entertainers. These are not positions of power. As Nelson (2003, p. 65) further points out, the results of contemporary environmentalism:

Have not been as devastating as the experience of slavery, yet they have often served Western interests and goals much more than the interests of ordinary Africans. In some cases, local populations have been displaced and impoverished in order to create national parks and to serve other conservation objectives. Under the banner of saving the African environment, Africans in the last half century have been subjected to a new form of "environmental colonialism." Cribb (2007, p. 50-51) argues that the term, "national park", emerged from the United States and New Zealand, both of which were settler colonies where the goal was to assert "a quasi-spiritual guardianship of the land in order to counter the older claims of indigenous inhabitants." The spiritual guardianship doctrine has remained pervasive in conservation spaces. As Nelson (2003, pp. 67-68) explains, modern-day environmentalism is cast in Christian religiosity as exemplified by the notion of:

Saving the earth from rape and pillage, building cathedrals in the wilderness, creating a new Noah's Ark with laws such as the Endangered Species Act, pursuing a new calling to preserve the remaining wild areas, and taking steps to protect what is left of creation on earth.

This kind of language and the documentaries that are beamed across the western world about African wildlife reinforce the image of Africa as a place that is full of animals, undestroyed by human civilization – pristine. African peoples only enter the discourse through the lens of 'poaching', 'slash and burn', 'deforesters', and all another manner of ugly terminologies. If they are cast in a semi-positive light, it is only as Maasai peoples (or equivalent), who are posed as the quintessential tourism product in the African landscape. All you see is a Maasai, clad in traditional regalia, jumping into the sky entertaining western tourists. This is Eden. Conservation spaces were primarily created for empire. As Murphy (2009, p. 20) points out, these were "places where the recreational hunter and recreational traveler emerged as key characters of colonialism." The only difference is that the recreational hunter/trophy hunter is not a poacher. The African who is hunting for subsistence is the poacher. So, the trophy hunter continues to hunt in places where it is allowed. In countries where game hunting is prohibited, the travelers can only 'shoot' the animals with their cameras.

Until very recently, "flag independence¹⁵" governments in Africa have continued to advance the preservationist approach which has been a source of conflict between communities and governments at many of the protected areas around the continent. This has resulted in communities forming a negative attitude towards conservation and

¹⁵ This refers to the mere change of flags at independence for African countries. The economies continue to be dominated by former and current colonial powers.

associated efforts. In as much as laws are changing to be more inclusive of communities in the management of natural resources, those implementing conservationist initiatives are often game guards or wardens trained in protectionist techniques (Adams, 2001). Arora (2006) argues that the 'guns and fences'/fortress approach has, to a large extent, undermined conservation itself by "creating arenas of conflict when the forest-dependent and forest-dweller communities were forcibly evicted or denied their usufruct rights" (Arora, 2006, p. 59). Calling for the recognition and legitimization of the forest-dwellers' rights in forests and other conservation areas as primary stakeholders ensures their constructive participation towards the achievement of conservation goals. Arora (2006, p. 59) recommends that "ultimately, conservation strategies have to respond to local contexts and mobilize local cultural perceptions of nature by taking account of their appropriation, the use and the abuse of nature."

2.4 Community engagement: Conservation with a human face

Top-down approaches to development and conservation have failed to deliver economic growth, as well as social and conservation benefits to communities (Kothari *et al.*, 2013). Many governments, as well as other players in the conservation sector, are now seeking to engage with communities living around or within protected areas in an effort to craft sustainable solutions (Reid *et al.*, 2004). UNESCO (2007, p. 2) contends that:

Heritage protection without community involvement and commitment is an invitation to failure. Coupling community to the conservation of heritage is consistent with international best practice, as evidenced by comparable international regimes. Heritage protection, should, wherever possible, reconcile the needs of human communities, as humanity needs to be at the heart of conservation.

In the article, 'From Communal to Protected Area' discussing examples from Guatemala, Elías (2012) postulates that conservation should guarantee access for subsistence activities, above all for the poorest and most vulnerable members of society. Conservation efforts should be seen as a mechanism for poverty reduction, and not of poverty entrenchment. It is, therefore, critical that all projects, irrespective of whether their principal motivation is conservation and/or development, should assume an integrated approach for the fight against poverty (Elías, 2012). Drawing examples from the Tholung Sacred Landscape of North Sikkim, India Arora (2006, p. 60) argues that policies that seek to engage with communities in conservation need to address the following questions:

Who is the local community and what are the livelihood needs? What are their local practices and indigenous knowledge/the historical and cultural linkages to the adopted conservation strategies? What is the current relevance of their local environmental knowledge? Who is to conserve what and for whom? Who are the other stakeholders in this landscape?

These kinds of questions are critical in ensuring understanding conservation spaces and people living around them. They also provide answers to the question – whose land is this?

2.5 Traditional territories and IKS: This land is our land

Conservation spaces are often found in territories claimed by indigenous peoples and local communities. These spaces, therefore, provide "a crucial sense of 'place' and identity" (Kothari *et al.*, 2013, p. 13). This recognition is important in the furtherance of conservation goals because "environmental and cultural education attuned to specific places and peoples can play an important role in reviving or cultivating this sense of pride in 'place', as also the new relationship of the local with the global" (Kothari *et al.*, 2013, p. 13). Application of IKS in conservation opens spaces for communities to participate in decision-making processes which, in many instances, have a great bearing on their livelihoods. In addition, it is critical to the improvement of livelihoods and the struggle against the exclusion of rural people worldwide (Boven & Morohashi, 2002).

This 'sense of place' is highlighted in a study conducted by Arora (2006) entitled, 'The Forest of Symbols Embodied in the Tholung Sacred Landscape in the North Sikkim, India'. The study articulates the role of sacred landscapes in crystallizing community identities (the Lepcha in this case), recognizes sacred groves as an indigenous forest management system, examines cultural politics in the landscape, and brings to the fore issues of conflict between development and conservation of sacred sites (Arora, 2006). Essentially, Arora emphasizes that "conservation is a latent consequence while the idea of a sacred site preserves the forest and keeps it inviolate" (Arora, 2006, p. 55). The research project under discussion in this thesis anchors on some of these principles to enhance understanding of forest landscapes as cultural landscapes that are intrinsically tied to the communities' ways of life and well-being.

Research has demonstrated that "most aspects of the structure and functioning of Earth's ecosystems cannot be understood without accounting for the strong, often dominant influence of humanity" (Vitousek *et al.*, 1997, p. 494). Irrespective of this level of awareness, environmental issues continue to be more intractable. Mascia (2003) recognizes that conservation policies and practices are inherently social phenomena and that the success of environmental policies should be interrogated through a social lens because they require changes in human behavior to succeed. According to UNESCO and Nuffic (2002), many case studies and research projects have shown that there are no general technical western solutions for solving contextual problems. The failure of many development interventions has been attributed to the fact that "these interventions have lacked both the will and the instruments to allow people to use their own knowledge" (UNESCO & Nuffic 2002, p. 8). UNESCO and Nuffic (2002, p. 8) further recommend that "greater efforts should be made to strengthen the capacity of local people to develop their own knowledge base, and to generate methodologies that promote activities for improving livelihoods in a sustainable way."

2.6 From 'Pristine wildernesses' to a cultural landscape approach

In addition to embracing IKS, there is yet another paradigm shift taking place in the conservation community; the need to move away from the island mentality which Kothari *et al.*, (2013, p. 5) describe as "zealously protecting a few isolated protected areas within a degrading landscape" to conservation in landscape settings, "in which multiple strategies of protection and sustainable use are employed in an integrated manner to ensure ecological connectivity." This embodies a cultural landscape concept which recognizes the intricate linkages between the cultural and natural values in landscapes. Essentially, most protected areas or landscapes or seascapes are not 'pristine wildernesses' without human presence. They have been shaped by human activities through an array of intangible and tangible cultural values, hence making them a diverse archive of human stories and venture (Kothari *et al.*, 2013; Pretty *et al.*, 2009). The Kakadu National Park in Australia's Northern Territory is an outstanding example of a cultural landscape. The park is inscribed into the UNESCO World Heritage List as a living cultural landscape for its fusion of cultural and natural properties that espouse its outstanding universal value. The park is managed through a mixed methods approach encompassing both scientific and IKS (UNESCO, n.d.). Cultural landscapes personify and reflect the historical, social, and economic relationships between people and place. The cultural landscape framework can provide a deeper understanding of landscapes and should inform management discussions and directions. However, the historical dimensions of people-landscape ties are not often recognized in contemporary management approaches.

Although the past cannot be changed, it can provide a more comprehensive understanding of historical society and landscape interaction that can act as starting point for management decisions and practices (Mahanty, 2003). At the heart of understanding cultural landscape is the need to interrogate environmental history. Smith (1999) adds that an exploration, deconstruction, and reconstruction of history is a critical and essential part of decolonization. By positioning and investigating questions of environmental and social change against a large mosaic of historical changes, an understanding of environmental history can contribute to a multi-layered appreciation of current global environmental issues. Employing a historical lens on questions related to human relationships with the environment is, therefore, extremely important to understanding the long-term implications of current environmental concerns (Govindrajan, 2007).

2.7 Merging natural and cultural heritage

In the same vein as a cultural landscapes approach is the effort to link both cultural and natural diversity in conservation efforts. Many of the world's biodiversity hotspots are also repositories of cultural diversity, but as knowledge on the links between culture and nature is advancing, the complex systems in landscapes are receding (Skutnabb-Kangas *et al.*, 2003). Pretty *et al.* (2009) argue that, while conserving nature alongside human cultures presents unique challenges, any hope for saving biological diversity is only feasible through deliberate efforts to recognize, understand, and protect cultural diversity. Therefore, it is important to enhance the active regeneration and use of this "culturally ingrained capital" because it can enable communities to secure livelihoods with the limits of their environments, as this capital would act as a form of "cultural insurance" in the event of extreme events resulting in loss of resources (Pretty *et al.*, 2009, p. 104).

This is not to say that cultures should be maintained in a fixed state, but that cultures should be allowed to evolve and chart their own paths as necessary, without being forcibly assimilated into dominant cultures. Thus, cultural groups could, for instance, evolve, embrace, and integrate modern practices into their ways of life, but still emerge as distinct cultural entities through time (Pretty *et al.*, 2009). According to Kothari *et al.*, (2013), there is an urgent need to identify and document initiatives dealing with the conservation of cultural diversity and acknowledge their contributions to conservation and social objectives. This should be done through:

Issues relating to tenurial security, respect for cultural and institutional diversity, integration of traditional and modern knowledge, sensitive recognition that does not undermine local institutions, dealing with local inequities, sharing, and devolution of decision-making authority, generating appropriate and sustainable livelihoods, maintaining or reviving community values in the face of cultural and economic changes, encouraging a facilitating role for external agents, the importance of a *process* vs. a *project* approach, and the need to focus on community-based conservation within large landscapes/seascapes should be integrated in the conservation process. (Kothari *et al.*, 2013, p. 13)

Irrespective of the increasing appreciation of the role that IKS and culture can play in conservation and development, they remain under-researched because they are seen to be associated with the irrational parts of human life that do not lend themselves for rigorous research and scholarship (Lesley, Trigger & Mullock, 2005). Culture is seen as separate from other aspects of life rather than as an integral part of it, and is associated with a high degree of variability. This is especially the case amongst indigenous and ethnic groups rather than mainstream society, making it seem like the indigenous and ethnic groups are a failed attempt at being like the mainstream society (Lesley *et al.*, 2005). While recognizing that not all cultural ideas or practices are good for nature, Pretty *et al.* (2009) argue that, in many cases, communities that are largely resource-dependent have positive synergies with nature and that these synergies should be nurtured for the future. At the same time, Elías (2012) cautions researchers against the danger of falling into a romantic view of 'primitive', non-acquisitive villagers as environmental saints. Critical alertness and sensitivity to the limitations of indigenous communities' knowledge and tools in present situations should be fully acknowledged (Elías, 2012).

2.8 A path forward

There is growing global consensus that the redesign of development interventions should start by examining local constructions, to the extent that they are the life and history of the people (UNESCO & Nuffic, 2002). This implies a change that comes from within communities themselves, having confidence in and deploying indigenous knowledge, among other things, to bring about economic and social progress (UNESCO & Nuffic, 2002.) The world stands at a pivotal moment in history in the search for a more equitable form of development that recognizes the place of human beings as crucial players in this endeavor. Global efforts point to greater interest in promoting paradigms of sustainable development that builds on knowledge resources existing in communities (Hoppers, 2002). In a study on recognizing the sacred natural sites and territories in Kenya, Adam (2012) finds that there is inadequate recognition of communities' customary governance systems of sacred natural sites and territories. Further, there are an abundance of human-centred and reductionist legal frameworks, compounded by voluminous complex and contradictory policy frameworks. The study, however, recognizes opportunities for legal recognition under Kenya's new 2010 Constitution, and recommends nurturing of community ecological governance and a furtherance of the philosophy of earth jurisprudence with guidance from elders (Adam,

2012). This recommendation reinforces the need for the kind of study under discussion in this thesis as it is specifically designed to bring local ways of knowing to the front burner with regards to forest management.

IKS represents an immensely valuable database that provides humankind with insights on how numerous communities have interacted with their changing environment through time, but very little of this has been documented (Byaruguba & Nakakeeto, 2008). At the same time, humanity is losing these cultural value systems due to multiple factors such as the influx of western cultures and practices, high population growth, modernization, and high demand for resources, as well as poor documentation of such practices and knowledge (Hoppers, 2002). There is an abundance of rich knowledge of traditional practices and knowledge that could be assessed from the citizenry that lives near and within the natural resource in question. (Byaruguba & Nakakeeto, 2008). As Hoppers (2002, p.10) argues, IKS enables us to reestablish science as the story of all animals and not just the lion. It creates a process in which those that she refers to as being regarded as "refractory to the scientific gaze" become part of the empowering process and strengthen their capacity to forge genuine partnerships, as well as informed alliances for development.

There is, indeed, an urgent need for a mutually respectful, synergistic relationship amongst various knowledge systems in our efforts to ensure sustainable development. The diversity of skills, expertise, and knowledge that communities bring to conservation initiatives, alongside those brought by external actors, makes for greater innovation and adaptability (Kothari *et al.*, 2013). These synergies cannot be achieved if IKS remains inaccessible. One cannot integrate the two knowledge systems (if that is deemed desirable or appropriate) if one does not have knowledge of them, especially IKS. In the following section, I define the key concepts and theory used in this study.

2.9 Concepts and theory

Curiosity about the object of knowledge and the willingness and openness to engage theoretical readings and discussions is fundamental. However, I am not suggesting an over-celebration of theory. We must not negate practice for the sake of theory. To do so would reduce theory to pure verbalism or intellectualism. By the same token, to negate theory for the sake of practice, as in the use of dialogue as conversation, is to run the risk of losing oneself in the disconnectedness of practice. It is for this reason that I never advocate either theoretic elitism or a practice ungrounded in theory but the unity between theory and practice. In order to achieve this unity one must have an epistemological curiosity – a curiosity that is often missing in dialogue as a conversation. (Freire, 1970, p. 97)

This study will adopt the International Labour Organization (ILO) definition of Indigenous people as "tribal peoples in independent countries whose social, cultural and economic conditions distinguish them from other sections of the national community, and whose status is regulated wholly or partially by their own customs or traditions or by special laws or regulations" (ILO, 1989, p. 2). The idea of indigenous knowledge is a relatively recent phenomenon, gaining conceptual and discursive currency in the 1970s (Smith, 1999). The 1970s were a watershed moment in the struggle for the emancipation of indigenous people around the world through the constitution of the United Nations working group on indigenous populations. It is the dialogues initiated by this working group that led to the crafting and adoption of the 2008 Declaration on the Rights of Indigenous people.

According to Hoppers (2002, p. 8), IKS refers to the "combination of knowledge systems encompassing technology, social, economic and philosophical learning or educational, legal, and governance systems. It is knowledge relating to the technological, social, institutional, scientific, and developmental including those used in the liberation struggles." Further, IKS is not about cultural objects/artefacts and expressions, such as dances, but rather about the traditions, technologies, and thinking behind those cultural objects and expressions (Hoppers, 2002). Dei (2002) posits that Indigenousness refers to the traditional norms, social values, and mental constructs that guide, organize, and regularize African ways of living in making sense of the world. Different forms of knowledge, for example, knowledge as superstition, knowledge as belief in the invisible order of things, and knowledge as "science", all build on one another to provide interpretations and understanding of society.

Thus, different knowledges represent ways that people perceive the world and act on it (Dei, 2002 as cited by Chilisa, 2012). The goal of this research project is to explore ways in which we can forge sustainable people-forest relationships through

engagement with, and use of, IKS. The concept of sustainability was popularized by the 1987 Brundtland Commission of the United Nations. The Commission defined Sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations, 1987, p.16). In as much as the term was coined in 1987 (United Nations, 1987), I have found through my interactions with many indigenous communities around the world that sustainable resource use is a practice that was embedded in their way of life prior to their encounters with colonialism.

In an effort to understand sustainable people-forest relationships, I seek to anthropomorphize (Nashon, 2004) the forest/land (attributing human characteristics to the forest). Maathai articulates this concept in her work '*Replenishing the Earth*'. She writes:

If we live in an environment that is wounded – where water is polluted, the air is filled with soot and fumes, the food is contaminated or the soil is practically dust – it hurts us, chipping away at our health and creating injuries at physical, psychological and spiritual level. In degrading the environment, therefore, we degrade ourselves and all of humankind. The reverse is also true. In the process of helping the earth to heal, we heal ourselves. If we see the earth *bleeding* [emphasis added] from the loss of topsoil, biodiversity...and we help reclaim it for instance, through regeneration of degraded forests – the planet will help us in our self-healing and indeed survival. (Maathai, 2010, p. 17)

In anthropomorphizing the forest, I am interested in a process that embraces the unity of theory and practice that Paulo Freire (1970) talks about in *Pedagogy of the Oppressed*. I seek to use theoretical frameworks that the community can relate and contribute to. I am, therefore, drawn to indigenous theories. I am compelled to explore ways in which indigenous knowledge can contribute to theory building, and how the crafting of conceptual frameworks can challenge deficit theorizing and inform research interventions that valorize the cultural heritage and worldviews of communities. I will use Dei's "anti-colonial discursive framework" (Dei, 2000) as an umbrella term comprised of the various Afrocentric theoretical formulations that I will engage with in this research project.

2.9.1 The anti-colonial discursive framework

The missionary had traversed the seas, the forest, armed with the desire for profit that was his faith and light and the gun that was his protection. He carried the Bible; the soldier carried the gun; the administrator and the settler carried the coin. Christianity, Commerce, Civilization: the Bible, the Coin, the Gun: Holy Trinity. The native was grazing cattle, dreaming of warriorship, of making the soil yield to the power of his hands, slowly through a mixture of magic and work bending nature's laws to his collective will and intentions. In the evening he would dance, muthunguci, ndumo, mumburo in celebration or he would pray and sacrifice to propitiate nature. Yes: the native was still afraid of nature. But he revered man's life as much as he revered nature. Man's life was God's sacred fire that had to remain lit all the way from the ancestor to the child and the generation yet unborn. (Ngũgĩ wa Thiong'o, 1977, p. 88)

According to Dei (2000, p. 7), the anti-colonial discursive framework is "a counter/oppositional discourse to the repressive presence of colonial oppression. It is also an affirmation of the reality of re-colonization processes through the dictates of global capital." This framework hinges on the theorization of colonial and re-colonial relationships, and unpacking the manifestations and consequences of asymmetrical power relationships that characterize our world today. These power asymmetries are seen in "the process of knowledge production, interrogation, validation and dissemination; claims of indigeneity and indigenous knowings; and, the recourse to agency, subjective politics and resistance" (Dei, 2012, p. 112). Dei (2012, p. 112) further points out that anti-colonial theorizing should aim at transformation and not only the understanding "of complexities, messiness, disjunctures, contentions, and contradictions of social realities." The use of the word 'discursive' is meant to avoid the totalizing nature and rigidity that theory is associated with.

The use of the term 'discursive' also encourages fluidity and transparency (Dei & Asgharzadeh, 2001). It moves away from the tendency to over-valorize certain theoretical formulations at the expense of enaging with new ideas and view points. The anti-colonial discursive framework emphasizes the celebration of cultural traditions through:

Celebration of oral, visual, textual, political, and material resistance of colonized groups, which entails a shift away from a sole preoccupation with victimization. It engages a critique of the wholesale denigration, disparagement, and discard of tradition and culture in the name of modernity and global space. (Dei & Asgharzadeh, 2001, p. 301)

This framework further warns Africans against being "intellectual imposters" Nyamnjoh (2012), whose mission is to embrace, regurgitate, and promote western theories at the expense of African interests, because this leads to "cultural violence, self-hate, and mimicry" (Nyamnjoh, 2012, p. 4). In that sense, then, Dei (2012, p. 102) stresses that "we need to develop theoretical prisms or perspectives that are able to account for our lived experiences and our relationality with other learners, prisms rooted in our cultures, histories, and heritage...We must stake out our own discursive and political positions."

Dei (2012) argues that the value of any social theory must be judged against its philosophical underpinnings and its ability to contribute to social and political questions. This is related to "consciousness and responsibility to/of producing, sharing, claiming, and gaining knowledge" (Dei, 2012, p. 104). The anti-colonial framework draws from the well of African knowledge systems and takes a stance against "the everyday devaluation, denial, and negation of the creativity, agency, resourcefulness and knowledge systems of African peoples" (Dei, 2012, p. 107). To achieve this:

We must understand the relations of political power and geographical and social spaces, as well as the strategic importance of land as a place of affirmation of histories, identities, and cultures of resistance. Anti-colonial intellectuality and praxis is about bringing ideas into fruition as social practice, as grounding and testing theories in the contexts of the liberatory struggles of our peoples as well as the people with whom we work in political solidarity...recognizing the links among culture, knowledge production, and colonization of land and space...our development of anticolonial knowledge production and intellectualities should remain rooted in histories, cultures, and revolutionary political traditions of African people's radical resistance to colonialism. Our work benefits from rich legacies of committed and visionary political action and our theories must be sophisticated enough to broach and sustain good political practice. (Dei, 2012, p. 107)

Drawing from Dei's thoughts, this research work will be anchored on land and Agĩkũyũ cultural heritage as formulated in their socio-political, spiritual, and economic worlds. In the following sub-section, I will discuss Ngũgĩ wa Thiong'o 'dismemberment and

remembering' theory and the theoretical formulations of Amilcar Cabral and Thomas Sankara's anticolonial and environmental thought. To my mind, these theories fall within the umbrella of Dei's 'anti-colonial discursive framework'.

2.9.1.1 Dismemberment and remembering

It was becoming clear to me that the question of memory may not only explain what ails contemporary Africa but may also contain the seeds of communal renewal and self-confidence. (Ngũgĩ wa Thiong'o, 2009, p. ix)

Ngũgĩ wa Thiong'o uses the terms 'dismemberment' and 'remembering' to theorize the struggles of African peoples, as well as for presenting solutions going forward. Ngũgĩ wa Thiong'o (2009) understands dismemberment as a tearing apart of the continent and its peoples. The first of these dismemberments happened during the brutal slave trade, which dislocated millions of Africans from their homes and spread them all over the world in the service of empire. Ngũgĩ wa Thiong'o (2009, p. 6) writes that the slave trade represented the:

Dismemberment of the diasporic African, who was now separated not only from his continent and his labour but also from his very sovereign being. The subsequent colonial plantations on the African continent have led to the same result: division of the African from his land, body, and mind.

The slave trade, therefore, was a precursor to colonialism, which then led to the enslavement of Africans on their own land. It is this second form of dismemberment that I will focus on in this thesis. Dismemberment in the colonial period manifested itself in various forms. According to Ngũgĩ wa Thiong'o (2009), these included decapitation of African heads, loss of land and livelihoods, loss of memory, and loss of cultures. I will now examine these briefly.

To assert colonial authority, the builders of empire employed several strategies to subdue the population, and to stifle dissent and resistance. One of the most prominent strategies was the elimination of leaders of the respective groups. Ngũgĩ wa Thiong'o (2009) draws from the examples of Waiyaki wa Hinga of the Agĩkũyũ in Kenya, King Hintsa of the Xhosa, in South Africa, the Ashanti golden stool, and the Matabele in Zimbabwe. Waiyaki wa Hinga (discussed in chapter 1 of this thesis) "was buried alive in Kibwezi, head facing the bowels of the earth in opposition to the Gĩkũyũ burial rites' requirement that the body face Mount Kenya, the dwelling place of the Supreme deity" (Ngũgĩ wa Thiong'o, 2009, p. 3).

This was designed to quash Gĩkũyũ resistance to colonial oppression. In the same vein, the British decapitated the Xhosa king, Hintsa. His head was taken to the British Museum, along with other heads, such as that of the Maori King (Ngũgĩ wa Thiong'o, 2009). The British colonial governor in Gold Coast (now, Ghana) demanded that the Ashanti produce the golden stool, "the embodiment of the Ashanti soul", as a way of weakening and scuttling their resistance. The Ashanti succeeded in hiding the stool during the colonial period. The stool resurfaced after independence. The imperial magnate, Cecil Rhodes, demanded to be buried in the sacred burial sites of the Matabele people in Zimbabwe. Cecil Rhodes' goal was to colonize the African people from Cape Town in South Africa all the way to Cairo in Egypt. His reign was one of terror to African peoples. He led the conquest of vast tracts of territory and named some of them after himself – northern Rhodesia (Zambia) and Southern Rhodesia (Zimbabwe). According to Rhodes, the English were a master race because "we are the first race in the world, and that the more of the world we inhabit the better it is for the human race" (BBC, 2015, n.p.). Rhodes demand to be buried in the sacred burial sites of the Matabele people and as Davidson (n.d.) argues, this was a way to continue the humiliation and torture of a people who had already been on the receiving end of Rhode's oppression for decades. It is as though Rhodes wanted to continue mocking them even in death. There are numerous examples of the elimination of African leaders through either exile or death and as Ngũgĩ wa Thiong'o (2009, p.4) argues:

The relationship between Africa and Europe is well represented by the fate of these figures. A colonial act-indeed any act in the context of conquest and domination, is both a practice of power, intended to pacify a populace, and a symbolic act, a performance of power intended to produce docile minds.

Dismemberment scatters, it shames, it humiliates, it demonizes, it diminishes, it disintegrates, it weakens, it wounds communities for generations. As demonstrated in chapter 1, the pain of Waiyaki's death is still a sore wound among the Agĩkũyũ people

today. According to Ngũgĩ wa Thiong'o (2009, p. 6), Hintsa's and Waiyaki's dismemberment went a step further in dislocating one from memory because the physical removal of the head (the carrier of memory) means that "memory is cut off from the body and then either stored in the British Museum or buried upside down." As Ngũgĩ wa Thiong'o (2009, p. 5) further explains:

The lynching of captive Africans in the American south, often accompanied by the brutal removal and public display of genitalia...The beheading of King Hintsa and the burial of Waiyaki alive, body upside down, and the removal of the genitalia of the Africans in America, go beyond the particular acts of conquest and humiliation: They are enactments of the central character or colonial practice in general and of Europe's contact with Africa in particular since the beginnings of capitalist modernity and bourgeois ascendancy. This contact is characterized by dismemberment. An act of absolute social engineering, the continent's dismemberment was simultaneously the foundation, fuel and the consequence of Europe's capitalist modernity.

Some scholars have argued that the slave trade fueled Europe's industrial revolution (Harley, 2013; Rodney, 1972; Ngũgĩ wa Thiong'o, 2009; Fanon, 1961). If that is the case, then, Ngũgĩ wa Thiong'o (2009) posits that the industrial revolution ensured the transition to the next phase of dismemberment, because colonialism provided raw materials, markets for finished goods, as well as strategic defense of trade routes. The manifestations of colonial dismemberment are discussed extensively in this thesis (See chapters 1, 4, and 5).

The other form of dismemberment is characterized by intellectual cleansing through the "planting of European memory in Africa" (Ngũgĩ wa Thiong'o, 2009, p. 1). This was manifested through mapping, discovery, and naming of African landscapes (Ngũgĩ wa Thiong'o, 2009). I have discussed the example of naming of Nyandarwa Ranges as Aberdares in this thesis. Naming is seen as a harmless intervention given the fact that some of the most iconic African landscapes and waterscapes still bear colonial names. As Ngũgĩ wa Thiong'o (2009, p. 9) points out, "European memory becomes the new marker of geographical identity, covering up an older memory or, more strictly speaking, burying the native memory of place", a potent form of dismemberment. Dislocation from the land during colonial occupation, slicing the land

up into many pieces in the name of management, destruction of knowledge systems associated with living on the land, and creation of pristine wildernesses in the name of conservation are all dismemberment practices. It is against this backdrop that we must launch a "remembering" project. Remembering is a revolutionary act. To end this section, I will again quote Ngũgĩ wa Thiong'o's earlier work because he (even then) articulates what remembering is all about – a struggle against forgetting buttressed with a struggle for redemption of African peoples. He writes that:

The oppression of black people is a fact. The scattering of Africans into the four corners of the earth is a fact...That our people fought against the Arab slave raiders is a fact: that the Akamba built formidable defences against them even when trading with them in ivory is a fact. That our people resisted European intrusion is a fact: we fought inch by inch, ridge by ridge, and it was only through the superiority of their arms and the traitorous actions of some of us that we were defeated. That Kenya people have had a history of fighting and resistance is, therefore, a fact. Our children must look at the things that deformed us yesterday, that are deforming us today. They must also look at the things us which formed us yesterday, that will creatively form us into a new breed of men and women, who will not be afraid to link hands with children from other lands on the basis of an unashamed immersion in the struggle against those things that dwarf us. (Ngũgĩ wa Thiong'o, 1977, p. 246)

Working against the things that dwarf us should entail revitalization of African ways of knowing, memorializing those who struggled for African liberation (both the living and the dead), mourning those who died during slavery and colonialism, building Africa's cultural infrastructure, restoring of African memories, cultivating political consciousness, and restoring of African dignity in all spheres of engagement. In the following section, I turn to the theory embedded in the work of Sankara and Cabral.

2.9.1.2 The anti-colonial thought and environmental philosophy of Thomas Sankara and Amilcar Cabral

Where is imperialism? Look at your plates when you eat. The imported rice, maize and millet; that is imperialism...Let us try to eat what we control ourselves. (Thomas Sankara, n.d., as cited in Dembele, 2013, para. 10)

Thomas Sankara, "a great combatant for African dignity, integrity and human liberation" (Sy, 2007, para. 1), served as the president of Burkina Faso (formerly named

Upper Volta) from 1983 until 1987, when he was assassinated by "neo-colonial forces" (Biney, 2013, para. 4). Sankara renamed the country from the colonial name to Burkina Faso, which means "Land of Upright Man". Sankara was a revolutionary figure, a thinker, a strategist, and a doer. At the heart of Sankara's revolution was the restoration of African dignity through harnessing the knowledge, cultures, and resources within their continent. As Dembele (2013, para. 3) writes, "the Sankarist Revolution was one of the greatest attempts at popular democratic emancipation in post-Independence Africa, and is considered a novel experience of broad economic, social, cultural and political transformation." At the core of the Sankara's philosophy was endogenous development, which Dembele (2013, para .1) describes as:

The process of economic, social, cultural, scientific, and political transformation, based on the mobilisation of internal social forces and resources and using the accumulated knowledge and experiences of the people of a country. It also allows citizens to be active agents in the transformation of their society instead of remaining spectators outside of a political system inspired by foreign models.

In his short time in office, Sankara mobilized Burkinabe people to attain food selfsufficiency, embark on ambitious ecological restoration of their landscape, build infrastructure, stand firm against foreign aid, and rebuild the economy which was left in tatters by the departing French colonial regime (Dembele, 2013; Murrey, 2016; Sy, 2007). From the above quote, one can argue that Sankara was a defender and believer of Indigenous Knowledge Systems and recognized their role in ensuring responsive and just development. Sankara connected with the masses of Burkinabe people and articulated his ideas in a manner that resonated with the needs of people. As Sy (2007, para. 28) explains:

Sankara's revolution was simple: work more, spend less and spend better, produce more, be concerned with the priority needs of the country. He said "our revolution is and must be permanent; the collective action of the revolutionaries to transform reality and improve the concrete situation of the popular masses our country. Our revolution will only have a value, if, looking back, we will be able to say that the people of Burkina are a little happier because they have clean drinking water, sufficient food, good health, education, decent housing and more freedom, more democracy, more dignity. Our revolution will have a right to exist if it can answer these questions concretely.

As an African woman, I am also attracted to Sankara's praxis on women because he made a case for the liberation of women. Sankara possessed a sophisticated understanding of freedom and emancipation in his time. Food self-sufficiency and related ecological restorative work is directly tied to women in Africa. According to the Gaia Foundation (2016), African women produce 80% of food on about 14.7% of the agricultural land base. This means that African women are in touch with the land, and holders of key knowledge systems on seed propagation, storage, dissemination, and knowledge on caring for the land. Therefore, Sankara was correct when he argued that:

We cannot transform society while maintaining domination and discrimination against women, who comprise more than half our society... Our revolution has worked for three and a half years to progressively eliminate demeaning practices towards women... Also they must be engaged as Burkinabe producers and consumers... Together we must always ensure access of women to work. This emancipatory and liberating work will ensure women's economic independence, a greater social role and a more just and complete knowledge of the world. (Sankara, n.d., in Dembele, 2013, para. 13)

I grew up in a rural area, and I know and have seen the role of women, and I have personally been, and am still involved in agricultural work. The linkages between women and food security are, for me, a lived experience. That is why Sankara remains an iconic figure in understanding the mix between sustainable living and emancipatory struggles. Regarding food security, Sankara illuminated his philosophy by elucidating the linkages between imperialism, neo-colonial encirclement, and sustenance for Burkinabe and African peoples in general. Sankara was a strong crusader against imperialism. In a speech to the United Nations in 1987, he said:

We have been indebted for 50, 60 years and even more. That means we have been led to compromise our people for 50 years and more. Under its current form, that is imperialism controlled, debt is a cleverly managed re-conquest of Africa, aimed at subjugating its growth and development through foreign rules. Thus, each one of us becomes the financial slaves, which is to say a true slave, of those who had been treacherous enough to put money in our countries with obligations for us to repay. We are told to repay, but it is not a moral issue. It is not about this so-called honour of repaying or not... Debt cannot be repaid, first because if we don't repay, lenders will not die. That is for sure. But if we repay, we are going to die. That is also for sure. (Sankara, 1987, n.p.)

Sankara understood the link between ecological sustainability and food security. This was demonstrated by ecological restoration programs, such as tree planting, which were designed to combat deforestation. He explicitly linked imperialism and ecological devastation when he said, "The struggle for the trees and the forest is the antiimperialist struggle. Imperialism is the arsonist of our forests and our savannahs" Sankara, n.d., in Dembele, 2013, para. 30). This statement rings true today as Africa and Africans are feeling the heat of climate change, the causes of which (greenhouse gas emissions) they have not significantly contributed to (Dembele, 2013). Sankara understood then what many conservationists and governments are now beginning to grasp; that conservation without the involvement of people and for the people is an exercise in futility. Therefore, Sankara (1988, pp. 155-156) argued that:

Our struggle to defend the trees and the forest is first and foremost a democratic struggle that must be waged by the people. The sterile and expensive excitement of a handful of engineers and forestry experts will accomplish nothing! Nor can the tender consciences of a multitude of forums and institutions – sincere and praiseworthy though they may be – make the Sahel free again, when we lack the funds to drill wells for drinking water just a hundred meters deep, and money abounds to drill oil wells three thousand meters deep!

Meaningful community engagement is a critical and often missing ingredient in conservation in the Kenyan context, as well. Sankara makes a strong case for sustained engagement with people as a key towards resolving conservation and livelihood challenges. He demonstrates the links between environmental protection and the direct impacts on people. I will draw from the Sankarist philosophies in engaging in discussions in the following chapters. In the following section, I turn to the environmental thought of Amilcar Cabral, who always emphasized that 'our people are our mountians.' According to Lopes (2006, p.1):

Cabral used to say that one must remember that people do not fight for ideals or for things on other people's minds. People fight for practical things: for peace, for better living conditions in peace, and for their children's future. Liberty, fraternity

and equality are empty words for people if they do not mean a real improvement in their lives.

Amilcar Cabral led the struggle for independence movement in Guinea Bissau and Cape Verde from 1963 until 1973, when he was assassinated "by agents of the fascist Portuguese state" (Tarifa, 2014, para. 1). This occurred eight months before the attainment of independence that he so gallantly fought for. Cabral was unique in the landscape of African liberation struggles because of the strength of his belief that a revolution must be anchored in theoretical formulations (Akuno, 2014). Cabral understood liberation as a struggle against oppression in its various manifestations. To this end, he made an argument for interrogating our cultural traditions and building on their strengths to support this cause (Tarifa, 2014). Culture, according to Cabral, is the equivalent of a flower to a plant because, just like a flower, it is important "for forming and fertilizing the seedling which will assure the continuity of history...[and] assuring the prospects for evolution and progress of the society in question" (Cabral, 1970, para. 15). Hence, the deliberate destruction of cultural foundations of colonized societies is a direct affront to their development and progress.

The results of this destruction can be seen in many African societies today because, as Ngũgĩ wa Thiong'o (1993) argues, Africans continue to cast their gaze towards Europe. Everything African is ridiculed, undervalued, dismissed, and dismantled, including by Africans themselves, and with the full support of African governments. This is aptly described by Okot p'Bitek (1966) in 'Song of Lawino' in which the "uneducated" Lawino laments of her husband Ocol. Lawino has questions for her Makerere University-educated husband, Ocol. But, when she asks questions, Ocol says "the answers cannot be given in Acoli" because it is not a "rich enough to express his wisdom, because it has very few words", unlike the white man's language, "which is rich and very beautiful. A language fitted for discussing deep thoughts" (Okot p'Bitek pp. 140-141). Ngũgĩ wa Thiong'o (1993) argues that language is the carrier of culture. Thus, the devaluation of indigenous languages is the first stage towards cultural destruction, and this remains a problematic issue in Africa today. Cabral made a case for home-grown ideologies that are informed by knowing what one wants, and how to achieve it based on one's own conditions and situations. He emphasized the engagement with ideologies that that are developed through interactions with the masses. Cabral (1970, para. 9) argued that:

The value of culture as an element of resistance to foreign domination lies in the fact that culture is the vigorous manifestation on the ideological or idealist plane of the physical, and historical reality of the society that is dominated, or to be dominated. Culture is simultaneously the fruit of a people's history and a determinant of history, by the positive or negative influence which it exerts on the evolution of relationships between man and his environment, among men or groups of men within a society, as well as among different societies.

It is important to note that Cabral did not advocate for an uncritical use of culture. He maintained that the weaknesses of respective cultures must be fully acknowledged. In the same vein, Fonlon (1967, pp. 21-22) argues that:

It is imperative to steer clear of two extremes: on the one hand, the imperialist arrogance which declared everything African as only fit for the scrap-heap and the dustbin, and, on the other hand, the overly-enthusiastic and rather naive tendency to laud every aspect of African culture as if it were the quintessence of human achievement.

Cabral reiterated that there was nothing wrong with borrowing positive elements from other cultures and using them with or alongside one's own culture in the struggle for freedom. This, he believed, would create a more powerful form of resistance. Further, he made a case for 'class suicide', which the 'petit bourgeoisie' needed to commit to align themselves with the masses or peasantry that made up the greatest segment of the population (Akuno, 2014). He called for action-oriented leadership, people-driven leadership, and anti-oppression leadership. While working as an agronomist for the Portuguese colonial government, Cabral gained a deeper understanding of the intersection of culture, agricultural productivity, and environmental conditions (Idahosa, 2000). Having worked extensively in the agricultural sector prior to his active involvement in liberation struggles, Cabral gained an understanding of the conditions, ways of life, ways of being, and philosophies of the rural communities. He also witnessed first-hand the suffering that comes from ecological devastation, colonial policies, and destruction of livelihoods. His politics were, therefore, hinged on real and lived experiences. Cabral writes, "I saw folk die of hunger in Cabo Verde, and I saw folk die of flogging in Guinea (with kicks, beatings, and forced labour)... this is the entire reason for my revolt" (Cabral 1969, p. 111). He was concerned about nature, culture, and community livelihoods. Cabral believed "that the best way of defending the land is the best way for defending people" (Idahosa, 2000, p. 38). He understood the intersections between land use, colonization of land and labour, and subsistence. He noted the shift from growing of food crops, such as rice, to monoculture agriculture exemplified by the growing of groundnuts for export. This created a situation of exploitation from international markets and global capital (Idahosa, 2000).

Cabral encouraged the need for production to be indigenous and endogenous – safeguarded from the tentacles of foreign domination. Therefore, from an ecological view point, he, like Sankara, understood the linkages between colonial domination, food security, and community livelihoods. I concur with Cabral that people fight for practical things and not empty ideals. Freedom means nothing if it does not translate into the capacity and opportunity for ensuring community livelihoods in all their various manifestations. Cabral remains a powerful intellectual force in helping to interrogate the challenges facing the African continent today. Indeed, as Dembele writes:

Forty years after his assassination Cabral's ideas remain more relevant than ever. His premature demise robbed Africa's revolutionary season of one of its most prominent and original theoreticians. Cabral was a leader intimately involved in the life of the masses and imbued with the fundamental values of his people. He was both a visionary and a passionate panAfricanist, a living symbol of the kind of leadership of which Africa has been cruelly deprived at this time, where there are growing threats of recolonization. (Dembele, 2013, as quoted in Fall, 2014, para. 21)

At this point, I would like revisit Ngũgĩ wa Thiong'o's dismemberment theory. I would argue that that the assassinations of Cabral and Sankara, as well as many other African freedom fighters – the true freedom fighters' – not the "enemies of the people" (Sankara, 1983, n.p.) who masquerade as freedom fighters – is another form of

dismemberment. The continent is consistently robbed of revolutionary thinkers and defenders of African interests. In fact, to see African revolutionaries one would need to visit the cemeteries. That is where they lie. But, their individual and collective legacies continue to inspire those that continue to strive for African freedom(s). I would further argue that the split between the elite/educated and the peasant masses, as illustrated between Ocol and Lawino above, is another is another manifestation of dismemberment. As Nyamnjoh (2012, p. 5) argues, we can trace a line back from colonial education system because "those emasculated and neutralized by colonial education, in turn, seek to neutralize and emasculate all those and everything around them. They fancy and favour imported thinking and things in European greenhouses under African skies."

The educated/elite are an expression of "the uncritical internalization of colonial and colonizing yardsticks of being educated and being modern" (Nyamnjoh, 2012, p. 5). In that sense then, the elite, who are represented by governments and other agencies, are incapable of aligning themselves with the needs and aspirations of the people. They cannot develop, articulate, and implement the ideologies and the cultural revolution that Cabral was talking about. Cabral insisted that, 'Our people are our mountains.' He was referring to the fact that Guinea Bissau was not a mountainous country and therefore, they could not necessarily engage in guerrilla warfare using the landscape as a launching pad. However, if the people understood what they were fighting for and were mobilized effectively, then they would be as formidable as the Kilimanjaro, or Kirinyaga, or Nyandarwa, or all the other African mountainscapes which sustained the struggle against imperialism. To this end, we need to listen to Lawino who tells us, "Listen Ocol, my friend, the ways of your ancestors are good, their customs are solid, not hollow. They are not thin, not easily breakable. They cannot be blown away by the winds, because their roots reach deep into the soil" (Okot p'Bitek, 1966, p. 29).

2.10 African ethnophilosophy

Theory cannot remain a privileged discussion among so-called academics and intellectuals that fails to evoke or be directly informed by anti-oppressive

actions and practice. There is the necessity to create discursive frameworks that affirm the inseparability of theory and practices, to create what can be called a definitional power of anti-colonialism. (Dei, 2012, p. 107)

Chilisa (2012) highlights methods based on ethnophilosophy as strategies for conducting research with an empowerment imperative. These methods are also useful for theorizing with indigenous people. According to Emagalit (2001, cited in Chilisa, 2012, p. 131), ethnophilosophy refers to the African worldview that is "encoded in language, folklore, myths, taboos, and rituals". These are banks where knowledge is stored and can be retrieved to triangulate with data from traditional sources. This approach echoes the concept of 'Funds of Knowledge' articulated by Molls (1992, p. 133) as, "historically accumulated and culturally developed bodies of knowledge and skills essential for household functioning and well-being." This concept is based on the premise that people (including those considered to be at the margins of society) are knowledgeable, that they have something to offer, and that their life experiences have given them knowledge. These are discussed in the following sub-section.

2.10.1 Stories and proverbs

Among the various forms of ethnophilosophy that Chilisa (2012) discusses, I feel that stories and proverbs will contribute to establishing useful theoretical frameworks to guide this research project. According to Chilisa (2012), in proverbs and metaphors, we find philosophical and theoretical frameworks from which we can ground research that draws from the value systems of communities to inform program interventions that address the needs of people. Positive proverbs can be powerful in challenging deficit theories and in exploring community ideologies. Tsepa (2008) points out that the enormous diversity of stories among indigenous societies are the building blocks of indigenous environmental thought. They provide an opportunity to understand communities' points of reference on different topics. Stories have been used to collect, deposit, analyze, store, and disseminate information, as well for units of socialization. They are instruments of teaching. Among these forms of stories are folklore, stories of origin, folktales, legends, and mythical stories in song and poetry (Chilisa, 2012).

Stories fill in the gaps and provide missing literature, theories, conceptual frameworks, and research methods in a post-colonial indigenous research paradigm (Chilisa, 2012). Stories, proverbs, and other forms of African orature are at the heart of our civilization and culture.

The art of storytelling around a fire as the children waited for dinner often cooked over an open fire and three stones was a defining element of many African societies. Stories were a way to keep children entertained and awake. The stories served to entertain, educate, and encourage creativity in children. It was an effective form of informal education (Maathai, 2007). I can relate to this as I grew up in this tradition and experienced fireside storytelling. Stories are imbued with relational ontologies emphasizing the interconnectedness that exists among both the living and the non-living. An example of this is the aspect of sharing food and drink with the ancestors that is found among many African societies. This is a tradition that, to date, continues to be practiced among the Agĩkũyũ and Ameru of Kenya. When people from these communities gather to drink beer, a little of the beer is poured on the ground as they say, "this is for the ancestors." Chilisa (2012, p. 141) recounts a similar tradition:

My grandmother used to require that we share every evening meal with the ancestors. As we gathered around the fireplace to eat our evening meal, we would first take a handful of the dinner and put it on the floor as a gift for the dead; then we ate.

In the same vein, Maathai (2010, p. 50) provides another example from Agĩkũyũ people:

The Agĩkũyũ had many rituals and practices that expressed gratitude for the bounty of their region and its continuance. Traditionally, a small portion of the harvest was always delivered to a specific open area or grove away from the village and usually at a crossroad that everyone knew of. This was called the granary of God/*ikumbi ria Ngai*. Here a farmer was obliged to leave a portion of what had been harvested as kind of tithe for wild animals or the very vulnerable in society...it was their way of contributing to common good.

These kinds of practices legitimize the relational aspects of a post-colonial indigenous research paradigm. Practices, such as sharing food, exchanging gifts, and communicating with the living in prayer, song, dance, or speech, are indigenous ways of communicating a philosophy, beliefs, and worldviews (Chilisa, 2012). In *Indigenous*

Storywork: Educating the Heart, Mind, Body and Spirit, Jo-ann Archibald (2008, p.12) writes, "Stories have the power to make our hearts, minds, bodies and spirits work together... Only when our hearts, minds, bodies and spirits work together do we truly have an indigenous education."

2.10.2 Afrocentric relational ontologies, epistemologies, and axiologies

This study will be augmented by Afrocentric relational ontologies, epistemologies, and axiologies, as espoused in the philosophy of Ubuntu, which addresses relations among people, relations with living things and non-living things, and a spiritual existence that promotes love and harmony among people and communities (Chilisa, 2012). Ubuntu is a philosophy that revolves around the acknowledgement of the interconnections of all of humanity. According to Ubuntu, I am we, I am because we are. This philosophy has been developed by Bantu (one of the language groupings on the continent) in southern Africa and has been popularized by, amongst others, Nobel Laureates Archbishop Desmond Tutu, and Nelson Mandela.

Ubuntu is intrinsically linked to relational epistemologies, ontologies, and axiology in the context of research. To my mind, Ubuntu is linked to the Harambee/pulling together for common good philosophy popularized by Jomo Kenyatta, the first President of Kenya and the Umuganda philosophy in Rwanda. Umuganda is a practice that draws on traditional aspects of Rwandese culture and involves coming together to perform tasks for common good. The practice has been popularized in the efforts to reconstruct the country after the genocide and is enshrined in the constitution. Harambee is tied to the idea of "democratic African Socialism" which is a rejection of both Capitalism and Communism (Republic of Kenya, 1965). Under this model, Kenya hoped to reorganize and mobilize the social heritage and colonial economic legacy for "a concerted, carefully planned attack on poverty, disease and the lack of education in order to achieve social justice; human dignity and economic welfare for all" (Republic of Kenya, 1965, p. 1). Ubuntu is also similar to what Mathabo Tsepa (2008) describes as 'Re-seng', a Basotho philosophy that espouses inter-relations between living and non-living things. Somjee (n.d.) ties Ubuntu to the concept of utu/personhood. Utu is manifested in peace and conflict resolution which is imbued in nature through peace trees, peace animals, and geographical splendor. For instance, "Memories and dreams of utu are complimented in nature's manifestations of greatness and beauty. The Agĩkũyũ face Mount Kenya in prayers seeking peace because God inhabits in its beauty and greatness" (Somjee, n.d., para. 10). To wind up this chapter, I want to bring my own experiences into the discussion through the lens of Ngũgĩ wa Thiong'o's theory of dismemberment and remembering.

2.11 Reflecting on my own dismemberment

Cultural community knowledges were not affirmed in my education and it has taken many years of struggle to shed the Eurocentric gaze and interpretations that have been ingrained in my thinking. (Dei, 2012, p. 103)

I would like to return to Ngũgĩ wa Thiong'o's theory of dismemberment and remembering, using myself as an example. Dei (2012), quoted above, pinpoints what I would like to discuss – dismemberment through the formal education system. This dismemberment is aptly captured in 'Song of Lawino' by Okot p'Bitek (1966). Lawino (the 'uneducated' wife) laments about her 'civilized' husband, Ocol. Ocol treats Lawino as a 'thing'. She is not a person any longer for she has not seen the light that comes through education and Christianity. Ocol insults Lawino and his "words cut more painfully than sticks". According to Ocol, Lawino and her kin "sit in deep darkness" because they "do not know the Gospel", they are "sorcerers", they are "foolish", they are "primitive." Ocol has become impossible to live with because his tongue "is fierce like the arrow of the scorpion, deadly like the spear of the buffalo-hornet, it is ferocious... and corrosive like juice of the gourd" (Okot p'Bitek, 1966, p. 16).

This passage from Okot p' Bitek's work is more relevant today than when he first wrote this book in 1966. The African education system has continued to perpetuate the belief that the only way to get educated is through the formal education system. As an African, one ends up learning more about other cultures (especially those of former and current colonizers) than their own. I do recall that when I started school, we learnt our local languages, but this was stopped by the time I was in standard three. We were not told why we could not learn these languages any longer. What became evident is that if

you were caught speaking in your mother tongue, you were punished through various methods. The worst of these, in my view, was the carrying of dirty smelly items, such as a bone, that you would be required to hang around your neck all day until you came across the next mother tongue speaker and gave it to them.

If one did not find anyone who spoke in their mother tongue, one was stuck with the bone or another item. One would need to wear it the next day as well – traumatizing. This is done to ensure that we learn to speak English. But now looking back, I feel that the goal here was to humiliate. It was to associate these languages and the cultures they carried with dirty, stinking objects, and it worked very well because I avoided speaking my language at all costs. I can fully understand when Lawino says that, "Ocol pours scorn on black people, he behaves like a hen that eats its own eggs. A hen that should be imprisoned under a basket" (Okot p'Bitek, 1966, pp. 16 -17). That is the unfortunate legacy of the formal education system in Africa. The school system has become a place to memorize and regurgitate, a place to learn how to valorize other cultures and to diminish your own. Basically, by the time I left the school system, I was convinced that Africans had never achieved anything and needed redemption.

All that we were taught was that everything had been discovered by white people. This includes anything and everything from the theory of gravity to mountains that sat on our own land. I remember being taught that Mount Kirinyaga/Mount Kenya, the home of Murungu/God in our Ameru cosmology, was discovered by Ludwig Krapf. When we were taught the history of colonialism, it was done is a very superficial manner that did not inspire confidence or create a sense of pride in the struggle for Africa's liberation. Indeed, the story of Africa's liberation remains untold, misunderstood, and undermined. History was seen as the subject to avoid because "those things of the past" cannot really take you anywhere. It has taken my own initiative to educate myself outside of the formal school system and to re-learn about African ways, life, and viewpoints. So, my interest in indigenous knowledge is also a way to redeem myself. Like Ocol above, we are taught to have contempt for the uneducated who make up the masses of the rural base. This is a strategic mistake, more so with regard to conservation and land use. I do not recall ever being taught about African conservation

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or African environmentalism at the university. I was studying in a university that is situated is in a country which is home to one of the greatest environmentalist movements in the world (the Green Belt Movement¹⁶), but we did not learn about that. During my time, the more forward-thinking professors had a difficult time getting the notions of community development and conservation through to the university administration.

The conservation that I was taught was preservationist conservation; conservation that is anti-people. When we started learning about communities, it was emphasized that one should go to teach communities conservation because they are destructive. They are cutting all the forests and laying the land bare! We must save these forests from the people. I recall one professor whose favourite topic was DuPont, the American multinational corporation, and I always kept thinking that this is so far removed from my reality, but there we were. This is just an example of the many cases of externally derived content that contribute to damaging any hope in the agency of Africans as a people. As Nyamnjoh (2012, p.1) points out:

In Africa, the colonial conquest of Africans-body, mind and soul-has led to real or attempted epistemicide – the decimation or near complete killing and replacement of endogenous epistemologies with the epistemological paradigm of the conqueror. The result has been education through schools and other formal institutions of learning in Africa largely as a process of making infinite concessions to the outside-mainly the western world. Such education has tended to emphasize mimicry over creativity, and the idea that little worth learning about, even by Africans, can come from Africa.

Another form of dismemberment comes forth through the materials or books available to African students at African universities. Based on my experience (as a student in two African universities), I can concur with Nyamnjoh (2012, p. 13) who argues that:

Most African university libraries are underfunded, struggle to keep pace with the latest publications of relevance, and are often desperately under stocked and at the mercy of donors dying to dump old and outdated publications as a sort of

¹⁶ The Green Belt Movement and Wangari Maathai were only added to the Kenyan curriculum in 2016.

intellectual 'toxic' waste. Libraries that are well stocked and even with material of direct relevance to critical scholarship informed by African perspectives and predicaments may find such books and journals under-consulted because of curricula and scholarly traditions that pay scant attention to African sources.

I had great difficulties with this lack of relevant materials when I was undertaking my undergraduate degree. I will explain this through a journal entry that I wrote for a course on indigenous methods with Professor. Cash Ahenakew, here at the University of British Columbia. One of the requirements for this class was to read several papers, books, and book chapters and submit your reflections in the form of a journal entry. In this journal entry, I reviewed chapter one of Bagele Chilisa's book *Indigenous Research Methods*. I share my response, below.

Chapter 1: Situating Indigenous Knowledge Systems: Journal entry, 14 September 2014.

Summary of Chapter

In this chapter, Chilisa discuses decolonization and indigenization of dominant (Euro-western) research models. She argues that these approaches exclude the knowledge systems and ways of knowing of the historically marginalized and oppressed groups from contributing to the research process. In essence, research contributes to the process of "Othering", further colonization and marginalization of these groups, Chilisa argues. She discusses two approaches to bringing other ways of knowing into an equal footing in the scholarly examinations of our world; decolonization of dominant research approaches and postcolonial-indigenous research paradigms informed by relational epistemology, axiology, and ontology.

Journal entry

I am writing this journal entry a day before my birthday, and I feel a sense of empowerment. I am happy to be taking this course this semester. One of my motivations to take the course, was simply the fact the Professor Ahenakew had listed a book by an African scholar in the reading list. Let me explain. I have always been bothered by the way education seemed to be alienating me from anything remotely African. This troubled me greatly especially when I was an undergraduate student (2000-2004), as I could not find books written by African scholars. So, I wrote my essays and assignments and quoted other scholars and with every citation I felt a huge sense of disempowerment and hopelessness. Granted, there were African scholars who had published works but most of those were in not in this area of study. Most of them were in literature. I was thinking to myself – Don't Africans write anything? Is it only white people who know things?

What is wrong with us? I was familiar with the Kenyan scholar, Ngũgĩ wa Thiong'o's work on 'decolonizing the mind', and kept wondering if we had not been irredeemably colonized – both physically and psychologically. Chilisa is unequivocal. She addresses all the issues that have bothered me for decades and it fills me with immense pride to see an African writing such a book, and articulating issues so eloquently. For me, Chilisa answers the question, "What is wrong with us?" The answer is – there is nothing wrong with us. Absolutely nothing. That makes me feel at peace.

The fact that I can access books by African scholars today, books with which I can relate, books that speak to my experiences, books that challenge me to think for myself, think for ourselves, is a very powerful balm to my psyche. When I cite the works of Wangari Maathai, Ngũgĩ wa Thiong'o, Sefa Dei, Achile Mbembe, Thomas Sankara, Amilcar Cabral, and many more in this thesis, it is to me, a kind of coming home. It is a kind of coming of age. My ideas and understanding of African conservation and environmentalism have expanded beyond what I was taught in my undergraduate degree and I now can tap from the wealth of the writing of African scholars who may not be perceived as environmentalists/conservationists at first glance. In my journal entry above, I said I could not quote from the works of African scholars because those that I knew of were in the field of 'literature'. While this is true in terms of classification, I have come to understand that these works (I am talking about people like Chinua Achebe, Ngũgĩ wa Thiong'o, Okot p'Bitek) are not necessarily just 'literature'.

They tackle many pertinent issues relating to African realities, including environmental issues, because in Africa, life in not fragmented into bits and pieces – it is simply life. It plays out in complex environmental settings. This was a great misunderstanding on my part and the education system that I was exposed to did not help. Nyamnjoh (2012, p. 13) is absolutely correct when he argues that even when African sources are available, they remain "under-consulted because of curricula and scholarly traditions that pay scant attention to African sources." My ideas and understanding of conservation have expanded based on my interactions with communities (see section on my positionality), as well as a deliberate attempt to educate myself. I opened this section with a quote from Dei to illustrate the fact that this is a struggle and that is based on personal initiative and effort. This is what remembering is all about. I have chosen to explore my own dismemberment to illustrate the fact that education can also be miseducation. Education can tear apart, can scatter, can dislocate – can dismember. It can also be used in building memory and remembering if it is an education that is anchored in emancipatory objectives and visions. What should we do going forward? To answer this question, I will quote Ngũgĩ wa Thiong'o, who I now have come perceive as one of Africa's greatest environmental thinkers:

Africa, endowed with enormous human and natural resources is the biggest continent. Its encirclement – its being denied a seat in the United Nations Security Council, its being defined in terms of North and South of the Sahara, then into Europhone zones (Franco-, Anglo-, Luso-, Hispa), its being free for all external forces to intervene – has to do with that fact. Keep Africa eternally weak, eternally divided, eternally fighting religious wars, eternally buying weapons of war, eternally using the military against African populations, eternally assuming the west, Europe in particular, is heaven. The fact is, for the last 400 years, Europe and the West have been Africa's hell, with Africa a European heaven. Africa must become Africa's heaven. But it is only Africa that can realize this for itself, lift itself into being a respected player in the world. It must rediscover and affirm self-pride, first by respecting the lives of the least amongst us...relate to the world on the basis of reciprocity...the challenge is to make African diversity in languages, culture, and religions a strength, not a weakness. (Ngũgĩ wa Thiong'o, 2016, p. xv-xvi)

At the core of this quest for self-respect and wholeness that Ngũgĩ wa Thiong'o talks about is an awareness cultivation exercise that should be anchored on appropriate education. Given the above discussion, it is fair to say that there is intellectual famine in Africa. There is starvation because of a lack of appreciation of local and intellectual indigenous nourishment. The intellectual land is parched and dry and yearning for rain. The land is filled with intellectual GMO's that are empty of life and which do not sustain livelihoods, but rather transform Africans into caricatures of mimicry. The intellectual crops lack a strong foundation. Education is discussed extensively as one of the pillars of the three-legged African stool (see chapter 5).

2.12 Chapter summary

This chapter has outlined the scope of literature related to indigenous knowledge systems, historical perspectives, and community engagement in conservation. It also highlights the theoretical direction that will undergird discussions in this thesis. Some of the key themes emerging from this discussion include: conservation as a discipline and practice still steeped in coloniality; a sustained effort to recognize IKS at the international level; and efforts to recognize the role of communities' and their cultures in conservation. This chapter demonstrates that communities have been resisting continued colonization of their spaces. This is exemplified through the recognition of ICCA's. These spaces (ICCA's) are now legitimate conservation spaces because communities have put up a sustained struggle against imperialistic models and ideas of conservation. I have presented a historical account of the origins of conservation and the role colonialism has played in its development. Historical accounts are important in understanding not just conservation itself, but also the issues of (in)justice tied to it. While legislation is changing to recognize communities and IKS there remains a gap between policy and practice regarding community oriented conservation. This can be explained by the fact that, while material aspects like land were captured, colonized, and conserved, there was also a capture of minds and knowledge (Dei, 2006). Therefore, Dei (2006, p. ix) further argues that resistance must be anchored on issues related to "education, information, and intellectual transformation."

Colonial dismemberment practices of creating protected areas (including the site of this study) have been discussed; the impacts on communities are felt today. This is tied to land use and living with and on the land and the weakening of associated knowledge systems. This is further embedded in formal education structures that continue the seizure of minds that Dei (2006) mentions above. As such, colonialism must be thoroughly interrogated and its various capillaries of power understood. This understanding is critical in working towards its overthrow. The change in legislation and recognition of communities as stakeholders in conservation discourses and spaces should be understood as a form of community resistance to imperial models of conservation. As discussed in this chapter, these changes have not not strengthened the role of IKS in conservation. The major reasons for these are the hegemony of western ways of knowing and a lack of understanding about what IKS really is and how it works. As Dei (2006, p. 7) argues, in the present day, "Eurocentric knowledge masquerades as universal knowings. Today, this fabrication continues to exact a heavy material, physical, psychological and emotional toll on those segments of our communities racialized as different. Their bodies bear scars of intellectual combat."

Therefore, the need to revitalize and engage with IKS is still a relevant and muchneeded intervention. This calls for an examination of historical accounts and the positioning of them in present-day discourses. Historical excavation should be understood as a remembering practice. This has been highlighted through the praxes of Ngũgĩ wa Thiong'o, Cabral, and Sankara. This historical engagement and mobilization should be built around the people, the masses who have been silenced by various forms of imperialism. They are the pillar around which new visions should be constructed. The following chapters will, therefore, seek to delve into history and use historical accounts to answer to the research questions. Further, the role of the community as agents and not subjects of their landscape and stories will be highlighted as the findings are discussed. In addition, I will seek to unpack the difficulties, the lack of meaningful community engagement in conservation irrespective of the prevailing friendly policy environment. With regard to the theoretical formulation, the following chapters will be anchored on Dei's (2002) anti-colonial discursive framework. Emphasis will be placed on a celebration of cultural traditions (e.g., songs, proverbs, stories, language, cultural practices), the application of Gĩkũyũ indigenous environmental thought in interpreting data, the centering of land as the space where histories, identities, cultures, and livelihoods are formulated, and an examination of Africa's peoples' resistance to colonialism. At the core of this study is the desire to understand how we can leverage of Indigenous Knowledge Systems to ensure sustainable peopleforest relationships. To this end, the study aims to present community voices and understanding as conceptualized within an IKS framework. The next chapter will discuss the methods of data collection and analysis.

Chapter 3: Methodology

Every research activity is an exercise in research ethics; every research question is a moral dilemma, and every research decision is an instantiation of values. (Clegg & Slife, 2009, p. 24)

3.1 Introduction

This study explored people-forest relationships among the Agĩkũyũ people of central Kenya. It seeks to understand the sustainability of the relationships through Indigenous Knowledge Systems, guided by the following research questions: 1) how have the indigenous communities around Nyandarwa Forest Reserve traditionally understood and sustained interdependencies with their local forest?; 2) how have these interdependencies transformed consistent with Kenya's post-independence changes in social, economic, and political situations?; 3) to what extent are the local, national, and international efforts to promote healthy sustainable people-forest relationships are incorporating local communities' IKS?; and, 4) how might these communities' IKS inform the proposition of an environmental conservation framework for sustainable peopleforest relationships? In an attempt to address the above questions, the study was framed, implemented, and analyzed through Dei's "anti-colonial discursive framework", Nqũqĩ wa Thiong'o's "dismemberment and remembering" theory, as well as the anticolonial and environmental thought of Amilcar Cabral and Thomas Sankara. These frames are enriched by African orature and ethnophilosophy as manifested through stories and proverbs that offer key theoretical, methodological, and philosophical frameworks.

These frameworks and post-colonial indigenous paradigms, which are driven by decolonizing methodologies (Chilisa (2012), informed my choice of research methods. I used a combination of approaches, which encompasses indigenous, participatory methods (Kovach, 2012; Wilson, 2008; Chilisa, 2012) governed by the traditions and cultural heritage (Chilisa, 2012) of the Agĩkũyũ people, who live around the Nyandarwa Forest Reserve. These methodologies were critical in how entrance to the community was gained, as well as the selection of the participants, data analysis, forging collaborations, and establishing long-term relationships with communities (Tsepa,

2008). Underpinning post-colonial indigenous paradigms are relational ontologies, epistemologies, and axiologies. Relational ontologies in this study were formulated through the understanding of I/we relationships as opposed to I/you formulations. Further, I approached my research work with an understanding that people's reality is shaped by interactions with their environment and the cosmos. Relational epistemologies are undergirded by the belief that knowledge is constructed in the midst of others, i.e., it is not an individualistic affair. Relational axiologies, on the other hand, emphasize the need to build relationships based on respect, representation, and reciprocity.

I sought to capture the reality of research participants by engaging with them from a position of relationship building, sharing my own experiences, and emphasizing the need for community and collectivity. Post-colonial indigenous paradigms are also anchored in an effort to decolonize knowledge production and the knowledge itself. Decolonization is a process that aims at contributing to the rebirth of societies relegated to the bottom of human hierarchy by multiple forms of colonialism (Hoppers, 2002). Mugo (1998) writes that "colonialism remains a factor insofar as it provided the framework for the organized subjugating of the cultural, scientific, and economic life of many on the African continent (Mugo 1998, p. 6 as quoted in Hoppers, 2002, p. 10). According to Esteva (1992, pp. 6-7):

The subjugation extended in a spectrum from people's 'way of seeing', their 'way of being', their way of negotiating life processes in different environments, their survival techniques, to technologies for ecologically sensitive exploitation of natural resources. All these knowledge systems were, *en masse*, rendered irrelevant to their use as millions of people became transmogrified by the combined advent of modern science and colonialism, into an inverted mirror of western identity – a mirror that belittled them and sent them to the back of the queue.

Maathai (2010) further emphasizes that perhaps the most unrecognized problem in Africa today is disempowerment as a result of deculturation. Similarly, Chilisa (2012, p. 117) writes that the limitations of dominant research methodologies include: The tendency to ignore the role of imperialism, colonization, and globalization in the construction of knowledge; academic imperialism – the tendency to denigrate, dismiss, and attempt to quash alternative theories, perspectives, or methodologies; methodological imperialism – a tendency to build a collection of methods, techniques and rules that valorize the dominant culture; the dominance of euro-western languages in the construction of knowledge; the archives of literature that disseminate theories and knowledge that are unfavourable to former colonized societies and historically oppressed group.

In the same vein, Linda Smith, a Maori scholar, discusses how research has continued to be used as a tool for further colonization in her book, *Decolonizing Methodologies: Research and Indigenous Peoples*. Smith (1999) calls for a process of decolonization of research through the strategies of deconstruction of negative and misleading narratives, and subsequent reconstruction, self-determination and social justice, ethical research practices, and use of language to validate indigenous ways of knowing. Further, she calls for internationalization of the indigenous experiences, a deliberate effort to study history, and a need to critique the imperial model of research (Smith, 1999).

It is against this background that I sought to design a research project in which the community could find space to articulate their knowledge(s), challenges, passions, viewpoints, and hopes for the future as relates to their landscape, and their place in it. A variety of strategies were employed to engage with communities as partners in the research project. These will be discussed in the following section. I will begin by presenting the process of participant selection, methods of data elicitation, and modes of analysis. This will be followed by an examination of validity and reliability, the significance of the study, and ethical considerations.

3.2 Selection of participants

Two community groups (from the eastern and western side of the Nyandarwa forest) were purposively chosen as research participants. One of these groups was actively working with the Green Belt Movement (GBM¹⁷), while the other group had worked with the GBM in the 1990's during efforts designed to restore the forest. It was

¹⁷ The Green Belt Movement was founded by Nobel Laureate Wangari Maathai in 1977. Its goal is to work with communities to restore forests and livelihoods.

important to draw the groups from the two sides of the forest because they have different climatic patterns, land use activities, and socio-economic conditions.See Appendix B for a breakdown of particpants by geographic location and gender. I chose the Nyandarwa Forest Reserve because it is a well-established ecosystem with a long history and an area in which the GBM has been working for over 20 years. In addition, the history of the Agĩkũyũ people has been documented by several scholars, and this is important for the verification of data and triangulation. I also had key contacts who were instrumental in accessing the community in this landscape.

3.3 Researcher-community relationship building

I started making contacts with my research team in 2012. I had just connected with an old friend through Facebook. We undertook our undergraduate degrees together at Kenyatta University, in Kenya. At that time, my friend was working for the Green Belt Movement in eastern Nyandarwa. I had started developing a lot of interest in the GBM, and I was pleased to find somebody who could provide answers to my numerous questions. My friend provided me with interesting information about the dynamics of the communities that they were working with and encouraged me to explore the aspect of IKS as there was much held by elders in the community, but no systematic recording of this knowledge. I toyed with various ideas for research topics at the start of my Ph.D. in 2014 and finally settled on the current topic of people-forest relationships and IKS. After wrestling with this topic and assembling a proposal, I thought it would be a good idea to get a feel for the community's thoughts.

At the end of 2014, I went to the community to discuss if they would have an interest in this topic at all or how it could be improved. I contacted my friend and asked him if we could meet some of the people he had been working with in eastern Nyandarwa. By then, he had left the Green Belt Movement, but he was still in touch with some people. We were searching for community groups to talk to on both sides of the forest. He had lost the phone number of the chairman of the group on the eastern side, so he contacted someone and asked for the number. The number he was given turned out to not be the number of the chairman of the group, but another elder who was

referred to as 'chairman' because he leads several community-based organizations on the eastern side of the forest. Nonetheless, we agreed to meet with this 'chairman' to discuss this research project with his group. This wrong contact ended up being the right contact in so many ways, as we shall see below.

We met with this elder/chairman in December 2014. We agreed to meet at a designated spot on the edge of the forest. My friend realized that this was the wrong chairman when we met him! What to do? We explained our case and said this was all a mix up of identities. We had a good laugh. Our plan was to meet the right chairman, discuss the research project, and explore the possibility of meeting with the group. But, here we were with another chairman who we did not know. So, we came up with a second plan. We requested this chairman to take us to the forest. We wanted to see big trees. The chairman was gracious. He reorganized his whole day and took us to the forest. He knew the forest inside-out. We went deep into the forest, and he instructed us on what to do if an elephant(s) showed up. We, in our infinite wisdom, did not think about elephants before we went into the forest. The only weapon we had was a machete, which the chairman would use to clear the paths. We descended deep gorges and rose to elevated sections (see Figure 3.1.).



Figure 3.1 Touring the forest in eastern Nyandarwa.

At this point, I began to think that if an elephant showed up here, we were all going to be dead in a minute. I did not think I would be able to follow or remember the instructions that the chairman had just told us about what to do if an elephant showed up. I could visualize an elephant flinging me towards the canopy. But we carried on, the gigantic trees beckoned! We could barely see the sky in some sections! My friend turned to me and said, "I cannot believe that the British wanted to take all of this from us." The chairman said, "this land was worth fighting for." I caught my breath and thought of Field Marshall Dedan Kimathi and all the Mau Mau warriors of freedom. And I said, "indeed." The chairman thrilled us with his knowledge. He knew the names of each tree, shrub, what they are used for, which one is good for producing charcoal, farm implements, hanging beehives, etc. Any movement in the bush stopped us (my friend and me) in our tracks! We eventually came out of the forest after our impromptu three-hour expedition. The chairman also took us to the PELIS¹⁸ scheme that he chairs. He is responsible for distribution of parcels of land and ensuring that those cultivating on these parcels follow the agreed upon rules.

I decided to share my research ideas with him, and ask what he thinks. He had already demonstrated his knowledge to us in the forest but, here again, he dazzled us with his understanding of IKS. He even told us that he makes traditional medicine. He took us to his home, and my friend bought five litres of medicine from him. He also gave us some tree seedlings from his nursery. He showed us an assortment of indigenous crafts, his self-assembled windmill, and his collection of videos that he has shot documenting various community activities. I then asked him if he knows of any group that we can work with. He recommended a group that had worked with the GBM in the past. We agreed to remain in touch. Once we had a contact in the east, it was time to explore the western side of the forest. My friend knew the GBM official who was now stationed in western Nyandarwa. He contacted her and asked if there was a possibility of conducting a meeting with the group she was working with. It turned out that the group was meeting every day as they were engaged in tree planting activities on the hillsides of western Nyandarwa at that time. She, therefore, invited us to come and join them for the tree planning activities.

¹⁸ A Taungya-like system where communities are allowed to grow crops on forest land as long as they take care of trees.

We travelled to the west and did just that. It was humbling to see the efforts that these women and men put towards the restoration of this landscape. They, for instance, had to carry tree seedlings from the bottom of the mountain, hoist them on their backs, scale the mountain, and then plant the seedlings. They also have to ensure that the seedlings survive. This was the first time that I saw the Green Belt Movement community members in action. It was inspiring and empowering to watch. We joined them in tree planting. When you watch these GBM community members in action, you understand that tree planting is not simply an act of ecological restoration. Digging up the soil, touching the moist soil of the Nyandarwa ranges, sharing implements, distributing seedlings amongst each other, talking and removing the seedlings from the plastic bags then submerging them into the soil, covering them up, hoping that the rain falls when it is supposed to ensure survival of the trees, then collecting all the plastic bags for the next cycle of planting – tree planting is an act of courage, passion, love, and hope. It is about community mobilization, knowledge revitalization, replenishing the earth, caring for the land, caring for each other, building networks, building communities, cultivating resilience, and so much more. Maathai (n.d.) encapsulates all of this when she says, "When we plant trees, we plant seeds of peace and hope."

Once we had planted trees, the GBM contact then introduced my friend and me to the group. One of the main things that they wanted to know was which community I came from. I said I was from Meru. Then, one of the group members said: "Wameru ni watu wazuri/the Ameru are good people." The others agreed. I had been screened and seen to be fit. Next, we sat down and had a conversation about my research interest/topic. I explained my research and highlighted that I was interested in a community-driven process. I wanted to hear their thoughts about this research topic. An interesting discussion ensued with contributions from different members. The community members were very forthcoming with information. Some people spoke about their knowledge of firewood species, seed propagation, harvesting of honey from hollow sections of trees, and the uses of different tree species. Then I asked them, "so, would you be willing to partner in this research project?" One of the women asked, "why should we not partner with you...are you not our child?" I was humbled. I felt a sense of

kinship. In many African societies, a child is seen as belonging to the whole community. It is the same among the Gĩkũyũ. So, we agreed that I will come back the following year to carry out the actual research work. I returned to Canada in January 2015 with a lot of confidence about the possibilities that this research project could bring if it was executed within a framework of honest community engagement.









Figure 3.2 From left to right: a) Meeting with community members of the GBM in western Nyandarwa; b) author planting a tree; c) GBM women hoisting tree seedlings on each other's backs; and d) GBM community member planting a tree.

October 2015

Before leaving for Kenya in October 2015, I got in touch with all my contacts and informed them that we will begin the research work once I arrived. I had taken pictures of the 'chairman' and the community group in the west when I met them in 2014. I printed these pictures and brought them with me during our preliminary/planning meetings. This proved to be a very important activity in terms of trust-building. Usually, people take pictures and video footage of communities and never return to show the results or to return the pictures. I was not necessarily doing this to build trust. I just thought it was good practice based on my previous experiences working with communities. But, I could hear people conversing and saying that "this is wonderful, nobody has ever done this to us". When I took the chairman with me to meet elders, he always said that: "Kendi came here last year, we talked, I took them to the forest, she took pictures, and she even brought us the pictures!" I heard some complaints about people who had filmed community members to produce documentaries, but the community never saw what was produced. So, returning the pictures demonstrated, on some level, that I could be trusted.



Figure 3.3 Returning the pictures in western Nyandarwa.

When we met elders, I would introduce myself and say that I am a Mumeru. Some elders would say that "the Ameru are our in-laws" or "the Ameru stood with us and we fought the Beberu together. They were in Mau Mau." In that sense, I was read as an ally. Ethnicity is a very pertinent issue in community relations in Kenya today. It has now become openly interlinked with politics and permeates intra-community relations. I always wonder whether entry to the community would have been difficult if I was not a Mumeru, but someone from another community that might not perceived as an ally to the Agĩkũyũ. I did not encounter any difficulties in gaining entry into the community. Once I had explained my research topic, elders would often say, "ask as many questions as you want." As I mentioned earlier, I had contacts who introduced me to people that they knew, who then introduced me to others.

My contacts would also find participants through other older community members who would then direct us to the right elders. I recall one example in Nyeri, eastern Nyandarwa. We had been told of an elder who we could interview, and we decided to go look for him. On the way there, my friend saw his high school teacher and we stopped to greet him. My friend explained the kind of research that we were conducting. The teacher told him that we should interview the eldest member of the village, a 90year-old man. He offered to take us there, and on we went. Once we arrived there we did not find him. On our way back, the teacher came across a group of elders, and he asked them if they had seen the elder we were looking for. They said they did not know where he was but that they would call him. A 90-year-old has a cell phone? I was surprised by this. So, he received the call and said that he is at the bottom of the ridge collecting fodder for his cattle and that he would come up and speak to us. We returned to his home and waited for him. The teacher stayed on and we ended up conducting a very interesting interview because the 90-year-old elder, the teacher, and another elder joined the conversation. I encountered several situations in which an interview turned to be more than just an interview with one person.

In some cases, interviewees gave me gifts. As I reflected in my journal:

Today one of the women brought me arrowroots. This filled me with joy. Arrowroots are indigenous. This is the food of our foremothers and fathers. It sustained them. It gave them strength. It was the fruit of the deep, rich and red Gĩkũyũ soil. It was my connection to Gĩkũyũ territory and a welcoming into the land. It was a beautiful offering. She explained to us the difference between Gĩkũyũ indigenous arrowroots and non-indigenous ones. She said to me, "you go try this. And when you come back tell me how it is." When I see her I will tell her that it was sweeter than honey! (Journal entry, 23rd October 2015)

When I went back in 2015, one of my great and urgent concerns was to find a group in the east. Recall that I did not meet a group in the east in 2014. I only met the chairman who told us that he knew of a group we could work with. So, we organized a meeting with the group that chairman had identified. We discussed the research project with the group members and they, too, were receptive to the idea.

The chairman offered us his home as a meeting place. The generosity extended to us throughout this project was more than I can ever repay. On the first day, his family made food for all 16 of us. It came as a surprise to me. So, we made his home our base for a week and had very fruitful discussions, sometimes punctuated with a great deal of laughter. We were all learning. We were sharing. We were interrogating ourselves. The group was very open and the use of the talking circle method proved to be absolutely critical in ensuring that everybody's voice was heard. Sometimes participants contradicted each other. Sometimes, they corrected each other. One of the group members in the west offered us their home, where we met for five days. She insisted on making food for my assistant and me every day. These are not wealthy people, but their hearts are wealthy! Elders on both sides of the forest would also offer us food when we visited their homes. And we could not decline. They would insist and say that "I do not allow people to come to my home and leave without eating something." That is the Gĩkũyũ way.

I only encountered one instance where an elder was not willing to part with information, especially on the Mau Mau. When we agreed to have a joint community meeting in the east, the chairman again opened his home to us. There were times when we got stuck in the mud when it rained and community members came to our rescue because they knew what we were doing. One elder hosted us in his home when we stayed till late in the field. He reorganized his family to accommodate us. All of these acts of generosity and kindness made me think of the Olenguruone song. This song was composed by the squatters of Olenguruone from where the Mau Mau movement originated. It encapsulated their pain and solidarity. It also highlighted the generosity and reciprocity of Gĩkũyũ culture. The song was sung widely in Gĩkũyũland and remains critical in memorializing the struggle for independence, as well as the defining elements of Gĩkũyũ heritage. The song goes like this:

Wendani ndonire kuo Wa ciana na atumia Mboco yagwa thi tukenyurana Hoyai ma, thai, thai ma Amu Ngai ni uria wa tene

Great love, I saw there Among women and children When a morsel was picked from the ground It was shared equally among us Pray to him fervently He is the God eternal. (Ngũgĩ wa Thiong'o, 2010, p. 126)

I have reflected on relationship-building in this section because I now strongly believe that the data collection for this research project could not have been successful if I had not invested time in relationship-building beginning in 2012. Relationship-building is at the core of indigenous and Afrocentric scholarship and paradigms. According to Wilson (2001, p. 177):

An Indigenous paradigm comes from the fundamental belief that knowledge is relational. Knowledge is shared with all creation. It is not just interpersonal relationships, or just with the research subjects I may be working with, but it is a relationship with all of creation. It is with the cosmos; it is with the animals, with the plants, with the earth that we share this knowledge. It goes beyond the idea of individual knowledge to the concept of relational knowledge . . .[hence] you are answerable to all your relations when you are doing research.

I feel a sense of kinship with the soil, with the trees that we planted, the seeds that we touched, the fruits of the land that we ate, the stories that we shared, the laughter that we shared. I wish to continue that solidarity with research participants for, as Chilisa (2012) argues, that relationship-building should continue beyond the end of the research project.

3.4 Methods of data elicitation

Data was collected using *a* combination of methods (talking circles, elder interviews, interviews with the Kenya Forest Service, archival research, and metaphorical strategies). These will be discussed in the following sub-sections.

3.4.1 Talking circles

Talking circles are an improvement over the Focus Group Discussion (FGD) method (Chilisa, 2012). They draw from African and indigenous cultures in general. Unlike in FGDs, where outspoken or opinionated individuals can dominate or shape the discussion, talking circles are designed to enhance fairness and balance. Mbiti (1991) argues that circles are used as symbols of the continuity of the universe in many African societies. Circles are symbols of eternity, of unendingness, of continuity. They are used in rituals, in art, in rock paintings, and as decorations on stools and domestic utensils (Mbiti, 1991). Ekeke (n.d.) extends the analysis of circles to African conceptions of time. According to Ekeopara (2005), Africans understand time in a cyclical fashion instead of in the linear chronological fashion of the western world. This is derived from reading the agricultural seasons because "the seasons of the year repeat in an eternal cycle. The agricultural season begins with the rainy season and ends with the dry season" (Ekeopara, 2005, p. 63, as quoted in Ekeke, n.d., p. 14). Hence, time is perceived as a movement of natural phenomena as presented through the eternal order which shaped the universe.

Formation of circles is a common feature in many African societies. Circles are formed around a fireplace, when passing judgements, when holding community meetings, and when performing ceremonies. Circle formation is manifested in Agĩkũyũ cosmology and societal construction. For instance, Agĩkũyũ traditional architecture was circular in nature, justice was delivered in circular settings, and ceremonies (including the very important initiation rite) featured cyclical movements. Consider this passage from Ngũgĩ wa Thiong'o (1965, p. 41):

Everyone went into a frenzy of excitement. Old and young, women and children, all were there losing themselves in the magic motion of the dance. Men shrieked

and shouted and jumped into the air as they *went round in a circle* [emphasis added].... Women, stripped to the waist, with their thin breasts flapping on their chests, went *round and round the big fire* [emphasis added], swinging their hips and contorting their bodies in all sorts of provocative ways, but always keeping the rhythm. They were free. Age and youth had become reconciled for this one night. And you could sing about anything and talk of the hidden parts of men and women without feeling that you had violated the otherwise strong social code that governed people's relationships, especially the relationship between young and old, man and woman.

Circular movements are emphasized as a way of remaining connected to the land, through initiation and sanctioning moral codes. Circle formation was critical in justice-related matters; justice was a strong pillar of Agĩkũyũ societal organization. When elders came together to ciira/discuss a case and pass judgment they sat in a circle and talked until an agreement was reached. I highlight the use of circles amongst the Agĩkũyũ to demonstrate that formation of circles is an integral part of Agĩkũyũ culture. The current method of seating arrangements that are found in churches or other communal gatherings, where the clergy or other persons in positions of authority peer down on people, are not Gĩkũyũ ways. According to Running Wolf and Rickard (2003), in using talking circles each person is given a chance to speak without interruption. The talking circle encourages sharing of ideas, mutual respect, togetherness, compassion, and equality for all members of the circle. To ensure this, a sacred object is used and passed on from one speaker to the other. The holder of the object speaks without interruption.

Talking circles were used to gather data from the two community groups. A total of ten talking circles were held for this project (five with each group). The groups were made up of between 12 to 16 individuals. These talking circles were conducted at the homes of group members who offered to host us during the five days when we agreed to meet. The research project was explained to the community, and room was created to address any concerns. We agreed on what time to meet and the duration of these meetings (usually two hours¹⁹). We also stressed that this was not, in any way, an effort

¹⁹ Sometimes the meetings lasted for three hours, when we had to work on maps.

to test who knows what and who does not. It was an effort to learn and share – this applied to everybody.



Figure 3.4 A talking circle with a participant holding a winnowing tray.

I put forward the idea of using talking circles when I first met each of the two groups. I suggested that we use a cultural object which would be passed on from one speaker to another. I was very nervous about making this suggestion because Christianity and missionaries painted, and continue to paint, all African objects and creations as witchcraft. I knew that all of these groups were comprised of Christians and, therefore, did not want to upset anyone by making this suggestion, especially when I was still trying to gain entry into the community. I was very careful about how I framed the suggestion. I made it into a discussion point. I explained why it would be of use, and how it would help our meetings proceed smoothly. I emphasized the point of giving space to everyone to be heard. To my great relief, the idea was received very positively.

In fact, some of the elders in the meetings took it upon themselves to explain to the group how this was a Gĩkũyũ way of doing things. They illustrated this with concrete examples. They even suggested how the circle should be set up. I now moved forward and asked them if any of them had a suggestion of an object that we could use for the five meetings that we would hold. I anticipated that we would use one cultural object during our five meetings with each group. To my surprise, the elders said that it would be good to use a different object on each day. In total, we used and discussed 12 objects: ten of these during the ten talking circles with the two groups, and two during the joint community workshop discussed below. These objects included a fly whisk, a gourd, a three-legged stool, a cow bell, a horn, a winnowing tray, bows and arrows, a sharpening stone, a calabash, a walking stick, and a chisel. Before starting each talking circle, an elder explained how each object was made, how it was used, and its importance in Gĩkũyũ culture. They went further and debated the destruction of their cultural infrastructure using these objects.





There were animated discussions about these objects and recognition of the indigenous technologies that were used to produce them. These objects facilitated the constructive collection of knowledge, and reinforced relationship building through mutual respect. There was also an appreciation that these were products of Gĩkũyũ land, especially the metal implements that were forged from Gĩkũyũ soil. This turned out to be a very important exercise in engaging in 'appreciative inquiry' (Chilisa, 2012). It was very interesting to see the younger group members learning about the importance of these objects which they have been made to think of as "those useless things of the past." It was encouraging to see the young people asking questions and wondering why these cultures are disappearing. As highlighted earlier, I had conceptualized the use of these objects simply as a method of guiding discussions, but the community embraced

the method and infused it with intellectual sophistication. They gave it intellectual gravitas. Through discussions around these objects, they unpacked fascinating elements of Gĩkũyũ indigenous environmental thought, and knowledge systems in the areas of agriculture, social organization, kinship with the soil, and spirituality. To ensure that we had rich data on Gĩkũyũ stories, proverbs, sayings, songs, as well as demonstrations of indigenous practices, we gave the participants some 'homework'. We encouraged them to go do some research with other community members who may know more about these practices. When the talking circles discussed these aspects of Gĩkũyũ heritage, a considerable repository of these indigenous ways of knowing was presented. I recall one elder who brought us 20 different species of plants and explained what each of them is used for. This knowledge was corroborated by other elders in the group. Other participants brought indigenous seeds, honey, medicines, and food. This was collective production of knowledge in action. This was relational ontology, epistemology, and axiology in practice. They did not have a lot of time to do this 'homework' because it was given only in the previous talking circle, but nonetheless, an impressive array of indigenous knowledge was presented the next day. Each talking circle was opened and closed with a prayer.

One of the criticisms levelled against community-oriented research is that it is too problem-focused, leading community members to see their community as a place laden with problems that can only be solved with the help of outsiders. To avoid this, Chilisa (2012) recommends the use of 'appreciative inquiry' which enables communities to move from deficit models to positive and empowering narratives. This approach comprises four stages: discovery (discover and learn the best elements of their moments in history, exceptional accomplishments); dreaming (envisioning and imagining other possibilities. What is the potential that lies within us? Where and with whom and how can we forge beneficial partnerships amongst ourselves and outsiders?); design (strategize on how to achieve the dream); and destiny (delivery of a new image for the future) (Chilisa, 2012). These strategies were applied in guiding discussions in the talking circles.

3.4.2 Elder interviews

Additional data was collected from elders by way of one-on-one interviews. Elders were instrumental in the collection of historical information and IKS. They were also key in exploring what Chilisa (2012, p. 211) refers to as "philosophic sagacity." Through this perspective of philosophic sagacity, "the theory of knowledge and questions about knowledge can be found in the wisdom and beliefs of wise elders of the communities, who have not been schooled in the formal education system" (Chilisa, 2012, p. 211). Chilisa (2012) writes that the conventional interview method is characterized by individualistic, westernized assumptions and theories that are not aligned with post-colonial indigenous views. The latter emphasize communities' togetherness, cooperation, and connectedness. According to Viruru and Canella (1997, p. 184), the individual interview is, for instance, built on the assumption of "individual knower, focusing on the concept of the individual researcher (aware of his own limitations and capabilities as a human instrument), talking, with rare exceptions, to an individual informant." As we shall see below, this notion did not apply to this research project.

The snowball sampling method (Babbie, 2007) was employed to select elders who were interviewed in this study. I worked with a team of Gĩkũyũ speaking research assistants, some of who came from the locations of these research site(s). They identified the initial elders through their networks, and these elders consequently suggested other elders to interview. This was instrumental in tapping the best available resources. Elder interviews were conducted at their homes. I was always accompanied by either an elder or a research assistant from the community in all the interviews. This was very important in gaining entry to the elders. There had to be someone from that community who was known and trusted by the interviewees. All interviews started off with introducing ourselves and the research project. Those who accompanied me had to introduce me, and explain how we knew each other, as well as what this research project was about. I then introduced myself again, highlighting where I come from, what this research project is about, and why I am doing it.

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I sought their permission to record the interviews using a voice recorder, as well as a video camera. I wanted to record the interviews using video so that I could produce a documentary for the community afterwards. The video ended up being a very useful method of capturing conversations because the Agikuyu speak with their hands as well. Sometimes, they do not verbalize the words but use hand gestures (especially when counting). I, therefore, constantly referred to the video footage when transcribing the audio recording. Understanding the language and the Gĩkũyũ conversational style also proved to be an asset. When a Mugĩkũyũ person speaks, they may not finish the sentences, but, if one understands the language and style, then one can understand what should come next. One can make sense of the conversation. Some elders were apprehensive about the use of having their interviews recorded and wondered if this was for sale. I stressed that this was for purely academic reasons, and not for sale. I invited them to ask as many questions as possible before we started. I also emphasized that it was completely voluntary, and that they could choose to not answer questions if they did not want to. I made it explicit that I was not an all-knowing researcher who was here to test how much they knew. I was a student at a university, but also a student of life, who was coming with an open heart and mind. I was ready to learn. And, learn we did. In some cases, other elders who may have been passing by the home of the interviewee joined in the conversation, and we ended up having a conversation with two people instead of one. When I was accompanied by an elder to other elders' homes, the conversation always ended up being a discussion between the two, as they would bounce ideas off each other, ask each other questions, and correct each other²⁰.

This valorized the "collective construction of knowledge" (Chilisa, 2012, p. 206). Knowledge production in Africa is not a personal affair. This African knowledge production reflects the philosophy of Ubuntu, anchored on the principle that one becomes human in the midst of others. Chilisa (2012, p. 206) further argues that a postcolonial indigenous research paradigm "offers other possible interview methods, which privilege relational ways of knowing that valorize respect for relations people have with one another and with the environment." These interviews were not based on a rigid set

²⁰ 21 elders were interviewed in this study. These interviews lasted between 1.5 to 2.5 hours.

of questions, but rough questions to guide the discussions on the topic of interest. My research assistants became very interested in the topics of the discussions that we were having and came up with their own questions. This enriched the conversation. I often found that the elders were incredibly generous with information. We strived to create a conversational atmosphere and, in some instances, the elders asked me questions as well. I recall one instance, where one of the elders turned to me and said: "you have been asking me questions – let me ask you a question too. We have planted trees all over; we have even planted trees under the bed! Why, then, is it not raining?" Kovach (2009) argues that open conversational methods create respect for the participants' stories, and gives them greater control over what to share in relation to the research question(s).

Since these interviews were carried out in homesteads, other family members ended up sitting around the interviewees and listening in. Some of the older children were quite keen to know what this was all about, and to ensure that their parents or grandparents were not being 'misused.' Once the research project goals were explained, they were satisfied, and as a son of one of the interviewees, for instance, said, "this is very important work. In the coming years, we will not have these elders to share this wisdom." In some instances, we had to go through the older children in order to access elders. They had to screen us to ensure that we had good intentions. The Agĩkũyũ say that "Kĩrĩra ti ukũrũ/knowledge is not the prerogative of the old." Younger elders (those in their 50s, for example) had, in some instances, more knowledge than the older ones, especially those that had been heavily Christianized. In some interviews, elders used cultural objects to illustrate points during the conversation. I interviewed an elder who pointed to a stool that was inherited from his grandfather - he was making a point about the quality of indigenous tree species. This stool was about 200 years old; this elder was 90 years old at the time of the interview. In other instances, they would pull out herbal medicines to demonstrate their knowledge, ongoing use, and production. An elder spoke fondly of his walking stick that was bequeathed to him by his father. This keeps him upright both physically and morally. His father had told him that he should always do what is right, especially, not to steal.

Some elders sang and danced. Others punctuated the discussion with proverbs and sayings. Some of them narrated stories with gripping drama. This is African epistemology that is contextualized in an environmental setting; knowledge that is shared. Nobody has a monopoly on knowledge. It does not belong to anyone. It belongs to everybody. It is to be produced, shared, and used collectively. I learned the proper way of thanking the participants from my Gĩkũyũ assistants. When you thank someone in Gĩkũyũ you say, ni twakena mũno, which translates into "we are very happy" (or in singular form, nidakena mũno/I am very happy). So, we ended every interview with the words "Nitwakena mũno" and we, indeed, sincerely were, because the elders opened their homes, hearts, and minds to us with incredible generosity. Nindakena! I am happy.



Figure 3.6 Elder interviews.

3.4.3 Interviews with the Kenya Forest Service (KFS)

Interviews with the Kenya Forest Service (KFS) were conducted at two KFS stations on the two sides of the forest. I interviewed the heads of the two stations who then directed me to the officers who were working on community-related aspects of forests (usually, two or three officers), as well as forest guards. I found that all the KFS officers were very jittery about having the interviews recorded and, therefore, I had to take notes. The interview questions centred on how the KFS is structured, how the Nyandarwa forest is governed, changes in this governance in light of the new Forests Act, strategies for community engagement, the interlinkages between the KFS mandate

and communities IKS, and future prospects with regards to forest governance. These interviews lasted for 45 minutes to 1 hour.

3.4.4 Archival research

Data was also collected from historical records from the Kenya national archives and the National Museum of Kenya. This historical documentation is critical in providing information that can enhance an understanding of landscape change, distilling information on economic and management relationships between various actors and the landscape, and providing background on historical relationships between key groups of actors in the area, such as the Kenya Forest Service and the community.

3.4.5 Joint community meeting: Metaphorical strategies

At the end of the fieldwork, we organized a joint community workshop (with the groups from the east and west) in which metaphorical strategies were used to guide discussions. According to Tsepa (2008), to appreciate the complexity of a culture, one must view the cultural information in a way that demonstrates the interrelationships of all aspects of that particular culture. Tsepa (2008) further argues that it is useful to employ metaphorical strategies in order to develop an understanding of how communities conceptualize their relationships with resources and each other. Indeed, in many African societies, the use of metaphorical strategies to illustrate the need for a revival of African heritage and a general uplifting of African people from subjugation and disempowerment. Further, Maathai (2010) argues that a lack of self-knowledge that comes from Africans' cultural deracination is one of the most troubling and long-lasting effects of colonialism. The destruction of Africans' cultural and spiritual heritage is not an analysis that is recognized or acknowledged in efforts to understand the problems facing the continent, which in most cases take on political and economic orientations.

Africans have been obscured from themselves, Maathai (2010) argues. "It is as if they have looked at themselves through another person's mirror – whether that of a colonial administrator, a missionary, a teacher, a collaborator, or a political leader – and see their own cracked reflections or distorted images, if they see themselves at all" (Maathai, 2010, p. 34). Two of the metaphors applied in this research project are the 'the wrong bus syndrome' and 're-chiseling the three-legged African stool' (Maathai, 2010). We employed the use of the three-legged stool and the wrong bus metaphor in engaging in dialogue with the community, as well as analyzing data. Maathai (2010) has used the concept of 'the wrong bus syndrome' in her work with communities and with the Green Belt Movement in helping communities to identify the causes of the challenges that they face, as well as in challenging them to craft appropriate solutions. Travelling by bus is one of the most common modes of transport in Africa. Getting on the wrong bus can lead to many complications.

Maathai (2010) uses this metaphor to get communities to think critically about the causes of the challenges they face. Maathai (2010) contends that one of the reasons that we are on the wrong bus is because of a loss of culture. The antidote to this loss of culture is the concept of kwimenya. Kwimenya in Gĩkũyũ, Kujijua in Swahili – self-knowledge – provides deep psychological and spiritual clarity. Kwimenya has been compromised amongst the Agĩkũyũ people, and with disastrous consequences. Indeed, there is a Swahili²¹ saying, "mwacha mila ni mtumwa" which translates into "without culture, you are a slave." Maathai (2010) believes that reclaiming cultural heritage is part of the process of getting on the right bus. This activity was led by the community members who had worked with the Green Belt Movement and had attended seminars where this metaphor was used. They drew from their own experiences as the group from the west had a hard time getting to the venue of the joint community meeting in the east. They interrogated their situations and explored ways in which they could get on the right bus. These reflections are shared in chapter 5.

The three-legged stool (Maathai, 2010) is a common feature in many African societies. Comprising a seat with three legs and chiseled out of a single block of wood, the stool represents stability, power, and harmony. According to Mathaai (2010), the first leg of the stool represents democratic space where rights, whether human,

²¹ Swahili is a language that developed as a result of interactions between the Arab and indigenous communities off of the east coast of Africa. It is Kenya's national language.

children's, or environmental, are respected. The second leg represents sustainable and accountable management of resources both for those living today and for those in the future in a manner that is just and inclusive of those on the margins of society. The third leg stands for cultures of peace embodied in fairness, respect, compassion, forgiveness, recompense, and justice. The three legs support the seat, which represents the milieu in which development can take place. Mathaai (2010) argues that most African countries are teetering on one leg or two legs. In other cases, the stool has been completely dismantled and has no legs. In other places, the stool has been reassembled using weak plastic materials.

To achieve sustainability, Maathai (2010) contends that all the issues represented by each of the stool's legs need to be addressed simultaneously. In essence, "it is crucial to take on the challenge of trying to imagine what the original stool could have looked like, in what ways its pillars served the people, and how those pillars might be re-envisioned for the challenges of today" (Maathai, 2010, p. 59). This joint community workshop brought together participants from the western side of the forest to the eastern side and was conducted after we had gone through the talking circles with each of the groups. Consequently, each participant had an understanding of what the topic of research was. One of the elders from the east hosted us on his homestead. The communities on both sides spearheaded the mobilization of their respective groups. Those from the west had to travel so they had to find transportation, negotiate the rates with the bus owner, get the directions, and work on timing. I must point out that these people do not live close together. Cell phones were critical in this mobilization. The host community on the eastern side had to meet and make a budget for all the food, hire a tent and chairs, purchase, cook, and serve the food. The core goal of the workshop was to explore community challenges and community-driven solutions to these challenges using the two metaphors discussed above.

Chilisa (2012) argues that research participants should participate in the analysis and interpretation of findings, and in identifying data-informed challenges and solutions to address these challenges. We used the wrong bus syndrome and the three-legged stool to discuss challenges that faced the community. Getting on the wrong bus and the breakdown of the stool were all understood through the various challenges that the communities face. So, the key question was – what are the reasons for getting on the wrong bus? And what are the reasons for the breakdown of the stool? Each participant was invited to point out the key challenge(s) that they believe are manifested in their communities. We then split the group into four talking circles. The task for the talking circles was to interrogate those challenges and list those that they felt were linked to forests²², land, or the environment in general. In addition, they were asked to brainstorm some solutions to these challenges. These were then presented to the whole group, debated, and prioritized, then aligned with the three legs of the stool and the seat. That was our collective attempt at re-chiseling the stool. This research project sought to elevate the role of the community from the 'researched' to 'co-researchers', and this workshop was an opportunity to do so. I discuss the results that emerged from this workshop in chapter 5.

I was interested in making the research project as community-driven as possible and the community shared in this vision. I emphasized that we were all here to learn from each other. There was, indeed, a great deal of learning and sharing that transpired. The host elder, for instance, took the participants for a tour of his farm where he demonstrated various indigenous farming methods, tree species, pest control methods, and medicinal plants. This was an experiential research activity. It moved beyond just discussions to viewing the application of IKS in practice. It was an opportunity for intra-cultural dialogue. While the two groups are all Agĩkũyũ people, neither group had travelled outside the communities to go and visit the current territories of the other group. A majority of the community members from the west were stepping on the traditional Agĩkũyũ territory for the first time because they were born in Beberu farms in the Rift Valley and had lived there all of their lives.

They had never seen the bounty of Gĩkũyũ land. They had never seen the coveted red fertile soil that was at the heart of the struggle for wiyathi/independence.

²² The groups argued that a majority of the listed challenges were related to environmental destruction. One went further and argued that all of the challenges that had been listed were related to forests, land, or the environment.

This was, therefore, a homecoming of sorts. It was a reconnection with the land of their ancestors. The host elder gave the visiting group some tree seedlings. They, therefore, carried Gĩkũyũ soil back home with them. They carried the connections that we had made. They urged us to do the same kind of workshop on the western side because the Gĩkũyũ life is anchored on reciprocity.



Figure 3.7 From left to right: a) Community group discussion; and b) a group member making a presentation.

To conclude the workshop, we used a ball of yarn which was thrown from one person to another. Each person reflected on the day's proceedings. Throughout this process, group members were asked to reflect on the following: what they learned; what can be improved; and what we should do. Each person held on to their section of the yarn and threw the ball to someone else. In the end, we created a web of interconnections (see Figure 3.6.). This can be interpreted as an illustration of connections – that we all depend on each other, my actions impact another person's life, that we should support one another, that caring for the earth is caring for ourselves and all of its inhabitants. That is why the Agĩkũyũ say, Mũgogo ũmwe ndũhingaga iriũko/One trunk cannot block a river, and that, Kamũingi koyaga ndĩrĩ/if you work together you can get the mortar²³.

²³ Used for pounding grain.



Figure 3.8 From left to right: a) Demonstration of grafting using indigenous forest plants; and b) reflecting on proceedings using a ball of yarn.

3.5 Data analysis

The data corpus in this study was analyzed consistent with the study's theoretical and philosophical frameworks. Data sorting, organization, and pattern generation were aided by NVIVO, a computer software produced by QSR International for analyzing qualitative data. According to Kovach (2009), qualitative research entails both interpretive and analytical approaches in order to derive meaning from inquiry. Thus, "the derivation of interpretative meaning involves subjective accounting of social phenomena as a way of providing insight or to clarify an event; it involves an inductive way of knowing" (Bustamante, 2013, p. 16). All of the interviews in this study were conducted in Gĩkũyũ. The first step was translating these audio interviews into English. This was done by a Gĩkũyũ speaking research assistant. I then went through all the transcripts to ensure that they were correct and that nothing was left out. I understand Gĩkũyũ and was present at all the interviews so I understood all the arguments made by the participants. The transcripts were then imported into NVIVO, and coded.

I applied descriptive coding which "assigns labels to data to summarize in a word or short phrase...the basic topic of a passage of qualitative data" (Saldana, 2013, p. 262). Through this coding method general codes were identified. This was followed by a process of going through each of these codes and trying to merge those that were related and similar. After this, different nodes/themes were identified as aligned with the research questions. Hence, themes one to nine address question 1 and 2, while themes 99

10 to 15 address question three and four (see Table 4.1). The choice of themes was informed by the frequency of mentions (see column 3 in Table 4.1). Under each of these nodes/parent nodes are child nodes. These child nodes are comprised of various other sub-themes related to the major themes/nodes. I then went through all of these child nodes and endeavored to create a concrete story with regard to the topic(s) under discussion. It is this story that makes up the major findings with respect to the various themes as aligned to the research questions. I complemented the coding process with creation of memos through which I recorded major thoughts and reflections with regard to the data and the coding process. These, too, informed analysis and interpretation of data. The themes were also aligned with the theoretical underpinnings that guide this study: dismemberment and remembering (Ngũgĩ wa Thiong'o, 2009), the emphasis on Sankarist self-reliance and community mobilization discourses, and the valorization of culture as a critical ingredient in the quest for freedom as outlined in Cabralism. In addition, African ethnophilosophy (stories, proverbs, songs) was used to buttress and explain findings. Archival data also aided in the interpretation of findings, especially those related to the pre-colonial and colonial periods.

3.6 Addressing validity and reliability

Creswell (2009) writes that validity and reliability of qualitative research studies should be judged on criteria different from those used in quantitative research. Other terms have been proposed to stand for validity and reliability: credibility for internal validity; transferability for external validity; dependability for reliability; and confirmability for objectivity (Creswell, 2009, as cited in Chilisa, 2012). Chilisa (2012) further argues that there is a need to acknowledge that qualitative research embodies multiple realities, and the credibility of research is embedded in the representation of these strategies: prolonged and substantial engagement to build trust; peer debriefing with peers, as well as elders of the community who are knowledgeable about the research subject; negative case analysis (cases that do not fit the appropriate categories should

be documented); progressive subjectivity (to ensure that the researcher keeps an open mind); and member checks (asking the research participants to verify data).

Triangulation, described by Babbie (2007) as the use of different research methods to test the same findings, is another method of buttressing credibility. Babbie (2007) recommends the employment of more than one research method in the research design. Krefting (1991) proposes methodological triangulation, triangulation of data sources, triangulation of investigators, and theoretical triangulation as strategies for data triangulation. I engaged with the research participants for a period of five months and employed a mix of the above methods to ensure that the results are credible. I was fortunate enough to have elders within the talking circles as participants, as they were instrumental in clarifying or correcting some of the discussions while we conducted these talking circles. Therefore, there was a continued on-site triangulation of data. Triangulation was also employed across different participants or groups. For instance, I checked the information that I obtained from the community with KFS officials and vice versa, and checked the interview data against historical sources derived from archives²⁴ and vice versa.

Unlike quantitative studies, a generalization of findings is not always necessary in qualitative research. In cases where generalization is desired, Chilisa (2012) recommends purposive sampling methods, such as snowball sampling and dense description of the setting, which I apply in this study. Regarding dependability, Chilisa (2012) argues that replication is neither feasible nor defensible in qualitative research as the focus here is on the uniqueness of human occurrences, although dense description and triangulation can be considered where appropriate. To address confirmability, triangulation, reflexivity, and auditing is recommended. I kept a journal throughout the study period to enhance reflexivity. Some of my journal entries feature in this dissertation.

²⁴ Written sources can also be wrong, misleading, or skewed. I became acutely aware of this point throughout the research project.

3.7 Significance of the study

This research contributes to 're-chiseling the three-legged stool' by engaging in an exploration of IKS as manifested in the Nyandarwa landscape. In this study, rechiselling the stool is understood as an effort to rebuild the Agĩkũyũ cultural infrastructure as exemplified by their understanding of the landscape, their interactions with it, and how IKS is manifested in their lifeways. This study further explores how IKS can contribute to the process of forging sustainable people-forest relationships and safeguarding forested landscapes, arguably one of the planet's most threatened resources. It contributes to unpacking the principles governing Indigenous Knowledge Systems in relation to forest/land. The study will further contribute to the body of literature on IKS and forest management, specifically among the Agikuyu of central Kenya. In addition, it provides the community, environmentalists, government, nongovernmental organizations, and other stakeholders with insights on how to promote sustainable people-forest relationships through the application of IKS. It also adds to the literature on indigenous methodologies and culturally relevant research strategies and contributes to the furtherance of the idea of African renaissance and exaltation of African philosophies and ways of knowing.

As espoused in the UNESCO (1999) declaration on Science and the Science Agenda Framework, there is a need to make science more responsive and inclusive. Science should become more accountable, more communicative, more *dialogical* (emphasis added). Paulo Freire refers to dialogue as an epistemological relationship in which we recognize the social, and not merely the individualistic, character of the process of knowing (Freire, 2012). The science of the twenty-first century should comprehend that science is a *product of culture or cultures* (emphasis added), and that its diverse manifestations must be recognized and seen as a shared asset by all. In addition, science must take a stand on the issues affecting global development, such as pollution, depletion of natural resources, poverty, and the widening disparities in wellbeing (Hoppers, 2002). Chilisa (2012) argues that researchers and research should contribute to the process of healing the wounds from a long history of subjugating indigenous ways of knowing and world views, and from deficit-theorizing about

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communities that reinforces stereotypes of hopelessness and lack of agency. This has been the driving force of this research project.

3.8 Reflection on indigenous research methods

The challenge of the intellectual is to make words become flesh, to make them breathe distinctly. Theory must always return to the earth to get recharged. For the word that breathes life is still needed to challenge the one that carries death and devastation. Works of imagination and critical theories can only weaken themselves by pulling back from that challenge. (Ngũgĩ wa Thiong'o, 2016, p. 112)

Indigenous research methods have emerged out of struggles for social justice and dissatisfaction with science and/or research. This dissatisfaction is a result of the historical role of science and research in the oppression including denying humanity of the 'other'. This dissatisfaction is expressed by Visvanathan (2002, p. 44), who argues that the hegemony of science emerges through "cannibalising others." According to Hoppers (2010, p. 81), the gaze of science over those that are considered "non-scientific" has become "a gaze of surveillance, not co-creation or co-determination." That is the researched are to be seen, mapped, measured, calibrated, and controlled, but never heard. Just as the colonial enterprise saw empty lands, scientists and researchers also saw empty heads amongst the colonised. These heads were to be studied, calibrated, and filled with knowledge. Knowledge was to trickle down, just like in 'trickle down economics'. History shows us that the trickle in this kind of economics defies gravity and trickles upwards, with the rich becoming richer and the poor becoming poorer. The same kind of conception can be applied to knowledge.

In the same vein, Visvanathan (2002) argues that the way science is constituted prevents the entry of pain and compassion. This is amplified by the belief that science should be apolitical in order to be truly scientific. Visvanathan (2002, p. 45) further argues that science is, indeed, highly political because it "creates its own microphysics of power, its own capillaries by determining discourses, by pre-empting the way one thinks." Tied to the idea of not entangling science with politics is the desire to keep science pure. This is powered by the foundations of western thought as articulated in Cartesian and Newtonian formulations. The separation of mind and body and

detachment from emotions in order to carry out value-free science are not consistent with African thought and conceptions of knowledge, which emphasize wholeness. As Ntuli (2002, p. 54) writes:

The platonic world view was further refined by Rene Descartes and Isaac Newton and these world-views had an incalculable effect on relations between human beings and nature on one hand, and Europe and the rest of the world on the other. Once the divisions began its logic would continue to fragment and split humankind into, 'the good and the bad', 'the rich and the poor', 'the colonized and the colonizer', and Nazism and apartheid became the climax of this logic.

Thus, science became a centrepiece of the globalization agenda. The antidote to globalization – counter-globalization – comes through in, amongst others, indigenous and Afrocentric research methods. I employed indigenous and Afrocentric research methods in this study with an aim of engaging with communities as co-creators of knowledge. Put forward by various scholars (Chilisa, 2012; Kovach, 2009; Smith, 1999; Wilson, 2008), these methods seek to right the wrongs of science and research on heavily researched societies (Indigenous peoples and Africans). Of the indigenous methods that I used, I would like to highlight the importance of appreciative inquiry. Appreciative inquiry is a method that is designed to make the 'poor' look at themselves with new eyes. It goes against the preoccupation with what people do not have, which entrenches powerlessness and lack of agency. This word 'poor' has been responsible for much of the deficit-theorizing that has characterized relationships with 'others'. As Odora (2002, p. 5) writes, current definitions of poverty "bypass critical questions by equating frugal existence with poverty, and assuming that rural (i.e., least western-looking) is always equal to impoverishment."

Communities in this study demonstrated a grasp of deep intellectual analysis of their environment and landscapes. They analyze their positions in these landscapes and understand all the wrongs that they and others have committed towards the land. There is a very high level of consciousness about the different dynamics of environmental issues and the community's role in these. To this end, I concur with Visvanathan (2002, p. 49), who argues that "every village is a science academy". It was through this method of inquiry that positive practices, such as community mobilization to protect the landscape, came forth in discussions. This mobilization has been discussed as a central theme of Agĩkũyũ indigenous practices throughout this thesis because it is a major finding that situates communities within the land. It is also through this method that memories about the Mau Mau war were discussed and consolidated. Memory is a very important project/undertaking in Africa. It is important because the continent has been heavily brutalized and, thus, it is easy to forget many of the positive aspects that have sustained African peoples.

Engaging with IKS is a struggle against forgetting; a struggle against forgetting that has enveloped the African continent, a struggle against forgetting that has been institutionalized in the quest for development and modernity. It is a struggle in terms of memorializing the landscape and putting people back into their landscapes because conservation has also been very hostile to communities. In this study, it is also a struggle to memorialize and immortalize the quest for justice and freedom that the Mau Mau stood for. Tied to the need to memorialize historical happenings (such as the Mau Mau) is room to narrate suffering and pain. Would the above have been achieved without a deliberate application of indigenous and Afrocentric methods? I do not think the kinds of feelings and sentiments that are discussed in this thesis would have emerged had I applied the pure scientific methods of measuring, calibrating, gazing at, and mapping. Indeed, as Visvanathan (2002, p. 42) writes, "poverty can be plotted on a map, a graph; it can be considered objectively...suffering eludes these actions."

Engagement with these kinds of research methods also created room for the community to be active participants in the research project. For instance, they often asked me questions. Researchers must be asked questions. This helps to diffuse the power relations that exist between researchers and the researched. I appreciated when an elder asked me: "Why are you doing your research here? Don't you have forests in your home area?" I explained myself. Another one asked me: "Why are you doing this?" Researchers must encourage their participants to ask them questions, including questions about themselves because, ultimately, "Research is not some innocent or distant academic exercise, but is recognized as an activity with intent. This intent must be made overt and explicit to those whom we have turned into the rats in our scientific

cages" (Hoppers, 2002, p. 6). This is what true reflexivity and honest engagement are all about.

3.9 Ethical considerations

I obtained approval for this study from the University of British Columbia Behavioral Ethics Board (BREB) as indicated in the preface (certificate number H15-02401). I further obtained permission from the Kenyan National Commission for Science Technology and Innovation (NACOSTI) (permit no p/15/3889/8381), which allowed me to conduct research in Kenya. I conducted meetings with the two groups involved in this study before commencing the research project. This was important in obtaining consent from the community. The following were discussed in these meetings:

- 1. The goals of the research project;
- The role of research participants. Participants were informed that their participation was voluntary and that they were free to leave at any time. It was also made clear that they were free to not share any information that they did not want to;
- 3. We sought oral consent as opposed to written consent because this is what the participants preferred. This was recorded;
- 4. It was emphasized that this research was for educational purposes and that it was my intention for the research to be of use to communities. As such, we brainstormed on how to make this a possibility and this remained a theme of discussion in subsequent meetings;
- 5. Room was provided for participants to ask questions; and
- 6. The participants were assured of confidentiality with the information provided in this study.

The above list was shared during interactions with elders who were interviewed in this study. The Kenya Forest Service officers interviewed in this study declined to sign any consent forms.

3.10 Chapter summary

This study aimed at applying a post-colonial indigenous framework (Chilisa, 2012) and Afrocentric methodologies such as metaphorical strategies, exemplified by the use of 'the wrong bus syndrome' and 'the three-legged African stool'. Application of talking circles and the use of cultural objects to lead discussions proved to be a robust strategy in unlocking IKS as embodied in these objects and the associated technologies. This emerged as an unintended consequence of the community engagement strategy. In that sense, we can clearly see the importance of working with decolonizing methodologies. The use of appreciative inquiry yielded an important element of IKS. The aspect of community mobilization to protect the forest was only put forth when participants were asked what they would consider as key achievements in their community's history. Mau Mau heritage was also considered as a big achievement. Both community mobilization and Mau Mau heritage have been instrumental in unpacking IKS and Gĩkũyũ indigenous environmental thought.

Conversations with elders opened up spaces for collective construction of knowledge and in-depth interrogation of the topics of interest to this study. We engaged in research as learning in this project. The community was seen as not just those from whom knowledge is gathered, but rather, those from whom knowledge can be shared. This happened in the talking circles as well as the joint community meeting in which experiential learning strategies, which I must add, organically evolved through community discussions. I have reflected on strategies applied in building relationships in this study. Some of these were well thought out, while others just happened to support this goal by chance. I believe that this aspect of building relationships is an important element of community-engaged research.

Wilson (2008) writes that research is ceremony. It is about connections; making connections, building connections, sharing connections, and expanding connections. Wilson (2008, p. 6) further argues that "research is all about unanswered questions, but it also reveals our unquestioned answers." This is a powerful statement. As I continually reflect on my research journey, I find that I am suspended between knowing and not knowing; suspended between answers and questions. Indigenous and Afrocentric

research methods provide a good base from which to explore this state of suspension. According to Wulff (2010, p. 1), the idea that 'Research is Ceremony':

Presents the notion of research as an idea and practice reflective of cultural values and beliefs of the researcher. Research is a cultural practice and is afforded value given its accordance with the beliefs and ideas embraced by that local culture.

I viewed this entire research project as an exercise in learning for all of us (including participants), as well as a cultural experience. I feel connected to these experiences and these landscapes on many personal levels. In the next chapters (four and five), I will share results that emerged from these engagement(s).

Chapter 4: Data analysis and findings: Agĩkũyũ people-forest relationships

4.1 Introduction

These ancient hills and ridges were the heart and soul of the land. They kept the tribes' magic and rituals pure and intact. Their people rejoiced together, giving one another the blood and warmth of their laughter. Sometimes they fought. But that was amongst themselves and no outsider need ever know. To the stranger, they kept dumb, breathing none of the secrets of which they were the guardians. *Kagutui ka mucii gatihakagwo ageni*; The oilskin of the house is not for rubbing into the skin of strangers...these were the people whose blood and bones spoke the language of the hills. The trees listened, moaned with the wind and kept silent. Bird and beast heard and quietly listened. Only sometimes they would give a rejoinder, joyful applause or an angry roar. (Ngũgĩ wa Thiong'o, 1965, p. 3)

Agĩkũyũ people-forest relationships are influenced by a variety of interrelated factors. I opened this chapter with the quote from Ngũgĩ wa Thiong'o above because it adequately sets the scene for making sense of the data I elicited from the study's participants and a discussion about the emergent key patterns that were pointers to the manifestations of Agĩkũyũ people-forest relationships. That is, these relationships are contextualized within and on the landscape. Analysis of data brought forth several themes, as outlined in Table 4.1. Whereas these themes are derived from the analysis, most of them started forming, conceptually, as I interacted with participants and with data in the field. The analysis process was my attempt to put everything together in order to solidify the themes that were forming.

Research Questions	Themes/Nodes	Sources	References/frequency of mentions
1. How have the indigenous communities around Nyandarwa Forest Reserve traditionally understood and sustained interdependencies with the forest?	1. Land	17	65
	2. Mau Mau and forests	23	81
	3. Naming of the	22	60

Table 4.1	Themes	defined	according	to	research	questions.
						4

Research Questions	Themes/Nodes	Sources	References/frequency of mentions	
2. How have these interdependencies	landscape			
transformed consistent with Kenya's post-independence changes in social, economic, and political situations?	4. Sacred spaces and trees	18	59	
	5. Water	12	50	
	6. Governance (pre-colonial, colonial, 22 independence)		141	
	7. Manifestations of colonial injustice	24	116	
	8. Access to non- timber forest products	29	92	
	9. Environmental changes over time	29	172	
 3. To what extent are the local, national and international efforts to promote healthy sustainable people-forest relationships are incorporating local communities' IKS? 4. How might the incorporation of IKS inform an environmental conservation framework for sustainable people-forest relationships? 	10. Gĩkũyũ cultural practices	21	114	
	11. Indigenous Agĩkũyũ Agriculture	10	101	
	12. Community mobilization to restore the landscape	24	91	
	13. Indigenous medicine	4	25	
	14. Memorialization of the landscape	10	20	
	15. Management	10	40	

It is against this background that this chapter seeks to answer the following questions: 1) how have the indigenous communities around Nyandarwa Forest Reserve traditionally understood and sustained interdependencies with the forest? And, 2) how have these interdependencies transformed over time, consistent with Kenya's post-independence (1963 to date) changes in social, economic, and political situations?

The methodological strategies applied to gather data included elder interviews, community group 'talking circles', and archival data, from which themes were generated to answer the questions outlined above. As the following discussion will demonstrate, Agīkūyū life is anchored on the land, and Agīkūyū relationships with forests have changed over time through different political regimes in post-independence Kenya. I employed a historical approach that traces their relationships with the land, starting with the pre-colonial, colonial, and post-independence epochs. For instance, Agĩkũyũ pre-colonial relationships with the forest were encapsulated in an all-encompassing landscape approach that was supported by their socio-religious and political organization. The colonial epoch opened up the land and people to 'civilization,' 'modernity,' and 'development.' Colonialism caused a calamitous disruption of Agĩkũyũ society. This chapter will seek to analyze this disruption from the perspective of land. Further, it will shine a light on how the Agĩkũyũ people fought for Ithaka/land and wĩyathĩ/self-rule using the Nyandarwa forest as a launching pad, when 'development,' 'modernity,' and 'civilization' were thrust upon them by the colonial regime.

Much of the post-independence period can be described as a legacy of woes with regards to forest and general landscape governance, up until recent changes in the constitution in 2010, and in forest management legislation in 2016. I will demonstrate that, just like when the Mau Mau mobilized to fight colonial oppression, the Agĩkũyũ have consistently mobilized to protect their landscapes, irrespective of the livelihood challenges that they face. These tensions come through in the narrative. The shifting relationships point to the fact that the conservation community and governments are now coming full circle in terms of understanding conservation. That is, they are beginning to understand conservation within a landscape that is not emptied of human presence. Thus, I begin by locating the Agĩkũyũ on and with the land because their positioning on the landscape and claim to land is consolidated in their story of origin and their social-political organization.

4.2 Agĩkũyũ story of origin

Far beyond, its tip hanging in the grey clouds was Kirinyaga. Its snow-capped glimmered slightly, revealing the seat of Murungu [Ngai]. Ngũgĩ wa Thiong'o (1968, p. 15)

The mountain of Kirinyaga/Mount Kenya is of great historical significance to the Agĩkũyũ people. It is believed to be the home of Ngai/God. Mount Kenya is the second highest mountain in Africa. It straddles the equator and rises to 5,199 metres above sea level. It is snow-capped and topped by glaciers all year round. The Gĩkũyũ name for the mountain is Kirinyaga. The name 'Mount Kenya', originates from the 'era of discovery'. Mathaai (2007) writes that explorers, Johan Ludwig Krapf and Johannes Rebman, who encountered the mountain in 1849, asked their guide, a member of the Kamba community, "What do you call that?" Thinking the two Germans were referring to the gourd he was carrying he replied, "It is called Kinyaa," pronounced Kenya by the British. This is how Krapf and Rebman 'discovered' Mount Kenya. This became the name of the mountain and later the country. Maathai (2007, p. 5) writes, "whether they were praying, burying their dead, or performing sacrifices, the Agĩkũyũ prayed facing Mount Kenya, and when they built their houses, they made sure the doors looked towards it." The mountain was absolutely sacrosanct. It was the source of all good things: rainfall; rivers; streams; and good weather. It was, and still remains, their anchor. The mountain is also linked to the primordial parents, Gĩkũyũ, the man, and Mũmbi, the woman. An elder (West, 10 November 2015^{25}) narrated the story of origin thusly:

Gĩkũyũ was at the top of the mountain with Ngai. Ngai told him to look at the land below them, west from Mount Kirinyaga to Nyandarwa, on to Kiambiruiru/ Ngong Hills to the south and Kia Njahi/ Oldonyo Sabuk to the southeast in Kilimambogo

²⁵ The attribution identifies the geographical location of the study participant (i.e., eastern/western Nyandarwa), and the the date when the interview was conducted. Gender has not been included to maintain anonymity.

Hill, and then, north to Garbatula. Gĩkũyũ looked at the panorama of the territory Ngai was giving him. It was awe-inspiring. He was overcome by the immensity of the land. Ngai then said to Gĩkũyũ, "I am giving you this land and everything on it. It is for you and your descendants to live in. Whenever you are in need, you should make a sacrifice, pray while raising your hands and facing the mountain, and I will come to your rescue." When Gĩkũyũ came down from the mountain, he established a home at Mukurwe wa Nyagathanga, in present day Muranga, right at the centre of the territory that Ngai had given him. Gĩkũyũ was so pleased with the land; he praised Ngai all the time. However, he felt that he needed a companion. So Gĩkũyũ said to Ngai, "you said that the mountain was your home and that if I was ever in need I should pray facing the mountain. So, Ngai, I pray that you give me a helper." Once he finished praying, he turned around and saw Mumbi, and they lived together and begot full nine²⁶ daughters. Once these daughters were older, Gĩkũyũ prayed to Ngai to give him husbands for them. And Ngai sent along nine men who married these daughters. Agĩkũyũ clan names are derived from the names of these daughters: Wanjirũ; Wambũi; Wangari; Wanjikũ; Wangũi; Wangecí; Wanjerí; Nyambúra; Wairimú; and Wamúyú. Each clan is known for a special skill or quality. And that is the origin of the Agĩkũyũ people.

This story of origin sets the scene for a discussion on the Agĩkũyũ people-forest relationships through time and changing political, social, economic, and cultural dynamisms. The various tendrils emerging from the story will be used to infuse discussion in this and the following chapter.

4.3 Gĩkũyũ conception of land and forest(s) in the pre-colonial epoch (before 1895)

The forest of the heart is never cleared of all its trees. (Ngũgĩ Wa Thiong'o, 1980, p. 7)

Gĩkũyũ life and culture is intrinsically linked to trees. The name of primordial parent 'Gĩkũyũ' is derived from the Mũkũyũ tree/sycamore (*Ficus sycomorus*). According to the Gĩkũyũ story of origin, Ngai instructed Gĩkũyũ to go and establish his homestead under a Mũkũyũ tree situated at Mũkũrwe wa Nyagathanga, near present day Muranga town. Thus, Agĩkũyũ entry into the world can be understood through trees.

²⁶ It was against Gikũyũ customs to count people or livestock. That is why they say, "full nine". There are, indeed, 10 clans. One of the daughters was not married, but begot children.

The Mũkũyũ tree remains a sacred tree *par excellence* in Gĩkũyũ environmental consciousness due to this important historical linkage. Gĩkũyũ life is also centred on the land. Gĩkũyũ's wife was named Mumbi, which translates into creator or potter. Soil/land, therefore, become a critical pillar of identity and sustenance. All of these elements coalesce in Agĩkũyũ cosmology and become the vantage point from which Agĩkũyũ understand the world – that is, through the landscape and everything on it, as well as within it. Manifestations of Agĩkũyũ people-forest relationships are discussed in the following section.

4.3.1 Tears from the mountains

The land sustained the Agĩkũyũ and gave them life in diverse ways, and the most important of these being through rainfall. According to an elder (West, 11 November 2015) interviewed in this study:

To magũka maũgaga "tũrore Nyandarwa" Riu athuri aria ria mathija kabũri no matiaugaga "mbura" maugaga "maithori" Kiarira maithori mageka atia" kiarira maithori ngayũa." Nigũo mainaga Igita rira marahoya yakorwo ni mbura marahoya "Kiarira maithori nganyua," no mataũgaga mbura maũgaga maithori todũ maratũmira thimo.

The elders used to say, "Let us look to Nyandarwa." When performing a sacrifice, the elders would not say, "rain"; they would say, "tears." "When it cries, we drink its tears." That is how they used to sing. So, if they were praying for rain they would say, "When it cries, I drink its tears". Because they spoke using proverbs.

Rain is considered a blessing in many African societies. In addition, among the Agĩkũyũ, there is a strong belief that indigenous trees are a source of rainfall. Rain-making rituals were a very important aspect of their culture. If there was drought or delayed rainfall, the community would need to perform a sacrifice to appease Ngai and beg for mercy. However, according to Mbiti (1975, p. 134), the term "rain-making" is perhaps the wrong name for this ritual because:

The ceremony is chiefly an occasion for praying for rain. Rain-makers do not produce rain as such. They perform rituals including sacrifices and offerings, in order to pray publicly for rain especially when the rain season seems delayed. Rain-makers know their weather secrets well and time their rituals carefully to

coincide with the period when the rains should be starting. There are also rituals performed to reduce or stop rain if too much is falling. A rain-making ritual which often comes before the start of the rains is a religious act of renewing life, sanctifying life, reviving life, for both human beings and other creatures of the earth. Through this ritual, man is playing the role of the priest of nature around him.

This aspect of man as a priest of nature acting to renew and revive life is encapsulated in contents of prayers for rain as will be illustrated below. According to the elders interviewed in this study, a prayer for rain would be narrated thusly (this prayer was a recital. A lead elder would guide the rest of the participants who would respond accordingly):

Ngai, we have come to pray for rain. Because we can see we have wronged you Lead elder: Mbura Thaai!/Rain peace! Other elders: Thaai!/Peace! Furũri Thaai!/The land peace! Thaai!/Peace! Atumia Thaai!/Our women peace! Thaai!/Peace! Athuri Thaai/Our men peace! Thaai!/Peace

And rain would fall. And they would know Ngai had heard them. The elders got whatever they prayed for, there and then. (West, elder interview. 11 November, 2015)

The prayer is a communal activity that invokes Ngai to renew the land, through rain, and revive the life of children, women, and men. There was not going to be any peace if all these elements were not in harmony and balance. Amongst the Agĩkũyũ, prayers for rain were performed under the sacred Mũgumo tree (*Ficus thonningii / F. natalensis*). According to Leakey (1977), the Mugũmo became a more prominent sacred tree, i.e., as opposed to the Mũkũyũ tree, which features in the story of origin for the simple reason that it was more abundant in Gĩkũyũ land. Prayers for rain were performed by highly respected elders who had gone through all the rites of passage and grades of eldership. They had to have "finished giving birth". Indeed, one of the elders (East, 9 February 2016) noted the following:

The sacrifices would be performed at the same time from Nyeri, all the way to Garbatula. He [the lead elder] would take a goat, hold it by the front legs, and when he looks at the shadow, he sees that it is 12 noon [when the sun is overhead]. So they would all be standing at the Mũgumo at the same time, and they would say, 'Thaai thathayia ngai thaai/ [Ngai we beseech you for peace].' The meat was roasted, the sacrifice was performed, the smoke rose up, and Ngai accepted it. It was that fast because people were very clean!

These prayers for rain were performed facing the mountain of Kirinyaga, just as Ngai had instructed Gĩkũyũ in the story of origin. I witnessed this in December 2015 While most Agĩkũyũ are Christianized, there appears to be a fusion of Christian and traditional prayer practices, as people still pray facing the mountain. I witnessed this in December 2015. Mbiti (1975) writes that natural places, such as mountains, are critical in cementing African spirituality. They are "symbolically the meeting point between the heavens, the sky, and the earth, and therefore of the invisible and visible worlds" (Mbiti, 1975, p.149). Other elements of the sacrifice included the use of stomach entrails of the slaughtered animal; this aspect is important because the entrails were also used in the marking of boundaries on the land. Mbiti (1975) argues that the use of entrails or their contents could be because the life of the animal is passed on to that of the people who are making the sacrifice. This exemplifies the fact that "Africans do not draw a sharp distinction between human life and that of other creatures" (Mbiti, 1975, p. 137). There is a strong belief that the elders who performed these prayers were always successful and all of the participants interviewed in this study emphasized that "marutagwo hau ni mbura" (loosely, this translates to: "they were removed out of that place by the rain."). Ngai was not waiting to respond the day after. When the old men prayed, they would be answered there and then.

There is a belief that the people of the olden times were more loved by Ngai because they were clean and pure. They were sanctified. Now, they say that corruption has crept into the systems and peoples' minds, and that there is no discipline. So, they have lost power to harness rain from Ngai. The landscape has been desecrated. The Agĩkũyũ's affinity to their landscape is clearly demonstrated by the anthropomorphization of the mountain in "kiarira maithori nganyua"/"when it cries I drink

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its tears." This locates the land(scape) front and centre in their cosmic, physical, and spiritual worlds.

4.3.2 Rainfall weaves a tapestry of Agĩkũyũ livelihoods

Agĩkũyũ people are agriculturalists and, therefore, rainfall is of absolute importance in sustaining their livelihoods. The forest was perceived as a source of rain/community sustenance. The abundance of harvest was interlinked with peace and happiness for the community. That is why the prayers for rain invoked thaai/peace. Peace was to come through trees, rainfall, and abundance of the soil. It made everything whole and new. It kept the cycle of life in motion. According to Muriuki (1974), the Gĩkũyũ agricultural season/ecological calendar was divided between two seasons: Kĩmera Kia Njahi (fiwi or hyacinth bean, *Dilichos lablab*); and Kĩmera Kia Mwere (millet; *Pennisetum glaucum*). These lasted approximately six months and combined to form the year, mwaka or kĩmera. These seasons were named to correspond with the rainfall patterns and crops that were grown, respectively. Ngũgĩ wa Thiong'o (1965, p.77) writes:

Njahi was the season of the long rains. It was the favourite season with all the people. For then, everyone would be sure of a good harvest. The peas, the beans, bursting into life, gave colour and youth to the land. On sunny days, the green leaves and the virgin gaiety of the flowers made your heart swell with expectation. At such times women would be in their shambas cultivating; no, not cultivating, but talking in a secret language with the crops and the soil. Women sang gay songs. The children too. And the plants, all the trees around, swaying a little as if they were surrendering themselves to the touch of the wind seemed to understand the joy of mothers. You could tell by the bright faces of the women, they were happy.

Rainfall was the embodiment of prosperity. Rainfall was a continuous reminder that Ngai was with them. It was the crystallization of their dreams and hopes. Water was and is the most important forest product; it sustains livelihoods.

4.3.3 The sacred Mũgumo tree

A big Mugumo tree stood near the edge of the hill. It was a huge tree, thick and mysterious. Bush grew and bowed reverently around it. And there the ancient tree stood, towering over the hill, watching, as it were the whole country. It looked holy

and awesome, dominating Waiyaki's soul so that he felt very small in the presence of a mighty power. (Ngũgĩ Wa Thiong'o, 1965, p. 15)

To the Agĩkũyũ people, the Mĩgumo (*Ficus natalensis / Ficus thonningii*) was the equivalent of a church, mosque, or temple. There were designated Mũgumo trees and spaces around them that were considered sacred. Sacrifices were performed around Mũgumo trees in times of social upheaval. As an elder (West, 12 November 2015) explained:

When the sun was hot, and it looked like drought was coming, the elders would offer a sacrifice at a Műgumo tree. But the church came and said that Jesus came and when you read the Bible there were people who God spoke to. It is only that the church has come in, there were men set aside, even in the Bible it is written that there were. So, our people had prophets too, and a prophet would come from a place like Wanjohi, and say God wants a goat because you have sinned. The very old men would take a goat and sacrifice to God. An old man would visit the area of Ndunyu Njeru and another man from Wanjohi would visit our place and they would all agree on what intervention to make. If there was drought, they would take a goat without any spot (one color) they would say; God we come to ask for rain for we have sinned. The other old men would respond; rain –Thaai, Children –Thaai, family – Thaai. The old men would be removed from the place by rain.

From the above quote, we can see that the sacrifice was a large community effort involving people from different localities within the larger landscape. It was an act of bringing the community together, an understanding that there cannot be prosperity for one group and not the other, and a quest for wholeness. The infiltration of Christianity disrupted this cultural practice by introducing new prophets in the minds of the Agĩkũyũ people. According to Christian teachings, Jesus made the ultimate sacrifice, so there was no need to continue sacrificing under Mũgumo trees. Besides, such practices were considered heathen by the Christianizing/civilizing group.

This tension between Agĩkũyũ ways of worship and introduction of Christianity is exemplified in the work of Maathai (2007) who narrates her experiences growing up in Gĩkũyũland in relation to the sacred Mũgumo tree. Her mother always told her not to collect firewood from the Mũgumo tree because it was a "tree of Ngai", the owner and source of life. Upon her return from the United States of America for her graduate

studies, she found that the same tree had been cut down, and a church erected in the exact same spot. She concludes that this is how "hallowed landscapes lost their sacredness and were exploited as the local people became insensitive to the destruction, accepting it as a sign of progress" (Maathai, 2007, p.6). Mbiti (1975) argues that African religious practices held many natural features in their landscapes in high esteem. Trees, rocks, mountains, forests, trees, birds, and insects were believed to be inhabited by 'living beings' or having 'mystical life.' Humans, as the priests of nature, therefore, use their ability to "use or control some of these things or phenomena" (Mbiti, 1975, p. 43). As such, people use trees symbolically to "make concrete and material the abstract notion of life" (Cloke, 2002, as cited in Karangi, 2008, p. 1).

The Mũgumo was the tower of strength for the Gĩkũyũ nation. Cagnolo (1933) noted that, in addition to being a sacred tree, the Mũgumo was used for various ceremonies: circumcision; prayers for rain; and the ĩtuĩka ceremony (this involved handing down of power from a ruling age-set to the next).

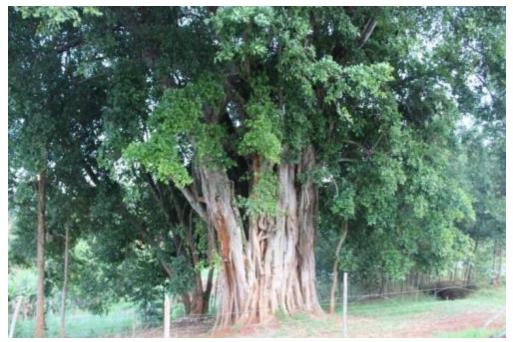


Figure 4.1 A sacred Mugumo tree.

The rituals with which the Mũgumo is associated express the Agĩkũyũ's claim to land, political power, identity, and religious hegemony (Karangi, 2008). Not only was the

Mũgumo spiritually potent, it was ecologically powerful too. As Ngũgĩ wa Thiong'o (2012, p. 99) writes, "the roots were strong and deep, and that is why a Mugumo never succumbed to the prevailing winds and changing weather and lasted many years." It had an enormous capacity to conserve soil moisture and capacity to increase soil fertility (Karangi, 2008).

4.3.4 Trees as embodied in Agĩkũyũ cultural heritage

Trees sustained life in diverse ways. They were a source of food, medicine, grazing land, and firewood, and were also used to make beehives, wooden articles for household use, furniture, and housing. Great value was placed on trees and efforts were made to protect them through the creation of the equivalent of the "forest reserves" that we have in Kenya today. Honey was of particular importance because it was not only used for healing, but also for ceremonial purposes. The elders (East, 9 February 2016 and West, 12 November 2015) I interviewed in this study spoke of its significance:

Agĩkũyũ knew the importance of the forest for they knew something like honey from trees (ũki wa hako). This was extracted from a crevice in a tree. They used to make alcohol from the honey and sugar cane. They would set aside an area where there were bees as a separated area for protection, but with no boundary.

In addition:

Honey came from the forest and this was a kind of medicine. Because the bees would collect many different plants, and when they put it all together, they would make something like medicine. Even when people slaughtered an animal, the fatty meat was soaked in honey. So, there were no diseases because people ate that. They could stay for a very long time without any problem. There was also water and water is life.

In addition to water, the one product that was actively derived from the forest was firewood. Firewood sustains life. According to the Green Belt Movement (2016), 70% of Kenyans still rely on wood fuel. The importance of firewood to local livelihoods cannot, therefore, be overemphasized. Participants argued that in the past, the forests were very thick and one needed to go in with two or more people. According to a participant,

effort was made to ensure minimum impacts were made to the forest/land because "picking firewood was not like today where people use pangas [machetes]. They used bare hands. They used to collect only the dry wood that had fallen from the trees." While the Agĩkũyũ were agriculturalists and kept domestic animals, some of them engaged in hunting to supplement their diets. As one elder said, "they would dig a hole and put grass on top which would act as a trap. Animals like buffalo would come and fall there."

The medicinal value of trees is understood, especially by the older generation. Prior to the introduction of western medicine, healing and treatment were derived from the land. For example, a participant in this study told me that "there is a time I did cut myself with a panga, and I was treated with a tree called Mũgio/*Triumfetta tomentosa*, and even stitched with the tree fibre." Trees were also embedded into Gĩkũyũ spirituality. Apart from the Mugumo tree, some other trees were considered to have spirits. As Leakey (1977, p. 123) writes:

Whenever the Kikuyu cleared forest land for cultivation they always left standing a number of big trees at intervals. Such a tree was called murema kiriti/one that resists the cutting of the forest...it was believed that it drinks the shadows or spirits of all trees felled and gathered them together.

If such a tree were to be felled or fell on its own, sacrifices had to be performed to avert misfortunes. This practice was augmented by the creation of "forest reserves" on the land. Those elders who owned or presided over large tracts of land had the right to prohibit the felling of trees. In some instances, Leakey (1977) argues, such elders left behind a deathbed curse to prevent their descendants from cutting trees in these forests. It is through this system that the forests of Karura and Nairobi City Park came to be. Karura forest is the largest urban forest in Nairobi. This forest was the epicentre of the struggle against grabbing public land and bad governance in Kenya. It was here that Nobel Laureate Wangari Maathai and other Kenyans directly clashed with Daniel Arap Moi's regime in the 1990s. Located at the edge of a growing city and, as such, sitting on prime land, Karura remains a site of resistance against land grabbing (attempts at which have been made as recently as 2015).

4.3.5 Trees and justice

The Agĩkũyũ had a great sense of justice. Justice was meted out in open courts, most of which were held under a tree. For instance, an elder (East, 16 October 2015) recalled that:

There was a court in Gatundu with steps such as the ones used in storeyed buildings. So, we could see the court proceedings. If you were in the lower level, you did not block those that were higher up and vice versa. The court was constructed in a circle and in an open space not in buildings like today.

Whenever there was a dispute, elders came together to ciira/consider a case. They would sit on the jungwa/three-legged African stool. The elders carried Muthigi/*Cordia monoica*/walking sticks (plural), which served a purpose in dispute resolution. A mũthigi was a black staff given to a third-grade elder. It was a sign of authority, respect, and power (Leakey, 1977). The mũthigi was a central plank of conflict resolution. Once the elders sat to ciira, a truce was reached when they pointed the stick towards each other (Maathai, 2010). Indeed, according to Maathai (2007, p. 84-85):

Among Kikuyus, once men had finished raising their children, they were expected to become guardians of wisdom and protectors of the community's way of life. As such, they were considered peace makers and judges, and during inducting them into elderhood they were given a staff from the thiigi tree [*Cordia monoica*]. This mark of authority allowed them to officiate in the various ceremonies and rituals that marked the communities' rites of passage and sacrifices.

Therefore, trees – and wood products – were central in ensuring the restoration of harmony in the land and with the land. They were symbols of peace.

4.3.6 Gĩkũyũ conception of land and forest(s)

While there were special zones designated for community uses (e.g., salt licks and grazing areas), land was seen as an all-encompassing whole. Gĩkũyũ people did not have a conception of "forests" as we understand them today. To the Agĩkũyũ, it was all Gĩkũyũland. When I posed questions around the extent of the "forest," or relationships with the "forest," elders emphasized that "there was no forest in those times." Indeed, as demonstrated by Leakey (1977), Agĩkũyũ lived within forests in fortified settlements known as ihingo. The Maasai, with whom they engaged in warfare from time to time, found that the Agĩkũyũ people were a formidable force who strategically used their dense forests in sustaining resistance. They established fortified villages set in the dense forest which they retained as a protective fringe around their country.

The Gĩkũyũ believed that trees were a source of good weather, or "riera rĩega." This is further tied to agricultural productivity of the land. In that sense, they are intrinsically considered to be part of the landscape and atmosphere as an allencompassing whole. To understand Agĩkũyũ relationship with the forest reserve, we have to decolonize our thinking from what we know a forest to be – i.e., a site that is specially designated for conservation, under a protection regime, or indeed, as a resource to be exploited. As Creary (2012, p. 1) writes, to decolonize means to "seize back their [Africans'] creative initiative in history through real control of means of communal self-definition in time and space." Agikuyu people have traditionally believed that their territory spread from Nyeri to the North, Muranga to the East, Kiambu to the South, and Nyandarwa to the West. Anything within that scope of territory belonged to and was under the control of, the Agĩkũyũ. This included the forest/land under discussion in this study. For the sake of clarity, I shall use the term land (in this section) because that is how the Agĩkũyũ people understand their landscape and not as fragmented bits that include forests and other features; indeed, land remains the cornerstone of Gĩkũyũ indigenous environmental thought.

4.4 The colonial epoch (1895-1963)

This section will examine the manifestation of people-forest relationships in the colonial period through governance, legislation, community livelihoods, and the politics of naming.

4.4.1 Colonial forest protection practices and governance

The fragmentation of the landscape was instituted in the colonial period during Britain's 'civilizing mission'. It is at this point that the boundary to the forest was created, and the people who had inhabited that land until then were pushed out. As one elder (East, 11 October 2015) in this study recalls:

When they [the Beberu] came, we were staying in the forest with my parents and that is where everybody was removed from and relocated to where we are now. The boundary came into effect after the forest was demarcated.

The creation of forest reserves in Kenya can be traced back to what Hickel, Brewer and Kirk (2015) describe as "closing off the commons" from the 17th to 18th century in Britain. At this time:

Wealthy merchants and aristocrats began a systematic campaign to privatize the commons and kick the peasants off their land, which they turned into sheep runs for the highly profitable wool industry. This became known as the "enclosure" movement, and historians regard it as the birth of capitalism as we know it today. (Hickel *et al.*, 2015, para. 9)

The 'enclosure' movement was exported to other regions of the world through imperialism. In Kenya, it was linked to the alienation of land for settlers, as well as an effort to ensure more civilized and productive use of land (Elkins, 2014). As has been demonstrated in chapter 1, this came at a high price for the local populations, many of whom found themselves landless or crammed onto small pieces of land where productivity was quickly depleted. Hickel *et al.* (2015) further argue that the masses of people forced out of their land and livelihood base in Britain found themselves in a state of poverty, and many poured into slums where they struggled to 'scratch out a living.' Several scholars (Elkins, 2014; Kariuki, 1964; Maathai, 2010) agree that a similar situation was fashioned in Kenya in the early 19th century. In fact, the colonial era marks the beginning of the establishment of slums/informal urban settlements in Kenya. This too is tied to claims today around land dispossession, ownership, and control.

Greer (2012) argues that the enclosure movement brought survey lines, fences, and legal rules fostering exclusive access and transferability. The landscape was dissected into pieces, producing a variety of social, economic, and ecological problems. An elder I interviewed recounted how he lost some sections of his land during the creation of the forest boundary/demarcation of the forest in eastern Nyandarwa: They had erected beacons in the forest. Beacons were erected in every ridge. In my place, the surveyor told me that the road is in the forest, but when I was trying to install a post to fence my land, I found another beacon. They were lying to Agĩkũyũ that they will still stay in the forest. But after some time, everybody was told to come out of the forest and the Beberu took over the forest just like they took all the fertile land. The forest was good and with very good weather. I used to go there when I was a young boy and it was very beautiful. We could get trees to make soup – more than 80 types. The Beberu were left with fertile places like Limuru, and we were left with plain [infertile] areas.

Once colonial rule was in effect, the governor wielded a huge amount of power over resource management. For instance, the proclamation of forest reserves was the prerogative of the governor. The governor also exercised absolute control on the power to disafforest²⁷. The governor could also "make rules of general application, or applying to particular forest areas, prohibiting felling, cutting, squatting, grazing, burning, clearing, cultivating, or trespassing" (Troup, 1940, p.16). Furthermore, he could make rules regulating the use of pasture, trees, or forest produce, as well as the rights for cultivation. There were no rights, however, in the forest reserves on crown lands (Troup, 1940). Boundaries were marked using beacons connected by "a cleared line, which serves as a fire trace by an inspection path" (Logie & Dyson, 1962, p. 26), and also marked by a line of eucalyptus trees which were the visual markers of the newly created no-go zone; a contested space on contested land.

Demarcation was facilitated by colonial appointed chiefs who had quickly earned a reputation for being a representation of pure evil and agents of terror directed towards their own people. As highlighted in chapter 1, the Gĩkũyũ society did not have a centralized system of government. There were athamaki/elders who served as leaders of each ridge, but these too did not have absolute authority over the people. If a decision that would have a bearing on the larger community had to be made, then there had to be wider consultation with other elders. In their efforts to endear themselves to the British, colonial chiefs dispensed with such democratic practices, and walked around showing the British where the beacons were to be erected to create the forest

²⁷ This is the procedure by which a declared forest area ceased to be a forest. In current day legislation, the word for this would be de-gazettement.

boundary. This resulted in very uneven boundaries and the ensuing loss of land to a people who were already under siege from the colonial administration. As one of the elders (East, 16 October 2015) recalls:

One of the goodies that the chiefs obtained from the Beberu were shorts. This was quite a prestigious item to have because, up until that time, men wore a blanket. So, this chief had his shorts and he was walking with the Beberu to show them where the Agĩkũyũ land ended, and where the boundary should be erected. The chief did not want to walk for a long distance and he also did not want to have the maramata [*Cyathula polycephala*] a plant whose flowers stick on clothing upon contact] stick on his shorts. So he said, "Place the boundary here." And that is how we lost a lot of land. Other chiefs, who were shrewder, pushed the boundaries.

An analysis of this land loss in the creation of the forest is important because there is still strong sentiment about land dispossession. This is further tied to the Mau Mau factor, because the children of the Mau Mau continue to agitate for land from the Kenyan government. According to the informants, the Forest Reserve is considered (by the children of the Mau Mau) as potential land for distribution to Mau Mau descendants. As highlighted in chapter 1, landlessness and land remain a sore point in Kenyan society. Among the Agĩkũyũ, this situation is made worse because some of the Mau Mau found themselves without the very land that they had fought to defend. It is a bitter and painful story, but one that is beyond the scope of this thesis.

4.4.2 Entrenching colonial legislation

When the British took control of Kenya in early 1900s, they embarked on an ambitious project of constructing the railway line from Kenya's coast to Uganda. This was the symbol of imperial achievement and a tool to facilitate the arrival of more settlers, as well as to transport raw materials out of the colony. From a forestry point of view, the need to ensure large supplies of fuel for the wood-burning locomotives led to the establishment of the first up-country forest reservation and the first plantations of eucalyptus for fuel (KFS, 2008). As such, the first forest legislation in the colony was not necessarily designed to protect the forest for its own sake but to ensure that there was enough timber supply to keep the railway construction going. According to the Kenya Forest Working Group (2008, p. 4):

The first forest legislation in 1891 dealt with the protection of the mangrove swamps in Vanga Bay, and was extended to protect mangroves throughout the coast in 1900. In 1897 the Ukamba Woods and forest regulation were published, and subsequently amended in 1900 and 1901. These regulations reserved trees within 5 miles of the courthouse in Nairobi and within two miles of the railway line except on private land. The later revisions of the regulations placed forests within one mile of the railway under direct control of the railway administration, and other strips were controlled by the district officer.

Colonial records indicate that there was 'theft' of forest products and 'encroachment' from as early as 1902. According to these records, the theft of poles, firewood, and other small produce from forest reserves was a very common offence. Logie and Dyson (1962) warned magistrates against considering these as petty offences because an accumulation of these kinds of offences would lead to the eventual large scale destruction of the forest. In a report on the 'Forests of British East Africa,' Hutchings (1909, p. 15) writes the following:

If villagers cannot obtain it legitimately they will steal it. The correct method of stopping the illicit removal of small produce required by villagers, is to make it readily available on reasonable terms. Simple working plans should be prepared with the object of providing regular supplies of the kind required, and facilities should be afforded for meeting the demand, whether by the issues of readily obtainable permits, or the establishment of local sale depots, or otherwise. Encroachment and unauthorized squatting can best be prevented by constant patrolling, and by clear definition of boundaries which should be inspected frequently, and kept in repair.

Agĩkũyũ people had effectively been dismantled from their landscape and schisms were created in their minds on how land was to be governed, accessed, and used. As one talking circle participant (West, 12 November 2015) put it:

Everything belonged to the Beberu. We had to go and ask for permission to fetch firewood. If you were caught there fetching firewood without permission, the Beberu would take you to his home and beat you so much. Your parents had to come and pick you up from there.

According to Logie and Dyson (1962), there was more closed forest in Kenya before the arrival of settlers. They claim that much of this had already been destroyed by Bantu shifting cultivation practices and the burning of grasslands by pastoralist groups. Anything that remained was attributed to non-inflammability or inaccessibility due to the mountainous terrain (Logie & Dyson, 1962). In other words, the 'African' was perceived to be utterly destructive and had to be tamed through colonial legislation. It was imperative to "save Africa from Africans" (Nelson, 2003, p.65). As Troup (1940, p. 8) writes:

If educated Europeans fail to realize the necessity of maintaining forests, it is expecting too much for the uneducated African to willingly conserve forests on hillsides, and catchment areas in the interest of generations to come. His whole tendency in the past has been to destroy forests, and he cannot understand the reason for laws framed to preserve them, any more than he can understand laws which prevent cattle raiding or the killing of witches.

This kind of paternalism completely ignored the fact that the Agĩkũyũ had, for example, engaged in highly complex and sustainable forest/tree protection strategies that were anchored in their general ethic of landscape governance and religious viewpoints. As Leakey (1977, p. 43) points out:

The Kikuyu practice of building their huts with thick planks meant the cutting down of many timber trees, but at the same time, it led to the valuable habit of making forest reserves within the country. These are in the form of islands of forests ranging in size from few acres to many square miles which were set aside deliberately for timber cutting only. The trees in these areas could not be felled to make room for cultivation.

These "islands of forests" further served as a protective mechanism as villages were built inside the shelter that they provided. In addition, the bush and undergrowth acted as extra protection. They "had a far denser population than any part of their country, a fact which was not always appreciated by Europeans of the time" (Leakey, 1977, p. 65). Colonial conservation doctrine also masked the obvious economic interests that the settlers attached to the forest. As Logie and Dyson (1962) state, the montane conifer forests were more prevalent and were of great economic value. To the colonial authorities, the greatest value of forests was the extraction of timber. As noted above, exotic tree species were introduced as boundary markers, but as time progressed they were widely grown in plantation forests. While indigenous tree species

produced good quality wood, it became obvious early on that they could not entirely rely on them because they took too long to mature.

According to Logie and Dyson (1962), as of 1946, trees were planted on 5,629 acres of land; 4,505 (80%) acres of these constituted exotic tree species. The displaced and landless Gĩkũyũ people were instrumental in the establishment of what Maathai (2010) refers to as 'tree farms.' Logie and Dyson (1962, p. 27) write that most of those employed in establishing these tree farms/plantation forests were Agĩkũyũ people "who *take readily* [emphasis added] to this kind of work and made good woodmen." They were also employed in sawmills. According to a "special forest labour census carried out on 1st July, 1946," the total number of resident labour employed by the forest department was 21,457. Out of these, 20,959 were Agĩkũyũ people. This number comprised 11,299 Agĩkũyũ children. According to the interviewees I spoke to in this study, settlers were very happy when they found people who had many children, or who could get many children. Child labour was a key element of the settler economy. It is also highly unlikely that the Agĩkũyũ took readily to this kind of work. They did it out of necessity, and due to a lack of alternatives.

4.4.3 Disintegration of community livelihoods

Agĩkũyũ people derived many benefits from forests, including honey, herbs for making soup and medicine, grazing land, bush meat, and construction materials. Colonial legislation changed free access to forests. As one elder (East, 16 October 2015) put it, "we could no longer harvest grass because we were told it belonged to elephants." In the pre-colonial period, there were limited uses for forests – in the extractive sense. Exploitation of forests was introduced by the British through commercial agriculture, the introduction of timber harvesting, massive harvesting of timber to support World War I and World War II, as well as through other uses of timber within the colony, such as the construction of the railway line. Massive deforestation for agricultural purposes was also instituted. Ngũgĩ wa Thiong'o (2010, pp.10-11), memorializes the landscape in his memoir:

Sloping down from the hill was a forested landscape. As a child, just beginning to walk, I used to follow, with my eyes, my mothers and older siblings as they went past the main gate to our yard, and it seemed to me that the forest mysteriously swallowed them in the morning, and in the evening, as mysteriously, disgorged them unharmed...then things changed, I don't know how gradually or suddenly, but they changed. The cows and the goats were the first to go, leaving behind empty sheds...I was aware of trees being cut down, leaving only stumps, soil being dug up, followed by pyrethrum planting. It was strange to see the forest retreating as the pyrethrum fields advanced.

Yes, the land was changing, and the Agĩkũyũ livelihoods were changing in turn. The forest was being transformed into a monoculture, shifting people-forest relationships and their understanding of what it really means to live off and with the land. As the colonial project progressed, the Agĩkũyũ found themselves working in plantations, which were former forests that stood on their land. An elder (West, 12 November 2016) narrates this colonization of land and labour as follows:

Let me say, that time was very bad as they didn't consider a black man to be a human being. Every morning, they used to sound a siren and we could all gather together, and were divided into groups. Some people would go to pick pyrethrum and others to do other works in the shamba [cultivated piece of land]. So from 8:00 am, you will work non-stop, during lunch hour you could rest a bit, and at 4:00 pm we were allowed to go home to the gĩchagi²⁸. At the gĩchagi, there was a lot of trouble. Nobody was allowed to cultivate large pieces of land. We also used to be given maize flour depending on the number of family members. If you are seven, including the kids and parents, a parent would get seven kilos of maize flour. You would eat that for a period of seven days. This would be eaten with processed milk (with all the contents removed.) "Mathache," we called it. Ladies also suffered so much. When a woman gave birth or is expectant, they would still go to work. No one was allowed to rear any livestock.

This was the face of Pax Britannica – the goal was to civilize the natives with paternalistic authority. Deliberate efforts were made to hinder any meaningful progress of Africans in all spheres of engagement. Tied to the loss of land, the arena of livelihood construction was the loss of other sources of livelihood. As one elder (East, 18 October 2015) recalls:

²⁸ A concentration village. One settler could have more than 2,000 people working for them. The ĩchagi (plural) on settler farms were also constructed along ethnic lines. So, all Gĩkũyũ people would be in the same gĩchagi (singular).

We had a lot of goats. But they were all taken away by the Beberu in one day. So I could see changes in my community. We had goats and now we do not have any. We no longer ate meat. We would ask my grandfather "where did the goats go?" And he would say "they were swept away by the kifagio/broom". We did not know that the kifagio/broom was the Beberu. They are the ones who 'swept away' or took all the goats and cows. Let us say there were very many problems starting from 1935 onwards. That is when the African population became poor.

Colonial theft of land and livelihoods entrenched dislocation of communities from their land and lifeways. It robbed them of their sense of self because, as highlighted earlier, a Mugĩkũyũ cannot become a person without land and without practicing land caring practices. In the following sub-section, I discuss another form of disintegration of community livelihoods, one that is more psychological in nature, but with livelihood implications as well.

4.4.4 The politics of naming: What is in a name?

When I asked the participants in this study what the name Aberdares means, the majority of them said they did not know, some wondered if that was really a Gĩkũyũ word, and a few said that that the name came with the Beberu. As an elder (East, 11 October 2015) reiterated, "They [the Beberu] know the reason for that name. We, we do not know. Our children know." The communities living around the forest have named the forest sections that are near them based on their understanding and observations in the landscape. An elder (East, 16 October 2015) explains:

This is Kieni. It was called Kieni (plain) because it had a plain place where animals used to come and sunbathe. Inside the forest was a village called Gitukũya and that is where we used to go for farming. And here there was Gitangi forest. We could look into it and see elephants and buffaloes grazing.

As has been pointed out earlier in this thesis, that the name of the larger landscape is Nyandarwa because the stretch of the mountain looks like a drying hide. This landscape has great historical significance in liberation struggles. As an elder (West, 13 November 2015) recalled:

Nyandarwa is where people ran to during the Mau Mau time, and later they sang:

"Nyandarwa is good" "It produces honey and all other good things" Nyandarwa. That is why it is very famous.

The name of the landscape under discussion in this thesis was changed during the 'era of discovery.' I argue that this 'era' marks the beginning of the dismantling of people from their landscapes physically, emotionally, and spiritually. Explorer Joseph Thompson who first saw the ranges in 1884, named them after Lord Aberdare, the thenpresident of the Royal Geographic Society. The Agĩkũyũ community living around this landscape believe that it is one of the homes of Ngai.

In addition to the dissection of the landscape, the schisms in the minds of the Agĩkũyũ have been created with the colonial (re)naming of landscapes. As Smith (1999, p. 20) writes, in imperial literature, people such as Thompson "are the 'heroes', the discoverers and adventurers, the 'fathers' of colonialism". Further, Smith emphasizes that "by naming the world people name their realities. These realities can only be found in indigenous language... and can never be captured by another language" (Smith, 1999, p. 158). In the same vein, Ngũgĩ wa Thiong'o (1989, p. 9) argues that language is the carrier of culture. That, while "the bullet was the means of physical subjugation", language was the means of the spiritual subjugation" for colonized peoples. Further, Ngũgĩ wa Thiong'o (1986, p. 3) writes that imperialism dropped a cultural bomb in Africa with the following consequences:

The effect of the cultural bomb is to annihilate a people's beliefs in their names, their languages, their environment, their heritage of struggle, in their unity, in their capacities and ultimately in themselves. It makes them see their past as one wasteland of non-achievement, and it makes them want to distance themselves from that wasteland. It makes them want to identify with that which is further removed from themselves; for instance, with other people's languages rather than their own.

If the landscape acquires foreign names, it gets disconnected from cultural connections within the larger society. Renaming and reinforcement of these names suspends community's histories and understanding of the landscape and their place in it. It supports Hegelian ethnocentric and racist viewpoints about Africa possessing no history before the entry of Europeans. As Serequeberhan (2012, p. 147) reminds us, "in

spite of the fact that colonialism has ended, its cultural and intellectual residue still endures and is utilized to perpetuate the political-economic submission of the formerly colonized." The contemporary use of the name "Aberdare" as the name of this landscape is a testament to this. The descendants of the Mau Mau have been calling for the renaming of this landscape after Field Marshall Dedan Kimathi, who used it as his base during the war as "this would remind successive generations of the hero who fought for Kenya's independence" (Daily Nation, 2014, p. 2). This further demonstrates that the community is not disinterested in names of their landscapes, their history, their stories, and their location on and in the landscape.

4.4.5 Wiyathi twarutire Githaka/our independence was derived from the forest/land

Cover yourself with bamboo leaves so that they may not see you. They are evil and brutal. --Letter from Comrade Puda to Field Marshall Dedan Kimathi (Maina wa Kinyattĩ, 1986, p. 104)

The forests of Nyandarwa and Mount Kenya were critical in launching and sustaining the Mau Mau rebellion. The Mau Mau war for independence was positioned within, and for, the landscape. At the heart of the Mau Mau rebellion was a struggle to regain land but also to recover African pride and dignity. As an elder (East, 10 February 2016) so eloquently put it:

The Beberu came and took land that belonged to our people. They then constructed huge houses and created ranches. Then, the local people were employed by the Beberu as labourers to herd cows, cultivate wheat, to pick pyrethrum, and to herd sheep – for wool. This is why the white man was constructing the railway line. So that it could transport wool and wheat from the interior to Mombasa (Kenyan coast). They had to construct a way of transporting these materials. And then they contradicted people because they came through Christianity. There were missionaries and administrators. The white man came with a Bible in one hand and a gun in the other. Then, they started teaching the local people a song which went like this: Goats, cows and money are not important What is important is the blood of Jesus When I look this way and that way I see angels Ehh? So, the Beberu is teaching this, but all the wool producing sheep are his. All the cows are his. The wheat is his. The pyrethrum is his. But those who are harvesting all these things are told that goats, cows, and money are not important. But, he has come all the way from Britain to enjoy all these things. So, there were contradictions. And this is what birthed the Mau Mau.

After the infiltration of settlers into the territory, the Agĩkũyũ found themselves needing to name the land. As Ngũgĩ wa Thiong'o (2012, p. 59) explains, "my coming of age had been shaped by the white monolith. Mbari ya Nyakeru, pitted against a black monolith, Mbari ya Nyakairu. The very identity of the land was contested: White highlands versus Black peoples' land." Re(naming) was the first step in launching the struggle. The Agĩkũyũ did not passively acquiesce in their fate. They self-mobilized to fight for the land which had now been stolen by the settler, the missionary, and the colonial government. Several scholars (Anderson, 2005; Elkins, 2014; Kanogo, 1987; Kariuki, 1964; Ngũgĩ wa Thiong'o, 2012; Maina wa Kinyattĩ, 1986) agree that Olenguruone in Kenya's Rift Valley was the epicentre of the Mau Mau Movement. Several thousands of Agĩkũyũ people had been forced to leave the White Highlands and settle at Olenguruone. The Beberu no longer needed them because they had started mechanised farming. Here, yet again, the Beberu instituted stringent and oppressive rules on the use and ownership of land. The Agĩkũyũ resisted, the consequence of which was eventual eviction yet again.

As has been discussed in chapter 1, thousands of Gĩkũyũ people left their ancestral territory [now renamed White Highlands] and moved to work on settler farms which sat on the traditional territories of other communities such as the Maasai and the Kalenjins. This mass enslavement of the Agĩkũyũ nation created fertile ground for resistance. The discontentment of Gĩkũyũ soldiers who returned from the Second World War – which they were made to believe was a war against Hitler, "a dreaded beast let loose in the world" (Ngũgĩ wa Thiong'o, 2010, p. 35), galvanized the movement. After all, the only reward that these returning Gĩkũyũ soldiers got for their service to the British was poverty and unemployment, while their British counterparts were rewarded with land that in some cases belonged to them. When all else failed, the Agĩkũyũ returned to their indigenous knowledge systems. A key indigenous practice was oathing. The squatters at Olenguruone "radicalized the traditional Kikuyu practice of oathing" (Elkins, 2014, p. 25). As Elkins (2014, p. 25) argues:

Typically, Kikuyu men had taken an oath to forge solidarity during times of war or internal crises. The oath would morally bind men together in the face of great challenges. But at Olenguruone the oath was transformed by the changing political circumstances of British colonialism, and local Kikuyu leaders administered it not only to men but to women and children as well. This oath united the Kikuyu at Olenguruone in a collective effort to fight the injustice of colonial rule.

The fact that the oath was given to children is corroborated by an elder (East, 18 October 2015) who argued that:

Kimathi and Mathenge [prominent Mau Mau guerillas] started the fighting when I was getting married. When I was married, we were attending the independent church. Then Kimathi and Mathenge came and started singing: "Tell the youth wake up so that we fight to get our land back." That is when I knew they were to fight for independence. We took the oath with my father and our two kids. We also took an oath in the forest.

This participant also highlights the fact that politicizing the youth was a critical ingredient to solidifying the movement. This idea of waking up or awakening was consolidated and encapsulated in the administration of and taking of the oath. At the core of Mau Mau mobilization was education and the integration of elders. The latter were critical in informing the youth, who were taking arms, that their land which was given to them by Ngai had been stolen and that it was their duty to fight to restore it. Teaching and education are all indigenous practices, and amongst the Agĩkũyũ, elders played a critical role in this regard. According to an elder (West, 13 November 2015) who had participated in the Mau Mau war:

We were educated. We were taught and told the following: This land was ours; It was taken from us through deceit. You should know that you are slaves. If a child is born here (by a Beberu family) you would have to refer to them as 'memsahib.' If it was a boy they would be referred to as 'bwana kidogo/small sir.' They used to go and teach their children in Mombasa. Even if you had stayed with that child and had good relations – they would now say – you should call me small sir. Because of what they had been taught there. That a black person is a bad thing. This is why we fought for independence. We also fought because we were being beaten and being fed on mathache! We also fought because the white man wanted our

women to have many children so that they could harvest his pyrethrum. So we asked – for how long are we going to remain slaves? So, we decided to take the oath and get into the forest. Then a state of emergency was declared.

This emphasizes the role of education and memory keeping in the struggle for community livelihoods and fighting against injustice. This was not formal education although some of this teaching was carried out through the independent churches and schools. Teaching and politicization were important for ensuring that the oath was taken seriously.

Edgerton (1989, p. 35) highlights the details of the indigenous oathing practice, which are worth quoting at length.

The ceremony was patterned after traditional male initiation ceremonies. Involved slaughtering a goat, of one solid colour if possible, collecting its blood in a gourd bowl, and cutting out its chest area. The goat was then skinned and the skin cut into one long piece, which was tied together to form a large ring. The oath administrator who wore a long white gown, smeared himself with clay or red soil. The persons taking the oath each put on a large necklace of woven grass, and the administrator put the goat skin ring around them. The entrance to the ceremonial area was a traditional Kikuyu arch made of rushes, flanked by stalks of sugar cane and arrow root. In front of the arch was a trough filled with various kinds of Kikuyu foods mixed together with soil and goats blood. Those to be oathed were cut seven times, (seven was an ominous, evil number for the Kikuyu), and their blood was mixed with that of the goat in the bowl. Later on, after the arrest of some of the oathers, the practice of cutting stopped because the resulting scars were evidence of oath taking. After the oath administrator had encircled the initiates with the skin ring, he asked each one of them "what are you?" The correct answer was "I am a Kikuyu." As each initiate answered the oath administrator made a cross on his forehead as a sign of unity with other Kikuyu who would fight for the country's freedom. The stick was dipped in the bowl that contained the various things. The oath administrator also said that the cross was a sign of Gikuyu and Mumbi, the mythical parents of the Agikuyu people. Finally, initiates had to bite meat from the chest, heart and lungs of the goat – all of which had first been dipped in the bowl of blood - seven times, and then walk through the arch. They were then taken to a nearby hut for a lecture on the oath and the "movement"

Breaking an oath was considered a serious crime and to do so would lead one to eventual destruction. The Mau Mau oath was an expression of patriotism and an uncompromising quest for freedom. To ensure its effectiveness, this oath was highly secret and the consequence of divulging the contents was instant death. The oath was administered widely in the Rift Valley, Nairobi, and central Kenya. Eventually, Agĩkũyũ territory in central Kenya became the citadel of the Mau Mau rebellion. Just like when the Gĩkũyũ prayed, they now 'faced' Nyandarwa and Kirinyaga. Salvation was to come from these forested mountains, the land of their ancestors; land that had been given to them by Ngai. Salvation was to come from shedding of the blood that flowed within them. In addition to the indigenous practice of oathing, the use of songs was central to Mau Mau mobilization. For instance, according to Henderson (2005), the various Mau Mau Nyimbo/songs dealing with Olenguruone testify to the effect their opposition had amongst the discontented elements of Kikuyu society. For instance, one of the participants informed me that they would sing and say "when we came from ringuruon [Olenguruone] we were guarded. Were in a train parked like pigs, the vehicle was moving like wind and we passed there very early." Koigi wa Wamwere (2002, p. 26) also documents one of these kinds of songs:

There was great wailing at Olenguroune Even as we collected together our belongings The enemy was scattered about The enemy was telling us Hurry up quick Are you forgetting you are criminals?

Chorus

We will greatly rejoice The day Kenyan people Get back their land

We are being oppressed all over this land Even our homes have been destroyed And our bodies have been exploited But do not be afraid We are heading for a great victory

Various methods were used to politicize and mobilize the masses. This is illustrated in this song below which positions the struggle in a historical context by linking it to unfair treatment of Waiyaki (discussed in chapter 1), who had by that time been turned into a martyr by the Agĩkũyũ. The song also positions the struggle in a

futuristic context – that, this struggle is for our children. According to an elder (West, 10 November 2015) this song went like this:

Waiyaki's war was the first one It was a big war Waiyaki called them and asked Are you letting all the land to be taken away? What will our children inherit? You are letting all the land be taken away. What will our children inherit?

These emotive songs of protest were an intellectual and philosophical repository of Agĩkũyũ cultural traditions which were effectively used to galvanize the struggle against colonial injustice. They provide hope, are a record of crucial historical events, and speak to the cultivation of Gĩkũyũ identity. As Mau Mau mobilization proceeded, Sir Evelyn Baring, the then-governor, declared a state of emergency in the colony in 1952, and as Ngũgĩ wa Thiong'o (2010, p. 155) writes, "the war machine that had once been directed at Hitler was now turned against us." Elkins (2014, p. 37-38) further points out the following:

With the emergency now in effect, hundreds and eventually thousands of Mau Mau adherents fled to these forests, where a fragmented leadership had begun to establish individual platoons before the emergency started, and now was responsible for taking young men and women who had never seen combat and turning them into soldiers. Some of these leaders had served in WW2, had been in combat in Southeast Asia and were able to draw on their prior military experience to organize the troops in the forest...Outside the forests, Mau Mau adherents organized an intricate, passive wing operation that would provide intelligence, weapons, food and other supplies to the forest fighters. It was the size of this passive wing that reflected the grassroots depth of the movement.

War had befallen the land. The instructions to the Mau Mau were clear: whenever you encounter a Beberu – slaughter to death. When you encounter anyone siding with the Beberu (especially the home guards) – slaughter to death. Indeed, the process of getting rid of home guards was termed as "levellation" (Maina wa Kinyattĩ, 1986, p.xi).Indeed, "home guards and other traitors were regarded as stumps in a field, to be levelled and gotten rid of" (Njama & Barnett, 1970 as cited in Maina wa Kinyattĩ, 1986). This executionary style, combined with the oath taking, led the British to conclude that the Mau Mau were atavistic, anti-Christian, and retrogressive. A relentless propaganda campaign was instituted to discredit the Mau Mau abroad, and in the colony. The hunt for the Mau Mau was ruthless and savage. They instituted an all-out war that was characterized by gruesome violence and brutality²⁹. They were considered animals that roamed the colony. They needed to be exterminated. An estimated 90,000 people were believed to have been executed and 160,000 detained in inhumane conditions (BBC, 2011).

It became clear that, in order to dismantle the movement, the passive wing outside of the forest had to be demobilized. All Gĩkũyũ³⁰ became enemies of the colonial state, and a system of brutal collective punishment was introduced. Blood flowed freely. To support the internal war, the British recruited loyalists from the Gĩkũyũ community. These were the homeguards. Their reign of terror is still remembered with much trepidation and utter disdain all over Gĩkũyũland. The passive wing mobilization was effected through the creation of concentration camps through a programme referred to as villagization which was:

The innocuous name the colonial state gave to the forced internal displacement, was sprung on the Kenyan people in 1955. I had heard of the agents of the state bulldozing people's homes or torching them when the powers refused to participate in the demolition. Mau Mau suspects or not, everybody had to relocate to a common site³¹. In some regions, the state forced people to dig a moat around the new collective settlement, leaving only one exit and entrance. The whole of central Kenya was displaced, and the old order destroyed, in the name of isolating

²⁹ Various methods of torture have been documented. These include, but were not limited to, castration; women having their vaginas stuffed with stinging nettle, snakes, boiling water, and broken bottles; burning with hot irons; starvation; beatings; public hangings; and being covered with faecal matter.

³⁰ Other Kenyan communities participated in the Mau Mau revolt, but this study focuses on the Agĩkũyũ.

³¹ There was a clear difference between the loyal and the disloyal in the gĩchagi. This was reflected in the architecture. The loyal lived in houses roofed with corrugated iron sheets and with adequate spacing between them. The disloyal lived in congested mud-walled, grass-thatched houses. The loyal were likely to have the whole family, while the disloyal were likely to be just mothers and the children. The men were either in the forest or had been detained in the other concentration camps scattered all over the country.

and starving the anti-colonial guerillas in the mountains. (Ngũgĩ wa Thiong'o, 2010, p. 13)

According to those interviewees who had lived through this experience, a lot of trees had to be cut down to establish the new gĩchagi/concentration camps and homeguard posts. Tied to this was the digging of a trench all around the Nyandarwa mountain – again, with an aim of starving the Mau Mau. The trench was dug through forced labour derived from those who were perceived to be loyal to the Mau Mau. Like the moat in the gĩchagi, this one too was filled with spikes of sharpened wood. Trees had become a symbol of torture. The reign of terror was now in full effect, and the cry of the people was echoed in the forest:

People lived under a double fear: of government operation by day and Mau Mau guerilla activities by night, the difference being that while the guerrillas were fighting for land and freedom, the colonial state was fighting to sustain foreign occupation and protect the prerogatives and wealth of European settlers. (Ngũgĩ wa Thiong'o, 2010, p. 206)

While there was limited freedom of movement and association before, the declaration of emergency marked the total disbandment of all basic freedoms. The people lived under constant surveillance and could be stopped and searched/screened any time. This was facilitated by the erection of tall wooden towers stationed on the highest point on the landscape. These would be found at home guard posts. As Ngũgĩ wa Thiong'o (201, p. 38) posits, "for all practical purposes, the line between prison, the concentration camp and the village had been erased." People were driven to the forest by several forces – amongst them the villagization process as well as the utter brutality of the colonial regime outside the forest – as Maina wa Kinyattĩ (1986) illustrates in this open letter from Dedan Kimathi³² to the colonial authorities:

Because of the government's policy of moving people without consideration, and harassing them in reserves, many people have come to the forest for fear of being

³² Field Marshall Dedan Kimathi was the de facto leader of the Mau Mau. The movement faltered when he was arrested and hanged by the Beberu in 1956. His body was allegedly buried in an unmarked grave. The family and Mau Mau veterans have been petitioning the British to reveal his grave so that he is given a decent and heroic burial. The wait continues.

killed or badly beaten. As a result, Mau Mau has increased a thousand times and now I am glad that I have many soldiers. (Maina wa Kinyattĩ, 1986, p. 57)

On the heels of the establishment of ichagi concentration villages, the colonial state introduced forced land consolidation, which was designed to amalgamate land holdings. This programme was introduced in Gĩkũyũ land before it spread out to other parts of the colony. The goal of this endeavour was to channel the energies of the Agĩkũyũ into productive agriculture and build a middle class which could support social services, such as education (Maina wa Kinyattĩ, 1986). Consolidation was effected through measurement and totalling of individual scattered pieces of land. This system completely disregarded Agĩkũyũ religious beliefs around land ownership, ancestral values, and general social organization. Maina wa Kinyattĩ (1986) contends that an individual could have owned 30 or more pieces of land. After consolidation, a 5% deduction was made for public spaces such as schools and dispensaries; the owner retained the rest as a contiguous piece, and he was issued with a freehold title. Title deeds were only issued to men as they were considered to be the head of the family. This has had negative consequences for women who do most of the agricultural work, but now have no outright rights to land within this system of private land ownership.

The new land owners had no choice over the location of the new consolidated land. According to Ngũgĩ wa Thiong'o (2012, p. 36):

People in the mountains [Mau Mau] and concentration camps were not there to verify their claims. It was a mass fraud, often giving land from the already poor to the relatively rich, and from the families of the guerilla fighters to those loyal to the state.

This further entrenched landlessness and a breakdown of value systems among the Agĩkũyũ since they were now forced to compete for small pieces of land. Conflict was all too common. Furthermore, the new land owners had to clear land in order to cultivate and this contributed to another round of deforestation and landscape change. As one elder (East, 17 October 2015) recounts:

In the past, people had small pieces of land in different places. You could be cultivating here, in Mathioya, or a different place...then land was consolidated

during the colonial period. Let us say a person was given three acres. If you found that there were trees on your land then you would clear them in order to cultivate and get food.

Land and forests were shaped significantly by the Mau Mau war. From the preceding discussion, we see that there was further dismemberment of land, and land distribution practices that entrenched injustices. This has continued to bubble under the surface to the present day. The above analysis also shows that the war for wiyathi and ithaka was sustained by the very land that the Mau Mau were fighting for. In the section that follows I examine the various ways in which Ithaka/land sustained the quest for wiyathi/self-rule.

4.4.6 How the forests sustained the Mau Mau

The hills from the ancient times have seen strange things. (Ngũgĩ wa Thiong'o, 1965, p. 48)

Beyond the forest serving as a hiding place, it sustained the movement in numerous ways, and the guerillas learnt to use various products and the landscape with utter creativity. The forest sustained the Mau Mau in diverse ways: as a source of food and medicine; as a site of strategizing for combat; trees as homes; as avenues for communication; as spaces for religious sustenance and ultimately as a space for death.

4.4.6.1 The forest as a source of food and medicine

Generally speaking, life in the forest was very hard and difficult. Rain and cold caused us untold suffering. Food was also difficult to get, and we usually had to do with one meal a day when it was available. Some of our weak comrades surrendered because of hunger. (Maina wa Kinyattĩ, 1986, p. 121)

At the beginning of the war, the Mau Mau did not intend to use the forest as a source of food. Food was to be supplied by the passive wing (i.e., food was mainly supplied by women who took it to the edge of the forest) or sourced by the guerillas themselves as they came out of the forest at night. Participants in this study reiterated that, according to the Mau Mau, nothing belonged to anybody as long as we did not have Wīyathī. So, if they knocked at your door, you were obliged to give them whatever

it was that they needed. It did not matter that these encounters would put both parties in great danger. As the war intensified, the forest became heavily guarded, and a trench was dug all around the Nyandarwa forest. According to Edgerton (1989), the ditch was monumental. In most places, it was 10 metres deep and 16 feet wide with impenetrable mazes of booby-trapped barbed wire and sharpened bamboo stakes, and every half a mile, there was a police post that patrolled the barrier day and night. Tied to the ditch was the creation of a 1-mile no-go zone, around the forests of Mount Kenya and Nyandarwa. This area was 'prohibited', meaning that security forces could shoot anyone (by which they meant any African) on sight (Edgerton, 1989). At some point, starvation became a real threat that could lead to disintegration of the movement.

To survive in the forest, therefore, required sheer willpower, strategic thinking, and creativity. Examples of this are gleaned from the examination of the movement's operations. The following information is instructive in this regard. Dedan Kimathi instructed the commanders of each camp to construct underground stores: *one for food* (emphasis added); and, one for clothing, writing materials, and other war materials and historical documents about the units' activities (Maina wa Kinyatti, 1986). This was clearly articulated in the narratives by some of the interviewees, who themselves were former Mau Mau guerillas:

We would also store food for a long time. We would dig holes and take that soil away from the hole, then food would be put in until the hole is full, and closed with leaves and branches. No one would know there is such a thing there. That would be our store when the forest food is unavailable or the forest is guarded in such a way that there is no way to get out for more food from outside. We came out of the forest at night to look for food and we also raided livestock from the Beberu farms. I have been involved in raiding 20 or 30 cows. The meat would be dipped in the water for preservation – the water was very cold. (East, 16 October 2015)

Once the Mau Mau were sealed into the forest, they had to make do with other sources of food. As one of the former guerillas that I interviewed explained:

We dug up arrowroots, roasted and ate them. The arrowroots were very bitter. So you would chew and swallow, then drink water and scrape your tongue to remove the bitterness. It is like pepper. That is when there was food shortage because the forest was heavily guarded by the colonial government, and we could not find an

escape route. We would also eat honey. We ate anything that would not kill us. We would also eat fish. The rivers had a lot of fish then. And, remember the government was looking for us. The government would also set bombs on bee hives. They would kill someone, erect him like he is not dead but set a bomb on the body so that when we go to get him, we die from the bomb explosion. So, if we saw a dead body we would not dare touch it because it would be a trap! (West, 13 November 2015)

It can be argued that the Mau Mau were forced to cultivate deeper relationships with the forest because of the prevailing conditions. They had to learn to eat new types of food, learn how to truly live off the land, learn how to store food, and how to read the landscape. For instance, some participants in this study recalled that young bamboo shoots were a food of choice and that, at some, point they also started cultivating crops in the forest. They also had to rely on wild game. As a participant in this study argued, "There were trees that were very important. Like they would use bamboo trees to make traps for wild animals for food." Trees also provided another form of well-being by being sources of medicine. Honey was consumed as food and as medicine for its healing properties. As another elder (West, 11 November 2015) in this study stated:

Yes, they [the Mau Mau] were helped by a lot of trees because you see all the trees that are flowering [were important for producing honey]. They ate a lot of honey because they lived in the forest. They would also use some trees for medicine and others as food.

Trees have remained a crucial source of medicine among the Agĩkũyũ people. It was imperative, therefore, that the Mau Mau ensured that there was a good supply of medicine in the forest. As Maina wa Kinyattĩ (1986, p. 40) explains:

Commander Dr. Kingori informed us that in order to be self-sufficient in medicine, we should try to manufacture our own medicine from the leaves and roots of certain trees like our ancestors used to do. He said that any comrade who knows a particular tree which produces healing medicine should report about it to the medical unit. It was agreed that thorough research should be conducted to identify such trees.

Here we see the importance of indigenous knowledge to the Mau Mau guerillas. There was a deliberate effort to manufacture medicine as informed by research. The forest

kept the movement alive in more than just the physical sense. It also kept them intellectually alive. Food and medicine were central pillars of sustaining the movement and imbuing it with strength for military combat.

4.4.6.2 Forests as a base for military combat

Mau Mau's simple weaponry (i.e., machetes, bows, arrows, spears, handmade guns, and few guns) was no match for the British military machinery, with which they engaged in air strikes as well as on-the-ground combat. One of the key advantages for the Mau Mau, however, was in-depth knowledge of the landscape, which they exploited to gain some advantage. An example of this is narrated in detail by one of the elders (West, 13 November 2015), a former guerilla:

In 1953, [Dedan] Kimathi called us together, around several thousand, but we were reported by one person called Kingori Ngure. When he was arrested for being in possession of a big gun, he directed the colonial government to where we were hiding. The following day, planes came, some from India (Nyagikonyo), they were so big that they would carry so many bombs. Others were also brought from North Rhodesia [now Zimbabwe]. They gathered where we were. A small plane led the rest and on gathering where we were, the small one left. We saw them because we were near a river. We hid somewhere and they started bombing a distance from where we were. They bombed for 20 minutes. The forest was on fire. And yet it was all green. But it was on fire! Ngai is good because no one died, but the bullets were hitting us. Many became fearful to an extent of urinating on oneself -men, women it did not matter. It was bad! We were hoping they did not know or see that we were there, because if they saw us they would for sure bring about 50 planes and bomb us. That night around 7:00 pm, they came back again and bombed our camp. But we were not there because we saw the planes and left. In that time, we were being wiped out but our Ngai saved us. Bombs would be set on our way so that we would die. They used to set bombs using strings, so when we saw the strings we would change our way. A string would be here but linked to a tree further off so if you continued going on that path, the bomb will kill you somewhere in the middle.

There was also a system employed to dig holes near the rivers and create large caves or hiding points. According to those who engaged in combat, they dug in the night near the river, and through the soil so that no one would suspect. They would choose a very deep place where no one would try to access the cave; to get into this cave, you

had to pass through the water. The big indigenous trees acted as good hiding places. As one of the guerillas (West, 13 November 2015) narrated:

We had big trees like Mũgumo, Mũna [*Aningeria adolfi-friedericii*], those are big trees in the forest with big leaves, and we used to stay under them. Even when the bombs are exploding, we hid under those trees. One time, our people were killed in numbers from our camp. When we went there, we found the Beberu was lying down. They stood and started spraying bullets on us. We hid in those trees, we also had guns and we shot back. Then we said – get them and slaughter them! On hearing this, the Beberu ran away. That is the time I saw them running so fast. Then immediately, the plane came and started bombing. When we saw the plane, we ran towards the Beberu because they cannot bomb near their people. We used to have guards for all our camps – during the day and at night too. At one time, we had guards, but at around 6:00am, the Beberu came and started shooting us, then we ran away evading the bullets and only few of us died. People were rolling down like cars to escape the bullets. You make yourself into a ball.

As such, all aspects of land, trees, rivers, and soils were important in ensuring that they waged a strategic battle against an enemy who was armed a million times more than they. To sustain the war, the Mau Mau needed weaponry, clothing, intelligence, medicine, and medical supplies, and these reached them through an intricate supply chain that operated outside of the forest. This was facilitated through a system of prearranged postas/pick up points (Elkins, 2014; Itote, 1967; Kariuki, 1964). According to Elkins (2014, p. 74), there were more risky methods of transporting weaponry because "in some instances, women would wrap bullets around the thighs of their infants, tie the young children onto their backs with a cloth, and make a delivery to the forest. There were Mau Mau outside the forest. As one elder (West, 11 November 2015) who participated in mobilizing weaponry recalled:

We were used as messengers to go anywhere like army barracks to steal guns. We could go ask for food from the army, and while eating, we would trace where the guns and bullets are kept. They would not suspect us and we would steal them. They would make us clean the utensils. We would also work in polishing the Beberu houses, and we would be very slow (deliberately) and they would tell us, "keep on, keep on!" And as they say that the gun would be gone [they would have taken the gun]. So, the boys were inside the Mau Mau, but, in Mau Mau in a very secretive manner. So, we were living on the Beberu land, but we were Mau Mau. Sometimes we would have to polish the floor. Their floors are wooden so they have to be polished. So, you polish the floor while bending on your knees. You could be in there as seven, or eight, or ten boys. So, we would leave two boys under the chair because the Beberu would not count. So, when the rest of us are asked to go we leave because it would be time. When it reached 5:00pm, the Beberu would say, "go on! go on! come tomorrow." Then you come tomorrow. Two boys would be left in the house of the Beberu hiding. When Mau Mau came in the night, the boys would open the doors for them to come and kill the Beberu. We also stuffed ammunition in our anuses because they would check as we left the house. So, they would check and find nothing. Then when we got out of their homes, we would remove them and pass them on to the Mau Mau.

Various strategies were employed to avoid detection or to cover their tracks. As

the elders (East, 10 February 2016 and West, 10 November 2015) recalled:

They [Mau Mau] used to come out of the forest from near my place. They would tie leaves on their feet, then walk on the reverse, and the leaves would rub their footsteps. When going back, they would do the same. So, no one would tell how they came and where they went after that.

Further:

They would come out and hung coats everywhere, so when the airplane comes it would bomb the coats thinking they are people. Then, Mau Mau would shoot down the plane.

According to Edgerton (1989, p. 86) by the time the emergency ended in 1957, the British had engaged in ferocious air strikes in which they dropped a total of "50,000 tons of bombs³³ in the forest and fired over 2 million rounds from machine guns during staffing runs. It is not known how many humans or animals were killed." The Mau Mau's main advantage was knowledge of the forest landscape. This was knowledge that had to be gained the hard way as these high altitude forested areas were not regions that the Agĩkũyũ were familiar with under normal circumstances. They had to learn the forest. Some of the studies (Carothers, 1954) commissioned by the colonial regime erroneously argued that the Mau Mau have a 'forest psychology.' That they were just animals who were returning to their animal-like way of life in the forest. According to the

³³ Participants in this study reported that a grenade had been discovered by children on the edge of the forest in western Nyandarwa in 2014, which is an indicator that there might be many more of these scattered around the landscape. The Kenyan army came in to detonate this one.

Beberu and their collaborators, the Mau Mau were "all that was foul and terrible in primitive savagery"... they were "debased creatures of the forest" (Edgerton, 1989, p. 107-108). This was done to strip the movement of any intellectual creativity or power.

The Mau Mau operated in large forested landscapes. The Nyandarwa range is 149,000 hectares; add that to 213,000 hectares of Mount Kenya and you have an expansive territory. This steep mountainous territory was covered by dense forests and dissected by thousands of ravines. According to Anderson (2005, p. 235):

The forest covered the deeply ridged slopes of Mount Kenya and the Aberdares [Nyandarwa] hills in a thick, green blanket that spread over the land like a shroud. The image of the whole conflict was made in this damp, dark environment, where you could hardly see more than a few yards in front of you, and where, it always seemed to be raining,...the forest was cold, too, as its paths were sheltered from the heat of the tropical sun by the canopy of branches...Moving over the thick swell of ground foliage was made worse by the need to cross the many streams and rivers...No sortie in the forest would happen without the British soldiers having to wade across a half dozen such streams, holding their rifles high above their heads and praying it wouldn't slip. It was a wet, cold, miserable experience.

Forcing the Mau Mau out of rugged retreats like these would be no simple undertaking. The terrain was treacherous and unforgiving for those that had not mastered how to navigate the diverse landforms and weather conditions. The Mau Mau devised several strategies including having mobile camps, using trees as instruments of combat, and using the natural landscapes as strategies of combat. A related element of forests as sites of military combat is the use of trees to manufacture weaponry. To supplement the weapons that they purchased or stole from the British, the Mau Mau had to innovate and manufacture their own weaponry/guns. Kariuki (1964) writes that the leadership encouraged creativity and those that produced the best guns were rewarded. According to participants in this study, some trees, such as Mĩiri [*Prunus africana*], Mĩtamaiyũ [*Olea africana*], and Mĩtarakwa [*Juniperus procera*] were used in the manufacture of guns. The Mau Mau's use of the landscape is a testament to the creative genius of African liberation struggles, and a reflection of the importance of endogenous and indigenous ideas in the quest for freedom. The conflict dislocated people from their home and made them seek a new home in the forest.

4.4.6.3 Trees as homes

Large trees in the forest offered the Mau Mau a good base from which to set up camps. They also were good hiding places when the bombs were dropping from the sky or when they were shot at by the Beberu. According to an elder (West, 13 November 2015) who participated in the war:

We, the Mau Mau, didn't have homes. We had very big indigenous trees like Mîtarakwa [*Juniperus procera*] whose leaves don't reach the ground. That is where we used to stay. Even if it rained the water would not reach the ground. We would not need any tent. We would live there and also light fires. And we would sleep there. We were not staying in one place. We were scattered all over the mountains.

Another participant adds, "we were fighting for our soil. In these forests of Kirinyaga and Nyandarwa, we had our thingira." In Gĩkũyũ cultural architecture, a thingira is the man's house. It is "a quiet abode of contemplation, a retreat into the quiet uncluttered fundamental substance of life" (Mukuyu, 2014, n.p.). The forest, therefore, became an arena for home-building, a space of reflection and regeneration of the self.

4.4.6.4 Communication strategies

The Mau Mau derived several strategies to communicate with those that were in and out of the forest. While the role of oral communication has been discussed, it is important to highlight that the movement made use of the written word too. For instance, the passive wing outside the forest organized a fantastically intricate communication mechanism in which boys known as "scouts" in Mau Mau lingo, played a critical role. As one elder (West, 10 November 2015) recalled:

Boys used to be sent driving their hoops and would take a letter to another village and hand over to another boy of that village who will take to another until the letter gets to its destination. Letters would be taken to as far as Nairobi (300 km away) in that way. The boy would drop the letter somewhere and the men would come from the forest and pick it. Boys would also be used to alert Mau Mau to hide if the sympathizers [homeguards] were coming their way. So, we can say the war was fought with a lot of wisdom. Relaying of messages was absolutely critical within and outside the forest. As Maina wa Kinyattî (1986, p. xiii) writes:

It was Dedan Kimathi's strong belief and wish that the political and military work of the Mau Mau movement should be documented and preserved for posterity. Kimathi insisted that every guerrilla front commander should send a written monthly report on his unit's activities, including minutes of all meetings held in his camp to the Kenya Parliament (KP). Similar instructions were given to all Mau Mau leaders in the villages and urban centres. From the time he established his army in the forest, Kimathi made a habit of writing down his daily observations of the independence struggle in his diary. He also filed all the communications he received as well as copies of all the letters and documents he wrote. He made sure that that the minutes of every session of the KP were set down. These documents, he once told members of the KP, "will be concrete evidence that we fought and died for this land". To preserve these documents the KP established underground archives in Nyandarwa forest in 1953 and appointed guerilla experts to man them. Thus, the first truly national archive in Kenya was established.

A living example of Mau Mau communication strategies and ingenuity is what is named the 'Dedan Kimathi Post Office', one of the tourist attractions and historic sites within the Aberdare National Park. This is a giant Mũgumo tree believed to have been identified by Dedan Kimathi as a suitable post office because it has "natural deep crevices" into which letters and other communication could be tucked in and remain undetected by the colonial authorities. This tree was absolutely crucial in keeping communication lines open between the guerillas in the Aberdares [Nyandarwa] and those in Mount Kenya (Njagih, 2010). The tree remains a symbol of struggle as it was the "silent listener to every revolutionary conversation that eventually aided our fight" (General Kimbo, 2010, as quoted in Njagih, 2010, p. 2).

4.4.6.5 The forest as citadel of hope and spiritual nourishment

The forest was the last point of refuge for the Mau Mau. It became a symbol of hope and solidified the belief that Ngai was on their side. Study participants argued that the Mau Mau had identified specific Mũgumo trees from which they would perform prayers and sacrifices. The movement's activities were punctuated with seeking spiritual guidance from Ngai. According to Edgerton (1989), the Mau Mau would only conduct a raid when the seers (usually women) who were stationed in the forest told them it was safe to do so. Forging spiritual nourishment was reflected in the kinships that the Mau Mau formed with the forest and its inhabitants. The Nyandarwa forest is inhabited by wild animals, including big game, such as elephants and rhinos. How, then, did the Mau Mau survive in the forest and in the presence of these animals? I posed this question to a guerilla that I interviewed and he told me, "we got used to each other. Like one time I lit a fire somewhere and elephants came and they could smell a human person and they just left." A view similar to this one is echoed by another guerilla as narrated in Maina wa Kinyattĩ (1986, p. 121):

We saw two rhinos grazing across the path we were following. Commander Waihwa wa Theuri tried to force them to move from our path but they resisted violently. To avoid dangerous confrontation, Commander Waihwa commanded us to go back and find another path, but the beasts followed us; they were ready for a fight. They troubled us for half an hour before we managed to escape. We could have gunned them down with our machine guns, but our rules prohibited the killing of animals unless it was for food.

This kinship with the forest speaks to the synergies the Agĩkũyũ had with the other inhabitants of the land. It is an embodiment of their indigenous environmental thought that is all encompassing in the sense that it does not place humans at the centre of the universe. This spiritual connection and kinship with the forest is exemplified in the writing of Dedan Kimathi as we shall see below. As highlighted earlier, Dedan Kimathi's letters and notes were widely circulated amongst the movement, and this galvanized the struggle. In the dream below, Kimathi paints a picture of forging kinship with the forest:

Last night I again dreamt that I was talking with our God about the struggle. It was a fantastic dream: I felt someone take hold of my hand in my sleep. I woke up and heard Mwene Nyaga saying to me: 'My son, come with me'. I stood up and followed him. We walked together, discussing our glorious struggle. We passed through a very beautiful forest where there were many red and yellow flowers and hostile birds with red wings. When these birds saw us, they started shouting: 'Kimathi we are with you! Do not give up the struggle!' There were many big shining rocks around us, and clean springs were flowing from them. Across the valley, there were thousands of women from all Kenyan nationalities singing songs of praise of our heroic struggle. I was really moved. We walked to a Mugumo tree, which was bigger and taller than all the other trees in the forest; a tree that was like the king of all trees. I rested my hand upon it, then Ngai spoke to me again. 'Kimathi', he said calmly, 'this is my dwelling place and here I will guard and protect you. I will make sure that your enemy is defeated and the peace will return to this beautiful land.' Then, suddenly, the tree came up out of the ground and ascended up to the clouds and disappeared. It rained heavily after that. The morning call for breakfast interrupted my dream and I woke up. (Maina wa Kinyattĩ, 1986, p. 82)

Various scholars (Archibald, 2007; Cajete, 2000; Kovach, 2009; Wilson, 2008) have articulated the role of dreams in shaping indigenous ways of knowing. Dreams are catalysts of knowledge development. Indigenous epistemology, axiology, and ontology arise from the interconnections between the human world, spirit world, and inanimate entities (Rowe, 2014). Communication containing such dreams (such as Kimathi's dream above) emboldened the movement and shaped the thinking about the environment they found themselves in. The forest and powerful trees (such as the Mũgumo) remained a lens through which they could understand and sustain the struggle and make sense of their reality. All the elements of the land, including the elephants and birds, joined in the struggle for the soil and liberation.

4.4.6.6 Death in the forest

Many Mau Mau perished in the forests during the war. The bones of all of those who fell during the war remain unburied in the forest. Others were killed and dumped in the forest. According to one of the elders (West, 10 November 2015):

In Nyambari, in Uplands, there is a forest where so many people were killed, people were being arrested from Kiambu reserves, and were being taken to the Uplands. They were cheated that they will be given land, but on reaching there, all of them were being shot because they were accused of having taken the oath.

The sons and daughters of the soil fought for wīyathī and ithaka with vigilance and determination. The forest embraced their struggle and protected them from the enemy. The soil that they fought for carries their memories. The soil that the fallen clutched in their fists as they met their death reverberates with echoes of courage.

Courage that drove them to fight the colonial regime that was armed to the teeth. Courage to fight, not for their individual gain, but to throw in their lot with the community (Ngũgĩ wa Thiong'o, 2010). They drank from the cup of courage. The forest echoes with the cries of all those bones that continue to lie within it. The trees in the forest weep for Field Marshall Dedan Kimathi and all the Mau Mau warriors of justice (dead and alive). They are soaked with the blood and sweat of our people who fought with courage and determination. As a participant in this study argued, for the Agĩkũyũ, the forest brought "thayũ/peace in this beautiful land." We should never forget that "wĩyathĩ twarũtire githaka"/we got our independence from the forest, and that protecting the forest is one way of immortalizing this glorious struggle. Wĩyathĩ twarũtire githaka.

4.5 The post-independence epoch (1963 to present)

Kenya transitioned into internal self-rule in 1963 and full independence in 1964. The post-independence state adopted colonial legislation and a system of governance *in toto*. As Fanon (1961) argues in his ground-breaking text, *The Wretched of the Earth*, the national middle class which took over power at the end of the colonial regime is an under-developed middle class. This middle class, Fanon (1961/2004, p. 98) further contends:

Is not geared to production, invention, creation, or work. All its energy is channelled into intermediary activities. Networking and scheming seem to be its underlying vocation... it has the psychology of a business man, not that of captain of industry. And it should go without saying that the capacity of the colonists and the embargo system installed by colonialism hardly left it any choice.

Colonial forest protection legislation remained in force after the attainment of independence. The hallmark of this legislation was the creation of pristine protected areas, to the exclusion of communities that lived around these landscapes. As such, most of these protected areas, including the Nyandarwa ranges, remain contested spaces. Various political regimes had a bearing on the social and economic conditions of the country. In the following section, I examine forest governance within the four post-independence regimes.

4.5.1 Post-independence presidency as evocative of forest connections

This section will discuss the manifestation of people-forest relationships in three epochs after indepence: the Jomo Kenyatta, Moi, Kibaki and Uhuru presidencies.

4.5.1.1 The Jomo Kenyatta presidency (1963-1978)

One of the participants noted "During [Jomo] Kenyatta's time, we had not destroyed the forest. Tũtiari atheru maitho/Our eyes had not been cleaned/opened." (East, elder interview. 18 October 2015)

By the time the country attained independence, the fact that the forest was colonial government property was ingrained in the minds of the Agĩkũyũ. At the time of independence, forests were considered a no-go zone, and were largely intact in the areas where land had been 'declared.' Interviewees argue that the Kenyatta government did not destroy forests. At this point, however, there were limited uses of the forest and very low levels of mechanization which were stumbling blocks to forest exploitation. Trees were mainly cut to construct houses and create furniture pieces for sale. The Kenyatta presidency emphasized reforestation programs, as well as the continuation of the Shamba system that had been instituted during the colonial period. This is reinforced by this example put forward by an elder (East, 10 February 2016) in this study:

During Kenyatta's time, every chief was supposed to have tree nurseries. If you wanted to cut trees, then you would be required to replace them and they would check that you have planted.

One of the key tasks for the Kenyatta administration was the redistribution of land or resolving land issues, which were at the core of the struggle for wiyathi. At independence, the British negotiated to have the land that they had occupied sold to the now independent Kenyan state. A loan from the World Bank facilitated the process. It is important to note that the Mau Mau were against this 'double theft' in totality. They did not see why they had to purchase stolen land (Maina wa Kinyattĩ, 1986; Ngũgĩ wa Thiong'o, 2010). In fact, some Mau Mau went back to or refused to leave the forest after independence because they felt the then leaders had betrayed the Mau Mau ideals and the struggle for independence. They felt that land distribution had not been fair. Jomo Kenyatta threatened to flush out the remaining Mau Mau from the forest. Some of the post-independence leaders in Kenya were

not real Mau Mau adherents. Indeed, some of those who had ascended to positions of power were homeguards, and those that had attained wealth through alignment with the colonial authorities. There is general consensus that independence in Kenya was usurped by opportunists (Elkins, 2014; Maathai, 2010; Maina wa Kinyattĩ, 1986; Ngũgĩ wa Thiong'o, 2010). Here, again, Fanon's (1961/2004, p. 97) incisive analysis is instructive:

History teaches us that the anticolonialist struggle is not automatically written from a nationalist perspective. Over a long period of time the colonized [Mau Mau] have devoted their energy to eliminate the inequities such as forced labour, corporal punishment, unequal wages, and the restriction of political rights. This fight for democracy against man's oppression gradually emerges from a universalist, neoliberal confusion to arrive, sometimes laboriously, at a demand for nationhood. But the unpreparedness of the elite, the lack of practical ties between them and the masses, their apathy, and, yes, their cowardice at the crucial moment in the struggle, are the cause of tragic trials and tribulations. Instead of being the coordinated crystallization of the people's innermost aspirations, instead of being the most tangible, immediate product of popular mobilization, national consciousness is nothing but a crude, empty, fragile shell.

The frustration that is expressed in the above excerpt seems to convey the impression of feeling unworthy. Kenya continues to reel from this dysfunctionality in all spheres of engagement, and especially so in matters related to land. The World Bank loan helped purchase land from departing white settlers. Those that were without land were encouraged to form cooperatives and buy land. The Agĩkũyũ who had found themselves in the Rift Valley or who were working in the ĩchagi for white settlers bought land in the region. Kenyatta was quick to remind them that "hakuna cha bure/ there is nothing for free." Those that had been issued with land in the Rift had to clear the trees in order to grow crops. As a talking circle participant (West, 12 November 2015) explains:

We had a lot of indigenous trees here. You could not walk around alone. When the land was allocated to individuals, people started cutting down trees to farm, to construct housing, as well as to fence their land.

Further, it is important to recall that those who came from the ichagi were in a state of complete poverty. After years of enslavement by the settlers, they came out of the whole arrangement with nothing to show for their employment. The existing trees were the only potential source of income and livelihood. As an elder (West, 10 November 2015) recalled:

Most of them came out of ĩchagi as very vulnerable people. So, such a person would have been forced to go get a pole and sell it, so that they would get something to eat. If one is not able to get a post, they get a piece of timber. Or else, you burn charcoal. So, forests stopped being of great help but became a source of business.

According to an elder (East, 10 February 2016) in this study, the Kenyatta regime was characterized by the unofficial policy of "kanyoni wakwa wihithahithe na wagwatwa ndũri wakwa." This loosely translates to "my bird, hide yourself, but if you are caught you are not mine." Amongst the Agĩkũyũ, this was understood as a policy of helping yourself in whatever way you can. This included extracting products from the forest. For a people who were emerging from total domination, this was a manifestation of unprecedented freedom, and it can be argued that this set the stage for exploitation of the forest. In essence, it can be said that the commodification of the forest was entrenched in the minds of the Agĩkũyũ at this point. The forest was like a mine from which to extract minerals. In this case, the mineral was timber.

4.5.1.2 The Daniel Arap Moi presidency (1978-2002)

Daniel Arap Moi assumed the reigns of leadership after the death of Kenyatta in 1978. His leadership was anchored on the "Nyayo philosophy." Fuata Nyayo meant following in the footsteps of the Kenyatta government, which was anchored on eradicating poverty, disease, and ignorance. Like the Kenyatta policy of tree planting, Moi's slogan was "ukikata moja, panda mbili/if you cut one, plant two". The only difference between the Kenyatta and Moi policies is that the latter was not enforced. While Moi's presidency was perceived as proactive and pro-development in its initial years, the situation completely deteriorated from the 1980s to the 1990s. It is widely believed (by participants in this study) that Moi presided over the destruction of forests in Kenya. While the destruction of forests may have been initiated in the Kenyatta era, all the blame is heaped onto Moi's era. That Moi completely "ate the government" and finished it is a common lament. As one of the talking circle participants (West, 12 November 2015) argued:

Moi's time was the worst because, even if he didn't do it himself, people were allowed to go into the forest and cut down trees without much protection. There was a high degree of lawlessness. You could get away with anything. Forest products were transported in broad day light. People would burn forests so that they can get land...During Moi's time, we also see videos of the one [Prof. Wangari Maathai] who protected the forest being beaten by the government. I feel like crying, but since I am a man, I will not. So, during Moi's time, there was a lot of war – this is when people got a lot of illegal land...let me stop there. I feel bad.

While acknowledging outright elements of ethnic favouritism in Kenyatta's regime, the participants seemed to intimate that Moi had eyes (people) on the ground that helped him to exploit the forest. According to a talking circle participant (East, 23 October 2015):

When we come to President Moi's time...the forest was...invaded by different people from very far. They would come and claim their two acres in the forest and continue burning charcoal there, and they would not plant any trees

Moi's government was associated with high levels of repression and outright dictatorship. The Moi era introduced the Nyayo Tea Zones (a project funded by the World Bank) as a strategy for protecting the forest by preventing further encroachment. Those who live near the tea zones had positive things to say about them even though the ecological and social impacts of the tea zones are not understood at the community level. In addition, there was no known attempt to seek local communities' input into how best to conserve forests while ensuring healthy people-forest relationships at the time of the establishment of the tea zones. According to an elder (East, 11 October 2015) who lives adjacent to a Nyayo tea zone:

When Kenyatta died and Moi took over... [his government] started selling the forest...subdivided the forest a lot. You can see these tea bushes in this zone which forms the boundary. Kenyatta [government] did not have such things...[His government] wanted the forest just to remain as it was. [The] Moi [government]

introduced tea bushes. The tea is good because it helps us. Any poor person gets into the tea zone and picks tea and makes money. So, the tea is not bad. So... [his government] did a good thing but...oppressed us a lot. If... [his government was] the one in power right now, there ... [would] be no freedom of speech. The people who are speaking a lot right now would be restricted. If it was [the] Moi government] days ungefinywa ama uhurwo shindano³⁴!/ you would be eliminated!

There are 17 Nyayo tea zones in Kenya (Nyayo Tea Zones Development Corporation, 2016). These are managed by the Nyayo Tea Zones Development Corporation whose mandate is "to enhance the conservation of forests and protection of the environment, to produce the internationally renowned Kenyan quality tea, to produce fuel-wood that is essential in tea processing, to create jobs as well as earn revenue for the Kenyan government" (Nyayo Tea Zones Development Corporation, 2016, para. 3).



Figure 4.2 A Nyayo Tea Zone adjacent to the forest in eastern Nyandarwa.

It was during the Moi era that Nobel Laureate Wangari Maathai's struggle to protect the forests was thrust into international limelight. Maathai, through the Green Belt Movement, was involved in protesting the grabbing of public land (some of it forest land), massive deforestation, and poor governance. As Maathai (2005, n.p.) says, "I

³⁴ This literally translates to "you would be squeezed or injected."

found myself not just a woman wanting to plant trees to provide food and firewood. I found myself a woman fighting for justice, a woman fighting for equity. I started planting trees and found myself in the forefront of fighting for the restoration of democracy in my country." While the battle to save forests and public spaces raged, communities joined the movement and emboldened the struggle even as the crackdown on protestors laid bare the brutality of the state. Forest, land, and environmental issues coalesced with the agitation for democracy. Maathai (2010) emphasizes the correlation between the state of the environment and the governance system in place. If the environment is in a bad state, the governance is likely in a similar state.

It was during Moi's time that the Kenyan economy faltered. Structural Adjustment Programs were instituted by the International Monetary Fund and the World Bank in the 1980s (Rono, 2002), and this had a bearing on all sectors of society. Characterized by divestment or reduction of government spending in the public sector, for example, a significant number of well-qualified staff were prematurely retired from the forest department (Rono, 2002; World Bank, 2007). As such, all public institutions, including the forest department, began to unravel. By the 1990s, inflation was at 27.5% and poverty was rife (Oyugui, Kigozi & On'gwen, 2014). Poverty and corruption fused to form a combustible mix that saw the forests go up in flames. Those who were deprived of a livelihood had no choice but to go into the forest to scratch out a living. This was the case in the Nyandarwa forest. As two interviewees recall:

During Moi's time, it was really bad. My father was burning charcoal just near where we are, and I remember there was total clearing of the area before burning charcoal. The forest was almost finished. It lacked value. You would look to the forest and just see billows of smoke rising up. People went into the forests to get items for money. It is thina/poverty that makes people go into the forest. If you had everything you needed you wouldn't need to go to the forest to suffer in the rain and cold. But there is no place that thina cannot take you. (East, talking circle participant. 22 October 2015)

I was employed by someone who had twenty-four power saws. I was his driver. Once the power saws are powered in the forest they go *meeeeehh* like sheep. You would not know which one is yours. We would carry ten tonnes of timber in one trip. I worked for him for more than ten years. (West, elder interview. 11 November 2015) As a result of public outcry, civil society, and international pressure, Moi effected a ban on illegal logging in the indigenous forests in 1999. A testament of the destruction is evidenced by the fact that it is very difficult to find many trees that are older than 50 years. There was a lot of public engagement in politics in the second half of Moi's regime and, since life was unbearable in every aspect, communities resorted to a lot of self-help interventions to restore their water catchment areas, as well as other livelihood-related matters.

4.5.1.3 Community self-mobilization to protect the forest

As outlined above, forest adjacent communities had been driven into the forests by poverty. There were different groups of people in the forest. In the eastern Nyandarwa, it is believed that some of those who were burning charcoal came from as far away as 500 kilometres away. Faced with difficult living conditions outside the forest, the residents of eastern Nyandarwa joined the foray in the forest and were involved in either charcoal burning or transporting charcoal and timber. According to one of the residents of this area, "we also became thieves and we would warn each other about the presence of forest officers. We used to live in the bush." One of the elders in the community decided to mobilize the community to fight the invaders (including his own community) and protect the forest. The mobilizing elder (East, 10 February 2016) explains:

I saw what was happening and gathered other men of my age in this area and we said *enough is enough* [emphasis added]. I mobilized men of my age because I realized that our children will be hearing it as a form of history that there were once camphor³⁵ trees, but they will not know what that looked like. We agreed that we will not allow anyone to cut down any more trees. Trees were being cut down by the Bukusu, Kisii, Aganda and even Agĩkũyũ, some of whom are here. People would just go into the forest and allocate land to themselves, and start cultivating. So, we took our weapons and torches and went into the forest. We could go in, find charcoal burners, and bring the charcoal into the open and burn it to ashes. We could find logs of wood for timber and we bring them down and cut them into

³⁵ This was and is one of the highly sought after hardwood species. It is now classified as endangered.

pieces...we did not want it! We could find their houses and demolish them. It is at this point that the government saw we are doing a good job and they decided to join us and gave us security. After that, the late Wangari Maathai would pass here with a helicopter. Wangari would make sure it is announced in the news how the forest is being destroyed. The helicopter would come low and announce for people to leave the forest and the people concerned would worry how they would hide themselves. After this, we started planting trees. We have planted 95,000 trees in this forest through collaboration with the Green Belt.

This intervention was successful for various reasons. First, there was gerontocracy involved. Respect for elders is one of the defining elements of the African societies. Second, in addition to receiving support from the government and the Green Belt Movement, the community decided to 'watch one another' since everybody was involved in the destruction. This event remains etched in their collective memories and is narrated with much pride. It features among the historical happenings that had a bearing on the larger community, and whose impact penetrated their environmental consciousness. Highlighting the role of community mobilization in forest restoration is important because (as one of the interviewees emphasized) "the government doesn't become efficient without information from the community." The community did not wait for somebody to come and resolve the problem. They rose to the occasion and they were the better for it, for, as they say, once the forest was restored, they became clean and glorious.

4.5.1.4 The Green Belt Movement

The elder quoted above recognized that they were supported by Nobel Laureate Prof. Wangari Maathai and the Kenyan government in helping to restore the forest. The Green Belt Movement came onto the scene in Nyandarwa before the 1990s, but it was in the 1990s that there was higher visibility because the forest was actually 'going up in flames.' The impact of their work in collaboration with the community is clearly visible in eastern Nyandarwa. Efforts to restore the forest bore fruit and this is exemplified by the testament of the changes that have been witnessed since the destruction was halted. For example, a talking circle participant (East, 22 October 2015) in this study argues that: When cutting of trees stopped, it rains frequently and we do not lack rain. The weather is good. And the forest is beautiful. We stopped the destruction! The trees give us fresh air to breathe. Also, in this forest when a tree falls and dries up, we get firewood. When it is dry, the weather is not very hot because of trees. Grass for our livestock is available in the forest. Good climate for farming is back, there is no food shortage. The forest is beautiful making the environment look good. To me, that is a good thing.

The Green Belt Movement became more visible during Moi's time because of the direct clash between the founder, Wangari Maathai, and president Moi. Maathai waged battles against the grabbing of public land (a lot of it forest land) and other public spaces, and the destruction of forests and the environment in general. She came face to face with Moi's brutal administration and was thrown into prison on several occasions. She was, however, defiant and reminded the government that "we are not going to dignify theft." The Green Belt Movement placed forests at the centre of national consciousness; accordingly, discourse around forests, land, and governance coalesced into a concrete whole. Maathai's interventions were acknowledged at the community level and local mobilization ensured that the message of protection of the forests were actually public land and not government property. She emphasized that the state held these protected areas in trust for the people, but that the kind of government we had in place could not be trusted to do so. Hence, the struggle to save forests and public land fed into the need and clamour to change the government and, later on, legislation.

As one elder (East, 18 October 2015) noted, "at first people were not taking her seriously but later on they realized that she knew what she was talking about." Another elder (East, 16 October 2015) adds the following:

Now we know that people live because of trees. Even if we are not educated, we agree with what Wangari wa Maathai was saying: That trees support life, and we need to plant trees. People used to undermine her as a woman who was just making noise. But now they see that she knew what she was talking about. We see a big difference!

She remains a highly respected and admired daughter of the Agĩkũyũ, Kenya, and Africa. Her spirit ignites the passion and commitment of those that are still involved in

the struggle that she began and fought for with utmost dedication. Some of these people are the women and men (interviewed in this study) who worked with her for years to restore degraded landscapes in Nyandarwa. Those that interacted closely with her say, "Ona wangari agikua ndiakuite/even if Wangari³⁶ is dead, she is not dead." She is with the ancestors.

4.5.1.5 Mwai Kibaki and Uhuru Kenyatta regimes (2002-2013-present)

"Kibaki na Uhuru magiuka nitwatheririe furũrĩ/ Kibaki and Uhuru came in and found that we had cleaned the land/community." (East, talking circle participant. 26 October 2015)

Respondents discussed these two presidencies together because, at the time of this research project (2015), Uhuru had only been in power for two years and his performance could not be assessed independently, as yet. Kenyans had been clamouring for a new constitution before and after the end of the Moi presidency in 2002. Twenty-four years of Moi-era plutocracy had brought Kenya to its knees. It was, therefore, with much relief that the country welcomed the election of the Kibaki government with the hope of seeing better days ahead. The new constitution was brought into effect in 2010, and it sets the ground work for proper environmental governance. A key issue that the new constitution seeks to address is what the country refers to as 'the land question'. A new forest policy was also instituted after over 15 years of debate (a testament to how many vested interests there are in forests and/or land in general in the Kenyan context). The new policy, instituted in Kibaki's government and reviewed under Uhuru Kenyatta's government, is meant to re-engage people with forests. It is anchored on the recognition that past efforts to protect forests through exclusion of forest-adjacent communities had been an exercise in futility. The legislation, therefore, seeks to re-enforce or re-invigorate people-forest relationships and target communities living within a radius of five kilometres of the forests.

It was also during the Kibaki era that a fence was installed around the Nyandarwa forest to primarily prevent human-wildlife conflict and also reduce encroachment.

³⁶ Wangari Maathai died in 2011.

Human-wildlife conflict was an issue of great concern for those that lived around forested areas. Big game, such as elephants, destroyed crops and livelihoods constantly. According to a talking circle participant (East, 22 October 2015) who lives adjacent to the forest in eastern Nyandarwa:

We had difficult times because when we planted crops, animals like elephants used to come and destroy our farm products. So you would not really farm but you had to buy all your food. But after the forest was fenced, the animals no longer come to destroy our crops.

The fence, however, does not prevent small animals, such as monkeys and porcupines, from eating farmers' crops, and the Wildlife Act does not offer compensation when crops are destroyed by these animals; neither are farmers allowed to kill the animals. During the Kibaki regime, the government became more responsive to the needs of communities, working explicitly towards the protection of forests. Coupled with the new policy, for example, was the restructuring of the forest department to the Kenya Forest Service (a quasi-governmental body responsible for the protection of forests).

One of the policies of the Kibaki government was continuation of free primary education and extension of this to secondary school. According to the interviewees, this had a bearing on the protection of forests because young people were now engaged in school, and they did not invest their time in the forest in search of a livelihood. Coupled with the education programs were youth projects, which contributed to the meaningful engagement of young people. The Shamba system was reintroduced as PELIS by the Kibaki administration. The respondents in the eastern Nyandarwa say that this is of great value and benefit to them. Indeed, it comes up next to water as a great value derived from the forest. The improvement in policy and governance does not mean that forest destruction has been eliminated. The western side of the forest is still facing degradation and numerous examples are provided to demonstrate the impact of this on the community. For instance, one of the talking circle participants (West, 12 November 2015) said the following: If you see clouds of rain come, they will pass until Nyandarwa where there are trees or it would go to this other side where there is a big dam. It rains everywhere else and not here because we destroyed the trees.

In addition, the community recognizes the fact that forests, as a source of money, is ingrained into the minds of the younger generation. According to an elder (West, 10 November 2015), the reason for this is:

The children we are bringing up grew knowing forests have money; Mũtamaiyũ is a tree for producing charcoal; Mũiri...any tree that could produce charcoal; Mũtarakwa is for getting poles and timber. So, the origin of destruction of forests started off from here. Commercialization is what has resulted in destruction of forests.

As can be gleaned from the quotes above, communities understand what the issues are with regards to forest governance or the imbalances that exist with regards to sustainable people-forest relationships. In the same vein, they also understand and engage with activities designed to restore the balance. These will be discussed through the community engagement strategies around tree planting and the sacred Mugumo tree.

4.6 Tree planting

Efforts to plant trees have been promoted by NGOs, such as the GBM, and government agencies. On the western side of the forests, for example, the local people planted trees where the white settlers had planted wheat. There is, therefore, transformation of the landscape in that sense. In this case, they planted eucalyptus trees, which they now feel are a problematic species – there are both negative and positive elements to this. As a talking circle participant (West, 11 November 2015) explains:

Previously, this area was swampy. Then, the Beberu came and showed people that there is a tree [eucalyptus] that can be planted to take away all that water. That is why it is called munywa mai/the one that drinks water. Gatondo [name of neighbourhood] was called so because it was swampy. The trees were planted in plenty and resulted in making the place very dry. In the past, you could not light a fire without using an iron sheet at the bottom. There was a dam some few

kilometers from here, but the dam doesn't have even a drop of water because there is no water. Rivers have dried up resulting to livestock lacking water to drink.

Conversely, there are those argue that you could not cultivate anything in this place because it was too swampy and, therefore, the eucalyptus trees made farming possible.



Figure 4.3 Eucalyptus trees in western Nyandarwa.

There have been a lot of tree planting activities in the country in the last 15 years. In an effort to ease pressure on forests, the GBM, for example, encouraged people to plant trees on their own farms. This was not something that people used to do before. Now there are many young trees on farms.



Figure 4.4 Trees on private land.

Tree planting as a consciousness-raising intervention is illustrated by a talking circle participant (West, 12 November 2015) who argued that:

I used to think trees have no benefit. When I was growing up, our dad used to tell us when we cut down a tree for firewood, we should plant another one. I used to think he is punishing us. But now the GBM has taught us how to plant trees. We did not know how. Planting trees brings development.

It has been argued earlier in this thesis that tree planting was not alien to Agĩkũyũ culture, but what is illustrated above is the effects of deculturation through the breakdown of Agĩkũyũ ways of life as a result of the various factors that have been outlined earlier. Therefore, I read this act of learning how to plant trees among the decultured as an act of cultural re-emergence. Given the prevalence of exotic tree species, much value is placed on indigenous tree species. The GBM has been championing the planting of indigenous tree species. They often clash with the KFS on PELIS. On the western side of the forest, the community refused to engage in PELIS which requires those who participate in it to plant exotic tree species. The community wanted to plant indigenous tree species, and KFS would have none of that. The land, therefore, remains vacant – no food for the community and no trees for KFS.



Figure 4.5 Vacant land (foreground) in which no trees have been planted.

4.7 The sacred Mũgumo in a contemporary setting

Inasmuch as the Agĩkũyũ have largely converted to Christianity, the Mũgumo's sacredness permeates through contemporary times. The Gĩkũyũ psyche still retains a deep residue of traditional belief systems despite their seeming Christianization. The belief in magical practices and ancestral spirits remains a very real existential fact in Gĩkũyũ indigenous environmental thought and consciousness. As one of the elders (East, 18 October 2015) explained:

Yes, we still consider it sacred. I cannot allow firewood from the Mũgumo in my house. It is like a Bible where a house can get burned and the Bible will not. Our brother recently bought land that had a Mũgumo seedling; I told him not to uproot it. I told him that he can remove all the other trees but he should not touch the Mũgumo. Now it's a big tree, under whose shade we sit when we visit him.

This linkage with Christianity is further outlined in Karangi (2008), who writes that the Mũgumo features in Catholic songs with the lyrics, "Ngai is the Mũgumo that never dries while Christians are its branches." Cutting a Mũgumo is considered a very serious offence against Ngai and the community at large. While sacrifices may not be performed under the Mũgumo anymore (on a large scale), it still retains an incredible amount of power and influence in Gĩkũyũ cosmology. As one elder (East, 11 October 2015) emphasized:

No, it is not cut even today. You do not cut it! The Mũgumo falls on its own. Here we had a Mugumo that was in the valley. When it fell, it burnt for a whole year. The fire was started by children.

There is a strong belief that cutting the Mũgumo would bring a curse to the family, and several such cases have been reported. To illustrate this point, one the elders argued that "there is a family that cut the Mũgumo and the all of them started going mad. Until the old men went to sacrifice for the family." To this date, the falling of a Mũgumo is seen to be associated or linked with the supernatural. It is not an "event" to be taken lightly. Elders are called upon to make sacrifices. They are called upon to inform the people of the meaning of this "event." The falling of a Mũgumo tree has been reported as recently as 2015 and, almost every time, fear and panic grip the residents of the particular area.

The Műgumo, therefore, retains an aura of reverence for spiritual purposes and sustenance of Agĩkũyũ indigenous environmental consciousness. It represents "a holistic approach of the Gĩkũyũ towards the environment [and that] taking care of trees is tantamount to taking care of the land and family because when the environment is destroyed, plundered or mismanaged their quality of life is undermined" (Karangi, 2008, p. 117). It remains a pivotal platform in shaping Agĩkũyũ identity.

4.8 Chapter summary

This chapter has outlined how the Agĩkũyũ people have traditionally understood their relationships with the forest. The forest is embodied in the larger landscape within which the Agĩkũyũ perform life. The land/forest is a source of spiritual nourishment, it guides them in understanding governance, and sustains life in diverse ways. The forest is etched in the memory of the Agîkûyû as the source of wiyathi. This is encapsulated in this succinct statement: Wiyathi twarutire githaka/our independence was derived from the forest/land. It is during the Mau Mau epoch that we see various relationships emerging and permeating Gĩkũyũ consciousness on the importance of understanding the landscape, and their role in the same. Agikuyu environmental consciousness is buried deep in the soil. It comes to them through Mũmbi and through Gĩkũyũ. Trees remain a critical element of Gĩkũyũ heritage. Agĩkũyũ relationships with the land began to unravel when the Beberu disrupted the old order of land ownership and governance. Land became a commodity; land became a source of conflict. Land became a contested space and new ecologies were introduced through exotic species and monoculture agriculture. The colonial intrusion and experiments created and continue to create massive suffering in Gĩkũyũ society. The soil is drenched with blood and tears. Indeed, it can be argued that it is through this encounter (with the Beberu) that things fell apart (Chinua Achebe, 1958) in Gĩkũyũland.

It also examines the evolution of people-forest relationships after the attainment of "flag independence" (Rodney, 1972, p.308). Many authors (Achebe, 1983; Ngũgĩ Wa Thiong'o, n.d.; Maina wa Kinyattĩ, 1986; Mbembe, 2016; Mwangi, 2014) agree that Africa is still not free. It is not free economically, socially, culturally, or politically. Looking at the four regimes (i.e., Kenyatta, Moi, Kibaki, and Uhuru), I discuss how economic, social, and political factors have shaped people-forest relationships in the respective regimes. Results show that these relationships have shifted from the pre-colonial, colonial, and during the flag independence era. However, some indigenous ways of knowing remain strong and in effect irrespective of the impacts of various internal and external factors in Gĩkũyũ society. This is best exemplified in the potency of the Mũgumo in Gĩkũyũ indigenous environmental thought.

Chapter 5: Data analysis and findings: Agĩkũyũ people-forest relationships and Indigenous Knowledge Systems

5.1 Introduction

I see an Old Homestead In the valleys below Huts, granaries All in ruins I see a large pumpkin Rotting A thousand beetles in it We will plough up All the valley Make compost of the pumpkins And the other native vegetables (Okot p'Bitek, 1972, p. 204).

Conservation discourse has, over the last two decades, been increasingly cast in the language of community engagement. Conservation strategies and ethos that perceive conservation spaces as those emptied of human presence are caving under pressure. This is especially the case in African landscapes where sites of conservation sit on contested territories that are linked to colonial appropriation of land for settlers and 'conservation'. As several authors (Maathai, 2007; Ngũgĩ wa Thiong'o, 1965; Okot p'Bitek, 1972; Santagnelo, 2014) have argued, the deracination of aspects of African culture, many of which maintained sustainable synergies with the land, were undermined by the destructive legacy of colonialism. Colonial conservation practices were underpinned by the belief that the 'native' was not knowledgeable and had to be guided by the firm of hand of the colonizers in taking care of the bounty that the land had provided them. As Beinart and Hughes (2007, p. 270) write, colonial resource use was underlain by "the belief that the state and its scientists perceived natural resource use more rationally than the local inhabitants. In their eyes, this legitimized their role as ultimate stewards of the land."

This 'stewardship' doctrine meant, among other things, denying Africans their livelihoods – a legacy that continues to haunt the continent today. In the Kenyan context at large, and amongst the Agĩkũyũ people in particular, it is impossible to engage in

conservation debates without engaging with the 'question of land' and the embedded IKS. The enactment of community-friendly legislation through Kenya's Forest Conservation and Management Act 2016, therefore, opens up space for dialogue within which historical injustices tied to land can be interrogated. This legislation has shifted the discussion of environmental justice on the landscape, and lends itself to community-oriented research and or scholarship. It is against this background that this chapter seeks to answer two questions: 1) to what extent are the local, national, and international efforts to promote healthy sustainable people-forest relationships incorporating local communities' IKS? and; 2) how might these communities' IKS inform the proposition of an environmental conservation framework for sustainable people-forest relationships?

Honest community engagement entails digging deep into the local ways of knowing in order to understand people-land relationships. I define honest community engagement as that which is driven by a social and environmental justice imperative as operationalized within a landscape approach. Drawing from in-depth interviews with elders, talking circles with two community groups, experiential learning, and buttressed by archival data, this chapter aims at offering counter-narratives about the position of the Agĩkũyũ in their landscape through the IKS lens. As Maathai (2009, p. 177) writes "for all human beings, wherever we are born or grew up, the environment fostered our values, nurtured our bodies, and developed our religions. It defined who we are and how we see ourselves." The Agĩkũyũ are agriculturalists. Food production is central to their economic, social, and cultural development. Interviews with participants reveal that It is through food production and related ecological restoration practices that IKS is actively manifested in Gikuyuland today. Thus, in this chapter, emphasis will be placed on Agĩkũyũ agricultural and ecological restoration practices; an all enduring testament to the embodiment of Agĩkũyũ people's kinship with the soil. This chapter will further seek to unmask the history of empire in controlling food production and related agroecosystems. The theoretical direction will be guided by Dei's (2000) anti-colonial discursive framework.

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According to Dei and Asgarzadeh (2001, p. 300), this framework is:

An epistemology of the colonized, anchored in the indigenous sense of collective and common colonial consciousness. Colonial in this sense is conceptualized not simply as foreign or alien, but rather as imposed and dominating. The anti-colonial approach recognizes the importance of locally produced knowledge emanating from cultural history and daily human experiences and social interactions. The anti-colonial discursive approach sees marginalized groups as subjects of their own experiences and histories.

I am attracted to Dei's anti-colonial discursive framework because it emphasizes the role of discourse and 'discursive' in order to avoid the rigidity and totalizing nature of theory. Dei & Asgarzadeh (2001, p. 299) argue that this framework recognizes that societies, communities, academics, and political questions are fluid and ever-changing. This framework, therefore, provides the platform to analyze this fluidity and challenge 'intellectual orthodoxies'. Discussion in this chapter will build on the works of Thomas Sankara and Amilcar Cabral, African thinkers who theorize on African liberation, including in the areas of food production and livelihoods. While fully recognizing that Aqĩkũyũ cultural practices and knowledges have been under siege since the colonial incursion, we shall see that they refuse to "make compost of the pumpkin", as conceptualized by Okot p'Bitek (1972, p. 204). Making compost of the pumpkin would be tantamount to total intellectual surrender. I will examine the manifestation of IKS today as evidenced through seed propagation, food preparation, storage, processing, medicine, pest control, and the use of indigenous fertilizers. In the end, we shall see that the Agĩkũyũ show us that we must fight for the land and our stomachs in the same way we fought for ithaka and wiyathi - with courage, with conviction, and drawing from IKS.

5.2 Positioning the Agĩkũyũ on the land through food

The pumpkin in the old homestead must not be uprooted. Okot p'Bitek (1966, p. 41)

I choose Okot p'Bitek's saying above as a departure point from which to discuss efforts to promote sustainable people-forest relationships using IKS because the pumpkin as metaphor is a powerful symbol of sustaining the efforts of revitalization of IKS. The pumpkin is a highly nutritious food in Uganda, the context in which he writes, but the same can be said of the Agĩkũyũ. The old homestead here is a representation of indigenous ways and value systems that are anchored on the land. In this sense not uprooting the pumpkin can be read as a potent form of resistance. Food is a critical lens through which the Agĩkũyũ people understand their relationships with forests or the land. The land provides nourishment and sustenance. Forests are perceived as a product of the land. Therefore, food, food security, food sovereignty, and the embedded indigenous knowledge are important pathways through which we can understand people-forest relationships. FAO (2001, para. 17) defines food security as "a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe, and nutritious food that meets their dietary needs, and food preferences for an active and healthy life." Similarly, Tsepa (2008, p. 20) further understands food security as:

The ability of people to feed themselves by consuming locally grown food. Food security exists when a community has sovereignty over their seed, especially native seeds, fields, animals and homelands; uses traditional farming practices grounded on the Indigenous life principles; develops an understanding of respect for land, reciprocity, interconnectedness, and interdependency between people, land, and their food; employs farming techniques involving a combination of traditional and modern methods that have proven to be healthy for the land and humans; and ensures food self-sufficiency for families, communities, and the nation of a particular place.

According to Christensen (2016, para. 1), food sovereignty can be described as "the right of people to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems in tune with their values, cultures and territories." The definitions above provide a frame for understanding food and land relationships and will guide the discussion in this chapter. According to Manson (2015), recent studies (Elliot, Jayatilaka, Varley & Corbett, 2012; Rudolph & McLachlan, 2013) have demonstrated that indigenous societies understand the problem associated with access to food as underpinned by food insecurity and food sovereignty. This chapter engages with indigenous food and land practices of the Agĩkũyũ. I seek to explain the linkages between food and forests, and/or land and the location of food, food production, use, and storage within Agĩkũyũ indigenous environmental thought. I begin with an historical account that situates food within Agĩkũyũ heritage and its connections with the land. It is important to understand what has been lost, why it has been lost, how it has been lost, what has remained, and how what has remained is manifested. I believe that one cannot defend that which one does not understand. So, in the following section I turn to an historical excavation that is paramount in understanding IKS.

Agĩkũyũ indigenous foods include yams, arrowroots, millet, sorghum, Njahi/black beans, and a variety of wild derived foods. Meat and other animal derived products also feature strongly in Gĩkũyũ diet. Maathai (2007, p. 4) writes that, when a child was born in Gĩkũyũland, they were introduced to the land through food:

When a baby joined the community, a beautiful and practical ritual followed that introduced the infant to the land of the ancestors and conserved a world of plenty and good that came from that soil. Shortly after the child was born, a few of the women attending the birth would go to their farms and harvest a bunch of bananas, full, green and whole. If any of the bananas had ripened and birds had eaten them, the women would have to find another full bunch. The fullness expressed wholeness and wellness, gualities the community valued. Along with the bananas, the women would bring to the new mother's house sweet potatoes from her and their gardens and blue-purple sugarcane (kigwa kia nyamuiru). No ordinary sugarcane would do...while the women gathered the ritual foods, the child's father would sacrifice the lamb and roast a piece of flesh. The bananas and the potatoes would also be roasted and along with the meat and the raw sugarcane given to the new mother. She would chew small pieces of each in turn and then put some of the juice into the baby' tiny mouth. This would have been my first meal. Even before breastmilk, I would have swallowed the juice of green bananas, blue-purple sugarcane, sweet potatoes, and a fattened lamb, all fruits of the local land (emphasis added).

Food tied the community together. It was an instrument of teaching, learning, and social control through all the phases of life. Children learnt how to cultivate the land and, as such, learnt to forge relationships with the land at a young age. According to Leakey (1977), the Agĩkũyũ believe that the seeds of various plants were obtained through divine intervention – a gift from Ngai. The story goes that Ngai removed man from his hut through the roof and, after some days, he returned with a variety of seeds. Seed

and food, therefore, are imbued with spiritual significance and not viewed as lifeless mechanical objects to be manipulated for human gain. Pre-colonial Agĩkũyũ life was punctuated with ceremony – some of these included ceremonies for harvest, planting, and seed purification. According to Kenyatta (1937), prayers and sacrifices were performed before the planting season to ensure that seeds were productive. The ceremony was comprised of various elements that culminated with the actual planting of seeds. Kenyatta (1937, p. 320) writes that:

When they arrive [those who would be going to plant] in the field the elder takes the seed calabashes, and, standing facing Kerenyaga [Mount Kenya], he raises his hands holding one of the calabashes and in this position, he recites the following prayer: "Mwenenyaga [Ngai], you who have brought us rain of the season, we are now about to put the seeds in the ground, bless them and let them bear as many seeds as that of gekonyi [a prolific creeper]."

The prayer was followed by ground breaking using a digging stick derived from a sacred tree, followed by ritual planting of a variety of seeds, and climaxing in the sounding of a horn, marking the beginning of the planting season for all. The planting ceremony was followed by the crop-purifying ceremony. In addition to lamb³⁷ (a feature in all ceremonies), this entailed the use of "makori (an herb believed to have a fertilizing substance, and when burned its smell acts as a protection against insects), mokenia (an herb the smell of which gives pleasure) [and] morohora (herbs for maintaining peace)" (Kenyatta, 1937, p. 320-321).

According to Mbiti (1975), the first fruits/harvest are considered sacred in many African societies. As such, they are used in performance of rituals which prevent any misfortunes that may befall one for eating the initial harvest. Amongst the Agĩkũyũ, the new harvest was to be given to Ngai. This would be achieved through various reciprocal practices designed to ensure relationship building. Reciprocity is a highly valued practice in Gĩkũyũ culture. As the Agĩkũyũ say, "weka wega nĩwe weika na weka ũuru niwe weika/if you do good to others, you are doing it to yourself and if you do evil to others, you are doing evil to yourself." When one visited someone, one carried a kĩondo/basket of food, and on your return, they gave you something to bring back with

³⁷ This was slaughtered and, in some instances, the entrails were used for ritual/prayer.

you. One never visited anyone with 'empty hands'. In addition, food was used to ensure that all of the less fortunate members of society and animals were taken care of. As one of the elders (East, 10 February 2016) explained:

In our culture, there was something called "ĩkũmbi ria Ngai/God's store." Every time you harvested, you were expected to take the first produce there. It was called God's store because everyone was supposed to tithe to God. The store was never closed. Anyone passing from, let us say, Nyeri going to Nairobi would pass there, open the store and remove the food that he wanted to eat. You were not to take anything away. So, the Beberu did not come with a new thing, but a different way of doing what Africans were already doing. They told us that the tithe [10% of your earnings] was to be taken to the pastor, but that pastor has a car, has a plot, has tea bushes. So, a cripple comes and gives 10ksh, and the pastor comes and takes away all the offering. I want to demonstrate to you that the Gĩkũyũ people knew God. Some of these new teachings that came are both good and bad. Somebody is blind, but comes to the church but all the offering goes with somebody who is strong and able to work. How do you see that? God was therefore listening to Agĩkũyũ prayers because they had clean hearts and minds. That is why the pastors are progressing and the church members are suffering because we are feeding the stomach of the pastor. If you find 100ksh, it belongs to the pastor, but you do not eat. So, God is not happy. The devil is seated right in the church, I tell you, my child³⁸. That is why there are so many problems.

As demonstrated in the lament by the elder above, the ĩkũmbi rĩa Ngai culture disintegrated and was usurped by the church. This practice of taking part of your harvest as form of tithe/offering to Ngai is mirrored in the churches (especially the Catholic church) where crop produce is an accepted form of offering. An elder (East, 16 October 2015) who I spoke to however, told me of a practice that has the elements of "ĩkũmbi rĩa Ngai" heritage:

We keep some food for the birds and other things for them to make their nests with. I think it is the work of God. I try such things and now I am encouraged because I see that there are other people who are supporting me or who believe in this kind of work. So, educate people. We need to gũcokia rũhi mũkaro/gũcokia makinya/find our path. Since we fought with those people and defeated them we need to now revitalize our culture. May your work be fruitful!

³⁸ It is a common practice for younger people to be referred to as "my child" because, in many African societies, children belong to everybody.

Food production shapes Agĩkũyũ relationships with the land and imbues their epistemology and ontological positions with regard to environmental consciousness. Food was also the centrepiece around which cultural teachings were weaved. As Muriuki (1974, p. 9-10) writes:

From an early age, a Kikuyu child was informally taught some of the tribal traditions. Tales, riddles and proverbs formed an important source of amusement for the young as they sat round the fire-place waiting for the evening meal to cook. Gradually, the children would in turn learn to relate this newly gained experience to their friends, brothers and sisters. When they grow a little older they learn basic things about their Mbari, for example, the family genealogy, the boundaries of their land, their debtors or creditors, and so on...Being well-acquainted with traditional education was essential, for a departure from the accepted norms and deportment was considered a serious offence because it brought shame to the family. And since individual merit and achievement were regarded to be the criteria for leadership, no individual would have wished to remain ignorant of the forces which held the society together. This was an important incentive to learning.

Cultivation, living off of the land, and their interlinkages with the cosmos were common features in Gĩkũyũ stories. These stories emphasized holistic living; being one with the land, respecting the land, and learning the place of man within and on the land. Now I invite you to 'listen' to these stories narrated by two participants:

Story teller: Ugeni "ĩtha" ndimũganire! Say Itha so that I tell you a story. Response: ĩtha!

Once upon a time there was a man, his wife, his daughter, and two sons. At that time, there was a huge drought and they did not have food. So, they decided that the mother and the children would stay at home and the father would go to look for food. The path they used went through the forest. They agreed that the mother should cook some food so that when the father comes back from hunting they would get something to eat. The mother sent one of the boys to the river to fetch water. The path to the river was in the forest. There were many trees here and you had to pass underneath them. The boy kept going. Then he heard a bird singing. The melody was so sweet! Once he found the tree from which the bird was singing, he sat down under the tree. The girl came back home from fetching firewood and found that her brother was not in. Her mother sent her to go find the brother. She found the brother sitting down under the tree, and just like her brother, she could not resist the temptation to sit and enjoy the bird's melody. So, they all sat under the tree. The second son came home and found that his brother

and sister were not in. He was sent to go and look for them as it was getting very late. He heard the bird singing, so the boy also sat there listening. The three of them sat there! The mother then went to go to the forest to search the kids. And she too ended up at the same place – listening to the bird. The father came home and found there was no one, so he decided to go looking for them. On his way, he heard the bird singing. The wife saw him coming and she ran to the river. Once the husband arrived at the tree he, like the rest, sat there listening...they all forgot what they were doing. That is the end of my story. (West, talking circle participant. 13 November 2015)

Story teller: Ugeni "ĩtha" ndimũganire! Say "Itha" so that I tell you a story. Response: ĩtha!

A long, long time ago, there a mother, father, and two children. One day, they went to cultivate in the forest and when it was dusk, they went back home. On reaching home, they realized that they had left Ngoi ya mwana/baby carrier, so they sent the girl to go fetch it. On her way to the shamba, the girl met with an elephant. The elephant asked, "where are you going little girl?" The girl replied by way of song: "I am going to pick Ngoi ya mwana witũ/ our baby's carrier. We forgot it. Give me way." The elephant let her pass. She continued and met the second elephant. The elephant asked her "where are you going all by yourself?" And the girl responded: "I am going to pick Ngoi ya mwana witũ. We forgot it. Give me way." The elephant obliged, and on she went. After a while she came across a third elephant. The elephant blew his trumpet and asked, "where do you think you are going, little girl?" And the girl sang: "I am going to pick Ngoi ya mwana witũ. We forgot it. Give me way." The elephant hesitated for a while, but let the girl pass and on she went. She walked very fast now. It was getting late. Just as she was about to reach the shamba, she met the fourth elephant. She was getting exasperated by these elephants. And the elephant asked, "where are you going little girl?" And the girl sang: "I am going to pick Ngoi va mwana witũ. We forgot it. Give me way." This elephant did not let her pass. It, instead, hoisted her high up with his trunk and hid her in his armpit. It now was getting dark and the family was worried about their daughter. The father decided to go and look for her. On his way, the father met the first elephant and asked. Have you seen my Wanjiru? The elephant answered by way of song: "I am not the one who ate her but the one behind me." He met the second and third elephants and the same exchange transpired. When he met the fourth one and asked the same question, the elephant said, "I am the one who ate her. You can do whatever you wish." The father killed the elephant, rescued his daughter, and they went to collect the Ngoi. That is the end of my story. (West, talking circle participant. 13 November 2015)

These kinds of stories were narrated as children waited for food to cook in the evening. So, the children would sit around a fire and drink from the wisdom of their mothers and grandmothers. While the stories were entertaining, they also served a significant educational value. They were imbued with teachings and lessons for life (Achebe, 1958; Emeagwali, 2014; Gauvin, 2013; Ngũgĩ wa Thiong'o, 1986; Okot p'Bitek, 1962; Okumu, 2000). Some of the teachings that can be gleaned from the above stories include: the need to cultivate discipline; the need to care and show concern for one another; the need to embrace responsibilities (both individually and collectively); and the need to build courage. In addition, the stories demonstrate a direct link between the human and non-human world. The stories are set in a world in which elephants speak and in which the birds' melodies are too captivating to resist. This is a clear demonstration of the Gĩkũyũ indigenous environmental thought in which humans were not seen as separate from nature, but a holistic whole; each of the different players in the scene had to be respectful of the other in order to cultivate harmony. Storytelling made the fire-place, food, and cooking the lifeblood of the community's understanding of the landscape, and their role in it.

It was the citadel of learning, teaching, and nurturing. It was a sphere of transformation; a sphere from which value systems that held the community together were inculcated. The two stories narrated above, as well as many others, highlight interrelatedness and interdependence between food, the land, and people. The stories remind us that we share the land with other creatures who equally depend on it for their survival. Indeed, as Tsepa (2008, p. 38) writes "stories not only teach Indigenous people traditional Land ethics, they go deeper into cognitive, emotional, and spiritual realms of our being thereby helping us to be self-disciplined and respectful of the natural world." Further, Emeagwali (2014, p. 9) argues that "stories reveal a quest for the ultimate truth or destiny; give a blueprint for empowerment and survival over trials, tribulations, and uncertain challenges; and reveal profiles in courage and resistance relevant to the understanding of indigenous African values and philosophies." In both of the stories narrated above, we see a presentation of struggles that a community may face, and the role of both individual and collective resistance.

Various scholars (Kariuki, 1964; Itote, 1967; Macharia & Kanyua, 2006) have further demonstrated the value of stories to the Mau Mau. For the Mau Mau, storytelling was a powerful cultural activity as it promoted camaraderie, entertainment, and served as a powerful tool to plug the psyche in the dire circumstances in which they found themselves. Stories helped distill their everyday concrete realities as they fought for wiyathi/self-rule and ithaka/land. From the preceding discussion, we can see that it was through food production, preparation, processing, and storage that the community remained anchored in the land. Sacrifices to Ngai when praying for rain were performed using products of the land: goats; honey; and millet. A Mugĩkũyũ became a Mugĩkũyũ by learning to live from and with the land; by cultivating crops, reading the weather, storing food, sharing food, and trading food. In the next section, I examine how the landscape is memorialized through food as anchored in IKS. This section will highlight how indigenous knowledge systems seep into the larger landscape and social structures as related to food production.

5.3 Memorializing the landscape through food

For a community whose livelihood depends directly on agriculture, drought has always and in all ways been perceived as a catastrophic event that must be memorialized in such a way that it remains in the community's memories. Drought is not a new phenonomon in Gĩkũyũland as it been documented and memorialized in various ways even before the coming of the Beberu. Ngũgĩ wa Thiong'o (1965, p. 36) elucidates:

The elders, then offered many burnt sacrifices to Murungu [Ngai]. Who did not know what such unusual harvests portend? Who could not remember the great famine that had swept through the hills, spreading its fingers of smoke to all the land of the Gĩkũyũ. That was before the real advent of the white men. Most of the old men had then been young. But they had not forgotten the great wealth and harvests that preceded famine.

Another form of memorializing the landscape was through the rite of passage. This was the ceremony through which a person became one with the land. Those that go through the rite of passage at the same time belong to the same age set. According to Muriuki (1974), the bond of the age set is very strong amongst the Agĩkũyũ people. As Mbiti (1975, p. 98) further explains: The blood which is shed during the physical operation [of initiation] binds the person to the land and consequently to the departed members of the society. It says that the individual is alive and that he or she now wishes to be tied to the community and people, among whom he or she has been born as a child. This circumcision blood is like making a covenant, or solemn agreement, between the individual and his people.

Indeed, those who belong to the same age set share whatever they have and forge binding life-long ties. This bond, Ngũgĩ wa Thiong'o (2010) argues, is stronger than that associated with the family or clan because it cuts across families, clans, and regions. As such, it becomes a powerful core from which to mobilize and cultivate solidarity. The naming of age sets was structured around key events on the land. For example, as one of the elders (West, 10 November 2015) explained:

You hear something like locusts and the age set of locusts. This is when the locusts came and cleared everything. The old men used to go and pray to Ngai, because they made the place dry by destroying the crops. The boys that were circumcised that time were named after the locusts as the age set of locusts/Ngige. Every major event was remembered by naming an age set of the time.

The landscape is still memorialized through naming it after major events that occurred e.g., floods, drought. As an elder (East, 16 October 2015) in this study recalled:

In 1943, there was a major drought called the ya mĩanga/cassava drought. During this drought, the only food people could get was cassava because it could withstand the dry conditions. In the past, there were a lot of cassava and yams in this area. They sustained people for a long time.

The 1984 drought is remembered as a time when human beings were fed with 'animal feed.' According to one of the participants, "Yellow maize was brought from USA. Have you eaten yellow maize? This is maize meant for horses and cattle, but was brought for human consumption. And this maize came and people ate it and I was one of them." To the Agĩkũyũ, this (being fed on 'animal feed') was a direct assault to their dignity. It is, in some cases, linked to the historical linkages of colonial injustices. The preceding sections have focused on food and land relations in the pre-colonial period. Now, I turn

to the colonial and flag independence epochs and examine how these relationships transformed the people and the land.

5.4 Food production in the colonial & flag Independence epochs³⁹

When we were under Beberu rule, we felt that we were really oppressed. Now we have freedom. I remember my parents used to work for the Beberu wearing sack cloth. And they were working without any freedom. Now we have a lot of freedom. When we came here, my parent was a slave. If you passed near a Beberu, you would be beaten badly. We used to go and pick fruits and we would be beaten badly. It was colonialism and slavery for the young and the old. Now we know that if you spoil you spoil for yourself. Nobody is watching you. (West, talking circle participant. 10 November 2015)

Colonial policies undermined Agĩkũyũ food security and sovereignty through land alienation, and the sabotage of the socio-economic and political infrastructures. Colonial attitudes were buttressed by Christian/missionary messaging that undermined every aspect of local ways of life. These factors can be attributed to the element of shame that people have learnt to associate with indigenous food. These foods are considered to be signifiers of backwardness. These missionary attitudes to African foods are aptly captured in Okot p'Bitek's lucid poetry:

Ocol says Black people's foods are primitive But what is backward about them? He says Black people's foods are dirty: He means Some clumsy and dirty black women Prepare food clumsily And put them in dirty containers. (Okot p'Bitek, 1966, p. 79)

It is important to understand and ask where the "enormous quantities of sweet potatoes, yams, cassava and sugar cane" that Thompson wrote about in 1885 disappeared to (as quoted by Leakey, 1977, p. 55). Changes in Agĩkũyũ food production and diet can be traced back to the colonial invasion. According to Parsons (2011, p. 496), "by 1930,

³⁹ I merge these two as the colonial epoch feeds into the flag independence epoch with regards to food production.

86% of all natives (and their livestock) were crammed in land that comprised of a paltry 22% of the total arable land in the colony." This, naturally, meant that there was a lot of pressure on the land and land degradation soon manifested in massive soil erosion. According to the settlers, soil erosion was caused by the primitive agricultural and livestock rearing practices of the natives (Elkins, 2014; Parsons, 2011). Mackenzie (1991) argues that, by 1931, white maize had replaced the drought resistant crops such as sorghum and millet. This was as a result of Beberu control of all the means of production and markets.

The decline of production of indigenous crops, therefore, commences during the colonial period and escalates into the flag independence period. The most disruptive force related to food production was land alienation and the subsequent collapse of the social-economic and political structures that guided communities prior to the colonial incursion. As Maathai (2010, p. 27) explains:

The colonial administration could also confiscate the local population's most valued assets – land and livestock – especially from those who did not cooperate, thereby damaging both the basis of the local economies and Africans' right of ownership, their honor and honesty. Without any means of redress or restitution, communities' existing systems of justice and sense of fairness, including traditional respect for privately held property, were deemed irrelevant; the power of the gun was the new form of administering "justice." In this way, a dictatorial regime was cultivated, imposed, and in time, increasingly tolerated.

Dismantling of communities from their land and landscapes had disastrous consequences on food production. This was the case for those that remained in the Gĩkũyũ Reserve, as well as those that ended up slaving on settler farms in the Rift Valley and other areas. Those that ended up in the Rift Valley had to contend with a diet that was for all intents and purposes unsuitable for human consumption. According to a talking circle participant (West, 10 November 2015) who lived on a Beberu farm:

That maize would be ground then stored for a year until some get rotten. We would also be given processed milk. Mathache – the milk is whipped up and all the cream is removed and the Ugali⁴⁰ is made from rotten maize flour. You were given

⁴⁰ A kind of cake-like meal that is, today, the staple in Kenya

7 kilos of maize at the end of the week. That thing has stayed in my heart because I feel it was unjust.

This disconnected people from the land and from indigenous agricultural practices and crops. While Agĩkũyũ grew maize before the advent of colonialism, the colonial regime transformed this into a cash crop whose market was tightly regulated and skewed in favour of settlers. For the Agĩkũyũ, hunger became an all too common problem. Indeed, when the Mau Mau war broke out many found themselves on the edge of starvation. As Ndege (2009, p. 2) writes, it is impossible to understand or explain Africa without first "unraveling the continent's colonial experience." According to an elder (East, 16 October 2015), the legacy of colonialism has endured to the present day especially with regards to the commercialization of food, because:

The Beberu brought technology of processing maize into maize flour, and graded it. The so-called grade 1 has nothing, every important item in the maize is removed, and then you don't eat with cultural vegetables that were very important, you don't take with milk but with processed milk that has nothing important to the body. Also, when you get all the milk, you take it to the dairy. If you get an egg, you take it to the shop to sell it. So, self-knowledge is very important.

Hunger was further entrenched by colonial policies that sought to foreclose Africans from all means of production. As Elkins (2014, p. 16) argues:

Africans were forbidden to grow the most profitable cash crops such as tea, coffee, and sisal though they were able to produce and sell maize freely until marketing boards were established after the Second World War that required Africans to sell their grain at a set price. These marketing boards would throw up roadblocks against African agriculture, further forcing the indigenous population to turn to wage labour for income.

By the 1950's, Africans were allowed to grow cash crops. This was the colonial government's way of making concessions regarding the Mau Mau's agitation for ithaka and wiyathi. The road to prosperity was to be paved by monoculture agriculture; this involved clear cutting of all the forests in order in to grow tea, coffee, and other cash crops. Loss of both indigenous and non-indigenous crop varieties is noted in the communities. All of these factors discussed above set the stage for conditions for food

insecurity. As one participant put it, "we used to have terere [*Amaranthus hybridus*] grow in forest, managu [*Solanum nigrum*], and the rest. Today, many can tell you they take a very long time to eat such vegetables." Another participant argued that, "there were potato varieties that we had in the past, but they have disappeared." The cash crop tragedy is one of the main drivers of food insecurity on the African continent. Maathai's penetrating analysis below is instructive in this regard:

Today, much of Africa's economic activity still rests on an unstable mix of aid, tourism, the export of natural resources, and sale of cash crops such as coffee, tea, sugarcane, nuts and other food stuffs – which has characterized the continent since independence and, in some cases, as far back as the colonial period. Newly independent African countries were encouraged by international financial institutions, some donor governments, and some development agencies to expand their economies by focusing on cash crops, which could be sold in the global market, with the proceeds used to grow other essential products. As a consequence, peasant farmers (who are largely uninformed) in much of Africa have become almost completely dependent on income from producing these cash crops to meet all the household's needs, such as food to eat, clothes, school fees and transportation. (Maathai, 2010, p. 96)

Today, much of the highly productive land is under tea farming on the eastern side of the Nyandarwa forest (see Figure 5.1). This is noted by an elder (East, 16 October 2015) who argues that:

Land has become small because we have planted a lot of tea. We started planting tea in 1959. There was a man who told us – matumbĩ matikuhagwo na gikabu kĩmwe/do not carry all your eggs in one basket. Plant many types of crops on your land. Kenyũ na kenyũ cioyagira nda/a little here and there fills the stomach. It is like mixing foods.

As seen in Figure 5.1, there are homesteads (indicated by the blue arrows) at the top of the hill. There isn't much land under food crop production. The land is covered with one crop – tea. I have experienced this kind of landscape change and the related food security issues in my own life. I grew up surrounded by forests, but I have seen the forests clear cut in order to plant tea. The government emphasizes cash crop agriculture and subsidizes inputs such as fertilizers (which are imported).

Lappe, Collins and Rosset (1998) argue that more than 2,000 African indigenous crops have vanished due to neglect by African governments and agronomists and have aptly been named Africa's 'lost crops'. These crops have been promptly replaced by cash crops. The cash crop economy is a hunger economy. Farmers concentrate on growing these crops on very productive land and, consequently, have to import food crops for sustenance. Further, they have no say in the prices for these crops or products derived from the same in the world market. Lappe, Collins and Rosset (1998) argue that food reliance doesn't necessarily mean producing everything the nation eats, but producing enough of its basic foods to be independent of outside forces. The Agĩkũyũ have traditionally been self-sufficient in food production. Colonial and flag independence policies however, have changed this, and as a talking circle participant (West, 11 November 2015) poignantly reflects:

The food that we eat has also changed. Local/indigenous foods no longer grow and we have to grow other introduced crops. That is why we have lost a lot of our indigenous foods and there is a lot of hunger.



Figure 5.1 Tea farms in eastern Nyandarwa.

According to the FAO (2016), 795 million people go hungry worldwide every day. Deforestation, triggered by escalating demand for food, fibre, and fuel, is degrading ecosystems, diminishing water availability, and limiting the collection of fuelwood – all of which reduce food security, especially for the poor. Hunger drives forest-adjacent communities into forests as a last resort for survival. Indeed, several studies (Cotter & Tirado 2008; Herndon & Butler 2010; Rosegrant & Cline 2003; Walker & Salt 2006) reveal that communities look to forests when other sources of income, such as agriculture, do not provide guaranteed support for their livelihoods. As Sunderland (2013, p. 3) writes:

Forests protect soil and water, maintain soil quality, help regulate local climates, provide habitats for pollinators and predators of agricultural pests, and are storehouses for biodiversity. These ecosystem services are crucial for maintaining the sustainability and nutrition sensitivity of farms, and provide a strong case for mosaic landscapes that integrate trees with agriculture

The two community groups that I worked with demonstrated various incidents when food insecurity led to severe encroachment into forests. This encroachment made an already bad situation worse (see chapter 4). Once this "nutrition sensitivity of farms" Sunderland (2013) was compromised by the destruction of the forest, the local people joined those who were carrying out various activities (e.g., harvesting timber, burning charcoal, cultivating) in the forest in order to eke out a living. Severe encroachment (discussed in chapter 4) into the forest in the 1990's resulted in severe hunger on the eastern side of the forest. As a talking circle participant (East, 26 October 2015) recalls:

Our parents also had a difficult time. We used to have one meal per day; we would drink porridge in the morning, go without lunch or dinner. It was not easy to get any income. For example, when you work for the charcoal burner and timber person, they would say they will pay after they sell the products. We used to walk for almost 3 kilometres to fetch water in the forest! But now [after restoration of the forest], we can harvest food from our farms and have enough water.

It was during this time that the community self-mobilized to protect the forest. By this, I mean self-driven community organization was created without any external support. This yielded many benefits for the community, including improved livelihoods, as mentioned in the quote above, but also a strong belief in the community's own agency, which can be used as a tool in resolving local challenges. According to one of the talking circle participants (East, 22 October 2015):

There is need for a good relationship between the community and anyone controlling the forest. Allow me to say the men in this community, at one point, said it is enough the forest will not be destroyed again. They used to go in with big torches to chase people away. Because, once it was 6:00pm, the forest guards would say that their work shift is finished. Then, the government came in to assist them. *The main people who destroyed the forest were the same people who protected it* [emphasis added]. So, it is the community that intervened to bring better results. There was high level corruption involved in the destruction of forests – government officials and administrators were involved. In terms of crop changes, there was a time we ate arrow roots because of drought. I also talked of cassava. Those arrowroots are good for preventing soil erosion. So, people should plant them.

Similar sentiments are echoed by another talking circle participant (East, 22 October 2015):

Allow me to say, the old men helped a lot to restore the forest. They even stopped their children going into the forest. We also tried very much to force ourselves into the forest to work. There were a lot of problems because when the officers came and found them, they would burn the charcoal. So everyone would lose – the charcoal burner and the one transporting the charcoal.

On the western side of the forest (which according to the participants is still highly degraded and under severe encroachment), the poor state of food security was associated with destruction of the forest. Participants argued that they did not have sufficient food because it did not rain regularly, or as expected. As one talking circle participant (West, 12 November 2015) pointed out:

If you go to Gatondo and Rironi [nearby localities in which forests are in good condition], you will see that those areas receive a lot of rain and they harvest a lot. Here, it is the opposite. Forests have been cleared to an extent you can see stones rolling down because the trees and bushes that support them have been cut down.

Destruction of forests further leads to destruction of livelihoods when animals from the forest come into farm land, opening up yet another angle of food-forest interlinkages. This, according to a talking circle participant (West, 12 November 2015), happens when:

Animals in the forest don't have enough grass, making the animals come and eat our farms. The animals come and destroy our farms because the forest has been affected. Previously, animals were not coming to our farms because they had enough grass [food in the forest]. For instance, now porcupines are eating our maize. They eat beans and potatoes too. Before the forest was destroyed, we used to farm, but the animals did not destroy the crops.

In addition, the people who live here (on the western side of the forest) are those who came from settler farms from which they emerged 'empty-handed'. All of these factors historically hindered the protection of the forest. They, therefore, have in recent times decided to work together to restore the landscape and improve their livelihoods. The lead community mobilizer chronicles how this came to be:

I had gone to a workshop and heard some ladies discussing about how badly our forest was encroached. I heard them say they want to plant trees in our forest. I told them that we can do it ourselves. Then, I visited the forester who I heard was organizing people from outside to come and plant trees in our forest. He told me, "You organize yourselves into a group so that you can stop people from coming into the forest." Then, I called some community members and told them that we need to join and form a group. And that is how we formed the group. The members said they will give me fare to go to Olbolosat and see how they are doing it [planting trees]. Then, we visited the forester who gave us seedlings of eucalyptus, mithirinda (cedar) and we planted them in a nursery. *I want my grandchildren to know that we protected this landscape* (emphasis added). (West, talking circle participant. 13 November, 2015)

Later on:

The forester called for two meetings. I met the Green Belt in the second meeting and we discussed a lot. The chairlady showed us how to plant all indigenous trees. They have also showed how to plant arrowroots here where we don't have enough water. She called us for a seminar and taught us how to plant. I only used to eat arrowroots when I went to Gĩkũyũ land or if I bought. The Green Belt has also showed us how to harvest water and plant trees. Now, I can plant my own vegetables instead of going to buy. May God bless the Green Belt. (West, talking circle participant. 13 November, 2015)

It is worthwhile pointing out that the participant quoted above is a woman. Community self-mobilization that has been demonstrated on both sides of the forest is an indigenous Gĩkũyũ practice. It is an African practice anchored on collectivity. It is an embodiment of African value systems. According to Emeka (n.d.), African value systems are anchored on the following principles: sense of community life; sense of good human relations; sense of the sacredness of life; sense of hospitality; sense of sacred and religion; sense of time; sense of respect for authority and the elders; and sense of language. On the eastern side, male elders spearheaded the mobilization, but in the western side we see a woman coming to the fore. While the Gĩkũyũ are a patriarchal society, women play a key role in keeping the community together and it is common to hear references of Agĩkũyũ referring themselves as the "nyũmba ya Mũmbi/house of Mũmbi" (the mother of the community), a testament to the respect traditionally accorded to women. The centrality of women and land comes through Mau Mau songs such as the following (sang to me by an elder (East, 11 October 2015)):

A lot of time has passed by The white man came with weapons of war They were very powerful weapons of war There is nothing we could do. They took our land We will rejoice when land will be returned to the house of Mũmbi These people [homeguards] wanted to align themselves With the Beberu so that that they are given leadership There will be a house on the hill of Waithera We will rejoice when land will be returned to the house of Mũmbi!

I would like to highlight this role because African women are often cast as those that things happen to. They are to be pitied. They are victims of patriarchy and hostile environments. As Win (2004, p. 61) argues:

For decades now, the development industry has thrived on the stereotypical image of an African woman who is its 'target' or 'beneficiary'. Always poor, powerless and invariably pregnant, burdened with lots of children, or carrying one load or another on her back or her head, this is a favourite image, one which we have come to associate with development. From the United Nations, to large international agencies, to multilateral/ bilateral donors, to small non-governmental organisations (NGOs), most of us have used and abused this image time and time again. Like the fly-infested and emaciated black child that is so often used by international news agencies, the barefooted African woman sells. Without her uttering a word, this poor woman pulls in financial resources. Any researcher worth their salt has to go the 'most remote' village to find her for their statistics on issues like access to water, to be valid. Similarly, the gender programme officer in any institution has to always demonstrate that her work is about the very poor and marginalised woman, for her to be regarded as legitimate.

The woman who spearheaded the mobilization on the western side of the forest was not a unique case. There are, indeed several other formidable women leaders in that community, but their stories do not get to be told because of the imagery described above. Community self-mobilization in these two cases should be read as an act of restoration of African dignity, of safeguarding livelihoods, of protecting the land, of saving their birthright, and of restoring value systems in an indigenous fashion. Food was a central feature in both cases. Food and forests/land are inextricably linked, and there cannot be success in any of these areas without success in the other. In the same vein, Sunderland (2011) argues that the contribution of forests to food security is overlooked, and that a clear disaggregation of biodiversity conservation and agriculture has been a stumbling block towards achieving optimal outcomes in both cases. Both community groups emphasized that food production and general community welfare is better when forests are in good condition. As Arnold, Powell, Shanley, and Sunderland (2011) argue, deforestation leads to impoverishment of both ecosystems and livelihoods in the long term; this has a bearing on food security for millions of people in the tropics. The health of livestock and associated dietary benefits are affected when forests are destroyed because communities can neither graze nor access fodder. In the next section, I highlight various living indigenous practices related to agriculture, drawing sustenance from the land and protecting the land. As Avittey (2006, p. 12) points out, "while it is true that the colonialists reordered African society to suit their purposes with brutal force, it is inaccurate to assert that Africa lost its cultural identity totally."

5.5 Towards a cultural resurgence: Gĩkũyũ food sovereignty

I also found my grandmother planting yams and sweet potatoes. Even if we go to my place now, you will get them. Those who eat traditional foods are healthier. (East, talking circle participant. 26 October 2015)

This is an arrowroot (ndũma ya mũti). It can stay for a hundred years and it will still be good for growing. This is very important during drought. (East, talking circle participant. 26 October 2015)

As can be heard in the voices of participants quoted above, despite all of the factors highlighted in the preceding section, the flame of indigenous food and cultivation

practices has not been extinguished. While this food may not be grown by a majority of the people, it is still cultivated and eaten because there are those who continue to grow them against all odds. The growers are not many and, therefore, prices tend to be higher as compared to those of non-indigenous crops. Participants understand and speak about the loss of indigenous food species and the corporate takeover of food. For instance, a talking circle participant (East, 20 October 2015) informed us that:

We used to be brought up with indigenous foods like yams, bananas, cassava, sweet potatoes, etc. Today, we are planting food that cannot help anyone. I even hear we have foods know as GMO. I remember one time my uncle told me to plant a banana and gave me a piece. After planting, it did so well that even 50 years down the line, the place still has bananas.

As part of this research project, we held a one day community workshop which brought together both groups that I had been working with (i.e., those from western Nyandarwa and those from eastern Nyandarwa). We cooked and shared an assortment of Gĩkũyũ indigenous foods (see Figure 5.2). These included different varieties of legumes (Njahi [*Lablab purpureus*], Njugu [*Cajanus cajan*]) mashed with potatoes and arrowroot leaves, arrowroots, sweet potatoes, bananas, boiled goat meat, roasted goat meat, soup, and pineapple that is locally grown in the region.



Figure 5.2 From left to right: a) Some of the food prepared during the workshop; and b) Women preparing food during the workshop.

A goat was slaughtered and cooked by elders. This yielded boiled meat, roasted meat, soup (which was made using roots and leaves derived from the land/forest), and various condiments prepared using internal organs. I was very impressed by the knowledge displayed in slaughtering the goat and I reflected on it in my journal:

Today, I woke up at 5:30am, I picked up my research assistant and we drove to Mataara the venue of the joint community workshop. We arrived at 9:30am just in time to witness the dissection of the goat. I was so amazed by the explanation of how each part of the goat is eaten by a specific group of people – women, children, men, in-laws, and so on. It is an intricate science with lots and lots of technicalities. The elder told me that the reason why they add the tree roots to the soup is because they break down the fat. They also use the kifiri/stirring stick to further break down the fat. And how did they identify the meat that had anthrax? Mzee Mungai told me that you put it in the fire...if it pops out it has anthrax. If it sticks and continues to cook it is clean (Journal entry, 2nd February 2016).

Goat slaughtering and cooking is a very important ritual amongst the Agĩkũyũ. A goat is of great spiritual significance and this remains the case today. Indeed, as Mbiti (1975, p. 131) explains:

Africans celebrate life. They act it. A lot of the visible demonstration of African religion occurs in rituals and festivals. These embody what people believe, what they value, and what they wish to apply in daily life. Through rituals, people not only act their religion but communicate it to the younger generation.

We used this activity as an opportunity for experiential learning and the elders obliged and shared knowledge, stories and lessons. As one of them articulated: "What were women given when they gave birth? Soup! We therefore have soup here with herbs from our forest." They also added that women are not strong today because they do not get access to these kinds of food. The women cooked the following: mukimo with njahi; njugu; and porridge made from millet and sorghum. They too, explained how each dish is prepared. A beautiful ceremony was performed by the women from the east and those from the west which clearly demonstrated the practice of reciprocity, and its significance in Gĩkũyũ culture. And the host elder (East, 2 February 2016) said: Receiving guests and togetherness is part of our culture. You are the guests and you shall unload the porridge before we drink it. You will drink without calabash because we were not able to get them.

The women of the east (the hosts) had prepared porridge for all of us. When this was ready, they called upon the women of the west (the guests) and they composed a song on the spot while the women (of the east) handed over porridge to the other group. The song was started by a lead singer from the east and then joined in the response by the rest of the women. It went like this:

Kwaũra kwaũra kwaũra ii/unload unload ii Kwaũra kwaũra/unload unload Kwaũra kwaũra Kwaũra ii/unload unload ii Kwaũra kwaũra/unload unload Kwaũra gacũru kwaũra ii/unload the porridge ii Kwaũra kwaũra/unload Ariirrrriiiiiiiiii//Ululation Kwaũra kwaũra kwaũra ii Kwaũra kwaũra Gacũrũ ni kega/ porridge is good Gacũrũ ge chama/porridge is tasty Na mũtari ngemi/why don't you ululate? Arirrrriiirrriiiii! Ululation At this point, the women from the west 'picked up' the song Turi akenũ ni kũnyitwa ũgeni/we are happy because you have welcomed us so well Kurűgigirwo űcűro/you cooked porridge for us ũrĩa wa Gĩkũyũ/our indigenous Agĩkũyũ porridge Turi na athuri/we have our men Tũmite Kipipiri/we are from Kipipiri Tũtikumenyaga/we did not know! Na mutire ngemi/why don't you ululate? Arirrriiiiiiii!!/Ululation Ucũrũ wa Gĩkũyũ /Agĩkũyũ porridge Riũ tuukũnywa/Now let us drink it Nitwacokia ngatho/We are very grateful Ngai amūrathime/May Ngai bless you! Nitwakena mũno/We are very happy Ni kũnyĩtwo ugenĩ/by the way you have welcomed us Ai mũtarĩ akenu/Are you not happy? (East, joint community workshop. 2 February 2016)

After this, we all drank the porridge and everybody was happy. The porridge was popular and many requested a second serving. One of the older women demonstrated to the younger participants how to pour porridge from a gourd. I later reflected about this performance in my journal:

What a heart-melting ceremony that was! The whole thing was organized by the community and I had no idea that something like that would transpire. I was blown away by the on-the-spot composition of the song to "kwaũra", the porridge. It worked like it was all planned, and when the women of the west picked up the song they dribbled it from one person to the other. At least four different women led in the singing – to me, this demonstrated collective action, supporting one another, picking each other up, keeping the song afloat, keeping each other afloat, lifting each other's burdens, celebrating life, living off the land – that is *our way* as Africans. The porridge was the sweetest! I drank two cups and they gave me some to take with me, because I said I loved it so much. Research can be an uplifting experience. It can be a joyous experience. (Journal entry, 2nd February 2016)

The fact that you can find these foods is a testament to people still growing them. The fact that these women and men can cook them is a testament to knowledge on seed propagation, food preparation, and storage still being alive. It is also a testament to the Agĩkũyũ preferring this kind of food (as evidenced by the quote in the beginning of this section) and the following one by a participant who state that: "When I was growing up, we were planting Njahi and Njugu. I found my grandmother growing them and we ate them a lot. But today we only see them on cultural ceremonies." We sought to explore indigenous knowledge tied to food, food production, and storage amongst the Agĩkũyũ. In the following section, I discuss of the practical applications of these knowledge systems as they relate to food and the land as manifested in seed propagation, firewood and food, pest control, trees as medicine and food, and indigenous fertilizers.

5.5.1 Seed Sovereignty

So you choose the seed that you feel is good using your heart and your eyes. (West, talking circle participant. 12 November 2016)

Seeds are critical to the growth and expansion of the Agĩkũyũ nation. Seeds to plant in the next season are selected from those of the current harvest, saved, and safeguarded from pests using a variety of methods (as articulated by several participants in this study):

Till today, I do store my own maize; I don't buy maize seeds. I smear with ash and if I want them to germinate fast, I soak them in water for a night and, within few days, they germinate. This technique was passed on to me by my mother. Once they are planted, they germinate fast because they do not stay in the ground so much and are, therefore, not attacked by rats. And people ask me to give them some of my seeds. (East, talking circle participant. 26 October 2015)

I store my maize seeds in a gourd and I soak them before planting. I don't go to buy seeds from the shop, I store mine until planting season. I have compared the seeds [hybrid] we were given once, but they are not comparable with mine. (East, talking circle participant. 26 October 2015)

I was taught how to preserve seeds. I was taught that the first maize to produce corn should be marked/identified. Keep it as seed for it will reduce the time to production. If it matured using the four months and a week the next time it will take four months only. In my farm, I also don't use synthetic fertilizer, but use traditional fertilizer. (East, talking circle participant. 26 October 2015)

If it is like maize, you take the maize at the centre of maize comb to be the seed. We choose the potatoes the size of an egg to be a seed. We do not choose the big ones. (West, talking circle participant. 12 November 2015)

I found the method of preserving seeds by hanging them near the fire for the smoke to reach them. I use the same method today. (West, talking circle participant. 12 November 2015)

The other thing is keeping maize in pots. Today because we don't have pots, so, I bought a small tank where I pour all my maize and cover it. (East, talking circle participant. 26 October 2015)

Seeds were also inherited from parents and this kept the connection with the ancestors and the land alive and strong. As one of the talking circle participants (East,

26 October 2015) said, "I inherited these maize seeds from my mother in the 1970's. They are the ones I plant and then save them for the next harvest. Even my neighbours borrow from me." Seed sharing to sustain the indigenous seed varieties was and still remains a strong element of Agĩkũyũ culture. Agĩkũyũ indigenous practices and connection with the land are still alive. These practices have not been completely wiped out because the community has continued to breathe life into them. Seed and food sovereignty are interlinked, and as Shiva (2013) points out, Africa is the new battleground for seed protection as a result of the infiltration of genetically modified seeds. Farmers are encouraged and pushed to use these seeds, yet they require costly inputs such as fertilizers. These costs are unaffordable to many African farmers, especially in light of the struggle to cope with climatic changes (African Biodiversity Network, 2012; Altieri, 2009; Patel, 2009; Weiler *et al.*, 2014). This is clearly demonstrated by a talking circle participant (West, 9 November 2015) who informed us that:

Our farms are not doing well without fertilizer. But we were taught how to make manure that has no chemicals. There are many diseases related to climate change and pesticides. We used to plant carrots and replant without any chemical. But today you have to add a lot of chemicals to make them grow.

The belittling of many aspects of local cultures has left the Agĩkũyũ open to exploitation by the forces of global trade. As Maathai (2010, p. 172) argues:

Once people have been conquered and are persuaded to accept that they not only are inherently inferior but also should gratefully receive the wisdom of the "superior" culture, their society is undermined, disempowered, and become willing to accept outside guidance and direction...This is partly why foreign cultures play an important role in power politics, and in economic and social control.

Purchasing of seeds and the use of pesticides and fertilizers are thought of and presented as the progressive ways of increasing agricultural productivity and 'developing'. Those who save seeds and use organic farming methods are considered backwards and stuck in the past; they are yet to 'see the light'. As such, anything indigenous is lumped together or dismissed as 'those things of the past'. Farmers find themselves locked into an unjust agricultural system. As one of the elders (East, 10 February 2016) poignantly argues "I told you that the Beberu told us that cows and goats are not important but they are the ones who make the pesticides so that we keep buying from them." In light of the pressure under which farmers and communities find themselves, seed and by extension, food sovereignty become critical plank in the struggle for the maintenance, use, and proliferation of indigenous knowledge. As Shiva (2005, p. 91) asserts:

The seed is starting to take shape as the site and symbol of freedom in the age of manipulation and monopoly of life. The seed is not big and powerful but it can become alive as a sign of resistance and creativity in the smallest huts or gardens and the poorest of families. In smallness lies power. The seed also embodies diversity. It embodies the freedom to stay alive. Seed freedom goes far beyond the farmer's freedom from corporations. It represents the freedom of diverse cultures from centralized control. In the seed, ecological issues combine with social justice.

Maintaining diversity and biodiversity is an important tool for sustaining community livelihoods in all dimensions: social; economic; cultural; and political. Seeds represent knowledge, cultural traditions, ways of relating and ways of knowing. They represent life. Their capture through market fundamentalism is an affront to all of these things. According to Ngũgĩ wa Thiong'o (2016), market fundamentalism, like religious fundamentalism, is based on the belief that there is only one way to do things. Those that resist this kind of thinking and systems that are associated with it are excommunicated from the global capitalist temple and expelled into purgatory. Within the global capitalist agricultural system, the farmers who are saving seeds can be said to be in purgatory. Yet, they continue to bury seeds in the ground, to hang them above their fireplaces, to store them in drums under their beds, to resist. In the next section, I examine the linkages between an important forest product (firewood) and food systems as manifested in Agĩkũyũ indigenous knowledge.



Figure 5.3 a) Participant displays indigenous maize seeds; b) Participant displays arrowroot seed; c) Githeri, an indigenous Gikuyu dish; and d) Potato seeds (you do not plant the big ones on the right but the smaller ones in the middle).

5.5.2 Firewood and food systems

Fuelwood is a critical, but often ignored, element of local food systems (Kuhnlein 2009). Loss of indigenous tree species affects food production. As one of the talking circle participants (West, 11 November 2015) informed us, "the Mũtamaiyũ tree is very good for keeping the fire buried overnight, but now, you cannot find it." Without good quality indigenous firewood, communities resort to other firewood that may be wet, producing a lot of smoke and requiring high volumes in order to cook. The energy crisis continues to escalate. According to one of the talking circle participants (West, 10 November 2015):

Today it is not easy to get firewood due to lack of forest [on the western side of the forest]. I am getting old, and therefore, don't have enough strength to go fetch firewood and I still don't have enough strength to carry water. The forest was destroyed by the poor as well as the rich. I have had my rope cut into pieces many times. We used to be chased out of the forest even when wanting to carry left overs from the tree by the people who cut down trees. So the biggest problem is that we are not cutting, but our children are cutting because they don't know any other benefit of forests. Our grandparents valued trees. For example, the Mũgũmo was used for performing sacrifices. Our children lack respect and guidance. We need to talk to them. Our children have gone to school and disregard their parents. They believe that since they [their parents] are old they do not know anything. They do not want to be taught how we respected our parents. If our parents told us to not go into the forest, we obeyed. Today, the kids will ask you - what do you want me to do? So, they continue destroying. But it is we parents who will continue facing problems. For example, as we get older, we are not able to climb the mountain. So trees are very important, and all of us, including our kids should be aware of this. They should also know that they will grow old at one point and lack the energy to go cut that tree. But now we are all forest askaris/guards. The planting of trees through the Green Belt initiative and the forester is very important to help us all to restore the landscape.

Most participants agreed that firewood from indigenous trees is of better quality and is preferred to those from exotic tree species. Planting of indigenous tree species is, therefore, understood as one of the ways to address not only the ecological crises, but the energy crisis as well and, by extension, food security. In this sense, planting of trees and the associated IKS becomes an important intervention. This is discussed next.

5.5.3 Planting and propagating indigenous trees seeds

Our culture likes trees just the way we do livestock. (East, talking circle participant. 26 October 2015)

Tree planting is not a new aspect in Gĩkũyũ culture. Leakey (1977) writes that there were various types of trees planted in homesteads. One of these was the Mũkũngũgũ [*Commiphora eminii*] tree which was used to hang up sweet potato vines for goats to eat. The other kind of tree was known as "kihanya kia muciĩ or kigona kia muciĩ." This was a homestead shrine. As discussed in chapter 4, tree planting had been a feature in all of the post-independence regimes in Kenya. Planting of indigenous tree species, however, took root through the advocacy work of the GBM. GBM communities have planted over 51 million trees in Kenya, in watersheds in the highlands of Mount Kenya, Nyandarwa ranges, and the Mau Complex – three of the five major mountain ecosystems in Kenya, as well as on private and public land (Green Belt Movement, 2016). Since the colonial period, tree planting was understood to be an activity to be undertaken or overseen by those who had attained formal education. The communities who took part in the Shamba system from the colonial period onwards worked under supervision of government foresters. When Wangari Maathai sought the help of the government agency to help the community with tree planting activities, the response she got was communities cannot plant trees. They do not know how. They do not have diplomas (Maathai, 2007). She, therefore, moved forward with the women and referred to them as "foresters without diplomas." This remains a key cornerstone of the GBM approach.

Tree planting is seen as an act with various imperatives: cultural resurgence; ecological restoration; struggle for good governance; community solidarity; and a quest for peace. The first step of tree planting is seed propagation. Communities work with the GBM and KFS to collect seeds of indigenous trees from the forest and propagate them. In addition, they collect soil from the forest which is used in the nursery beds. There are several methods employed in the propagation of seeds as it corresponds to the tree species. The groups interviewed in this study apply various methods to collect and propagate indigenous seeds from the forest:

We collect seeds of Mĩkorobothi [*Afrocrania volkensii*], Mĩtamaiyũ [*Olea africana*], and many other indigenous trees and plants in a nursery. We have taught other groups how to plant Mikeu [*Dombeya torrida*] and Mikorobothi [*Afrocrania volkensii*]. We learnt how to remove the seeds when the tree is dry and propagate them. For trees like Mĩkorombothi – if the seed pods are too dry they burst and fly to another place. We collect the seeds before it gets completely dry. When I went to the forester, he showed me how to get indigenous trees seeds from the forest and plant them. (West, talking circle participant. 12 November, 2015)

When we get seeds we plant them in a nursery, then we were told we should get soil from the forest or one that remains after burning charcoal, then mix it with the farm soil. This is done for Mīkorobothi [*Afrocrania volkensii*] and Mītarakwa [*Juniperus procera*]. (West, talking circle participant. 12 November, 2015)

For olive tree seed/Mutamaiyu [*Olea africana*], you are required to warm the water and put the seeds in it, pour the seeds there. Then prepare a place with murram under it and mix it with manure, then dig trenches and plant your seeds. All these are indigenous methods. (West, talking circle participant. 12 November, 2015)

Other interventions at the national level are implemented through the Kenya Forest Service (KFS) and the community. KFS purchases seeds from the Kenya Forest Research Institute (KEFRI), whose mandate is to collect seeds and test them. These seeds are then passed on to farmers. As a KFS official (East, 8 December 2015) I interviewed argued:

Farmers might not always collect the best seeds, but the majority of the seeds are collected locally. We show them the best trees to collect seeds from. They share knowledge with KFS. So, we talk about how you know if seeds are mature. How do you store seeds? How do you pre-treat, how do you break seed dormancy? Podo, for example, can be sowed for 4 months and it would not germinate if seed dormancy is not broken properly. Communities have knowledge on how to harvest seeds, monitor the rate of growth, and use of products from trees.

Seed propagation and tree planting are, therefore, important knowledge mobilization interventions that are hinged on understanding the soil, cycles of growth, how various seeds respond to various stimuli; a deep ecological consciousness.

5.5.4 Indigenous Gĩkũyũ pest control

Pest control is integral to ensuring good agricultural productivity and health of the soil and the land. Several methods have been devised to ensure this. One of the most problematic pests in Gĩkũyũ land is the mole. While there are now pesticides designed to kill moles, the mole trap (see figure 5.4) is still in use today. According to the participants, the trap is carved from either a Mũtatĩ [Polyscias kikuyensis] or a Mũkũngũgũ [*Commiphora eminii*] tree. Ngũgĩ wa Thiong'o (2010, p. 102) writes:

Moles are a scourge to farmers. It is an invisible enemy that travels underground. How can one catch such a creature? A trap: A piece of wood, hollow inside, three strings, two are nooses at both ends, and the middle, carrying the bait is firm. Dig a trench and place the trap inside the moles path, cover it with soil, and then tie the strings to a bent elastic stick in the earth above ground. As the mole goes through the noose to eat the bait in the middle, the stick straightens up, and the noose tightens around the mole.

The continuity of this tradition ensures that one needs to know the tree to use to make the trap, how to design the trap, and how to position the various elements of the trap to ensure its effectiveness.



Figure 5.4 Mole trap.

One of the elders (West, 10 November 2015) interviewed demonstrated intricate knowledge on pest control. He has planted many indigenous tree species on his compound (an unusual factor in itself as many people tend to plant trees, not on their compounds, but on the boundaries or in the shambas). His reason for planting indigenous trees was:

I learned to plant trees when I was working with the Beberu in Karen and Muthaiga [Nairobi suburbs]and I decided to plant mine. They liked to live inside forests – in a place with many trees. Trees are good, the weather is good. They clear the bad smell produced by other activities of the homestead. No one gets so sick as to need to visit a hospital here in my homestead. Personally, I have never gone to hospital, my wife and kids have never gone to hospital, and I think the trees have contributed to that.

He collects seed from these, propagates them into seedlings, and supplies the Green Belt Movement with the seedlings which are subsequently transplanted in the degraded landscape. He has to compete with and work around two species of birds. He has observed (for over 20 years) that one of them eats the peel of the seed while the other one eats the actual seed. He needs the seeds, so his actual enemy is the bird that eats the seed. His method of dealing with this is through a sling with which he hurls stones into the tree to scare away the seed eating birds. "The birds now know me. When they see my yellow headgear they take off!," he says. He also argues that he has forbidden his children from cutting any of the trees for as long as he is alive. He believes the trees ensure that the family is in good health and peace.





Figure 5.5 From left to right clockwise: a) Elder shows indigenous tree seeds; b) Elder uses the sling to chase away pests/birds; and c) nursery bed of indigenous tree species.

5.5.5 Indigenous Gĩkũyũ plants in food and medicine

According to Leakey (1977), the Agĩkũyũ had a wide knowledge about plants and their environments. They knew, had names for, and used up to 500 species for various needs. Medicine was and remains an important product derived from trees. As one elder (West, 11 November 2015) informed us:

The herbs were for medicine and putting into bone soup. The trees used were mostly from indigenous trees. I knew one that was very famous, I even have some in the house. Trees like Mũiri [*Prunus africana*], Mũkorobothi [*Afrocrania volkensii*], and Mũkarakinga [*Rhamnus prinoides*], Mũthigiũ [*Rhus natalensis*]. So, most of them [indigenous trees] were useful.

Traditional medicine is still in use. Some of the elders were actively involved in producing traditional medicine. Herbalists can also register with the government, and amongst the CFA, members of the community who are interested in producing herbs can form groups and access herbs from the forest. A talking circle participant (West, 12 November 2015) further explained:

In my years [approximately 50 years], I don't take medicine, but take herbal medicine. The only thing I was lacking is the measurements for doses. After my kids are through with postnatal clinics, I introduce them to herbal medicine and fruits and vegetables.

Honey is still considered not just a food source, but also a substance which possesses medicinal values. As a talking circle participant (West, 12 November 2015) narrated:

The other thing I know about honey and how we can harvest honey. I do it naked since that is the only way bees will not get into your clothes. Here I have some honey that I harvested at 5:00 am in the morning. I wanted to harvest bee comb with maggots, another one with bee food, and another one with honey. I use the honey when taking herbal medicine, I don't take honey, but I take Maana, which I didn't get. I do this because my father told me that is what Mau Mau used to eat. I have even eaten this and stayed for a whole day without eating. It was also used by the elders to prepare alcohol. The honey you can see is from a bee hive called hinga, and there is another one called hinga nini and the third called ndambarari, depending on how the honey is placed on the beehive. This honey can stay for long without going bad. I said I did not get maggots and so I cannot

be stung by the bees because it shows there were no young bees. When the young bees leave the beehive, that is the point bees put honey in the beehive. When it is put in the honey comb, it flattens the area so that the honey is hidden.

Such practices keep the community connected to the land. While few people are involved in these practices, the fact that relatively younger members of the community still hold such cultural values and knowledge systems in high esteem is an example of the enduring legacy of IKS.

5.5.6 Indigenous trees and food

Anything that can be eaten by a goat is good for human beings⁴¹. (West, elder interview. 10 November 2015)

Indigenous trees still serve many important roles in Gĩkũyũ society. Trees are important in food processing and production, preservation, livestock feed, and food. For instance, the participants in this study argued that:

There is a tree called Műkűrwe [*Albizia gummifera*] which is used to store bananas for ripening. They help bananas to ripen faster and give them a good smell. And there will not be any hard parts inside the banana. (East, talking circle participant. 26 October 2015)

This is Mũthakwa [*Vernonia auriculifera*]. If you want to eat a sweet meat, slaughter it on its leaves. When you roast and tie it with Mũthakwa, it doesn't get rotten fast. It was also used for carrying meat after men slaughtered and shared meat. (East, talking circle participant. 26 October 2015)

This is Nũma [*Justicia diclipteroides*], it is very important. It grows under wattle trees. If you don't have maize jam/bran for your livestock, this is very important for it has a lot of proteins. Those who herd ox like to give this one to them. (East, talking circle participant. 26 October 2015)

Mũtindia arĩithi [*Embilia schimperi*]/shepherds' companion – shepherds ate this when hungry. (East, talking circle participant. 26 October 2015)

⁴¹ This indigenous knowledge is echoed in the work of Adichie (2006), who writes that, during the Biafran civil war in present day Nigeria, refugees would watch what the goats ate and eat that to avoid starvation.

Mubangi [*Tages minuta*] is used to store maize. It is also used to make pesticides for crops. It is also very important when making compost manure. (East, talking circle participant. 26 October 2015)

5.5.7 Indigenous fertilizers

Improving soil fertility is considered a religious duty when it comes to caring for the land. After the privatization of land, land was cultivated intensely without giving it any time to rest. As one of the elders (East, 16 October 2015) pointed out:

The soil became weak because of farming so much without any change. Just like the Bible says that after every seven years the land was to be left for a year without farming to allow it to rebuild. That has caused harvest to decrease day after the other. We have small pieces of land, so we cultivate on the same place.

This change in land use is also linked to the loss of indigenous crop varieties. According to one of the elders (East, 16 October 2015):

The other reason why some of them [indigenous crops] have disappeared is because the soil became very weak, and now you have to use a lot of manure to realize good harvest. The other thing is so many pests like moles, so we still have everything but not in the same quantities.

The quote above draws from biblical teachings which backs shifting cultivation, a Gĩkũyũ practice which was demonized by the colonial regime and made impractical by private leasehold of land.

Participants also shared various methods that are used to boost soil fertility:

Rabbit urine is a fertilizer that is very good. Another method is – take castor oil leaves and put them in a drum, leave them for seven days, after you will find the leaves have fallen in the water. Where it has fallen, just take and spray into your plants. And that is a very good booster. (East, joint community workshop. 2 February 2015)

We were taught how to make manure. Previously, we were using fertilizer to farm. But we were shown how to make manure using ash. We put organic material in a pit with ash and give them time to decompose. (West, talking circle participant. 12 November 2015) I used to use fertilizers, but nowadays, I don't. I use manure which we make using cow dung and mix it with other tree waste like leaves, and wait for some time, to rot and mix. I stopped using fertilizers because I saw that it was spoiling my soil. I didn't know there is a better method to use. I realized its affecting my soil and, after using manure, I realized it's better than fertilizer. (West, talking circle participant. 12 November 2015)

The Green Belt Movement advocates for the use of organic fertilizers to increase soil productivity. One of the other pathways they explore to engage with communities is ensuring food security by the introduction of kitchen gardens and indigenous crops. As one of the talking circle participants (West, 12 November 2015) noted:

I used to apply fertilizers on my crops, but after being taught by Green Belt about how to plant using cultural fertilizer, I no longer buy it. Today, if you come to my place I have very big maize plants and they were not sick like others in the community. Some people came to buy maize seeds from me when theirs failed. Like the rest said, I was taught by my mother about how to select seed.

The devaluation of indigenous crop varieties has left communities vulnerable to hunger and the only organization that was engaged in promoting the revitalization of cultural food and indigenous agricultural practices in the study site is the Green Belt Movement. Maathai and the GBM made the links between the destruction of the environment and hunger and devised strategies to revitalize this indigenous agricultural heritage. According to Maathai (2010, p. 165):

When communities were told that their culture was demonic and primitive, they lost their sense of collective power and responsibility and succumbed, not to the god of love and compassion they knew, but the gods of commercialism, materialism, and individualism. The result was an expanding impoverishment, with the peoples' granaries and stomachs as empty as their souls.

Agriculture, she argues, is part of how we deal with seeds, crops, harvesting, processing, and eating (Maathai, 2010). As we have seen in the preceding sections, it opened the way to massive environmental destruction, infiltration of unsustainable property management regimes, and oppression for the most vulnerable members of society. What, then, is the way out of this quagmire in regard to food security and forests? Maathai (2010) postulates that we need to learn how to grow indigenous crops,

cook, and eat them with pride. This is echoed by an elder (East, 16 October 2015) who calls for the revitalization of indigenous crops:

If we can return to growing some cultural products, it would be very good. If we continue eating the current crops day in-day out, like rice, our bodies will be lacking some important nutrients. So, we should have teachings on how to return those crops. Today, we have children who rarely eat meat. In those days, men would slaughter a goat and give the meat to the family, give the skin to the wife as a cloth. They would also go to the forest for hunting. We should, therefore, think of returning back to the cultural crops. You have asked me an important question – what was wrong with our crops [demonized by missionaries and governments]? They were given to us by Ngai.

I must point out that it took quite a bit of explaining to get some of these practices to start emerging from the participants. Communities have been convinced and convinced themselves that their ways of living are backward and not worth talking about. If I framed the question using the word 'knowledge', it was difficult to elicit responses. Then we changed strategy and started calling them cultural ways or ordinary ways of living, farming, food processing, land care, and so on. That made the discussion quite lively as examples started to pop up. This lack of confidence is further exemplified by the fact that the participants referred to me as mwarimũ/teacher. My insistence that it was I who was learning from them did not seem to make a difference.

The indigenous practices discussed above underscore the importance of trees to the Agĩkũyũ people in critical arenas of their livelihoods, food processing and storage, livestock rearing, and nourishment. In the following section, I engage with the works of two African thinkers (Thomas Sankara and Amilcar Cabral) on positioning food, conservation and livelihood discourses in both local and global circuits of power.

5.6 Sankaraism: "Our stomachs will make themselves heard."

Maathai's ideas about revitalization of indigenous crops and knowledges echo the philosophies of Sankaraism. Thomas Sankara was Burkina Faso's revolutionary leader and president from 1983 until 1987, when he was assassinated. Aptly described by Aidi (2015, para. 1) as "one of the most riveting leaders of the last half-century," Sankara

offers us a launching pad from which to interrogate the interconnections between food and the environment. As Murrey (2016, para. 4) writes:

Sankara emphasised national food sovereignty, argued against over-dependence on foreign aid, and implemented several important pioneering ecological programmes. He was only in power for four years before he was assassinated in 1987, but in that short time he managed to make the country self-sufficient in basic foodstuffs.

In other words, hunger and ecological disasters could be traced back to the shackles of debt and over-dependence on foreign aid structures that encourage bare survival. At the core of Sankaraism was the belief that the challenges that the Burkinabe people found themselves in were to be traced to neocolonial encirclement and the ensuing asymmetrical power relationships in the world. He stressed self-sufficiency that drew from their creativity, imagination, and passions. As demonstrated above, the growth of cash crops is one clear example of neo-colonial relationships and power structures between the colonised and the colonisers.

Food insecurity became a reality when, amongst other reasons, a large percentage of the productive land base was placed under the monoculture of cash crops. When speaking at the 39th UN General Assembly, Sankara had this to say:

We must succeed in producing more – producing more, because it is natural that he who feeds you also imposes his will...We are free. He who does not feed you can demand nothing of you. Here, however, we are being fed every day, every year, and we say, 'Down with imperialism!'...Our stomachs will make themselves heard and may well take the road to the right, the road of reaction, and of peaceful coexistence with all those who oppress us by means of the grain they dump here. (Murrey, 2016, para. 8)

Food aid and the usurpation of food production by multinational corporations are all ways through which food sovereignty is compromised and sabotaged (Shiva, 2005; Murrey, 2016). As discussed in the preceding sections, Kenya and the Agĩkũyũ people have been recipients of food aid in the past. These events are etched in the memories of people and continue to haunt them, because lack of food is not something that they are not accustomed to historically. According to Oxfam (2005), food aid is a way of controlling the lives of people and compromises food production (especially among the most poor and vulnerable) because it involves dumping surplus production and promoting donor countries' exports. Sankara tied food justice with environmental restoration, which he implemented through the 'One Village One Grove' project. As Murrey (2016) further points out, Sankara understood that self-sufficiency and ecological sustainability were intertwined. Sankara encouraged the planting of trees as a national duty and cultural activity transforming the landscape of Burkina Faso. Drawing from local knowledge and capacities of the people, he mobilized grassroots support for this and other interventions designed to ensure self-sufficiency in all facets of engagement.

At the crux of the tree planting activities was the revitalization of Burkinabe's cultural heritage, a groundbreaking idea at the time. As Murrey (2016, para. 15) writes:

The mixing of forestlands and farmlands was historically practiced throughout West Africa but the practice had been suffocated by the colonial domination of land use. Sankara re-linked the practice of tree planting to pre-colonial tradition, emphasising both the usefulness of tree planting as well as valorising it as custom of the country.

While Sankara's focus was Burkina Faso and in the Sahel, a drought-prone landscape, the food sovereignty challenges he chose to address are and remain applicable to Gĩkũyũland, and much of Africa today. The agro-ecological strategies espoused in Sankaraism can inform and solidify community engagement interventions for the case study at hand. Indeed, as Kientenga (2009) asserts:

It is indisputable that, from the environmental point of view as well as the ecological, Burkina today would have presented a different face [had Sankara's ecological approach survived] than the [current] decrepitude and hazardous sale of pesticides everywhere, the plastic packaging that suffocates our land and restrains our animals, and the GMOs [that proliferate] in spite of outcry and almost universal disapproval. (Kientenga 2009, as cited in Murrey, 2016, para. 24)

It can also be argued that if the positive synergies that the Agĩkũyũ had with their landscape were sustained and allowed to flourish, then the ecological crises that they have had to deal with might have been averted.

5.7 Cabralism: "Return to the source."

Amilcar Cabral was an agronomist and revolutionary socialist leader of the national liberation movement that freed Guinea-Bissau from Portuguese colonialism. He was assassinated in 1973, eight months before his country attained independence. Some of Cabral's seminal work is in the milieus of cultural practices and productivity. It was Cabral's belief (based on extensive ground work with communities) that national liberation meant nothing if it did not coalesce with economic liberation through agricultural productivity. Imperialism, Cabral argued, is a structure of exploitation where the imperialist power controls the development of the forces of production in another society and, thereby, takes charge of its history (Brown, 2012).

I engage with Cabralism here because, like Sankaraism, it mirrors the agricultural and economic conditions of Agĩkũyũ people under colonialism, and after the attainment of flag independence. Like Sankara and Maathai, Cabral strongly believed that the key towards true African self-determination and environmental consciousness was through a deliberate re-engagement with our cultural identities and ways of knowing. This was to be the lynchpin under which democratic ideals and development could be structured. According to Cabral:

A people who free themselves from foreign domination will be free culturally only if, without complexes and without underestimating the importance of positive accretions from oppressor and other cultures, they return to the upward paths of their own culture, which is nourished by the living reality of its environment, and which negates both harmful influences and any kind of subjection to foreign culture. Thus, it may be seen that if imperialist domination has the vital need to practice cultural oppression, national liberation is necessarily an act of culture (Cabral n.d., as cited in Biney, 2014, para. 14).

Cabral saw culture as:

An essential element of the history of a people. Culture is, perhaps, the product of this history just as a flower is the product of a plant. Like history or because it is history, culture has as its material basis the level of the forces of production and the mode of production. (Cabral, 1970, para. 12)

Cabral encouraged food diversification and a subversion of the Portuguese cash crop industry and economic system by encouraging barter trade. Food justice was a central plank of the struggle against imperialism, and the associated undermining of indigenous knowledge systems in agriculture. As Idahosa (2002) argues, Cabral had investigated the nature of indigenous people's social and productive systems, the politics that wove them together or tore them apart, and the impact of colonial agriculture upon them. In addition, he had written extensively about the problem of soil erosion in Cape Verde in the 1940s. As such, indigenous knowledge was placed on a pedestal as a critical tool towards liberation on all fronts. This knowledge and the embedded cultural practices were critical in understanding relationships between people-land, people-food, people-economics, people-politics relationships. Just like the Agĩkũyũ, Cabral noted that farmers were being driven away from food crop production and the associated traditional cropping techniques and encouraged to grow cash crops. In Cabral's case, it was groundnuts. As a result of this, "Guineas economy depended on the product within the fluctuations of the international market, which also tied certain groups, either through pervasive destitution that contributed to the migration to towns" (Idahosa 2002, p. 40).

Revitalization of Agĩkũyũ culture is an imperative for survival. It is an act against another form of colonization – colonization of the stomach. It is a battle towards restoration of Gĩkũyũ dignity and pride. As has been demonstrated, there cannot be any protection of the forest or ecological restoration without the liberation of the stomach. Cabral's call of "return to the source" is a guiding light towards efforts achieving food sovereignty, environmental restoration, and general cultural resurgence. Returning to the source is about reclaiming the power of the seed, control over food production, building relationships, building communities, and healing societies that have been dislocated from their landscapes by multiple forms of oppression. In the next section, I discuss concrete ways of building sustainable people-forest relationships through IKS, as outlined by the participants.

5.8 Towards an environmental conservation framework for sustainable people– forest relationships

I used to think the top environmental problems were biodiversity loss, ecosystem collapse and climate change. I thought that with 30 years of good science we could address those problems. But I was wrong. The top environmental problems are selfishness, greed and apathy...and to deal with those we need a spiritual and cultural transformation. And we scientists don't know how to do that. (Gus Speth as quoted in Colwell, 2015, para. 9)

As outlined in chapter 3 (methodology), some of the strategies employed in engaging with the community in discussion about the challenges that they face, and how these can be resolved, are metaphorical strategies. Two such methods include the wrong bus syndrome and the three-legged African stool. The application of each of these strategies and the emerging results are discussed in the following section.

5.8.1 The wrong bus syndrome

Maathai (2010) uses the wrong bus syndrome to theorize the current state of affairs on the African continent. The wrong bus provided a springboard from which to analyze how we got to where we are, and how to get on to the right bus. This metaphorical strategy was employed during the joint community workshop. We started off the discussion by asking the community members present if they thought we were on the wrong bus with regard to general community welfare and the status of the environment. It turned out that the group that had travelled to the eastern side of the forest (the venue of the workshop) had 'gotten lost' on their way to the venue. The discussion drew from that practical example. How come we did not find our way? Some of the reasons put forward for getting on the wrong bus/missing the way included: being lost in your thoughts; not paying attention; lack of knowledge; not seeking help/guidance; lack of exposure; you may have slept in the bus (which was understood as a metaphor for not thinking); and finally, not getting adequate information or any information about your destination. What do you do when you discover you are on the wrong bus and headed the wrong way? Some of the participants (East, joint community workshop. 2 February 2016) said:

I would alight and go to look for the bus going the right direction.

If I realize, I will ask someone who may know where I am going. Today, there are phones and we can call. They then will direct me to the right bus.

I would go back to where I started my journey and ask from there.

I think I would stop, look for someone to ask. I would also go back few steps, then ask them the way. I will keep asking for directions along the way. I need to retrace my steps and ask for help.

When applied to the state of the forest, the metaphor made sense to those in

attendance. As one participant argued:

The issue is teaching us that when we realized the forest was destroyed, we should go back and start re-establishing the forest. Like the secretary said, they had to mobilize at the community level when they realized that the forest was getting destroyed. You go back to the beginning and evaluate your mistakes. We used to say that the forests belonged to the government, but now we know it belongs to all of us.

The same argument was extended to the realm of de-culturation, which is one of the lenses that Maathai (2010) uses to anchor her argument regarding environmental protection. According to one of the participants:

What I can say is this – we have left all the good things and cultural practices that sustained our society, and adopted maudũ ma mũthũngũ/the white people's ways. And now, we see we have lost our way. We need to go back and find how to move forward. We should be alert that we don't enter in the bus of destroying the forest.

Maathai (2010, p. 167) advocates for kwimenya/self-knowledge amongst African

societies who have been brainwashed by colonialism, and other forms of oppression.

She argues that:

Culture gives a people self-identity and character. It allows them to be in harmony with their physical and spiritual environment, to form the basis for their sense of self-fulfillment and personal peace. It enhances their ability to guide themselves, make their own decisions, and protect their interest. It's their reference point to the past, and their antennae to the future. Conversely, without culture, a community loses self-awareness and guidance, and grows weak and vulnerable. It

disintegrates from within as it suffers a lack of identity, dignity, self-respect, and a sense of destiny. People without culture feel insecure and are obsessed with the acquisition of material things and public displays, which give them a temporary security that itself is a delusional bulwark against future insecurity. (Maathai, 2010, p. 167)

In the same vein, one of the participants further elaborated:

There is a difference between getting lost and missing the way. We entered the right bus, but we missed the way while on our way here. It happens that we know where we are going, but we found ourselves lost until we enquired the way. That is when we arrived. If we didn't, we would not have come here. It is like someone coming here, and growing what does not do well...When we come into the forest, the right bus is growing the right trees. Another lesson is that we should be patient and go back to the point where you missed the way. Then, from that point, go in the right direction. So, getting on the wrong bus is not the end of the road. There is redemption. This is our business as a community. We need to find a way of resolving it.

Maathai (2010) argues that it was through her analysis of the intersection of culture, environmental destruction, and corruption that she expanded the scope of GBM's work to include cultural heritage, the consequences of de-culturation, and how this was symptomatic of the public's reaction to the environment and, indeed, life itself. Getting on the right bus, therefore, become critical towards "Gũcokia rũhi mũkaro"/finding our path. Gũcokia rũhi mũkaro is vital if we are to achieve the spiritual and cultural transformation that Gus Speth speaks about at the opening of this section.

5.8.2 Re-chiselling the three-legged African stool

The three-legged African stool (described in detail in chapter 3) is a common feature in many African societies. Chiselled out of a single block of wood, the stool is a symbol of power, stability, and harmony. Maathai (2010) uses the metaphor of the three-legged African stool to theorize around the challenges facing African societies, as well as to proffer solutions to these challenges. We used this metaphor of the threelegged African stool during the joint community workshop to engage in discussion about how to safeguard the landscape and community livelihoods. The elder (East, 2 February 2016) who hosted us during this workshop had a three-legged stool in his homestead and he explained about the indigenous technology associated with the carving of these stools:

This is the ngomi/chisel that is used to carve the three-legged stool. There is another called thiaa that was used to hang bee hives. It looks like this tool but the difference is on the handle which should be able to help you hang bee hives. There was a special tree known as Mũthaitĩ; it was a bit hollow and was used to clean the inside of the beehive. Another tool is the slaughtering knife. These tools were not imported from abroad but were cast using soil that is on our land [emphasis added]. There was a certain type of soil near the forest that was used to boil and make metal traditionally. But the men who used to do that died with the knowledge because they never taught anyone because they didn't want to unless you pay them with a goat. And now, the Chinese came to make the highway. And decided that all the machinery was to be brought from abroad. But in the past, all the iron implements were made here. Kenya would have really developed if we were using our own technologies. When the Beberu came, this wisdom stopped because they feared the Beberu would cut the hand of such a person to stop them from doing that. If you were found to be inventing anything you would be stopped. The Beberu was selfish and could not allow anyone to be self-reliant. He treated us like his garden.

Maathai (2010) argues that the African stool has been broken by slavery, colonialism, de-culturation, poor governance, and environmental destruction. She calls for all Africans to work towards re-chiselling the three-legged African stool. When asked if they believed that the stool was broken, the participants were firmly unanimous – Yes! We then engaged in a discussion around the reasons for the brokenness of the threelegged stool. The reasons put forward included: not taking care of it; a lack of knowledge; forsaking our culture (associated with colonialism, modern education, Christianity); by destroying the forest, so we don't have a log to make it; and because we don't ask for counsel. One of the younger participants from the west and in her mid-20's, caused both laughter and bewilderment when she made this confession: "Personally I don't know what it is, I even though it is a chapati [flat bread] stool. And I was wondering why someone was sitting on a chapati stool!" The admission by this participant is a testament of the breakdown of Agĩkũyũ cultural infrastructure. There is recognition that there is not a proper transmission of knowledge systems from the older to the younger generations. As one of the elders pointed out, "We have to go back to our culture. We have left it to an extent that we don't train our children even speaking

our language – the Gĩkũyũ language. We are not English people." One of the elders (East, 2 February 2015) distilled the overall discussion thusly:

What is coming out of our discussion is that when the Beberu came they started teaching Africans to leave their traditions and join the church; that the only place where you can find peace is in the church. They made fools out of us. We were not allowed to grow coffee, pyrethrum. We became slaves on the Beberu's land. I can say the Beberu was the first one to destroy forest through farming, through constructing railway, and transporting things outside, yet we remained as slaves to them. So, that is how the Agĩkũyũ people started losing their culture and started adopting the Beberu's ways. It is like blowing air in the fire and then spitting water on it. We, the elders, can see this, but our children do not see that. And our culture is completely disappearing. We will only be hearing that there were Agĩkũyũ people.

It is from this point that we sought to explore ways of re-chiselling the three-legged stool.

5.8.3 Towards Gũcokia rũhi mũkaro/finding our path: Re-chiselling the three-legged African stool

Bile burns my inside! I feel like vomiting! For all our young men Were finished in the forest, Their manhood was finished In the classrooms, Their testicles were smashed With large books! (Okot p'Bitek, 1984, p. 134)

From the preceding discussion, it is clear that the community recognizes that there is a problem with regard to general community well-being. That there are challenges from within and from without. There is also recognition that they, the community, have a critical role to play in re-chiseling the stool. They have a contribution to make towards "gũcokia rũhi mũkaro." Education is seen as a potent way of revitalizing indigenous ways of knowing. As discussed earlier in this chapter, there were various informal methods of education amongst Agĩkũyũ society. Gĩkũyũ cultural teachings were also included in the formal curriculum, especially through the independent school movement during the colonial period. As one elder (East, 10 February 2016) recalls:

When we were studying, we used books written in Gĩkũyũ. Those books of the Agĩkũyũ were very good, but all the Gĩkũyũ ways of knowing were being destroyed [during the colonial period]. And we did not know that we were the ones being fought. The books that were written for the use by the Agĩkũyũ were destroyed and now we are using the books that were written by the Beberu.

The Gĩkũyũ independent schools and churches emerged as a result of dissatisfaction with the colonialists, and the psychological arm of colonialism represented by the missionary policies that sought to undermine Gĩkũyũ cultural practices. It is important to note that these schools were established through the community's own mobilization of resources. Some Gĩkũyũ elders donated land on which some of these schools were built. When the emergency was declared in 1952, these schools were banned and some of them razed to the ground. The Gĩkũyũ independent college was transformed into a gallow where the Mau Mau were hanged by the Beberu (Ngũgĩ wa Thiong'o, 2010). This was to undermine all of the efforts that had gone into establishing this institution and all that they stood for. Ngũgĩ wa Thiong'o (2010) writes that independent schools⁴² were based on the principles of self-reliance and they drew from Agĩkũyũ cultural traditions. As such, performance was central in many activities in and out of the classroom. Some of the songs and performances chronicled historical injustices meted towards the Agĩkũyũ.

For example:

If this were the times of our ancestors, Ndemi and Mathathi My father, I would ask you for the feast due to initiates, Then I would ask you to arm me with a spear and shield But today, Father, I ask you for education only Our herd of bulls is gone Our he-goats depleted I will not ask for a banquet My father, all I ask for is education. (Ngũgĩ wa Thiong'o, 2010, p. 123)

⁴² It is also worthwhile noting that these schools were used to mobilize the community to wage war against colonial invasion.

According to Ngũgĩ wa Thiong'o (1965, p. 10), "Ndemi and Mathathi were giants of the tribe. They had lived a long way back, at the beginning of time. They cut down trees and cleared the dense forests for cultivation." The invocation of Ndemi and Mathathi is also tied to a statement believed to have been made by Jomo Kenyatta at the height of the struggle for independence. That is, "from Ndemi and Mathathi, this land was ours and nobody can tũnya [take it away from us] us". In the independent schools, both English and Gĩkũyũ were taught side by side and all knowledge systems were accorded respect. Once the independent schools where a deliberate effort was made to undermine Gĩkũyũ ways and African ways in general. Ngũgĩ wa Thiong'o (2012, p. 66-67) illuminates the scenario:

The tendency to make Europe the reference point for human experience was exacerbated by the content and approaches in other subjects as well. In geography, the European landscape, mountains, rivers, and industrial locations were the primary formations to which the African versions, secondary of course, could now be contrasted. To the River Thames about which I learned in my elementary schooling, I added knowledge of *civilized* (emphasis in original) waters in Europe - the Seine, Danube, Rhine, and Rubicon - as the early locations of commerce and trade. African rivers - the Niger, Nile, Congo, and Zambesi - all discovered by Europeans, had any number of reasons for not being sites of civilization, except of course the Nile Delta, but even that was really part of the Mediterranean and Asia Minor, as the Middle East was then named. In history class, we traveled through 16th and 17th century England, admiring a gallery of dashing heroes. Livingstone, Stanley, Speke, and Burton were the larger-than-life bearers of light to a dark continent. They were soul merchants, traversing terrains of dangerous forests clad in nothing more than the Bible, spreading enlightenment and casting out the devil. In the story of colonial settlement in Africa and America, only the Spanish and German rivals wallowed in blood, while the English overcame challenges of nature and man. Even in the story of the slave trade, the English, with the antislavery legal enactments, emerged as the heroes of the abolition movements and the villains of its earlier expansion.

I quote extensively from Ngũgĩ wa Thiong'o because the Kenyan education system carried on colonial *modus operandi* into modern day Kenya as attested to by participants in this study. As one of the elders (West, joint community meeting. 2 February 2016) astutely argued: The government that is ruling is telling people to be digital and its telling all sorts of things, most of which are western and not cultural. Teaching cultural ways should start from the grassroots with children. Kids are learning other languages and encouraged to forget their own. Now, there is global warming and climatic changes, we are the ones who have been affected all this.

Okot p'Bitek (1984), quoted at the beginning of this section, argues that all the men who were not killed by colonial powers in the forests were still killed in the classrooms where their testicles were smashed with large books. I understand this as as the destruction of seeds the carriers of life, the destruction of personhood, of culture, and of our sovereign being. As a guide towards re-chiselling the stool, we explored the challenges that the community faces, and analyzed how these are related to safeguarding the landscape. Some of the challenges enumerated included: destruction of the environment; shortage of firewood; shortage of water; lack of money; lots of diseases; diseases that affect crops; poor harvests; loss of culture; fog that destroys crops; lack of market/poor prices for farm produce; changes in climate; drug abuse; lack of education; and poor transportation. The participants argued that all of these challenges have a bearing on forests, general landscape health, and community well-being. In that sense, then, taking care of the land and the forests, becomes a critical step forward towards the building of sustainable livelihoods. In order to achieve these (landscape health and community well-being), four interlocking strategies/interventions were discussed and agreed upon. These are: education; tree planting; community mobilization; and an IKS framework.

5.8.3.1 Education

To educate in post-colonial Africa in the 21st century without making visible the dignity, creativity and humanity of Africans is to perpetuate Joseph Conrad's imagery of Africa as "heart of darkness." (Nyamnjoh, 2016, p. 2)

According to Achebe (n.d.) as cited in Tyson (2006, p. 375), "in the *Heart of Darkness,* Joseph Conrad portrays Africans as a pre-historic mass of frenzied, howling, incomprehensible barbarians." Education should not be understood as institutionalized education or formal education. In this case, education should be seen as an all-encompassing activity that straddles both the formal and informal realms. Formal

education has been criticized as imbued with coloniality. It is an education that produces self-doubt, self-deprecation, and self-annihilation. In the preceding section the need for context dependent education was emphasized as a tool for ensuring sustainable livelihoods. Infusing cultural teachings in both formal and informal educational systems is of the essence. Education is our light, but not if that education takes us farther and farther away from the land. It has been demonstrated in this chapter and chapter 4 that cultural instruction was critical in forging a stable society amongst the Agĩkũyũ. Without this kind of system, people drift through life without any depth or meaning. Kodjo (1987) describes the condition of the African as "torn away from his [or her] past, propelled into a universe fashioned from outside that suppresses his [or her] values, and dumbfounded by a cultural invasion that marginalises him [or her]. The African...is today the deformed image of others" (Kodjo, 1987, as cited in Pheko, 2012, para. 1).

Culture is, therefore, the lifeblood of environmental and community health. It is a stepping stone towards reconstruction of African societies. Intellectual house cleaning is thus an indispensable supplement necessary for the completion of our political liberation. It is only by liberating the mind that we will "shatter the psychological and metaphysical shackles of European domination" (Farley, 2001, para. 1). We can now start re-chiselling the stool. We choose a camphor tree to be our starting point. Camphor is strong and beautiful. And with this Ngomi made from the soil, the soil of our ancestors, we start the chiselling – kuku! Ka! Ka! Kaka! Ku!, the sounds resonate with the land and so the first leg of the jũngwa/three-legged stool starts to form – Education, is the first step of kwimenya/self-knowledge. Education is the first step towards "gũcokia rũhi mũkaro."

5.8.3.2 Tree planting: Restoration of forests and protecting existing forests

A tree has roots in the soil yet reaches to the sky. It tells us that in order to aspire we need to be grounded, and that no matter how high we go it is from our roots that we draw sustenance. (Maathai, 2007, p. 293)

Planting of trees is, as has been discussed, should be read as a complex task of cultural resurgence, social reconstruction, restoration of livelihoods, and political engagement. Planting indigenous tree species entails learning about these species

(including names), how to propagate the seeds, how to take care of the seedlings, and how to use products from these trees. This, in itself, creates an opportunity to build and share a repository of indigenous knowledges about the land and the place of humans in it. Through tree planting activities, the GBM has created a network of community members working to replenish the earth and, consequently, replenish themselves. Both groups that I have worked with in this research project have demonstrated the power of community mobilization in resolving community challenges. The group in the east for example, argued that there was better security and peace in the community after they intervened to prevent destruction of the forest.

This is the hallmark of social reconstruction which draws from the well of Agĩkũyũ ways of knowing. Landscape restoration helps safeguard livelihoods. For an agricultural community that fully depends on rain-fed agriculture, forests remain a lifeline for survival. Therefore, forests are life, for they sustain livelihoods. Tree planting is an opportunity to engage with the government and governance. It creates a platform for the community to engage directly with legislation, and the policy environment in Kenya now creates room for that. It is also a chance to challenge poor governance. Tree planting is also used as a way to memorialize important events. One of the talking circle participants (West, 10 November 2015) showed me a cedar tree she planted on the day that Wangari Maathai was buried. She said that "I want this tree to remind me of the struggle of Wangari Maathai to save forests. It is my way of standing with her and honouring her because she was a warrior." She chose to stand with her because her politics was tied to sustaining livelihoods and community members could relate to this directly. Tree planting has taken root in Gĩkũyũ land and Kenya at large. Tree planting should, therefore, be viewed as a revolutionary act. So, yet again, we pick up the Ngomi and chisel away. kuku! Ka! Ka! Kaka! Ku! And the second leg of the stool comes to the fore – tree planting and protection of existing forests.

5.8.3.3 Community mobilization

We must kill. Put to sleep the enemies of black man's freedom. They say we are weak. They say we cannot win against the bomb. If we are weak, we cannot win. I despise the weak. Why? Because the weak need not remain weak. Listen! Our

forefathers fought bravely. But do you know the biggest weapon unleashed by the enemy against them? It was not the maxim gun. It was division among them. Why? Because a people united in faith are stronger than the bomb. (Ngũgĩ wa Thiong'o, 1967, p. 207)

There is an African saying that goes like this: "If you want to go quickly, go alone. If you want to go far, go together." Community mobilization is a defining element of many African societies. According to the philosophy of Ubuntu (discussed in detail in chapter 3), we become human in the midst of others. Historical evidence demonstrates that the only time when the Agĩkũyũ have saved themselves were those times when they pulled together. Key examples of these include: the establishment of independent schools, the organization, launching and sustaining of the Mau Mau revolt, and the restoration of the landscape through tree planting. The Swahili say kidole kimoja hakivunji chawa/one finger does not crush lice. As Maathai (2007) argues, planting trees is the easy part; making sure that they survive is the difficult task. Planting trees initiates an act of mothering, of nurturing, a life-long commitment. Therefore, the community has to be on guard and pass on the same set of skills to the younger generation. This involves ensuring that mobilization does not become a one-time event. It needs to be a continuous event that is ingrained in the community way of life. According to Ngũgĩ wa Thiong'o (2016), one of the greatest failures of the post-independence states in Africa is the unwillingness to mobilize the masses to rebuild Africa. The ruling elite have turned into enemies of the people whose main business is to be at the service of empire. This kind of orientation has failed to "secure the base" (Ngũgĩ wa Thiong'o, 2016, p. 1). I concur with Ngũgĩ wa Thiong'o and I will now draw from experiences during this research project to illustrate this point.

I recall speaking with elders who demonstrated a high level of complex thinking and an ability to make connections between the current situation, the past and future. One elder linked the destruction of casting of iron technology (through colonization) and the present day importing of all the construction materials from China. Another elder (East, joint community worskshop. 2 February 2016) linked the use of pesticides to destruction of indigenous knowledge systems and seed preservation. "They destroyed it so that we keep buying from them," they said. This is a display of deep and complex thinking. An ability to make correlations. Were the same questions posed to a formally educated person the answers might not have been the same. The likelihood would be that the educated person would not know that our ancestors were smelting iron – from our soil. They also would see the Chinese take-over of all the supply chain in construction as 'development' and 'globalization'. That is the tragedy of the education systems. It has produced a situation that is akin to intellectual cleansing where the educated do not recall any history, but instead are encouraged to have an uncritical imbibing of 'modernity' and 'development'.

So, let us re-chisel the third leg of the stool with the Ngomi from the soil. The soil that is our birthright. kuku! Ka! Ka! Kaka! Ku! And so, the third leg begins to emerge – Community mobilization. The seat of the stool is the last section that we will work on. This is going to be an indigenous knowledge framework which infuses the three legs with cultural teachings. To my mind, this framework can be modelled around the thinking articulated in Dei's anti-colonial discursive framework, as it aligns with the history of the Agĩkũyũ people. Thus, it should be guided by the rejection of heirachies of knowledge systems, fluidity and transparency of knowledge production, celebration of Agĩkũyũ cultural trations, departure from victimization, grounded in cultural teachings, and rooted in the Agĩkũyũ's revolutionary resistance to oppression. This system offers a space through which we can look at the land and each other with new eyes. I would like to illustrate the power of such a framework by drawing from the Gĩkũyũ universe of storytelling. This story was narrated by an elder (West, 12 November 2015) and goes like this:

One day, the hare told an elephant that "even if you, elephant, are so big, you cannot pull me." "I cannot pull you?" wondered the elephant. Hare replied, "no you can't!" Then the elephant said, "okay, then let us agree on when we can pull each other so that we eliminate any doubt." The hare said, "let us pull each other on that mountain a week from today." The hare also went to the hippo and told the hippo that, "hey, hippo even if you are so big you cannot pull me!" The hippo was incensed. The hippo said to the hare, "when can we do that so that we eliminate the doubt?" The rabbit said, "let us do it a week from now from that mountain over there." The hippo agreed. So, the day of reckoning came. The hare went to the river, tied the hippo with a chain, and told the hippo, "wait until you hear the sound of the chain from the other side of the mountain and then start pulling." The hare

went to the other side of the mountain and tied the elephant and told the elephant the same. The hare went on top of the mountain and pulled the chain, and the hippo and elephant started pulling each other! They pulled and pulled, and none of them could pull the other. The hare then went to the elephant and said, "now you agree that you cannot pull me." The elephant agreed. Then, the hare went to the hippo and said, "so you now agree that you cannot pull me, right?" The hippo lowered his head in shame and said, "yes!"

Wisdom is strength. An indigenous knowledge framework is anchored in wisdom, not might. As such, this system becomes a good base to start from because it creates a space to interrogate our ethics around environmental issues. As Gus Speth writes above, the greatest environmental challenges today are as a result of human greed and breakdown of value systems. This framework should be anchored in cultural teachings that can help us sustain the land and ourselves. This framework will inform all of our engagements with the land, including growing crops that were inherited from our ancestors and crops that respond to the soil, carrying on the tradition of indigenous agriculture, caring for the land, and caring for livelihoods.

5.9 Chapter summary

This chapter discussed the manifestations of IKS at the local, national, and international levels as applied in the Nyandarwa landscape. It further explored how an ethical indigenous environmental framework could promote sustainable people-forest relationships. Using food and landscape restoration as two domains in which IKS is manifested, I have demonstrated various living cultures amongst the Agĩkũyũ and how these are involved in transforming the landscape and community livelihoods in very concrete ways. I began by grounding the chapter in a historical perspective in order to unpack Agĩkũyũ land and food relationships. As Christensen (2014) argues, in most cases, Africa's food crises are always assessed from the position of what is, as opposed to asking why that is or trying to gain insight into how communities that once had enormous quantities of food became food insecure. According to Christensen (2014, p. 3):

Post-colonial Africa nations, however, did not develop food insecurity organically, hence observing "what is" is insufficient to remedy their problems. It did not result from gender inequalities, did not emerge due to low production rates, will not be the result of the land's inability to support life – though each of these factors exacerbates hunger. Instead, these nations were colonized by Europeans, robbed of resources and enslaved, uprooted and impoverished. As such, Africans were forever altered, traditional practices lost, cultural norms destroyed.

I concur with Christensen, and further argue that understanding the origin of a problem can help to resolve it. As demonstrated in this chapter and in chapter 4, colonial policies related to land had a huge bearing on the Gĩkũyũ way of life. Land alienation, mass displacement of people, missionary infiltration, undermining of Agĩkũyũ' cultural heritage, enslavement of Agĩkũyũ people on settler farms, and settler monoculture agriculture all intersected to produce hunger. I have discussed a repertoire of IKS practices as linked to agricultural practices, especially through food production. In as much as the cultural infrastructure of the Agĩkũyũ people has been weakened by a combination of factors (colonialism, modernity, neo-colonial encirclement), some elements of these practices continue to shine through their livelihood regimes because communities have continued to give life to them. It has been shown that the communities who participated in this study are interested in cultural revitalization and in growing indigenous crop species, and that efforts in this direction are bearing fruit for those that are actively engaged with the GBM's food security programme.

Food security and safeguarding of forest ecosystems are interlinked, and this case study has shown that the safeguarding of livelihoods and forests has to be addressed systematically and holistically through a landscape-oriented approach. Everything is interconnected. I have also drawn from the works of Maathai, Sankara, and Cabral to unpack the interlinkages with African food security and imperialism. These thinkers offer what Dei (2001) refers to as an anti-colonial discursive framework from which we can interrogate challenges that face the African continent. These scholars insist that Africans must work towards food self-sufficiency through a return to the production of African indigenous crops which are suited to African soils and climates. According to the participants, restoration of the landscape is a critical tool for resolving a majority of the challenges that they face as a community. To achieve this, they propose a four-pronged

strategy which I have used as a guide in re-chiselling the three-legged African stool. The legs and seat of the stool are ecological restoration, community mobilization, education, and an IKS framework.

Chapter 6: Discussion and conclusion

6.1 Introduction

The African scholar has two clear tasks before him [or her]. First, to expose and destroy all false ideas about African peoples and culture that have been perpetuated by western scholarship. Vague terms such as *tribe, folk, non-literate* or even innocent looking ones such as developing, etc., must be subjected to critical analysis and thrown out or redefined to suit African interests. Second, the African scholar must endeavour to present the institutions of African peoples as they really are. (Okot p'Bitek, 1979, as cited by Imbo, 2002, p. 4)

I started this Ph.D. and research project with a desire to centre African IKS. I positioned my interest in this area because of my experiences working with different African communities, as well as my interactions with Aboriginal communities in Australia's northern territory. I also draw from my own life experience and reflect on the fact that I am a beneficiary of IKS. All of these experiences (discussed in detail in chapter 1) guided my research work and engagement with the Agĩkũyũ people, with whom I partnered in this project. My desire to centre IKS is anchored on the belief that subjugated knowledge systems have the potential to offer transformative ideas towards protection and sustenance of people-forest relationships.

This belief can be applied to general conservation discourses about forests and natural resources in general. The central goal of this thesis was to understand people-forest relationships through the lens of IKS. This chapter seeks to synthesize the main arguments made in this dissertation and position them within larger conservation and community engagement discourses. It will discuss the results of the four research questions that guided this study. The main study findings show that the Agĩkũyũ people understand the forest and conservation through the lens of land, which remains a central pillar for construction of their spiritual history, survival, and struggle. The study further shows that colonial dislocation had a severely disruptive impact on the Agĩkũyũ society, the effects of which are felt today and manifest in their socio-economic and social-cultural needs. In addition, colonial-like policies have shaped people-forest relationships into the post-independence period and have played out in the power and leadership discourses of four presidencies. Finally, irrespective of all the pressures

against IKS, Agĩkũyũ indigenous environmental thought has been sustained through sacred sites, self-mobilization to protect their landscape and livelihoods, and the quest for seed and food sovereignty. All of these are strategies that aim at ensuring sustainability and harmony with the land. The thread that weaves these people-forest relationships together is a desire to sustain Agĩkũyũ individual and collective humanity.

As Okot p'Bitek (1979), quoted in the beginning of this section argues, Africans must work towards exposing and destroying false ideas about African peoples. As highlighted in the quote, some of these ideas are to be found in the language ('tribe' and 'developing') that is used to define African peoples. According to Ngugi wa Thiong'o (2016), the word 'tribe' is a colonial creation that seeks to make Africans look small, weak, and incomprehensible. How is it that 300,000 Icelanders constitute a nation, while 30 million Igbos are a tribe? And yet they have all the characteristics of a nation territory, language, socio-economic, and political organization. I concur with Ngũgĩ wa Thiong'o and have, therefore, only used this term when making direct reference to other works. According to Rodney (1972), the terms 'development', 'underdevelopment', and 'developing' mask the exploitation of these countries or peoples by 'developed' ones. Another set of false ideas is the belief that Africans do not know conservation, that they have to be taught conservation, and that they are naturally destructive. These ideas stem from the era of enlightenment, and have been perpetuated by colonial and neocolonial literature and other pro-imperialist discourses. All of these false ideas fall into the category of what Ngũgĩ wa Thiong'o (1986, p. 28) conceptualizes as the "cultural bomb," whose impact has been the continued dismemberment of African peoples.

This study has shown the impact of dismemberment practices on lives, livelihoods, ideas, cultural ways, and general community well-being. In discussing the results, this chapter will seek to elucidate the 'cultural bomb' that has been dropped on the Agĩkũyũ people and propose interventions towards the reconstruction of people-forest relationships. The second task calls on Africans to present African institutions as they really are (Okot p'Bitek, 1979). This thesis draws from the works of diverse African scholars, thinkers, and theorists. Using the umbrella of Dei's anti-colonial discursive framework, I specifically draw on the indigenous environmental thought and philosophy

of Thomas Sankara, Amilcar Cabral, Wangari Maathai, and Ngũgĩ wa Thiong'o. It is my belief that the works of these individuals help to portray African people and institutions as they really are. All of these individuals embody African agency in different forms of emancipatory struggles. Thus, some of their ideas will enhance the discussion in this chapter. In line with Dei's anti-colonial discursive framework, the community ideas and thoughts emerging from this study help to contribute towards 're-chiselling the threelegged African stool'. In the following sections, I discuss the main findings of this study.

6.2 "I am telling you, there was no forest": Land as the centrepiece of Agĩkũyũ people-forest relationships

According to Rodney (1972), diagnosing the root cause of a problem is important in order to come up with appropriate solutions. Proper diagnosis calls for a historical excavation. When one sees a doctor with an illness, the doctor asks the patient to think backwards and try to trace the origin of the illness. In this regard, we start our historical excavation with regard to the Nyandarwa landscape from 1778, in the 'Era of Enlightenment'. It was during this time that a booklet promoting the exploration of the interior of Africa was published. At this point, nothing much was known about Africa (by Europeans) and this was "seen as a shameful gap in human knowledge that must be immediately filled" (Hugon 1993, as cited in Serequeberhan, 2012, p. 139). And thus began the era of discovery that saw the "planting of European memory in Africa" (Ngũgĩ wa Thiong'o, 2009, p. 4). According to Serequeberhan (2012, p. 13), "there is a seamless confluence in the pursuit of knowledge and the conquest of Africa."

Further, "Europe objectified the globe as the terrain – the virgin soil – on which to inseminate and actualize true human existence" (Serequeberhan 2012, p. 13). The era of discovery starts the systematic conquest of African societies. Discovery culminates in naming. Nyandarwa, so named by the Agĩkũyũ because it looked like a drying cowhide, becomes Aberdare, thus burying the memory of Agĩkũyũ, memory that reminded them of a time when they had many cows. As an elder interviewed in this study recalled, "the elders of those days had a lot of cows, let me tell you. We used to eat meat all time." By renaming the landscape, the Agĩkũyũ are denied the opportunity of naming the land and of memory, hence starting the systematic dismemberment and dislocation of the

Agĩkũyũ from their landscape. I understand this renaming process as the first form of taking, an indirect form of theft of land, because it marks the beginning of colonial dislocation of the Agĩkũyũ from their land.

One of the first questions I asked the elders in this study was, "what was the extent of the forest before the colonial period?" The very first elder I interviewed was a 90-year-old man who lives at the edge of the forest boundary. When I posed this question to him, he responded that "there was no forest!" I was puzzled. "What do you mean?" I pressed on. He told me that people were scattered everywhere. That there was no special designated place known as a forest. There was freedom of movement. People farmed in what he referred to as "gichanhganyiko." This was to say that land use was all mixed up. He then told me that the forest was created when the Beberu came and created a boundary, designating it as 'special'. He then summed up his explanation by saying, "I am telling you – there was no forest!" I had to question the framing of my whole set of questions from that point on.

The designation of the forest as a special zone is seen through the lens of land dispossession because some people had to be moved out so that it could be set aside. This particular elder was one of them. This word 'special' is also important in understanding the tensions between conservation and communities living around protected areas. Once a landscape becomes a special zone for conservation, communities are denied access and entry into these zones is strictly regulated. There has historically been much tension between communities and conservation agencies at forest reserves (including the Nyandarwa forest) in Kenya. Communities have historically been locked out of their landscapes since the beginning of the colonial experiment. This has created what Wambui (2002, p. 82) refers to as "hide and seek" games between communities and those whose responsibility it is to protect the forest. This is characterized by a situation where communities infiltrate the forests and still extract products without being spotted by enforcement officers. The designation of forests as special zones is also reminiscent of the wilderness movement in the creation of protected areas. As Edgerton (1989, p. 23) writes, settlers were captivated by Kenya's landscapes. Those that wrote about this 'paradise' spoke about its majestic

animals that "roamed freely on vast plains that had names like Tsavo, Amboseli, and Mara." and its people, "usually the Maasai or other more or less naked spear-wielding, cattle-herding nomads."

This perception of Kenya has not changed much and this kind of imagery is used today to sustain the tourism industry. Rarely do human beings feature in conservation discourses unless they are 'spear-wielding' and 'more or less naked'. To the Agĩkũyũ, the Nyandarwa forest is not a wilderness packed with biodiversity; it is simply Gĩkũyũland that has been bequeathed to them by Ngai (Creator). The creation of this special place/wilderness marks the beginning physical removal from/sanitizing of African landscapes of African peoples. The values assigned to these landscapes by the new protectors (the Beberu), of course, differ significantly from those assigned by the Agĩkũyũ people. This clash of values assigned to protected areas is demonstrated by Ndoro (2001, n. p.), who writes in the context of cultural heritage and argues that the challenges in heritage conservation can be read in what he refers to as the "your monument, our shrine" formulation. Ndoro (2001) uses the case of one of Africa's most iconic sites, the Great Zimbabwe, to illustrate the tensions between conservationists and communities in post-independent Africa. The Great Zimbabwe is a complex city ruin of the Shona Empire believed to have been an active trading centre between the 11th and 15th centuries. It must be noted that early European explorers believed that such a complex and impressive piece of architecture could not have been created by Africans. It was at that time attributed to, amongst others, the Phoenicians.

According to Ndoro (2001), the preservation of such sites has been undertaken without fully understanding their significance to local communities. While the potential of revitalizing cultural pride for nation-building is appreciated, the views of local communities are ignored in favour of "international guidelines and frames of operation." (Ndoro, 2001, p. 1). Communities are seen as irrelevant to a "scientific approach of managing their own heritage" (Ndoro, 2001, p. 1). To conservationists, including governments and scientists, this is a monument to be maintained in pristine condition and scientifically managed and promoted for tourism, the benefits of which may not be felt/seen by the surrounding communities. To the community, it is their shrine – to be

used to reconnect with their ancestors, and to invoke the spirits so that they may intercede in their daily activities and struggles. If we apply this logic to the Agĩkũyũ and the Nyandarwa landscape, then it would be, "your forest reserve and national park, our sacred mountain and land."

These are two clashes of understanding a landscape which serve to create complex management regimes. While the discussion around conservation is changing, we are yet to fully see conservation or land from the community's perspective because the engagement is narrow and superficial (Mbaria & Ogada, 2016). Rarely do communities' cultural connections to landscapes feature strongly in the formulation of conservation discourses. One of the best examples of these emotional and spiritual connections is seen through the importance accorded to the Mũgumo tree through time. The Mũgomo clearly illustrates interrelatedness with the land, people, the cosmos, livelihoods, and identity. As one of the iconic features in Gĩkũyũ landscape, it encapsulates Agĩkũyũ spiritual history and survival struggles. This is discussed in the following section.

6.3 Sacred trees and spaces: The enduring legacy and potency of the Mũgumo among the Agĩkũyũ

The sacred value of the Mũgumo tree to the Agĩkũyũ has been demonstrated as one manifestation of IKS that has refused to die, irrespective of the infiltration of Christianity. The Mũgumo is still considered a tree of Ngai and it is forbidden to cut it. Sacrifices are performed when a Mũgumo tree falls, and elders are called upon to explain to the community what this event means. Further, the ecological values of the Mũgumo are recognized as implicit Agĩkũyũ conservation practices. For instance, Maathai (2007, p. 79) argues that the Mũgumo prevented "landslides and allowed rainwater to travel from underground reservoirs to the surface in streams and rivulets that then burst through the soil." Cutting a Mũgumo would entail the disruption of this conservation system. The prevention of landslides is a very important factor because of the hilly terrain of Gĩkũyũ land. As such, the conservation of the Mũgumo tree continues to serve critical ecological functions that are directly tied to community livelihoods.

The Agĩkũyũ affinity to the Mũgumo should be recognized as a positive element of community synergies with their environment. When the colonialists and missionaries infiltrated Gĩkũyũland, they told the Agĩkũyũ that God could not be worshipped out in the open, but in "specially constructed houses, where an alter would be set up and controlled by a priest whose authority had come not from the community but from another representative who lived many miles away" (Maathai, 2007, p. 95). Hence, the majority of the Agĩkũyũ worship in churches, but nobody would cut a Mũgumo tree; as an elder put it, "gwika maudũ mooru hau"/do anything untoward around the area where a Mugumo grows. Macamo (2010) writes about the experiences of communities in southern Mozambique in relation to the advent of Christianity and colonialism. He argues that the church offered opportunities for education, vocational training, medical care, and a sense of community. Hence, its hearty adoption was underlined by the fact that, "in their struggle with their own social, political, and economic environment, Africans came to see Christianity...as an important resource in the domestication of their fate" (Macamo, 2010, p. 24). Macamo (2010) further emphasizes that the 'sense of community' has been one of the most enduring legacies of the Christianization processes. Can this interlinkage between the church and communities' socio-economic conditions in Mozambique be applied to the Agĩkũyũ?

I tend to think this interlinkage could be mirrored among the Agĩkũyũ people because the independent church movement, for example, did not seek to completely break away from Christianity, but rather to refashion the Christian teachings around their ways of knowing. When examined through Ngũgĩ wa Thiong'o's dismemberment and remembering theory, the Mũgumo illustrates that there are certain aspects of Agĩkũyũ culture that defy dismemberment and are cemented in Agĩkũyũ memories. Drawing from the example of Waiyaki wa Hinga, who was buried head first by the British, Ngũgĩ wa Thiong'o (2009, p.7) argues that the loss of memory is exemplified by turning the heads of the colonized Africans "upside down and burying all the memories they carried." Remembering is a quest for seeking wholeness and a struggle against forgetting because "memory and consciousness are inseparable" (Ngũgĩ wa Thiong'o, 2009, p. 40). I see the continued application of indigenous knowledge, such as that demonstrated by the Mũgumo, as an effort towards exhuming Waiyaki and turning his head right side up. It is an act of resisting intellectual cleansing whose seed was sown by imperialism. It is an act of resistance. It has been argued that one cannot become a Mugĩkũyũ without land. In the same vein, this study shows that one cannot become a Mugĩkũyũ without being tied cosmologically to the Mũgumo. One of the other manifestations of people-forest relationships is the role of forests as sites of struggles for self-determination through the Mau Mau war for independence. This struggle for survival and history will be discussed next.

6.4 Wiyathi twarutire githaka!: Our independence was derived from the forest/land

Mwenenyaga [Ngai/God] we pray that you may protect our hideouts Mwenenyaga we pray that you may hold a soft cloud over us Mwenenyaga we pray that you may defend us behind and in front from our enemies Mwene Nyaga we pray that you may give us courage in our hearts Thai thathaiya Ngai, Thaai/ [May peace prevail]. (Ngũgĩ wa Thiong'o, 1967, p. 23)

This study has demonstrated that the forest/land was the citadel of the Mau Mau war for independence in Kenya. The Mau Mau relationships with the forest were manifested through forests as: a source of food; a site of strategizing for combat; and a space for religious sustenance. This is a very powerful manifestation of people-forest relationships that has a bearing on the formation of Kenya as a nation, as well as the struggle for liberation on the African continent at large. The need to mobilize and fight for wîyathî was fuelled by an uncompromising quest for freedom and dignity. Ngũgĩ wa Thiong'o (p.1967, p. 240) puts it well when he argues that:

The white man went in cars. He lived in a big house. His children went to school. But who tilled the soil on which grew coffee, tea, pyrethrum, and sisal? Who dug the roads and paid the taxes? The white man lived on our land. He ate what we grew and cooked. And even the crumbs on the table he threw to his dogs. That is why we went to the forest.

While much has been written about the Mau Mau, there is limited analysis on the role that the forest landscape and the land played in the quest for ithaka/land and

wīyathī/self-rule. This study has provided a comprehensive assessment of the connections between the struggle, the land, and the consolidation of the Gĩkũyũ nation to forge their identity.

The Mau Mau movement was driven by sustained community mobilization among the Agĩkũyũ people. Pulling together and consolidating support for their common goals has been demonstrated by, amongst others, establishing parallel educational institutions during the colonial period (an important feat in and of itself). The land on which these institutions (*e.g.*, the Kenya Teachers College and up to 300 Independent schools) were established was donated by the community when there were massive pressures on the land, and when much of the fertile land had been confiscated for Beberu settlement. Mobilization during times of war or other crises is a central tenet of Agĩkũyũ social-cultural organization. Mau Mau mobilization centred around and was imbued with IKS. While this has been acknowledged in many studies and scholarly works (Anderson, 2005; Elkins, 2014; Kanogo, 1987; Maloba, 1993, e.g.), there has not yet been an in-depth analysis on how this knowledge contributed to an understanding of the land, tying together various elements of Gĩkũyũ society and how it shaped Gĩkũyũ indigenous environmental thought.

The Agĩkũyũ indigenous practice of oathing was central in Mau Mau mobilization. According to Edgerton (1989), oaths were taken to prove one's innocence in legal cases, to pledge one's loyalty before going to war, or to show devotion during religious ceremonies. Several scholars (Anderson, 2005; Elkins, 2014; Maina wa Kinyattĩ 1986; Ngũgĩ wa Thiong'o 1967;) and Mau Mau's guerillas (Itote 1967; Kariuki; 1964; Njama 1964) have written that there were a series of oaths, the degree and seriousness of the ceremony growing as you moved from one to the next. The oath was central in exploring inter-linkages with the land, as well as solidifying identities among the Agĩkũyũ people. Soil and food were critical ingredients of the oath. Soil was seen as an important ingredient as it was smeared on the oath administrator, used in the mixture with other indigenous foods, and ingested by those taking the oath. One ingested the soil that one was fighting for. It became one's nourishment; it flowed through one's veins. Just like the shedding of blood in the initiation ritual made one with the land, the oathing ceremony solidified this belief and gave land/soil a greater spiritual and political meaning.

The Beberu portrayed the oath as dirty, evil, atavistic, and demonic, diminishing its creativity or intellectual power; it was just the *mumbo jumbo* of uncivilized natives. It can be argued that, without the oath, it would have been impossible to achieve the formidable mobilization that the Mau Mau realized. The oath interlinked with politics, economics, social organizational, structures, and cultural resurgence. It also revitalized Gĩkũyũ identity. The forest has always been a source of refuge for the Agĩkũyũ. In the early days of contact, they hid children there when punitive expeditions were launched by Captain Lugard's men (Edgerton, 1989). The forest also acted as a safe refuge during raids from nearby communities (Leakey, 1977). So, the Mau Mau's retreat into forests was a carrying on of the tradition of using forests as a place of refuge in times of trouble. What does the role of forests as sites of struggle against colonialism mean? In answering this question, I draw from the thinking of Hoppers (2010), who argues that scholarship should move beyond just recording the heritage of resistance but instead aim to turn it into "theoretical events" that inform present and future scenarios. Thus, the "people without history" are removed from the "ethnography corner" in which colonialism(s) have dumped them and "would want them to remain cast for eternity." They instead, "become full agents and makers of history current and future" (Hoppers, 2010, p. 89).

The Agĩkũyũ people turned to various cultural forms (e.g., songs, proverbs, sayings) to embolden the struggle against imperialism. Songs were and are powerful instruments of political mobilization in Kenya. When the Agĩkũyũ were mobilizing to fight the Beberu, songs such as these were sung widely:

Waiyaki wa Hinga died He left us a curse That we do not sell our lands And now we are giving it away Our country of the Kikuyu God blessed it for us And he said we shall never leave it Waiyaki died He was buried at Kibwezi And on the spot where he was buried A banana tree was planted. (Otieno, 1998, p. 17)

One elder (West, 12 November 2015) sang thusly:

Wĩyathĩ na ithaka Wiyathi fũrũri wa kirinyaga Fũrũri ya Gĩkũyũ ya itũamba na mĩtitu Kenya ni fũrũri wa andu airu Tutiuragwo guthinio kana gũtwaro jera Kana gũtwaro icigirira Fũrũri ũyu ni witũ na gũo igai ritũ Twagairwo ni mwene nyaga

Independence and land Independence in the land of Kirinyaga, The Agĩkũyũ land of swamps and forests Kenya is a land of black people We don't mind being tortured, taken to prison or taken to concentration villages This land is ours and our inheritance We were given by the God of Kirinyaga.

At the core of both songs, and many other Mau Mau songs, is the need to cast their gaze back into history, refer to their story of origin, and use that knowledge to consolidate their claim for land and highlight colonial injustices. This study illustrates that there is a revolutionary thread that ties the Mau Mau struggle for ithaka and wiyathi with the Agîkûyû story of origin. There is also an emphasis on indigenous practices, such as the use of death-bed curses to ensure conservation of land and all that is within and on it. It can be argued that the Mau Mau were formidable and systematic researchers; they collected data, analyzed it, and presented it in a simple form that could be understood by all.

Specifically, the findings of this study suggest that the Mau Mau event is not forgotten; many believe that the Mau Mau is an incomplete revolution. The Mau Mau struggle remains a misunderstood phase of Kenya's history today. Overtaken by political machinations and its subjugation in Kenya's post-independence regimes, it remains shrouded in mystery. Hoppers (2010, p. 90) calls for shining a light on colonialism and a "vigilant analysis of its failures, silences, and a systematic spotting of transformative nodes that were not recognizable before but which are now released into public spaces." The Mau Mau remained banned in Kenya from 1950 until 2002. This silencing of Mau Mau and related subjects can be understood through the dismemberment and remembering theory. The denial of memory through a silencing of Mau Mau and related discourses can be understood as a dismembering practice. As Ngũgĩ wa Thiong'o (2009, p. 109) argues, physical manifestations of colonial violence are easy to see and understand, but cultural subjugation is more difficult because its effects are "more subtle and long lasting." Cultural subjugation is tied to a denial of memory which "can lead to pessimism that fails to see in her history any positive lessons in dealing with the present" (Ngũgĩ wa Thiong'o 2009, p. 109).

I am compelled to agree with Ngugi wa Thiong'o because this research project has clearly shown me that there are injustices that we do not see. There are scars that we cannot see. There are bullet wounds that we cannot see. What is to be said about those wounds? Where is the medicine? Where is the healing? Where are the tears? Where is the agony and anguish? Where is the moral outrage? Where is the wailing? That is the pain that I saw and felt as I conversed with those who directly participated in the liberation of Kenya and their descendants. The pessimism and cultural subjugation that Ngũgĩ wa Thiong'o (2009) talks about above is further augmented by the destitution of those who put their lives on the line in order to struggle for independence in Kenya. As such, they are put in a position where they cannot be admired or looked up to in a society that is now clothed in the robes of raw capitalism. They are, as Okot p'Bitek (1971, p. 120) writes, "a broken branch of a tree. Torn down by the whirlwind of Uhuru [independence]." Their dismissal is further sanctioned by the school system that considers anyone who is not instructed through formal education as an absolute ignoramus. Therefore, the Mau Mau and all the vital and robust knowledge systems associated with it are relegated to the margins as we move forward and in tune with the dictates of global capitalism. According to Ngũgĩ wa Thiong'o (2009, p. 59), there has been a deliberate attempt to forget the various dismembering practices that have befallen the African continent because:

Postcolonial Africa has never properly mourned the deaths that occurred in the two traumatic events in its history: slavery and colonialism. Many thousands died on land and in the sea. Others perished on slave plantations of Belgian Congo and the gold and diamond mines of South Africa. Millions more died in the fight against slave trade, slavery and colonialism. Altogether, it was an African holocaust, or horrordom. Those who fell have never had a proper burial, nor were they periodically mourned.

As has been mentioned above, in Kenya, there has been a systematic and institutionalized act of forgetting. In place of remembering, there was "a systematic attempt to act as if Kenya's independence had come as a gift from the Queen of England, very much as the liberation of slaves was often touted as a gift from the good Queen Victoria" (Ngũgĩ wa Thiong'o, 2009, p. 59). Now that the Mau Mau can be discussed more openly, "the casting of light at last onto subjugated peoples, knowledges, histories and ways of living unsettles the toxic pond and transforms passive analysis into a generative force that valorises and recreates life for those previously museumised" (Hoppers, 2010, p. 90). The older generation is dying out and the young people do not know the details of why and how the Agĩkũyũ mobilized to restore their land and dignity. For instance, two of the most charismatic and knowledgeable elders whom I interviewed have since died (in 2016 and 2017). That community members still speak passionately about the Mau Mau struggle for independence is a testament to the fact that they have not forgotten. They have not surrendered. They demonstrate that no amount of official/sanctioned forgetting can wipe out the memories of this struggle because these memories are lodged in their minds, hearts, souls, and land. They link the past, the present, and the future, and illustrate just how disruptive land dispossession was and continues to be in Agikuyu society.

Participants in this study explained how the introduction of new land ownership regimes and ecologies has had an impact on livelihoods. They illustrated how Pax Britannica led to wars on a mass scale with devastating consequences on the ecologies of the Agĩkũyũ – not just a loss of bodies, but a loss of land and livelihoods. The Agĩkũyũ understand their history of oppression, and they also understand their history of resistance to this oppression, which is anchored in and with the land. They understand the triumph of life in the here and now. It is not all grim; there is joy and pride which

emanates from knowing that the freedom we enjoy today is a result of the ingenious and sustained struggle by our people. Engaging with colonialism is not about being stuck in the past. It is about the past, the present, and the future as they are all connected. Wiyathi twarutire githaka. It would have been impossible to wage war against imperialism were it not for the formidable support offered by this iconic mountain landscape. The forest and the land stood with the Mau Mau warriors of freedom. It served as a base for reclaiming African dignity and pride. It served as a base to consolidate the Agikuyu's claim to their territory. It served as a flagpole around which their indigenous environmental thought and conceptions were draped. These fluttered in the wind and scattered the seeds and desire for freedom. Land dispossession strengthened claims to land, setting the scene for a battle that continues to rage today in present-day Kenya. The fact that the forest was critical in launching this heroic struggle is not forgotten and is tied to perceptions of current destruction of the forest on the western side. The participants in this study see the destruction of the forest as a destruction of the revolutionary struggle, a destruction of a landscape that came to the aid of the community in times of great need.

Restoration of the landscape is, therefore, perceived through the lens of restoring the dignity of the land and the people in a dynamic landscape that sustains livelihoods. The Mau Mau were deeply engaged with Gĩkũyũ IKS; oathing, bringing gerontocracy to the fore, the use of plant medicines in the forest, the use of trees for combat, and mobilization, amongst others. This aspect of turning to cultural traditions is not unique to the Mau Mau. As Macharia (2006) writes, social movements do not exist in a vacuum. They draw from the culture(s) of participating groups of people. This kind of influence can be seen in other movements, such as the African-American civil rights movements which was informed by African-American culture, as represented in, amongst others, music from the south of the United States. Further, the use of maji (a mixture of water and millet) was critical in sustaining the Maji Maji revolt in Tanzania. According to Macharia (2006), modernization theory blames culture for a lack of progress, but with the Mau Mau, culture was used positively. It was used to raise consciousness and to fight injustice. Songs as instruments of resistance feature strongly in the Mau Mau

movement. The fact that elders can still remember and sing these songs is a testament to their power. It is a power that can be harnessed to fuel the struggle against various forms of injustice for, indeed, as Macharia and Kanyua (2006) argue, the inequalities in Kenyan society and among the Agĩkũyũ cannot be divorced from the Mau Mau movement.

The memorializing of the Mau Mau struggle and its linkages with the Nyandarwa forest and its positioning in the liberation of the country from colonialism is another act of remembering. The continued agitation to rename the Aberdares Forest after Field Marshall Dedan Kimathi is another act of remembering. Forests and land sustain Agĩkũyũ livelihoods. They need rain to grow the crops and to know that Ngai is still with them. While there is much fragmentation (another form of dismemberment) in the landscape due to private land ownership, it is clear to the community that safeguarding their livelihoods is dependent on caring for common resources and the land in general. Gĩkũyũ indigenous environmental consciousness may be under threat, but it is not dead. Land and forest are interlinked in their minds and lives. In essence, forests and land still remain a sophisticated pedestal around which life and livelihoods are constructed. In the following section, I discuss the manifestation of Agĩkũyũ peopleforest relationships as encapsulated in power and leadership discourses during the post-independence period.

6.5 Post-Independence regimes and forest governance

The study results show that the post-independence period has been characterized by a carry-over of colonial policies which are buttressed by colonial and colonising policies, as well as present day colonial-like processes. Kenyan forest legislation was only changed in 2005 (since reviewed in 2016), meaning that communities had to contend with being restricted from accessing their landscapes or engaging with them. Large scale forest destruction was one of the defining element of Moi's regime (1979-2002). This is especially so in the late 1980's and 1990's. Destruction of forests is an extremely potent way to demoralize, fragment, and intimidate the local population by stripping it of both its economic and its spiritual sources and strengths.

The forest crisis in Kenya put President Moi and Wangari Maathai of the Green Belt Movement in open ideological confrontation. Maathai drew from the wisdom of the Agĩkũyũ in confronting Moi's high-handed ideology of patriarchy. She tied the struggle for the forests and land to the Mau Mau movement. At the height of the struggle to save Karura forest, she is quoted: "our fore-fathers fought for this land...this is my blood" (Maathai, n.d., n.p. as cited in Independent Television Service, 2015). She remembered. She remembered and memorialized Waiyaki wa Hinga. She rekindled memories of the Mau Mau struggle among supporters and demonstrated the linkages between bad governance and community livelihoods through the lens of forests. This is an illustration of the importance of understanding history and memory, and using them in struggles against injustice. Study results also show that participants on the eastern and western sides of the forest have been organizing themselves to protect their landscapes and livelihoods. On the eastern side, the elders physically protected the landscape against encroachers before embarking on tree planting. On the western side, a woman spearheaded the mobilization to protect the forest. Both of these communities have put much effort into the restoration of these landscapes. They understand the interlinkages between protecting the land and survival of their cultures and livelihoods. Without land, the Agĩkũyũ culture is dead, because their cultural traditions are anchored in the soil.

The Mau Mau fought for land and freedom. The elders on the eastern side of the forest also fought for land and livelihoods. They had a sophisticated understanding of freedom. They could not make the soil yield to the power of their hands without this kind of freedom. There is no freedom if one cannot even control one's own very basic livelihood. Without this, freedom becomes an empty shell. As such, this mobilization should be read as a very strategic intervention that is anchored on Gĩkũyũ social organizational structures and philosophies. This finding is important because it showcases community agency. Usually, communities are cast as recipients of teachings and instructions on how to organize their lives. This reeks of colonial paternalism and is a prevalent practice. What these communities demonstrate is that they understand the landscape, they understand that there needs to be harmony among its various

elements, and they understand that they are the masters of their own destinies. They do not sit and wait to die. Maathai (2010) argues that Africa has been on her knees through various moments in history (the slave trade, under colonialism, begging for aid, indebtedness, and praying for miracles). She calls for Africans to change their mindsets, believe in themselves, and cultivate their own identities in order to honour their cultures and make them relevant to today's challenges.

What we see in this community mobilization to protect the forest is a sense of capturing the best elements of Agĩkũyũ culture and using it as a lynchpin to fight for their livelihoods. They could have chosen to watch as the forest went up in flames. They could have chosen to turn a blind eye to all of the destruction. They would have justified that they were also suffering and, therefore, needed to join the fray in the forest. But, they had an awakening. Joining the fray in the forest had not made their lives better. In fact, it made it worse. Hence, they chose not to be on their knees. They, like the Mau Mau, chose to mobilize and fight against injustice. They rose up and walked. In fact, the Agĩkũyũ people have been defending their landscape, livelihoods, and humanity for over 100 years (since 1895); they have been defending it from the Beberu, postindependence governments, and even from themselves. As a result of colonial hangovers, government agencies, NGO's, and other agencies engage with communities from a position of ignorance. They fail to tap the power that is within communities and, when they do, they exploit it for their own benefits (Mbaria & Ogada, 2016). Stories of African conservationists need to be told. Usually, in Africa, the conservationists are Europeans and Americans – researchers, photographers, film makers, etc. Wainaina (2012, para. 8), in his ground-breaking work, How to write about Africa satirizes this phenomenon as follows:

After celebrity activists and aid workers, conservationists are Africa's most important people. Do not offend them. You need them to invite you to their 30,000acre game ranch or 'conservation area', and this is the only way you will get to interview the celebrity activist. Often a book cover with a heroic-looking conservationist on it works magic for sales. Anybody white, tanned and wearing khaki who once had a pet antelope or a farm is a conservationist, one who is preserving Africa's rich heritage. When interviewing him or her, do not ask how much funding they have; do not ask how much money they make off their game. Never ask how much they pay their employees.

The voices of African conservationists rarely come to the fore. When they do, it has to be the voice of someone like Wangari Maathai because of her well-deserved Nobel Peace Prize. Africans are portrayed as not caring about or even understanding conservation. I would like to argue that the communities that I have interacted with in this research project are conservationists. I believe that there is a need to demystify and decolonize the conservation discipline in Africa. The discipline has always been so elitist that ordinary people cannot access it. As has been demonstrated throughout this study, communities who are engaged with landscapes on a day-to-day basis have a very sophisticated understanding of these spaces. Conservation practices are manifested in selecting seeds, saving seeds, planting them, taking care of crops, planting trees, rearing animals, etc. The amount of ecological restoration work that has been put into the Nyandarwa landscape by the communities living around it cannot be quantified. A common argument that is advanced in conservation circles is that communities would not take an interest in conservation unless they are assured of monetary benefits from this work (Mbaria & Ogada, 2016). The question to be asked is this: who paid the elders in eastern Nyandarwa and the woman who spearheaded the mobilization on the western side? One of the other facets of people-forest relationships that emerges from this research project is seen through the historical tensions between communities and protected areas. In the colonial period, protected areas were created for the enjoyment of settlers – either through hunting or recreation. In the post-independence period, protected areas remained spaces that were seen as important for tourism, perpetuating a racialized formulation of conservation.

Protected areas in Kenya are closely tied to the tourism industry, which provides 10.5% of the country's GDP (World Tourism and Travel Council, 2015). The clashes between the values assigned to conservationists and people are also well illustrated by the satirical work of Binyavanga Wainaina. Wainaina (2012, para. 7) argues that:

Animals, on the other hand, must be treated as well rounded, complex characters [as juxtaposed with Africans]. They speak (or grunt while tossing their manes

proudly) and have names, ambitions, and desires. They also have family values: *see how lions teach their children?* (emphasis in original). Elephants are caring, and are good feminists or dignified patriarchs. So are gorillas. Never, ever say anything negative about an elephant or a gorilla. Elephants may attack people's property, destroy their crops, and even kill them. Always take the side of the elephant. Big cats have public-school accents. Hyenas are fair game and have vaguely Middle Eastern accents. Any short Africans who live in the jungle or desert may be portrayed with good humour (unless they are in conflict with an elephant or chimpanzee or gorilla, in which case they are pure evil).

Attitudes that romanticize wildlife and make wildlife appear more human and humane than Africans are pervasive in the conservation and tourism industries. Attempts to engage with communities are largely framed through the lens that communities are destructive and that these protected areas need to be saved from said communities. While the electric fence has reduced the human-wildlife conflict on the eastern side of the Nyandarwa forest, there is human-wildlife conflict on the western side, mainly as a result of monkeys eating farmers' crops. In conservation circles, the landscape is seen through a utilitarian lens and not as a holistic landscape in which people are also participants. Therefore, the findings of this study reveal that true community engagement is yet to be a reality. The changing of legislation in 2005 to recognize communities as stakeholders in forest governance in 2005 is a good starting point for sustainable forest governance. However, the change of legislation does not mean that all is well with regards forest governance.

I recall being in a forest in 2012 and I felt a wave of fear go through my body when a Kenya Forest Service vehicle drove by. We had just toured the forest and had done nothing wrong, but I was filled with fear. It was the same fear that I saw when we saw some women fetching firewood. They started preparing to take off when they saw us because they thought we were Kenya Forest Service officials. It was the same fear I saw when my colleagues and I came across children who had come from the forest to fetch firewood in western Nyandarwa. The children dropped their bags of firewood and disappeared into the thickets until a community member that we were with called out to them and told them to take the firewood to their parents. The forest and protected spaces remain heavily militarized spaces that instill fear. That, to my understanding, is the legacy of Beberuism. The new Forests Act opens up space for engagement, but we must not pretend that this will be an easy task. We have had a command-and-control system for over a hundred years and it would be naive to expect a complete turnaround in a short time. There is a long way to go to attain community-engaged conservation. The study findings are also relevant in that they show the importance of building interstakeholder engagement. These results support findings by other scholars (Hamworth, Hawatere & Robb, 2016; Jangawe, 2007; Manson, 2015; Mercer *et al.*, 2016; Nyong, Adenisa & Alasha, 2007; Tsepa, 2008) about the need to engage with communities for sustainable conservation as a way of meeting their socio-economic and cultural needs in a sustainable manner. In the next section, I discuss the manifestations of IKS through the lens of seed and food sovereignty and ecological restoration among the Agĩkũyũ.

6.6 Making compost of the pumpkin

Among your characters you must always include The Starving African, who wanders the refugee camp nearly naked, and waits for the benevolence of the West. Her children have flies on their eyelids and pot bellies, and her breasts are flat and empty. She must look utterly helpless. She can have no past, no history; such diversions ruin the dramatic moment. Moans are good. She must never say anything about herself in the dialogue except to speak of her (unspeakable) suffering. (Wainaina, 2012, p. 125)

I have used Okot p'Bitek's metaphor of 'making compost of the pumpkin' to discuss food security and food and seed sovereignty discourses amongst the Agĩkũyũ. Making compost of the pumpkin is tantamount to deserting all the indigenous foodways and adopting 'modern' farming and eating methods. Food security in Africa is critical especially in light of the reality of climate change. There cannot be any success for forests conservation if efforts are not buttressed by robust food security regimes. While discussions around food security are a feature in national discourse in Kenya, seed and food sovereignty are not. A goal of the Kenyan government is to modernize agriculture and increase productivity. This is linked with the pressure to expand irrigation and increase the use of fertilizers and pesticides (Republic of Kenya, 2011).

Participants in this study demonstrated a deep knowledge of seed selection, preservation, and propagation. While there is a great deal of pressure to 'modernize'

their agriculture, some farmers have held on to their indigenous practices. Holding on to seeds is an important practice of keeping memory and sustaining the land. Seeds are shared at the community level and this, too, keeps relationships between community members strong and anchored in the land. Infiltration of genetically modified seeds is something that farmers are aware of. According to Hoppers (2010, p. 80), the colonial conception of *terra nullius* has been applied in the genetic engineering of "empty life" seeds. In the colonial period, what was seen as empty land was appropriated for settlers and subsequently 'improved'. The corporate capture of seeds mirrors a similar logic – appropriation of seeds, followed by 'improvement'. Both of these practices have had long-term consequences for community livelihoods.

Saving seed varieties is, therefore, important in ensuring sustainable living and creating balance on the planet. Seed sovereignty and food sovereignty are interrelated. One cannot achieve one without the other. There cannot be total liberation without a decolonization of the stomach. This work links with the indigenous environmental thought of Thomas Sankara and Amilcar Cabral on what true liberation means. Liberation must be anchored in self-reliance, an understanding and celebration of empowering cultural ways as grounded in communities' knowledge systems, and building resistance. Food is inherently a human dignity issue. Food aid is a direct assault on that dignity. This is aptly captured in the quote in the opening of this section about the horrors of the food aid industry vis-à-vis the recipients. Another angle of food and people-forest relationships is seen through firewood. Food and firewood are interlinked. Deforestation, land use changes (for cash crop production), and a proliferation of exotic tree species all have an impact on firewood. Shortage of firewood has led to changing diets to favour the consumption of processed foods with health-related consequences to communities (Maathai, 2010).

The linkages between food and forests are gaining greater attention amongst international agencies and researchers. According to FAO (2016), forests contribute to food security in many ways, but these are not well captured in national food security strategies. Further, due to a lack of synergies between various sectors, forests are excluded in policies related to food security and nutrition. Communities the world over have demonstrated the interconnectedness that exists within landscapes, and this points to the fact that conservation ideals must shift and readjust to the prevailing conditions in order to ensure success. As Rockstrom and Sukhdev (2016) argue, all the Sustainable Development Goals are directly or indirectly linked with food and call for a more comprehensive lens of looking at food – culturally, politically, socially, economically, and environmentally. In other words, if we succeed in ensuring food security, we will succeed for the planet. I concur with Rockstrom and Sukhdev, and further argue that the revitalization of indigenous crops and the methods to grow them is critical for fostering sustainable people-forest relationships in the Nyandarwa ranges and beyond. Amongst the Agĩkũyũ, it is a crime to deny somebody food. Understood from the Agĩkũyũ indigenous thought process, the capitalistic agricultural industry that is hinged on money, therefore, should be seen as a crime, as it denies people food. It denies people a livelihood, chaining them to a form of slavery.

These findings contribute toward reimagining spiritual connections with the land. Food can provide a salient entry point in understanding Agĩkũyũ indigenous environmental thought and conservation practices. Conservation practices that are tied to everyday living practices, such as seed saving, sharing, and food production, are important in demystifying conservation and bringing it down to earth, so to speak. Conservation engagement should support practical hands-on activities that ensure continued engagement with the land – tree planting, planting indigenous crops, etc. – so that indigenous knowledge can be developed through experiential practices. In writing about Gĩkũyũ land, Ngũgĩ wa Thiong'o (1965, p. 1) aptly captures the tensions between the old and new, the pressure on indigenous knowledge, and the resilience of indigenous knowledge in this passage:

The two ridges lay side by side. One was Kameno, the other was Makuyu. Between them was a valley. It was called the valley of life. Behind Kameno and Makuyu were many more valleys and ridges, lying without any discernable plan. They were like many sleeping lions which never woke. They just slept, the big deep sleep of their Creator. A river flowed through the valley of life. If there had been no bush and no forest trees covering the slopes, you could have seen the river when you stood on top of either Kameno or Makuyu. Now you had to come down. Even then you could not see the whole extent of the river as it gracefully,

and without any apparent haste, wound its way down the valley, like a snake. The river was called Honia, which meant cure, or bring-back-to-life. Honia river never dried. It seemed to possess a strong will to live, scorning droughts and weather changes. And it went on in the same way, never hurrying, never hesitating. People saw this and were happy.

The valley of life is the liminal space in which the Agĩkũyũ currently find themselves. The Honia river flows on. I use the Honia river as metaphor for Agĩkũyũ ways of knowing. The community, especially the elders, continue to hope that there can be a more robust method of transmission of this knowledge, and that this knowledge and ways of knowing are accorded the respect that they deserve. It is a hope that must not be extinguished. In the following section, I discuss the implications of study findings on theory, practice, and activism.

6.7 Implications for theory

This study engaged with Dei's anti-colonial discursive framework. I placed Nqũqĩ wa Thiong'o's 'dismemberment and remembering theory' and the anti-colonial thinking of Sankara and Cabral within this framework. This study has expanded the scope of the dismemberment and remembering theory through concrete illustrations such as: decapitation of African heads through a colonial-like education system; the dislocation of the Aqĩkũyũ from the land; the actual dismemberment of land through the introduction of foreign land ownership and management regimes; the introduction of new ecologies; and the continued undermining of IKS in the conservation discipline. Remembering practices that come through in the study include: the Mau Mau struggle for independence and its interlinkages with the landscape; cultural forms that sustained the struggle (songs, proverbs); remembering communal struggles through time; memorialization of the Agikuyu's triumphs; seed saving; and food production as manifested within a land care framework. The study also expands the scope of African environmentalism by highlighting the conservation practices of ordinary Agĩkũyũ people. It demystifies conservation and conservation practices. The findings add to the corpus of Cabral's and Sankara's anti-colonial thought by applying their ideas in another African context, hence making a case for PanAfricanism, because our struggle is one.

Lastly, the use of stories, proverbs, and songs contribute to the repertoire of African ethnophilosophy from an environmental perspective. Finally, the thesis has added to the discourse on community-based theorizing through the use of the three-legged stool metaphor. Through this, the community acknowledges that local knowledge has sustained and will continue to sustain their relationship with forests into the future.

6.8 Implications for practice, policy, and activism

This study has demonstrated that the Agĩkũyũ are not passive agents in their landscape. In this sense, these findings should strengthen community engagement in conservation from the community's perspective. This study demonstrates that the Agĩkũyũ have a deeper understanding of their landscape, which might not necessarily be aligned with the values that have been created around them by governments and conservation agencies. Honest community engagement calls for speaking the language that a community can relate to. There is a need to tap into the emotional connections that people have with landscapes, not just by looking at the landscape from a utilitarian perspective. When conservationists and governments frame conservation discussions or seek to engage communities in discussions, communities' socio-cultural and emotional connections are rarely featured. Efforts to engage with communities tend to emphasize the need protect forests for tangible or visible things like water and tourism.

The failure to tap into the emotional connections that communities have historically cultivated with their landscapes is a big loss for conservation. For instance, understanding and speaking of the value of the forest as a site of liberation struggles will serve to memorialize the Mau Mau and, by extension, the landscape. This should strongly feature in policy and other conservation agendas. It should be given the same weight as water or earnings from tourism. It is not to be treated as a footnote. Wīyathī twarutire githaka. Wīyathī twarutire githaka. Wīyathī twarutire githaka. Wīyathī twarutire githaka. Wīyathī twarutire githaka! We need to repeat it, articulate it in policy, and practice it until it sinks into our subconscious. Engagement in liberation heritage will also contribute to redressing injustices, reconciliation, and healing. Participants in this study have proposed strategies towards re-chiselling the three-legged African stool (education, ecological restoration,

community mobilization, and an IKS framework). All of these are practical interventions that can contribute to sustainable-people forest relationships. Since de-culturation is a reality, I suggest educational programs that put people back in their landscapes because, as Ogada and Mbaria (2016) underscore, Kenya's most precious natural resource is its environment and the associated wildlife.

Elders remain the uncelebrated intellectuals in Africa. Elders should be instrumental in shaping educational discourse because they hold knowledge that is critical in re-connecting people with their landscapes. Tree planting and taking care of the forest is a potent way of infusing the land with life-giving values. Community mobilization is imperative for success because, as the Agĩkũyũ say, a single finger cannot kill a louse, one stone has never made a fireplace, and a single log cannot make a fire last through the night. Salvation is to germinate from the unity of our sweat, our collective action, and our collective purpose. This is the principle espoused in Ubuntu – that we become human in the midst of others. We restore the landscape in the midst of and with others because, we all share in the bounty of the land or the pain resulting from its devastation.

These results should encourage an engagement with, articulation of, and a celebration of indigenous conservation and initiatives. Governments and non-governmental agencies should be willing to invest the same amount of energy, passion, and resources as they invest in 'saving elephants and rhinos'. Tied to this is a need to demystify conservation and recognize community conservationists. There should be community representation on the Kenya Forest Service Board, for instance. There should be deliberate efforts and incentives extended to farmers who are growing indigenous crops, including access to markets, establishment of community seed banks, on-farm extension services, and recognition. This study shows that there is still a great need to deal with the trauma of the Mau Mau and related injustices. It shows that despite the shroud of silence that has been draped around this subject, people still carry open wounds and yearn for justice. Therefore, it reinforces the need to implement the

Truth, Justice and Reconcilliation Commission (TJRC) report⁴³ and adhere to the ideals of the Kenyan constitution. For those that are engaged with activism in various arenas, this study illustrates and emphasizes the need to engage with history to understand the roots of the present-day struggles. This understanding is vital, for one cannot truly defend that which one does not understand. The study also shines a light on community resistance through everyday practices. For instance, saving seeds or planting a tree are potent forms of resistance. There is much to be learned from those that give life to land. There is much to be deciphered from indigenous forms (songs, proverbs, sayings, etc.) on resistance strategies. There is much to be learnt from the Lawino's/those without formal education. Cabral's cry "A luta continua!" is still as relevant and pertinent as it was during the struggle for independence.

6.9 Implications for future research

One of the main findings of this study relates to the use of the landscape during the struggle for independence. This study focused on the Nyandarwa landscape, but other forested mountains were also used by the Mau Mau freedom fighters during the war for independence. It would be important to explore how the various landscapes interacted with each other, how the guerilla fighters understood and navigated these vast landscapes, and how the landscape can be memorialized by succeeding generations. It would be useful to map out key guerilla paths and bases in order to understand the strategies for military combat and broader community engagement in the struggle for ithaka/land and wīyathī/self-rule. Understanding the scope and locations of ĩchagi/concentration camps as tied to present day land-use and land dispossession discourses would illuminate discussions on land and governance in Kenya. Kenya's settler community is heavily involved in conservation. An exploration of their oral histories regarding the Mau Mau and land, would add new insights and understanding of Kenya's conservation and political landscapes.

⁴³ The TRJC report makes recommendations on how to address historical injutices from the colonial period to the present day. It was commissioned in 2008 after the post-election violence emanating from the disputed 2007 elections.

It would also be important to explore the development of Agĩkũyũ food and seed sovereignty discourses and how those that are involved in the struggle for self-determination in this area have organized their resistance, what kinds of interventions are most effective, and what can be done to strengthen them. I recommend further studies on IKS and community based conservation in other Kenyan and African societies. Further research should be conducted to shed light on the gendered dimensions of IKS, how this knowledge is transmitted, and how it has transformed over time. The challenge in engaging with IKS, in some instances, is that it is not understood, nor articulated in a clear manner. It would be useful to grow a critical mass of people who are committed to unpacking the power of IKS through research and other community engagement efforts/practices. This study sought to engage a wide variety of community members (women, men, and youth), but there was much lower than desired youth participation. Future research can seek to undertake more sustained youth engagement on what their stand on IKS is and whether continued engagement with IKS is a useful undertaking.

6.10 Study limitations

The findings in this study are limited to the stories of the Agikuyu people living around the Nyandarwa Forest Reserve, in locations where research was conducted. Although understandings generated from the study might evoke experiences of others elsewhere who might have lived similarly, the ideas about people-forest relationships in this study are limited to Kenya and specifically to the locations where the study was conducted.

6.11 Final thoughts

This study has demonstrated that the Agĩkũyũ people hold on to some of their indigenous practices with vigour. Land is the central element in Agĩkũyũ social-political organization. It is the ground upon which their indigenous environmental thought is anchored. Forests and land were traditionally seen as interfused elements embodied in

their landscape. Colonial dismemberment slices up the land into pieces and introduces new ecologies and different management regimes. These kinds of practices are carried on into the various post-independence regimes. Some indigenous practices endure irrespective of the pressures to modernize. The most obvious of these are the sacred Mugumo tree, ecological restoration, and agricultural practices tied to food production. The participants in this study demonstrate that there is a need for a cultural awakening; a need for a critical reflection on their situations. To illustrate this, I will draw from a story narrated in Ngugĩ wa Thiong'o (1967, p. 231), which goes like this:

Koina who is constantly running into trouble with his employers for demanding his rights. He had served in the WW2 as cook and was very proud of this. He is finally kicked out of his job at a shoe factory when he told the white boss the following: I want more money. I want a decent house and enough food, just like you. I want a car like yours. He then goes to work for a woman who has a dog. As a boy, he owned a pack of dogs which he used for hunting antelopes. How he would have loved to take her well-fed dog for a real chase of hares and antelopes in the forest. She was so pleased that her dog and he got on so well that she even gave him Christmas presents. Then, he started thinking. The amount of steak the dog ate could have fed a whole family. The amount of money spent on the dog was more than the total wages of ten Kenyans. The dog had its own room in the house with a bed and sheets and blankets! The big house could have sheltered many, many families. How could all this be? Why should he live in a shack while this woman and her dog live in luxury? He became restless, and took the oath to join the Kenya Land and Freedom Army [Mau Mau]!

At the beginning of this thesis, we saw that the elephant initially succeeded in squeezing the man out of his hut. The elephant began by reorganizing the Gĩkũyũ hut, but that was not all. The elephant proceeded to demolish the Gĩkũyũ hut. He built a mansion for himself in Gĩkũyũland. The man did not just stay outside in the rain. He strategized. He mobilized his people. They regrouped. They had an awakening and worked tirelessly to dislodge the elephant from their land – men, women, children – all of them. They said, it was better to die than live under slavery. That was during the Mau Mau war for self-determination. The struggle ushered in a new dawn.

Uhuru/independence. Remember, the elephant had destroyed the man's hut. The man needed to reconstruct the hut. He is still reconstructing the hut. As he does this, he continues to see that the elephant was on his mind and his being. The elephant is

grazing and trumpeting in his mind. The elephant is unleashing mountains of dung in his mind. How is the man to dislodge the elephant from his mind? All of the strategies proposed to re-chisel the three-legged African stool need to be informed by an awakening. There is a need for a Koina-like awakening on a mass scale. It is only with an awakening like this that the Agĩkũyũ people can understand and navigate the matrix of power structures that characterize the world today. It is only after doing this that we can all join Lawino in saying:

Let me praise you Son of the chief! Tie ankle bells on my legs Bring *lacucuku* rattles Call the *nanga* players And let them play, And let them sing, Let me dance before you, My love, Let me show you The wealth in your house, Ocol my husband, Son of the Bull, Let no one uproot the pumpkin. (Okot, p'Bitek, 1966, p. 215)

This study has demonstrated that there is wealth in the Agĩkũyũ house; a wealth of knowledge that plays out in the bounty of the land that Ngai has provided. The pumpkin must not be uprooted. Agĩkũyũ indigenous environmental thought has survived, but is threatened. Let me dance for the IKS ways that have survived. Let me dance that they may thrive. Let me celebrate all IKS on the African continent for the elucidative power it is gaining worldwide! Let me mourn and weep for those who have slept. Let me ululate for those who have refused to die. May the ways and wisdom of our ancestors continue to endure. May they rise like creeper plants!

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Appendices

Appendix A Questions to guide discussions

Talking circles questions with the GBM groups

- 1. For how long have you lived here?
- 2. What is your favourite memory growing up here?
- 3. What makes this area a good place to live/what do like about this area?
- 4. How long have you been involved with the GBM?
- 5. What part of your work with GBM do you enjoy the most?
- 6. What positive changes have you noticed in your community generally and in relation to the forest?
- 7. What are some of the main challenges you face in the community related to forests or forest resources?
- 8. How has this forest/ the region in general changed over time in relation to climate?
- 9. What are some forest/agroforest related interventions that people have come up with to respond to this?
- 10. What do you call this forest?
- 11. Does the name Aberdare mean anything for you?
- 12. Has the fence helped improve community livelihoods?
- 13. Did you notice any changes with regard to the community's relationship during the colonial period? If yes, what were the differences between the pre-colonial and colonial period?
- 14. How about after independence to the present day? How does this vary from one political regime to the next (i.e., during the Kenyatta, Moi, Kibaki, Uhuru presidencies)?
- 15. What can you access from the forest currently? Of these things which one does the community here feel is the most important?
- 16. Do you differentiate between the KFS and KWS administered zones? How?

- 17. What is the current status of the forest as a water catchment area? Prompt (how many rivers flow from the forest? Have you noticed any changes in the amount of water? Have any of these dried up?)
- 18. Is there any group using the community's IKS in relation to the forest or other resources? What exactly do they do?
- 19. Can you recall any stories, proverbs or other cultural heritage related to forest or other resources?
- 20. What major events can you recall that happened in your lifetime in this community?
- 21. In your view is use of IKS in forest management important? If yes, how can it be developed or strengthened? If no, why and what other solutions can you propose to safeguard the forest?
- 22. How do you think integration of the knowledge that is held within communities would be useful in ensuring successful forest management?
- 23. Do you feel CFA's have helped? If not, why? How can IKS be applied in the CFA's?

Questions to guide discussions with elders

- 1. How long have you lived here? Do you remember anything about when white people came to Kenya? (probe about age set)
- 2. What regions were considered Agikuyu ancestral lands (before the coming of white people)/what was the expanse?
- 3. How were boundaries marked with respect to the surrounding communities?
- 4. How this territory was traditionally governed?
- 5. What was the system of land ownership/how was it divided?
- 6. How were boundaries marked within the territory?
- 7. What were the laws that community members had to adhere to with respect to the land/forest or resource use?
- 8. Were there sanctions for not following these rules? How were these sanctions enforced?

- 9. What kind of products could you access from the forest?
- 10. Are there any sacred sites around here?
- 11. What makes them sacred?
- 12. What did the community think of the forest? Prompt (was it considered as part of the larger landscape, a separate area?)
- 13. Are there any stories or proverbs or other cultural heritage related to the forest/general resource use?
- 14. What do you call this forest?
- 15. Does the name Aberdare mean anything for you?
- 16. Did you notice any changes with regard to the community's relationship during the colonial period? If yes, what were the differences between the pre-colonial and colonial period?
- 17. How about after independence to the present day? How does this vary from one political regime to the next (i.e., during the Kenyatta, Moi, Kibaki, Uhuru presidencies)
- 18. What key events can you remember that happened in this area in your life time (examine the life time line, trend analysis and community maps and fill in any gaps)
- 19. How has this forest/ the region in general changed over time in relation to climate?
- 20. What are some forest/agroforest related interventions that people have come up with to respond to this?

Questions to guide discussions with KFS

- How has the aspect of engaging communities in management of this conservation area varied from the pre-colonial, colonial and post-independence (through different regimes) periods?
- 2. What are some of the positive changes in this area with regard to management of this conservation area?

- 3. What are some of the challenges faced with regard to executing your mandate? In relation to community engagement in management of this conservation area?
- 4. In your view, how can these be overcome?
- 5. Is there any application of IKS that is held within communities in forest management in this area? Please provide some examples?
- 6. Do you feel application of IKS would be useful in helping you achieve your mandate? If yes, how?
- 7. How has this forest/ the region in general changed over time in relation to climate?
- 8. What are some forest/agroforest related interventions that people have come up with to respond to this?

Appendix B Breakdown of participants by gender and geographic location

1 Tolking circle porticipants			
1. Talking circle participants			
Eastern Nyandarwa	Male	Female	Total
Talking circle 1	5	9	14
Talking circle 2	4	8	12
Talking circle 3	5	9	14
Talking circle 4	4	8	12
Talking circle 5	4	9	13
Overall Total	22	43	65
Western Nyandarwa	Male	Female	Total
Talking circle 1	4	10	14
Talking circle 2	5	9	14
Talking circle 3	4	8	12
Talking circle 4	5	10	15
Talking circle 5	5	11	16
Overall Total	23	48	71
2. Elder interviews			
	Male	Female	Total
Eastern Nyandarwa	7	5	12
Western Nyandarwa	7	2	9
Overall Total	14	7	21
3. KFS interviews			
	Male	Female	Total
Eastern Nyandarwa	3	1	4
Western Nyandarwa	5	1	6
Overall Total	8	2	10
4. Joint community workshop			
	Male	Female	Total
Fastern Nuendanus			
Eastern Nyandarwa	12	24	36