Human Wildlife Conflicts in Meru District, Kenya, 1920-2008

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Recommendation

This thesis has been submitted for examination with our approval as the university supervisors.

Signature:.....Date..07.08.2012.....

Dr. Reuben. M. Matheka

Department of Philosophy History and Religion

Signature..... Date.....7/8/2012.....

Dr. Josiah. O. Osamba

Department of Philosophy History and Religion

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DEDICATION

I dedicate this work to my dear and loving mother, Virginia Muthoni Mutegi, for her unwavering support during the course of my education, especially at the master's level.

ACKNOWLEDGEMENT

I wish to pay tribute to all those who have played part towards the completion of my master's programme. Most importantly, I wish to start by thanking God for giving me opportunity to reach this level of education. I acknowledge the great effort my supervisors, Dr. Matheka and Dr. Osamba have put in shaping my educational experiences through their critical and educative guidance throughout the course of my master's programme. I thank my parents, siblings and other relatives who have supported me, both financially and morally during the course of my studies. I appreciate all my friends, lecturers from Egerton University and any other person who has assisted me in any way during the course of my studies. Lastly, I wish to pay special tribute to my wife, Lilian, and my son, Ivan, for their patience and support during the course of my studies.

ABSTRACT

Human-wildlife conflicts have been a major problem in parts of Meru District since the 1920s. There have been numerous cases of loss of human lives due to wild animal attacks, predation of livestock and crop destruction by wild animals in the district. Despite the magnitude of human-wildlife conflicts (HWC) in the district, the underlying causes for the conflicts have not been studied. This study therefore examined the social, political and economic aspects of HWC in Meru District in the period 1920 to 2008. The study analysed the impact of wildlife conservation on people's livelihoods and the responses by government and local communities to the conflicts. To achieve these objectives, the political ecology perspective was used. This perspective examines interactions between political, economic, social and environmental factors over time. The research relied on both secondary and primary sources. The former included published works that were obtained from various resource centres, while the latter were obtained from the Kenya National Archives (KNA) and field interviews. Sources from the KNA included both monthly and annual reports from the provincial administration and the Ministry of Wildlife and Tourism. Oral interviews were also conducted in the study area. Forty informants were interviewed during fieldwork. Purposive sampling was used in selecting the informants. This ensured that only knowledgeable persons were interviewed. Initial informants directed the researcher to other potential informants. Interview schedules targeting local residents, the provincial administration and wildlife conservation agents were used. These categories of informants enriched the study through different perspectives to the HWC Phenomenon. Data analysis involved usage of "data cards" that were useful in sorting out data. The cards were categorised according to the themes highlighted in the study objectives. Chronology was also used in the categorisation of "data Cards." In the analysis, the data were tested against the objectives of the study. The study found out that, while there were efforts to ameliorate HWCs in the district which included logging, poaching and destruction of crops and livestock by wild animals, the methods used were ineffective. The findings of the study may assist policy-makers to formulate wildlife conservation policies that could help ameliorate HWC, which could lead to improved standards of living in the district.

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LIST OF ABBREVIATIONS AND ACRONYMS

ADC	African District Council
CITES	Convention on Trade in Endangered Species
CWS	Community Wildlife Conservation
DC	District Commissioner
DEAP	District Environment Action Plan
GDP	Gross Domestic Product
GPC	Game Policy Committee
HWCs	Human Wildlife Conflicts
IBEAC	Imperial British East African Company
IFAW	International Fund for Animal Welfare
KAR	King's African Rifles
KARI	Kenya Agricultural Research Institute
KNA	Kenya National Archives
KTDA	Kenya Tea Development Authority
KWS	Kenya Wildlife Service
MCA	Meru Conservation Area
MOE	Ministry of Education
NFD	Northern Frontier District
PC	Provincial Commissioner
Kshs	Kenya Shillings
SP	Species
SPFE	Society for the Preservation of the Fauna of the Empire
US$	United States of America Dollars
WCMD	Wildlife Conservation and Management Department
WWF	World Wildlife Fund

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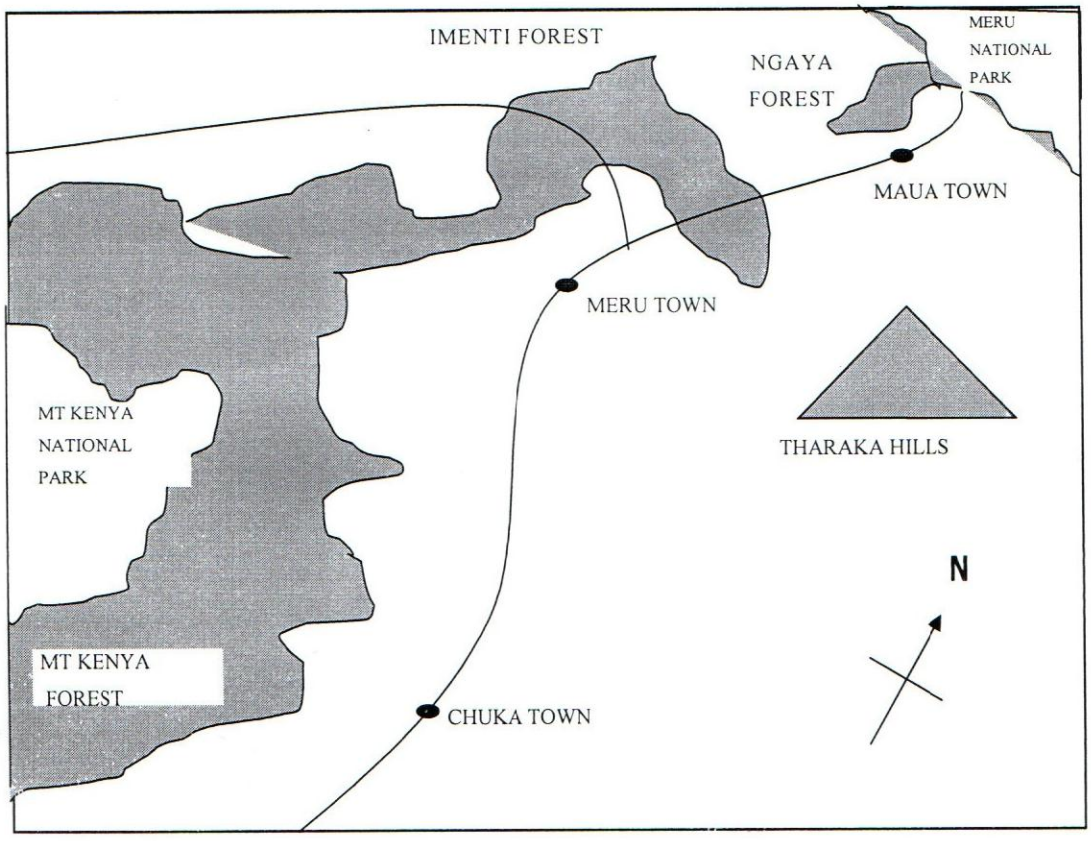
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CHAPTER ONE
INTRODUCTION

1.1. Background to the Study

Human-wildlife conflicts have been a serious problem in parts of Meru District since the establishment of colonial administration in the area in the early twentieth century. These conflicts involve loss of human lives to wild animals as well as predation on livestock and destruction of crops. Elephants, buffaloes and monkeys are a threat to crop production in the district. The parts of the district that are most affected by the conflicts are those surrounding Mount Kenya Forest, Imenti Forests, Ngaya Forest and Meru National Park. Other affected areas are those surrounding Tharaka Hills (see map 1.

Map 1: Wildlife Conservation Areas in Meru District



Source: KWS General Report, 1999

Very few cases of HWC were experienced in the district prior to the coming of the colonialists and the subsequent introduction of wildlife conservation in the region. People had various mechanisms of ensuring peaceful co-existence with wild animals, which were in plentiful then. Hunting and planned killing of nuisance wild animals for instance were some of the ways of ensuring a balance was maintained in the eco-system.

From the early 1900s when wildlife conservation was initiated in the district, the residents were denied access to wildlife resources that they once enjoyed. At the same time, sport hunting, which was carried out mainly by the Europeans as they could afford the permit fee, was on the rise in the district. This created conflicts between the residents and the government as the former felt sidelined in the utilisation of wildlife resources. Many residents engaged in poaching as they could not afford the hunting fee required by the government.

HWCs in the district intensified from the 1920s owing to the destruction of wildlife habitats especially by government-licensed timber sawing companies. Tree logging and bush clearing continued up to the 1930s as people tried to secure land for crop cultivation. Due to the effects of the Great Depression that was experienced in the 1930s, the government had to diversify the country's economy to enable her fund her affairs. This created an abrupt imbalance in the eco-system thereby intensifying HWC in the district.

Due to increased cases of HWC in the district as well as other parts of the country, the British government bowing to pressure from conservationists appointed a Game Policy Committee (GPC) to examine the possibility of setting up national parks in Kenya. The GPC made recommendations which were approved by the colonial legislature in 1945 leading to the establishment of national parks in Kenya with Mount Kenya in the subsequent period. The committee recommended that killing or capturing of fauna or destruction and collection of flora, be prohibited in the designated areas except under the direction of park authorities. Such conflict mitigation measures continued to be applied by the government in the creation of African District Council game reserves from the late 1950s.

From the 1960s immense forest destruction and illegal forest excisions were experienced in Meru District. For instance, Thatiam has noted that, "11,657 ha were de-gazetted in the upper Imenti side of Mount Kenya Forest between 1963 and 1969. It is estimated the litany of de-gazettements of the mountain between 1963 and 2000 hived off more than 50 percent of the forest cover."[1] Such destruction of the district's forests was an important contributory factor to the subsequent conflicts involving elephants, especially in the Lower Imenti Forest which was an important elephant breeding area.

From the early 1960s, the eastern parts of Kenya experienced attacks by the Somali bandits commonly referred to as the *Shifta*. The bandits were fighting for the secession of the Northern Frontier District (NFD), which they wanted incorporated into Somalia to form a unified Somali country. The NFD was then inhabited by Somali people. Meru Game Reserve suffered immensely from poaching by *Shifta* bandits. Residents also took advantage to engage in anti-conservation practices as they detested the tough conservation laws.

As a result of increased poaching in the district as in other parts of the country, the government combined the National Parks Trustee and the Game Department to form the Wildlife Conservation and Management Department (WCMD) in 1976. In 1977, parliament banned trade in wildlife products to curb poaching which was threatening to wipe out the populations of elephant and rhino. This was through Legal Notice No. 120 of May 1977 and Legal Notice No. 181 of August 1979. In 1977, in pursuant to section 45 of the Wildlife (Conservation and Management) Act of 1976, the Minister of Tourism and Wildlife prohibited the export of game trophies by a notice in the Kenya Gazette.

While the population of monkeys and other small animals was on the rise in the district in the 1980s to a point of leading to exporting some, the population of elephants and rhinos was on the decline due to poaching. This prompted the president to issue a directive in 1984 which prohibited all hunting, killing and capture of wild animals. In an act of affirmation to the decree, the president issued another directive in 1989, which led to the torching of all the ivory that had been collected from all over the country. Owing to such presidential directives, game wardens

[1] P. Thatiam, "How Timber Trade Destroyed Forest," *The Standard*, 19 August, 2008:19-20.

often felt restricted to a point of even fearing to kill an animal that was a threat to people. This led to an increase in HWC in the district especially in areas that bordered Imenti and Mount Kenya Forests where the elephants were causing extensive damage to people's farms following extensive destruction of their habitats and their breeding areas through tree logging.

To curb the increased cases of HWC in the district as in other parts of the country, the government revised the Wildlife Act (Conservation and Management Act) Cap. 376 which led to the establishment of the Kenya Wildlife Service (KWS) in 1989. Its mandate was to manage Kenya's wildlife resources for posterity and to protect people and their property from wildlife damage. A Board of Trustees was appointed by the Minister for Wildlife Conservation and Management to run the KWS. The KWS was however faced many management challenges ranging from poor law enforcement to ineffective community mobilisation mechanisms, poor animal control and revenue sharing strategies.

Tree logging in Mount Kenya and Imenti Forests continued to intensify in the 1990s leading to increased cases of HWC in the surrounding areas. Elephants were the most problematic animals as they suffered from the destruction of their habitats through tree logging. The installation of electric fences around the Imenti Forests in the 1990s to mitigate the problem was however without any consideration of the history of the area. For instance, the fencing of the Lower Imenti Forest blocked the migratory route of elephants coming from the Isiolo region for breeding purposes. This forced the incoming elephants to pass through farms where they caused damage to property. In other instances, attempts by the residents to keep animals such as elephants and buffaloes from their farms often turned catastrophic leading to injuries and maiming of persons. Such problems are still being experienced in the district todate. People are suffering immense losses as a result of property destruction by wild animals throughout the district as wildlife officials are often reluctant to kill wild animals even when found destroying property. Such was the case when this study was being carried out in the district in 2008.

In 2000, Mount Kenya Forest was gazetted as a national reserve in order to help the Forestry Department with work it was ill equipped to do. For instance, the Kenya Wildlife Service (KWS) was able to assist the Forestry Department in dealing with cases of HWC in parts of the district

neighbouring the Mount Kenya National Reserve. The Forest Act of 2005, which emphasized sustainable utilisation of forests and the incorporation of the community in forest conservation, to some extent managed to stamp out forest destruction in the district. However, this was not the remedy to the conflicts between wild animals and human beings in the district. Cases of crop destruction continued to be reported. For instance several television channels in Kenya reported cases of people from Chogoria and Naari in Meru District feeding on elephant meat in January 2008. The two elephants had been shot dead by game wardens after complaints by residents of crop destruction.

Berry and Sommerlatte assert that it is unfortunate that wildlife research in Kenya and other East African countries has mainly been concerned with individual large animals and their social behaviors.[2] The little research that has been done has not examined issues such as the impact of human population pressure, land use practices, and poaching on wildlife, and the overall attitude of rural people towards wildlife conservation. Thus, in an attempt to understand the issues surrounding HWC in Meru District, the study examined the history of the conflicts in the district.

1.2 Study Area

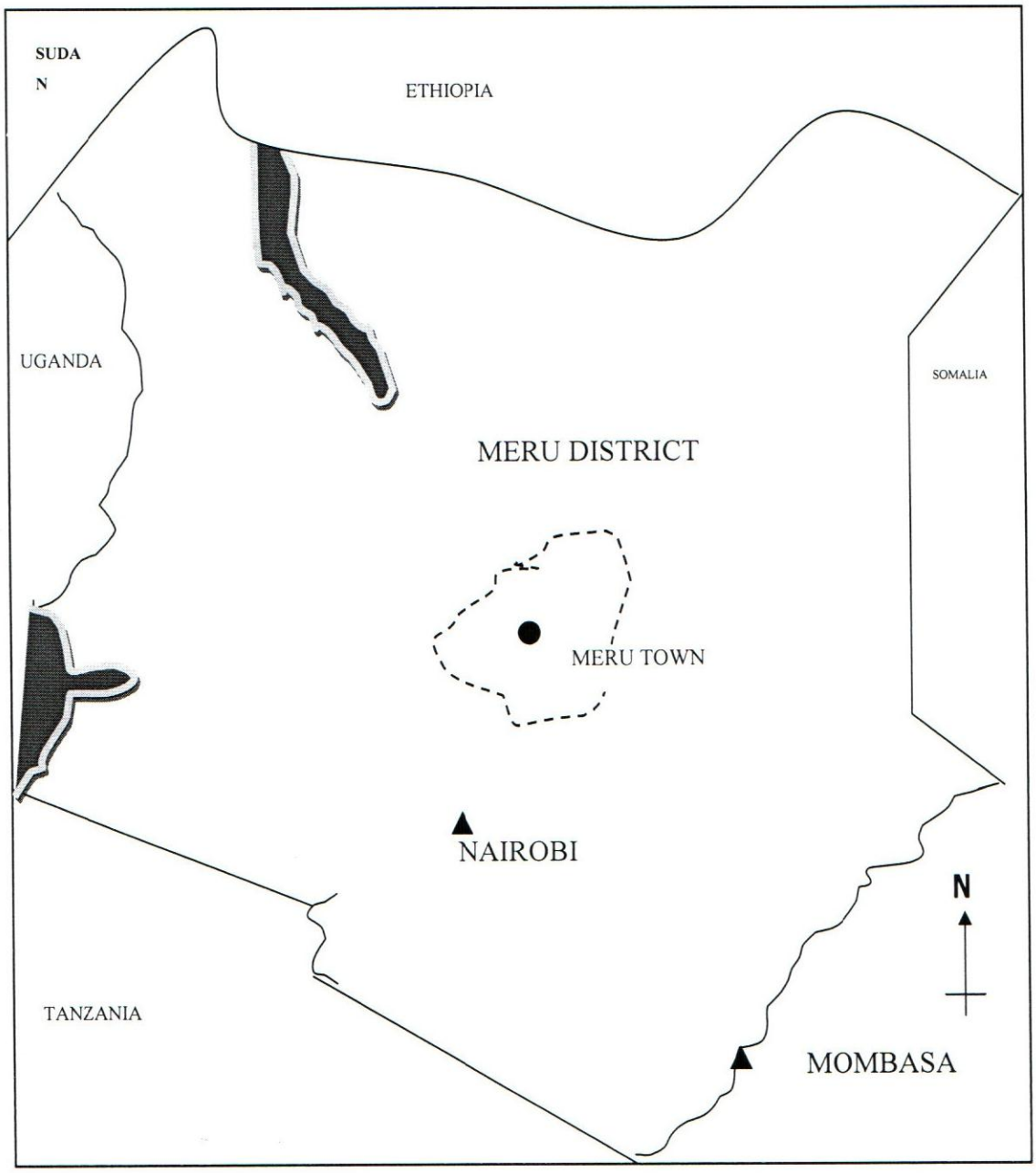
The study was undertaken in Meru District (see Map 2). The history of HWC in Meru District has been quite dynamic. This has been the case owing to the district's varied ecological zones. The district extends from Thuchi River in the south to the Meru National Park in the north. It slopes down from both Mount Kenya and the Nyambene Hills to the lowlands of Tharaka and Igamba Ng'ombe further south.

During the colonial period, Meru District covered parts of Isiolo, Tharaka, and Chuka extending up to Laikipia. In the 1990s, the district was subdivided into Meru Central, Meru South, Meru North and Tharaka Districts. In the 2000s the districts were further subdivided to create small districts.

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[2] H. Berry, and M. Sommerlatte, "Commercial Utilization of Wildlife," in J. G Grootenhuis, S. G. Njuguna, and P. W. Kat, (eds), *Wildlife Research for Sustainable Development,* (Nairobi: KARI , KWS and NMT, 1991): 38.

Map 2: Location of Meru District in Kenya



Meru National Park[3] is rich in fauna and flora and has over 400 bird species including the Somali race of ostrich *Struthiocamelus molybdophanes*. The park also has such animals as lion, leopard,

[3] Meru National Park located 370 km from Nairobi and straddles the equator. It is well endowed with permanent rivers, 14 of which traverse through the park. It is the third biggest wildlife conservation area and elephant habitat in Kenya after Tsavo East and Tsavo West. The former ADC Meru Game Reserve was elevated to park status and

cheetah, elephant, common and gravy zebra, black rhino, reticulated giraffe, hippopotamus, lesser kudu, oryx, gerenuk, hartebeest, and grant gazelle.

1.3 Statement of the Problem

Human-wildlife conflicts in Meru District have been rampant since the 1920s. Loss of human lives owing to attacks by wild animals, predation on livestock and crop destruction by wild animals are common in the district. However, the nature of these conflicts is not known as they have not been studied. This study therefore looks at the history of human-wildlife conflicts in the district.

1.4 Objectives of the Study

The study was guided by the following objectives:

1) To analyse the nature of human-wildlife conflicts in Meru District.
2) To assess the impact of human-wildlife conflicts on livelihoods in the district.
3) To examine the government and local residents' response to human-wildlife conflicts in the district.

1.5 Research Premises

The study was guided by the following premises:

1) That the problem of human-wildlife conflicts in Meru District has been dynamic.
2) Those human-wildlife conflicts in Meru District have been detrimental to the socio-economic development of the district.
3) That government and local residents' responses to human-wildlife conflicts in Meru have not addressed the issues underlying the problem.

1.6 Justification of the Study

Many studies on HWC in Kenya have tended to overlook the conflicts occurring in agricultural areas. More attention has been paid to pastoral areas than to their agricultural counterparts. Moreover, very few studies have examined the history of HWC emanating from forest

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gazette on 1st January 1966 under the charge of Kenya National Parks. The handing over process between Meru County Council and Kenya National Park was completed a year after, in 1967.

destruction in the country. A study on HWC in Meru District, which is an agricultural area with numerous threatened forests, is therefore important in contributing new knowledge to the field of environmental history.

Meru District has a high potential for agricultural production. The district is on the windward side of Mount Kenya and therefore receives high annual rainfall. Nonetheless, due to the ongoing HWC in the district, this potential has not been realised. The findings of this study therefore are expected to provide information that will be used by relevant agencies to ameliorate HWC, leading to an increase in agricultural output in the district.

1.7 Literature Review

Owing to HWC, wild animal populations have been declining at a high rate in different parts of the world. In the late 1980s, for example, Adamson observes that there were only 20 percent as many elephants in Kenya as they were before the Second World War.[4] The black rhino suffered even worse. By 1970 there were about 20,000 rhino but by 1980s, their number had been reduced to levels below 500. In the 1960s, there was a restocking programme in Meru National Park whereby six black rhino were brought in from Zululand.

Worboys, Winkler, and Lockwood affirm that in 2004, 15,589 species were recognized to be threatened with extinction in both mammal and bird species.[5] This number was 100 to 200 times higher than estimated average rate of extinction of species through geological time. All mammals and birds were assessed for extinction risk, and 24 percent of mammal and 12 percent of birds' species were considered globally threatened in 2000, a clear evidence of a rising trend towards wildlife destruction. However, the factors behind such destructions needed to be assessed especially in Meru District where poaching is quite rampant.

Though at varying degrees, HWC have been experienced in many parts of the world. Many parts of Asia for example have been experiencing serious cases of HWC. In the Indian state of Himachal Pradesh, around Kibber Wildlife Sanctuary for instance, conflicts between agro-

[4] G. Adamson, *My pride and Joy,* (London: Fontanal Collins Harvill, 1988): 49.
[5] G. L. Worboys, C. Winkler, and M. Lockwood, "Threats to Protected Areas," in M. Lockwood, G. L. Worboys, and A. Kothari, (eds), *Managing Protected Areas: A global Guide*, (London: Earthscan, 2006): 223-261.

pastoralists and wildlife have been increasing at an alarming rate. Nevertheless, the residents never resort to killing the snow leopards which are the main source of the problem. This is because their traditions prohibit the killing of animals. Mishra and others aver that in 1995, wild carnivores killed 18 percent of the total livestock holding which amounted to an annual loss of 12 percent for families with livestock holding.[6] Cases of conflicts between carnivores and human beings are not as serious in Meru District. However, this work was important in providing a comparative source to this study.

In Indonesia, natural events such as forest fire have big impact on HWC despite being so much unpredictable. Nyhus and Tilson state that during 1997 to 1998, an *El Niño* southern oscillation caused drought and fires, a combination of factors, which resulted in the destruction of large areas of Sumatran Forests.[7] During that period, tigers fleeing burning areas near Berbak National Park reportedly attacked people. Meru District has been experiencing many forest fires that have destabilised the ecologies of the conservation areas. However, the situation in the district needed to be studied as it involved other animals besides carnivores as is the case of Berbak National Park in Indonesia.

In the mountainous area of Simao in China which is close to Xishuang Banna National Reserve, HWC are prevalent. Zhang and Wang observe that about 19 to 24 Asian elephants cause immense crop and property destruction as a result of degradation and fragmentation of the elephants' habitat to create room for cultivation.[8] As a consequence of scarcity of their forest food, the elephant forage on food crops such as wheat, rice, banana and bamboo. In 2000 for instance, rural inhabitants claimed that elephant damage accounted for 28 to 48 percent of the community's loss of annual income. The total economic losses between 1996 and 1999 amounted to about US$314,600. Besides the illegal encroachments often experienced in Mount Kenya Forest in Meru District, a lot of land was excised from the forest in the 1960s to create

crops

[6] C. Mishra, P. Allen, T. McCarthy, M., Madhusudan, A. Bayarjargal, and H. Prins, "The Role of Incentive Programs in Conserving the Snow Leopard," *Conservation Biology*, **17** (6), 2003: 1512-1520.
[7] P. J. Nyhus, and R. Tilson, "Characterizing Human-Tiger Conflict in Sumatra, Indonesia: Implications for Conservation," *Oryx,* **38** (1), 2004: 68-74.
[8] L. Zhang, and N. Wang, "An Initial Study on Habitat Conservation of Asian Elephant (*Elephas maximus*), with a Focus on Human Elephant Conflict in Simao, China," *Biological Conservation,* **112** (3), 2003: 453-459.

room for cultivation. The work by Zhang and Wang therefore provided valuable comparison on the effects of forest encroachment on HWC.

Like elsewhere in the world, South America has also suffered from HWC. In Peru for instance, the people living in the Amazon Province of Tambopata inside the northern border of the Tambopata-Candamo Reserve, have been experiencing various types of HWC. According to Naughton-Treves and others, the principal wild herbivores responsible for the conflict are the Brazilian tapir, tayra and capybara.[9] Among the predators that cause HWC are jaguar and puma. Between July 1998 and January 2000, the average value of crop loss per planting season was US$13, while the annual loss as a result of livestock attacks by small and large carnivores was US$45 and US$148 respectively. Although, cases of HWC in South America are not as many as in Meru District, the work on Peru offered valuable insight to this study by providing a broad understanding of the problem.

In North America, wolves are the most troublesome animals to the residents. At Alberta in Canada for instance, Musiani and others aver that between 1982 and 1996, wolves caused 2,086 deaths among domestic animals, mainly cattle and to a lesser extent dogs, horses, sheep, chickens, bison, goats, geese and turkeys.[10] In Idaho, Montana and Wyoming in the USA, wolves killed 728 animals between 1987 and 2001. These mainly consisted of sheep and cattle. The work by Musiani *et al* was also helpful in providing a broad understanding of the problem of HWC.

As in North America, wolves cause the greatest problem in parts of Europe. In Italy for example, predation of domestic livestock by wolves (*Canis lupus*) is a problem in parts of the Abruzzo region. Cozza *et al* claim that wolves caused about 94 percent of the total livestock deaths.[11] The animals preyed on as they graze near the Shrubor woodland cover include sheep, goats, horses,

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[9] L. Naughton-Treves, L. Mena, A. Treves, N. Alvarez, and C. Radeloff, "Wildlife Survival beyond Park Boundaries: The Impact of Slash-and-Burn Agriculture and Hunting on Mammals in Tambopata, Peru," *Conservation Biology*, **17** (4), 2003: 1106-1117.

[10] M. Musiani, C. Mamo, L. Boitani, C. Callaghan, C. Gates, L. Mattei, E. Visalberghi, S. Breck, and G. Volpi, "Wolf Depredation Trends and the Use of Fladry Barriers to Protect Livestock in Western North America," *Conservation Biology*, **17** (6), 2003: 1538-1547.

[11] K. Cozza, R. Fico, L. Battistini, and E. Rogers, "The Damage- Conservation Interface Illustrated by Predation on Domestic Livestock in Central Italy," *Biological Conservation*, **78** (3), 1996: 329–337.

and cattle. About 13 percent of the attacks occur when the animals are lost or drawn away from the main grazing route. Some parts of Meru District have suffered livestock losses as a result of carnivore attacks. This is more so in the northern boundaries of the Meru National Park where the residents are pastoralists. Thus, the work by Cozza *et* al provided a comparison for this study.

In the Middle East, numerous cases of HWC have been reported. In Israel for example, a third of the Golan grassland plateau is managed as pasture for grazing cattle and it is inhabited by farmers who produce cereals, fruits, turkeys, hens and dairy products. Yom-Tov *et al* point out that farmers lose an average of about 1.9 per cent of the calves born each year to golden jackals' predation.[12] The economic value of the total cattle loss in 1993 was estimated to be approximately US$42,000. The high predation rate is as a result of an increase in the population of golden jackals. Through illegal dumping of domestic animal carcasses by farmers, the jackals have had enough to feed on leading to an increase in their population. This work shows that as much as the wildlife is to blame for the conflicts, the residents of a particular region may also play a role. Thus, the work by Yom-Tov *et al* was important in providing background information to the problem of HWC.

Many parts of Africa have been affected by HWC in one way or the other. In Zimbabwe, for instance, many areas of traditional agro-pastoralism such as the Gowke Communal Land neighbouring the Sengwa Wildlife Research Area, rural residents experience many cases of HWC. Butler points out that between January 1993 and June 1996, in a study area of 33Km^2, 241 domestic animals were killed by baboons, lions and leopards, which contributed to 52, 34 and 12 percent of the kills respectively.[13] Baboons attacked small stock such as goats and sheep during day time, while lions and leopards attacked larger prey such as cattle and donkeys at night. Despite having similar HWC situations in Meru District as experienced in the Gowke Communal Land, the situation in the district needed further study. This is because, the geographical and climatic conditions, cultures and population densities in the two places are different.

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[12] Y. Yom-Tov, S. Ashkenazi, and O. Viner, "Cattle Predation by the Golden Jackal (*Canis aureus*) in the Golan Heights," Israel. *Biological Conservation*, **73** (1), 1995: 19–22.

[13] J. Butler, "The Economic Costs of Wildlife Predation on Livestock in Gokwe Communal Land, Zimbabwe," *African Journal of Ecology*, **38** (1), 2000: 23–30.

In Zanzibar, farmers have experienced crop failures as a result of destruction by red colobus monkeys. The residents of the agricultural areas on the southern border of the Jozani Forest Reserve have often complained of their coconuts being destroyed by monkeys. However, according to Siex and Struhsaker, the monkeys were not a limiting factor to the farmers.[14] They argue that the monkeys contributed to an increase in the final coconut tree yields through pruning small and immature coconuts besides being of benefit to the tourism sector. While this could be true for the situation in Zanzibar, the situation is certainly different in Meru District as monkeys destroy *Miraa*[15] twigs which are useful. Monkeys also destroy other crops in many parts of the district.

In Uganda, HWC are also common in areas close to wildlife conservation areas. Naughton-Treves points out that in areas around the Kibale National Park, where 54 percent of the land within one kilometre from the National Park's border is cultivated; farmers lost an average of 4 percent to 7 percent of their crops per season.[16] He attributed the conflicts to poor defensive strategies which included guarding and to a lesser extent fencing of the fields. Maize, sweet potatoes and bananas were the most vulnerable crops. Most of the damage was attributed to olive baboons, bush pigs, elephants, and the red tail monkey. Incidentally, farmers in Meru District play a great role in game control, especially when dealing with monkeys which the Game Department has not been able to manage. Residents of Meru District use methods like guarding their fields. The effectiveness of methods of minimising HWC needed to be assessed further.

In northern Cameroon, the creation of the Bénoué National Park in 1968 imposed great restrictions on land use. As a result of HWC, farmers in the region incurred heavy losses besides being constricted in a small transitional area surrounding the park's border. The most affected crops were maize, millet, yam and cotton. The species inflicting most of the losses were elephants, baboons, green parrots and warthog. People in the region try to secure their livelihoods through illegal encroachment into the protected areas and poaching. According to

14 K. S. Siex, and T. T. Struhsaker, "Colobus Monkeys and Coconuts: a Study of Perceived Human–Wildlife Conflicts," *Journal of Applied Ecology*, **36** (6), 1999: 1009-1020.
15 *Miraa*/Khat is traditional plant, whose twigs are chewed for enjoyment like tobacco.
16 L. Naughton-Treves, "Farming the Forest Edge: Vulnerable Places and People around National Parks, Uganda," *Geographical Review*, **87** (1), 1997: 27-46.

Weladji and Tchamba, bush meat constituted about 24 per cent of the animal protein intake by the residents.[17] Although poaching in Meru District is not as intense as in areas around Bénoué National Park, a significant number of such cases are reported in the district. The experiences of the residents of northern Cameroon were useful to this study for comparison.

In Namibia, the Caprivi region has suffered many cases of HWC as a result of the high population density of both human beings and elephants. O'Connell-Rodwell and others aver that the region supports a population of about 5,000 elephants which is the largest single free ranging population of elephants in Africa.[18] The problem is aggravated by the fact that elephants are not confined to the two East Caprivi National Parks, but often stray into the surrounding villages. Between 1991 and 1995, crop damage caused by elephants amounted to US$39,200 while lion depredation between 1991 and 1994, totaled to about US$70,570. Though not as many as in the Caprivi region, the elephant population in Meru District is one of the biggest in Kenya. The Caprivi experience was useful for comparison with that of Meru District.

Many other works have discussed HWC in general view. For instance, Reid *et al* claim that human population growth has been associated with habitat conversion into agriculture and other uses, leading to land-use and vegetation changes.[19] In Meru District, a lot of forest land was excised in the 1960s to cater for a growing human population. This excision mainly affected the Nyambene and Imenti forests. The extent of HWC emanating from such excisions was the focus of this study.

According to Alcorn, biasness in sport hunting and tourism, as well as prohibition of residents from killing animals found destroying their crops and livestock, contribute to the negative attitude local people have against wildlife conservation..[20] This is because they are the ones who

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17 R. B. Weladji, and M. N. Tchamba, "Conflict between People and Protected Areas within the Bénoué Wildlife Conservation Area, North Cameroon," *Oryx,* **37** (1), 2003: 72-79.

18 C.E. O'Connell-Rodwell, T. Rodwell, M. Rice and L.A. Hart, "Living with the Modern Conservation Paradigm: Can Agricultural Communities Co-exist with Elephants? A five- Year Case Study in East Caprivi, Namibia," *Biological Conservation,* **93** (3), 2000: 381-391.

19 R. S. Reid, R. L. Kruska, N. Muthui, A. Taye, S. Wotton, C. J. Wilson, and W. Mulatu, "Land-Use and Land-Cover Dynamics in Response to Changes in Climatic, Biological and Socio-Political Forces: the Case of Southwestern Ethiopia," *Landscape Ecology,* **15,** 2000: 339–355.

20 J. B. Alcorn, "Indigenous Peoples and Conservation," *Conservation Biology*, **7,** (2), 1993: 424-426.

bear the cost of conservation without obtaining any significant benefits from it. Tisdell affirms that local communities are at the fulcrum of conservation because they incur heavy costs that arise from numerous conservation programmes and projects.[21] These losses can cause political unrest, sabotage of conservation efforts and programs or projects, and disregard of laws aimed at conserving biodiversity. While sport hunting was rampant in Meru District from the 1900s, the residents were barred from engaging in consumptive hunting. Moreover, the residents watched helplessly as wild animals destroyed their crops because they had no authority to kill them. The effects of such injustices on residents' attitude towards conservation needed to be examined.

The impact of the rising elephant populations on the ecosystem creates great concern because of their large and varied diet, physical impact on their surroundings, and high mobility. Hoare points out that in Kenya, over ninety percent of crop raiding incidents of wild animals involve elephants.[22] The same problem is experienced in Meru District. However, the role of elephants in HWC in Meru District needed further examination. Moreover, the problem in the district is not only caused by elephants but it also involves other animals such as buffalo, rhinoceros and monkeys.

HWC are more pronounced in agricultural areas where farms are adjacent to forested parks or reserves. Kiiru avers that changes in land-use practices by local communities contribute to the rise of the conflicts.[23] This is due to the immigration of communities that were once pastoralists in areas near conservation areas who resort to farming in areas that are also grazed on by elephants. The subsequent subdividing and reducing of the elephant ranges often causes HWC. Incidentally, many conflicts in Meru District are caused by elephants. However, not all conflicts in the district are found in purely agricultural areas. Thus, more study needed to be carried out in the district for a better understanding of the problem.

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[21] C.A. Tisdell, "Issues in Biodiversity Conservation Including the Role of Local Communities," *Environmental Conservation,* **22** (3), 1995: 216-222.
[22] R. E. Hoare, and J. T. Du Toit, "Coexistence between People and Elephants in African Savannas," *Conservation Biology*, **13,** 1999: 633-639.
[23] W. Kiiru, "The Current Status of Human-Elephant Conflict in Kenya," *Pachyderm*, **19,** 1995: 15-20.

Koch and others argue that changes in land use practices around protected areas have altered habitat use and migratory routes of herbivores, making elephants to stray into farmsteads where they cause heavy losses to farmers.[24] This is true of Meru District as elephants causing problems in the area are known to have either migrated from Mount Kenya National Park or Isiolo District. However, the situation in the district is complicated as some people maintain that the main problem is with the fencing of the park which blocked the elephants' migratory routes. Hence, this created a need for a more elaborate study of the problem.

Climatic trends are an important cause of HWC. Seasonal changes in rainfall are directly correlated with predation intensity in Kenya. Patterson *et al* quantified a positive association between monthly rainfall and attacks in Tsavo National Parks, demonstrating that in that region lions are more likely to attack livestock during the rains.[25] During droughts, ungulates spend most of their time near the limited water sources and thus they were easily found and killed. When rain fills seasonal pools, lions disperse into their habitat, change their diets, and prey on easier targets. In Meru District, the situation is more or less the same. However, the difference in the district is as a result of diverse climatic conditions. The northern and southern boundaries of Meru National Park exhibit relatively hot climatic conditions in certain times of the year when the western buffer zone of the park and areas around the Mount Kenya Forest are a bit wet. This has often triggered off migration of animals as they search for food, resulting to HWC. Nonetheless, the situation in the district needed to be studied as conditions in Tsavo National Parks are different from those in Meru District.

HWC have largely been blamed on various wildlife conservation strategies adopted by the government since the advent of colonialism. According to Neumann, European colonial authorities were responsible for the establishment of the 'Yellowstone model'[26] of wildlife

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[24] P. L. Koch, J. Heisinger, C. Moss, R.W. Carlson, M.L. Fogel, and A.K. Behrensmeyer, "Isotoipic Tracking of Change in Diet and Habitat Use in African Elephants," *Science*, **267**, 1995: 1340-1343.

[25] B. D. Patterson, S. M. Kasiki, E. Selempo, and R.W. Kays, "Livestock Predation by Lions (*Panthera leo*) and other Carnivores on Ranches Neighboring Tsavo National Parks, Kenya," *Biological Conservation,* **119** (4), 2004: 507-516.

[26] Yellowstone model is principally the notion that "nature" can be "preserved" from the effects of human agency by legislatively creating a bounded space for nature controlled by a centralized bureaucratic authority. Yellowstone was initially implemented in the nineteenth century United States at Yellowstone - present day Wyoming and Montana.

conservation in Africa, which in many ways helped to legitimise and reinforce imperial rule. As in many other places in Africa, Meru residents were never allowed to access resources in both Meru Game Reserve and other forests in the district. Hence the role played by such policies in relation to the conflicts in the district needed to be assessed.

Anderson and Grove claim that Europeans formulated conservation policies so as to protect the natural environment as a special kind of 'Eden' for psychological purposes rather than as a complex and changing environment in which people had to live.[27] Many colonial authorities created protected areas in Africa so that Europeans could enjoy them without any interference. They were not concerned whether the conservation areas would interfere with the residents' culture or not. This is true for Meru District especially when the resources available for the residents are compared to the size of population. The establishment of protected areas in the district disregarded the factor of population growth which intensified the conflicts due to competition for scarce resources between people and wild animals.

Many African communities largely depend on land for their existence. So, the establishment of protected areas was often at the expense of African communities. In Tanzania for instance, Neumann argues that about 14 percent of the land is under national parks and game reserves, in a world where approximately 80 percent of agricultural production is done by peasant households on plots averaging less than 2.2 hectares.[28] As a result, most protected areas in Tanzania have become arenas for struggles over resources between state conservation agencies and local peasants and pastoralists. Given that Meru is an agricultural district, the Tanzanian experiences provided comparative sources for this study.

The reason behind the establishment of wildlife conservation areas was to protect wildlife. Nonetheless, this can only be true for Africans since the Europeans were allowed easy access to game resources. For example, Mackenzie illustrates the predatory character of settler and

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See: R. P. Neumann, *Imposing Wilderness: Struggles over Livelihood and Natural Preservation in Africa*, (Berkelay: University of California Press, 1998): 9

[27] D. Anderson, and R. Grove, "The Scramble for Eden: Past, Present and Future in African Conservation," in D. Anderson, and R. Grove, (eds), *Conservation in Africa: People, Policies and Practice,* (Cambridge: Cambridge University Press, 1987: 1 – 12.

[28] Neumann, *Imposing Wilderness*: 5.

imperial hunting in Southern Africa which catastrophically reduced wildlife and was responsible for the final extermination of a couple of mammal species, like the quagga and the blue antelope.[29] Beinart also provides a description of the extraordinary "great slaughter," which was arranged for the British royal visit to South Africa in the 1860s, where 600 heads of large game alone were shot for sport in one day.[30] In Meru District, only Europeans were allowed access to wildlife resources through sport hunting. As a result, the role of Europeans activities in HWC in the district needed to be assessed.

Beinart further claims that Africans for whom hunting was still of some importance in subsistence and survival were never allowed to hunt.[31] Thus, the bias in utilisation of wildlife angered the local residents, making them resort to anti-conservation practices. However, the extent of such practices in the district needed to be examined as many poachers were non-Meru residents. On the other hand, Kinloch argues that to Africans, game reserves and early national parks were little more than government "game-farms" set aside for the exclusive use and enjoyment of Europeans, something they resented. Africans saw game laws as a form of restriction imposed by an alien government, conceived and designed for the sole purpose of preventing the exercise of their legitimate rights to live, cultivate and hunt when, where and how they pleased.[32] Kinloch's views could be taken as true if the conflicts halted after the implementation of programmes such as the 2005 Act of Parliament that integrated communities into wildlife conservation. Nonetheless, given that the conflicts never stopped in the district, this premises necessitated further study.

Cartwright claims that the destruction of mountain forests and overgrazing of grasslands were essentially responses to increased population pressure.[33] While this could be true, the impact of

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[29] J. Mackenzie, *The Empire of Nature: Hunting, Conservation and British Imperialism,* (Manchester: Manchester University Press, 1988): 272.

[30] W. Beinart, "Review Article: Empire, Hunting and Ecological Change in Southern and Central Africa," *Past and Present*, (128), 1990: 162-168.

31 W. Beinart, "The Politics of Colonial Conservation," *Journal of Southern African Studies*, **15** (2), 1989: 143-162.

[32] B. Kinloch, *The Shamba Raiders: Memories of a Game Warden,* (London: Collins and Harvill Press, 1972):34. W. K .Lindsay, "Integrating Tasks and Pastoralists: Some Lessons from Amboseli," in D. Anderson and R. Grove, (eds), *Conservation in Africa: People, Policies and Practice,* (Cambridge: Cambridge University Press, 1987), pp. 149-168.

[33] J. Cartwright, "Is There Hope for Conservation in Africa?" *The Journal of Modern African Studies*, **29** (3), (1991), pp. 355-371.

the government licensed saw millers casts doubt to this hypothesis in Meru District as they were quite rampant.

Concerning the Kenyan situation, the following works provide a historical overview of HWC. With regard to the establishment of the Southern and Northern Game Reserves in Kenya in the late 1890s, Lindsay argues that it was seen as serving the same purpose: "The preservation of a primitive Africa where both the "native" and game have wandered happily and freely."[34] The Maasai and Samburu communities inhabiting the areas occupied by the Southern and Northern Reserves respectively were expected to co-exist with wild animals. However, such intrusions led to the emergence of conflicts that had not existed before. For example, Lindsay points out that there is archaeological and historical evidence to show that prior to European colonization, pastoralists never exploited wildlife except during periods of stock loss. However by the 1970s, the situation had been transformed to a point where the Maasai of Kenya were systematically slaughtering rhinoceros in Amboseli in protest over land alienation for wildlife conservation.[35] Many people in the areas surrounding Meru National Park practise livestock keeping. This fact created a need for investigating how such intrusions could have instigated the residents to engage in anti-conservation practices.

Collett states that the establishment of national parks and associated protected areas led to what he described as the question of "people versus animal."[36] As a result, most protected areas became arenas for struggle over resources between the state conservation agencies and local peasants and pastoralists. In Meru District, farmers have often complained of lack of compensation for damages caused by wild animals on their farms. However, the government has repeatedly defended itself by blaming farmers on encroachment of protected areas. This therefore created a need to investigate the issue further.

Matheka has observed that by the 1920s, formal wildlife conservation along with other colonial policies like land alienation and disarmament, had begun to cause tension between pastoralists

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[34] Lindsay, "Integrating Tasks and Pastoralists,"
[35] Ibid.
[36] D. Collett, "Pastoralists and Wildlife: Image and Reality in Kenya Maasailand," in D. Anderson, and R. Grove, (eds), *Conservation in Africa,* 1987: 129-148.

and conservation authorities in the Northern and Southern Game Reserves.[37] Consequently, a Game Policy Committee (GPC) established in April–May 1939 to look into HWC in those areas recommended the establishment of national parks and park adjuncts administered by a Board of Trustees. However this recommendation was not effected until after the Second World War, with Mount Kenya National Park being established in 1949. The problem with Meru District, however, was that the conflicts occurred in forests outside Mount Kenya National Park. These forests were under the Forestry Department which was never affected by the above recommendation.

Gibson argues that after independence, most governments continued to keep colonial wildlife laws that were draconian, unpopular and exclusionary, established in favour of the Europeans.[38] The residents of areas under wildlife conservation have often been excluded from wildlife utilization. According to Homewood, the form of conservation that excludes local people from consumptive use of wildlife is known as "fortress conservation."[39] It utilizes paramilitary ranger style forces for enforcement, and prohibits local communities from consumptive use of natural resources like grazing livestock, honey hunting, firewood or timber gathering. Many people in Meru District continued to suffer from the game by-laws of the 1960s especially those prohibiting utilisation of wildlife resources. However, an assessment of the extent to which such policies contributed to HWC in the district was necessary.

Unlike in the West where governments are more responsive to the needs of their people, Areola argues that in Africa, few governments care about the needs of their people.[40] Consequently, after independence many African governments responded to HWC by stepping up state brutality against the perceived perpetrators. This may be true for other parts of Africa, but in Meru District, poachers were often better equipped than game rangers. This therefore called for research on the issue of poaching in Meru District.

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[37] R. Matheka, "Antecedents to the Community Wildlife Conservations Programme in Kenya," *Environment and History*, **11** (2), 2005: 239-267.
[38] C. C. Gibson, *Politicians and Poachers: The Political Economy of Wildlife Policy in Africa*, (Cambridge: Cambridge University Press, 1999).
[39] K. M. Homewood, "Policy, Environment and Development in African Rangelands," *Environmental Science and Policy*, **7**, 2004: 125-143.
[40] O. Areola, "The Political Reality of Conservation in Nigeria," in Anderson, and Grove, (eds), *Conservation in Africa*: 177-292.

In 1989, the Convention on Trade in Endangered Species (CITES) banned all international trade in ivory and ivory products. According to Kangwana, Kenya's elephant population had drastically been reduced from an estimated 165,000 in 1963 to less than 20,000 by 1990.[41] Following the ban and other world-wide campaigns, poaching declined because of reduced demand and low prices for ivory. At the same time, the KWS tightened its anti-poaching measures in the country's national parks and game reserves and gradually the elephant population increased to about 27,000 elephants by 1996. This reflects the trend in Meru District. Owing to poaching, sport hunting and elephant shooting by game control officers, the elephant population in the district reduced drastically in the 1970s. However, from the 1990s, there was resurgence of HWC in the district especially those involving elephants. Nevertheless, the impact of these conservation measures in relation to the rising elephant population in the district required further study.

Following criticism by social scientists, Miller claims that literature by conservationists began to emphasize the need to reconcile wildlife conservation with the needs of local people.[42] This led to the establishment of community-based wildlife protection initiatives in several African countries. For instance, the Amboseli ecosystem in Kenya was one of Africa's first community conservation initiatives in the early 1970s. Community-based wildlife conservation was re-introduced in Meru District in 2005. The first of such projects was introduced in the district in the 1960s following the establishment the short lived Meru ADC Game Reserve in 1959. However, the weaknesses of the program during implementation in the district required to be assessed since it did not ameliorate the conflicts as expected.

Barrow, Gichohi and Infield claim that the early experiences at Amboseli were used to inform the Kenya Wildlife Services (KWS) community wildlife programme, as well as the over all

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[41] K. Kangwana, "Human-Elephant Conflict: The Challenge Ahead," *Pachyderm*, **19**, 1995: 11-15.
[42] I. R. Miller, "Regional Planning for Rural Development," in F. R. Thibodeau and H. H. Field, (eds), *Sustaining Tomorrow: A strategy for World Conservation and Development*, (Hanovel and London: University Press of New England, 1984): 37-50.

policy framework and development programme in the 1990s. [43] KWS's Community Wildlife Service (CWS) focus in 1991 was to enable local people to benefit from wildlife, minimizing conflicts between conservation interest and local populations, promoting better land use outside protected areas and increasing cooperation with other sectors. However, such policies were never implemented in Meru District until 2005. This created a need to examine why the programme was not implemented earlier in the district and yet the conflicts were intense.

After his appointment as the head of the KWS in 1998, Richard Leakey announced new policies that ensured that national parks did not benefit the surrounding communities. This ushered in a renewed wave of HWC in many parts of the country. For instance, Kimega points out that in Taita Taveta District in 2003 "curfews were imposed" on people by the uncontrollable movement of wildlife through villages and farms.[44] This compares favourably with the situation in Meru District as the Safari article indicates. The article points out that in some hard-hit agricultural areas like Kithoka in Meru, rangers evidently struggle helplessly to control the elephants by walking long distances during day and night.[45] This illustrates a weakness on the side of the KWS in Meru District as well as other affected places in the country. Such weaknesses needed to be evaluated especially in Meru District in order to understand the underlying problem.

Kruuk commenting on pastoralists and camel keeping communities (such as Turkana, Rendille, Samburu and Gabra) in 2002 pointed out that his research showed that those pastoral communities lost 2 to 10 percent of their livestock every year to wild animals.[46] This together with the Taita and Meru examples above demonstrate that the issue of HWC is still quite rampant in many parts of the country. They have however highlighted the problem without detailing the factors behind increasing cases of HWC in the recent past, particularly in Meru District.

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[43] E. Barrow, H. Gichohi, and M. Infield, "The Evolution of Community Conservation Policy and Practice in East Africa," in D. Hulme and M. Murpree (eds), *African Wildlife and livelihoods: The Promise and Performance of Community Conservation*, (Oxford: James Currey, 2001): 59-73.

[44] G. M. Kimega, "Unresolved Human-Wildlife Conflict in Kenya – The Source of Misery and Poverty," http://humanwildlifeconflicthtm, 2003.

[45] Safaris, "Kenya Human-Wildlife Conflict," http://www-wildlifesafaristourism-dev.htm, 2007.

[46] H. Kruuk, *Hunter and Hunted: Relationship between Carnivores and People*, (Cambridge: Cambridge University Press, 2002: 86-87.

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As the above literature review shows, there is no comprehensive study on HWC in Kenya. There is need therefore for a general shift from research purely on wildlife ecology to one which includes the interaction of people, land use practices and wildlife outside protected areas. Hence this study is hoped to fill the knowledge gaps in the literature.

1.8 Theoretical Framework

The study used the political ecology perspective. The perspective discusses how political, economic, and social factors impact on environmental issues. It focuses on the political economic and social structures and processes which underlie practices leading to environmental degradation.[47] Political ecology combines the concerns of ecology and a broadly defined political economy. It emphasizes the importance of state actions such as taxation, food policy, land tenure policy and the allocation of resources. This relationship encompasses a constantly changing dialectic between society and land–based resources as well as within classes and groups within society itself.

The origins of political ecology can be traced to the early work of the anthropologists John W. Cole and Eric R. Wolf, and in certain other writers like HM Enzensberger and Blaikie and Brookfield, from the 1970s and 1980s. The Third World political ecology attempts to integrate environmental and political analysis to illustrate how both the environmental and political factors are interrelated, and how one cannot be fully understood without the other.[48] It examines the political dynamics surrounding material struggles over the environment in the Third World. The role of unequal power relations in constituting a politicized environment occupies the central position. Emphasis is given on ways in which conflict over access to environmental resources is connected to systems of political and economic control. This leads to increased marginality and vulnerability of the poor.[49]

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[47] R. P. Neumann, "Political Ecology of Wildlife Conservation in the Mt. Meru Area of Northeast Tanzania," *Land Degradation and Rehabilitation*, **3** 2, (1992): 86.

[48] R. L. Bryant, "Political Ecology: An Emerging Research Agenda in Third-World Studies," *Political Geography*, **11** (1), 1992: 28.

[49] R. L. Bryant, "Power, Knowledge and Political Ecology in the Third World: a Review," *Progress in Physical Geography*, **22** (1), 1998: 79-94.

At the most elementally level political ecology perspective entails three aspects: a focus on land users and the social relations in which they are entwined; tracing the linkages of these local relations to wider geographical and social settings; and a historical analysis of a conflict so as to understand the present situations.[50] Through historical analysis of the political economic situations in the country, it is possible to understand how contemporary changes external to a local setting can influence land use and conservation practices of that area. The political ecology approach provides a framework for human ecologists interested in examining the interrelationships between local patterns of resource use and the larger political economy.[51] By revealing the underlying socio-political motivations in many of the violations of resource laws, political ecology theory helps in analyzing conflicts between nature protection and rural livelihoods in Africa within their historical and socio-political context. For instance, the establishment of national parks is in essence, a process of relocation of masses which involves the introduction of new social structures for controlling access to natural resources, making it a political process.

The implementation of wildlife conservation policies in colonial Africa typically involved the state denying a disenfranchised society of peasants and pastoralists access to traditional resources. This often involved land use practices that dislocated entire settlements, threatening the very existence of the communities. Thus, to understand the origins of conflicts, it requires an analysis of the historical evolution and dynamics of state conservation policy, particularly as it pertains to changes in the control of access to resources.

Neumann has critiqued political ecology perspective. He states that despite the theoretical breadth of studies using it, there is a void in their analysis. That is, in most cases the analysis does not delve deeply into daily workings of local politics, but remains focused on formal political structures, often at the inter-class level.[52] Nonetheless, the theory is quite effective in drawing general conclusions over a long period of time when dealing with an unspecified population. This made the political ecology perspective quite appropriate for this study.

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[50] Neumann, "Political Ecology": 85-98.
[51] T. J. Bassett, "The political Ecology of Peasant - Herder Conflicts in the Northern Ivory Coast," *Annals of the Association of American Geographers*, **78** (3), 1988: 453.
52 Neumann, "Political Ecology": 87.

1.9 Scope and Limitations of the Study

The study focused on the history of human-wildlife conflicts. Since the 1920s, various efforts have been made to ameliorate HWC. However, not much has been achieved. Livestock and human beings are still being killed by wild animals, with extensive crops destruction occurring everyday. This fact has made it necessary to study the history of human-wildlife conflicts in the district in an attempt to understand the factors underlying the problem. In doing so, the study examined the causes for the conflicts, control measures for the conflicts and the socio-economic effects of HWCs on residents of Meru.

The study was carried out in Meru District. The Larger Meru District as it is often referred to, has recently been sub-divided into five other districts. These are Nithi, Mara, Meru Central, Meru North and Tharaka Districts. Since the conflicts started before the sub-divisions, the unit of study was the Larger Meru District. The study covered the period 1920 to 2008. The first incidences of HWC were reported in the district in the early 1920s. This fact prompted the study to begin from 1920 so as to examine the factors leading to the conflicts in the district. The study covered the period up to 2008 although conflicts are still being experienced in parts of the district. The study ends in 2008 because data collection was conducted in early 2009.

A major limitation to the study was language barrier. Many people living in the remote areas of Meru District speak only in local dialects. This created communication barrier as the interviewer struggled to understand the dialects spoken by informants. It required the informants to explain their statements more whenever the interviewer did not understand.

1.10 Research Methodology

1.10.1. Research Design

This study was based on historical research design. The purpose of this design is to collect, verify, synthesize evidence to establish facts that defend or refute a hypothesis. It uses primary sources, secondary sources, and other qualitative data sources such as logs, diaries, official records, reports. The sources must be both authentic and valid.

This was basically a qualitative study. Both primary and secondary sources were consulted. The former involved materials from the Kenya National Archives (KNA) and field interviews, while the latter involved materials from libraries. Archival sources that were used included monthly and annual reports from the provincial administration and Kenya wildlife conservation agencies. Internal memoranda and letters from the Ministry of Wildlife and Tourism were also consulted.

To complement archival sources, oral interviews were conducted in the study area. Interviews involved forty informants from the district who were identified through purposive sampling techniques. Using snowballing technique, interviewed people led the researcher to other knowledgeable informants. Members of the provincial administration, the current and former wildlife conservation agents and a number of local residents of Meru District were interviewed. However, the proportion of informants that was interviewed from each category depended on the availability of resourceful people in relation to the problem under study. Village leaders from the study area were used in locating and creating good rapport with informants whenever necessary. Different interview schedules were used for the different categories of informants: one set for the provincial administration, another for wildlife conservation agents, and the third for residents of Meru District. Each interview schedules was based on a set of probing questions. A tape recorder was used to record interviews which were conducted in English, Kiswahili or Kimeru, as was appropriate to a particular informant.

A comprehensive secondary research was conducted throughout the period of study to supplement the primary sources. Secondary sources that were consulted included published books, journals, articles from Kenya's major newspapers and academic papers presented in conferences and seminars. Such sources were obtained from both public and private libraries. Some material was purchased from bookshops. The internet was also used to access current information on the topic.

1.10.2. Data Analysis and Interpretation

The data collected was mainly qualitative in nature. After data collection, all the main ideas were entered into 'data cards' that were classified according to the research objectives. The transcription of data was done immediately after data collection when the memory was still

fresh. This minimised piling up of work which would lead to confusion. The 'data cards' were useful when compiling ideas since, cards of the same category could be put together and then ideas linked when necessary.

Once all data were collected and recorded into the first set of 'data cards', a process of data reduction followed. This involved the recording of the selected important data into a new set of 'data cards'. A thorough revision of recorded data to ascertain that all the necessary facts were available followed. Once links were established, conclusions were made concerning the work to be written. After conclusions were made for all objectives, the verification of facts followed in readiness for the thesis write-up.

CHAPTER TWO

ORIGINS OF HUMAN-WILDLIFE CONFLICTS IN MERU DISTRICT, 1920-1939

2.1 Overview

This period marked the beginning of human-wildlife conflicts (HWC) in the district. Formerly, people utilised wildlife resources in a more sustainable way thereby ensuring there was proper balance in the ecosystem. However colonial administration and the resultant enforcement of wildlife conservation regulations upset the ecological balance, engendering HWC. Logging, which started in the 1920s for instance, destroyed the habitats of the larger animals such as elephants, prompting them to invade farms.

Many people in the district lost their land to the government in the 1930s. The most affected were the Chuka people who lost a twenty mile strip of land to the Meru County Council in the 1930s. The piece of land has been the source of protracted conflicts between the Forestry Department and the residents as the latter tried to regain it as their population increased. The 1930s also marked a period when many forests and bushes were cleared as people tried to create land for farming. This was as a result of an upsurge in human population in the district. Such activities led to the intensification of HWC in the district as wild animals lost some of their habitats.

2.2 Prelude to Human-Wildlife Conflicts in Meru District

Before the emergence of wildlife conservation policies in the district, cases of HWC were few despite the presence of large numbers of wild animals. This is because; the residents had a variety of ways of ensuring ecological balance. One of the explanations for the peaceful co-existence between people and wild animals was that there was plenty of food for both human beings and wild animals. In addition, the killing of destructive animals by the residents and the *Athi*[1] maintained manageable animal populations. The common animals in the district were elephants, buffaloes, pigs and monkeys.

The *Athi* who were of two types, were quite helpful in establishing a balance in the eco-system. The first group was that of the professional hunters, while the second consisted of people who

[1] *Athi* means hunters.

engaged in honey hunting as well as yam cultivation in the forest. Both groups were believed to possess magical powers that were used to be-witch anybody who violated the community's norms such as stealing. The professional hunters used bows and arrows to kill their prey. Trained dogs were also used in hunting. Among their favourite prey were gazelle and other small mammals. At times however, buffalo and elephant were killed when the population of gazelle and other small mammals went too low. The *Athi* used pits and wire traps to catch buffalo and elephant ensuring that the animal population did not exceed the carrying capacity of the region.[2]

Besides normal hunting, which was important in reducing the population of wild animals, the *Athi* organised themselves to kill a particular species of animal that they felt was a threat to human beings or their production systems. Each of the methods they used however had its shortcomings. These people hunted ungulates mostly due to their abundance in the district. This was important in reducing the number of ungulates that would have otherwise destroyed their crops. Nonetheless, the killing of ungulates led to a sudden reduction in their number in the food chain making carnivores like hyena to resort to killing livestock for food. To deal with such threats therefore, all men from the affected areas organised themselves into groups where they killed as many wild animals of a particular species as possible. Monkey was the most affected species.[3] Such activities however, could not completely eradicate HWC in the district. Elephant, which was the greatest threat to farming in areas adjacent to the Mount Kenya Forest, was the hardest to deal with because the weapons used by the residents such as spears and arrows could not penetrate its tough skin. To keep elephant out of farms, residents resorted to drumming, shouting, or throwing objects at them. With time however, elephant got used to those tactics and it became hard for the residents to deal with them.

Many of the contemporary socio-economic issues of wildlife conservation in Kenya can be traced back to the arrival of Europeans in the country in the late nineteenth century and the resultant incorporation of Kenya into the global economy. Conservation of wildlife in Kenya has been based on alienation of resource user-rights from the rural communities and transferring

[2] J. C. Kathuraku, Chuka, Oral Interview, 2009.
[3] E. Njeru, Chuka, Oral Interview, 2008.

them to the state, conservation organisations and tourism groups. Local subsistence hunting has often been dismissed as poaching. The prohibition of utilisation of wildlife products was one of the key reasons for the emergence of HWC in Meru District as in many other parts of the country.

Pre-colonial indigenous communities had developed various methods for wildlife resource use based on their cultural understanding and perception of their territorial and social landscape. Such methods included pastoralism, shifting cultivation, as well as hunting and gathering of wild fauna and flora. Until the early 1900s, people hunted freely in both the Mount Kenya Forest and other forests in the district. The reason for hunting was to acquire either meat or other items that were needed for cultural practices. For instance, they would use the skins of slaughtered animals as traditional attire. The forests were also a source of firewood. Women went into the forest in groups to collect firewood. Livestock grazing in the forests was also a common practice among the residents. It was the young boys who took livestock into the forest early in the morning for grazing.[4]

Most rural communities in Kenya had rules to govern how wildlife resources were utilised. For instance, in communities such as the Meru, it was a taboo to hunt or kill certain wild animals. The killing of venerated animals was perceived as a bad omen which could bring natural disasters such as drought, famine and disease to the community. Animals which were totems among the Meru community included elephant, cheetah, lion and leopard.[5] Stories of wild animals featured prominently in children's literature to the extent that the youth accepted them as part of their rural environment.

The relationship between the residents and wild animals in the areas surrounding the Mount Kenya Forest was never interrupted especially in the early part of colonial rule in Kenya. This was because the part of Mount Kenya Forest where people lived had not been alienated by the Game Department for the establishment of a wildlife conservation area. People used forestland until in the 1920s when they were forced to retreat to the lower slopes of Mount Kenya by the

[4] Ibid.
[5] J. S. Akama, "Evolution of wildlife Conservation Policies in Kenya," *The Journal of Third World Studies,* **2** (8), 1998: 3.

neighbouring communities in one of the inter-community battles. From that time onwards, the land was incorporated into the Mount Kenya Forest Reserve which was under the Local Native Council. This prevented the original occupants from any form of utilisation of the forest resources. It marked the beginning of a period of prolonged conflicts between the residents and the conservationists over the ownership of that strip of land that was incorporated into the forest reserve.[6]

People in the areas between Chuka and Chogoria lived deep inside the Mount Kenya Forest in what were their ancestral lands. There is still evidence in the forest that shows how people utilised forest resources. At Kiria,[7] which is about twenty kilometres deep the forest for instance, remnants of old pots, building poles and baskets locally referred to as *miruru*[8] can still be found. People living in the forest areas engaged in crop cultivation. This is evidenced by the presence of *miruru* remnants in the area. Even though no scientific dating has been done on those remnants, elders from the region were able to confirm their usage period by relating them with their earlier experiences in the area. Their main purpose was for harvesting and storing of grains. At times they could be used to accelerate the ripening of bananas. The cold climate made the ripening of bananas under natural conditions too slow. For bananas to ripen quickly therefore, they had to be put into a *mururu* which was stuffed with leaves from a specific indigenous tree locally called *Mukworwe*. The leaves of the tree provided warmth that caused bananas to ripen quickly.[9]

Millet and sorghum were the favourite food crops among the Meru. These usually produced good harvests due to favourable climatic conditions and good soils. The dark fertile soils in the forest also provided good harvest of yam, ensuring enough food supplies even in times of drought since yam is drought resistant. This made the Meru withstand drought better than neighbouring communities. This explains why the region was frequently raided by the neighbouring Imenti, Embu and Kikuyu peoples searching for food.

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[6] E. Njeru, 2009.
[7] The name Kiria denotes a place with a pool of water. Thus, the place was named Kiria because it had a pool of alkaline water from which animals drank. Another pool had water for human beings.
[8] *Miruru* were traditional baskets that were generally used for storing harvested food. They were made from supple twigs acquired from creeping vegetation referred to as *muugu* (singular) or *miugu* (plural) which was acquired from the Mount Kenya Forest.
[9] E. Njeru, 2009.

Meat from wild animals was the main source of protein for the residents. Hunting was commonly done by men. However, there was little livestock keeping in the region. Families kept just enough livestock to provide milk, especially for women and children. That was because meat acquired by hunting was never taken home. It was considered as a curse locally referred to as *mugiro*[10] to take wild meat home. Whenever there was a kill, men would roast and eat the meat in the forest. They would then keep any leftovers in their special huts called *gaaru* (see figure 1).

Wild animals also provided pelts that were used for various purposes. For instance, residents used pelts as a form of clothing. Women wore skins from animals like leopards to decorate themselves during various traditional festivals such as dances and other occasions such as marriage ceremonies. The porcupine tail was used in making flywhisks that were a symbol of power among elders.

Figure 1: A Traditional Hut (*Gaaru*)



Like other traditional African communities, the Meru people depended on traditional medicine to cure illnesses. Such medicines were derived from particular trees that were mostly found in the Mount Kenya Forest. One good example was the neem tree locally referred to as *mwarubaini*

[10] *Mugiro* is the traditional Chuka name for the curse that occurred as a result of taking wild meat home. Wildlife resources were considered 'holy' and therefore out of reach for women.

(see figure 2). Every part of the tree had medicinal value. Despite their bitterness, the herbs from the tree could cure virtually all human diseases experienced in the traditional Meru Society.[11]

Figure 2: Neem Tree (*Mwarubaini*)



Many rivers that traversed the whole of Meru District originated from Mount Kenya. One of the most important rivers was the Ruguti River. The river passes near Kiria where the residents had their settlements. Its fish were exploited by people living within and without the forest. There also existed two small wells at Kiria that contained saline water, one for animals and the other for human beings. People would take their livestock to drink saline water from the well at particular times of the day when wild animals were not present since the well was used by both wild and domestic animals. The well for human beings was a little different. A person utilising the well at a particular time had to clean it before collecting saline water. That was by scooping out the old saline water from it so as to allow fresh one to ooze out. While waiting for the well to fill with fresh saline water, one would place a small bow over it to notify other users that it was booked. It was considered a curse for another person to fetch saline water from a booked well. Other than replenishing the body with various mineral elements in both the human beings and animals, the residents used the saline water to season their food in place of salt.[12]

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[11] V. Kirugua, Kirachene, Oral Interview, 2009.
[12] F. C. Njeru, Chuka, Oral Interview, 2009.

People also utilised forests through honey harvesting. Other than for its medicinal value, people would use honey in trade as well to make beer that was used in various traditional ceremonies. The people who were responsible for honey collection were called *Athi ma Miatu.*[13] They collected honey from either caves or from traditional beehives. A traditional beehive was hewn from the log of an indigenous tree called *muringa*. To make a beehive, they would scoop out the wood substance from a log of *muringa* tree that measured between one and one and half metres long. The beehives were then placed at strategic places in the forest to attract bees. Certain types of herbs that provided a particular scent as well as roasted goat fat were smeared in the beehives to draw the bees. The Mount Kenya Forest was ideal for honey gathering because it harboured plenty of flowery vegetation that provided nectar for making honey.[14]

Traditionally, Meru people utilised wildlife resources sustainably to satisfy various needs. However, as various wildlife conservation practices took root in the district, the residents lost the freedom they had enjoyed in the use of wildlife resources. Besides the restrictions the residents faced in utilisation of wildlife resources, the conflicts that arose as a result of the establishment of wildlife conservation in the district led to immense socio-economic losses to inhabitants of the district. The losses incurred varied from place to place owing to different patterns of the conflicts experienced in various parts of the district due to varied climatic conditions. While the southern and central areas of the district are relatively wet, the Tharaka areas are fairly dry. The most prevalent and problematic wild animals in the district were porcupine, pig, monkey and a variety of other vermin. Crocodile was also common in some rivers like Thagana.[15] While pigs were a threat to tuber crops such as sweet potatoes and yams, monkeys destroyed virtually everything due to their dexterity. Maize and banana cultivation was almost impossible in the presence of ravaging monkeys. Monkeys were also a threat to both the livestock and human beings, especially during droughts. The most vulnerable livestock were goats and sheep.[16]

Women did most of the farming in the district. Nonetheless, the presence of many monkeys in the district made farming almost impossible. For fear of the monkeys, most women avoided

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[13] *Athi ma Miatu* is synonymous with beehive hunters.
[14] C. Njeru, 2009.
[15] Thagana is the local name for River Tana which passes through the region.
[16] J. Kirimi, Igamba Ng'ombe, Oral Interview, 2009.

going to their farms alone. Even when they went, they avoided staying in the fields until late in the evening. Consequently, women ended up doing very little farm work, leading to poor harvests. Due to lack of enough food, majority of the people could not effectively engage in other productive work. [17] This not only led to an increase in poverty levels in the district but was also responsible for the failure of children to go to school due to starvation.

An increase in human population from the 1920s made the residents to clear up land to create space for crop cultivation. Due to lack of appropriate farming implements, many people used fire to clear the vegetation. This method was common in Tharaka areas. The destruction of vegetation led to the displacement of many wild animals from their habitants. As they sought new habitants, the animals ended up causing damage to crops wherever they passed. The animals living in the burnt hills were the most affected because they had to migrate to new localities. This led to competition for food with the animals they found in the new localities. For example, troops of monkeys were the most dangerous. A group of monkeys inhabiting a particular locality resisted any intrusion into their locality by other monkeys. This made the displaced monkeys to seek refuge in people's farms where they caused extensive damage to crops.[18]

In time, monkeys became more cunning. In order to get pumpkins which were their favourite, they would steal a sleeping baby placed under a tree by the mother as she worked on the farm. After climbing a tall tree with the baby, they would start yapping aloud to alert the mother of the incidence. To get back the baby, the mother would place a mature pumpkin under the tree and step aside for the monkey to come down with the baby whom they exchanged with the pumpkin. Whether this is a myth or a reality remains a mystery.[19] However, one certain thing was that monkeys from Tharaka and Igamba Ng'ombe were quite bold. It is therefore not surprising that even at the present, Meru people remember the arrogance of the monkeys through a popular local expression: "Urimung'entu ta maguna ma Ruguti."[20] Sometimes, monkeys inflicted serious injuries on women and children by biting or beating them.[21]

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[17] A. Kirito, Murera, Oral Interview, 2009.
[18] K. Muthee, Kamuguongo, Oral Interview, 2009.
[19] A. Kathuraku, 2009.
[20] The English translation of the expression is, "You are as arrogant as the monkeys of Ruguti." Ruguti is the name of one of the rivers in the region that has its origins in Mount Kenya.
[21] A. Kathuraku, 2009.

Up to the 1920s, many people in the areas surrounding the Meru National Park were livestock keepers. Their livestock grazed in the same areas as wild animals. There was a remarkable co-existence between human beings and wild animals. After the establishment of a conservation area in the region by the colonial government, the situation changed as the residents were not allowed to graze their animals in the protected area. The residents were instead given a strip of land near the park for grazing their livestock.[22] The problem with such an arrangement was that the government did not control the movement and utilisation of the area by wild animals.

From the 1920s, the population of both wild animals and livestock increased leading to congestion in the area. As a result, communicable diseases and parasites became easily transmitted among the animals. The livestock were the most affected as they were less adapted to many of the diseases. For instance, tsetse flies transmitted by buffaloes often proved fatal to livestock in the region as they had a weaker body resistance in comparison to buffaloes. Most of the infected livestock died thereby causing immense losses to the residents who mostly depended on them for their livelihood.[23]

Before the establishment of colonial rule and therefore wildlife regulations the Meru used wildlife resources such as trophies for trading purposes. However, after the establishment of wildlife conservation, the government prohibited all forms of wildlife utilisation by the residents. The residents were seriously affected as they could no longer use wildlife resources as trading items like they used to. The ban made some residents to shift to crop cultivation though on a limited scale. An impediment to their effort was however threats from wild animals. The presence of nutritious food at their vicinity highly attracted the animals. They always chose to feed on cultivated crops rather than their usual foliage in the bush which was often dry fibres. For instance, buffalo had a strong liking for a local variety of peas locally called *Njahi*. In the process, many farmers experienced huge losses owing to crop destruction by buffaloes.

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[22] N. Maria, Murera, Oral Interview, 2009.
[23] KNA/DC/MRU/1/2, Meru District, Annual Report, 1925: 3.

In areas like Kangeta and Ngaya, the residents depended on *miraa* farming as their main economic activity. But *miraa* was not spared from destruction by wild animals. Elephant and monkey were the most destructive. Monkey caused a lot of damage on *miraa* twigs as they climbed up and down the *miraa* trees while playing. Elephant on the other hand destroyed to *miraa* trees whenever they passed through a *miraa* farm by breaking them.[24]

Although crop destruction by locusts was of great concern in many parts of the district, it was in the areas around Tharaka that were most affected. For instance, in September and October 1919, flying swarms of locusts passed in a south-easterly direction up to Tharaka areas where they caused considerable damage to crops and vegetation.[25] Entire fields of sorghum were destroyed. This, in combination with the effects of the 1919 drought popularly known as *Yiura ria Kithioro*,[26] led to increased suffering among the residents. In the same year, hordes of locusts from a southerly direction found their way to the region where they destroyed all grass and crops. On all the occasions, the affected residents had no option but to turn to the forests to graze their livestock and to hunt for wild animals. The residents used poisoned arrows to hunt in their region as well as in surrounding areas such as Tigania and Kinna. Such anti-conservation practices resulted in bitter conflicts between the residents and the conservationists.

Many people in the areas surrounding the Meru National Park lived by hunting wild animals for meat prior to the coming of colonialists in the 1890s. Other than hunting for food, they killed any wild animal that they felt was a threat to their lives and to their livestock. The colonialists keen to protect all the fauna and flora of the region prohibited any killing of wild animals. Sport hunting around Meru National Park was however a common activity as early as the late twentieth century. Majority of the hunters were the Europeans as they could easily afford the fee levied on hunting licenses. Such licenses not only provided income to the government but also effectively locked out local residents from any utilisation of wildlife resources. The government

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[24] N. Maria, 2009.
[25] KNA/DC/MRU/1/1, Meru District, Annual Reports, 1919: 3.
[26] *Yiura*-famine, *ria*-of, *kithioro*- corner. It was referred to as the famine of corners because people would move in circles over long distances without getting any help as the draught was widespread.

ensured that no wildlife resource was in the hands of the residents including ivories that were used by the residents as an item of trade both internally and with the neighbouring communities.

Despite being provided with hunting licenses, many hunters never adhered to the laid down regulations. Many ended up killing more animals than they were licensed for. In September 1912 for instance, a peculiarly flagrant case of breach of the game regulations occurred. J.J. Finnie had only one license but ended up shooting more than six elephants including a cow without reporting the matter.[27] Sport hunting was largely blamed for the increased cases of carnivore conflicts in the district that were a threat to human beings and their livestock. Due to a reduction in the number of ungulates as a result of killings through sport hunting, the carnivores had to look for alternative sources of food. In doing so, many resorted to preying on the residents' livestock as well as human beings.

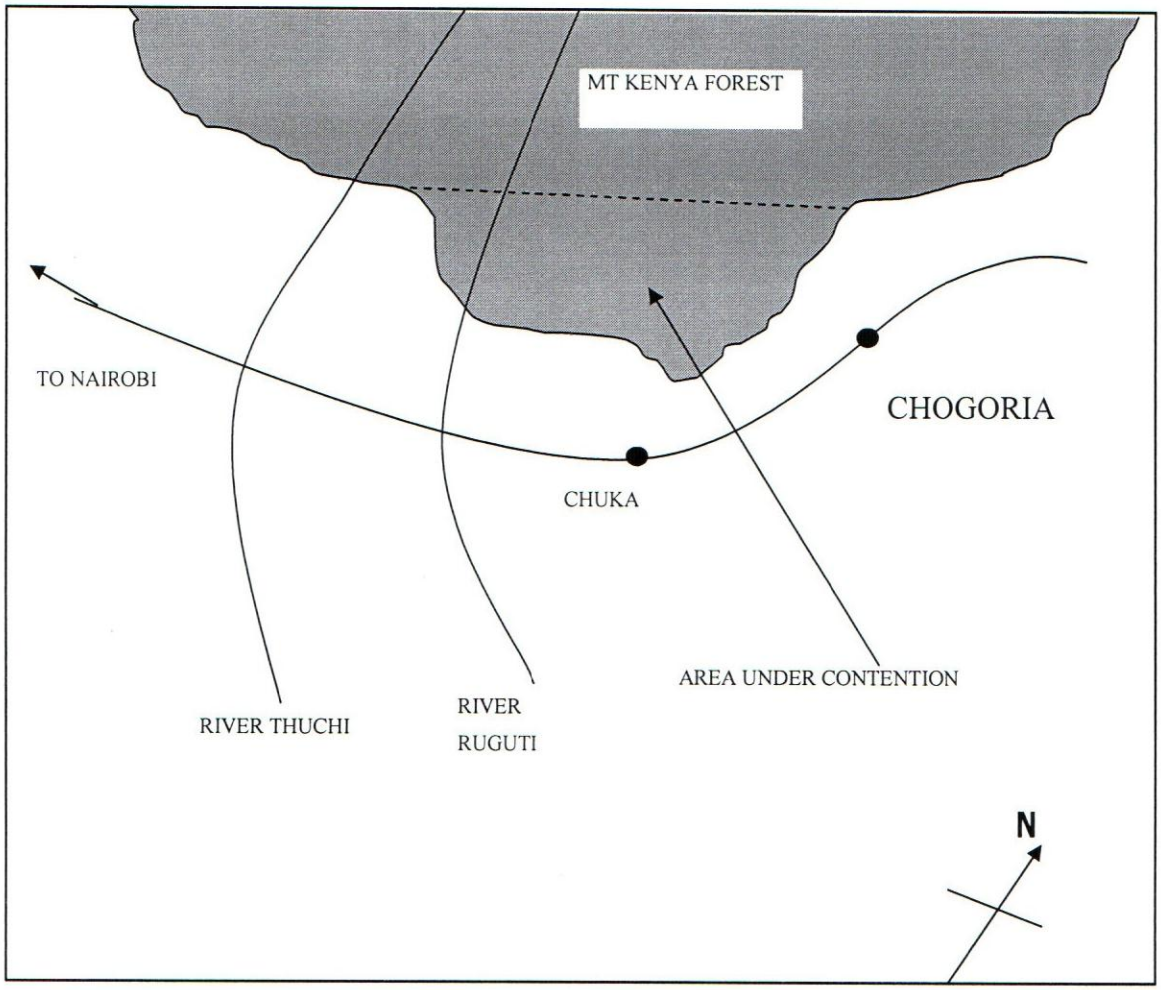
In the 1910s, tsetse fly invaded Mbeyu, making the area only inhabitable by wild animals especially the buffaloes. The inhabitants of the place were forced to move elsewhere as many of their livestock had began to die of nagana. Many people from the area suffered from sleeping sickness as a result of tsetse fly bite. After the migration of the residents, elephant, rhino and buffalo moved into the area.[28] From then on up to the 1940s, buffaloes and elephants made farming around Giaki and Mbeyu areas a near impossibility.

At the turn of the twentieth century, British settlers started moving into the district, just like in other highland regions of the country. At first, little of significance was done in relation to wildlife conservation in the district. The situation did not change much until around 1919 when most parts of the country were faced with a severe drought. In areas around Chuka, the drought was referred to as *yiura ria kithioro*. In addition to adverse climatic conditions experienced at the time, food shortages were occasioned by decrease in food production during the First World War. During the war, very little farming was done as many of the community's young men had been recruited into the Carrier Corps.

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[27] KNA/DC/MRU/1/1, Meru District, Annual Reports, 1912: 2.
[28] Ibid.

Map 3: Chuka-Chogoria Areas of Mount Kenya Forest



The effects of the drought culminated in Chuka people losing part of their land that was later incorporated into the Mount Kenya Forest (see map 3 below). That marked the beginning of tensions between conservation authorities and the local people. Traditionally, there were many wars in Meru District. However, it was a 1919 Conflict occasioned by the drought discussed above that made people from Chuka and Chogoria to lose their forest territories (see map 3). The Kikuyu, Embu and Imenti people had previously attempted to dislodge Chuka people from their territory without success. Despite their small population, the Chuka people were the most feared due to their superior military organisation. All the young men of a given clan (*nthaka*[29]) lived in

[29] *Nthaka* are young men who have been initiated into warrior-hood through circumcision. The Meru initiated their children at mid-teenage. During initiation young men were taught various fighting techniques.

in a military camp called *gaaru*.[30] In case of an invasion on any clan, the attacked group would raise an alarm to alert neighbouring clans. Upon receiving the signal, neighbouring clans would pass it on until everybody in the region was notified. Young men from the furthest clan would then link up with those of the clan that had notified them. The process would continue until everybody was gathered at the point where the initial alarm was raised. Using the many forests that were in their region as combat zones, the Chuka people easily defeated their enemies.[31]

Owing to the prevailing drought, the 1919 invasion (locally referred to as *maitha*[32]) by the Kikuyu, Embu and Imenti people was so ferocious. The areas of Embu, Kikuyu and Imenti were ravaged by droughts and their only haven was Chuka region, which was in most times green due to its mountainous environment. In 1920, Chief Kabandango, one of their most influential Chuka chiefs of the time, on realizing they were outnumbered advised his people to retreat to the much lower areas of the region. People heeded the advice and retreated some twenty miles out of the Mount Kenya Forest.[33]

2.3 The Spread of Human-Wildlife Conflicts in the District

From the 1920s, the interaction between the residents and wildlife changed. The movement of people from the Mount Kenya Forest and the subsequent incorporation of the areas into the Mount Kenya Forest Reserve in the 1930s seriously affected the socio-economic status of the residents. The inclusion of the people's land often referred to by the residents as *maganjo ma Chuka*[34] into the forest reserve abruptly changed the way people utilised wildlife resources.

In the late 19 century and the early 20 century, game was abundant in many parts of the country due to scarce human population then. During establishment of white settlement in Kenya, the government enlisted army officers to shoot wild animals on sight to clear land for habitation. This went hand in hand with the sport hunting that was in practised in the country, especially in Meru District which was favoured by hunters due to the abundance of game. Previously, people

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[30] *Gaaru* to Meru is like the *manyatta* to the Maasai. It was a place where men lived in their youth to learn to be useful members of their community. Women were never allowed to go into these camps.
[31] A. Kathuraku, 2008.
[32] *Maitha* is a sudden invasion.
[33] A. Kathuraku, 2008.
[34] The term *maganjo ma Chuka* is synonymous with the old residence of Chuka people.

dealt with wild animal populations through hunting and killing of problematic animals. However, after the coming of European settlers in the early twentieth century, African hunting was prohibited. The killing of wild animals, regardless of whether they were a nuisance to the residents or not, became punishable under the law. This forced residents to apply crude methods of game control that were hardly effective. For example, to chase away marauding elephant and buffalo for instance, the residents resorted to drumming and yelling. The methods were initially effective but later became redundant. Elephant soon got used to drums and any attempt to scare them by drumming sometimes turned tragic. An elephant would listen carefully to the source of the noise, then when everybody was convinced that it had gone, it would charge with vengeance towards the assailants.[35] Many residents lost their lives in such incidents. Soon, the residents devised the use of fire to scare away elephant. They would throw lighted objects at them. The elephants on seeing sparks from an approaching torch would get scared and run away. The use of fire was quite effective in the control of wild animals. The only shortcoming with the method was that it was only applicable at night. Thus, the animals causing destruction during day time were mostly unaffected.

The introduction of the Imperial British East African Company (IBEAC) rule in 1888 led to the development of the idea that East Africa, especially Kenya, was a sportsman's paradise.[36] The establishment of the colonial government and the arrival of European settlers led to rapid decline of wildlife populations and their habitats. Such a decline was occasioned by the high number of hunters and ivory seekers at the time. This kind of destruction, especially of large wild animals, alarmed the Western conservationists who raised concern about excessive destruction of wildlife in Africa. By the turn of the twentieth century, there was a growing interest in the West for wilderness conservation especially in the colonies. The pioneer naturalists fuelled by the realisation that pristine natural areas in most frontier territories were rapidly shrinking due to increased human populations with attendant settlement, industrialisation and uncontrolled hunting started to organise conservation awareness campaigns throughout Europe and North America. The conservationists put pressure on governments which had colonies in Africa and elsewhere such as Britain, France, Germany and Italy to initiate policies and programs of nature

[35] M. Micheni, Chuka, Informal Communication, 2009.
[36] R. W. Beachey, 'The East African Ivory Trade in the Nineteenth Century', *Journal of African History*, **8** (2), 1967: 271.

protection. In 1888 the East African Game Regulations were promulgated and became the basis for wildlife conservation in Kenya. In 1898, a Wildlife Regulation was enacted to curb indiscriminate loss of wildlife through hunting and trade in wildlife products in the country.

It was against this backdrop that the Society for the Preservation of the Fauna of the Empire (SPFE)[37] was formed in 1903 in Britain. SPFE quickly demanded control over the killing of wildlife in the Empire and the establishment of national parks or reserves using the American experience of national parks. The main aim of SPFE was to pressurize the British government to initiate and implement policies and programs on wildlife conservation in the East African Protectorate and other colonies. The implementation of the recommendations of the 1900 London Convention in the protectorate involved the establishment of a one-man Game Department in 1901 with A.B. Percival as the Game Ranger. In 1907, the Game Department was established essentially to control hunting. The staff of the Department rose to four men when J.H. Patterson was appointed the game ranger with three assistants. Patterson did not stay for long and Percival was appointed the acting game warden in 1909. In 1910 a new warden restored the Department's European staff to four officers. At the same time the Department began to recruit African game scouts and had about thirty by the beginning of the First World War. A fifth European officer had also been recruited in 1912. In pursuance of the 1898 Ordinance, a number of game scouts were recruited in Meru District by the Game Department in 1912 to obtain information on hidden ivory and rhino horns amongst the "natives." The outbreak of war in 1914 however disrupted the Department and its activities until 1925 when it was restored to its pre-war strength.[38]

Although there were always small episodes of HWC in Meru District, it was not until the 1920s that the conflicts intensified. The reasons for the intensification of HWC ranged from logging, land alienation from residents for the establishment of conservation areas, encroachment of wildlife habitats by the residence and the clearance of forests to create space for crop cultivation.

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[37] SPFE was formed by private British citizens in 1903 under the leadership of Edward North Buxton, a former hunter. Its main objective was to pursue throughout the empire awareness of the need to establish wildlife sanctuaries and enforce suitable game laws and regulations. See R. Matheka, "The Political Ecology of Wildlife Conservation in Kenya, 1895 – 1975," PhD Dissertation, Rhodes University, 2001: 73.

[38] R. Matheka, "The Political Ecology": 72.

The most common forms of HWC in the district included destruction of crops and other property by wild animals, killing of people by animals, tension between wildlife conservators and the residents and poaching by residents. The most affected areas included those surrounding the Meru Game Park, Lower and Upper Imenti Forests, Mount Kenya Forest, Tharaka and the Igamba Ngo'ombe areas.

Before the 1920s there were hardly any cases of forest destruction in Meru District. According to the Meru District Commissioner, the area under "native" forest was approximately 5000 acres by 1916 and it was in good condition without any cases of forest depredations by the natives.[39] From the 1920s however, cases of HWC started being reported in the district. People engaged in various anti-conservation practices as they attempted to continue their old ways of wildlife utilisation. Some cases of violation of wildlife regulations were purely motivated by the desire to revenge over the discrimination in the utilisation of wildlife resources. In 1929 for example, ten people were convicted of violation of game and forest ordinances in the district.[40]

Logging by licensed saw millers started in the district in the 1920s. In 1924 for instance, Messrs Young and Ayre Company was granted a concession to cut timber within a large area of forests in native land reserve. A broad grass strip which was to be patrolled by forest guards was made around the whole concession area in order to prevent encroachment on the forest by the "natives". The inhabitants of the areas that were brought under concession were not allowed to live within them or graze their livestock there without permission from the Forestry Department. This not only barred the residents from their source of income but also contributed to intensified conflicts between them and the conservators. The residents were unanimously against such concessions which they felt were part of their problems. They felt cheated in the utilisation of resources that were formally theirs. In 1925 therefore, arsonists started a fire that destroyed olive and cedar trees in areas under the Young and Ayre concession.[41] In 1927, another forest fire was lit by residents who protested against what they called "stealing of our resources" by the government in the at Kithangari area.[42]

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[39] KNA/DC/MRU/1/1, Meru District, Annual Report, 1919: 3.
[40] KNA/DC/MRU/1/3, Meru District, Annual Report, 1929: 2.
[41] KNA/DC/MRU/1/2, Meru District, Annual Report, 1925: 7.
[42] KNA/DC/MRU/1/2, Meru District, Annual Report, 1927: 1.

Such sabotage was as a result of the bitterness the Meru had towards conservation authorities and the timber-sawing companies. Residents often felt oppressed by the authorities as they were forced to participate in work that they believed was aimed at benefiting other people rather than their community. In 1925 for instance, under the supervision of the Assistant Conservator of Forests, the residents of Nthimbiri Location were ordered carry out demarcation of the Young and Ayre's concession area by placing beacons and cutting a line around the whole area in lieu of a fine under the Collective Punishment Ordinance.[43]

Forests such as Kuura and the Lower Imenti have been the breeding areas for elephant for centuries. Logging by licensed saw millers in these forests which started in the 1920s, is believed to have been the immediate cause of HWC that prevailed in the surrounding areas for the rest of the century. During dry seasons for instance, elephant often migrated from the NFD to the Mount Kenya Forest. On their way, they caused immense damage on farms. In 1929 for example, the situation was worsened by drought in the NFD. Hundreds of elephants migrated from the area to the greener areas of Mount Kenya Forest. By the time crops in Meru District were beginning to mature, the bushes in the NFD were mostly dry. Similarly, undergrowth skirting Mount Kenya Forest was often dry. Thus, the elephant from the NFD would stay in the forest's impenetrable cover by day and at night they would raid surrounding farms. In 1929, the Meru DC commented that, "A herd of [a] hundred elephants … can reap and destroy many acres in a night."[44]

When crops that escaped elephant destruction in the first round were harvested at the lower attitude areas, the elephants would move up into the Mount Kenya Forests. From there, they would do immense damage to crops which matured late in the higher altitudes. The elephant would eventually move back to the NFD at the onset of the rain season and the cycle would be repeated the following year.

Human encroachment into conservation areas in the 1920s was another factor that contributed to the escalation of HWC in the district. To deal with the problem, the government was forced to

[43] KNA/DC/MRU/1/2, Meru District, Annual Report, 1925: 3.
[44] KNA/DC/MRU/1/3, Meru District, Annual Report, 1929: 2.

create boundaries between the 'native' reserves and the forests. In an attempt to control further encroachment into the forest in both 1924 and 1929 for instance, a line of black wattle trees was planted along the edges of various forests in the district. The 'natives' were also allowed to cultivate on the farms they had created in the forest on condition that they would replant trees on them. Further, the Forestry Department during the October to December rains in 1930, planted a line of *Eucalyptus globules* trees along the portion of the native forest reserve boundary. The "natives" caught cultivating in the forest always gave excuses that they did not know where the boundary was. However, that served as a source of conflicts between the Forestry Department officers and the residents as the areas where they lived experienced serious shortages of firewood and building poles.

In the mid-1920s, the Game Department was faced with an acute shortage of manpower. The officers sent to Meru never took their work seriously since they were not employed permanently. As a result, property destruction by elephant increased. In 1926 for example, five residents were reported to have been killed by elephant in the same year.[45] To deal with the conflicts, the residents were granted permission by the Game Department to kill elephant found destroying crops. However, this did not help as the residents were poorly armed. Elephants were hardly affected by the arrows which the residents used. During September 1926, Wandorobo living in the veterinary quarantine area of Isiolo were moved back into the Meru reserve. There was a problem accommodating them in the densely populated "native" reserves because an area estimated at between 80,000 and 100,000 acres had been reserved for the King's African Rifles (KAR) for grazing.[46] The area constituted a buffer zone between the Meru reserve and the Nanyuki white farms and deprived the Meru of Imenti and Tigania of considerable grazing land as well as access to water in the Isiolo River. The addition of the Wandorobo livestock to those already in the constricted area between the KAR Grazing Reserve and Jombeni ranges created a lot of tension between the residents and the conservationists. Due to shortage of grazing areas for their livestock, the residents became more determined to regain the land lost to the government through various conservation programmes. As a result of pressure from the residents, the land

[45] KNA/DC/MRU/1/2, Meru District, Annual Report, 1926: 4.
[46] Ibid.

reserved for the KAR was reverted to the "native" reserve except for some 6000 acres.[47] In 1929, the forest stretching from the Isiolo Road up to the Upper Tigania areas was reportedly destroyed by the residents to create land for cultivation. The process of forest destruction had gone on unnoticed for many years because conservators mainly patrolled from the highway.

The *athi* groups remained a major threat to wild animals in Meru District during the colonial period. The *athi*, whose senior grade was called *mbuju*, were found in both the Tigania and Igembe clans and were meat-eaters. They originally lived on game meat from animals which they shot with poisoned arrows or trapped. They would demarcate certain areas of the forest for hunting purposes. In order to do this, certain sticks, known as *ndidi*, were planted at intervals round the area to be reserved. Those sticks were pointed at one end with a feather fixed on the other end. They were carved in a peculiar way and were said to contain magical powers. Any one cultivating an area demarcated with *ndidi* could be affected by the *athi* magic. That was by placing hollowed sticks about two inches in length, curved like a claw and engraved with the *athi* markings called *nguchua* under the ground near the offenders hut or under the path on which he walked. Another and more serious magic involved a wizard circling the village shouting incantations. The inhabitants of the village invariably died. The *Athi* were so dangerous that the local leaders feared them and were unwilling to interfere with their operations. They indiscriminately killed wild animals without being questioned by anybody.[48] In 1929 however, the government tightened game rules thereby regulating their activities.

From as early as the 1920s, Meru people had developed irrigation schemes. However, such endeavours were hampered by elephant as they regularly destroyed water intake points. In 1928 for example, elephant were reported to have destroyed the Morania furrow near its intake in the Uaso Naro River. This greatly hampered various irrigation schemes started in the district. It also cost the residents extra expenses in repairs.[49]

Human-wildlife relations in Meru District changed as the government became more serious about the conservation of wild animals. The prohibition against killing of wild animals enabled

[47] Ibid.
[48] KNA/DC/MRU/1/2, Meru District, Annual Report, 1926: 6.
[49] KNA/DC/MRU/1/3, Meru District, Annual Report, 1929: 3.

their population to grow. This coincided with increased clearance of land to pave way for cash crop cultivation which had started in the 1930s. The process significantly reduced wild animal habitants. Many of the displaced wild animals started straying into people's farms. The Forestry Department, which was ill equipped to deal with the resultant conflicts, placed the burden of keeping wild animals out of farms on residents whose control methods were mostly unsuccessful.

In the 1930s, people were only able to access wildlife resources through poaching. For instance, people could still graze their livestock in the forest and take them to Kiria to drink saline water. However, this was only possible in the absence of the conservationists. Those who were caught were at times punished seriously. By then, the *athi* had made a road deep into the forest, separating the forest reserve and settled areas. The road ran from Kirangi areas of Embu District up to Mutindwa wa Mbogori area of Meru District. The road, commonly referred to as *Laini ya Kairi*,[50] is about twenty miles inside of what is today the Mount Kenya National Reserve.

In the early 1930s, Ngaine, who was the clerk of the Local Native Council, facilitated the inclusion of the twenty mile strip of land into the Mount Kenya Forest Reserve against the wishes of the residents.[51] Despite the fact that Meru residents needed wood for firewood and building posts, the government prohibited them from cutting trees in the Crown Forest. The government often accused the Meru of lacking aesthetic value despite having protected forest resource for many decades before the arrival of the colonialists. For instance, Leakey, a conservator in the district lamented:

> The problem is how to induce an aesthetic sense in the African. Most of our efforts so far seem rather to produce an aesthetic sense (the "escape through alcohol") and we cannot persuade ourselves that the African has yet acquired his share of the artistic thrill of "helping God create" by conserving beautiful things.[52]

In 1930, the DC similarly lamented:

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[50] *Laini ya kairi* denotes second line.
[51] E. Njeru, 2008.
[52] KNA/DC/MRU/1/2, Meru District, Annual Report, 1930: 1.

> "Gardener and his predecessors in office were Bogey men whose main delight were to ruin, which according to most of the Meru, was to make intelligent use of the forest God gave them in a more enlightened opinion, by destroying the same forests as quickly as possible."[53]

Many forest concessions were issued to private saw millers by the government in the 1930s. The natives who were living in areas that were brought under concessions or those taken by the government like the Uringu and Thura Forests were no longer allowed to live or graze their livestock in the areas without a special permission from the Forestry Department. This seriously affected the livelihoods of those people who depended on them for grazing their livestock.

Logging by licensed saw millers was a major cause of land degradation in many parts of the district. Driven by the need of revenue, the government continued to license private saw millers. In 1930 for instance, Monchouguy was given permission to set up a saw mill within the elephant grass zone in the Mbeyu Forest. This led to displacement of wild animals in the region. As a result, elephant and buffalo invaded settled areas in search for food. In 1931, the government granted a logging concession to Monchouguy in Thura and Uringu Forests.[54] The residents strongly resented the concession as it was bound to destroy their traditional grazing areas. Besides, the residents relied on wildlife resources for survival during famines. In protest, the residents poached wood from the forests and drove their livestock into the forests to graze, causing conflicts with the Forestry Department. As a result, thirty people were arrested and convicted in 1931 of violation of the forest ordinance prohibiting such acts.[55]

The 1930s also witnessed increased cases of crop destruction by monkey and other vermin. In 1930 for instance, poor germination of grains in Igamba Ng'ombe and Tharaka was attributed to a plague of rats. This unusual state of affairs was due to the 1920s famines that drove rats out of homesteads because of starvation.[56] As in 1919 and the 1920s, residents turned to protected areas for their survival and that of their livestock.

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[53] Ibid.
[54] KNA/DC/MRU/1/2, Meru District, Annual Report, 1931: 3.
[55] Ibid.
[56] KNA/DC/MRU/1/2, Meru District, Annual Report, 1930: 4.

In some cases, climatic conditions in neighbouring areas largely contributed to an increase in HWC in Meru District. In the 1930s for example, the Akamba and Tharaka peoples having destroyed nearly all game in their territories, were the greatest threat to game in the Kinna area. Akamba poachers were dangerous as they used their poisoned arrows to avoid capture by game officials. Much Kamba and Tharaka poaching was motivated by lack of food in their areas as a result of frequent droughts.[57] In 1934, a drought in the NFD forced many elephants to move southwards to the areas around Meru Game Park where they caused immense damage to the ripening crops.[58]

In 1937, due to rampant crop destruction by monkey, local people were supplied with sweet potato vines and cassava cuttings for planting as a precaution against famine. This was viewed as an effective safeguard since cassava and sweet potatoes are tubers. Unfortunately a lot of the cassava was destroyed by vermin such as pig and porcupine. This led to an increase in poaching in the areas adjacent to the Meru Game Park that year and the subsequent period as people turned to wildlife for food. The intensity of the poaching is captured in J.A. Hunter's report which stated: "In 1939, numerous Kamba and Tharaka groups appeared to be living on diets of elephant meat and *Mukoma* palm wine."[59]

In 1938 parts of Tharaka and lower Mwimbi areas suffered from tick-borne diseases and rinderpest. Many areas were also infested with tsetse fly. Majority of those diseases were transmitted to domestic animals by wild animals coming from the southern areas of Meru Game Park. In the same year, many acres of land north of Tharaka and Igamba Ng'ombe were cleared of vegetation to create land for shifting cultivation. This led to the removal of the original forest cover in the affected areas, leading to displacement of monkey, baboon and pig that lived there. The displaced animals moved to the southern parts of the Meru Game Park and other areas in the south that were less cultivated.[60] As a consequence, intense pressure was put on resources in the region as competition for food between the original inhabitants of the region and the immigrants

[57] KNA/KW/5/4/1, Game and Vermin Control Report, Meru District, 1937: 6.
[58] KNA/DC/MRU/2/4/54, Meru District, Annual Report, 1934: 5.
[59] KNA/KW/5/4/1, Game and Vermin Control Report, Meru District, 1939, p.5. J.A. Hunter was then an Animal Control Officer.
[60] KNA/KW/5/4, Meru District, Game Report, 1938: 2.

intensified. This made animals to move beyond their borders as they searched for food. In the process, they ended up causing damage to crops and other property in the region.

In an attempt to curb the destruction of the forests in the district, the Forestry Department put up measures aimed at regulating the utilisation of forest resources by the residents. However, many people objected to the conservation policies introduced by the Department. The residents' displeasure is best illustrated in the following extract from the DC's Annual Report of 1937:

> There is little doubt that the Meru have in the past divided their country of forest to at least as great an extent as any other Kenyan tribe. It is also undoubted that the tribe in general has little sympathy for the Forestry Department which to them is little more than a power which prevents them collecting fuel and building timber in the forests.[61]

As a result of such negative feelings, the residents defied wildlife conservation regulations in various ways. For instance, fifty one people were reportedly convicted of violation of game laws in 1934.[62] With regard to the Ngaya Forest, a letter from the Game Department pointed out the following in connection to poaching in 1938: "I have seen at least a dozen rhino skeletons, four in one day. This is a great number to actually see while hunting elephant and surely proves that rhino poaching is very heavy."[63] In 1938, poaching was so rampant in the region that revenue from ivory and confiscated trophies totaled to shs186.53, an amount that was quite high at the time.[64] Owing to a decrease in the number of ungulates as a result of poaching, there was an increase in conflicts caused by carnivores in the district in the 1930s. For example, Captain T.R.P. Salmon, a Game Control Officer in the district, shot and killed a man eating lion that had killed six people in Chief Inoti's location in the same year.[65]

In other areas, especially those bordering Mount Kenya Forest, elephants were causing damage on crops. Although the conservators were aware of the situation, the government did not commit enough resources to curb the problem. No new game control officers were posted to the region to

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[61] KNA/DC/MRU/1/4, Meru District, Annual Report, 1937: 1.
[62] KNA/DC/MRU/2/4/54, Meru District, Annual Report, 1934: 7.
[63] KNA/KW/5/4/1, Game and Vermin Control Report, Meru District, 1938: 2.
[64] Ibid.
[65] Ibid.

deal with the problem. Worse still, the officers already contracted often saw their contracts terminated prematurely as the Game Department did not have enough resources to maintain them. In 1937 for instance, Carr Hartley, an elephant control officer, was hired by the Game Department for four months but his appointment was suddenly terminated without any replacement.[66] As a result of increased HWC in the district, the residents urged the government to relocate wild animals to the game reserves. Nevertheless, the game officials never considered such a move to be warranted as they considered the "natives" to be less developed to warrant such a move. For instance, the DC in his annual report of 1937 pointed out the following:

> It is generally accepted today that the proper place for game is in game reserves, not in the native reserves or settled areas where they interfere with industry and people. On the other hand, old ideas die hard - particularly those bound up with sentiment - and I fear it will be some time before the development of the native and his land will genuinely be considered more important than the protection of game in native reserves.[67]

In 1939, many incidents of logging were reported in the district. The most affected were the Upper and Lower Imenti Forests. Kikuyu squatters who had moved into the district in the early part of the decade were the biggest menace. Concerning forest destruction, the DC in his report observed that:

> ...the Kikuyu colonist, who relying on the European's apparent inability to budge him from anywhere he cares to settle, proceeds to do what he has represented as so reprehensible on the part of the protector - take land apparently unoccupied and appropriate it to his own use. The Kikuyu have a get-rich-quick mentality, who care nothing for the preservation of [nature] for posterity.[68]

During their stay in Meru District, Kikuyu squatters caused immense damage on the region's forests. The Meru indigenous authorities were aware of the Kikuyu problem but could do little to arrest the situation as their original authority as the custodians of their land had largely been

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[66] KNA/KW/5/4/1, Game and Vermin Control Report, Meru District, 1937: 3.
[67] KNA/DC/MRU/1/4, Meru District, Annual Report, 1937: 5.
[68] KNA/DC/MRU/1/4, Meru District, Annual Report, 1939: 1.

taken over by the Local Native Council. The Kikuyu in the district who were either *Aciarua*[69] or *Arombi*[70] were believed to be followers of the *Watu wa Mungu* sect which was founded by Musa Muchai in 1931. In 1931, the Kikuyu attacked a police post at the Ndaragu Forest. As a result, some moved to the Fort Hall District while others penetrated into Chuka and settled first in Muthambi, south of Chogoria and north of Chuka (Mwimbi Division) areas.[71] In order to create land for cultivation, the Kikuyu immigrants cleared large parts of the forests in the region. In the process they displaced many wild animals leading to conflicts between animals and people as the animals habitats shrunk. In 1934 for example, damage to crops was so heavy in areas around Chuka that the DC lamented: "The soil in most parts of the district is good and rainfall is generally adequate but destruction by vermin is usually heavy. Elephants can undo a season's work in a single night. Pig and baboon do tremendous damage...."[72]

In 1939, Kikuyu immigrants were reported to have caused a lot of destruction to the forests around Mwimbi and Muthambi areas. The destruction was said to be out of their entrepreneurship spirit as they aimed at maximizing the use of natural resources in the area. In his annual report of 1939, the Meru DC noted the following concerning Kikuyu immigrants:

> Unfortunately there are parts of the district (particularly upper Mwimbi and Muthambi) where Kikuyu influence; directly or indirectly, has encouraged a spirit of individualism which tries to override tribal control for purely selfish ends. It is this spirit of animals which describes the man who hacks down tribal forest for immediate gains... It might be said with truth that there is to all intents and purposes a Kikuyu colonist association in Meru whose objects are to grab as much Meru land as they can and to alienate all land to their own tribesmen, and to squeeze all exploitable wealth out of the Meru forests and put it into Kikuyu pockets as fast as possible. There are numerous Kikuyu living in the Meru native reserve. The two principal settlements are at Naari and Chuka, but there are other families scattered here and there in all divisions. As a rule, they get on well with the

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[69] *Aciarwa* is a Meru term that refered to people who are born in certain place, thereby becoming the original inhabitants of the place. In this context it was used to refer to the Kikuyu immigrants who were absorbed into the Chuka society, thereby acquiring the same status as their host through a specific ceremony.

[70] *Arombi* is a Meru term used to refer to beggars or landless people who are accommodated by others in exchange for their labour. Thus, the Kikuyu in the region were the opposite of *Aciarwa* since they were tenants at will.

[71] KNA/DC/MRU/1/2, Meru District, Annual Report, 1931: 8.

[72] KNA/DC/MRU/2/4/54, Meru District, Annual Report, 1934: 3.

> Meru and apart from their inclination to the indiscriminate cutting of trees, cause little troubles. But at Naari some of the settlements have ploughed up large portions of Meru grazing land and in Chuka, their destruction of forest has gone beyond all bounds.[73]

Forest destruction in the district had increased tremendously by 1940. Table 1 for instance, provides an illustration of the quantities of timber cut by the Thaie Saw Millers in the Upper Imenti Forest from 1934 to 1940.[74]

Table 1: Thaie Saw Millers Timber Production in the Upper Imenti Forest, 1934-40

Year	Quantity (Cubic feet)
1934	12,165
1935	13,435
1936	14,351
1937	16,832
1938	32,037
1939	46,044
1940	54,170

Due to increased crop destruction by elephant owing to little help from the Game Department, the residents resorted to killing the animals themselves. In 1937 for example, elephant caused immense damage to food crops in Igembe North.[75] This forced the residents to resort to poaching for food as the sweet potato and banana provided by the government were insufficient. As a result, twenty two people were charged for violation of game laws that year. In 1939, elephant caused severe damage to crops in Igembe. The damage was occasioned by residents' invasion of wildlife areas with their livestock, causing to a decrease to the amount of *machicho*[76] available for elephant.

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[73] KNA/DC/Meru/2/4/55, Meru District, Annual Report, 1939: 4.
[74] KNA/DC/Meru/2/4/55, Meru District, Annual Report, 1940: 2
[75] KNA/DC/MRU/1/4, Meru District, Annual Report, 1937: 12.
[76] *Machicho* is a wild plant that grows in wet areas or places sheltered by a canopy of trees. It is slippery in texture and forms an appropriate meal for elephant as it eases the digestion of the rough grass elephant consume.

From 1938, a lot of livestock died as a result of diseases spread by wild animals. For example, around the Ngaya areas there was an outbreak of a mysterious disease that caused immense losses to livestock. The spread of the disease was blamed on wild animals as noted in the following extract from a game report, "Eland are the most common and I have found many carcasses and skeletons of eland recently dead, and as far as one can tell, they have died of a disease."[77]

In 1939, locusts caused severe damage to the grazing lands and cultivated fields. This forced Meru residents to move into the forests with their livestock as much of their livestock had already died of starvation. Lack of grass for the livestock added suffering to the residents because the conservators could not allow them to graze their animals in the protected areas. Despite the fact that the residents had traditionally appropriated and conserved forest resources, the government often accused them of lacking aesthetic value for the same.

Owing to a ban on hunting by the residents, wild animal populations rose to soaring levels by the 1930s. This led to an increase in HWC in the region owing to an acute shortage of game control personnel in the district. To deal with the conflicts, the Game Department used all sorts of methods ranging from traditional ones to indiscriminate killing of animals regardless of whether they were destructive or not. In regard to traditinal methods, an assistant game warden in Meru District in 1937, reported on how he dealt with cases of elephant destruction of banana plantations: "…. on Sunday morning I went with a gang of some fifty boys, and we put empty kerosene cans tied together and hanging from trees along their paths."[78]

The traditional method was unsuccessful in controlling elephant. Thus, the most preferred method by the Game Department was that of indiscriminate killing since the Department did not have sufficient human resource to kill specific animals that were destructive. Nevertheless, the method had its shortcomings. For example, majority of the animals killed were often not the problematic ones. The real culprits often survived the slaughter, thus getting another chance to

[77] KNA/KW/5/4, Meru District, Game Report, 1938: 3.
[78] KNA/KW/5/4, Meru District, Annual Report, 1937: 3.

continue harassing residents. Such concerns were voiced by the game warden in Meru District in 1938:

> In my opinion, events have proved that the killing of large numbers of elephants as has been done in the Meru District during the last five years, has little or no real effect in putting a stop the shamba [farm] raiding. I recommend strongly that in future one or possibly two experienced hunters should be engaged for control work at Meru each year at the commencement of the rains; and that the work should be so organised that every case of raiding is followed by punishment of the herd concerned, whilst no other animals than shambas [farm] raiders are shot.[79]

Despite such concerns, the killing of wild animals in large numbers continued in the 1940s. Between July 1942 and June 1943 for instance, fifty seven rhino had been shot dead on control work by game wardens.[80] Such destruction of wild animals was responsible for the extinction of some game species in the district. In the 1960s for instance, the white rhino numbers had decreased to a point where it was decided to import white rhino from Zululand in South Africa. Moreover, the destruction of wild animals by game officials motivated the residents to engage in poaching activities. In regard to this, Captain T. Salmon, a game control officer, observed: "The rhino seem to have suffered badly from wholesale slaughter by native gunmen. In one small locality, a native told me he had shot eight since game officers do not care any more about wild animals."[81]

2.4 Summary

The 1920s and 1930s marked a period of transition in the district when people were forcibly made to abandon their traditions of wildlife utilisation. New wildlife conservation areas modelled after the West conservancies were introduced in the district as in other parts of the country. Such policies, together with the need by the residents to sustain their cultural way of life, were responsible for the conflicts that emerged over the period.

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[79] KNA/KW/5/4, Game and Vermin control Report, Meru District, 1938: 7.
[80] KNA/KW/5/4, Game and Vermin control Report, Meru District, 1943: 4.
[81] Ibid.

The period also marked the start of logging in the district. The most affected was the Mount Kenya Forest and Imenti Forests. Much of the logging in the aforementioned forests was by companies that had been licensed by the government. At the same time, Meru residents frustrated by attempts to lock them out in the utilisation of wildlife resources resulted to all sorts of anti-conservation activities such as poaching. This created conflicts between them and wildlife conservation agencies.

CHAPTER THREE

INTENSIFICATION OF HUMAN-WILDLIFE CONFLICTS IN MERU DISTRICT, 1940-1976

3.1 Overview

The period under consideration was characterised by deliberate attempts by the government to improve wildlife conservation in the district and other parts of the country. As a result of increasing HWC in the district, the government heeded to the recommendations of the Game Policy Committee established in 1939 and created national parks in the country. Consequently, Mount Kenya National Park was established in 1949. National parks prohibited any form of utilisation of wildlife resources in the designated areas except for tourism.

The 1940 decade was also characterised by extensive forest destruction by the Kikuyu who had moved into Meru District. The government often found it hard to remove them from the areas they had settled in as they regarded such areas as "the Kikuyu colonies." Forest destruction led to an increase in HWC in the district as wild animals sought for new habitats and feeding areas. The exclusion of the residents from utilisation of wildlife resources created resentment among people towards conservation. This led to the establishment of community-based wildlife conservation areas in the country with Meru African District Council (ADC) Game Reserve being established in 1959 as the first of the kind in the country. Due to mismanagement however, the reserve experienced financial difficulties, leading to its conversion to a national park in 1969.

After Kenya's independence, there was a lot of mismanagement of public resources, including wildlife conservation areas. As a result, poaching increased all over the district with Meru National Park being the most affected by the activities of the Somali bandits commonly referred to as *Shiftas*. The 1960s, 1970s and the subsequent decades of the 20 century were characterised by intensive poaching in Meru District as in other parts of the country.

3.2 Escalating Human-Wildlife Conflicts in Meru District

As farming in the district intensified in the 1940s, people resorted to guarding their farms against invasion by both the small and large wild animals. This practice involved building watch towers in their farms. Due to the abrupt nature of bush clearance however, monkey took time to relocate

to the Mount Kenya Forest and therefore remained a threat to farming as the natural food they had hitherto depended on had been cleared. To deal with the problem, the residents sent their children to the watch towers to guard their crops using slings to chase away the invading animals. However, monkey proved difficult to deal with as they would enter a farm quietly and cause a lot of damage to maize crops before they were discovered.

Poaching became rampant in the district over the period under examination. Buffalo was the most preferred hunting target among the poachers. That was because a single kill was able to provide enough food for many people. Another blow to the buffalo population in the district came in the same period when it was struck by a mysterious disease locally referred to as *kathunguthi*.[1] The disease was not only catastrophic to buffalo but also to livestock and people. By then many people used to graze their livestock in the forest where buffalo also grazed. The livestock used the same salt licks as infected buffalo at a place called *Kiria*.[2] As a result, the disease was transmitted to livestock leading to high immortality, especially among cattle. On consuming infected meat, many people in the areas surrounding the Mount Kenya Forest lost their lives too. This was because people there never threw away carcasses of dead animals. They instead used wild herbs to detoxify the carcass before consuming them. Although they were at times successful in detoxifying carcasses, some cases like that of *kathunguthi* were often ineffective. Hence, the loss of lives among those who consumed infected carcasses.[3]

In the 1940s, various forms of conflicts were reported in Meru district. They ranged from poaching, destruction of crops and predation of livestock by wild animals, as well as killing of human beings by carnivores. In 1946 for example, Captain T.P. Salmon, the Game and Vermin Control Officer in Meru District, killed seven rhino and six buffalo in Tigania for causing crop destruction.[4] At the same time, about forty three people in Kinna were convicted on various charges of violation of game regulations. The total number of animal trophies confiscated that year was 790.[5] As a result of HWC caused by big game in the district, the government was left

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[1] *Kathunguthi* is a local term refering to something that jumps,which suggests that the disease was anthrax.
[2] *Kiria* is a local term refering to a pool of water. It was a place in the Mount Kenya Forest where people collected saline water for domestic use and for their livestock.
[3] I. Gitari, Chuka, Oral Interview, 2009.
[4] KNA/KW/5/4, Game and Vermin Control Report, Meru District 1946: 2.
[5] Ibid.

with no alternative but to kill some of them in an attempt to reduce their population. Increase in HWC was also caused by increased farming activities in the district. For instance, a Game Department report of 1942 stated:

> With the bringing into cultivation of these rhino grounds, the status of the rhino here in Meru has altered and it is no longer a question of killing of the odd rogue who develops a taste for n*jahi* but of keeping the rhino population down and that is the position we have to face.[6]

In 1944, Leakey, the Assistant Conservator of Forests, suggested to set aside what he referred as the "green belt" to the Local "Native" Council. That was a chain of hills in Tharaka which needed to be kept free from any human activities.[7] However, the majority of Tharaka people depended on forests on the hills for their cottage industries besides pasture for their cattle. This brought Tharaka residents into collision with conservators as they resisted such a move. In addition to the *miraa* they harvested from the hills, Tharaka residents collected fibre locally called *muugu* which they used for making ropes, baskets, mats and other things.

In the late 1940s, the government began land partitioning and registration in Meru District among the residents. The reason behind the exercise was to enable people engage in tea and coffee cultivation.[8] Due to the effects of the global recession of the 1930s, the only way the government could survive the economic crises was to improve on the growth of gross domestic product (GDP) through increased production and spending by people. The recession had considerably reduced the demand for locally produced goods abroad, forcing the government to look for ways of diversifying the economy. To do that, places with good production potential but far enough from settlers' plantations like in Kiambu were allowed to engage in cash crop farming. The selection of such far places was to prevent them from offering direct competition for labour to settlers' plantations. Meru District was one such area. To enable the local people engage in effective cash crop farming, the government partitioned land into small portions among the residents, leading to extensive forest destruction in areas outside the Mount Kenya Forest.

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[6] KNA/KW/5/4, Game and Vermin Control, Meru District, 1942: 7.
[7] Ibid.
[8] E. Njeru, 2009.

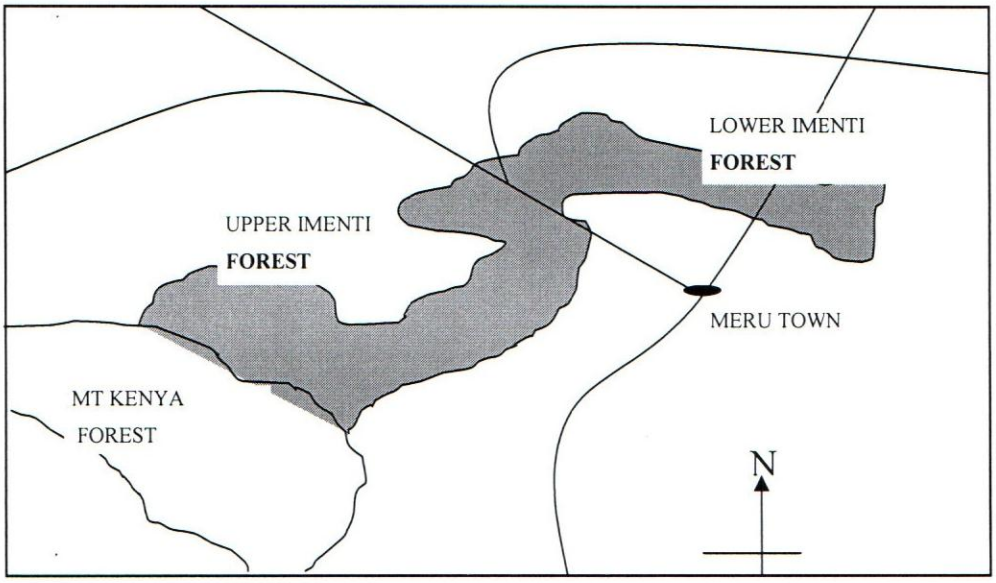
Animals that formally inhabited various forests in the district were forced to migrate to the Mount Kenya Forest after their habitats were destroyed. The migrating animals, which included monkey, pig and other vermin like porcupine and squirrel, took time to adapt to their new surroundings. They would often sneak out of the forest to farms where they caused considerable damage to crops. The most affected areas were Mitheru, Kiang'ondu, Kirege, Kinoru and Gitogoto.[9] Other areas such as Mbeyu had a lot of land put under crop cultivation over the period. By 1942, a huge acreage had been put under *njahi*[10] cultivation, leading to increased conflicts between rhino and farmers in the area. This is evidenced by the large number of rhino killed in the period. For instance, nineteen rhino were killed in 1942 in Mbeyu area.[11] Additional land was put under cultivation in Mbeyu in 1943 as a result of population growth, intensifying HWC. Consequently, about forty five rhino were killed that year by four trained shooters hired by the Game Department, two of whom were to be paid by the Local Native Council.[12] In 1948, eleven elephants were shot dead in the region after raiding farms and destroying the Council's forest plantations.

The government continued to lease out forests to timber sawing companies over the period. In 1946 for instance, twenty pit sawyers were given permits in Mwimbi and Chuka in the Crown Forest under the control of the Assistant Head of Forestry Department. In 1948, the government leased four acres of the Imenti Forest to the Kenya Timbers (PTY) Ltd for a lease period of thirty three years. Much of the Imenti Forest, shown (Map 4) had been used by elephant as a breeding zone for centuries. Tree felling by timber companies as well as the residents completely transformed the ecology of the area. The once thick forest with a good canopy of camphor trees was eventually reduced to shrubs. Thus, elephants migrating from Isiolo District into the forest for breeding were forced to go further into the Mount Kenya Forest where there are tall trees. On the way, elephant strayed into farms, causing immense damage to crops.

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[9] J. Mugambi, Kinoru, Oral Interview, 2009.
[10] Njahi is variety of peas widely grown in Meru District.
[11] KNA/KW/5/4, Game of Vermin Control, Meru District, 1942: 2.
[12] Ibid.

Map 4: Imenti Forest



Source: District Topographical Maps

Another cause of forest destruction was politics. Forests faced destruction after years of reforestation due to political disturbances. As political temperatures in the country increased in the late 1940s, many elders in Igembe seized the opportunity to incite people against the restrictions imposed on them over the utilisation of forests in the region. The desire to have local control of the forests was driven by a belief that the forests naturally belonged to the Meru. In 1947 the DC commented in his annual report:

> In regard to the closed areas - given the slightest opportunity, they [residents] would undoubtedly return to their destructive activities; this did in fact happen during the political disturbances in August, when very serious damage was done on the protected hills and forest of Igembe by hundreds of people.[13]

Intensified pressure continued to be put by conservationists from Europe seeking wildlife protection. The International Conference for the Protection of the Fauna and Flora of Africa held in London in 1933 was important in recommending the establishment of national parks in African territories. In 1939, the British government bowed to pressure from conservationists and appointed a Game Policy Committee which was mainly composed of British naturalists,

[13] KNA/DC/MRU/1/4, Meru District, Annual Report, 1947: 13.

aristocrats, and top administrative officials to study and make recommendations regarding the setting up national parks in Kenya. The Game Policy Committee made recommendations which were approved by the colonial legislative council in 1945, leading to the establishment of national parks in Kenya from 1946. Mount Kenya National Park was established in 1949. Under the national parks ordinance, killing or capturing of fauna as well as destruction or collection of flora in the parks was prohibited except under the direction of a competent authority.

Such forms of wildlife conservation policies and programmes were in part a consequence of Western experiences as well as lack of clear understanding of African values. The former is represented by a rapid disappearance of most wildlife in the West during the industrial revolution. Most often the conservationists and government officials classified African modes of natural resource use as unprogressive and barbaric. This perception led to the introduction of government policies and programmes which were designed to stop Africans from utilising wildlife resources. Indigenous resource utilisation was perceived as incompatible with the principles of wildlife conservation. Thus, when the state established the first national parks, not only was traditional subsistence hunting banned but rural communities were also prohibited from entering the parks and utilising resources such as pasture and collection of wood.[14]

The rate of disappearance of once abundant game in Meru District continued to cause alarm in the 1940s. Efforts to reverse the situation through application of new wildlife conservation policies were however brought to a grinding halt by the Second World War. Wild animals in Meru District as well as other parts of the country reached an all-time low level in 1945 when the vestiges of war and lack of active government policy to protect wildlife, all contributed towards wildlife destruction. The lack of imported meat highly raised the demand for meat for the soldiers, much of which was acquired from the wildlife.[15]

The effects of the Mau Mau on wildlife conservation in Kenya were drastic. Between 1952 and 1955, many wild animals were killed in the Mount Kenya Forest. Over the period, Mau Mau fighters took refuge in the forest from where they waged guerilla warfare against government

[14] N. Maria, Nguyuyu, oral interview, 2009.
[15] KNA/KW/5/4, Game and Vermin Control, Meru District, 1942: 11.

forces. Besides the destruction of trees and wild animals by bombs dropped by government forces, many wild animals were killed by the Mau Mau fighters. The Mau Mau set up traps which they used in capturing wild animals for food. Being in the forest away from their homes, it only meant that their chief sources of food were wild fruits, wild roots and wild meat. Wild animals like elephant and baboon on the other hand caused a lot of damage to the residents' farms due to the presence of the Mau Mau and the government fighters in the forest their usual habitats.[16]

By 1955, many people and wild animals had been killed during forest operations. For example, two officers were trodden by an elephant and a rhino respectively. In the same year many buffaloes were deliberately killed and others wounded by bomb exploded by the government officers during forest operations. Such killings occurred as government forces attempted to wipe out the Mau Mau fighters. Other cases of unlawful shooting of game by Meru Forest Guards were reported in the region. They shot elephants in pretext that they were destroying crops so as to acquire the ivory for sale.[17]

In May 1953, Mount Kenya Forest was declared a prohibited area, locking out many pit sawyers. In September 1953, all squatter contracts were cancelled and the workers re-engaged as casual labourers. However the problem was that, they were not able to work efficiently due to long distances involved between the places where they lived and the forest. As a result, elephants got a chance to do considerable damages to the tree plantations that had been established. Eventually, due to competition for land between the squatters and the local people at their relocation areas, many people were forced to occupy land at the edges of the Mount Kenya Forest. This led to new conflicts between people and wild animals such as elephants and buffalo due to their feeding habits. Elephants in particular like feeding on high nutritional food. Thus, the presence of crops like millet and *Njahi* close to their habitats attracted them.[18]

One issue of contention between the residents and conservationists from the 1940s was the Northern Grazing Scheme. The scheme covering an area of about 500 square miles was

[16] KNA/DC/MRU/1/11/1, Meru District, Annual Report, 1955: 6.
[17] KNA/DC/MRU/1/11/1, Meru District, Annual Report, 1955: 10.
[18] Ibid: 12.

previously used freely by people from various locations surrounding Meru Park for grazing livestock. However, due to lack of water in parts of the area, those with water tended to be overgrazed. The overgrazing of certain parts of the area led to the ruining of the grass cover which in turn seriously affected the terrain of the area due to soil erosion. To reverse the situation, the government introduced the Northern Grazing Scheme in 1946. During the Mau Mau period however, the scheme was declared an operation area for government forces. This led to its closure to residents and their livestock. This left the residents with nowhere to graze their herds. Between 1957 and 1958 the government ordered the residents to destock, a situation the residents strongly resented. Attempts to get the residents back into the Northern Grazing Scheme after the Mau Mau proved futile as the residents accused the government of plotting to make them destock their livestock. Instead, the residents left their livestock to graze in the forests. This led to increased tension between them and the conservationists.[19]

The Game Department continued to be vigilant on residents who attempted to move their livestock into the forests. For instance, according to the Forest Ordinance (Cap 176, 1959), the residents were no longer allowed to graze goats in the forest. The cattle could only be grazed under licence.[20] This greatly affected the economic welfare of many local people who largely depended on livestock keeping as their main economic activity. That was the case because settlement land was becoming limited in the 1950s due to rapid increase in population and increased cash crop farming. These processes made it hard for livestock keepers in the region to maintain their big herds.

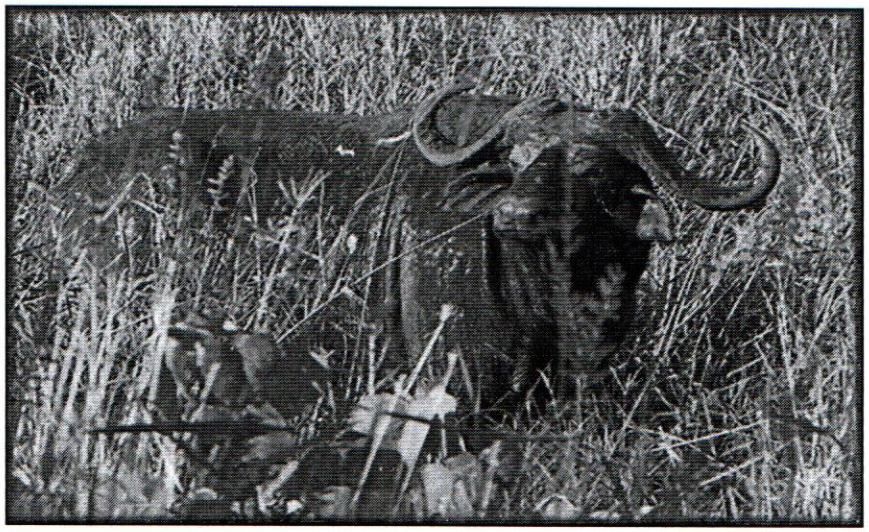
Cases of crop destruction continued to be reported in Meru District in the 1950s especially in the areas around the southern buffer zone of Meru Game Park. Much of the damage was by large wild animals such as buffalo. In 1955 for instance, a lot of damage was done to crops by buffaloes in the Miriga Mieru areas of Tharaka where large herds of buffalo resided. The buffaloes were reportedly from the Meru Game Park. Once in the Miriga Mieru, the buffalo

[19] KNA/DC/MRU/2/14/1, Meru District, Annual Report, 1958: 7.
[20] KNA/DC/MRU/1/11/3, Meru District, Forest Ordinance, 1959: 2.

(Figure 3) hid in the bushes during the day awaiting darkness when they caused immense damage to crops.[21]

Numerous droughts were experienced in various parts of the district in the 1950s. Probably due to the effects of drought, propaganda spread that all meat was good as long as it did not harm the consumer. People eventually developed all sorts of explanation to justify their actions. For instance, they would claim that the boundary between edible and non-edible food was a snail.[22] That is, they could eat anything apart from a snail. Such propaganda together with the effects of the drought forced people to develop weird feeding habits. Monkey meat became a delicacy to many residents, especially those living in Tharaka and Igamba Ng'ombe. The practice continued into the 1960s when the government became more stringent on poaching by using chiefs to ensure that nobody killed wild animals in the region.

Figure 3: A Buffalo near Meru National Park



Source: KWS, 2007[23]

Due to the inadequate numbers of game control officers in the 1950s, the Game Department resorted to hiring of game scouts to deal with the rising cases of HWC. For instance, a game scout by the name Lembina was responsible for game control around the Nyambene Ranges in

[21] KNA/DC/MRU/1/11/1, Meru District, Annual Report, 1955: 10.
[22] K. Muthee, Kamuguongo, Oral Interview, 2009.
[23] KWS, http://www.kws.org/parks/parks_reserves/MENP.html buffalo, 2007.

1951. In the course of his duties, he was able to kill about forty buffaloes in the same year.[24] The Game Department also depended on sport hunting as a way of reducing game populations. For instance, an excerpt from the annual report of the Senior Game Ranger in Isiolo pointed out the following:

> In the course of the year, there were many complaints from Meru regarding damage to crops by game, principally buffalo and elephant... In areas such as Mbeyu where there is a constant clash between game and human interests, everything should be done to encourage hunting safaris to shoot the country ...this might be done by removing restrictions on methods of hunting, removal of ban on dried meat, closing of adjacent areas etc.[25]

Such acts of game cropping had their consequence. As a result, a number of game species such as buffalo or a rhino became near extinct in the Mount Kenya Forest.

The rapid decline in elephant and buffalo populations in the district in the 1950s forced the government to intensify anti-poaching measures. In 1959, the African District Council (ADC) received an approval from the government to start a game reserve in the Kinna area. The establishment of the Meru ADC Game Reserve, the first of the kind in the country and was viewed as the best way of dealing with poachers. The establishment of the game reserve enabled the department to hire its own warden who was a European. Before then, the district used to share game wardens with other districts due to lack of adequate commitment by the government to provide a full time warden for the region.[26]

The co-operation between the conservationists and the community in wildlife conservation was reported to be effective among the residents of Meru District. Out of the income from entry fees to the game reserve and the sale of meat, hides and trophies, they were able to build clinics and provide other amenities as well as compensate those whose property was destroyed by wild animals. On their part, the ADCs undertook to ensure that poaching was crushed. It was assumed that due to the gains the residents acquired from the game, they were less likely to permit or encourage poaching in their territories. This was out of the realisation that effective wildlife

[24] KNA/DC/MRU/1/6, Meru District, Annual Report, 1951: 1.
[25] KNA/DC/Meru/1/12/1, Meru District, Annual Report, 1956: 14.
[26] KNA/OP/1/720, Kinna Game Park, Meru, Annual Report, 1960: 13.

conservation must meet local interests. In an attempt to cater for this need therefore, land in Kenya was categorised into three zones: in zone one, wildlife was to be wholly protected; zone two consisted of areas in which human beings were to co-exist with the wildlife, while zone three consisted of areas in which the needs of agriculture and forestry made it desirable for game to be eliminated. The last zone encompassed areas like Mbeyu, Giaki and areas around Meru ADC National Reserve. Animals such as elephant and buffalo had to be relocated to the Mount Kenya Forest and Meru ADC National Reserve respectively. However, inadequate fencing of the protected areas allowed wild animals to continue threatening human activities as they could easily return to the areas they were evacuated from.[27]

Due to a rapid increase in population in the 1950s, people cleared forests in the district to create land for cultivation. The residents also tried to reclaim parts of the land under conservation.for example, in 1959 the DC reported:

> It is sad to report, that the Meru's traditional respect for and appreciation of the importance of trees is on the decline and not only were there indications of large scale felling with a view of making money, but there were demands for the return of parts of both the Crown Forest and the ADC Forest for cultivation purposes.[28]

The most affected forests were in Nyambene. The period also witnessed various incidences of forest fires. The *Miraa* illegal trade was one of the factors that contributed to various outbreaks of forest fires. In 1958, the DC reported:

> It is difficult at present to check smuggling which besides bringing the law into contempt, is believed to lead to the grass fires which have burnt off large part of the Meru North Grazing Area. The smugglers line the Wajir road at night and light fires as signals to lorries and also to keep themselves warm. [29]

The fires sometimes spread deep into areas under conservation. Thus, in addition to limiting the feeding areas for livestock, wild herbivores were seriously affected. As a result, the affected wild animals strayed into farms in search of food. Similarly, affected livestock keepers moved into protected areas in order to save their livestock from starvation.

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[27] E. Munyi, Mbeyu, Oral Interview, 2009.
[28] KNA/DC/MRU/2/4/5, Meru District, Annual Report, 1955: 2.
[29] KNA/DC/MRU/2/14/1, Meru District, Annual Report, 1958: 4.

Following the establishment of the Meru ADC Game Reserve, various by-laws were passed in the 1960s that were considered unfair by the residents. For instance, one of the articles of the 1960 game by-laws postulated that:

> ... any person who intentionally approaches or follows any animal, or makes any sudden movement, or noise, or flashes a light, or does anything else in such a manner as to cause an animal to move away from where it is, or to change its direction of travel, or to increase its pace, or speed, or to become frightened, or to stampede, shall be deemed to have disturbed an animal.[30]

Such laws contradicted the reason for the establishment of the ADC game reserve in the region, which was to benefit the residents rather than make them feel alienated. The lack of quantification index for such by-laws opened the way for the imprudent game wardens to misuse their authority. They started harassing the residents in order to get bribes from them. Those who failed to raise the required 'fine'[31] were severely punished. The victims, most of whom were innocent, were left tied out in the cold for days, while others were beaten senseless and left to die. In most cases, such people became easy prey to the marauding hyenas.[32]

Other sections of the 1960 game regulations introduced laws that led to an abrupt change in the residents' lifestyle, leading to an increase in conflicts between the conservationists and the residents. For instance, sections 14 and 15 of the 1960 game by-laws stated that:

> ...no person shall cultivate any land within the reserve, cut, burn or otherwise damage any tree or other vegetation within the reserve; remove any animals, vegetable or mineral matter from the reserve ... if any person without the permission of the warden, introduces into the reserve any domesticated animal or any domesticated wild animal, or allows any such animal to stray into the reserve, he shall be guilty of an offence against these by-laws. Any domestic animal or domesticated wild animal found in the reserve shall at the

[30] KNA/OP/1/720, Kinna Game Park, Meru, Annual Report, 1960: 15.
[31] The term fine is in quotes because it was a bribe in the real sense as it was not legal and the dues were never submitted to the government.
[32] F. Ntarangwi, Kiina, Oral Interview, 2009.

discretion of the warden, be destroyed and no claim for compensation shall lie against the council, the warden or any other servant of the council.[33]

As much as such laws were important for the development of the game reserve, many people felt that their implementation was rather too abrupt as it never gave them time to adjust. For instance, many people used to collect saline water as well as herbs and vegetables from the reserve. The residents also used the reserve as a refuge for their livestock in times of drought. In short, the introduction of by-laws led to an increase in conflict between conservationists and the affected residents. It is therefore not surprising that even after many years had passed, people still reserved the same negative attitude towards wildlife conservation. This led to all sorts of anti-conservation practices like cultivation in forests, logging and poaching. To acquire land for cultivation, people cleared up large portions of the forests. This, together with logging, not only reduced the amount of food available to wild animals but also destroyed their habitats. In their search for new habitats and food, such wild animals often strayed into farms where they caused damage to crops.

Following the establishment of the ADC game reserve, lion, rhino, cheetah and Leopard were relocated into the reserve from other parts of the district. However, owing to lack of adequate resources, very little was achieved. Many animals, especially the monkey and baboon, were left outside the reserve and thus becoming a major problem to farmers in the region in the subsequent years. The translocation of wild animals to the reserve led to increased HWC in the region as various animals tried to adapt to their new environment. To resolve the problem, the Game Department resorted to cropping as a means of reducing conflicts between wildlife and people. In 1963 for instance, eighty zebras were cropped in the Northern Grazing Area. The Game Department justified this by observing that they were competing for grass with livestock. At the same time, fourteen elephants, twenty one buffaloes, thirty six zebras, two eland and three impala were also shot dead. [34] Such a justification by the Game Department was not factual in any way as the animal population in the region was reported to be very small in relation to the

[33] KNA/OP/1/720, Kinna Game Park, Meru, Annual Report, 1960, p.15.
[34] KNA/DC/MRU/2/14/2, Meru District, Annual Report, 1964: 3.

size of the game reserve. By 1964 for instance, there were only 300 elephants, 400 buffaloes, and fifteen lions in the game reserve.[35]

Despite efforts to establish national parks in Kenya after the Second World War with Mount Kenya National Park being one of the first in 1949, no pronounced government policy aimed at protecting wildlife was put in place. It was not until in late 1963, when the government officially declared its policy widely and internationally, known as the Kenya Wildlife Manifesto of 1963. With this declaration, the government embarked upon a systematic plan of how the country's natural resources could be utilised to achieve economic independence for all the people. The government issued a statement on the conservation and development of natural resources. On 18 September 1963, the Prime Minister together with the Minister for Natural Resources and Wildlife, and the Minister for Information, Broadcasting and Tourism, issued to the Eighth General Assembly of the International Union for the Conservation of Nature and Natural Resources, then meeting in Nairobi the following statement:

> The natural resources of this country - its wildlife, which offers such an attraction to visitors from all over the world, the beautiful places in which these animals live, the mighty forest which guard the water catchments areas so vital to the survival of man and beast are a priceless heritage for the future. The government of Kenya, fully realizing the value of its natural resources, pledges itself to conserve them for posterity with all means at its disposal. We are confident of the co-operation of the other governments of East Africa in this important task, but, at present, we are unable, unaided, to provide the specialist staff and money which are necessary. We therefore invite other nations and lovers of nature throughout the world, to assist us in honouring this solemn pledge.[36]

In pursuance of this policy, the government established the Ministry for Natural Resources which was to be in charge of all aspects of game and wildlife conservation, national parks, fisheries resources, mining and geology, forests and water resources. Within the Ministry of Natural Resources and Wildlife, there were six departments, two of which were National Parks and the Game Department. The organization of national parks provided for a Board of Trustees which

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[35] Ibid.
[36] KNA/KL/1/13, Game Policy Report, Meru District, 1963: 6.

elected their own chairman and was responsible to the minister on all matters connected with the management and administration of parks. The Game Department on the other hand was responsible for the control, protection and management of wildlife in game reserves and in all other areas outside the national parks.

Concerning destruction of crops and human lives by wild animals, the government allowed the killing of animals posing such threat provided that the animals shot were to be utilised in other ways to earn the country money. However, the problem with the policy was that the control officers were not willing to kill destructive animals such as monkey and baboon as they were of little economic value. The Game Department hired piece rate control officers to deal with the nuisance animals. Due to the need for big trophies that would fetch more money however, the people contracted to kill destructive wild animals often concentrated on the larger ones. They did not bother with the smaller animals despite being equally destructive since they viewed them as economically unrewarding. Sometimes, elephant that was spared proved to be more aggressive and destructive due to the grief of losing family members. The situation was worse whenever a young elephant lost its mother. Elephants are said to have a very powerful memory. Thus, as the young elephant matured, it always remembered the ordeal it underwent as it watched its parents get killed.[37] Perhaps this explains why elephants in the region became more aggressive and violent in the subsequent years.

Logging by licensed saw millers was on the rise over this period. Timber sawing in the district intensified so rapidly that by 1964, the amount of sawyers that were in operation was 746, which was an equivalent of an average of sixty two sawyers in a month. By 1964, the total volume of sawn timber was 109,664.72 cubic feet per annum.[38] This was significantly high compared to the volumes of timber sawn in the 1930s. About thirty pit sawyers were in operation by 1964. The destruction of forests not only destroyed the breeding places for elephants but also led to a decrease in food for the animals. As a result, many wild animals moved into the neighbouring farms where they caused immense damage. The areas that were most affected by forest

[37] M. Micheni, Chuka, Informal Communication, 2009.
[38] KWS/DC/MRU/2/14/2, Meru District, Annual General Report, 1964: 3.

destruction included, Naari, Kirachene, Kinoru, Kithoka, Nchiru, Giaki, Mbeyu, Kianjai, Maungu and Kongogakuima.

The problem with elephant became increasingly severe in the 1960s and 1970s. Elephant ventured into settled areas where they posed great danger to the inhabitants. In 1963 for instance, an elephant was shot dead within the Meru Town after it had killed a man.[39] In 1976, a herd of 600 rampaging elephant reportedly caused immense damage to farms in Kirwa and Ruiri areas on the western outskirts of Meru town.[40] The elephant were said to have come from the nearby Mount Kenya Forest through Imenti towards the Nyambene Hills or from areas around the Meru National Park. However to the dismay of the affected people, Raphael Yilpan, a Meru game warden, announced that those people whose property had been destroyed would not be compensated by the government because the government was not responsible for such kind of damage.[41]

After independence, the government set out to boost wildlife conservation for the sake of the tourism industry. All forms of wildlife utilisation were proscribed. The government became more vigilant on wildlife protection. However, tree felling and poaching intensified. It was so difficult to effectively protect the vast Mount Kenya Forest from human activities. There were also claims by the residents that bhang (*Cannabis sativa*) cultivation was going on in the Mount Kenya Forest from the 1960s. Large portions of the forest around Chuka were cleared for the cultivation of bhang (see map 5 below). The cultivation of bhang may have intensified HWC in the district. After feeding on bhang, many wild animals including elephants became wilder causing disturbances in the neighbouring villages.[42]

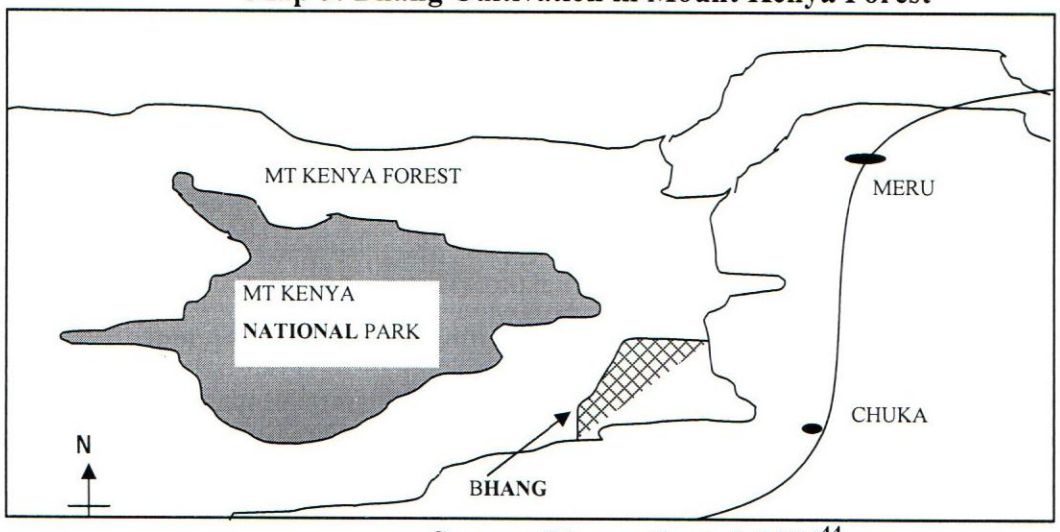
Due to rapid population growth, land shortages had begun to be experienced in the 1960s. This led the residents to intensify their claim to a strip of land in the Mount Kenya Forest that had been taken from them in the 1930s. Owing to constant agitation for their land by the Chuka people, the government agreed to excise the Chuka bulge in 1964. To clear the area completely,

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[39] KWS/DC/MRU/2/3/1, Meru District, Monthly Report, 1963: 7.
[40] KWS/KL/16/5, Press Cuttings, 1976.
[41] *Daily Nation*, 12 January 1976: 8.
[42] K. Muga, Chuka, Oral Interview, 2009.

it was also agreed that potatoes or any other suitable cash crop should be planted there for the first three of four years before planting tea. However, due to lack of urgency and consensus between the Forestry and Agricultural departments, the land was not excised. This led to a protest characterised by a renewed wave of forest destruction by the residents.[43]

Map 5: Bhang Cultivation in Mount Kenya Forest



Source: Disperati, *et al*, 2006[44]

The lack of consideration for residents' feelings made them to lose all interest in preserving forest. The conservators did not involve the local people, who had formally protected the same resource in decision making. The licensing of private saw millers to operate in the Mount Kenya Forest and also the act of prohibiting the residents from utilising forest resources was responsible for hard feelings among the residents, leading to indiscriminate logging. In 1964 the Forestry Department annual report pointed out that:

> In the old days, it has to be said that trees were highly respected by people... probably it has to be said that the Forestry Department made a mistake when they established their functions in Meru...and concentrated on developing them (natural resources) but local people were not told the benefits of the forest at all... natural forests were made a paradise of some kind which made people to hate forest. And it is because of this reason

[43] KWS/DC/MRU/2/14/2, Meru District, Annual General Report, 1964: 8.
[44] P.S. Disperati, S. Bocchi, and S. Gitau, "Tropical Forest and Conflict for Natural Resources. A Geomatic-Based Approach for a Case Study from Mount Kenya National Reserve," R. Lafortezza and G. Sanesi (eds.) *Accademia Italiana di Scienze Forestali,* **2** (5), 2006.

> why we always face great problems in trying to convince people that forests have importance. In view of lacking understanding on the importance of forests, it is the reason why forest excisions are demanded by even the County Council.[45]

In the northern parts of the district, many people wanted to be allocated land for cultivation in the Northern Grazing Area. In an attempt to force the government to heed to their demands, the residents used all sorts of anti-conservation practices, including encroachment into the grazing area as well in the Meru National Park. Such practices led to total destruction of the Northern Grazing Area. In the early 1970s for instance, the Northern Grazing Area and the low lying areas east and south of the Nyambene range were reported to be harbouring large quantities of game especially buffaloes following the destruction of their habitats by people through encroachment.[46]

In response to the residents request to have parts of ADC forests excised, the government formally allowed people to cultivate areas surrounding forests and other protected areas in order to provide fire breaks between them and the grazing lands. However, in the 1960s, many of the grazing lands had been cultivated, negating the need for the establishment of fire breaks. Moreover, the politics also provided impetus to the people to agitate further for more land. For instance, the tenure-ship of positions in the ADC was becoming intensely coveted, making the aspirants to engage in "dirty" politics of inciting the residents against various conservation programmes in the region. Consequently, the residents did all they could to acquire the land they were agitating for. In 1963 for instance, all grazing areas and some bracken areas were reportedly burnt by the residents.[47] As a result, wild animals suffered from starvation, causing a lot of disturbances to the residents. The migrating wild animals, as they searched for pasture, passed through farms where they caused immense damage to food crops.

To hamper the re-forestation work that was going on at the Muthara area, the residents pulled out the tree seedlings at night. Many people associated the establishment of conservation areas with land alienation. The residents felt that the replanting of the areas under conservation with more

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[45] KNA/DC/MRU/2/14/2, Meru District, Forestry Annual Report, 1964: 8.
[46] KNA/DC/MRU/2/3/4, Meru District, Annual Report, 1971: 13.
[47] KNA/DC/MRU/2/3/1, Meru District, Monthly Report, 1963: 16.

trees would eventually diminish any hope they had of claiming the pieces of land that had been grabbed from them. This motivated them to engage in various aspects of anti-conservation practices. As a result of continued agitation for land by the residents, about 507 acres of the Nyambene Forest were excised to create the Nyambene Tea Estate in 1963.[48] At a glance, this looked like a brilliant idea, but the rapid growth in population of some animal species such as monkey and baboon increased pressure on the remaining forest resources. In no time, wild animals begun to cross over to farms in search of food, ending up causing immense damage.

Following the establishment of settlement schemes in the Mbeyu area in 1961 the residents started experiencing serious problems with buffalo. Competition for scarce resources between people and wild animals that followed made the wild animals to invade the neighbouring farms even more intensely as food in their habitats was fast diminishing. To deal with the problem, many buffaloes in Giaki and Mbeyu areas were moved by the Game Department to Kiagu Forests in the late 1960s. The establishment of the Meru ADC Game Reserve in 1959 led to an increase in game populations due to a decrease in poaching activities. The residents realised the need to protect wild animals as they felt part and parcel of the conservation programme. By 1965, for instance, there were about 350 elephants and 480 buffaloes in the region as compared to 300 elephants and 400 buffaloes in 1964. However, the increase in animal populations had its shortcomings. Due to the strain on limited resources in the game reserve, many animals started moving out of protected area, causing a lot of trouble in the settled areas. This is evidenced by the increased number of game shot on control annually. In 1965 for example, 26 elephants, 256 buffaloes, 94 zebras and 107 baboons were shot dead for causing disturbances in settled areas.[49]

Cases of forest fires continued to be experienced in the district in the 1960s. Many of them were started by residents as they tried to clear up the old grass cover in order for a new one to grow. Others were started by people while harvesting honey. In other instances, people started forest fires to protest the establishment of protected areas in the region as it led to shortage of land for grazing their livestock. The 1964 forest fires for example, ended up consuming huge areas of pasture, forcing wild animals to move into settled areas where they caused damage to property.

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[48] Ibid.
[49] KNA/DC/Meru/2/14/2, Annual Report- Meru Game Reserve, 1965: 11.

During the months of February, March, August and September 1964, many fires were reported in many parts of Tharaka as residents protested over the government's prohibition of farming and other operations on the hills to curb soil erosion. Residents started fires under the pretext that they were clearing up old grass from the fields so as to allow a new cover to grow. Some fires even extended into the designated forests, especially in the areas bordering the Meru National Park. Owing to starvation, many wild animals started wandering about as they searched for other sources of food. Animals like elephant, buffalo and even lion vacated the burnt areas and flocked into the human settled areas where they caused immense damage to crops. In respect to this, the head of the Forestry Department in Meru District had the following to say in 1964:

> As a result of grass burning, especially in the lower parts of the district, wildlife had to suffer from hunger and then began to wander about looking for better pastorals [sic]. Animals like elephant, buffalo and even lion had to vacate the burnt places flocking into the places where they had a chance [to] get good feeding and as a result, complaints were heard all over the district. People complained that animals were destroying their property and even their control was exceedingly difficult.[50]

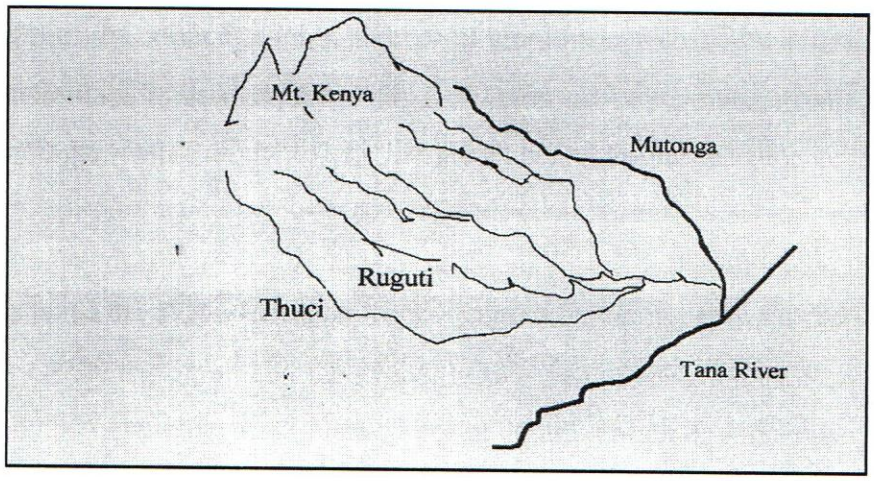
Before the 1960s, people living along River Tana (Figure 4), locally referred to as *Thagana*, could kill crocodiles in certain parts of the river to make it safe for fishing and watering their livestock. However, the post independence government became more stringent towards the protection of wildlife. The residents were prohibited from killing crocodile in any part of the river. The chiefs were directed to ensure that the residents did not kill any crocodiles. Consequently, fishing in the river became impossible following a rapid increase in the crocodile population. Watering of goats in the river was always dangerous. Nevertheless, due to lack of alternative sources of water as rivers are far apart, the residents continued to water their livestock in the same river. They ended up losing many of their livestock to crocodile. The majority of people in the area were livestock keepers. To supplement their diets, they sometimes engaged in fishing. However, due to the presence of large numbers of crocodile in the river, the residents were not able to reap maximum benefit of such a resource.[51]

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[50] KNA/DC/MRU/2/14/2, Meru District, Forestry Annual Report, 1964, p.13.
[51] M. Kinjogi, Kamaindi, Oral Interview, 2009.

Cases of poaching continued to be reported in the district in the 1960s, especially in the Tharaka areas. The poaching was mostly motivated by hunger rather than the need for economic gain. This is evidenced by the high number of herbivores killed in comparison with carnivores. In 1965 for instance, nineteen poachers were charged and convicted in the region. Of the twenty animals killed, fifteen cases were buffalo and water- buck while the remaining five were a civet cat and four rhino.[52] As tension between the residents and the conservationists increased, many people were arrested and convicted of various charges of contravention of game laws.

Figure 4: River Tana (*Thagana*)



Source: Meru South Water Office

From the 1960s, the *Shifta*[53] intensified their poaching activities in the Meru Game Reserve. They claimed that the land in which the game reserve was established was part of Isiolo District, whose population is predominantly Somali. Hence, *Shifta* often viewed the security guards in the reserve as a stumbling block to their livestock keeping. In an attempt to sabotage the management of the game reserve, as well as the need to acquire game trophies for sale, the *shifta* engaged in poaching activities. They were mostly armed with machine guns (shown in Figure 5),

[52] KNA/DC/Meru/2/14/2, Annual Report- Meru Game Reserve, 1965: 3.
[53] *Shifta* were Somali bandits either from Kenya's North Eastern Province or Somalia. They used to raid the parts of Kenya stretching from the Somali border up to area around Meru Town. They were fighting for the secession of parts of Kenya occupied by Somali and related peoples so that they could join their kith in Somalia.

making them dangerous not only too wild animals but also to the residents and game wardens who were poorly armed.[54] The *shifta* activities continued up to the late 1980s.

The *shifta* activities had a negative impact on the reserve's revenue status. For instance, due to the closure of the reserve between June and July 1964 owing to *shifta* activities, huge losses were incurred as tourists could not visit the reserve. Although many parts of the reserve such as the Leopard Rock Camp were relatively safe to visit, tourists were not sure of the real situation and therefore chose to stay away. This led to huge losses to the Meru County Council. For example, the number of visitors during the year had reduced to 503 which was an all time record.[55] Due to the financial situation of the council, a large number of employees were to be laid off. However, the situation was rescued by the Elsa Appeal Fund that made fund available for staff wages. Due to lack of the capacity to finance its activities, the status of the park was changed to a national park in 1966.

From the late 1960s up to the 1980s, cases of conflict caused by carnivores were very rampant in the district. This was attributed to a reduction in the number of ungulates in the region as a result of poaching either by the residents or bandits from the neighbouring communities. In 1968 for instance, huge losses were reported in various ranching co-operative societies in the district such as the Meru Co-operative Ranch and the Ngara Mara Ranch as a result of predation on livestock by lion. In 1971, a man eating lion killed at least five people in Njia Location of Nyambene Division while another man eating lion was killed in Igembe after attacking and wounding three people.[56] In the same year, three children were killed by a leopard at Kangeta.[57]

Lack of compensation for losses emanating from wild animal attacks was another problem that seriously affected the residents. As late as the 1970s, the government had not formulated a scheme of compensation for victims of wild animal attacks. In 1972 Nabea, the Divisional Game Warden, observed:

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[54] KNA/DC/Meru/2/14/2, Annual Report-Meru Game Reserve, 1965: 9.
[55] KNA/DC/MRU/2/14/2, Meru District, Forestry Annual Report, 1964: 5.
[56] *The Daily Nation,* September 30, 1971: 14.
[57] KNA/DC/MRU/2/3/4, Meru District, Annual Report, 1971: 3.

We have our normal problems in Meru pertaining to wildlife. Thus, properties [sic] are destroyed by animals and we receive a lot of claims for compensation. There is nothing which is laid down about compensations for the losses suffered from the wildlife nature and this is a continuing problem which I think affects most parts of (the) country leave alone Meru which is surrounded by the wildlife areas.[58]

Figure 5: Weapons and Trophies Seized from Meru National Park



Source: IFAW

This is a problem that had persisted in the district since the 1920s when the effects of wildlife conservation started to be felt by the residents. It hindered any development in the district as the residents were never certain about the future.

[58] KNA/KW/5/9, Meru District, Game Control, 1971: 6.

3.3 Summary

Deliberate attempts were put by the government over the period to manage wildlife through the creation of national parks and community-based wildlife conservation programmes such as Mount Kenya National Park and Meru ADC Game Reserve respectively. Such measures however met various shortcomings, leading to intensification of HWC all over the district. Poaching and logging were the most prevalent activities over the period. The period witnessed intensified HWC in the district with few attempts to minimise them. It ended in 1976, ushering in a period where concerted efforts were put to limit HWC starting with the promulgation of a game policy in 1977 that banned trade in wildlife products by Parliament in order to curb poaching which was threatening to wipe out the populations of elephant and rhino in the country.

CHAPTER FOUR

CAMPAIGN AGAINST HUMAN-WILDLIFE CONFLICTS IN MERU DISTRICT, 1977-2008

4.1 Overview

This is a period that has seen Kenya under the leadership of different presidents with diverse philosophies starting with the latter stages of Kenyatta regime. When Moi took the presidency in 1978 after the demise of the country's first president,[1] his regime had all intent of curbing poaching which had risen to alarming levels. This started with the promulgation of a game policy in 1977 that banned trade in wildlife products by Parliament in order to curb poaching which was threatening to wipe out the populations of elephant and rhino in the country.

The population of elephant and rhino in the district as in other parts of the country had fallen to alarming levels by 1980 due to poaching. This prompted the president to issue a directive in 1984 which prohibited all hunting, killing and animal capture. In an act of affirmation to the decree, the president issued another directive in 1989, which led to torching of ivory confiscated from poachers in Nairobi National Park. The president's directive made game wardens reluctant to kill wild animals including those that were a threat to people. This led to an increase in HWC in the district especially in areas that bordered Imenti and Mount Kenya forests where elephant caused extensive damage in farms. This was as a result of destruction of their habitats and breeding areas through logging. To curb the increased HWC in the district as in other parts of the country, the Kenya Wildlife Service (KWS) was established in 1989. Its mandate was to manage Kenya's wildlife resources for posterity and to protect people and their property from wild animals. KWS, however, met many management challenges ranging from poor law enforcement to ineffective community mobilization mechanisms, poor animal control and revenue sharing strategies.

Intensified logging in Mount Kenya and Imenti forests in the 1990s destroyed wild animal habitats, especially for elephant which strayed into farms. This led to the erection of electric fences on the edges of the forests in the 1990s, which blocked elephant migratory routes. As elephant tried to reach forests which they traditionally used for breeding purposes, they passed

[1] Kenya's first president was late Jomo Kenyatta.

through settled areas where they caused extensive damage to property. Such problems have persisted in the region to-date.

4.2 Human-Wildlife Conservation Campaign in Meru District

In addition to the *Shifta* problem that started in the 1960s, people from the neighbouring communities were equally destructive to the district's wildlife. In 1976 for example, four Turkana *morans*[2] were convicted of spearing an elephant (Figure 6) to death in the Meru National Park.[3] Other animals such as rhino suffered the same fate as elephant.

Figure 6: A Speared Elephant



Source: Philip Muruthi, 2005[4]

The ban on poaching of monkey as well as other animals in the 1960s led to a rapid increase in their population. It became so hard to sustain them in the district at a time when the human population was steadily rising. Due to the rising population, many forests were cleared to create land for crop cultivation and settlement. As a result monkey strayed into crop fields where they caused extensive damage. Fed up with their destructive activities, residents started killing them indiscriminately in the 1970s. Men from each household met at an agreed place, from where they

[2] A *moran* is a warrior.
[3] P. Muruthi, "Human Wildlife Conflict: Lessons Learned From AWF's African Heartlands," *The Daily Nation*, 28 January 1976: 15.
[4] Ibid.

launched an assault on monkey. Once there, they directed as many monkeys as possible to a particular tree. Then after organizing themselves in three rows around the tree, two men armed with swords climbed up the tree to force the monkeys down. On touching the ground, the waiting men made sure that no monkey escaped alive. If a monkey survived the first row; it was dealt with by the other rows.[5] The areas in which such events occurred were Kamanyaki and Gatunga in Tharaka as well as areas along the Ruguti River in Igamba Ng'ombe. Although their population was greatly reduced in the 1970s, monkeys remained a threat to farming in the region.

Despite all the efforts by the government to curb poaching in the country, very little success was achieved. As a result, the government through an Act of Parliament Cap 376 of 1976, combined the Wildlife Fund Trustees and the Game Department to form the Wildlife Conservation and Management Department (WCMD). In 1977, trade in wildlife products was banned by Parliament in order to curb poaching which was threatening to wipe out the populations of elephant and rhino in the country. This was through Legal Notice No. 120 of May 1977 and Legal Notice No. 181 of August 1979. In 1977, in pursuant to section 45 of the Wildlife (Conservation and Management) Act of 1976, the Minister for Tourism and Wildlife prohibited the export of the following trophies by a notice in the Kenya Gazette: trophies of elephant tusks, hippopotamus teeth, rhinoceros horn, leopard skin, zebra skin, lion skin and crocodile skin.[6]

Despite the advantages of wildlife conservation, the residents were skeptical about the pragramme. Many saw the new wildlife conservation policies as detrimental to their established lifestyles. Moreover, the new wildlife conservation policies led to the escalation of human-wildlife conflicts in the district. For instance, prohibitions against utilisation of wildlife resources such as wild meat and fruits led to food shortages among the residents since they largely depended on the forest for food supplements. To deal with the situation, the residents began to engage in illegal logging so as to acquire timber that they could sell to obtain money for buying food.[7]

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[5] E. Njeru, Chuka, Oral Interview 2009.
[6] KNA/KW/7/8, Game Department, Annual Report, 1978: 15.
[7]

Logging by the residents provided an opening to wealthy people to establish timber sawing companies in the district. It is believed that, had the local people been the owners of the forest, private companies would not have been established in the region's forests.[8] Logging by the residents as well as by the saw milling companies led to destruction of forests in the district, making wild animals to move elsewhere in search of food. In the process, many wild animals ended up in settled areas where they caused damage to crops. The extent of damage to crops is illustrated by Mungania, a farmer in Nchiru who lamented as follows: "One can tend a mango tree for ten years only for an elephant to bring it down in a single move."[9]

The biggest worry among residents was the lack of compensation by the government for crops destroyed by wild animals. Whenever the residents reported incidents of crops destruction by wild animals, the game officials would visit the area only to take names of the affected. No compensation was paid for damaged property. This was mainly due to lack of cooperation between the Game Department and the Forestry Department. For instance, during the November - December rains in 1978, a farmer called Rutere reported extensive destruction of wheat by zebra and buffalo on his farm at Chooge. Similar damages were experienced in neighbouring wheat and potato plantations. However, because the affected areas were leased from the Forestry Department, the Game Department resisted claims for compensation.[10] In other cases, residents were unaware of their rights to compensation for losses incurred as a result of crop destruction by wild animals. The failure by the government to compensate residents for losses incurred due to property destruction by wild animals demoralised farmers. As a result, poverty levels in the district continued to rise.

In areas like Kirachene and Naari where residents guarded their homes from the marauding elephant, the effects of HWC were far-reaching. Farmers often complained of illnesses caused by cold weather such as pneumonia. One resident, Kirugua, lamented in an interview: "We are sick. We suffer from pneumonia because of staying out until late at night. We cannot feed our children because we are always sick and therefore our children do not go to school."[11] Parents often incur

[8] F. C. Njeru, Chuka, Oral Interview, 2009.
[9] F. Mungania, Nciiru, Oral Interview, 2009.
[10] KNA/KW/4/3, Game Department, Annual Report, 1977: 14.
[11] V. Kirugua, Kirachene, Oral Interview, 2009.

expenses as they buy medicine to treat various diseases acquired through exposure to cold weather at night while guarding farms. The inability by parents to feed or financially support their children's education owing to lack of money has increased the level of illiteracy in the region. This has in turn led to a decline in levels of productivity among residents, lowering their standards of living.

Majority of people killed by wild animals were young and productive men as they attempted to protect their farms from wild animals. Most of those killed had families with small children who were dependent on them for survival. Thus, other than the community losing in terms of agricultural output, the affected children were forced by the circumstances to drop out of school. The outcome of such events has been the rise of uneducated generations of young people in the district. This has led to low socio-economic standards in the district as the young people can no longer get competitive formal jobs.

In Ruiri, some farmers have been incapacitated as a result of attacks by elephant. For instance, Kimanthi, who lost several of his fingers after being ambushed by an elephants lamented in an interview: "Now I cannot use this hand except for holding cigarette. Even shaking hands in greetings is a problem for me. I was a farmer but now I am a beggar."[12] Such accidents have not only impended residents' ability to fed for themselves, but have also led to increased levels of dependency in the district. More worrying is the fact that the people they depend on are also struggling to survive as farming is hardly feasible in the region due to widespread HWC.

The establishment of wildlife conservation in the forested areas of the district was initially viewed by residents as a good idea. However, failure by conservation agencies to take responsibility proved costly to residents in terms of resources and time. For instance, residents were forced to pool resources together to fence part of the Lower Imenti Forest, an area prone to crop destruction by elephant. The residents assisted by donors were able to put up an electric fence on the edge of parts of the forest. However, the Forestry Department did not undertake to

[12] S. Kimanthi, Ruiri, Oral Interview, 2009.

protect and repair the fences whenever broken. It was the residents who repaired damages, leading to unnecessary cost on them.[13]

The 1970s witnessed the largest number of HWC cases in the district. The causes ranged from acts of negligence to natural causes. The former consisted of cases resulting from land disputes and poaching, while the latter involved calamities like drought. In 1978 for instance, a gang of poachers that had its hide-out at the Kamarenge Hill was reportedly living in Tharaka Hills.[14] The gang supplied meat and rhino horn to the Tharaka residents in exchange for food. In 1979, ten hunting dogs were captured in the Meru National Park while on a hunting spree with their owners. Poachers in this area often killed buffalo and bushbuck for meat. Twenty four people were arrested with game trophies in the same year in the areas bordering the national park.[15]

Land disputes in Tharaka in 1979 caused a lot of disturbance in the areas under conservation. For instance, a fire started by unidentified people as a result of a land dispute broke out at Kiagu Hill on communal land entered the forest where it burnt down large areas of grass and trees.[16] As a consequence, the displaced animals, especially the baboon, crossed over into farms where they caused a lot of damage. There was also a severe drought in Tharaka in 1979 which forced many wild animals to migrate from the southern areas of the Meru National Park in search of pastures. In the process, large proportions of crops were destroyed in the region, leading to an acute food shortages among residents. This prompted them to engage in subsistence hunting in the protected areas.[17]

From the 1980s, irrigation schemes were extended into areas bordering the Meru National Park. This enhanced farming practices among the people living in Murera. However, their efforts were frustrated by the game officials. Despite being unable to protect the residents from wild animals, especially the monkey and pig that made vegetable cultivation in the area impossible, the game officials often restricted farmers from utilising water from the rivers. They blocked the rivers

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[13] C.M. Kiunga, Nciiru, Oral Interview, 2009.
[14] KNA/DC/MRU/2/3/4, Meru District, Annual Report, 1978: 12.
[15] KNA/DC/MRU/2/3/4, Meru District, Annual Report, 1979: 3.
[16] Ibid.
[17] M. Kinjogi, Kamaindi, Oral Interview, 2009.

from flowing into farms under the pretext that they were conserving water for wild animals. This, demoralised farmers as it led to the drying up of crops due to lack of water.[18] The conflict over water for irrigation in the region is still a problem to date.

By the 1980s, the government had become aware of what was happening with regard to the killing of monkey by the residents, especially in Tharaka and Igamba Ng'ombe. To address the situation, the government warned chiefs in the affected areas that they would lose their jobs if they failed to stop the practice. As a result, the residents had to change tactics. Instead of hunting the monkeys, they would poison them using bananas.[19] A problem however, arouse when domestic animals especially the poultry consumed the poison. Complaints by people who lost poultry through such actions led to the discontinuation of the practice.

The residents were thus left defenseless in the face of destructive monkey. All they could do was to throw stones at them, a method that proved ineffective as monkeys are crafty. Throwing stones at monkeys made them think one is playing with them. With great precision, they would throw back the stone to the person who threw it and in many times ended up injuring the person. Other animals such as lion, porcupine, mole and squirrel were also a threat to farmers in the 1980s. In 1982 for instance, a lion was killed at Kawere after eating eighteen goats.[20] Four other lions were killed at Kisima farm and Ontulili for eating goats and sheep in the same year. Other areas affected by such problems were Kinna and Mutuate. While moles destroyed root crops like yam and sweet potato, squirrel destroyed nut crops. To deal with moles, residents would dig them out or use traps to capture them. However, digging moles out was quite tedious and often unsuccessful. With time people gave up digging out moles. The squirrels were hard to deal with as they are good tree climbers. Formerly, residents shot them with arrows. Over time however, residents changed to more conventional lifestyles, leaving squirrels to roam freely.[21]

[18] J. M'iti, Murera, Oral Interview, 2009.
[19] J. Kirimi, Igamba Ng'ombe, Oral Interview, 2009.
[20] KNA/KW/5/9, Game Department, Annual Report, 1982: 16.
[21] F. Ntarangwi, Kiina, Oral Interview, 2009.

To prevent elephant invading farms in areas bordering Mount Kenya Forest, the government established a tea zone[22] along the edge of the forest in the 1980s. This however, provided little relief as elephant soon learned to navigate their way across the barrier following the paths used by tea pickers.[23] After the establishment of the Nyayo Tea Zone, the government initiated a reforestation programme for areas affected by extensive logging. People arrested in the forest by guards were worked in the reforestation programme as punishment. Another way was to provide some residents with farms in the forest on which they planted and tendered trees as they cultivated their crops. Nevertheless, an obstacle to the idea was the unwillingness by the people to allow the trees grow properly. They developed a tendency of trimming them down to avoid being thrown out of the forest once the trees matured.

From the 1980s, the Game Department adopted a game control programme in which some species of wild animals were captured and exported to countries like Bangladesh, Dubai, United States of America (USA), England and Saudi Arabia. Table 2 below shows some of the animals that were exported to overseas institutions such as zoological parks and research institutions between January 1980 and October 1984.[24]

Table 2: Animals Exported Abroad, 1980 - 1984

Species	**1980**	**1981**	**1982**	**1983**	**1984**	**Total**
Velvet monkeys	4352	4325	2050	1961	4212	16,900
Baboons	1057	1053	350	345	636	3,441
Columbus monkeys	-	-	-	-	160	160
Total						**20,499**

In the 1980s also, the Game Department faced many problems, ranging from corruption to low morale among game wardens. Many wardens had stayed in the same work stations for more than fifteen years, establishing unhealthy relations with poachers and other criminals. The wardens' low morale was as a result of inadequate allowances and food while on patrols. Another reason

[22] The tea zone was part of the Nyayo Tea Zones programme which aimed at stemming encroachment on forests.
[23] A. Kathuraku, Chuka, Oral Interview, 2009.
[24] KNA/KW/5/9, Game Department, Game Control Report, 1984: 7.

for the low morale was poor working environment. Game Department internal memorandum in 1987, for instance, stated: "The morale of the Meru rangers was very low; the attitude being, 'Why are we risking our lives for the *Wanyama* [animals] with poor arms and when our comrades are killed, their bodies [are] left for ages before burial."[25] This was in relation to two game officers who had been killed by poachers in the region. The death of Sergeant Peter Chege of the anti-poaching unit headquarters in the Meru National Park in December 1986 while on operation was blamed on poor weapons.[26] The ban on any killing of wild animals or export of trophies in the 1980s by the government also had an effect on the motivation of the game officials who hugely depended on the sale of trophies acquired after killing animals on control. In addition to shortage of equipment in the Game Department, many game officials neglected their duties. For instance, T.M. Voorspuy, the director of Safaris Unlimited remarked:

> In Meru National Park on Tuesday 27th January [1987] near Nyambene Hills at 6pm, my client and I, whilst on a game drive, encountered a very distressed lone young elephant of not more than 7 years of age with an obvious bullet in one hind leg and severe swelling above the wound which would ultimately lead to a painful death. I reported the matter the same evening but no vehicle or warden was available for me even to point out the spot on a map. The following morning I reported it again and still there was no vehicle available and there was a distinct lack of urgency amongst the park staff I spoke to.[27]

The shortage of staff orchestrated by the transfer of rangers from the district without replacement was another problem affecting operations the Meru National Park in 1987. For instance, sixteen rangers were transferred from the park to other parts of the country without replacement between 1983 and 1986.[28] Another problem in Meru District was the involvement of security officers in illegal sale of game trophies. For instance, a Game Department internal memo in 1987 stated: "Mohamed Aden had so far recovered 107 tusks weighing 707 kilos [sic]. He reported that Kinna is rotten with magendo [corruption] - saying that ivory buying was nearly on the open market with even government Servants; security forces swopping bullets for tusks."[29] This only served

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[25] KNA/KW/7/7, Game Department Anti-poaching Operations, 1987: 17.
[26] KNA/KW/7/6, Game Department Anti-poaching Operations, 1986: .3.
[27]KNA/ KW/7/7, Game Department Anti-poaching Operations, 1987: 17.
[28] KNA/KW/7/6, Game Department Anti-poaching Operations, 1986: 15.
[29] KNA/DC/MRU/2/14/5, Game Department, Internal Memo, 1987: 7.

to motivate Meru residents to engage in anti-conservation activities as they could easily buy their freedom whenever caught by the game officials. Unlawful behaviour arose in many parts of the district. In some cases, people living near the park would plant crops at the edges of the park anticipating compensation should they be evicted from the area. Such farms were often destroyed by wild animals, especially the elephant and buffalo.

By the early 1980s, people had started acquiring farms in areas adjacent to the Meru National Park. This intensified HWC in the region as wild animals strayed into farms. In 1984, the government erected a single live wire electric fence in parts of the park boundary. The fence was only effective in controlling large animals such as elephant. Small animals such as monkey, porcupine and pig easily found their way out of the park into surrounding farms where they caused immense damage. With time, however, the fence was destroyed by elephants. Trees brought down by elephant often fell on the fence, destroying it in the process. Another problem was that many wild animals were locked out of the park when the fence was erected. Such animals, especially the monkey continued to terrorise residents. Most of these animals occupied various forests and hills of the region. The Ngaya Forest, which extends out of the Meru National Park, had the highest population of monkey and elephant.[30]

To address the rising cases of HWC in Meru District, game wardens employed scouts who were useful in showing them the routes followed by wild animals. Nevertheless, the effort of these scouts went unrecognised despite their importance to a Game Department that was facing an acute labour shortage. In case of accident, the scouts were never compensated as the case of Kimathi (Figure 7), a former game scout, illustrates:

> I used to work as a game scout, helping in tracing elephant that caused destruction in Ruiri area for a small token. One day while on patrol, I came across a herd of elephant. To scare them away, I would normally throw an explosive at them. But, on that fateful day things did not go as expected. The elephants were many and I was scared. When they saw sparks of light as I tried to ignite an explosive, they begun to trumpet, moving towards me. As I retreated, I forgot to throw the ignited explosive and it exploded on my hands. The explosive threw me into the air and when I landed, a frightened elephant

[30] J. Nthumbi, Murera, Oral Interview, 2009.

trampled me, injuring my leg. In the process, I lost two fingers in the right hand and the remaining three seriously injured. It pains me that the government never reimbursed the money I spent in the hospital leave alone the fact that I can not use my hand any more. Some game wardens even threatened to sue me, accusing me of being a poacher. [31]

Figure 7: Kimanthi Wounded by an Elephant



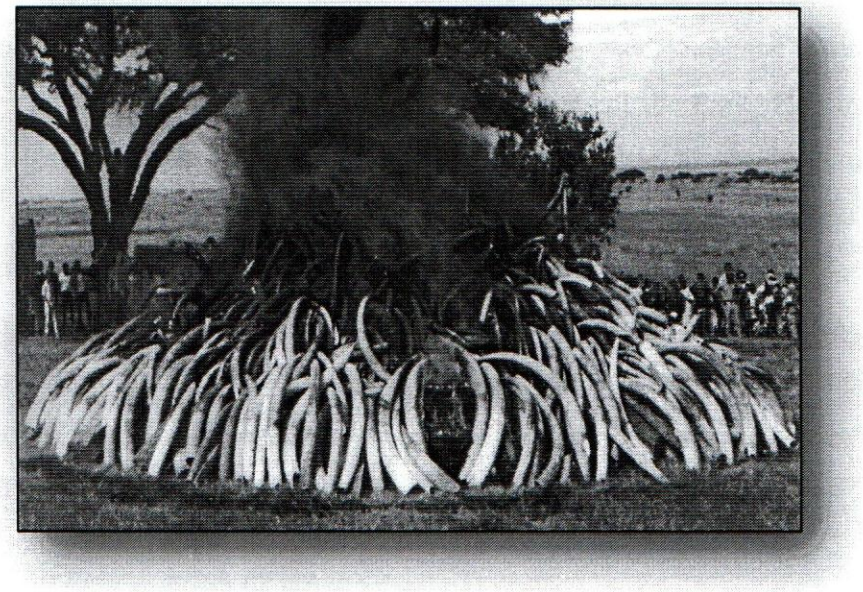
This is not only an indication of the ineffectiveness of game control methods but also lack of harmony among the groups charged with managing wildlife. Despite the fact that game scouts were an important arm of the Game Department, the department was never concerned about welfare as they were not permanent employees. In some instances, the forestry and game departments would disagree on various aspects concerning game control. It is worth noting that before 2000, the Mount Kenya Forest was under the Forestry Department. As such, the forest was neither designated as a national park nor a national reserve, both of which were under the Game Department. So, issues in the forest that could have been dealt with by the Game Department were left unattended.

In 1984, there was a presidential directive which prohibited all hunting, killing and animal capture. In an act of affirmation to the decree, the president issued another directive in 1989, which led to the torching of all the ivory that was collected from all over the country in Nairobi

[31] S. Kimanthi, Ruiri, Oral Interview, 2009.

National Park (see figure 8). As such, the game wardens felt restricted by the directive to a point of even fearing to kill an animal that was a threat to people.

Figure 8: Burning of Ivory in Nairobi National Park, 1989



Source: Jivetti, 2004

For the period before the 1980s, game wardens would kill animals causing trouble to the residents. The motivation for such killing was the reward wardens got from the sale of trophies they submitted to the government. However, after the presidential decree in 1984, which was a follow up of the 1978 ban that was imposed by the government on the exportation of game trophies from the country, the game wardens were too demoralised to protect the residents from wild animals.

Incidentally the presidential decree that prohibited the killing of wild animals came at a time of intensive HWC in the district as a result of encroachment of the park's buffer zones by farmers. In the 1980s, the sizes of communal grazing lands in Meru Conservation Area buffer zones continued to decrease. This was attributed to constant encroachment of the area by human settlement and the fragmentation of land into small farm units. The areas affected by this process included Murera, Kanjoo and Nguyuyu on the western buffer zones. Before the arrival of

agriculturalists in the wetter areas of the Meru National Park buffer zones in the 1980s, the areas were occupied by pastoralists. In addition to the local people many of the people who bought parcels of land in those areas, especially the Murera region were from other places. There is evidence of people from Chuka, Muthambi and Machakos who bought land in the area.[32]

Intrusion of agriculturalists into the western buffer zone of the Meru National Park, forced the pastoralists to move into the northern and southern buffer zones of the Park. This in turn led to competition for resources between livestock and wild animals, especially in the Kinna areas of the northern buffer zone. During the dry seasons, many pastoralists were forced to move with their livestock deep into the park in search for pasture. Even the areas around the western buffer zone that were occupied by agriculturalists were not spared from the conflicts. As competition for resources intensified in the northern and southern buffer zones, animals such as elephant and buffalo were forced to migrate to the areas around the western buffer zone where they had a chance of finding food. Conflicts between people and wild animals were experienced in the area wherever the latter passed through.

The Presidential Decree notwithstanding, poaching continued in Meru District as in other parts of the country. The Somali poachers continued killing wild animals in the district in the late 1980s. They nearly wiped out the wildlife in the district especially in the Meru National Park. The *shiftas* also attacked tourist vehicles. This state of lawlessness peaked in 1988 and 1989 when two tourists were murdered by bandits. They are said to have slaughtered about 90 percent of the elephants in the park whose population plummeted from over 3000 to a mere 251. Black rhino, whose population stood at 300 in the early 1970s, were completely wiped out. Attempts were made to introduce white rhino to the park, but four out of five animals were shot by poachers in 1988.[33]

On realising that there was danger of certain wildlife becoming extinct as a result of poaching, the government was forced to revise the Wildlife Act (Conservation and Management Act) Cap. 376. This led to the establishment of the Kenya Wildlife Service (KWS) in 1989, whose

[32] J. Mulwa, Murera, Oral Interview, 2009.

[33] KNA/DC/MRU/2/14/7, Game Department, Annual Report, 1988: 2.

mandate was to manage Kenya's wildlife resources for posterity. It was also mandated to protect people and their property from wildlife damage. A Board of Trustees was appointed by the Minister of Tourism and Wildlife to run the KWS. The Board of Trustees was charged with the duty of making policies and regulations for the protection and management of wildlife in Kenya. It was also empowered to establish, de-gazette or close any wildlife conservation area.

Destruction in the Mount Kenya Forest persisted in the 1990s. In 1991, for instance, there were 40 illegal privately owned sawmills in the forest reserve while the Forestry Department was markedly under-equipped and underpaid.[34] Most of the valuable timbers such as camphorwood and yellowwood have been extracted. In his influential report based on the 1999 survey of the three forests, Gathara stated that 14,662 indigenous trees had been felled, 46 percent of these being valuable camphorwood, and 8,279 hectares had been extensively damaged; 76 percent of clear-cut farms had been cultivated but not replanted; 622 charcoal kilns, 2,187 head of livestock and 200 hectares of marijuana fields were seen on Mt Kenya, 21 forest sites had been burnt, often to clear land for farming, and there were 120 landslides in logged areas, 76 in the more heavily logged camphorwood forests.[35] The effects of such exploitation was the disruption of wildlife habitats and decline in biodiversity, impaired water catchment and retarded forest redevelopment which aggravated animal conflicts with humans thereby entrenching local poverty.

In the 1990s the residents around the Lower Imenti Forest, tired of waiting for help from government, pooled resources together to put up an electric fence (Figure 9) around the forest. The project was completed in 1994 but was only a temporary solution. Elephants soon had learnt to go around the fence, which covered a small portion of the forest, to gain entry into farms. Ten years later another project financed by European donors was started in the region. Nevertheless, the construction of the fence stalled mid-way as the residents complained of poor quality wire supply by the contracted company. Following the cancellation of the contract, the company filed a court case against the residents, stalling the project. The stalling of the project exposed the

[34] R. Bussmann, "The Forests of Kenya (Kenya). Vegetation, Ecology, Destruction and Management of a Tropical Mountain Forest Ecosystem," *PhD Dissertation*. University of Bayreuth, **3** (2), (1994).
[35] G. Gathara, *Aerial Survey of the Destruction of Mt.Kenya, Imenti and Ngare Ndare Forest Reserves.* Forest Conservation Programme, Kenya Wildlife Service, Nairobi. (1999).

residents of Giaki and Mbeyu to marauding elephant because the Kuura Forest, which connects the Lower Imenti Forest and Mbeyu remained unfenced.[36]

Despite the importance of the Lower Imenti Forest fence in stopping animals already in the Mount Kenya Forest from entering farms, the fence has been blamed for an increase in HWC caused by elephants from Isiolo District (locally referred to as Jangwa). [37] The Lower Imenti Forest is a breeding area for elephant from the Isiolo District which migrate annually to the Forest to breed. However, the blockage of their traditional migratory route following the installation of an electric fence, has forced the elephant to seek alternative routes. Consequently, many people, especially those living adjacent to the forest have lost property due to maraunding elephant. The fence has become a problem since elephant from Isiolo, unable to enter the forest on their way to the Lower Imenti Forest, end up destroying farms. These elephant cause even worse damage than they used to before the fence was put up. [38]

Frequent droughts in Isiolo District were also responsible for the increased HWC that were experienced in the areas around the Lower Imenti Forest. During fieldwork, an old man from Nchiru recalled an incident where hundreds of elephants coming from the Isiolo region in the 1990s, invaded his farms on their way to Mbeyu. He stated:

> The damage caused by those elephants may have been worse than the destruction of Sodom. The field was full of maize ready for harvesting, but in the morning, it was like Kasarani Stadium. We reported the matter to KWS, but they only took our names and that was the end of the story.[39]

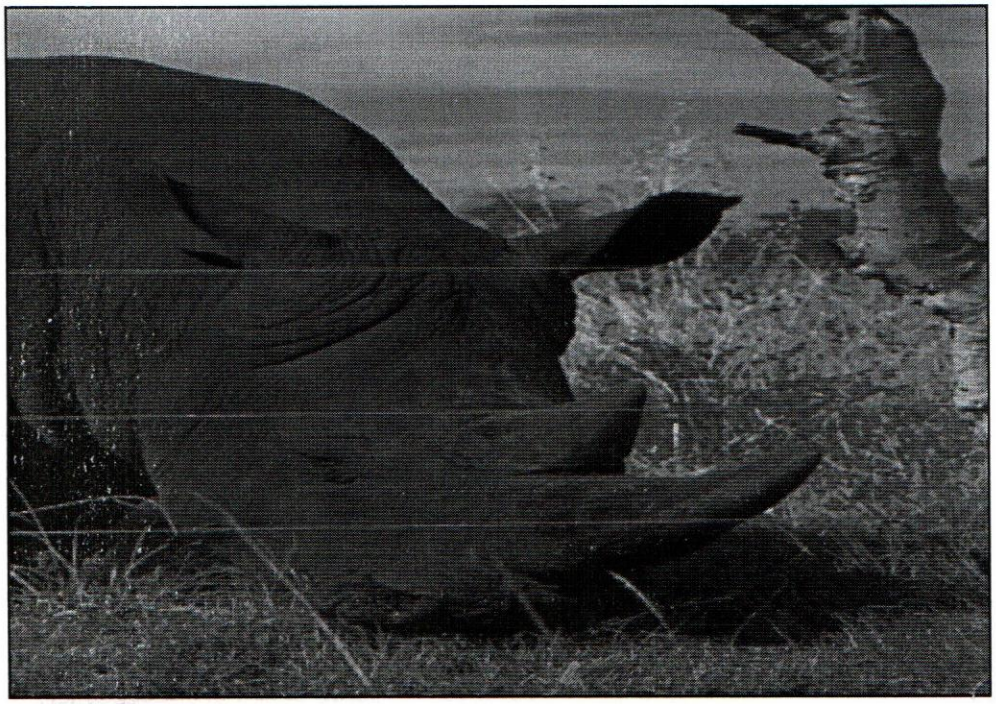
The fence has not stopped small animals from invading farms. This is because it is made up of three far spaced strands, with only one live wire. The fence has not been effective in the controlling animals like hyena which have been ravaging livestock. The residents have also

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[36] J. Kairimwe, Kirachene, Oral Interview, 2009.
[37] The residents call the Isiolo Region *Jangwa* or *Luanda* due to harsh climatic conditions experienced there. The region is in the north of Meru District.
[38] T. Mailu, Meru, Oral Interview, 2009.
[39] P. Nkiri, Nchiiru, Retired Sub-Chief, 2009.

complained of lack of goodwill from conservation agencies. They have accused them of opening gates to let out elephant in pretext that grass in the forest was inadequate.[40]

Figure 9: An Electric Fence at Imenti Forest



Source: IFAW

In areas around Kirachene and Naari, elephants went as far as Meru Town where they posed great danger to people. To address the problem, the government was forced to put up an electric fence around the Upper Imenti Forest which extended up to the Kinoru areas as from 1996. The fence was more effective than the one in the Lower Imenti Forest since it had many strands of

[40] Ibid.

wire. For some time the situation was contained. However, from 2006, the situation changed as the elephant had learnt the trick of going round the fence using the Meru-Nanyuki Highway.[41] Whenever the residents complained, the game wardens would keep watch until about ten o'clock at night. Almost immediately after their departure, one notorious elephant would show up. To prevent it from destroying crops, all the men from the area would gather at a particular place where they would light a fire as they waited for it. When the elephant arrives, they would pelt it with stones to ward it off. However, the elephant, well aware that it could never be harmed, proceeded to farms where it would feed until day break. The following morning officials from the Game Department would visit the ravaged fields only to record the names of the affected farmers.[42]

The biggest question surrounding the issue of wildlife conservation is not whether wild animals should be protected at whatever cost, but whether it is worthwhile to protect the life of one particular elephant (Figure 10) at the expense of hundreds of human beings. Many people have expressed such reservations. During fieldwork, a resident would jokingly say: "I wish I was born an elephant for I would reap from where I did not sow without any consequences."[43] Residents would usually watch in disbelief as game wardens tried to force the stray elephant back to the forest without success the following morning. When their attempts failed, they would let it leave whenever it felt like.

Meanwhile, the realisation by the KWS that many wild animals inhabited areas outside the protected areas led to the establishment of Community Wildlife Service (CWS) in 1992. The CWS aimed at ensuring proper conservation of biodiversity, the sustainable use of natural resources, and the equitable sharing of benefits arising from activities related to conservation. In 1996, the KWS attempted to review the Wildlife Act to recognize community participation in wildlife management. The Bill was however never presented to parliament. Between 1997 and 2003, over ten people were reportedly killed by lion in Kinna and Murera areas. The reason for

[41] Ibid.
[42] J. Kairimwe, 2009.
[43] N. M' Arimi, Kirachene, Oral Interview, 2009.

the increase in the number of people killed by carnivores was attributed to the habit of people walking along isolated paths at night as well as grazing their livestock until late in the evening.[44]

Due to forest destruction in Meru District, especially the Mount Kenya Forest from as early as the 1930s, elephant have continued to be a threat to crop cultivation in areas adjacent to the forest. In areas like Gitogoto, elephant control has been a big problem. In the absence of game wardens, ill-equipped residents have taken the responsibility of guarding their crops from elephant. However, attempts to push the elephant back into the forest have often turned tragic. In 1990, for instance, a man alarmed by an elephant that was ravaging his bananas (Figure 11) decided to hunt it down using arrows. Unfortunately as he moved closer to take to shoot it, another elephant that was grazing nearby noticed him. Elephants are basically known to walk softly even in places with dry leaves. Thus, as he was about to shoot the elephant in front of him, the one behind him moved swiftly and knocked him dead. Such were the repercussions whenever residents tried to fight off elephant. The residents could only leave the elephants to eat their fill before returning to the forest at their pleasure.

Figure 10: An Elephant in a Maize Farm



Source: Kenya Land Alliance

[44] L. Kaburu, Ngaya, Oral Interview, 2009.

The problem with Gitogoto is that Mount Kenya Forest cuts through the area, dividing it into two (Map 6). For one to move from the furthest end towards areas near the Embu-Meru highway, one has to go through the forest. Besides the frequent crop destruction by elephant experienced in the area, a lot of time is wasted as children have to be escorted to school in the morning and collected in the evening. This has left the people with very few hours to engage in meaningful economic activities.[45]

Figure 11: An Elephant in a Bananas Grove



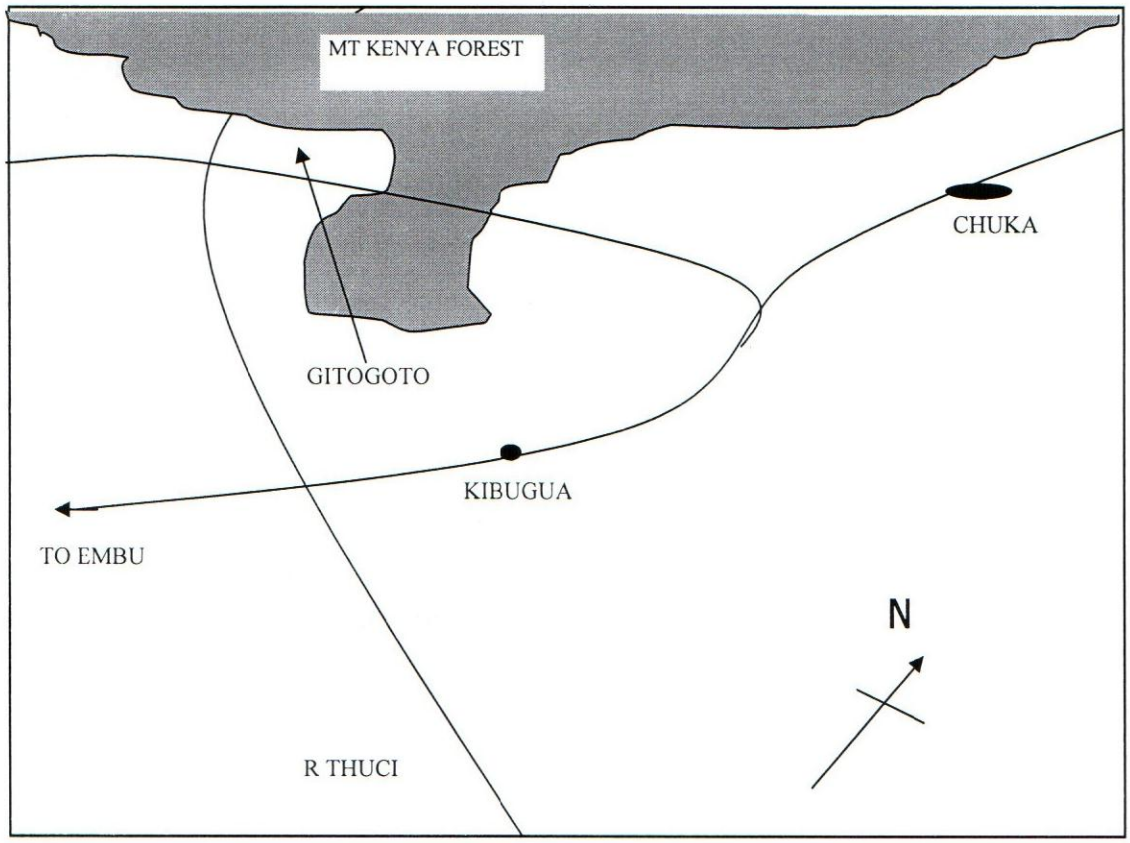
Source: Kenya Land Alliance

At times, Game Department officials availed themselves to help fight back the elephant. Nevertheless, their presence was helpful as they only killed animals deemed to be seriously notorious. The problem was in identifying troublesome elephant worthy killing in their view. As a result, it took a long period for the Game Department to kill a single elephant even when their destructive behavior was evident. For instance, the most recent killing of an elephant by the Game Department occurred in January 2008 in Chogoria. Since then, no other elephant has been

[45] J. C. Kathuraku, Chuka, Oral Interview, 2009.

killed despite the intensity of the conflicts in the region in the period that followed.[46] The unwillingness by the game wardens to kill the elephant made them to become more notorious. They started killing people even at their residences. The families of those people who were killed by wild animals were never compensated by the government. For instance, there were claims of about sixty five people killed by elephants in the Nchiru area in 2002.[47] The families were promised compensation but the promise was never honoured.

Map 6: Gitogoto in Meru District



The increase in HWC in many parts of the district coincided with a farming program that was introduced in 1993. It allowed families living adjacent to the Lower Imenti Forest to acquire plots of land in the forest for farming as they nurtured tree seedlings which they were required to plant. However, the program failed due to the tendency of the families to destroy the seedlings to

[46] F. Njeri, Chogoria, Oral Interview, 2009.
[47] C.M. Kiunga, Nciiru, Oral Interview, 2009.

avoid being thrown out of the forest once the trees matured. This led to their eviction from the forest in 1997. Nonetheless, by the time they were evicted, they had caused damage to the forest by cutting down trees to create more land for crop cultivation.

Farming in the Ruiri and Magumoni areas has often been hampered by the disruption of water for irrigation. The water shortage has been as a result of destruction of water pipes passing through the forest by elephant.[48] Shortly after the 2002 General Elections in Kenya, the farmers full of expectations initiated a water project which was intended to provide water for irrigation. Guided by the new president's philosophy of working nation, farmers anticipated to reap full benefits from their rich soils. Nonetheless, the project was not as successful as anticipated. The project suffered various setbacks including destruction of pipes by elephant in the forest. The farmers not only incurred losses through lack of water for vegetable production but also incurred huge losses in repairing the damaged pipes.

Besides the presence of an electric fence around Kirachene that was put up in 1996, elephants continued to torment people for the larger part of the subsequent decade. Elephant moved into farms and went as far as Meru town. The fence managed to restrict elephant from crossing over to farms only for a short while. With time, the elephant learnt how to go round the fence. From 2007, elephant, especially one of them that was familiar to the residents, started using the main road. It would move out of the forest through the areas that were unfenced and thereafter, using the Meru-Nanyuki highway, it was able to reach the Kirachene areas. Once in the area, it caused a lot of damage on farms. Sometimes it would stay up to daybreak.[49] The elephants were still a bother to the residents of Kirachene by the time this study was carried out in early 2009.

In the areas adjacent to the Meru National Park, there were intense conflicts in the 2000s. In 2006, however, the problem with elephant declined after the construction of a more effective electric fence around the Meru National Park. However, the problem was that the fence did not cover the whole area. The areas around Kinna remained unfenced. This provided an opening for wild animals to move to settled areas. The elephants, having the capacity to walk long distances

[48] I. Gitari, Chuka, Oral Interview, 2009.
[49] S. Kaaria, Ruiri, Oral Interview, 2009.

could easily move up to the Murera areas. Residents have had to content with the elephants that were locked outside the park after it was fenced as well as those coming from the Kinna areas of the region. Another obstacle to farming in the region was that of monkey that came from the Kinna areas and Ngaya Forest. Due to their cunning behavior, monkeys were hard to control. One would chase them away and after leaving, they would return to the farms almost immediately. Monkeys were also a threat to human beings. They chased away women by hurling stones at them. During fieldwork for this study, monkeys, baboons and a few elephants coming from the Kinna and Ngaya areas were still a problem to the residents. Cases of loss of human lives as a result of attack by wild animals have continued to be reported in areas like Murera, Kindani and Kinna. Between 1997 and 2003, for instance, over ten people were reportedly killed by lions in Kinna and Murera areas.[50]

Due to low populations of wild animals in Meru District as a result of the effects of poaching in the previous decades, the KWS opted to restock the Meru National Park. In July 2001, for example, KWS translocated nine family groups of elephants and nine individual bulls from Sweetwaters Rhino Sanctuary to Meru National Park. The translocation was carried out to beef up elephant population in the park. Meru National Park once accommodated over 2,400 elephants which were greatly reduced by poaching in the 1960s and 1970s, to the extent that only 300 elephants remained. The Elephant Programme - a unit that is charged with overseeing elephant issues within KWS raised funds for the operation in which Ksh 10.5 million was spent. The operation was carried out by the KWS personnel with assistance from the Kenya Army, which provided two low loader trucks to transport the elephants and personnel. The exercise was funded by a number of donors including the International Fund for Animal Welfare (IFAW) contributed US$ 40,000, the Born Free Foundation gave US$ 12,500, Save the Elephants gave US$ 3,900, Ol Pejeta Ranching gave US$ 3,000 and The Humane Society of the Unites States who contributed US$ 4,500. In addition to supplying personnel and equipment, KWS also utilised two aircraft at a cost of US$ 51,000.[51]

[50] N. Maria, Murera, Oral Interview, 2009.
[51] KWS, www.enchanted-landscapes.com, 2009.

Despite efforts by the KWS to restock the park, poaching in the district continued to increase in the 2000s. For instance, three poachers were arrested and eighty one elephant tusks worth Kshs 2.5 million recovered from them on 14 January 2011. The poachers were found in possession of the trophies in their saloon car as they headed to Meru Town after picking the consignment from a house in Nthugi village along the Isiolo-Meru highway. Two rhino horns, six rounds of ammunition, two night-vision binoculars, two rangers' uniforms and a rifle scope were recovered in the incidence.[52]

Forty one elephants in the district were reportedly killed by poachers in 2010 (see Figure 12).[53] "We lost 20 rhinos across the country but in this region (Northern Circuit), poachers killed nine over the past year, but we had a breakthrough yesterday and managed to recover the consignment,"[54] added Laikipia senior warden Aggrey Muamo, who was among the intelligence officers tracking the poachers. The poachers had state-of-the-art technology, including binoculars with powerful night-vision capabilities to enable hunting at night. They also had a rifle scope, which is mounted on a rifle to enable the user to aim at a target with more precision. Digital weighing machines and poisoned arrows, used to kill wildlife without attracting attention from wardens on patrol or scaring away other animals, were also recovered from the car.

[52] H. Huka, "Three Arrested as KWS Seizes 81 Tusks Worth Sh2.5m," *Daily Nation*, 18 January 2011: 23.
[53] M. Musibu, Meru, Oral Interview, 2010.
[54] A. Muamo, KWS, Laikipia, Informal Communication, 2010.

Figure 12: Tusks Recovered along Meru-Isiolo Highway



Source: *Daily Nation*, Tuesday January 18, 2011

In the late 2000s, there was a problem of theft of game trophies from the strong rooms. The problem was associated with the Game Department personnel who were in charge of storage of game trophies. Such activities only served to encourage poaching as the KWS personnel knew that they would benefit from trophies confiscated from poachers. In this regard, Paul Udoto, the KWS Communications Manager stated in 2010:

> When a tusk or horn is recovered from any region, they are temporarily kept in those regions before being transported to Nairobi under tight security. We have not disposed of any horns, tusks or wildlife trophy since 1989. Surprisingly, several rhino horns worth millions of shillings have mysteriously disappeared from various KWS strong rooms around the country in recent years. The thefts have been recorded in Meru National Park, Nanyuki's KWS offices and KWS headquarters in Nairobi.[55]

4.3 Summary

As seen in the above discussion, the period started with a more direct approach by the government to control HWCs that were being experienced in the district and other parts of the

[55] J. Weru, "Rhino Poaching: Spotlight on Rangers," *The Standard*, 22 December 2010: 30-31

country. The president played a leading role in these efforts especially in the late 1970s and the 1980s. However, logging and poaching continued unabated in the district. As a result of logging in the Imenti and Mount Kenya Forests, elephant continued to move into settled areas as they attempted to find new feeding areas. As such, many farmers incurred huge losses through destruction of property by elephant and other wild animals such as monkey.

CHAPTER FIVE
CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

The nature and the causes of HWCs in different parts of Meru District over the period under examination were dynamic. This was largely influenced by the diverse climatic conditions experienced in different parts of the district. The topography of the district also played an important part in influencing the nature of conflicts experienced in different parts of the district. For instance, the southern and central parts of the district experience more rains since they are on the windward side of the Mount Kenya than the Tharaka and Igamba Ng'ombe areas. However, the difference between the areas extending from Chuka to Chogoria and the Imenti areas is that the latter has Imenti Forests which extends up to settled areas leading to intensified HWC. Apart from a few areas such as Gitogoto, where elephant have been a big problem to the residents, the forest boundary in the Chuka-Chogoria region is rather straight.

The northern parts of the district experiences both dry and wet climatic conditions. For instance, the areas around the western buffer zone of the Meru National Park are wetter than the northern buffer zone areas. Thus, while livestock keepers in Kinna in the northern buffer zone of the park suffered from carnivore attack on their livestock, people in Murera in the western buffer zone of the park suffered mainly from elephant and buffalo destruction of their crops. The southern buffer zone of the park, which is significantly dry, suffered mostly from property destruction by monkey. This covered parts of Tharaka.

Most of the conflicts in the district have been blamed on the introduction of wildlife conservation measures. This is either through the imposition of unpopular polices on the residents that ended up changing their lifestyle, or as a result of alienation of their land for conservation of wildlife. The residents of the Chuka-Chogoria areas for instance have been the most affected by this after the inclusion of large parts of their land in the Mount Kenya Forest Reserve. This has been the cause of intense strife between conservationists and the residents.

The southern part of the district has suffered mostly due to lack of adequate agricultural land. Owing to rapid population increase, especially from the second half of the twentieth century, the residents of Chuka felt the need to reclaim the strip of land that was incorporated into the Mount Kenya Forest in the 1930s. However, that has not been possible because of lack of harmony between the Forestry and Game Departments. This led to logging and encroachment of areas bordering the forest as the residents retaliated. This led to an increase in HWCs in the region as wild animals attempted to find new habitats and sources of food.

The central part of the district has suffered mostly from losses caused by buffalo and elephant on crops and other property. The problem was worsened by the fact that the forests were too close to settled areas which were densely populated. Moreover, the Lower Imenti Forest, which was used by elephant for breeding was surrounded by settlements. Residents incurred huge losses as a result of crop destruction by wild animals. In the northern part of the district, the situation was more complex. Most of the land in the region was formerly occupied by pastoralists before they were transformed into agriculturalists. Such transformation coupled by other factors, led to increased cases of HWCs in the region. Crop destruction, animal diseases and conflicts over water for irrigation were some of the factors that seriously affected the socio-economic standards of the residents.

In Tharaka and Igamba Ng'ombe, the situation was less complicated. Most of the conflicts were as a result of land clearances that started in the 1930s because of population increase. Monkey and pig were the most troublesome animals. However, other vermin, though on a limited scale, were also an important factor in HWCs in the region that led to the detriment of the residents' livelihoods. Restrictions on utilisation of wildlife resources by residents have been another source of conflicts in many parts of the district. The residents' attitudes was dampened by the tendency of government to allow only a few people, such as sport hunters and private saw milling companies to utilise wildlife resources at their expense. Moreover, logging has been the main cause of wildlife invasion of farms in most parts of the district. The rapid growth in human population made people to encroach on forests, making wild animals stray into their farms.

HWCs in the district have contributed to the deterioration of economic standards in the community. It has been difficult for residents to farm in areas surrounding wildlife conservation areas such as Imenti Forests, Mount Kenya Forest and Meru National Park because of crop destruction by wild animals especially elephant, buffalo and monkey. In areas like Murera and Gitogoto, residents spend a lot of time guarding their farms and escorting children to and from school, hindering them from engaging in other profitable work. In other places like Kirachene and Naari, people have lost lives trying to chase away elephants, leaving behind many orphans in the community. While the extent of losses as a result of wildlife conservation has differed from region to region in the district, the effects have been spread over all parts of the district. The failure to generate enough income by a particular region was compensated for by income from other regions of the district. This has in turn led to poor livelihoods among the residents of the district due to the slow rate of economic growth.

Many attempts were made by both the government and residents to deal with HWCs in the district. Nonetheless, many of those methods were often unsuccessful due lack of a clear policy on HWCs in the district and the country as a whole. The diverse nature of the conflicts in the district was a major problem that faced the Game Department. It became hard to plan for a common way of dealing with the conflicts for all parts of the district. Moreover, the implementation of policy was hampered by an acute shortage of manpower in the Game Department. Tired of waiting for help from the government, residents devised their own ways of dealing with the conflicts. Yelling, throwing stones, drumming, and the use of fire were some of the traditional methods they used in dealing with marauding animals. Nevertheless, these methods were largely ineffective. The alternative was for the residents to kill problematic animals. While the killing of small animals like monkey and pig was usually successful, attempts to kill larger animals such as elephant often turned tragic. Many people ended up losing their lives while others escaped with serious injuries.

During fieldwork in the district in the early 2009, both the government and residents were implementing various programmes for dealing with the conflicts. Lack of adequate understanding of the nature and the causes of the conflicts however, led to implementation of measures that intensified HWCs in the district. For instance, the erection of an electric fence

across the migratory route of elephant in the Lower Imenti Forest only served to intensify HWCs in the area. Elephant were forced to pass through farms as they migrated from Isiolo District to their breeding grounds in Lower Imenti Forest. In the process, they caused immense damage to property and crops wherever they passed.

5.2 Recommendations

As illustrated in the report, there have been many attempts by both the residents and government to ameliorate HWC in Meru District. Nevertheless, many cases of HWCs are still being reported in the district, an indication that the efforts put are working. There is need therefore, for more study to be done on effective ways of reducing HWCs in the district. There is also need for more study to be done on sustainable ways of human-wildlife co-existence in the district. This is driven by the fact that, since the establishment of wildlife conservation in the district in the early twentieth century, residents have often complained of marginalisation in the utilisation of wildlife resources besides the efforts that have been put to involve them like the creation of Meru ADC Game Reserve in 1959.

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Cianjoka, Faith Njeru	Farmer	1924	9 January 2009	Kirege, Chuka
Gitari, Benson.	Retired KTDA worker	c1960	10 January 2009	Kirege, Chuka
Gitonga, James.	Farmer	c1945	26 January 2009	Murera
Gituma, Riara.	Farmer	1973	26 January 2009	Murera
Ireri Gitari	KWS Officer	1985	11 January 2009	Chuka
Kaaria, Samuel.	Fencing Programme Chairman	1947	14 January 2009	Ruiri, Imenti
Kaburi, Marete.	Retired Teacher	c1950	12 January 2009	Kiereni, Chuka
Kaburu, Lawrence.	Farmer	1967	10 February 2009	Ngaya
Kairimwe, John.	Village Headman	1961	23 January 2009	Kirachene
Kanyaru, Maingi.	Farmer	c1940	12 February 2009	Tunyai
Kiambia, Gerrison.	Farmer	1950	27 January 2009	Murera
Kimanthi, Dennis.	Farmer	1978	22 January 2009	Nciiru
Kimanthi, Gitonga.	Farmer	1975	13 February 2009	Kamaindi
Kimanthi, Samuel.	Farmer/ Former Game Scout	1943	22 January 2009	Ruiri
Kinjogi, Mati.	farmer	c1950	11 February 2009	Kamaindi
Kinyua, Muthee.	Farmer	1968	10 February 2009	Kamuguongo
Kirigua, Veronica.	farmer	1962	20 January 2009	Kirachene
Kirihinya, Kiambi.	Farmer	1952	20 January 2009	Mbeyu
Kirimi, Dennis.	Farmer	c1955	27 January 2009	Murera
Kirimi, John	Chief	1974	15 February 2009	Igamba Ng'ombe
Kirito, Ann	Teacher	1973	28 January 2009	Murera
Kirunja, Charles.	Retired Civil Servant	c1950	12 February 2009	Tunyai
Kirunja, Samuel.	Farmer	1950	10 February 2009	Ngaya
Kiunga, Charles.	Retired Military Officer	1949	21 January 2009	Nciiru

M' Arimi, Nkoroi.	Village Headman	1957	21 January 2009	Kirachene
M'ikunyua, James	Farmer	1959	20 January 2009	Mbeyu
M'iti, John.	Farmer	1979	28 January 2009	Murera
Mailu, Thomas.	Meru KWS District Warden	1964	19 January 2009	Meru
Maria, Naeserio.	Farmer	c1950	4 February 2009	Nguyuyu
Maritha, Mukiri.	Farmer	1914	29 January 2009	Murera
Mati, Gideon.	Retired game warden	1952	14 January 2009	Gitogoto, Magumoni
Mbaka, Martin.	Farmer	1970	13 January 2009	Gitogoto, Magumoni
Mbuba, Nkiria.	Farmer	1930	12 January 2009	Gitogoto, Magumoni
Miriti, Samuel.	Farmer	1974	29 January 2009	Murera
MKathuraku, Aphaxard.	Retired KTDA Officer/ Farmer	1930	9 January 2009	Kiereni, Chuka
Muamo, Aggrey.	KWS, Senior District Warden, Laikipia District	1972	8 February 2009	Laikipia
Muga, Kanga.	Farmer	1930	10 January 2009	Kirege, Chuka
Mugambi, James.	Farmer	1970	17 January 2009	Kinoru, Meru
Muikari, Faith.	Farmer	1965	6 February 2009	Ngaya
Mukiri, Nkunga.	Farmer	1938	16 January 2009	Nchiru
Mulwa, Japhet.	Farmer	1940	29 January 2009	Murera
Munene, John.	Farmer	1967	4 February 2009	Nguyuyu
Mungania, Fredrick	Retired Sub-Chief	1953	17 January 2009	Nchiiru
Mungania, Fredrick.	Retired Sub-Chief	1936	16 January 2009	Nchiiru
Munyi, Eustace.	Farmer	c1970	18 January 2009	Mbeyu
Murungi, James.	Limaru Water Project Chairman	1950	19 January 2009	Nchiiru
Murungi, John.	Farmer	1945	6 February 2009	Naari

Musibu, Maureen.	KWS Deputy District Warden	1974	18 January 2009	Meru
Mutegi, Justin	Retired Civil Servant	c1950	14 January 2009	Kiereni, Chuka
Muthoni, Virginia	Teacher	1957	9 January2009	Kiereni, Chuka
Mwiraria, Kiunga.	Retired Game Warden	1948	21 January 2009	Kirachene
Njeru, Eustace Kamiriri.	Retired Village Headman/ Teacher	1920	15 January 2009	Kirege, Chuka
Nkirote, Hellen.	Farmer	1955	30 January2009	Murera
Ntarangwi, Festus.	Farmer	1930	5 February 2009	Kiina
Nthumbi, Japhet.	Farmer	1932	31 January 2009	Murera

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APPENDICES

Appendix I: Interview Schedule for Local Residents

Name.....Age.....

Sex.....Occupation.....

Division..... Place of residence.....

Date of interview.....

A list of sample questions:

1) When did human-wildlife conflicts in the district start?
2) What was the nature of interaction between people and wildlife before wildlife conservation policies were introduced in the district?
3) How did the introduction of wildlife conservation in the district affect the interaction between people and wildlife?
4) How did the introduction of wildlife conservation in the district impact on people's livelihoods?
5) How many times have you heard about cases of HWCs in the district?
6) What were their forms?
7) How have the conflicts affected people's livelihoods?
8) What have been the causes of the HWCs?
9) How have the conflicts been dealt with?
10) Do you think the government has been doing enough to deal with human-wildlife conflicts in the district?
11) If yes, how?
12) If no, why not?

Appendix II: Interview Schedule for the Wildlife Conservation Agents

Name.....Age.....

Sex.....Occupation.....

Division..... Place of residence.....

Date of interview.....

A list of sample questions:

1) When did wildlife conservation start in Meru District?

2) What were the reasons for the introduction of wildlife conservation in Kenya?
3) Were the objectives for the introduction of wildlife conservation in the district achieved?
4) What do you think have been the reasons for increase in human-wildlife conflicts in the district?
5) What changes has the Game Department initiated into wildlife conservation since its inception?
6) How have those changes impacted on Meru residents' culture?
7) Could those changes have contributed to the escalation of human-wildlife conflicts in the district?
8) What has the government done to reduce HWCs in the district?
9) What obstacles have you encountered in the execution of your duties in the district?
10) Why has the game department not been able to ameliorate the conflicts in the district?
11) How have government policies on wildlife conservation impacted on human-wildlife conflicts in the district?
12) How have the Meru residents responded to human-wildlife conflicts?

Appendix III: Interview Schedule for the Provincial Administration

Name.....Age.....

Sex.....Occupation.....

Division..... Place of residence.....

Date of interview.....

A list of sample questions:

1) When did HWCs start in your area of jurisdiction?
2) What were the causes of the conflicts?
3) What have been the forms of the conflicts?
4) How intense have the conflicts been?
5) How have the conflicts been dealt with?
6) What have been the main challenges in ameliorating the conflicts in your area of jurisdiction?
7) How did the conflicts and wildlife conservation policies affect the livelihoods of the residents of your area of jurisdiction?

8) Could the effects on their livelihoods have contributed to the escalation of the conflicts in your area of jurisdiction?

9) If the answer is yes – in what way?

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