University of Strathclyde
Faculty of Education

Cultural perceptions of elephants by the Samburu people in northern Kenya

By

Onesmas Kahindi

A dissertation presented in partial fulfilment of the requirements for the Master of Science Degree in Advanced Professional Studies

2001

Abstract

The Samburu people of northern Kenya have co-existed with elephants since time immemorial. The Samburu-elephant co-existence is facilitated by local knowledge gained through real experiences from direct interactions with, and actual observation of the elephant's natural behaviour. The experiences are interpreted and coded through existing traditional belief systems and permeated to the community and descending generations through the vibrant oral system in the society. The knowledge is an integral part of the co-existence.

The Samburu perceive elephants in terms of individuals and individual groups rather than a population. Individual elephants have meaningful and significant characters. The Samburu perception is different from that of other organizations, past and present, interested in the elephants inhabiting Samburu District. The activities of these organizations regard elephants in terms of population.

Events such as poaching, law enforcement against poaching, and conservation have barely changed the cultural perception of elephants in the Samburu society. Through their programmes of action, each and every one of the elephant interest groups claims an ownership of elephants in different ways.

The people regard elephants as moral beings capable of hurting and being hurt. As a result, elephants attain a higher moral status in the Samburu society than any other animal, including livestock. As moral beings, the study shows that the Samburu perceive the concept of ownership as a form of slavery and exploitation of elephants. To Samburu, owning a moral being is immoral or constitutes an immorality and therefore conscripts 'the being' to a lower moral order.

The Samburu perceptions on the elephant are challenging to environmental education. Adopting the local perception about elephants ensures the implementation of meaningful and respectable programmes. This is important not only to the Samburu people but for elephants and elephant conservation in the district.

Acknowledgements

The journey to this dissertation has been supported by the warmth and generosity of numerous colleagues and friends, both old and new. First and foremost, I would like to thank the Chairman of Save the Elephants Trust, Dr. Iain Douglas-Hamilton, for making it a reality, and candidly supporting it to the end

I wish to thank World Wildlife Fund for Nature, (US) for funding the degree course through the Russell Train Educational Fellowship, and most heartily thank Mr. and Mrs. Russell Train for the nomination; Iain and Oria Douglas-Hamilton for introducing me to the Trains.

My quest began in 1998 after attending the post-graduate certificate course in Environmental Education at Jordanhill using the Prince Phillip Scholarship for Envirionmental Education awarded by WWF (UK). I take this opportunity to thank Patricia Ngari of the WWF East and Central Africa regional office for supporting my application; Nicky Souter, Sara Travellion and Muriel Walker for their care and concerns during the 3-month stay at Jordanhill in 1998.

I am heavily indebted to Ms. Anne Glen, the APS programme at the University of Strathclyde for the good advice and professional guidance, extra-ordinaray patience and counselling throughout the MSc course. My thanks to Dr. Angus McWilliam for motivating me with constructive comments, and showing genuine enthusiasm for the research project and the write up thereafter.

Save the Elephants wholly funded the research project. Thanks to Iain, again, for being keen on it progress. The field study owes its success to STE staff, namely: Dr. Juliet King for showing a keen interest and also, ensuring the study was well endowed; Oria and Saba Douglas-Hamilton; Elena Seba and Njoki Kibanya, for their help around the head office; Wainaina Kimani, Peter Oduogo and Shivani Bhalla for their unwavering support in more ways than I can mention here; Solomon, Francis and Musyoki for providing food and comfort in the ‘cold room’; all the STE staff in Samburu, notably: David Daballen and Alex Lekalaile for their assistance with translations during the pilot phase of the project; Benjamin Kilemi, Simon Kakai, Richard Lesowapir and Charles Lenkare for their warmth and friendliness. I sincerely thank George Wittmeyer for the moral support and comradeship throughout the field project; and Renee Kuriyan for sharing and stimulating constructive thoughts in the field.

I give special thanks to my field assistant, Michael Lenaiyasa for his dedication and commitment to the project. I would like to thank all informants and participants in the study, especially Messers Nauro Lekalaile, Loinyamal Lenanyangerra and Lenamoi Losowapir for their kind hospitality, time and unlimited access into their personal lives, homes, villages, friends and relatives.

I am eternally grateful to my wife, Joyce for her encouragement, unrelenting correspondence, affections and assistance in the course of study. My admirations to our son, Larry, for boldly enduring the long separation while I pursued the coursework, undertaking the field project, and writing up. I unreservedly dedicate this dissertation to these two wonderful people in my life.

Table of Contents

List of Figures and Colour Plates

Figures

Colour Plates

Preface

Introduction

This dissertation presents the results of a research study about the cultural relationship between the Samburu people of northern Kenya and elephants. The preface was compiled from literature research. The descriptions herein provide the necessary background information for the thesis. The preface contains three detailed descriptions, namely: the study area, the Samburu people and elephants in Samburu District.

Description of the Study Area

Size and Location

Samburu District is approximately 20,826 square kilometres in size. It is located in the north central part of Kenya. The District lies between latitudes 0^0 40" and 2^0 50" north of the Equator and longitudes 36^0 20" and 38^0 10" east of the Prime Meridian. Five other districts namely, Turkana, Marsabit, Isiolo, Laikipia and Baringo (Republic of Kenya, 1997) border Samburu District (Figure 1).

Topography and Geology

The information about the district's topography and geology is extracted from Bronner (1989) whose description is based on Shackeltom (1946).

The geological formations found in the Samburu District were originally sediments from the *precambrium*. They comprise sand, clay, limestone and other minerals. On the extreme west of the district is Suguta valley is of tectonic origin bounded on both sides by youthful fault escarpments and floored by red clays, boulders and gravel fans. These superficial deposits overlie lacustrine deposits. The whole are was originally part of Lake Turkana, as evidenced by beach terraces on ash cones. East of Suguta valley, the District is covered by gently dipping extensive high-level lava plains (plateaus) made mainly of phonolites and basalts. The highest parts of these plateaus are on the Kirisia hills, 2000m above sea level. Erosion of lava field has produced only a thin mantle of soils, the lava flow remaining as rough, boulderly sheets in some places, devoid of vegetation. Mount

Nyiru is composed of homogeneous granitoid gneiss and in some places compact biotite gneiss of the basement system. South of Mount Nyiru and east of the volcanic area of the west are the sub-miocene peneplain surfaces lowered by erosion of the less resistant metamorphosed sediments of the basement system to plains of various lower levels.

There are isolated hills on two distinct peneplain surfaces noticeable at Kowop in Baragoi Division, and the area between Lodungokwe and Wamba, continuing eastwards and southwards. The surface of the plains is covered by red soils and sands derived from the adjacent slopes by sheet erosion.

Mountains in the lowland region namely the Mathews Range (2700m) and Ndoto Mountains form four discontinuous ranges trending nearly north-south on the eastern side of the District. The Matthews Range is formed by resistant gneiss of granite composition of the basement system. Remains of ancient, perhaps cretaceous, peneplains have been left on the even summit levels of the Mathews Range and Kirisia Hills.

The altitude of the lowland ranges from less than 700m above sea level in the east of the district up to around 1200m above sea level in the west. The lowest point in the district lies on the banks of Lake Turkana at 380m above seal level. The western part of the district belongs to the Loroki plateau (2600m at the Kirisia Hills). Further to the north lies Mount Nyiru (3010m), the highest elevation in the district. The plains are, namely El Barta, Swari Plains, Bonyeki Plains and Middle Waso plains. These plains occur between 1,000m and 1350m asl.

The topography and rock types among other factos influence the distribution and development of soils in the District. The volcanic hills on the Loroki Plateau with ample rainfall and humidity are covered by deep reaching lithosols, xerosols, the stony regosols and the shallow red sandy loams called cambisols. On mountaneous areas, the cambisols are dark, deep and humic. The lowlands are covered with acidic acrisols, the alluvial luvisols combined with small pockets of combisols and regosols (Kapule, 1986)

Drainage

The south of the District is characterised by River Waso Nyiro, the largest river in northern Kenya. Seya valley, which intermittently becomes known as River Barsaloi and River Milgis, is the other significant river in Samburu. A number of intermittent streams e.g. Baragoi and Amaya, drain the Leroki plateau and the northern part of the District. The dry riverbeds, known as *lugga* (sometimes spelt 'lagga'), which are choked by sand and are subject to wind action, only have water after heavy rains in the higher areas. Lugga are the main drainage system in the District. Lugga cause great problems to communication (Ssennyonga, 1986). Seepage in lagga is the main source of ground water replenishment in the lowlands. However, most of the rainfall evaporates, either directly from the soil or through the transpiration of the vegetation (Bronner 1989).

Forested mountain areas supply ground water to replenish the local aquifers (Synott 1979a). When rainfall is so intense that the maximum rate of soil infiltration is exceeded, the water flows away on the surface and feeds the luggas. Outside the forest these occurs very often because of the usually very intense rainfall. The surface runoff causes sheet wash and erosion if there is lack of sufficient vegetation cover to protect the soil (Synott 1979b).

Most natural springs in the District originate from mountain ranges and rock outcrops. They usually dry up a few kilometres downstream due to high evaporation and percolation rates. Springs are common in Kitich, South Horr Tuum, Amaya, Suguta Marmar, Wamba, Margwet, and Baawa areas. The annual flow for both rivers and springs has been decreasing in recent years due to deforestation and intensive use of water upstream (Kapule, 1986).

Climate

The study area belongs to the driest regions of East Africa. The climate is characterised by the tropical monsoon wind system and the regional distribution of landmasses. Northern and eastern Kenya is under the influence of the northeasterly monsoons from December to March. Low and dry winds blowing

from the Arabian Peninsula are dominating in the dry season (Bronner 1989). From March to May the wind turns to southeast (south-east monsoon) and carries humidity from the Indian Ocean to the mainland.

Due to the near proximity of the Equator only small seasonal changes of temperature occur. The daily maximum and minimum temperatures during the dry season are only slightly lower than during the dry season. The temperature varies with altitude and is generally between 24^0C mean minimum and 33^0C mean maximum. The central parts of the region east of Mathews range have the highest temperatures. The highland belts in the north and eastern side of the Loroki plateau are cooler (Kapule, 1986).

Rainfall

The district has a 'tri-modal' rainfall pattern. The southeast monsoon, blowing from the Indian Ocean, causes rainfall between March to May. The local Samburu people call it *ngerngerwa*. In October the winds turns eastwards again. Humidity from the Indian Ocean leads to the second rainy season, which normally begins in November and is shorter yielding less rain than the first (Ojani and Ogendo, 1973 in Bronner 1996). Short rains fall between November until December. The local people call this season *ndumuren.* From the dry southeasterly winds blowing from the Ocean, the air rises due to thermic convection and orographic lifting and becomes cooler thus generating rains in mountainous regions. Orographic rains are highest in the central highlands around Maralal and Loroki forest. The local people call the rains *lorikine*. They do not occur in the lowlands due to low humidity. .

Rain in Samburu District is unreliable in distribution throughout the year and from one year to another. On the Swari Plateau between Loroki and the Mathews Range precipitation is particularly low with 200mm/a. The southwest plains and Loroki plateau receive between 500-700 mm of rainfall of an orographic nature. The central basin, is bounded by the El Barta and Swari plains, which also constitute the upper reaches of the Milgis River, and the plains east of the Mathews Range, is the driest area of the District. It usually records between 250 –

500 mm of rain. The Nyiru and Ndoto Mountains and Mathews Range receive the highest amount of rainfall, between 750 and 1250mm annually (Kapule, 1986)

Two dry seasons occur in the district. The longest season is between June to September and is caused by southern winds from dry land masses. The local people call it *lamei odo*. Another dry spell follows the October – December rains. Local people call it l*amei dorop*. On the contrary, convection (occurring after an extensive heating of the land surface) does not lead to rainfall owing to insufficient humidity. Under these conditions 'dust-devils' can be witnessed, particularly in sparsely vegetated area.

Vegetation

Bronner (1989) also gives a detailed of vegetation composition and history in Samburu District. Bronner (1989) did an intensive vegetation and land use study in the Mathews Range area. Barkam and Rainy (1976) describe the vegetation of the Samburu Game Reserve.

The main vegetation of Samburu District consists of a combination of grasses and *Acacia* species as well as other dry land woody species. *Acacia*-grasslands hold a dominant position in the Samburu lowlands. Most areas of the plains surrounding the Mathews Range are covered by a composition of scattered trees and shrubs and an herb layer developed according to natural factors and grazing intensity. *Acacia tortilis* and *Acacia mellifera* compete for and collect sufficient water through their deep and extensive root system. Around settlements, where the grazing pressure is particularly strong, the field layer can be very poorly developed and contain hardly any fodder grasses.

In the lowlands, trees reach a height of ten meters. Tree stands containing *Balanites aegyptiaca* and those located in *Commiphora*-savannah are somewhat shorter. *Cynodon dactylon, Sprobolus pellucidus* and occasionally *cynodon plectostachys* attain a high grade of cover though only in moderately grazed areas. Pasture weeds are common, but their cover is restricted. The largest part of the lowlands belongs to the *Acacia tortilis*-Savannah. *Acacia tortitlis* is the dominant

or even the only tree but does not form a closed canopy usually reaching a cover of 10 to 20 per cent.

The typical high altitude (above 2000m) vegetation are dry mountain forests dominated by *Pordocarpus species*. Above the altitude of 1900 metres forest clearings have developed in many places where the tree layer is not present or only consists of a few isolated trees. Instead, a combination of shrub and herb layer is present where climbing and scrambling species such as *Ipomoea wightii*, *Glycine wightii*, *Thunbergia alata* and *Conyza pyrrhopappa* are dominant (Bronner 1989).

Vegetation along streams and lugga has features distinctly different from the surrounding vegetation, whether in the mountain forest along almost permanent streams or along the lugga in the savannah. The riverine vegetation is very inhomogeneous. The floristic differences between the riverine forests and mountain streams are as great as those between savannah and forest. The vegetation of Samburu District is dry and leafless in the dry season, red and brown shades of the soils dominate the aspect of the landscape, whereas during the rainy season all is green and is difficult to imagine the area as being semi-arid (Bronner 1989).

During the past millennia far-reaching changes in climate have taken place and displaced the vegetation zones (Synott 1979 a). The forests of the Mathews Range, the Ndoto Mountains and Mount Nyiru were possible at some time connected. The forests have been affected by fire and grazing over the last centuries. There is widespread land and vegetation degradation in Samburu District. Where open grassland was formerly found, woodland with *Acacia tortilis* is now present. The presence of *Acacia tortilis* can be interpreted as the result of degradation (Bronner 1989).

The District supports substantial populations for a wide variety of animals, including the restricted gerenuk antelope and reticulated giraffe; globally threatened animals e.g. the grevy's zebra and raptor birds (Bennun & Njoroge, 2000). The once common black rhino is now extinct in the District. The area

supports over 3,000 bush elephants. About 99 per cent of the wildlife co-exists with the local pastoral people (Kapule, 1986).

Human geography

Administratively, Samburu District is divided into 6 administrative divisions, 30 locations as shown in Figure 1.

Figure 1: Administrative boundaries of divisions and locations of Samburu District.

(Source: Ministry of Panning and National Development, 1996 p. 7)

The district has two local authorities namely: Samburu County Council and Maralal Town Council composed of mostly elected councillors and a few nominated councillors.

Table 1: The table below shows population figures and densities in the District

Name of Division/attribute	Area (Km2)	Population (1989)	Population Density (pp/Km2)
Lorroki	1629	19695	12.09
Kirissia	2446	30815	12.60
Baragoi	2892	14909	5.16
Wamba	5045	20387	4.04
Waso	4922	8056	1.64
Nyiro	3901	15972	4.09
TOTALS	20826	109834	

The human population in Samburu District is unevenly distributed. Distribution is determined by various factors such as climate, soils and infrastructure. Republic of Kenya (1997) assumes that the average human population growth rate in the District is 3.5 per cent per annum.

There are four main indigenous ethnic groups in the District, namely the Samburu (75 per cent), the Ariaal (or Southern) Rendile (0.44 per cent), the Dorobo (1.0 per cent) and the Turkana people (17 per cent). Other immigrant groups constitute about 7.5 per cent (Kalule and Ssennyonga, 1986).

Due to the topographical and ecological setting of the District, there are four categories of land use patterns.

1. Protected areas in form of forest Reserves and Game Reserves. The District has about 328, 806 hectares of gazetted government forest, which is approximately 16.9 per cent of the total area of the district and about 25 per

cent of the total gazetted forest area in Kenya. An area of about 400 Km^2 is designated as Samburu National Reserve and Maralal National Sanctuary.

2. Mixed farming, which is concentrated in Lorroki and Kirissia Divisions
3. Pastoralism, covering over 70 per cent of the District and engages over 90 per cent of the local people.
4. Town and trading centres

In terms of human activities on the land, the district can be sub-divided into the agro-ecological zones, namely: upper highland zone (comprising of Kirisia and Lorroki Divisions, Mathew Ranges and Nyiro Mountains, which also serve as dry season grazing lands for Samburu people), lower highland zone (comprising some parts of Lorrki plateau and lowlands) and low midland zone (comprising of Nyiro plains, some parts of Baragoi, Waso and Wamba Divisions).

The 1997 District Development Plan has a major thrust to exploit the resources in Samburu District more extensively, through intensive farming systems, mining of minerals and harvesting of forestry products. Infrastructures like roads, transport and communication facilities etc essential for trading, commerce and industry, and social and economic development are some of the least developed and poorest standard in Kenya. (MOPND 1997).

The Samburu People

Origins

Due to scanty records and fragmented historical accounts, it is difficult to piece together the history of Samburu people (Brown 1989, Waruinge, 1986, Spear & Waller, 1993). The Samburu belong to the Eastern Nilotic group of tribes and speak the *Maa* language, which consists of least three primary dialects, namely the Maasai, Samburu and Ilchamus (Ole Sena and Ssennyonga, 1986). The Samburu are specifically classified as northern Maa (Sommer & Vossen, 1993). They were originally known as *Loiborkineji*, people of the white goats, and got the name Samburu from the Laikipiak Maasai because of the leather bag women carry, called *Samburie* (Brown, 1989, Pavitt 1991)

The Samburu are semi-nomadic pastoralists who live and mainly depend on their drought and disease resistant breeds of livestock, namely cattle, goats, sheep, donkeys and recently camels (Sperling 1987a, b, c). Since the 18th century, diseases and wars with the Laikipiak Maasai, Turkana and Abyssinian horsemen have ravaged the people and their stock. There was respite at the onset of colonial administration in the 1890's (Brown 1989). In the 1930s the Samburu tribe almost lost the Loroki plateau, a prime dry-season grazing land, to European settlers who wanted to occupy the land by force. The feud made the Samburu harbour feelings of mistrust and suspicion on the British Administration (Spencer, 1965; Waruinge, 1986).

The Samburu traditional way of life is susceptible to changes from contacts with other ethnic groups and influences. Spencer (1965, 1973) Sperling (1987a, 1987b), Larick (1984, 1996), Holtzman (1996) and Fratikin (1994) show how the Samburu culture is influenced by neighbouring ethnic groups, government policies and the modernization.

Social structures

Spencer (1965, 1973) gives a coherent outline of the social structure of Samburu society. Pavitt (1991) gives detailed information about the elaborate ceremonies, *Ilmuget*, that benchmark the 'illustrious' life of a Samburu male. The society has two key structural systems.

First, the society has at least 6 distinguishable levels of segmentary descent system. Spencer (1965, p. 71) lists the levels in ascending as: the lineage system, the hair-sharing group, the sub-clan, the clan, the phratry and the moiety. This study will focus on the phratry, clan and sub-clans levels. Sub-clan is group of recent and past blood related men where age mates address each other by name, and others by murata. Girls of the sub-clan are avoided sexually. Three quarters of a man's stock friends are members of his sub-clan. Sub-clans make a clan. Clans make a phratry.

The Samburu society has eight exogamous phastries composed of several clans. Each phratry and age set has only one ritual leader called *launoni* with certain ceremonial duties and ritual powers. The phastries perform their activities at different times, place and follow different codes. All Samburu elders and warriors are very aware of their phratry, clan and sub-clan and their customs. They tend to be oblivious/ignorant of the same for other phratries. Pavitt (1991) refers to 'phratries' as 'clans' and it's the only segmentation shown in his work. The eight phratries are, namely: Masula, Pisikishu, Ilngwesi, Nyaparai, Lorokushu, Longeli, Lukumae and Loimusi (see Appendix 3 for complete detailed description the segments). Based on the complex kinship system, the sub-clans, clans and phratries relates to each other in different brotherhood terms (Spencer 1965, p. 77 – 80).

The second social structure is based on the age set and age grade system. In the Samburu society, an age set is composed of all the men who have been circumcised in youth during a specific period of time. A new age set is formed every 12 to 14 years. An age grade is a stage through which each male passes at some period of his life together with others of his age-set, namely boyhood, warriorhood and elderhood. (Spencer 1965, p. 80-81) Wives adopt their husband's age-grade and age-set. They are automatically affiliated to their husband's clan and continue associating with members of their own clan . Every man aspires more than one wife for provision of labour and prosperity through children (Spencer 1965, 1973; Pavitt 1991). Marriage is exogamous on the basis of phratries. Marriage is patrilocal and kinship system is patrilineal.

Political and legal system

As a tribe, the Samburu people live in an acephalous society, with no organized formal system or chiefs. The political and legal institutions in the society are contained in the institution of elderhood constituted by one or more male members of the elders' age group. Elders are the most powerful section in the society (Spencer 1965). They perform many duties such as settling quarrels and performing sacrifices. Spencer (1965) describes gerontocracy, the distribution of power through age and sex, in the Samburu society.

Elders use two strategies, namely discussion or cursing, to solve issues. A small crisis is discussed by a small number of elders while a major crisis leads to an even larger and more informal discussion or even a series of discussions. Through these discussions, the elders would wield power they hold over the rest of the Samburu society. The ultimate power that the elders have over society rests on the unshakable belief in the curse. The introduction of chiefs by the British colonials to have power and authority over others went completely against Samburu rules. The appointed chiefs encountered a lot of criticism and resentment from the people.

The Samburu age set system functions as a military, political and socio-economic organization. They are also instrumental in binding together different segmentary levels and territorial sections of the tribe (Simonse & Kurimoto, 1998).

Production systems

Livestock is the mainstay of the economy in the Samburu society. Livestock is the main form of exchange and food during social-cultural occasions involving marriage, circumcision, religious sacrifices, cultural exchange, compensation etc. The number of livestock it holds can indicate the wealth of a family.

The tribe as a whole owns the land. However, since 1970's and 1980's the Kenya Government initiated a land ownership scheme to encourage the Samburu people to adopt a sedentary life and engage in more productive activities like farming and participate in the money economy (Okiomeri 1986). Subsistence and commercial farming is done in Losuk areas situated in the central highlands of the District where rainfall is high and soils are fertile. About 70 per cent has low agricultural potential and hence not suitable for crop farming (Wandera & Kapule 1986). Furthermore, crop farming is perceived as an occupation for poor people without livestock. Sedentarization have resulted in the building of permanent and semi-permanent houses in Maralal, Baragoi, Wamba, Suguta Marmar and *Kisima* areas. The 'pastoral economy' cannot be separated from the larger regional and national production area. Many Samburu have adopted the mixed strategy of wage labour

and cooperative herding to serve their increasing monetary needs (Sperling, 1987b).

Samburu people do not hunt wild animals for income or food unless during very severe drought and famine where specific animals can be killed for sustenance (Sobania 1979; Bronner 1989; Fratkin 1996). Large carnivorous animals are killed for predating on livestock (Kapule 1986). A Samburu is strictly forbidden from consuming certain animals such as warthogs, zebra and elephant no matter the circumstance (Bronner, 1989). The Samburu believe that cattle would perish from the smell if elephant meat is brought into a homestead (Fratkin 1974, Cosentino 1994). But other ethnic groups in the District, mainly Dorobo and Turkana, subsist on hunting and gathering (Bronner 1989, Sobania 1979).

On the contrary, Sperling (1987) and Larick (1986) state that the Samburu people hunt wild animals and gather a wide variety of food as a principal means of obtaining food. Other means are procurement directly from their herds and purchase or growing of agricultural produced. Larick (1984) claim that many Samburu warriors hunted elephants for ivory at the height of ivory smuggling in the 1970's.

Traditional education system

The Samburu still have an informal system of education whereby the older members of the society teach the young. Knowledge on livestock is strongly emphasized. Children are taught to recognize cattle brands, earmarks of the clan and those of other clans, colours and names of each individual animal.

Oral narrative is an integral part of the Samburu society. One form of oral literature is narrative, *nkatini*, which give historical accounts of the Samburu – about origins and migration of people. Other stories are mostly about raids organized by warriors, about livestock and about wild animals. They give explanations and reasons for the existence of certain things e.g. man, wild animals, black and brown people and different societies (Ole Sena, 1986). These stories are not written but memorized until an opportunity arises to retell them. The Samburu

people use metaphors, idioms, symbols, proverbs and riddles in their conversation to clarify, explain or advice. Every age set have particular songs to express their experiences and world outlook.

The Samburu have two highly sophisticated forms of non-verbal communication. These are, emotional outbursts by shivering or shaking (Spencer 1965), and through aesthetics and weaponry. It would be a gross misinterpretation if beauty were considered the sole purpose of such ornaments (Ole Sena 1986). Decorative items express social rank and status as well as advertise social events and ritual. Candidates for circumcision, mourning widows, nubile girls, are all distinguished by their attire and body decorations. You can distinguish the age set, age group, social status and special responsibilities a male Samburu from the appearance of his spear (Larick 1984, 1986a, 1996).

Belief system

The Samburu believe in one God, although God is at times referred to as a collection of guardian spirits (Ole Sena 1986).

The Samburu try to avert misfortunes by modifying customs, such as building, collapsing rebuilding a white hut at marriage, growing hair after birth, changing the circumcision time from morning to evening. Thus the diagnosis of a mystical misfortune, and the search towards an optimal ritual code is constantly pursued. Certain objects and animals e.g. hyena and donkeys are harbingers of misfortune. The knowledge of what brings misfortune is acquired as a skill through the senior members of a clan. There are ritual specialists called Kursa. Their knowledge is passed on from father to son, and such a person commands respect in the Samburu society.

Samburu have states that they consider to be sinful. These states are diagnosed by their results and are associated with sufferings things like being struck by lightening, being killed by a wild beast or catching some fatal disease. The Samburu try to search for some supernatural reason why that particular person died that way using two reasons. Either the person has been in contact with some

agent of misfortune or the person may be in a state of sin entered if the person violates the norms of society. The elders curse plays a major role in Samburu society in the resolution of crises and in socialization. It reflects the structure of the society and is also interwoven with the norms of behaviour. Every Samburu person believes in the curse, although cursing is actually very rare. Only elders and very occasionally wives curse.

Elephants in Samburu District

I reviewed a wide range of published and unpublished reports and records to understand the ecology and the key conservation issues concerning the bush elephant, *Loxodonta africana africana*, in Samburu District. The African elephant is listed in Appendix II of the CITES treaty as a highly threatened species (STE, 2000).

Elephant profile

The bush elephant is widely distributed within the African tropical region. The elephant is highly mobile, has great body size, exceptional long life, and is highly adaptable (Laws 1970, Estes 1991). The Kenya elephant population size is approximately 23,000 elephants (Kahumbu, 1999). The elephants occupy a wide variety of habitats (see map 2 KWS, 1991 pp 27). Kenyan-based scientists, naturalists and conservationists have studied the animal's natural history (Sikes, 1971, Estes, 1991), ecology (Douglas-Hamilton, 1972; Laws, 1970; Moss 1988; Poole 1987) and conservation.

Population estimates in Samburu

Approximately 3,000 elephants inhabit Samburu and the surrounding Districts. It is the largest population surviving in Kenya outside protected areas (Thouless 1993). Early explorers in northern Kenya recorded a large presence of elephants in Samburu country (Thouless 1993; Brown 1989, Rosevelt 1909). In 1950, in spite of intensive poaching that exterminated them in the region between the Ethiopian border, Mt. Marsabit, Lake Turkana and Ndoto mountains, elephant numbers in the whole district ran "into their thousands and increase every year"

(Sobania 1979, p. 219). Thouless (1993, p. 12) notes, "the forests of Mathews Range were always considered important elephant breeding grounds".

Because the elephants are free ranging and highly mobile, it is difficult to state the exact size of the elephant population or to determine a consistent trend. The large differences from elephant counts in the District usually raise serious doubts. Each count uses different methods and techniques to estimating the population in the District. Appendix has the full list of all counts done since 1973.

Distribution pattern

Although building a reliable population trend seems difficult, the results indicate a general distribution pattern of elephants in the District. 'Sub-populations' (Thouless 1998), exist in Mathews Range (Thouless 1993, 1995), Lorroki Forest (Litoroh et al 1992, Bitok et al 1997), Kirisia Forest, Ndoto Mountains and Samburu National Reserve (Ruhiu 1996, Wittemyer 2001). Wittemyer (2001) has described the population dynamics of the Reserve's sub-population. The Reserve holds about 700 individuals (Wilson 1989, Ruhiu 1996 and Wittemyer 2001) in about 50 family units of between 3 and 25 individuals (Ruhiu 1996 and Wittemyer 2001). This is the only sub-population living outside the forested mountain areas.

During the rainy seasons elephants migrate to the lowlands to feed on the lush vegetation and drink readily available surface water (Ruhiu 1993, Thouless 1993 1995). The rains attract a substantial population from Isiolo District (Ruhiu 1992, Wittmeyer 2001) and Laikipia District (Thouless 1993). Sooner the lowlands dry up after the rains than the elephant return to the protected areas within and around the District. Ruhiu (1996) outlines the migration routes from Samburu National Reserve and Douglas Hamilton (per comm) shows a host of individual movements using GPS technology.

Conservation concern: elephant poaching

Thouless (1993) states that many surviving elephants were forced to migrate south due to intensive poaching for ivory in the mid 1970's. Sobania (1979) shows that elephant poaching in the area dates back to pre-colonial days in the 19th century

and spilled into the 20th Centuries. The main hunters were Ethiopians, Turkana, Wakamba, Borana, Somali, European and Americans. The poachers sought for elephant tusks and rhino horn. Ethiopia was the main export route. In spite of tough protection measures by the government, poaching and sport hunting continued throughout the 20th century causing the extermination or elephants in northern Samburu and extinction of rhino, at one time common animal in the District.

The poaching intensified between 1962 and 1975 when most of the elephant and rhino population was annihilated using automatic weapons by Somali outlaws commonly known to as 'shifta'. In 1977, a government-sponsored count yielded 4400 elephant recent and old elephant carcasses and 710 live elephants. Ruhiu (1996) speculates the data was a misrepresentation. But Thouless (1993, p. 27) makes the count credible by showing a report of fresh carcasses of 200 elephants in one counting block. The information also shows that 96 tusks were dug up in one tourist campsite. In another incident recorded in July and August 1973, an assistant game warden found 49 dead elephants with tusks removed, and 30, which had been killed but still had tusks in place.

The revitalized wildlife services and the international ban on ivory trade in 1989 stopped the wanton elephant poaching. Also, the survival of elephant is attributed to the Samburu cultural values avoided poaching or cooperating with poachers, and the establishment of community initiatives in wildlife conservation and tourism, namely Namunyak Wildlife Conservation Trust (Ruhiu 1996).

1.1.1 Conservation concerns: Human – elephant conflict

The Samburu pastoralists have unlimited access to pasture in the rest of the District. Although they co-exist harmoniously, literature shows increasing negative human – elephant interactions in the district. Elephants get injured and killed from spearing by the Samburu herdsmen mostly at wells. Between May 1991 and November 1992 of 2 elephants killed at a water dam, 6 speared by locals and seriously injured; 1 report of dam destruction, 11 reports of crop damage, 2 report of people killed and 4 injured, a killed cow and a damaged moat (Litoroh

1992). Between 1993 and 1998 elephants killed 10 locals and injured 11 (Kuriyan, 2000). Litoroh (1992), Bitok (1997) and Waweru (1994) note that an increase in human-elephant conflict would have serious long-term repercussions to wildlife conservation in Samburu District. In Samburu National Reserve, debarking of mature Acacia elatior trees, which forms unique riverine canopy, by the large concentration of elephants has increased the tree mortality rate and gradually destroying the forest (Ruhiu 1996, Wittemeyer 2001).

Conclusion

The Samburu people and elephants co-exist and continue to interact in the District. Elephants are common in the district as the Samburu are ubiquitous in the landscape. The Samburu culture has a rich animal symbolism, and elephants are a part of it. The preface supplements the dissertation by providing the background and supporting information about the study area. The references cited in the preface are included in the general reference list of the dissertation.

Chapter 1

Introduction: The Study and its setting

1.1 Background of the Study

I have been a full-time employee of Save the Elephants (STE) working for the long-term elephant research programme based in Samburu National Reserve of Samburu District since August 1999. The programme operates a community education and outreach activities targeting schools, villages and local towns, trading centres and employees of various tourism business and local authorities situated in and around the National Reserve.

In 1998, a colleague studied the Samburu cultural beliefs about wildlife (Kuriyan 1999a). The outreach programme adopted the findings of the study and incorporated the rich Samburu knowledge and positive values for wildlife in its activities. The programme applies ethnographic methods to design and develop the activities. The unique approach is exciting and challenging in my job.

But my learning experience raised numerous questions about the validity and reliability of the approach. Apart from information from Kuriyan (2001; 1999a; 199b), the approach is not supported by ethnographic literature, published or otherwise, about the Samburu people. Another concern is that the education activities seem detached from the research activities or goals of the research programme.

When undertaking the MSc degree course, I studied modules that would enable me overcome both of these weaknesses in the programme. The Independent Study Module (ISM) module was completed using knowledge gained from a social anthropology course at University of Glasgow, and education foundations from the post-graduate environmental education course in the Faculty of Education in 1998. The Methods of Professional Enquiry (MPE) module introduced me to ethnography. Three modules enhanced my knowledge in natural sciences. These modules were, namely: Geographic Information Systems, Ecological Modelling, and Ecology, Biodiversity and Conservation.

This dissertation contains the outcomes of my research study done in partial fulfilment of the MSc course. The study was not based on hypotheses but three research questions or objectives. The first objective was to find out the cultural meanings of beliefs, attitudes and values of elephants in the Samburu society. The second objective was to describe the local knowledge about elephants and the significance of that knowledge in the Samburu society. The third objective was to compare and contrast the relationships between the Samburu cultural perceptions and knowledge of elephants against the STE elephant programme and the mandate of Kenya Wildlife Service in Samburu district.

1.2 The study area

The preface of this dissertation contains detailed descriptions of the study area.

Samburu District lies in the north central parts of Kenya (Figure 2 and 3), in the arid and semi-arid region of the country. The region is ecologically diverse, ranging in altitude from 1,000 feet to over 8,000 feet. Rainfall varies between under 400 millimetres per year in some of the lowland areas, to over 1.250 millimetres per year in the mountains. Climatic variations follow patterns of rainfall, with cooler temperatures in the highlands; the heat in the lowlands becomes oppressive during the driest months of the year.

The Samburu people form the majority of human population in the district. Samburu are a polygnous, segmentary lineage society inhabiting the semi-arid lands of northern Kenya (Spencer 1965). Their economy of subsistence pastoralism is based on cattle, goats, sheep, and occasionally camels, and is not increasingly supplemented through wage labour and the cash economy (Sperling, 1987a, 1987b, Holtzman 1996, Straight 1997).

Traditionally, the Samburu are not hunters or food gatherers, unlike the minority ndoboro and Turkana tribes in the District. Samburu have co-existed with wildlife resource in the district since time immemorial. The African bush elephant, *loxodonta africana africana* is a common animal in the district; the current

population is about 3,500 individuals (Thouless 1993). Samburu and the surrounding districts have the largest elephant population outside any of the wildlife-protected areas in Kenya.

The elephant is a species of international conservation importance (Western 1997) and its conservation dominates most of Kenya Wildlife Service (KWS) programmes. In 1970's, Somali tribesmen and other black marketeers intensively poached elephants in Samburu District for ivory, decimating the population. KWS has now intensive anti-poaching programmes in place. In addition, the Service conducts activities to address the rampant human-elephant conflicts, as well as encourage the local people to venture into wildlife-related business in order to benefit from wildlife (KWS 1994).

1.3 Theoretical framework

Beliefs and attitudes are two important elements of a value (Caduto, 1985). Rokeach (1972) shows qualitative relationships between beliefs, attitudes and values. "Values are revealed in behaviour" (Byers 1996; page 5). Behaviour is determined by experience and knowledge. Lewis (1946, p. 25) asserts that knowing, doing and valuing is indicated by experience; furthermore empirical knowledge, which is verifiable and confirmed by experience, is indeed "knowledge *par excellence*".

Since time immemorial, people have interacted with the natural world using their culture as a means to adapt to various environmental components (Milton, 1996); and also through their behaviour – their decisions, practices and actions made in the context of existing values (Byers 1996). Each community and culture has its own array of values.

The majority of African tribes still believe that a human being lives in a religious universe where natural phenomena and objects, including plants and animals are intimately associated with God (Mbiti 1969; Douglas, 1954; Ingold 1996; Bird-David 1993). In Africa, the depictions of the elephants, even where they have vanished, say as much about the human society as about the animal itself (Leakey

et al 1995; Ross 1992b). Ross (1992a) has detailed accounts of elephants in African metaphor (Cosentino 1992), art (Arnoldi *et al* 1992; Ravenhill 1992; Binkley 1992) spiritual power (Cole 1992), political adornment (Geary 1992) and ivory trade (Alpers 1992). Ville (1995) describes traditional perceptions of elephant in local livelihoods in the Tsavo area of Kenya. In spite of impressive sculptural and other representations, little is known about the symbolic role of an elephant in a culture (Ross 1992a).

African traditional attitudes towards the natural world involve people's intimate, respectful and time-proven feelings, thoughts, interpretations, knowledge, ideology, beliefs, attitudes and values (Milton 1996; Marshal 1976). Most conservation policies introduced by organizations and central governments are insensitive to local culture and depict local people as the worst of eco-criminals, barbaric and cruel (Adams *et al*, 1998; Adams *et al*, 1992). But tribal representations cannot be dismissed outright in favour of the exotic notions of conservation. At present, although the involvement of local people in conservation receives widespread support (Hulme 1998; Berger 1993; Metcalfe 1994; Western *et al* 1994) there has been little research either on the origins of the ideas or the concepts it draws upon (Adams *et al* 1998).

Community conservation has a strong economic rationale, which assumes that wildlife is conserved when community welfare increases. The assumption is based on an incomplete understanding of the economics of community conservation (Emerton 1998) and may lead neither to community welfare improvement nor wildlife conservation when wildlife benefits fail to reduce economic loss from wildlife.

1.4 Objectives of the dissertation

This dissertation presents the findings my study about the relationship between elephants and the Samburu society. The specific objectives of the dissertation are:

i. To describe Samburu knowledge about elephants and the significance of the knowledge in the Samburu society. The descriptions are classified according to the local taxonomy, vocabulary and terminology in the society.

ii. To describe the cultural importance of elephants in the cultural beliefs attitude and value systems in order to understand the important of elephants in the Samburu society.

iii. To compare and contrast the Samburu cultural perception about elephants with the current KWS elephant conservation plan and the on-going STE elephant programme in Samburu District.

Chapter 2

General Methods and Data

2.1 Introduction

The study is a part of Samburu ethnography. "Ethnography is the study of people in naturally occurring settings or fields by means of methods which capture their social meanings and ordinary activities, involving the researcher participating directly in the setting, of not also the activities, in order to collect data in a systematic matter but without meaning being imposed on them externally" (Brewer 2000, p. 10). Fieldwork was done between April 2001 and July 2001. The data presented in this thesis are the result of my own fieldwork.

The field study had three advantages. Firstly, being an employee of STE (Chapter 1), the study benefited from STE equipments and field facilities. Secondly, my Maasai heritage enhanced the accessibility, built confidence and facilitated acceptance among the Samburu people. The Samburu regard me as a member of the Kiroro age set because I was circumcised in 1983. Thirdly, I am an appointed Honorary Warden with privileged access to official records from Kenya Wildlife Service and other classified government records related to wildlife in Kenya.

Maa is the native language of the Samburu people. I am a poor *Maa* language speaker, and can't fully comprehend Samburu linguistic expressions. To help in translating and transcribing the Samburu dialect, the field study engaged a full time research assistant, Mr. Michael Lenaiyasa. Michael belongs to the Lmooli age-set and is a secondary school graduate with recent working experience as a research assistant in the district. Male informants, friends and colleagues kindly introduced me to their female relatives and spouses, who cooperated and willingly attended the interviews. Therefore, an additional female research assistant was not necessary.

2.2 Sampling

Geographically, the tribe is evenly distributed around the district. The Samburu society has clear social structures and age-set systems (Spencer, 1965)

(Appendices 3 and 4 below). Informants were derived from the following areas: Kiltamany, Laresoro, Ndonyo Wasin, Gogoltim, Lkalkaloi, Porro, Lodungokwe, Baawa, Suguta Marmar and Laisamis, and selected on their genuine willingness to participate in the study and good knowledgeable about the Samburu culture. The study was receptive to members of all living age sets, but particularly the Kimaniki age-set (senior elders) and Kishili age-set (the current firestick elders). Significant variations in the data arising from age set differences or tribal segmentation were duly noted in the study.

The study had a total of 23 informants. Interviews from three of them were rejected after loosing seven micro-cassettes containing raw data. Informants were affiliated to the following phratries: Masula (6), Longeli (4), Pisikishu (3), Lorokushu(2), Lukumae (2), Loimisi (2) and Ilngwesi (1), Pardopa (1). Ethnic composition of the informants: Ariaal (2), ndorobo (3) and Samburu (18). Age-set composition: Mekuri (1), Kimaniki (9), Kishili (1), Kiroro (6), and Lmooli (6). Only 3 informants were female. The informants can also be classified according to their occupation: Village elders (15), government chief (1), spiritual leader or *launoni* (1), game rangers (4), full time warriors (3). Each informant was assigned a reference code (Appendix 2).

2.3 Methods

The study applied the Developmental Research Sequence (Spradley, 1979) to gather and analyse data. Additional methods are specified in Chapters 3, 4, 5 and 6.

2.3.1 The Developmental Research Sequence

The DRS technique is designed for ethnographic studies, and strongly emphasizes the emic (the informant's view) approach in data collection and analysis. The technique has twelve distinct stages, which applied in the study as follows:

Step 1: Finding informants

Potential informants were introduced to the study either by an incumbent informant, colleague or a friend. I introduced myself by offering each informant

the traditional gifts tobacco, sugar and tealeaves. In the Samburu society, these particular items solemnize friendship and mutual trust. Except for three males and two female informants, the informants were new to me.

Step 2: Interviews

Data was gathered mainly through interviews at each informant's homestead or address. A short visit lasted two days; a long visit took a week. Key informants were visited more than once on different dates. Other villagers (age mates and relatives) joined the interviews and stayed to the end. On average an interview session lasted about 3 hours. Views from those attending the interviews were welcome but the informants were requested to consolidate them accordingly. The participants helped informants to recall events or explain a phenomenon. It is against the cultural norms for women to attend men meetings; but men are not prohibited from attending and dominating women's meetings. However, the study excluded men from participating in women interviews. Condensed accounts of informative conversations outside an interview were kept for reference and information.

Step 3: Field records

All interviews were recorded using Sanyo TRC-1148 and Sanyo micro-cassette TRC-530M tape recorders. Informants did not want the recordings replayed to them because it was considered rude 'to repeat the same words'. Michael translated my questions in *Kiswahili* (Kenya's national language) to *Maa*, unless the informant was confident in *Kiswahili*. Responses were translated back to me in *Kiswahili*. During most interviews, capable and confident participants in the audience were requested to translate the proceedings. This technique was meant to boost informants' and participants confidence. Michael noted down important points and vetted the translations. Any emergent discussion between informants and participants was observed to avoid distraction, eliminate doubts and to form consensuses. Field notes were summarized in a dairy.

Step 4: Descriptive questions

After building a rapport with informants, the interviews began in a casual, informal and unstructured way. Broad descriptive questions were applied to encourage an informant to describe the cultural scene. The questions sought examples of incidents and accounts of events experienced by informants. The questions were phrased in personal terms to seeking personal opinions, and cultural terms by asking informants to narrate or paraphrase according to the cultural scene. Appendix 1 shows a complete list of questions asked during each interview.

Step 5: Analysing the interviews

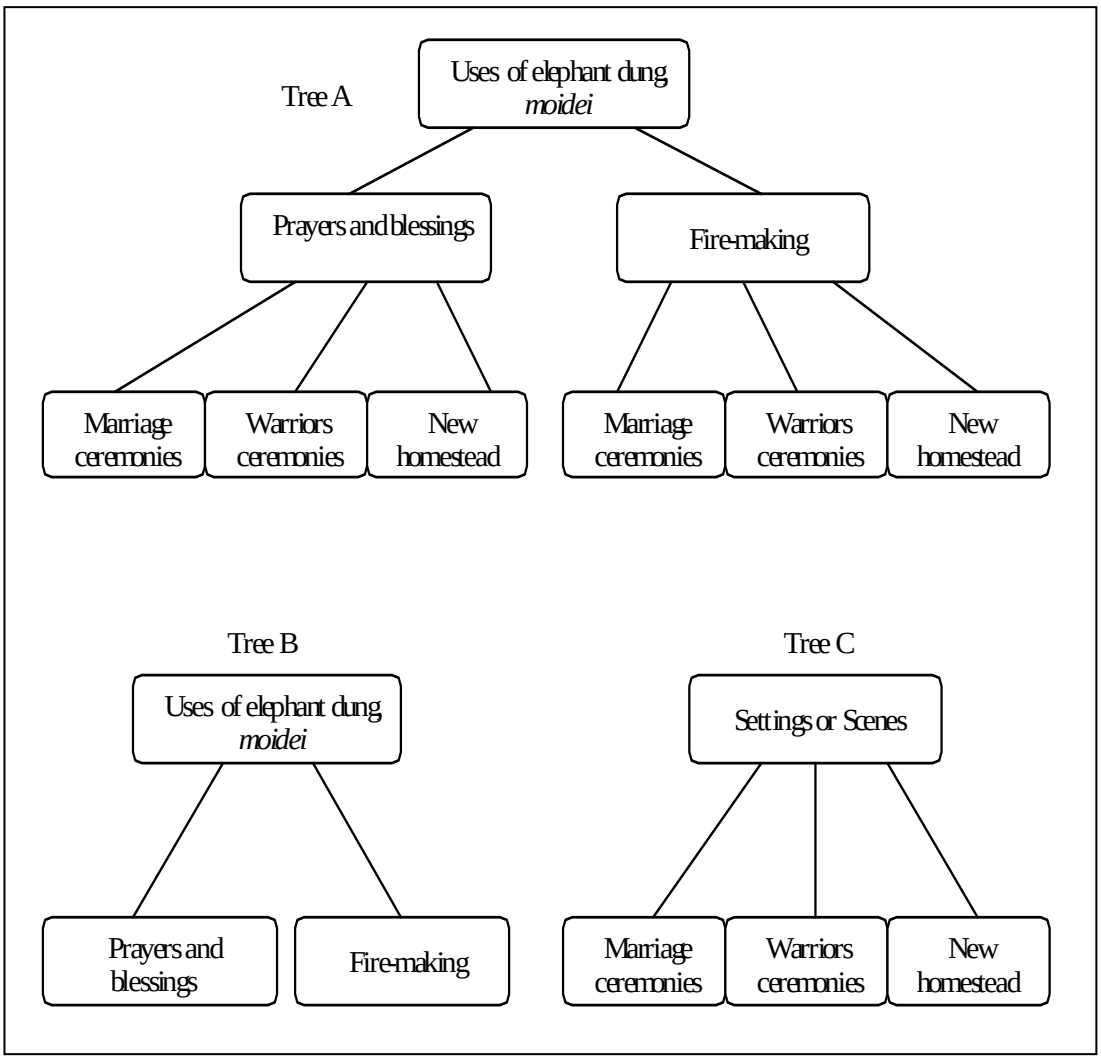
The interviews were transcribed in English using a portable computer, Gateway 5300 installed with Microsoft Word 2000 word processing software. The transcripts became documents for qualitative data analysis. Appendix 2 shows the full list of transcriptions from the study. *QSR NUDIST Vivo* (hereafter referred to as NVivo) software is highly recommended for coding, search/retrieval, memo, data linking, matrix and theory building in qualitative data analysis (Miles & Huberman 1994; Creswell 1998). Richards (1999) describes how to use NVivo in qualitative research.

Step 6: Domain analysis

The Samburu culture has a vast number of folk terms (names of things, events, characters etc) that informants use to describe observations or experiences. Folk terms can be related to each other and can serve as cultural symbols representing a wide variety of cultural meanings. A symbolic category that involves other categories is a domain. Domains are the first and most important unit of analysis in ethnographic research (Spradley, 1979, pp 95-103). Preliminary search for domains involved perusing the transcript documents to find folk terms, names of things or characteristics related to the Samburu people or elephants. Names, terms, phrases etc form cover terms. Once a symbolic category (domain) was identified, it was presented for confirmation with the informants. For example, informants used different names and cover terms to describe kinds of cultural uses for elephant dung. NVivo was useful in refining the domains too. Figure 3 shows a

tree diagram for the domain ("uses of elephant dung"). Tree A combines two different sort of domains, i.e. uses and settings of elephant dung. It is a big tree and blocks further questions. The tree is refined further to sub-tree B and C to make it possible to search for relationships between uses and settings.

Figure 3: Domain analysis in NVivo



Step 7: Structural questions

Using descriptive questions, informants were asked to explain their experiences, events, and give more clarifications. Structural questions were adapted to each informant, meshed with descriptive questions, and skilfully repeated over and over again (Appendix1). The informants were asked verification questions to confirm or disconfirm hypothesized domains. They were also asked cover term questions to elucidate on cover terms discovered in the domain analysis. The structural questions functioned to explore the organization of an informant's cultural

knowledge, without imposing analytical categories to organize the data from interviews or observations.

Step 8: Taxonomic analysis

This is the stage where the study identified the important domains of knowledge, and selected numerous domains for in-dept analyses. Given the short time for the study, this thesis is mostly composed of surface analyses, which give a translation to show cultural meanings known to the informants. Like a domain, a folk taxonomy is a set of categories organized on the basis of a single semantic relationship. The taxonomy shows the relationships among all folk terms in a domain, and reveals subsets of folk terms and the way these subsets are related to the domain as a whole. The study selected a domain with the most information. Spradley (1979, pp. 142 -153) describes the 8-steps procedure of completing a taxonomic analysis.

Step 9: Contrast questions

"The meaning of a symbol can be discovered by finding out how it is related to all other symbols" (Spradley 1979, pp 157 – 159). Contrast questions can frequently confirm differences and similarities among a large group of folk terms. In order to discover contrasts, the field notes and transcripts were reviewed to look for statements that would suggest differences between two folk terms in the folk analysis.

Step 10: Componential analysis

The differences that emerged from the few contrast questions and from reviewing field notes provided further attributes and meanings associated with the cultural symbols. The meanings were organized in a systematic fashion to identify missing contrasts. Componential analysis can be completed through in 8 steps as described by Spradley (1979: 178 – 184).

Step 11. Cultural themes

While keeping tabs of the small details, the study kept in mind the broader features of the cultural landscape.. This was important for discovering conceptual themes that the informants used to connect the domains. Cultural themes are larger units of thought. They consist of a number of symbols linked into meaningful relationships. These themes are assertions that have a high degree of generality and apply to numerous situations. The study discovered themes from listening keenly to informants and an inventory of data like sketch maps, examples and condensed data.

Step 12: Write up

The aim of the DRS methodology was to find the cultural meanings of the Samburu elephant-relationship and translate the meanings in a way they can be easily grasped. The dissertation inter-links universal themes and direct quotes from the transcript documents using descriptive statements to make reference to taxonomies and paradigms that sum up a great deal of information.

2.3.2 Secondary data

The study gathered secondary data in form of records, reports, policy guidelines and periodic documents from Kenya Wildlife Service (KWS), Save The Elephants (STE) and Kenya National Archives (KNA).

2.3.3 Mapping

During the field project, satellite positions were taken at every interview location using a hand-help Global Position System (GPS) gadget, model Garmin GPS 12. The study used two topographic maps (the British Army Kenya Training Areas scale 1:250,000; and a general map, scale 1:500.000) for position referencing and information. The general map was registered using MapInfo 6.0 software package for basic spatial analysis. (Map attached for reference of locations mentioned in this thesis).

2.4 Validity and credibility

A third, and sometimes fourth party approved most of the English transcriptions. The methodology enhanced the credibility of data presented in this dissertation. The data was validated from repeating same questions to different informants (Appendix 1). Primary and secondary data was also interpreted using authentic Samburu anthropological literature, and other relevant types of Samburu ethnography. Most of the primary data were first hand accounts. In other words, the general methodology gives the study its credibility and renders this ethnography authentic.

Chapter 3

Samburu thoughts about elephants and their characteristics

3.1 Introduction

The elephant's unusual body formation, peculiar characters and mysterious behaviour raise a lot of curiosity in the Samburu society. In a study about animal symbolism among the Samburu people in Marsabit District, informants referred to an elephant as an old woman (Fratkin 1974). Asked why, the informants remarked: "The elephant has breasts, the same as an old woman, and her vagina is in the same place – no difference" (1974, p.3). The informants were shocked when Fratkin suggested that the elephant's trunk reminded of something possibly similar to a man. The informants replied that there was absolutely no relation between an elephant and a man (1974, p. 4). Kuriyan (2001, p. 13) recorded similar comparisons, and added that Samburu compare the elephant proboscis with the human arm and elephant skin with human skin too.

To make the symbolic meaning apparent, Fratkin introduced a local folk tale about elephant disobedience to God and the consequent punishment. Using Levi-Strauss' structural analysis theory, Fratkin classified the folk tale is a metaphor for actual rivalry not between God and elephant but between man and woman. On the other hand, Kuriyan stated that the comparisons connote high respect and positive attitude of Samburu towards elephants. Both anthropologists show elephants in some aspects of Samburu thought and society. Some of these aspects are discussed below. Interpretations of animal symbolic meaning are catered for in relational theories of meaning, which state that all cultural meanings are created by using symbols (Geertz, 1973).

This chapter celebrates the knowledge and insights of Samburu understanding of and interdependence with elephants. The analyses are superficial but, and most important, highlight salient cultural meanings of elephant characteristics in the Samburu society. The chapter provides a basis to discuss elephant cognition and local empiricism in the society.

3.2 Methods

Data was gathered and analysed using the DRS technique (Chapter 2). Three publications, namely: Mols (1995), Mols (1996) and Brightwell *et al* (1998), were consulted to confirm spellings of the local names and terms. Bronner (1990) was also consulted for botanical names of plants mentioned by the informants (Appendix 8).

3.3 Results

3.3.1 The physical appearance

While talking about elephants, informants habitually connected a body part with its function to emphasize their speech. For example: "…as an elephant ate with its mouth…" or "…the elephant saw with its eye…" etc. In a language, such emphases are poetic (Jan MacDonald, pers comm.). The study did not analyse them to understand their meanings and important in the Samburu society. However, certain names and terms seem anomalous to their functions. The cultural meanings of a few anomalous terms are discussed below.

Figure 4: Samburu topography of an elephant

3.3.2 Habits and characteristics

The informants reckon that bulls, *laingoni* and cows have different appearances. Generally bulls are taller and larger than cows. Bulls tend to dominate cows and stronger bulls dominate other bulls. Cows have smaller and weak-looking 'teeth'. Bulls have bigger 'arms' (proboscis) than cows.

Elephants use their 'teeth' (tusks), 'arms' and feet to feed by grazing, browsing and digging. Tusks are used for defence and they break easily when feeding, lifting heavy loads or fighting. Many elephants in Samburu have broken tusks. Samburu have local names and terms for elephants with different tusk appearances (Appendix 7).

Elephants have poor eyesight and depend on the sharp hearing and acute sense of smell to detect danger. They smell with their 'arms' (proboscis), which are said to be versatile, sensitive and delicate. During a confrontation with a herdsman, an elephant protects its arm from spears by tucking it behind. Although elephants have a weird gait, which resembles an old man walking with the help of walking stick, *sotua*, elephants reportedly 'run' faster than people. The best defence when attacked by an elephant is to hide behind a bush, in a ditch, or rock boulders and run later.

Informants said that elephants have a tough hide and skin which rubs the acacia tree trunks smooth. In old, or in poorer body condition, the elephant's hide tends to hang loosely on the body. As an elephant gets older the cracks on its soles grow bigger. According to Samburu, an elephant's lifespan is nine age sets; a human being lives for 11 age sets. Bulls are said to outlive cows. The lifespan of a Samburu is eleven age sets. (Appendix 7 describes in detail methods that Samburu use for determining the age of individual elephants).

3.3.3 Kinds of elephants

3.3.2.1. Hot and cold elephants

Informants reckon that from observing elephants during migration over many decades, Samburu can classify elephants on the basis of their reaction to people and livestock, natural behaviours and physical appearances. Elephants from the

highlands, generally known as *osupuko*, namely Loroki, Sarara, Kirisia and Rumuruti forests are said to be highly tolerant of people and livestock. Sometimes the come close homesteads to browse on Acacia trees. Elephants from the lowlands, generally known as *lpurkel*, especially from Samburu National Reserve, are known to be short-tempered and are very aggressive to herdsmen. According to the informants, the difference in character is caused by the kind of food elephants eat. Elephants in the highlands eat cool vegetation, hence their calm behaviour. Elephants from the lowlands *lpurkel* eat 'hot' plants, hence their bad temper. (Appendix 8 shows a list of local names of several cool and hot plants eaten by elephants).

3.3.2.2 Unit groups

Elephants live in distinctive social unit groups. A unit group is known as *mboo o ltome* (translates to 'group', 'enclosure' or 'kraal' of elephants). A unit is composed of a dominant bull, *sangalai*; one protector, *ngamitoni*; other cows, and their calves, *nguoo*. The cows in a unit group cooperate to care and protection all calves in their group. Adult cows in a unit group are not sisters or close blood relatives. The cows come from different groups and areas. After giving birth at least once, a female off spring wanders off to join other unit groups or forms a new group with other wandering young cows from different groups, if they are friends. Members of a unit group have unique peculiarities common characteristics and appearances, for instance, broken tusks, worn ears etc (Appendix 7).

Unit groups don't mix except during migrations whereby move together. Normally groups avoid each other and pass their own way. A unit group is composed of between five and twenty individual animals. A bull adopts a family unit usually by displacing the incumbent or by being opportunistic. Bulls are stronger than females and hence they impose themselves on the family and assume the role of the overall leader. Therefore, a unit group experiences bull turnover but cow-cow relations are stable and long term. A group can be destabilised by poaching or extreme climatic conditions like drought and floods, or an irreconcilable quarrel.

A unit group has two types of leaders: the bull, *sangalai,* and the group protector female, *ngamitoni*. Each has unique characteristics and leadership duties (Appendix 7). Informants used the term *sangalai* (plural s*angala*) to refer to any solitary bull elephant. Solitude arises when the bull is displaced as the dominant bull from a unit group either. The term was also used for referring to a non-breeding bull in a unit group. Also, a solitary sick bull was referred to as *Sangalai*. *Sangalai* is a brave and fearless elephant is responsible killing people and livestock. *Sangalai* is known to wander of to search for rain and returns to take its group to the rains (Appendix 7).

Ngamitoni is a resolute leader. The term n*gamitoni* means 'protector or guardian'. *Ngamitoni* is a 'middle-aged middle-sized' cow usually with her own calves. Above all it is known as the most aggressive and dangerous individual in a group. The animal must be strong and agile, but not necessarily the smartest in a unit group. According to the informants, *ngamitoni* is the prefect of her group except when *sangalai* is present. Sometimes *ngamitoni* chases away *sangalai* or even frustrates the bull just to 'get it off their backs' for a while. *Ngamitoni* is not the oldest female in the group. In old age, an *ngamitoni* retires and her eldest daughter takes over. Generally an old cow is known as *narikon*i.

3.4 Discussions

3.4.1 The elephant tribe

Severally, informants abruptly ended a question line with the phrase: "That is how the elephant tribe is…" This phrase was frustrating and dismissive but the meaning became apparent during analysis. According the informants, elephants are a distinct 'tribe' and live in a functional society composed of social units.

The elephant tribe is composed of individual elephants with their unique character traits; distinct unit groups; a power hierarchy or order among bulls and a system of 'administration' entrenched in the institutions of *sangalai* and *ngamiton*i. The Samburu people perceive the elephant tribe as a social functional unit. Each aspect of an elephant is dependent on the state of the elephant tribe as a whole. Variations within the elephant tribe arise from prevailing environments.

The Samburu people use their own society and their livestock as point of reference in explaining and understanding the elephant tribe. The proximity of elephants to Samburu society makes people observe and describe the animal using similar terms. A good example is the term for unit group, *mboo*, which means "a group, enclosure or kraal". In Samburu society, different families from different clans not related by blood usually live together in the same enclosure or kraal. This may be the reason why the informants said that elephant *mboo* too are composed of a cow and her offspring, as well as other cows not sisters. In the Samburu society, married sisters don't live in the same enclosure. Each elephant *mboo* has a sangalai; a Samburu enclosure or homestead has a dominant male or father figure.

According to the informants, elephants are not the most dangerous animals. Lions and solitary buffaloes are the most dangerous and dreaded. Old and solitary lions and lioness depredate on livestock at night – hence a lion can be a thief or grabber. An informant put it: "you can have a fair and reasonable fight with an elephant". An elephant can be a bully. The elephant tribe is described in both human and non-human terms.

3.4.2 The meaning of names and terms

From Figure 4, it is clear that the informants describe an elephant's anatomy according to the major (and not minor) functions of an organ. Eyes are used for sight, the skin for covering the body, teeth for eating and defence etc. Some terms are more relevant to humans than to animals e.g. the breasts, vagina and the penis.

In addition, a body part composed of several parts, or it can have different names (Figure 4). For example there are different names for front legs and hind legs. The tail and tail tip have different names. The Samburu nomenclature refers more to the functions rather than the structure of the organ.

Based on this premise, a contradiction arises. The proboscis is called 'the arm' and the two projections at the end of the 'arm' are called fingers. According to the informants, it is not anomalous to position 'the arm' on the face just above the

mouth. The proboscis' other important function is to detect scents. For elephants, detecting and touching objects is done with 'arms' rather than noses (a term never associated with the proboscis). In fact, the term "nose" has a negative connotation to the Samburu. For example, the Turkana tribe, which the Samburu people generally despise, is known as *nkumei*, (which translates into noses). The term is definitely derogatory and referring to 'the proboscis' as a nose is spiteful, according to Samburu. Hence the most appropriate term is 'the arm'. In common English, the proboscis is known as a trunk – a term more ambiguous than 'the arm'. The arm is a more appropriate term, its apparent contradiction notwithstanding. This explains why Fratkin (1974, p. 13) said the informants were shocked and disgusted when suggested that the proboscis resembled a human penis. The informants were reacting to the apparent folly of the anthropologist rather than the suggested comparison between males and females, as Fratkin interprets it.

In addition, the informants referred to the wildlife-protected National Reserve protected as the 'lodge'. In their perception, the main tourist lodge built gives the Reserve its character. The lodge is private property and this aspect symbolizes the prohibition of the Samburu people and their livestock into the Reserve.

Some names and terms are presumptuous of their function and structure. When suggested that an elephant has no external scrotum (which is a scientific fact), informants disagreed. The Samburu term for penis, *nderege*, means both penis and scrotum and not just one of them. The term suggests that bull elephants have it. It is a taboo to discuss or mention female genitals, even when referring to an elephant.

Some local names and terms are unique. For example, no other animal has *sangalai*, although the term can be used for solitary bull cattle to symbolize elephant behaviour. The informants used the term *laingoni* to refer to a sexually active bull and s*angalai*, to refer to the same bull when sexually inactive. The term *sangalai* indicates a considerable degree of the bull's aloofness and detachment from a unit group. For cattle, a castrated bull is called *mong'o*.

3.4.3 Is the elephant an old woman?

Elephants have loose skins like the many hanging cloths of an old woman, as the anthropologists suggest. Also, an elephant's mammary glands look shrivelled like the breasts of an old woman and positioned in the 'chest' between the front legs as all women. In addition, the elephant's gait resembles an old woman or man with a walking stick.

Elephant skin seems to hang loosely and develop belly flaps, *njelata e njoni,* in sickness, famine or old age. The flaps resemble the cloths of Samburu women, who, unlike the men, wear three pieces of cloth. Each cloth has a specific name. The names are different for married and unmarried women. A married woman wears the back skirt, *legesana*, the back top, *likila*, and the front top apron, *elgela*. Therefore, all women in the society have hanging cloths on their body. The question of old women wearing them loosely or being shabbily dressed is debatable.

Unlike lactating mothers and maidens, the middle-aged and old women are not required to cover their breasts in public (hence the chauvinistic comment). According to informants, it is the flabby looking breasts of middle-aged and old women compare with those of an elephant. Both men and women using a walking stick have the same gait as an elephant. Lastly, the vagina is a taboo subject in the Samburu society and would not arise as a point of hidden reference or inference in a metaphor, as Fratkin suggests.

Samburu descriptions of a unit group *mboo*, *sangalai* and *ngamitoni* provide more appropriate symbols of gender opposition in the Samburu society. There are many aspects of an elephant, not one or a combination of a few, which symbolize the Samburu society. More in-depth functional and structural analyses would indicate that the elephant tribe is an appropriate metaphor for the Samburu society. Such analyses would, perhaps, show 'why the elephant is a Samburu'. The themes in this chapter are revisited later in the dissertation to reflect on their significance in understanding the cultural meaning of elephants in the Samburu society.

Chapter 4

Elephants and their surroundings in Samburu District

4.1 Introduction

Chapter three shows the Samburu understanding of individual elephants. Chapter 4 looks at elephants as animals in the Samburu social thought. Symbolically, anthropologists and their informants often treat salient animals as mythic rather than real objects (Richards, 1993). This chapter shows elephants have a nature that is possible for local people to know through local empiricism.

4.2 Methods

The DRS technique (Chapter 2) was applied to gather and analyse data. In addition, topographic maps were introduced to locate specific locations mentioned in an informant's story. One topographical map was used for finding specific locations using readings from a hand-held Global Positioning System (GPS) devise.

4.3 Results

4.3.1 Some aspects of an elephant's life cycle

Informants described the age grade of elephants in different ways. An adult can be calf-bearing cow or post-breeding female, or a bull capable of competing for mating. Old cows, *narikoni* and old bulls, *sangalai* don't mate or breed. Mating takes places in the lowlands, *lpurkel* during the rainy season between October and December. Informants said that elephant mating events are full of excitement and noisy. Oestrus cows run away from bulls and scream when bulls approach and pursue them. Bulls make low rumbling noises but don't scream. A bull subdues a stubborn and unyielding oestrus cow from drinking water for about three days. On the fourth day, as the female drinks, the male mounts. Before a bull pursues an oestrus cow, it ejects all other 'junior' bulls and becomes the dominant bull. A stronger bull can displace the consorting bull; this may lead to a fight between them.

The gestation period for elephant is *lari naare*, (a local term meaning about two years). Informants said that cattle would give birth twice before an elephant gives birth once. But a donkey would give birth only once in the interval. Elephants usually give birth at night. No informant has ever witnessed a birth. Usually, people see an elephant with a new calf in the morning. She buries the placenta in the ground, stamping on the mound with her feet and rubbing it with her belly. New calves are very weak and so new mothers stay in the area before embarking on a journey. Other females are patient with a new mother and its calf. Cows with younger calves are rather pugnacious to people and protect their calves aggressively. Those with younger calves are more dangerous. Cows seldom abandon or loose their calves, even during sickness.

Informants said that an orphaned elephant calf could become solitary if it had no elder siblings or friendly cows to care for it. A calf can become solitary is rejected by its group and mother after a lion 'urinates' on the calf's back. Elephants hate the revolting smell of lion urine. Lions relish elephant meat but elephants are difficult to hunt. After the calf is ejected, the lion stalks it for a few days and then kills. The STE research programme and KWS occurrence books show records of solitary calves killed by lions inside the Samburu National Reserve but the reasons for solitude are not known. Informants said that elephants abandon calves that fall in deep wells. Monthly reports at Namunyak Trust in Wamba show five elephant calves were abandoned after falling in wells around area in 1999 only. But some females never give up, as shown in an intelligence report of December 1947: "Two young elephants fell into a water hole near the vet station on 21st December. Their mother killed a cow and chased local as it tried to save her young. Later, the young elephants were pulled out and set free. Fortunately, it was not necessary to shoot the mother" (KNA ADM 15/1/5 – December 1947, p.3)

4.3.2 Response to human danger

Informants said that no enemy is worse to an elephant than a human being. Elephants know people can be dangerous and hence get nervous when close to Samburu. Generally, elephants avoid human settlements and usually pass them

quietly at night, close to one another in a tight group formation. Even a solitary bull feeds quietly inside a homestead to avoid raising an alarm.

A warning call prompts a unit group to stop abruptly and lift their proboscis in the air to determine the danger by through scent. If they fail to find the object, n*gamitoni* makes at least two short screams indicating that the danger is still lurking. This triggers off a *sangalai*, to move around searching for the danger in the nearby bushes. Soon the group resumes feeding but remains alert for any signal to regroup and flee.

A highly provoked elephant makes two mock charges with it ears spread open and proboscis tucked behind to protect it from spearing. If it makes a third charge and kneels on its front legs, then it makes a full attack. When a unit group encounters livestock and herdsmen, *ngamitoni* controls it from attacking cattle by whipping them with a broken branch. If the cattle are too close, she makes the mock charge and her group follows closely behind. No two elephant attack simultaneously. A *sangalai* rarely retreats (Appendix 7). An attacking elephant walks sideways, '*lmarangu*' to protect their proboscis and ears from spearing. It stabs with its tusk and crashes the victim between its front legs. When a *sangalai* kills a person, it seldom walks far from its victim. It covers the body with branches, an act known as *asai*, which means 'blessing the dead'.

In the 1970s' and 1980s'at the height of poaching, informants said that elephants sought refuge in thick forests and inaccessible thickets. They still travelled to the lowlands but dragged tree branches behind them to wipe their tracks and evade detection. During this period, elephants avoided walking on human paths. They resumed their movements after poaching stopped. To date, elephants still avoid risky areas, especially the northern parts of the district.

When Samburu attack an adult cow elephant, it usually begs for mercy by picking up sand, touching its breasts and then extending the proboscis with the sand towards the human attacker. If lactating, the cow draws milk for the same submissive act of surrender.

Adult elephants die from non-human causes too. Apart from falling to death on cliffs and in human-made wells, elephants suffer and die of several diseases, notably the contagious *lokuchum* (a name for anthrax and general conditions). The main symptom of *lukuchum* is prolonged leg swelling and pus oozing from the wound on the swelling *septicemea*. The disease affects people and cattle too. The disease occurs anytime of the year but mostly during the long dry season. Only God knows what causes *lokuchum*. Elephants contract liver fluke or leaches, *ilmolog*, from contaminated water. Symptoms of a serious *ilmolog* infection are: blood oozing from the proboscis, penis and vulva. Several informants claimed to know about elephant abortions, premature births and stillbirths. Elephants also suffer a kind of partial blindness, which causes watery eyes. Informants said elephants could die from eating the poisonous plant, *Ilkisiriko* common along the Waso River. Most informants claimed that elephants smell the sickness of other sick elephants and avoid them all together.

4.3.3 Distribution and migration patterns

Informants said that the elephant distribution pattern in Samburu District can be described in three ways: first, areas to find elephants throughout the year; second, areas to find elephants only during migration; and third, areas where elephants are scarce and rarely found any time of the year. The pattern changes frequently, both in specific areas and the district in general due to four main and inter-related factors, namely: the intensity of elephant killing for food and ivory, vegetation cover, human density (the number of people in a given area), and aridity.

Using a general topographical map (scale 1:500,000) showing the physical and general features of Samburu District, informants in Ndonyo Wasin, Lerata and Gogoltim described elephant distribution in Samburu District (Appendix 9). Elephants are found in 90% of the district at some time of the year. Most of the lowlands have elephants during the migration periods only. The animals travel to salt licks in the dry eastern parts of the district during the rainy seasons.

Informants claimed that Samburu District is the meeting point for elephants in northern Kenya, about 100 kilometres radius of Ololokwe or Sabache Hill. All migrating elephants (mainly from Rumuruti, Oldonyo Ngiro, Loroki, Kirisia, Marsabit, Mt. Kenya and Marsabit) meet in the Lerata plains during the rains and disperse in the nearby mountains around the Mathew Ranges. Elephants migrate between the highlands and the lowlands in search of better food and water after the rains. The changes are unevenly distributed in the district (Synott, 1979a). A little amount of rain stimulates a prolific herbaceous growth in the lowlands (Bronner 1989, Synnot 1979a). Elephants feed both during the day and night. Local people believe that an elephant eats all kinds of plants. This is illustrated by a common blessing for unity among all clans of the Ilmasula phratry: "*Maata ngae o ltome*" (let us be like the stomach of an elephant).

Informants said that in the rainy season, elephants make and use their own water pools known as *olturot* and *mailoti* in the lowlands. They wallow and drink from the same water pools during the migrations. All water pools have local names and the Samburu use the pools too. Some pools are more than 70 years old and still in use. Informants said that elephants don't make water pools in the highlands.

Appendix 9 contains a detailed description of the migration cycle, detailed maps of the migration routes and distribution of water pools in the district.

4.4 Discussions

4.4.1 Nature of elephants in Samburu District

The results show local knowledge about elephants in Samburu District. Informants defined residency, not according to the duration of stay of individually known elephants in an area but the presence of elephants. Using specific characteristics, some individual elephants are known to live in an area for a considerable length of time.

The informants emphasised that elephants have been migrating in the rainy seasons since time immemorial. This assertion differs to some extent with Thouless (1993) who states that the elephant migration intensified southwards into

Laikipia District during the poaching era in the 1970's and 1980's. Informants and historical information show that elephants in Samburu District have been under heavy poaching and hunting pressures since the 19th century (Appendix 9). The question is how past and recent poaching sprees affected the migration pattern. Informants claim that although migrations still took place, most elephants sought refuge in the impenetrable forests of Loroki, Kirisia and Ndoto. Many hid in Rumuruti and Mt. Kenya forests too and dispersed to the neighbouring lowlands. Since the end of rampant poaching in 1990, elephants have returned to their migrations routes and waterholes. Informants said that elephants highly intelligent and have good memory.

Elephants migrate in and out of the district during and soon after the rains. Samburu District has a 'trimodal' rainfall pattern and receives more rainfall in the lowlands during the normally short rains than the long rains. Rains are erratic, torrential and unevenly distributed (Bronner 1989). The informants are well conversant with the elephant migration cycle (Appendix 8). Elephants are found almost everywhere in the district, except the north.

4.4.2 Living with elephants

People and elephants occupy the same areas throughout the year. During the dry season, local people graze their cattle on the hillsides, nearby forests, Loroki plateau and the lowlands east of the Mathews. Herdsmen reportedly use pathways and tracks created by elephants in the impenetrable forests to herd their livestock. Local people share water springs and salt licks in the lowlands with elephants. The co-existence is unavoidable.

Samburu regard elephants as mighty and dangerous animals. The knowledge underscores local trepidation towards elephants and symbolic of human anxiety in the Samburu society. Samburu say that knowledge and intelligence about a rival helps to win 'an argument' with that rival. The more predictable 'the rival' the lower the chances to avoid losses. Because elephants are mighty, common, intelligent but unpredictable animals, Samburu observe elephants closely to avoid losing more in the co-existence.

Specific examples illustrate the statement about the Samburu trepidation. For instance, local knowledge about elephant's contagious diseases is more of a concern for livestock herds. Also large numbers of elephants in an area are risky, especially to unwary children. More vigilance is required; the tension is stressful during migration. People and elephants compete for and share water and pasture. People subsist on the elephant water pools as elephants invade human-dug wells sometimes with fatal outcomes. Local people have given names to all elephant water pools using descriptive terms that characterize each pool (Appendix 8). These names are messages codes for Samburu herdsmen.

Local people observe elephants keenly. An elephant gathering means a migration is imminent and rain is expected soon. Elephants use their routes during migration without changing them unless forced by unavoidable circumstances. Therefore, Samburu know the routes and don't build settlements in the middle of an elephant highway. Bulls are extremely unpredictable and are watched closely. Elephant's migration out from an area gives people respite and a sigh of relief. The sudden appearance of bulls in an area heralds the coming of rains. Rainfall means that the neighbourhood will soon be teeming with elephants, thus raising a need for more vigilance to avoid attacks.

4.4.3 Local knowledge about elephants

Samburu build their knowledge from a wide variety of first-hand experiences and their interpretations through the belief system in the society. The beliefs are merged with experiences to build local theories about elephants and their behaviour. The local knowledge about elephant social structure and behaviour is comparable with the findings of elephant researchers. Many animal behavioural researchers concur that elephants groups are composed of female relatives and their calves (Douglas-Hamilton 1972, Moss 1988, 1996) and that males have peculiar reproductive behaviours (Poole 1987, Rassmussen, 2000). The Samburu believe that genetically unrelated adult females make up elephant unit groups, *mboo* (Chapter 3). In their adult hood, sisters live separately in different *mboo*. Also, each group has a dominant male leader, *sangalai*, whose mating rights can

be usurped by a bigger, fuller, and healthier bull, *laingoni*. Each group has a female leader, *ngamitoni*, who is middle aged, aggressive and very intolerant. But in a group, older females, *narikoni*, are wiser. This local knowledge differs with published theories about the social organization of elephants (Douglas-Hamilton 1972, Moss 1988).

Elephants in Samburu District die naturally, mostly from diseases. KWS records and past government reports (Appendix 9) record cases of 'many' elephants in the district were dying of anthrax. In spite of the high number of elephants reportedly dying from natural causes, no systematic study has been done to determine the actual causes of death. The local people say elephants die naturally from *lokuchum* (including anthrax and septicaemias), liver fluke and blood poisoning from eating *Ilkisiriko* plant along the Waso River. Calves are predated by determined lions who urinate on the calves killing them for food.

Radio-telemetry collars on elephants in Laikipia and Samburu Districts show that both adult bulls and cows move great distances for various reasons, mainly food and water (Thouless 1988, Douglas-Hamilton 2001) and probably for reproductive reasons (Rasmussen, 2000). According to the Samburu, females move from area to another in response to rain. Bulls move mainly to confirm the occurrence of rain in an area (Appendix 7). Unlike the unit group, bulls do not follow regular migration routes on while on their mission.

4.4.4 Local empiricism

This chapter clearly shows that the Samburu symbolically employed elements of the natural world in their own cultural framework. This is common with other ethnic groups in Africa. Imageries of wild animals in African traditions arise from actual observations (Ross 1992a). Local natural history is often 'good science' that makes a worthwhile contribution to the global stock of knowledge concerning animals and plants (Douglas 1954; Richards 1993) and that local 'natural history' interacts with 'natural symbols' in ways that are complex and not always easy to anticipate.

Chapter 5

Elephant symbolism in the Samburu Society

5.1 Introduction

In every society, people relate to each other, to animals and to nature. Social anthropologists have long been interested in the relationship between animal symbolism and social organisation (Levi-Strauss 1963). They stress the relationship between specific social segments and various animal species to emphasize on the role of animal symbols in the articulation of social structure.

This chapter draws upon ideas central to this interpretive style. While recognising the social correlates of symbolic systems, the focus is elephant symbolism in the Samburu society rather than to specific social segments. Again, the analyses are superficial but the chapter provides deeper insights of elephant symbolism in different aspects of the social structure in the Samburu society.

5.2 Methods

Data was gathered using the DRS technique (Chapter 2) and non-participant unobtrusive observations. During five wedding ceremonies, two things were observed. First, the elders' prayer in the new hut '*nkaaji naibor*' (translates to 'white house') for newly weds; and secondly, the proportion of warriors adorned with ivory earplugs (Pavitt 1991, Kasfir 1992, Spencer 1965). The proportions were noted in villages, towns and trading centres too. Photographs were kept as records

5.3 Results

5.3.1 Oral narratives

5.3.1.1 Figurative speech

Samburu frequently use figurative speech in their daily talk. During the study, an elderly informant said: "I have Rendile heritage but have lived most of my adult life among the Samburu people. If you go where people eat elephants then eat elephants as well. I have eaten elephants in Samburu". The 'eating of elephants' is

an idiom given as advice for tolerance and harmonious co-existence with people in other societies. Also, Samburu may also refer to a crime as 'to eat an elephant'.

A fellow pedestrian who slows down and lags behind is cautioned: "don't be such an elephant". Old elephants walk slowly and trail others along the way. Some informants said the idiom is mostly used to chastise women, especially wives. Men tease their age mates or juniors using the same expression. An obstinate person is said to be 'as tough as an elephant skin'. This means to be "thick-skinned" or to be "impervious to change or influence".

The study collected only one chorus sang by Samburu children asking the elephant about its long journey. Samburu don't sing about elephants or killing of elephants. Unlike killing a lion, buffalo or even a *shifta* bandit, killing an elephant is not considered heroic or an act of good riddance. When a warrior kills a lion, he cuts both its ears and takes them home singing loudly. At the village excited women pour milk and tie beads around the warrior's neck to recognize and celebrate his bravery.

Samburu women usually express their experiences in life through songs. At a recent local gathering in the home of the local Member of Parliament, a group of women from Wamba town sang the following verse in their song: "We would like to drink more elephant's milk". "Milk" is an essential food in the society and in this case it symbolizes "income and economic benefits". "Elephant's milk" specifically means economic benefits from wildlife-based economic projects. The phrase was used to appeal for more such projects to benefit local people.

Another women group from Kiltamany village sang: "…we have not only drank the elephant's milk but we have also tethered (tied a rope around the neck of) the elephant". 'To tether the elephant' was a new phrase; in local thought to tether an elephant is an unimaginable feat. When asked to explain its meaning, the women said that Kiltamany people occasionally participate in scientific activities done by the STE elephant research programme to collar specific elephants inside Samburu

National Reserve in order to monitor their movement patterns. Therefore the verse was not figurative speech but was a reality.

5.3.1.2 Folk stories

Informants were asked to explain the traditional relationship between people and elephants. In response, each narrated the same folk story about an irreconcilable argument between a woman and the elephant, which ended the harmonious co-existence between Samburu and elephants. The story was first collected by Kuriyan (1999b). The study analysed the version of informant MLLK, interview LE120501 (Appendix 5).

The version varies with Kuriyan in several aspects. First, Kuriyan attached a gender to the elephant in the story. Informant MLLK did not indicate whether the elephant was a 'he' or a 'she' but referred to the elephant as 'it'. Suppose the elephant had a gender, an in-depth symbolic analysis would readily reveal its gender connotative meaning in the society. A further analysis would show many aspects of the Samburu's perception of the natural world and as well as interrelationships between phraties, clans and sub-clans. Kuriyan noted that *ngamarie*, the cowhide that became the elephant's ears is a sleeping mat. But *ngamarie* is a cowhide wall cover for a Samburu hut. Amongst the Ariaal and Rendile, *ngamarie* is used for covering the doorway. During my visit to an Ariaal homestead in the outskirts of Laisamis town, I notice that *ngamarie* actually resembled two elephant ears joined in the middle. The door cover of a Samburu hut looks different. In the Masula version of the story, the woman is said to have told the elephant as it stormed out of the village: "Go, my child, but we will always meet in the same wilderness…" The Masula are considered the dominant phratry in the Samburu society. Therefore, this position is revealed in the story where it's the woman who told the elephant and not the elephant who told the woman.

The study gathered two other stories (Appendix 5), including one similar to that recorded by Fratkin (1974).

5.3.2 Beliefs and rituals

The Samburu people have many beliefs about elephants, some of which appear in Chapters 3 and 4. According to the woman-elephant story, Samburu believe that elephant was a human, and lived with humans until the argument with a Samburu woman. But it is still a 'favourite child' in spite of the separation. Therefore, when Samburu find an elephant skeleton, they show it the same respect for the human dead, *asai*, by placing a green twig, stone or smearing ochre on the elephant's skull. The performer says a short blessing (not a prayer) when performing the rite. The prayer's intro depends on age group. 'My child' (for elders), 'my brother' (for warriors and boys), 'my sister' (maidens), I have seen you. Sleep in peace". No other skeleton is accorded the same respect but human graves and elephants.

Samburu believe that an elephant placenta, not buried or partially eaten by scavengers, is a harbinger of good luck and prosperity. The placenta is transported home using a donkey and buried in the homestead right in the middle of the cattle enclosure. A few days after the burial, many white insects known as *nkurui* (no English or latin term was found) emerge as the placenta decomposes. At the end of it, the homestead prospers and the man who buried it becomes very rich indeed. Elephant placenta is hard to find because elephants bury them deep into the ground.

Samburu rarely name people after plants or wild animals unlike other tribes like Maasai, Kikuyu etc. Only one family in the whole district is known to have at least an elephant nickname. It is the Loltome family. Its real name is Lesamaja and it hails from Baragoi and belongs to the Masula and Loimisi phratries. An informant in Baawa has an elephant nickname given after birth because her maiden birth call resembled an elephant's scream. Samburu get new names at marriage. These are the only meaningful names.

To protect babies from dying at birth, Samburu fix a necklace talisman, *riati*, made of ivory on the child immediately after its birth. Death of children at birth is known as *ndarunoto*. A child wears the talisman in his or her lifetime. The person who provides the ivory and makes the talisman is rewarded with a heifer and becomes a special family friend. Some males of Lanat clan in the Pisikishu pratry wear an ivory talisman as protection from elephant curse suffered their ancestors who hunted elephants. Lanat are descendants of Ndorobo, a hunter-gather tribe in the district. Death from famine, war and disease is a kind of *ndarunoto* as well. During the infamous famine in 1890's, nicknamed *mutai*, the family of Lolmodooni was badly devastated and only two boys survived. During circumcision, where boys loose a lot of blood, the boys were given ivory bracelets to protect them from death and confer them blessings to prosper and retain their family line. To date, boys of the Lolmodooni family must wear the ivory bracelet, *rap* during circumcision. Many other Samburu families protect themselves from *ndarunoto* in a similar way. Today, ivory armlets are not possible for all such boy. Therefore, a family bracelet is circulated around and passed on from one generation to the next to be worn by the eldest circumcision boy of the family, while the rest wear white bangles instead, during circumcision ceremonies. Some elders in Porro wear their bracelets to date.

5.3.3 Religion

Elephants feature prominently in several Samburu religious activities. At each and every Samburu wedding, elephant dung is compulsory for making the nuptial fire in the newly wed couples first hut, *nkaji naibor*. Rubbing two firesticks from ilgoita and ntarakwai trees makes the fire, which symbolizes life, light and warmth in the new home. The Masula phratry uses any kind of elephant dung available in their vicinity. Other clans insist on using four boluses of a young elephant to symbolize purity. As the fire burns, the elders say a common prayer, which includes the following verse: "May your marriage last nine age sets like the lifespan of an elephant bull". Only elephant dung is used for making fire in the sacred kraal, *kulal*, in every traditional homestead; and *kulal* of the ceremonial enclosures, *lorora*, where *ilmuget* ceremonies are held. Also, as cattle return from

long-distant pastures, Samburu burn elephant dung at the cattle gate as the animals enter the homestead. Informants said this is a compulsory blessing.

During every new moon, all *lais*, (a Samburu term for those families with an unusually potent curse) perform the monthly ceremonies known as *ara lapa* in the early evening of the first night of the lunar cycle. The ceremony is done using two pieces of ivory dipped in hot ashes and then used for smearing ochre on the forehead of and right hand chest of boys. The girls are smeared in the morning. The blessing ceremony is done to avert misfortune to the family and its members in the course of the following cycle. All Samburu *laisi* claim descent from Rendile, and maintain their power by performing the same ceremonies each new moon and at the birth of a son (Spencer 1973: 62, 116, 126). About one out of every 10 families in the white cattle moiety among the Samburu is *lais*.

5.3.4 Taboos

Although Samburu can kill an elephant in defence, it is a serious and irresolvable taboo to cut or knock the face of a dead elephant. Any Samburu who does this naturally inherits the curse of death, *ngooki*. However, Samburu can pull out tusks from a dead and decomposed elephant carcass without knocking the head. If a tusk is hard to come off, a Samburu knocks it hard to break of pieces for making earplugs and a talisman for *ndarunoto*. Chopping the face or knocking the head is hideous and unpropitious.

It is taboo to eat elephant flesh for food. Eating elephant meat is considered to be cannibalistic. During the famous Mutai famine, which occurred in 1890's (Sobania 1979), certain Samburu families are known to have eaten elephants to survive. To date, the daughters from such families are not taken in marriage no matter how beautiful or hard working. But sons are allowed to marry Samburu girls. A person who eats elephant meant is stigmatised and adopts an inferior position in the society. Informants said elephant meat must never be brought to the village. All cattle will die instantly from the strong smell of elephant flesh (Fratkin 1974).

Among the Samburu, killing an elephant in whatever circumstances is considered a tragedy and not a heroic act. It is worse to kill, or participating in hunting elephants, merely for ivory or any other malicious reason. Such acts invoke the wrath of a serious curse, *leket* as elephant retribution. The curse precipitates on successive generations in the lifetime of the cursed person. His family degenerates and sinks into misery and desperation. Samburu say that the retribution is not confined to the Samburu society or tribesmen but universal (Appendix 6). After spearing or shooting the elephant during an attack, the person must never pursue it. In most cases, the person does not even report the incident. Traditionally, if the animal died instantly, the killer was not allowed to benefit from its ivory for fear of retribution later in his life. His and age mates would remove the tusks from the decomposed animal and manufacture earplugs, necklaces etc.

Informants said that is also a serious taboo to touch an animal or human victim killed by an elephant. No mortuary rites are given to such human victims no matter how important their status in the society might be. Anyone killed any other animal, except elephants, is accorded the full burial rites. To date, a person injured by elephant is never brought into the homestead until a thorough cleansing ceremony is done on the person. Livestock killed by an elephant are never eaten unlike those killed by other predators and even enemies during a raid. Eating such an animal invokes the curse, *leket*, and it is considered to be the same as having eaten the elephant itself.

Informants said that pregnant women are strictly forbidden from fetching water from a water pool, *olturoto,* with fresh elephant footprints. Doing brings a bad omen to the mother and the unborn child - both would die during childbirth.

5.3.5 Totemic animal

The elephant is an animal of special social significance to the whole tribe and not just to particular segments of the society. However, one clan (Lotimi) and two sub-clans (Talas and Kuro) have supernatural capability to control and ‘command’ elephants. Both male and female, adults and children from these segments possess the powesr. Because of their vulnerability, females and children powers are more

effective than those of adult men. When persons from these segments encounter elephants they must grab sand quickly and throw it towards the animal as a command to dismiss or warn it to give way. If the elephant grabs the sand first, then the person gives way instead.

In case of a conflict, no member of these segments should kill the elephant with a weapon but revenge against the elephant by spitting saliva and pronouncing the curse on the animal. Any member who kills looses the power forthwith. The power is forfeited persons denouncing the Samburu traditional customs. In cases where an elephant kills a cow or a person belonging to these segments, the elephant reportedly dies soon after the curse by falling from a cliff or drowning in a human-dug well. If the disturbance is mild, the elephant may break its tusks or injure its proboscis. The people are known to seek justice by commanding elephants to find and punish their offenders, enemies and nemesis (see Appendix 6 for informants narrative accounts). The powers are 'patrilineal' (i.e. passed on through the father) and never conferred to spouses but to children. Fathers, not mothers, pass the power to children.

In the Samburu society, an elephant attack is not a random occurrence but a supernatural phenomenon. Many elephants die too on their own without any sign of injure, sickness or old age. If an elephant kills a person and stays around the victim without leaving the area, Samburu say the elephant is at fault and therefore must die for the malice. Samburu hire non-Samburu tribesmen usually Turkana or Ndorobo to kill the elephant. But if the elephant kills and flee, it is never pursued because Samburu believes that did it under supernatural influence.

5.3.6 Adornment and decoration

Samburu warriors adore ivory earplugs and wear them as a part of their daily dress code. Warriors procure ivory earplugs in two ways. First, from retiring warriors, and second, curved from raw ivory. Tusks are easy to curve after they are buried in the donkey kraal for several days to soften. One informant said his earplugs were first adorned by a relative of the Kimaniki age set in the late 1940s. Unlike those

made from other material, ivory earplugs are bright, durable and easy to clean. Warriors may substitute ivory for white plastic if the earlobe is fragile.

At three wedding ceremonies, between 70 and 90 per cent of warriors wore ivory earplugs. Although maidens can wear ivory, only two cases were recorded during the study. About 40 per cent of warriors in towns and trading centres wore ivory. There are main three reasons why some warriors had no ivory earplugs or any earplugs at all. First, since the *Ilmuget Ikarna* (warriors naming ceremonies) were done in 1998 and1999, many senior warriors started taking wives. It is a bad omen for a baby to pull out an ivory plug from the ears of its father or break them. To avoid the misfortune, the plugs are removed and given to junior warriors. Second, many warriors fear arrest for being in possession of ivory by Kenya Wildlife Service personnel or the police in towns. Third, Samburu warriors who have Ndorobo or Turkana heritage seldom wear ivory plugs. Therefore, contrary to reports by Pavit (1991) and Kasfir (1993), the majority of warriors still wear ivory earplugs. Informants did not mention scarcity of ivory for earplugs or that the practise is dying.

Plate 1: Ivory earplug worn by warriors

Each Samburu phratry has a spiritual leader, *launoni*, for every age set. All Samburu ritual leaders wear an ivory finger ring to signify their importance and status in the tribe. Before the Kishili age set, all spiritual leaders wore elephant tail tips, *lenyau*, on their chest. But the colonial government and the new government outlawed the practise. During the blessing ceremony to appoint the leader, the elders say a prayer with a verse, which reads: "May you, *launoni*, lead steadfastly and diligently as an active elephant bull".

Plate 2: The ivory ring of a ritual leader *launoni*

5.4 Discussion

5.4.1 The moral order

Legends and myths of the Samburu people emphasize more on the social relations between segments than about origins (Darkwa 1986). Informants said that God created the Samburu people and elephants on the same day. The Samburu take elephants to be humans-like and to be a moral being that can hurt and be hurt.

Informant stressed and emphasized that the story woman-elephant story is the genesis of this particular Samburu perception about elephants.

Informants say that the cultural practices done with elephant by-products are meant to pacify the elephants and restore the proverbial cordial relationship. The elephant is given preferential treatment unlike other useful animals like livestock. An informant said: “we try to bring back the elephant in bits”. This is achieved by bringing back elephant placenta home for good luck, fortune and prosperity. An ivory talisman protects children from ill luck, *ndarunoto*; elephant dung is used at formation of a new family; establishment of elders shrine; and used for blessing cattle returning home after spending most of the dry season away. Ivory is considered beautiful and attractive, and elephants symbolise power in the institution of the spiritual leader.

The Samburu consider killing a human enemy, lion or buffalo as a heroic act. But killing a rogue elephant is a tragedy and not an important event. Because elephants are humans, then eating elephant meat is cannibalistic and to bring it home, unlike ivory and placenta, spells doom to the homestead. This fact is symbolized by the ‘woman-elephant’ story whereby the woman’s insult connoted cannibalism by the elephant. Samburu people don’t eat insects either. The story shows that the elephant was seriously insulted and degraded by being ridiculed with serious taboos in the Samburu society: cannibalism, insect-eater (means extreme poverty), and ill luck. Hence it left the homestead and vowed never to return (being an outcast). But the animal was wrongly accused and hence the efforts to bring it back home.

Killing an elephant with an intention to extract ivory is regarded as ‘murder’ and the culprit pays the price with his whole future. But killing an elephant for retribution is regarded as justice. An elephant’s skeleton receives the same recognition and rites as human graves. No other animal gets that kind of attention. Anything killed or injured by an elephant is an abomination. These observances confirm that elephants belong to the same moral order as people in the Samburu society. The meaning of the figurative phrase “eating an elephant” is now clear.

5.4.2 Thin line

The Samburu say that those ethnic groups or individuals who kill elephants for ivory as a sport, or for trade or any other reason except revenge or food, are cursed eternally. According to the informants, there's no difference between sport hunters and poachers because practices are wasteful habits that invoke the wrath of God, and hence the elephant retribution. Informants said that the curse is a retribution for injustice against elephants. The curse is universal and affects whoever kills elephants for pleasure or to trade in ivory (Appendix 6). The Taita people along the Kenyan coast regard killing an elephant as murder and killers undergo a cleansing ceremony (Ville, 1995).

Chapter 6

The Samburu people and elephant conservation

6.1 Introduction

As an animal species of international importance (Western 1997), elephants are prominent in the Kenya Government's security, research and monitoring, education and extension, tourism and legal programmes implemented by the government agency, Kenya Wildlife Service (KWS 1990).

Human-wildlife conflicts have existed since time immemorial but have never been addressed seriously in Kenya's wildlife conservation history. Elephants are perceived as the worst problem because they are the most pervasive, voracious and powerful (KWS, 1994). A major component of the relationship between humans and elephants is competition for water, food and space to migrate (Kangwana, 1996).

KWS shares its responsibilities for community, research and monitoring, and legal services with non-governmental organizations. Save The Elephants (STE), an international wildlife charity established in 1993, works with KWS for elephant conservation. STE's mission is to secure a future for elephants and their habitats, as well as promoting human-elephant co-existence.

Today, Samburu and the adjacent districts hold the largest population of free-ranging elephants outside any wildlife-protected area in Kenya (Thouless, 1993). KWS and STE are noticeable elephant conservation organisations in Samburu District. This chapter examines the goals of both organizations in relation to the Samburu indigenous knowledge and cultural perceptions outlined in Chapters 3, 4 and 5.

6.2 Methods

The results of Chapters 3, 4 and 5 were analysed to find kinds of attitudes by the Samburu people towards elephants and their conservation. Using steps 4, 7, 8, 9 and 10 of the DRS technique (Chapter 2) the attitudes were reviewed with

informants to seek the Samburu perceptions on wildlife law enforcement, ivory poaching and local wildlife-related economic activities.

6.3 Results

6.3.1 Hunting, poaching and the ivory trade

Chapter 5 shows that traditional customs prevent the Samburu people from killing elephants except in defence of their livestock. During the study, informants said Samburu smuggled ivory collected in the wild for most of the 20th Century mainly to build up their livestock herds. One full tusk was equivalent to about 5 boran cows. Samburu believed that cows acquired through exchange of ivory were blessed and resistant to drought and diseases. The blessed cows were not used for social exchange, for example dowry. To date, no Samburu, adult or child, ignores a piece of ivory lying in the field. But nowadays, full tusks are surrendered to the local government chief or wildlife rangers post (KWS, 1993, 1994, 1995, 1999).

Ivory is valuable in Samburu society (Chapter 5). This leads to conflict with the government law (KWS 1991 - 2001). In 1948, two warriors were arrested and convicted for attempting to steal ivory to manufacture earplugs (KNA, Samburu circumcision, 1948 pg. 10). To date many old carcasses are found with a tusk missing or bits of one chopped off, mostly by Samburu tribesmen (KWS, 1989, 1997, 2001).

The Kishili age-set was circumcised between 1960 and 1962. At this time, the tension between the government and the Samburu about the restricting game policy was high. At the same time the *shifta* (Somali bandits) poaching menace had become worse. The bandits used guns for hunting elephants for ivory and rhinos for rhino horn. Informants said that the new warriors began to ambush the Ndorobo people smuggling ivory out of the forests or drove cattle home after exchanging ivory. In 1971, Somali and other black marketers enlisted the help of the warriors, to operate in the unknown and difficult terrain. Because of that and the lucrative pickings from ambushing or cooperating with the bandits, more warriors joined the fray, except those from Lukumae phratry and Lotimi clan

(Masula phratry) because of their special customary regard for elephants (Chapter 5).

An unprecedented liaison of convenience developed between the Samburu and the Turkana and Ndorobo. The warriors provided the knowledge of elephant routes in the lowlands and protected Ndorobo and Turkana during the illegal hunts. Elephants were so common in the lowlands that any place was suitable for hunting. As the warriors speared the elephants, the Ndorobo and Turkana extracted the tusks. In some cases, warriors speared as many as 30 elephants in one spot. In the meantime, Samburu elders of Mekuri, Kileko and Merisho age-sets condemned waywardness of the Kishili warriors and urged them to stop their marauding and roguish behaviour because it was against the Samburu culture. Warriors are daring and defiant to elders by nature (Spencer 1965, 1973). They did not heed the warning; the elders had no choice but institute the curse.

Individual blacksmiths in Wamba Division recounted how groups of warriors arrived at a workshop and ordered several spears for elephant hunting. "These groups were willing to pay high prices for quick delivery of roughly finished spears, a practice that ultimately drove up the cash price of all spears…." (Larick 1984, pp. 26 – 27). During this period, game wardens, rangers and government official were involved in poaching and smuggling ivory and rhino horn for the black-market (Thouless, 1993). A government aerial survey in 1977 counted 2793 elephant carcasses and only 710 live individual elephants in the district (Peden 1984). Poaching stopped in 1978 after the government and wildlife preservation groups eclipsed the ivory market in East Africa. Informants said that the liaison amongst Samburu, Ndorobo and Turkana people increased inter-marriages, especially in the Masula and Pisikishu phratries.

The incoming age-set, Kiroro, initiated in 1977, did not continue with the unpropitious activities. Informants say that the majority of Kishili age-set are dead and many others are languishing in poverty. Others migrated from the District to find cheap labour in towns and cities. The hunting spree virtually exterminated the rhino from Samburu District and drove most the elephants into hiding.

From the KWS occurrence books (1991 – 2001), the study gathered names of 14 people referred to as 'Samburu people' arrested for killing elephant for ivory between 1989 and 2001. Without divulging the full names or reasons for asking, the study presented the suspects' family names to informants to confirm their clans. All informants said the names were Ndorobo people, except one. The exception was discharged without trial after a community protest of his wrongful arrest. Informants said that KWS is known for malicious arrests and brutality towards local people especially if tusks go missing from an elephant carcass. These claims were confirmed by a KWS report (KWS, 1994).

6.3.2 The Samburu-elephant conflict

During the study, informants reiterated that elephants are dangerous animals but not more than lions, leopards, rhinos and buffalo. Until 1979, more Samburu people died of rhino attacks than any other animal. Their extinction is seen as 'a good riddance'. Nowadays, according to informants, more people in the district die from buffalo attacks than any other animal. In terms of property destruction, hyena, lions and zebra are the most destructive.

The Samburu refer to human-elephants conflicts as "*ndoki nauroi*" (which translates to "something to quarrel about"). Any object of conflict between the people themselves is also called *ndoki nauroi*. When elephants struggle for *sakaram* (seed pods of Acacia tortilis – a favourite forage of many livestock and herbivorous wildlife) it is referred to a kind of *ndoki naurroi*.

There are many kinds of *ndoki nauroi* with elephants. One conflict concerns water from shallow wells. A well is not communal property but owned by an individual or a family. So when an elephant destroys a well or kills cow at a well, or a goat in the field, it is *ndoki nauroi* to the owner not the Samburu society in general. The same term is applied to elephants attacking on people on a footpath. Any injury or death of a person or elephants in such a situation is a *ndoki nauroi*. Killing elephants for ivory is *ndoki nauroi* but smuggling ivory is not *ndoki nauroi*.

Informants said an elephant is conscious of its wrongdoing to people. It knows well that wells belong to people but it still pushes off livestock from water troughs; destroys the well, and even fights for it. During drought, out of desperation, elephants take water by force. Therefore it appreciates the risks and knows the consequences – injury or death – to the elephant, livestock or person. The KWS occurrence books (1991 – 2001) shows records of complaint made against elephant after the animals kill cows for *sakaram* or displace people and livestock from a water hole. People can also provoke elephants by stalking and throwing clubs or stones at them. The elephant can decide to flee or confront the person. The victim, human or elephant, is indebted *ndoki nauroi*.

Informants said that *ndoki nauroi* between Samburu and elephants will never end, as long as both continue living together. Elephants will continue confronting people and vice versa. Traditionally, there was a common cleansing ceremony for people who killed elephants. The ceremony was the same as that done for people who commit human murder. The ceremony is called *ngutuko*, which is a general word meaning "cleansing ceremony". Nowadays, Samburu seldom perform the ceremony.

Before Kenya's independence in 1963, the Samburu never sought compensation of anyone killed by elephants. Some families still decline to accept any monetary compensation given for an elephant attack. Others pursue it reluctantly with the assistance of local chiefs, councillors and other leaders. Such compensation is a form of blood-wealth known as *ng'iruai*. On receipt of n*g'iruai*, the money is dished out immediately to friends and relatives. It can't be invested any property and must be spent to the last penny on perishable items only, mostly food. Livestock bought with compensation money are bad omen and die shortly thereafter.

6.3.3 Some attitudes towards 'conservation benefits'

During the study the informants explained that non-consumptive values and benefits of livestock make the Samburu people unique and different. Livestock give a family its social and economic statuses in the society. Also, cattle, goats and

sheep are exchanged in dowry and many other social occasions. Informants said that Samburu hunt some kinds of wild animals for food, especially those that resemble livestock, mostly giraffes, antelopes (except the kudu), buffalo. No Samburu social segment eats pig-like animals like warthogs or bush pigs; reptiles and amphibians, any insects (except honey from bees) or donkey-like animals, for example zebras. Where ivory is not available, dikdik (one of the smallest antelopes) tarsa are used for making a necklace to guard against *ndarunoto*. Although birds are not eaten, newly initiated boys hunt colourful ones for feathers to make the ceremonial circumcision headdress, discarded at the *Ilmuget lengwenyi (or lolbaa)* ceremony.

The elephant has many cultural benefits from consumptive and non-consumptive uses. The use of dung, ivory and the placenta are kinds of consumptive uses. Most importantly, the elephant is unique for its non-consumptive benefits to the Samburu people. These are in form of 'projects' that elephants plan, implement and develop for themselves but in turn benefit the Samburu people (Chapter 4), especially the water pools. Elephants pull down branches to feed. Samburu women gather the dry branches for firewood to use at home or poles for building houses. Another beneficial elephant activity is the making of 'excited' calls and subsequent gathering. To the Samburu people, this means the onset of rains. Rain is a blessing from God. When elephant move to the thick parts of the forests, they create paths, which local people use for driving their cattle deeper into the forest during the dry season. Without elephants in the Mathews, Loroki, Ndoto and Nyiru forests would be impenetrable.

Since 1993, the KWS community programme has been promoting the development of income generating wildlife-related community projects. Such income is termed as 'benefits from wildlife and conservation'. These income-generating projects are expected to reduce the 'human-wildlife conflicts' and justify the co-existence of people and wildlife. A local organization, Namunyak Wildlife Conservation Trust was established in 1995 with the assistance of donors and private ranchers as a result of the KWS 'community wildlife benefits' campaign. Informants referred to these projects as "sources of elephant's milk".

Informants said the KWS programmes have taught them: “that the elephant is the prize-bull to slaughter without killing it”. Another informant said: “we have been taught that wildlife is our goldmine”.

The above clichés were presented to a group of warriors in Kiltamany for discussion. The discussion concluded that outcomes of the wildlife-based income projects are not the same as benefits from wildlife but benefits from wildlife-based tourism or tourism in general. These two phrases mean different things to the local Samburu, as shown in the discussion below.

6.3.4 Community services

KWS community programme uses education, community wildlife extension and awareness programmes as interventions to encourage positive attitudes towards wildlife, and in effect the preservation of the wildlife. In Samburu District, KWS and STE have worked together in schools and local villages to promote wildlife conservation among the local people. The liaison was mentioned in the general evaluation of the STE community programme (Kuriyan 1999a).

In Samburu District, KWS and STE are well-known and important ‘neighbours’ with highly respectable and unique activities. Informants who had attended STE collaring events described them as exhilarating and incredible. None of them had ever touched a living elephant before. An informant who was involved in beading a telemetry elephant collar and attending the collaring exercise with other villages remembers the event with nostalgia. A common joke is told and even sang about how the informant regularly joins the STE research team in the Reserve to wash the dirty beaded collar tied on the elephant, nick named “*lepus*” (which translates to “big” or “gigantic” or “massive”). During the study, when an elderly informant was explaining about elephant ears, he said: “I was told by those who attended the ‘elephant tethering’ [a term for fixing the collar] that water was poured on the elephant because it uses them to cool its body”. In Gogoltim and Ndonyo Wasin, villagers refer affectionately to the community rangers hired with the STE grant as “elephant scouts”.

6.4 Discussions

6.4.1 Strong and dynamic traditional values

As far as using ivory for cultural purposes is concerned, Samburu traditions have outlived the Government's laws and regulations. To date, the majority of Samburu people act and react towards elephants with more reverence of the (unwritten) customary law than to the government laws.

Although the vicious wars with *ngoroko* (Turkana bandits), *shifta* (Somali bandits) and Borana are over, the increasing frequency of cattle rustling activities in the region has forced Samburu warriors and the outgoing probationary elders, to acquire illegal firearms and ammunition to protect their livestock. The district probably has one of the highest densities of illegal guns and ammunition in Kenya. Therefore, any Samburu involvement in ivory smuggling, as it happened in the 1970s, would spell doom to elephants. Informants said that elephants benefit from the Samburu security systems for and against potential cattle raiding.

Informants said also that the Government sanctions KWS brutality and punishments in their pursuit of suspected ivory poachers. To avoid the harassment, elders are forced to threaten their own people with curses to produce the tusks. The elephant killers are seldom arrested and the elders bother less about them. Rangers are primarily interested in finding the tusks; arresting the culprit is a bonus. The KWS occurrence books confirm this claim.

6.4.2 Conflict and reprisal

Samburu perceive elephants with ambivalence as a part of their daily life and reality. From the study, the people's attitude cannot be divided into positive or negative realms. Also, elephants are perceived as individuals of 'the elephant tribe' (Chapter 4) and not as a population of the species.

Samburu people perceive elephants to be humans. Samburu-elephant conflict is equivalent in stature to elephant-Samburu conflict – both orientations are referred to as *ndoki nauroi*. Samburu say that an elephants is 'conscious of itself and its actions'. Therefore, appropriate reprisals against an elephant's aggression are

justified. An elephant may be aggressive or respectful towards people depending on the prevailing circumstances of survival and its responsibilities within a unit group.

Since the early 1900, elephants have been damaging crops and man-made dams in the District. In 1980's the government encouraged local people to report damage by elephants and other animals for compensation. KWS records show payments for crop damage between 1979 and 1980s. Elephant crop damage and disturbance is seasonal. In the highlands, more crop damage reports more in number during the orographic rains when most elephants migrate to the highlands. In the lowlands, the frequency of elephant disturbance reports is higher during the rainy seasons. The reports are used for reference by KWS to shoot elephant as a control measure (KWS 1993 – 2001; 1994). KWS elephant control work is seen as justified reprisal for elephant's wrongdoing. Where KWS does not do it, then the local people spear and shoot the elephants themselves. For the past decade, most elephants in the district seem to die from elephant control and spearing or shooting by local people (KWS 1991 – 2001).

6.4.3 The elephant's milk

The study collected a myth about how the Samburu people lived with every wild animal in their homestead, and two versions of the story about whether the animals belonged to men or women (Appendix 5). The male informants gave a different version of the story from the female informants. Both versions have the same conclusions that, God owns wild animals and they belong to no one, and that intentional and unintentional exploitation, and cruelty is wrong. The myth is an important contribution to the understanding of Samburu perceptions of the natural world.

KWS community programme stresses and emphasizes that the Samburu people are the tenants of wildlife in the district and must therefore derive maximum benefits from it within the existing wildlife law in Kenya. The phrase "local people own wildlife" and "wildlife belongs to the local people" are common clichés in local wildlife forums. The local leaders use clichés like: "…drink (or suckle) the

elephant's milk" and "the elephants are our immortal prize bulls to slaughter". This clichés symbolize income from wildlife-related ventures, for example photographic tourism, mountain and rock climbing, nature walks and treks, as well as bird shooting enterprises. Some informants are convinced that wildlife can be used for generating income but are uneasy about the consumptive aspects and the law too.

Informants cited security of people and livestock as the main benefit from wildlife-related income generating projects. Local people are employed to be rangers; Very High Frequency (VHF) hand-held radios, guns and ammunition are provided for their work. The projects are supported by nearby private game ranches and KWS. According to the informants, no benefit surpasses security for livestock and the local people are determined to 'protect wildlife' if it means boosting the local security system. The community rangers are situated in different parts of the lowlands and have a centralized communication system.

Most of elders, the important decision makers in the society, are illiterate and unable to participate directly in the projects proceedings with the donors and supporters. Tourism is complex business venture, which the majority of the local people are not capable of planning, organizing or developing. Only the younger and literate Samburu can participate, and are known to monopolize the external contacts.

In reality, it is difficult to measure economic cost and benefits from wildlife-related ventures and tourism at a community level in Samburu District. The business interests are personal, segmented, diverse and uncoordinated. However, benefits make sense if they support or are compatible with livestock and pastoralism in general. And lastly, no one owns wildlife; it belongs to God.

6.4.4 Research and education

Local people perceive the STE research and education programmes interesting and amusing. Informants were fascinated that the STE elephant research programme can recognize over 700 individual elephants. Samburu can recognize their cows,

goats and sheep individually using name codes for each animal in the heard. In this way they can notice when one individual is missing. However, the informants thought the STE elephant naming system was awkward and meaningless, except *Lepus*, of course.

The animated *Maa* film made by STE on the woman-elephant story is seen as entertainment; the cultural meanings of the story are different from the learning outcomes portrayed in the film. The Samburu audience perceives the film as humour rather than a lesson for conservation.

6.4.5 Samburu perception on elephant interest groups

In a nutshell, the Samburu perceive and co-exist with elephants within the context of Samburu culture, not according to the interest of governmental and non-government elephant interest groups, whether poachers, law enforcers, conservationists, scientists or development workers. This difference may be an important source for conflict of interests between Samburu and others. Culturally, Samburu neither kill elephants maliciously nor protect elephants from killers. Samburu people protect themselves; and regard elephants as capable of protecting themselves too.

The study indicates that Samburu perceive such interest groups in two ways, firstly, as foreign or alien, and secondly the implication of the group's activity to the society. The local perceptions about the elephant remains largely unaltered as it has always been since time immemorial. The rates at which Samburu perception about elephants are changing, and the role of interest groups in this change, is not known and was not determined in this study.

Chapter 7

Concluding discussions and recommendations

7.1 Elephants in the Samburu Society

From an anthropological perspective, elephants play an important role in animal symbolism in the Samburu society. The goal of symbolism, unlike that of science, is not to extend factual knowledge, resolve phenomenal paradoxes or restrict the scope of interesting conceptual puzzles. Symbolism explores eternal truths, and is sustained in that path by faith in the authority of those charged with the task of continually reinterpreting the truth and fitting it to new circumstances (Atran, 1990).

The woman-elephant folk story is the genesis of the Samburu-elephant relationship (Chapter 5). The story can be analysed in two ways. First, the story is about the society itself and numerous symbolic meanings can be drawn from it. As a myth, the story does not have an single simple intrinsic meaning, but its meaning is given by the Samburu culture itself. The story is viewed as text within the context of Samburu culture. Secondly, the story is not to be read or understood as an explanation, but as an active part of the Samburu culture that legitimises the social connection between elephants and the Samburu. Just like the biblical creation story about Adam and Eve, its literal truth is irrelevant to its function. The story functions to charter various social institutions of marriage, justice and morality. It expresses, enhances and codifies belief and contains practical rules for guidance and of faith and moral wisdom in the society.

The Samburu people perceive and describe tangible and intangible objects in functional terms (Chapters 3, 5 and 6). For example, the elephant proboscis is described as ‘an arm’, despite the fact that the organ is situated in the middle of the face and is used for smelling too. A nose has negative connotative meaning to the Samburu and seen as a secondary or minor function of the organ. The woman-elephant story, the elephants anatomy (Chapter 3), the peculiar human-like behaviours (Chapters 3 and 5), ability to communicate directly with Samburu in a supernatural manner (Chapter 5), and its capability of eternal retribution against

serious immoral acts against it by specific people (Chapter 5) compel Samburu to regard elephants as "human". The animal is placed in the same moral order as a human and accorded equal treatment in life and death. Unlike any other animal, many parts of an elephants are perceived as "fetish" because they are believed to invoke good fortune, prosperity and protection against evil spirits and misfortune among the Samburu people.

7.2 Fearsome rivals and provocative neighbours

The Samburu people revere elephants for their large body size, power and might, strong social bonds, supernatural tendencies, intelligence and powerful memory. The reverence is mixed with anxiety, feelings of vengeance and foreboding about the same animal. The Samburu people exercise great caution after detecting the presence of elephants in the neighbourhood (Chapter 4). Prior local knowledge about the animal's habits and behaviours is a useful tool against negative encounters. The local people say that unlike other more dangerous and fearful animals like lions and buffalo, 'elephants reason before acting'.

Samburu gain their knowledge from personal and collective experiences of interacting elephants. They observe elephants closely claiming to understand their inclinations and motivations. *Sangalai*, the 'inactive' bull lives in bushes and vegetated areas near water sources. Unless provoked, *sangalai* is calm and docile. But as their body conditions improve, and they become 'full' (Appendix 7), the animal becomes easily irritated and becomes a threat to any nearby person or livestock. These bulls are known to confront people while appreciating the risks involved. Warriors and elephants provoke each other into fatal attacks. During the dry season, elephants are known to invade human wells at night and destroy them as they drink water. Samburu belief when a bull confronts people or livestock, only a fatal injury or its death will resolve the situation then. If the animal is under supernatural influence, then the human victim dies and the bull escapes (Chapter 5).

In the plains, unit groups can be dangerous too (Chapter 4). Females with new calves are known to reacts to human presence by attacking or charging people. But

ngamitoni, the protector female is considered to be more dangerous and relentless in her attacks. Local people know the movement pattern of animals and their distribution as a precaution against attacks. A local person would ignore elephants at his or her own peril.

7.3 Owning and belonging

The Samburu people state that God owns all the wild animals and they belong to no one. Samburu are spiteful of tribes or people whose main source of protein is game meat. From this point of view, their attitude towards Ndorobo and Turkana, who even used to hunt elephant for food, is understandable. No social segment of the Samburu claim to dominate any wild animal or claim exclusive rights for an animal's utilization. If a being can be owned it cannot be autonomous, responsible for itself; therefore it is of a lower moral order.

The colonial government introduced the notion that all wildlife belongs to the government and are protected by law. According to the Samburu, if an object has an owner, then the owner is fully responsible for it. In 1949, after the government declared success from anti-poaching and other illegal killings of wildlife the local began complaining about the high number of people killed by large animals, notably rhino and elephants and demanded compensation for deaths arising from these animals. To diffuse the problem, in mid 1950s, the government lifted the ban imposed on Samburu warriors on carrying of spears after it was recognized they were necessary for defence against the growing population of large game in the Northern and Marsabit Game Reserves (Larick 1984). Samburu protection against wildlife attacks is not seen as a part of 'owning the attacker' but as a traditional defence system against rogue wild animals. In addition, the government heaped the responsibility of compensation to the newly created county council. Samburu did not own the wildlife and but is part of their heritage. After the council declined the responsibility, the government began to compensate the local people for crop damage and death cause by wildlife (the government property). To date, the law still claims that wildlife belongs to the government.

Samburu, especially the senior (Kimaniki) and the out-going firestick elders (Kishili) who witnessed the antagonism, are suspicious when KWS officers declare at public meetings that wildlife belongs to the people. The statement is taken as a figurative speech but KWS treats it as a matter of fact.

Most of the educated Samburu belong to the Kiroro and Lmooli age sets. The cream of the current political and development leaders are Kiroro and Lmooli too. Neither of these age sets has experienced the antagonism between Samburu and the government concerning games laws. However, KWS deals mainly with the educated lot of the younger age sets, many of who buy the notion 'that local people own wildlife' and whose propaganda includes the cultural clichés, for example 'drinking the elephant's milk'. But for law enforcement, KWS works through the older age sets, which still regard the traditional customs as superior.

Another kind of dichotomy exists where the central government implements most of its programmes for Samburu in the highlands west of the Mathews Range and rarely on the eastern side. On the other hand, KWS community programmes and the creation of conservancies are done in the eastern side of the Mathews Range and seldom in the highlands. This division on land use has in effect classified the Samburu Society into two types: the 'agricultural-type' Samburu in the west and the 'pastoralist-type' Samburu in the east. The KWS programme entirely contradicts the Government's current ambitious development plan (MOPND, 1996) for Samburu District. KWS mission differs with the Plan whose main thrust is demarcating Samburu District further and developing the Samburu rangelands through commercial livestock production, industrial mining, and crop irrigation schemes.

Informants argue that profits and benefits must be directly, and not indirectly, relate to the benefactor and beneficiary (Chapter 6). The KWS notion of benefit is different from that of Samburu. The people perceive benefits to be those recurrent goods and services (for example employment, communication networks and regular contacts) that organizations and business ventures offer to the society rather than direct benefits from wildlife. The 'benefits' of improved security and

increased contacts with the outside world surpass the economic incomes and profits generated from tourism ventures. Only poor people benefit from wildlife.

7.4 Experiential learning, knowledge and belief systems

This study clearly shows that the Samburu people gain their knowledge about elephants from experience. Using the available literature, and without being pedantic, this final section of the dissertation assesses the outcomes of the study using Kolb's theory of experiential learning (Kolb 1984). The theory states that: "Experiential learning is the process whereby knowledge is created through the transformation of experience (Kolb 1984, p. 38)". Kolb's theory views learning as a process whereby concepts are derived from, and continuously modified by, experience. Chapters 3, 4, 5 and 6 present study outcomes supporting this definition. It is the experience and direct interaction over a prolonged period of time that provides Samburu with intimate knowledge about elephants.

Learning is a major process of human adaptation, and occurs in every human setting. The process of learning requires the resolution of conflicts between dialectically opposed modes of adaptation to the world. Learning arises from the transaction between social knowledge (objective experience) and personal knowledge (subjective experience). Again, Kolb (1984, p. 37) examines the forms of multiple interactions between the object and the subject. New knowledge, skills or attitudes are achieved through confrontation among four modes of experiential learning, namely: concrete experience, reflective observation, creation of abstract concepts that integrate the observations into logically sound theories, and finally actively experimentation of the theories to make decisions and solve problems.

Knowledge results from the combination of grasping experience and transforming it. According to empiricist philosophers, knowledge was to be found in the accumulated associations of sense impressions of the surrounding world (Aune 1967; Lewis 1946). Lev S. Vygotsky states that the 'zone of proximal development' is where learning occurs. The zone is described as the distance between the actual development level as determined by independent problem solving and the level of potential development through problem solving under

guidance or in collaboration with capable peers (Cole *et al*, 1978). "This learning becomes the vehicle of human development via interaction between individuals with their biologic potentialities and the society with its symbols, tools and other cultural artefacts" (Kolb 1984, p.133)

Knowledge is an important influential factor to the formation of human beliefs, attitudes and values, which eventually shape human personality and behaviour. The Samburu people attach beliefs, attitudes and values to their knowledge of elephants. A belief is a simple proposition, conscious or unconscious, inferred from what a person says or does, capable of being preceded by the phrase 'I believe that….' (Rokeach, 1973; Caduto, 1985). Beliefs are formed early in a child's life (Caduto, 1985) and have descriptive, evaluative and prescriptive qualities. Beliefs in their totality form a belief system, and not all beliefs are equally important; that the more central a believe is to the system, the more it will resist change. This statement is relevant to Chapter 5 and 6 of the study. In spite of the laws and Government intervention to eliminate ivory, the Samburu people still believe ivory is an invaluable elephant product with many cultural uses. However, the Samburu culture admonishes killing of elephants for ivory. Ivory from natural death are blessed.

Also, if beliefs closer to the central part of the belief system are changed, repercussions are more widespread to the rest of the belief system (Rokeach, 1968, pp. 2 – 3). Such fundamental change is possible with intensive indoctrination through education and awareness, especially with the younger members of the Samburu society. Unwittingly, the STE Samburu programme has tremendous potential for altering the belief system by demystifying the elephants through its education and research activities, and in effect sub-consciously helping to accelerate the loss of cultural values among the younger generation. This may have long-term repercussions to the cultural relationship between the Samburu and elephants.

A smaller aggregation of related beliefs forms an attitude (Caduto, 1985). Attitudes are mainly learned through the principles of learning, whatever these are

or may prove to be (Rokeach, 1968, p. 112). Although all attitudes incorporate beliefs, not all beliefs are necessarily a part of attitudes. A meld of closely aligned attitudes forms a value. Reich *et al* (1976) list at least six value orientations, namely: theoretical (truth), aesthetic (harmony), political (power), economic (usefulness), social (altruistic love) and religious (unity). Value systems are flexible. As seen in the preface, new contacts (other tribes, KWS, the Government, STE, researchers, development groups, education, Christianity, Islam and so on) have the potential of building up new value orientations. Rokeach (1968, pp.156 – 178) has described the dynamics of value-attitude systems. Adults possess tens of thousands of attitudes toward specific objects and situations, but only several dozens of instrumental values and perhaps only a few handfuls of terminal values. Through their culture, people adapt to various environmental components for survival (Milton 1996, p. 23). In a dynamic process of learning through experience, people have created knowledge and other social systems, which are bequeathed to succeeding generations through cultural phenomena like symbols (Geertz, 1973, Eriksen, 1995); myths and folklore (Kirk 1970), religious and other ideologies.

7.5 Lessons from the study about the Samburu-Elephant relationship

The study demonstrates the complexity of the relationship between the Samburu and elephants in which elephants are seen as of a higher moral order than other animals and therefore subject to different moral codes.

Elephants are seen as capricious as individuals having free will and intentions capable of being good or bad. They are not to be treated in general but as individuals. At times benevolent at times malevolent, necessary but to be feared. Belief systems have been developed over generations. The systems codify, explain and support this relationship.

Events in the past damaged and conflicted with this meaning system and forced the people to accept that elephants as "beings" could be owned. Ownership is a form of slavery, which is considered degrading, immoral and grossly demeaning the natural rights of a 'being'.

The current elephant protection, research, related education programmes are more concerned with species and habitat conservation. In Samburu District, these programmes have to face the challenge of working with a belief system, which dictates that how a person relates with an individual elephant is a moral question, which may override the consequences for species or habitat.

7.6 Recommendations for environmental education

1. The ethnographic methods currently applied to design STE education programmes for different targets in Samburu District should be critically reviewed using the findings from and a wealth of information gathered by the ethnography.

2. To make the ethnographic approach a valid and authentic teaching and learning methodology, an extensive use of existing information about the target groups is essential for the achievement of the desired goal, which is to empower local people with appropriate education that enables them to participate constructively in conservation programmes within their locality.

3. The education programme should set practical and appropriate learning outcomes that can be evaluated and reviewed regularly to understand their usefulness in the society. Clear and efficient monitoring systems should be incorporated in the education programme to identifying ideas for improving existing education activities as well and designing appropriate programmes for different target groups.

4. A further research to understand the different attitudes towards the elephants and its conservation among is necessary in the Samburu society. STE should support any organization with credible a programme to monitor human-elephant interactions in Samburu District. Information arising from such programmes is useful in understanding human-elephant relationships, not only among the Samburu, but also among other societies living in and around Samburu District.

5. The STE Samburu programme should exemplify a mutual link between pure animal research and community education. Outcomes from the research activities should be reviewed as resources for the education programmes. In turn, the education programme should become a platform for the local people to participate and contribute their knowledge directly to on-going elephant research programmes. The study shows that local people have valid and reliable local knowledge and skill useful to scientific research in elephant biology

References

Adams, B., Hulme, D. (1998) Conservation and communities: changing narratives polices and practices in African conservation. In: *Community conservation research in Africa: Principles and comparative practice.* Paper Number 4. University of Manchester: Institute for Development Policy and Management

Adams, J. S., McShane, T. O. (1992) *The myth of wild Africa: conservation without illusions.* London, New York

Alpers, E. A (1992) The ivory trade in Africa: a historical overview. In Ross, D. H. (editor) (1992) *Elephant: the animal and its ivory in African culture.* University of California: Fowler Museum of Cultural History

Arnoldi, M. J., Ezra, K. (1992) Sama Ba: the elephant in Bamana art. In Ross, D. H. (editor) *Elephant: the animal and its ivory in African culture.* University of California: Fowler Museum of Cultural History

Atran, S. (1990) *Cognitive foundations of natural history: towards an anthropology of science.* Cambridge University Press.

Aune, B. (1967) *Knowledge, mind and nature: an introduction to theory of knowledge and the philosophy of mind.* New York: Random House

Barkam, J.P., Rainy, M. E. (1976) The vegetation of the Samburu-Isiolo Game Reserve. *East African Wildlife Journal.* Volume 14: 297 – 329.

Berger, D. J. (1993) *Wildlife extension: participatory conservation by the Maasai of Kenya.* Nairobi: African Centre for Technological Studies

Bernard, H. R. (1995) *Research methods in anthropology – qualitative and quantitative approaches.* Second edition. Walnut Creek, London, New Delhi: Sage publications

Binkley, D. (1992) The teeth of Nyim: the elephant and ivory in Kuba art. In Ross, D. H. (editor) *Elephant: the animal and its ivory in African culture.* University of California: Fowler Museum of Cultural History

Bird-David, N. (1993) Tribal metaphoriation of human-nature relatedness: a comparative analysis. In Milton, K. (editor) *Environmentalism: the view from anthropology*. London: Routeledge

Bitok, E. K.; Mwathe, K.; Kones D.; Mwangi S.; Omondi P. and Waithaka J. (1997) *A survey of the Loroki-Kirisia Forest Reserve elephant population.* Unpublished report. Kenya Wildlife Service

Brewer, J. D. (2000) *Ethnography*. Buckingham, Philadelphia: Open University

Bronner, G. (1989) *Vegetation and land use in the Mathews Range area, Samburu District, Kenya.* PhD theisis, Albert-Ludwigs University, Freiburg, Germany.

Brown, M. (1989) *Where giants trod – the saga of Kenya's desert lake.* London: Quiller

Byers, B. A (1996) *Understanding and influencing behaviours in conservation and natural resource management.* African Biodiversity series. Number 4. US International Agency for Development.

Caduto, M. (editor) (1985) A guide on environmental values education. *Environmental Education Series Number 13.* UNESCO-UNEP International Education Programme.

Cole, M., John-Steiner, V., Scribner, S., Souberman, E. (editors) *L. S. Vygostsky: Mind in society - the development of higher psychological processes.* Havard University Press

Collet, D. P., Robertshaw P. T. (1983) The identification of pastoral peoples in the archaeological record: an example from East Africa. *World Archaeology.* Volume 15(1): 67 – 78

Cooper, C. T. (1998) *Kenya Elephant trends.* MSc Dissertation. University of Warwick. September 1998

Cosentino, D. J. (1992) Talking (gray heads): elephant as metaphor in African myth and folklore. In Ross, D. H. (editor) *Elephant: the animal and its ivory in African culture*. University of California: Fowler Museum of Cultural History

Creswell, J. W. (1998) *Qualitative inquiry and research design – choosing among five traditions.* Thousand Oaks, London, New Delhi: Sage Publications

Darkwa, A. (1986) Music dance and recreation. In Were G. S. and Ssennyonga J. W. (editors) *Samburu District: Socio-cultural profile. Government of Kenya*. University of Nairobi; pages 133 – 144.

Douglas, M. (1954) The Lele of Kasai. In Forde D. (editor) *African worlds.* Oxford: Oxford University Press.

Douglas-Hamilton, I, Krink, T. (2001) Complex movements and home ranges of the African elephant, Loxodonta africana. Draft manuscript

Douglas-Hamilton, I. (1972) *On the Ecology and Behaviour of the African Elephant: Elephants of Lake Manyara*. D.Phil. thesis. University of Oxford, Oxford.

Emerton, L. (1998) *Why wildlife conservation has not economically benefited communities in Africa.* Community conservation research in Africa: principles and comparative practice. Paper Number 5. University of Manchester: Institute for Development Policy and Management.

Estes, R. (1991) *The behaviour of African mammals.* Russell Freidman.

Fratkin, E. (1974) *Why the elephant is an old woman: animal symbolism in Samburu.* Seminar paper number 63. Institute of African Studies, University of Nairobi.

Fratkin, E. (1987) Age-sets, household, and the organization of pastoral production: The Ariall, Samburu, and Rendille or northern Kenya. *Research in Economic Anthropology.* Volume 8: 295 – 314

Fratkin, E. (1994) Pastoral land tenure in Kenya: Maasai, Samburu, Boran and Rendille experiences, 1950 – 1990. *Nomadic peoples* 34/35: 1994: 55-68

Fratkin, E. (1996) Traditional medicine and concepts of healing among Samburu pastoralists of Kenya. *Journal of Ethnobiology* 16(1):63 - 97

Fumagili, C. T. (1978) An evaluation of development projects among East African pastoralists. *African Studies Review.* Volume 21(3) 1978: 49 – 63

Geary, C. M. (1992) Elephant, ivory, and chiefs: the elephant and the arts of the Cameroon grassfields. In Ross, D. H. (editor) *Elephant: the animal and its ivory in African culture.* University of California: Fowler Museum of Cultural History

Georgiadis, N., Ojwang' G. (2001) *Numbers and Distribution of Large herbivores in Laikipia, Samburu, and Isiolo Districts – Sample Count, 22 January to 7 March 2001.* Laikipia Wildlife Forum

Granblatt, J., Said M. Y., Mutira J. K. (1989) *Livestock and wildlife data summary 1987 – 1988 for Kenya Rangelands.* Data summary number 1 August 1989. Department of Resource Surveys and Remote Sensing: Ministry of Finance and Planning, Kenya

Holtzman, J. D (1996) *Transformations in Samburu domestic economy: the reconstitution of age and gender-based processes of production and resource allocation among a Kenyan "pastoral" people.* Ph.D. dissertation. University of Michigan

Hulme, D. (1998) *Community conservation in practice: A case study of Lake Mburo National Park, Uganda.* Community conservation research in Africa: principles and comparative practice. Paper Number 3. University of Manchester: Institute of Development Policy and Management.

Ingold, T. (1996) Hunting and gathering as ways of perceiving the environment. In Ellen R., Fukui, K. (editors) *Redefining nature: ecology, culture and domestication.* Oxford: Berg

Kahumbu, P., Omondi, P., King, J., Muriuki, G., Geddes, C. & Higginbottom, J. (1999) *Total Aerial Count of Elephants in Samburu-Laikipia.* Kenya Wildlife Service Report, Kenya.

Kangwana K. F. (1993) *Elephants and Maasai: conflict and conservation in Amboseli, Kenya.* Doctorate dissertation. Darwin College, University of Cambridge.

Kangwana K. F. (1996) Assessing the impact of human-elephant interactions. In Kangwana, K. (editor) *Studying elephants.* Nairobi: African Wildlife Foundation.

Kapule, D. (1986) Samburu District: General physical setting. In Were G. S. and Ssenyonga J. W. (editors) *Samburu District: socio-cultural profile.* Government of Kenya, University of Nairobi; pages 10 - 20.

Kasfir, S. L. (1992) Ivory from Zariba country to the land of Zinj. In Ross, D. H. (editor) *Elephant: the animal and its ivory in African culture.* University of California: Fowler Museum of Cultural History

Kenya National Archives records: ***a)*** *Samburu monthly intelligence reports: ADM/15: 1944 – 1950;* ***b)*** *Political records – annual and handing over reports: SAM/7/DC/SAM: 1921 – 1970;* ***c)*** *Handing over reports: PUB 24/2, 3: 1927 – 1954*. Ministry of Culture and Social Services, Republic of Kenya.

Kenya Wildlife Service (1989 – 2001) *Occurrence books: Maralal District Headquarters; Wamba; Serolevi; Isiolo Complex*. Kenya Wildlife Serice

Kenya Wildlife Service (1990) *A policy framework and development programme: Annexes 6 and 8.* Kenya wildlife Service

Kenya Wildlife Service (1994) *Widlife-human conflict in Kenya: a report of the fiver-person review group.* Kenya Wildlife Service.

King, J., Kahumbu, P., Omondi, P. & Douglas-Hamilton, I. (1999) *The status of Kenya's elephant populations, September 1999.* Kenya Wildlife Service Report, Kenya.

Kirk, G. S. (1970) *Myth: its meaning and functions in ancient and other cultures.* Cambridge University Press.

Kolb, D. (1984) *Experiential learning.* Englewood Cliffs, New Jersey: Prentice-Hall

Kuriyan, R. (1999a) *STE Grassroots Elephant Awareness Programme.* Final report, July 1999. Save The Elephants.

Kuriyan, R. (1999b) *Living together – the Samburu people and elephants*. Save The Elephants, Kenya Wildlife Service.

Kuriyan, R. (2001) *Local perceptions of elephants and conservation: Samburu pastoralists in northern Kenya.* Manuscript in print

Larick, R (1984) *Sedentary makers and nomadic owners: the circulation of steel weapons in Samburu District, Kenya: Part 1 – Weapons, past and present.* Seminar paper number 163. Institute of African studies, University of Nairobi

Larick, R. (1986) Age grading and ethnicity in the style of Loikop (Samburu) spears. *World Archaeology.* Volume 18 Number 2. Weaponry and Warfare. pp 269 – 283

Larick, R. (1987) The circulation of spears among Loikop cattle pastoralists in Samburu District, Kenya. *Reseach in Economic Anthropology*. Volume 9, pages 143 – 166.

Laws, R. M. (1970) Biology of African elephants. *Sci. Prog., Oxf*. 58: 251 - 262

Leakey, R., Lewin, R. (1995) *The sixth extinction.* New York: Doubleday

Levi-Strauss, C. (1963) The structural study of myth. In Levi-Strauss, C. (editor) *Structural anthropology*. Volume one. New York: Basic Books.

Lewis, C. I. (1946) *An analysis of knowledge and valuation.* Illinois: The Open Court

Marshall, L. (1976) The !Kung of Nyae Nyae. United States of America: Havard University Press.

Mbiti, J. S. (1969) *African religions and philosophy.* London: Heinemann

Metcalfe, S. (1994) The Zimbabwe Communal Areas Management Programme for Indigenous Resources (CAMPFIRE). In Western D., Wright M., Strum S. (editors) *Natural connections: Perspectives in community-based conservation.* California: Island Press

Miles, B. & Huberman, A. M (1994) *Qualitative data analysis.* Second edition. Thousand oaks, London, New Delhi: Sage.

Milton, K. (1996) *Environmentalism and cultural Theory: exploring the role of anthropology in environmental discourse.* London: Routledge

Ministry of Planning and National Development (1997) *Samburu District Development Plan 1997 – 2001*. Republic of Kenya. Nairobi: Government printers

Moss, C.J. (1988) *Elephant Memories: thirteen years in the life of an elephant family*. William and Morrow and Co., New York.

Mwangi, E.; Omondi, P.; Kiiru W., Litoroh, M. (1993) *A survey of the Lorroki forest reserve elephant population.* unpublished report. Kenya Wildlife Service

Okiomeri, I. (1986) Property, trade and production systems among the Samburu people. In Were G. S. and Ssenyonga J. W. (editors) *Samburu District: socio-cultural profile.* Government of Kenya, University of Nairobi; pages 73 – 91

Ole Sena, S. (1986) Belief systems and religion of the Samburu people. In Were G. S. and Ssenyonga J. W. (editors) *Samburu District: socio-cultural profile.* Government of Kenya, University of Nairobi; pages 27 - 32.

Ole Sena, S. (1986) Political and legal institutions among the Samburu people. In Were G. S. and Ssenyonga J. W. (editors) *Samburu District: socio-cultural profile.* Government of Kenya, University of Nairobi; pages 44 – 48.

Ole Sena, S. (1986) Traditional education in the Samburu society. In Were G. S. and Ssenyonga J. W. (editors) *Samburu District: socio-cultural profile.* Government of Kenya, University of Nairobi; pages 40 - 43.

Ole Sena, S. and Ssennyonga, J. W. (1986) The Samburu People: language and literature. In Were G. S. and Ssenyonga J. W. (editors) *Samburu District: socio-cultural profile.* Page 21 – 26. Government of Kenya, University of Nairobi; pages 21 – 26.

Ottichilo, W. K., Kufwafwa J. W., Stelfox J. G. (1987) Elephant population trends in Kenya: 1977 – 1981. *African Journal of Ecology*. volume 25: 9 – 18

Pavitt, N. (1991) *Samburu.* New York: Hendry Holt & Co.

Peden, D. G. (1984) *Livestock and wildlife population inventories by District in Kenya: 1977 – 1983.* Kenya Rangeland Ecological Monitoring Unit

Poole, J.H. (1987) Rutting behaviour in African elephants: the phenomenon of musth. *Behaviour*, 102**:** 283-316.

Rasmussen, H. B. (2000) Elephant movements and male mating behaviour. Final report to the Elephant Research Trust Fund and Save The Elephants. November 1992

Ravenhill, P. L (1992) Of pachyderms and power: ivory and the elephant in the art of central Cote D'Ivoire. In Ross, D. H. (editor) *Elephant: the animal and its ivory in African culture.* University of California

Reich, B., Adcock, C. (1976) *Values, attitudes and behaviour change.* London: Methuen

Richards, L. (1999) *Using Nvivo in qualitative research.* Melbourne: Quality Solutions and Research

Richards, P. (1993) Natural symbols and natural history: Chimpanzees, elephants and experiments in Mende thought. In Milton, K. (editor) *Environmentalism: the view from anthropology.* London: Routeledge

Rokeach, M. (1972). *Beliefs, attitudes and values: a theory of organization and change.* Jossey-Bass

Rokeach, M. (1973) *The nature of human values.* New York: The Free Press

Roosevelt, T. (1909) *African Game Trails: An account of the African wanderings of an American hunter-naturalist.* New York, London: Syndicate publishing company

Ross, D. H. (1992a) (editor) *Elephant: the animal and its ivory in African culture.* University of California

Ross, D. H. (1992b) Imaging elephants: an overview. In Ross, D. H. (1992) (editor) *Elephant: the animal and its ivory in African culture.* University of California

Shackelton, R. M. (1946) *Geology of the country between Nanyuki and Maralal* Geological survey of Kenya, publication 11; Nairobi (cited in Bronner 1989)

Sikes, S. K. (1971) *The natural history of the African elephant.* London: Weidenfeld and Nicolson

Simonse, S. and Kurimoto E. (1998) (editors) *Conflict, age and power in north East Africa: age systems in transition.* London: James Currey, Dar es Salaam: Mkuki na Nyota, Nairobi: East African Education Publishers. Athens: Ohio University Press.

Simonse, S. and Kurimoto E. (1998) Introduction. In Simonse S. and Kurimoto E. (editors). *Conflict, age and power in north East Africa: age systems in transition.* London: James Currey, Dar es Salaam: Mkuki na Nyota, Nairobi: East African Education Publishers. Athens: Ohio University Press. Pages 207 – 226

Sobania, N. W. (1979) *Background history of the Mt. Kulal Region of Kenya.* IPAL Technical Report Number A – 2. UNESCO/UNEP: Man and The Biosphere Programme

Somjee, S. (1986) Material culture. In Were G. S. and Ssenyonga J. W. (1986) (editors) *Samburu District: Socio-cultural profile.* Government of Kenya, University of Nairobi; pages

Sommer, G. and Vossen R. (1993) Dialects, sectiolects, or simply lects? The Maa language in time perspective. In Spear T. and Waller R. (editors) *Being Maasai – ethnicity and identity in East Africa.* London: James Currey, Dar es Salaam: Mkuki na Nyota, Nairobi: East African Education Publishers. Athens: Ohio University Press. In Pages 25 – 37

Spear, T. and Waller, R. (1993) (editors) *Being Maasai – ethnicity and identity in East Africa.* London: James Currey, Dar es Salaam: Mkuki na Nyota, Nairobi: East African Education Publishers. Athens: Ohio University Press.

Spencer, P. (1965) The Samburu: *a study of gerontocrary in a nomadic tribe.* Berkley and Los Angels: University of California Press.

Spencer, P. (1973) *Nomads in alliance: symbiosis and growth among the Rendille and Samburu of Kenya.* London: Oxford University

Spencer, P. (1976) Opposing streams and the gerontocratic ladder: two models of age organization in East Africa. *Man*. Volume 11: 153 - 175

Sperling, L. (1987a) Food acuisition during the African drought of 1983 – 1984: A study of Kenyan herders. *Disasters* 2 (4): 263 – 272

Sperling, L. (1987b) The adoption of camels by Samburu cattle herders. *Nomadic Peoples* 23: 1987 pp 1 – 17

Sperling, L. (1987c) Wage employment among Samburu pastoralists of north-central Kenya. *Research in economic anthropology* Volume 9: 167 – 190

Spradley, J. P. (1979) *The ethnographic interview.* New York, Montreal, London, Sydney: Holt, Rinehart and Winston.

Ssennyonga, J. (1986) Introduction. In Were G. S. and Ssenyonga J. W. (1986) (editors) *Samburu District: socio-cultural profile*. Government of Kenya, University of Nairobi; pages 1 - 9.

Straight, B. S (1997) *Altered landscapes, shifting strategies: the politics of location in the constitution of gender, belief and identity among Samburu pastoralists in northern Kenya.* Ph.D. dissertation. University of Michigan.

Synnott, T. J. (1979a) A report on the status, importance and protection of the montane forests. IPAL technical report D 2a; UNESCO; Nairobi

Synott, T. J. (1979b) A report on prospects, problems and proposals for tree planting. IPAL technical report D 2b UNESCO; Nairobi

Thouless, C. R. (1993) *Laikipia Elephant Project.* Unpublished manuscript. Final report to Kenya Wildlife Service, World Wide Fund for nature, Zoological Society of London, Gallman Memorial Foundation

Thouless, C. R. (1995) *Wet season aerial survey of Sarara-Sabache area, Samburu District, Kenya.* Unpublished manuscript. Namunyak Wildlife Conservation Trust

Thouless, C. R. (1998) Variability in ranging behaviour of elephants in northern Kenya. *Pachyderm.* Number 25: 67 – 80

Ville, J. (1995) Man and elephant in the Tsavo Area of Kenya: An anthropological persepective. *Pachyderm.* Number 20: 69 – 72

Wandera, J. G. and Kapule, D. (1986) Crop production among the Samburu. In Were G. S. and Ssenyonga J. W. (editors) *Samburu District:*

Socio-cultural profile. Government of Kenya, University of Nairobi; pages 57 – 64.

Wandera, J. G. and Kapule, D. (1986) Livestock among the Samburu. In Were G. S. and Ssenyonga J. W. (editors) *Samburu District: socio-cultural profile.* Government of Kenya, University of Nairobi; pages 65 – 72.

Waruinge, M (1986) History of Samburu people. In Were G. S. and Ssenyonga J. W. (editors) *Samburu District: Socio-cultural profile.* Government of Kenya, University of Nairobi; pages 21 – 26.

Waweru F. K., Muriuki G. M (1993) *Herbivore population status: Samburu District.* March 1993. unpublished report. Kenya Wildlife Service

Were, G. S. and Ssennyonya, J. W. (editors) (1986) *Samburu District: Socio-cultural profile.* Government of Kenya, University of Nairobi

Western, D. (1997) When the forest falls silent. In Orenstein, R. (editor) *Elephants – the deciding decade.* International Wildlife Coalition.

Western, D.; Wright, M. and Strum, S. (editors) (1994). *Natural connections: Perspectives in community-based conservation.* California: Island Press

Wilson, A. (1989) *Samburu, Buffalo Springs and Shaba National Reserves – A visitors guidebook.* Friends of Conservation

Wittemeyer, G. (2001) *The elephant population of Samburu and Buffalo Springs National Reserves, Kenya.* Manuscript in print.

Appendix 1
Interview questions
22nd April – 18 July 2001

Appendix 1 - A

Name of Informant	Mr. Nauro Lekalaile
Age set	Kimaniki
Phratry	Longeli
Clan	Wiyam
Ethnic group	Ariaal
Occupation	Senior elder
Date(s) of interview	April and May 2001
Location of interview	Kiltamany
Number of other participants	32

Interview questions on 22nd April 2001

- I have known you for sometime and we have been close friends since I began working in Samburu. At the moment, I am doing a study and wish to humbly ask if you would be willing to teach me the ways of the Samburu concerning elephants?

- How would you like us meet? What time are best for you and how about how many time a week can I contact you?

- Since I want to listen to everything that Michael translates, do you mind if I use this tape recorder to 'write' my notes?

- Of course I don't mind other people attending. In fact I would very much like them to hear your stories too. I understand that it is uncustomary to host visitors without a friend or friends. Sure, they are very welcome and I don't think they will distract us at all. I would only ask you to verify their contributions and ensure it is just like what you want me to learn.

- Yes, now I understand the saying 'when you go where they eat elephants eat elephants'. When else is this idiom used?

Interview questions on 24th April 2001

- Do you mind elaborating on your idiom yesterday that: "When you go where they eat elephants, eat elephants"?

- Do Samburu eat elephants?

Interview questions on 26th April 2001

- Did you say that when an elephant kills livestock or a person, nobody even touches the victim?
- What other animals, apart from elephants are not eaten?
- What can you do or supposed to do when an elephant attacks your livestock?
- Yes, please tell me about your encounters with elephants now and in your warriorhood?
- I thought elephants never abandon their calves, how come it sounds a bit of a common thing in the Waso?
- I understand your point about not eating elephants but are there any so called benefits from elephants? What make the Samburu and Rendile regard them so highly?
- If an elephant died around the village, would you more?
- You say that ivory is very important to the Samburu. Could you please tell me about the importance?
- Yes, please tell us the story about how the elephant broke its back?

Interview questions on 7th May 2001

- Why do you say the woman discovered the ntotoi game to distract men?
- Describe the Remore, the women fertility ceremony to me.
- Apart from fighting, what else is prohibited during the ceremony?
- Do you know any significance of that ear to the elephants according to the Samburu's?
- What is would an elephant be indicating by flapping its ears like that?
- When an elephant charges, does it flap its ears?
- Which one of the elephants is more aggressive, Sangalai or a female elephants?
- You say that you have witnessed many people being killed by elephants. Do you mind describing the process of the elephant attack?
- Which elephants usually kill mostly, female or male elephants?

- In your opinion, when do you think the Samburu people have actually killed a lot of elephants in an argument, is it now when you were old or when you were a warrior or when you were a child?

- What do you think stopped the conflict here, is it that people like elephants or people learned their importance or even elephants are not available in great numbers like before? Do Samburu like or have elephants?

- In your opinion, which place has a lot more human-elephant conflict compared to other areas?

- Why don't the Samburu people like reporting dead elephant; is it against their culture or is it a fear?

- In you opinion, all those elephants that have died in this area, do the concerned authorities know or only the Samburu people know because they are the ones who see those elephants in the bushes?

- How about nowadays, if it dies do they know that quickly?

- How long does an elephant live, in your opinion?

- Why do you say that elephant skin is tough?

- Why would a Samburu say that an elephant is like an old woman?

- Can Samburu refer to elephants as old men?

- Is it an insult if you make an example of an elephant to a man? Can you say 'the arm' resembles a man's penis?

- In your opinion, from the groups you have watched so often, do calves play with females or adults play with calves or even females play with male adults or there is usually no play at all?

- When Samburu see unique characteristics in elephants like one tusked or deeply nicked-ears ones, does it say anything about the character of the animal?

- Can you identify the one you are describing from a photograph?

- If elephants come and meet and elephant carcass, do you think they notice it?

- Since you heard about the burning of ivory in Kenya, do you think of that good or bad idea to burn?

- What could you have suggested to be done, if people were to take your opinion?

- Those are interesting comments from the warriors. But how does the lion get to kill an elephants?

- But since we started the project, we have been getting a lot of information from the warriors themselves about things happening all over, they just go their own patrols and feed on anything. Do you think STE sends those warriors?

Interview questions on 9th May 2001

- Did you say that sometime ago, the district authorities stopped you and the whole village from driving cattle through the Reserve for water at the Waso River?

- Mzee, earlier on you said that you asked warriors not to seal the wells completely so that smaller animals and birds can drink from there too. Is that a common Samburu practise to intentionally allowing wild animals to share their hard-dug wells? Does is happen in all parts of the district or is the situation only unique to the Samburu area?

- Can you recall how many times you have had to make wells on the dry river bed of the Waso River?

- During which drought did he advice people not to deny animals their water?

- Have you heard whether people outside the park did the same thing?

Appendix 1 - B

Name of Informant	Mrs. Naipaare Lekalaile
Age set	Kimaniki
Phratry	Longeli (Loimisi)
Clan	
Ethnic group	Samburu
Occupation	Senior elder
Date(s) of interview	24th April 2001
Location of interview	Kiltamany
Number of other participants	2

Interview questions on 24th April 2001

- Why do you say that men are giving the wrong version of the story and that it is them who let their wild animals run of as they came to look for women?

- Why do the men change the version to favour them?
- So the animals got lost because men left them to come and marry or they got lost first and men came to where women stay with their livestock?
- What is the real or women's version of the story?
- Thanks for the story. The men tell me that after you lost your animals (wildlife) you cam to look after their livestock and in the process the men married the women. Why do they say that?
- Let us change the topic. If a girl is born where boys have been dying, can they still put on the ivory to prevent them from death or what other ivory ornament do they wear?
- What about wearing it for beauty like the warriors or girls who put on the lkiyaa?
- What about that one which is put on the child's neck and also the mother, what's the importance of it?
- What other things related to elephants do they use when they blessing or praying?
- We have been hearing a lot about lukumae, that they have power to control elephants. Do you know anything about that?
- Do you know or remember any songs that used to be sang for someone who killed elephants out of bravery or someone who was killed by an elephant?
- Why do the Samburu like elephants or have little to do with them? Would you say they like it, or fear it or just respect or even worship it… what word best describes their attitude or relationship?

Appendix 1 - C

Name of Informant	Mr. Lepirendon Lekuuk
Age set	Lmooli
Phratry	Lorokushu
Clan	
Ethnic group	Samburu
Occupation	Warrior
Date(s) of interview	9th and 10th May 2001
Location of interview	Kiltamany
Number of other participants	3

Interview questions on 9th May 2001

- You said that you always fence around your water well? Why? The elephants will always break them anyway.
- So when you put a fence do you cover it completely?
- Do you get upset if you find that elephants have damaged your well?
- Why not?
- But in 1999 a moran from Kiltamany village shot an elephant at the wells near Nantaana. I know the moran that did it. How do you explain that?

Interview questions on 10th May 2001

- What is this sangalai elephant you keep mentioning?
- How does Sangalai behave because you seem to know about Sangalai than any other elephant?
- What else do you know about Sangala?
- Is Sangala a juvenile elephant, middle aged or very old male?
- So Sangalai is an old bull that stays alone; tell me more about it?
-
- What do you called an elephant group?
- Within that mboo are they related or they are just unrelated individuals associating?
- Does a mboo have a leader?
- For an elephant to be Sangalai, does it have to be chased from the herd through dominance and fighting?
- Along the Waso, are there places where Sangala like staying?
- When an elelphants stays alone, can he be called a Sangalai?
- When an elephant becomes a Sangalai, does it remain so all its life or its status changes from time to time?
- Must they fight?
- Can two or three Sangalai meet up and make their own herd and hence stop being Sangala or they are still Sangalai?

- Let us assume that there are no females, only bulls from different places e.g five bulls can they stay together, refer their group as a mboo?
- Do the Sangalai stay together in one herd forever or not?
- What is the normal behaviour of a Sangalai, apart from solitude?
- So you think he is the leading bull in the mboo?
- Why do the Samburu people say that Sangalai is always coming from behind the herd, what does that actually indicate?
- Can we call a lone female Sangalai?
- Can we say a calf moving alone is Sangalai?
- If an elephant is sick and gets left behind can we call it Sangalai?
- What causes Lokuchum and how do affected elephants look like; will they die or can they recover from the disease?
- What causes lokuchum?
- Do you know which family ate elephants during *mutai*?
- When did you stop intermarrying with Ntorobo before they started eating elephants or even before?

Appendix 1 - D

Name of Informant	Mr. Sesen Lekalaile
Age set	Lmooli
Phratry	Longeli
Clan	Wiyam
Ethnic group	Ariaal
Occupation	Warrior
Date(s) of interview	7th May 2001
Location of interview	Kiltamany
Number of other participants	16

Interview questions on 7th May 2001

- Did you say that Sangalai is always nervous?
- So let me ask again. Is there a time when you can find many Sangala staying together?

- Which diseases mostly affect elephants?
- Will they really know that the other elephants are suffering, so that they keep off from the water?
- Most of the time people say that when an elephant kills a human being, other elephants will not come near that elephant. Is that a Samburu belief?
- Why should the elephants avoid the killer elephant?
- What about if the killer is ngamitoni?
- When an elephant kills somebody, be it a female, bull, or Sangalai, according to the Samburu, I have heard people say that it kills and put branches on top like trying to bury the corpse and then puts it in a discrete place. Is that true?
- Which one likes to charge people most, females or Sangali?
- Were elephants like human or were they with humans.
- Is that why Samburu's place leave on the skull,
- What is ngamitoni? Is *ngamitoni* a big cow, bull, young bulls or what is it?
- So it must be a short elephant? Does that mean bigger elephants don't have ngamitoni?
- What about in a family without a ngamitoni, who is the leader?
- So it's not a bull which is the leader it is a female.
- You say ngamitoni is the protector, what about those old cows who actually in the herd?
- Can a Samburu tell just by looking at an elephant how many age sets it has stayed?
- Is it male or female which mostly have those large lines in their foot-prints?
- How do you know the footprints of an old cow?
- I would like you to tell me about elephant routes to many places, where they pass, which season and the main reasons whey they move to those places. Please also tell me when they come back or anything else you might know about their movements.
- Why do they migrate?

- What are the specific features or criteria for creating olturoto or mailoti?
- What attracts them to Chapulo?
- Do all elephant use all the routes? Are they different for each mboo?
- You say they recognize the dead. How do elephants react to dead elephants? How can they recognise the dead elephant?
- Why do Samburu warriors wear ivory earings?
- Where do the warriors acquire the earings?
- Which age set began wearing ivory plugs?
- Is there something wrong throwing them away?

Appendix 1 – E

Name of Informant	Mrs. Veronica Lekalaile
Age set	Kimaniki
Phratry	Longeli
Clan	
Ethnic group	Samburu
Occupation	Senior elder
Date(s) of interview	9th May 2001
Location of interview	Kiltamany
Number of other participants	7

Interview questions on 12th May 2001

- Can you narrate to me that story about the elephant and the Samburu woman?
- Did any other animal ever live with people?
- In what circumstances are these stories given?
- In normal circumstance which parent or gender tells stories to children?
- Any other stories? We heard one about the elephant challenging God….
- In the nkatini, is an elephant perceived to be smart, wise, strong or merely a bully?

- I have a question regarding the ivory necklaces. Who, when and why do they use it?

- Why use the ivory for good omen and not any other bone?

- According to the women, if it is bad to eat an elephant and people whose ancestors ate elephants are generally avoided, why then was such a practice of using ivory necklace adopted and accepted by Samburu people?

- Is the necklace put on both boys and girls?

- You say that children belong to women. But how is that possible? I thought all children belonged to the men?

- That is true. But who will you say the child belongs to?

- But which homestead's name will the child be names after?

- But why not give the child your name and not connect it with any man's manyatta?

- [No. I don't even think it matters who conceived. It is only the mother who knows who the father is.] [I only think that will only be a matter of darkness. Men and women will visit each other and sooner or later, they will just decide to break down the fences and live together because it is easier].

- All right, give me an example where a woman has named children after her own name in Samburu land?

- Let's use your example. Fine, but when you say your name is Lengamunyak, which is a woman's name are you referring to a 'man' or a 'woman' point of origin?

- It seems like women in Samburu have a lot of influence. But that influence is never noticed by outsiders and women never bother to wield it in public. Why?

- In English, we say never argue with a fool because one would never know the difference. Is it the same sort of strategy adopted by Samburu women in this case?

- Is there anything other than ivory product that Samburu women wear, equivalent of earrings or earplugs etc?

- Another question; suppose you are walking to the river and find a dead elephant, Samburu put a twig or stone on the skull. Why should people do it, I mean the prayer, *asai*?

- Elephants make noise in different circumstance. What kind of noises are these and what do the Samburu people relate the noises to?
- Who usually calls during the feeding?
- How about when attacking?
- Did you say Samburu have different names for different elephant noises?
- Does the period when elephant calls vary with the season?
- Is there any other peculiar elephant behaviour that gives interesting signs?
- So which elephants go for the scouting? Large families, small families or which?
- What is the work of *ngamitoni*?
- Must every elephant group have such leaders?
- How does an elephant become a *ngamitoni*?
- Can you have two *ngamitoni* in a group?
- Is there a possibility of a group not to have a *ngamitoni*?
- Would I then be right to claim that the work of Sangalai and Ngamitoni is the same?
- Is Ngamitoni the oldest female in the group?
- Do Samburu women have an equivalent of *ngamitoni*?
- Do other animals have *ngamitoni* e.g. cattle?
- Can *ngamitoni* be displaced or bullied by any other elephant in the group?
- What would happen if *ngamitoni* from two different groups meet?
- We have talked about a group many times. But how is it formed?
- Are all elephant the same in terms of character or do they differ like people?

Appendix 1 – F

Name of Informant	Mr. Loinyamal Lenanyangera
Age set	Kimaniki

Phratry	Lukumae
Clan	Lowuagoso
Ethnic group	Samburu
Occupation	Senior elder
Date(s) of interview	Various
Location of interview	Lerata
Number of other participants	24

Interview questions on 12th May 2001

- What is the relationship or association between the Samburu people and elephants?
- I am informed that Samburu people don't eat cows or goats injured or killed by elephants. But if other animals or human enemies kill a cow or goat, Samburu people will eat the meat. But if elephant kill, Samburus never even touch the animal. Why do the Samburu people abstain from eating the animals?
- Would you eat any animal killed by your angry prodigal son?
- But why not an elephant if it was once a Samburu?
- I have a good reason for begging this question. Elephants are treated in a more special way than the Samburu people or any other living organism. And now I understand that all these abstentions and special treatments are meant to bring elephant closer to the Samburu people. What other special things do Samburu people do for elephants in an attempt to being it much closer?
- You mention that during the great famine, some families hunted and ate elephants. Now I realise that eating elephants is such a serious offence, a taboo, and a hideous crime. Namely, which families are known to have eaten elephants?
- What is the Samburu name for the pair of tusks used for the moon ceremony? What is the name of the ceremony? How long have Samburu people been doing this ceremony?
- The elder has said that cows bought or exchanged with tusks don't die during drought and don't easily contract. How come?
- Why do some families use ivory for the moon ceremony and circumcision and not others in the same clan?

- So if a family begins experiencing high infant mortality and deaths of family members, will they begin using ivory even if they never did that before?

- Does it mean that families that never use ivory have never experienced the same kind of problems?

- Samburu use ivory and they place green leaves on elephant skulls. Are there any prayers given when placing the leaves?

- Are skulls of other animals accorded the same respect?

- You said that only elephant dung is used for wedding ceremonies. Tell me more about it.

- Severval wazee told me about people with special powers to communicate with elephants. To me it seems like they were mostly females – girls and women. Why do women seem to be the most effective in commanding elephants?

- Would a Samburu hunt an elephant for ivory?

- Even when an elephant kills a Samburu?

- Let us say I go to 'game' and report that an elephant killed somebody. 'Games' arrives and finds the animal and kill it. How would Samburu interpret that then?

- But isn't it the same thing as killing an elephant, this time by proxy?

- Would the Samburu people seek compensation of someone killed by an elephant?

- Can a woman bring the elephant placenta to the manyatta?

- I would like Mzee lenanyangera to summarize this session for me about elephants people and elephants.

- From our discussion, we have observed three distinct kinds of elephants: Ngare Ndare and Mt. Kenya; elephants from Lorroki and Mpala; and elephants from the Lodge. Are there other known populations?

- When are elephants in Sarara?

- Where does the Ilkerei population pass?

- We have now defined and described five elephants. Elephants from the lodge, elephants from Ngare Ndare and Mt. Keny; elephants from Loroki. Elephants from Rumuruti and elephants from Ilkere. Any others?

- Which evergreen tree is this that they like browsing so much and attracts them to the area?
- How about Sakaram?
- Do 'the lodge' elephants use only one route to and from Samburu or they also do a circuit?
- Among the 5 sub-populations of elephants, which one is largest and which one the smallest? List the sub-populations in order of their size.
- Which elephants arrive first in Lerata?
- Which elephants depart from Lerata first?
- You seem to describe five population and Ilkerei and Sarara elephants seems to be different too. Can you tell whether these five populations have different charactors and dispositions too? Or are they all the same?
- We have seen that Lorroki elephants are the highest in number and Mt. Kenya elephants are the least. Has it been like that since a long time ago or was there a time when some low population were actually here?
- Which areas or what particular spot did Somali set up and ambush elephants
- Why did the elephants, *mboo le shere* make the noise?
- Why were they so easy to kill?
- Do Samburu know why elephants move in a line or in a dispersed group?
- What is the arrangement of the queue?
- Do elephant families mix when migrating?
- Is ngamitoni a male or female?
- What is the work of Ngamitoni, exactly?
- What kind of sounds or noises do elephants make and what do these noise(s) mean to Samburu?
- Do the Samburu know whether elephants make noise when mating?
- Does the female scream for long when males approach?
- Can the dominant bull be displaced?
- Have anyone here ever seen an elephant giving birth?

- Why not?
- How do elephants treat new calves?
- Have you seen a still birth or a dead elephant calf?
- Sometimes you find solitary calves especially those fallen in wells or others just loitering and roaming on their own. How does this situation of solitude develop?
- Do Samburu know exactly why they bury some fallen calves and leave others alive?
- How about other solitary yearlings roaming on the own?
- Why didn't the Samburu people stop *shifta* people from killing rhinos and elephants?

Interview questions on 14th May 2001

- These pieces of ivory that you are showing me for performing the moon ceremony, can they be kept anywhere or must be put in a special place?
- Must the ivory pieces have to be any specific shape?
- Why do elephant tusks have a little ridge at the tip?
- Are the tusks protected from people believed to be of bad omen e.g. *laisi*?
- What are the special new moon prayers for? What is their main purpose?
- Why use elephant tusks and *ntarakwai* and not any other bone or tree?
- It is interesting about what you say concerning 'arguments with elephants'Considering that an elephant was once human, how do Samburu resolve the argument?
- So is it that a different kind of *ndoki Nauroi or* what exactly do Samburu people refer to human-animal conflict?
- If elephants were considered to be human or people, why did other Samburu ask their moran to abstain from committing a hideous crime, equivalent to cannibalism?
- Why didn't the Samburu elders or culture prevent them from killing elephants for personal gain?
- Is killing of elephants for ivory another kind of *ndoki nauroi?*
- Can I say that I have committed ndoki nauroi to an elephant?

- Can an elephant also perceive *ndoki nauroi*?
- How about when an elephant is aggressed while drinking water from an Olturot or feeding on sakaram and livestock intrude, what would you think of that?
- Would I be right to say that Samburu people look at human to elephant conflict and also elephant to human conflicts?
- Do Samburu resolve such a conflict i.e. how would one resolve a case where people actually aggress elephants?
- Will human-elephant conflict ever end?
- So compensation for wildlife damage does not ameliorate the situation?
- All kinds of animals fall sick, and come diseases are peculiar to specific animals. Do elephants get sick, or contract any kinds of diseases?
- An elder informed me about a kind of plant that grows near the Waso River, which is poisonous and would kill an elephant if eaten.
- Some elders have said they contract *ngulup*. Is that true?
- Can elders put a curse on game meat poaching by morans?
- Can they fined or punished for it?
- Can you say that you literally own wildlife?
- But who had told the morans not eat the meat in the first place, Namunyak or the elders?
- Why were they not fined or punished by the traditional culture?
- I have heard many times that Wamba was the centre of trafficking of all sorts of game meat and ivory. Is that true?
- What did the Samburu people think about burning of ivory by the Kenya Government in July 1989? Would Samburu burn ivory to destroy it?
- Have the local elders ever raised that question about burning a blessed product with 'game'.

Interview questions on 17th July 2001

- Could you describe Olturot and all the elephant routes from Lerata to 'the lodge' for me?
- What about the main routes from here to Loroki Forest.

- Mzee Lenanyangerra, I presume you have travelled throughout the district. So please tell me where elephants are distributed. I will call out the name of a place using this map and you can tell me whether elephants are found there, only during migration or whether they are residents or not.

- So in summary which parts of the district do elephants prefer to reside most?

- You said to me before that until recently Samburu *launoni* did not wear ivory, lalae, and but the tail tip, lenyok. What brought about the change?

- How many Samburu phastries are there?

- Where does each phastry 'capture' its spiritual leader?

- Must all spiritual leaders wear the ivory ring?

- If a launoni dies, does his assistant automatically take over?

- If he looses his badge, what happens?

- I understand that mzee Lolmodooni does not have the ivory bangle. That his elder brother in Wamba has it. But I thought each son had their own?

- What if the family has more that one boys, each boy is supposed to get their own?

Appendix 1 – G

Name of Informant	Mr. Leadeke Longiro
Age set	Kiroro
Phratry	Masula
Clan	Mosiat
Ethnic group	Samburu
Occupation	Ranger, NWCT
Date(s) of interview	13th May 2001
Location of interview	Lerata
Number of other participants	4

- Who found the dead elephant that you are now going to show me at Loijuk?

- Is it a common practise for Samburu to report a dead elephant to 'game'?

- Did Samburu people ever show concern or interest in ivory poaching by the Somali tribesmen?
- Would you eat a cow killed by elephant?
- Why not?
- Why didn't Samburu morans or people in general challenge the poachers?
- Which meaning or benefits are more important to you, KWS or Samburu?
- [Why can't STE repair the broken water pump so that other animals can benefit too] Have you ever seen an elephant dying of thirst?

Appendix 1 – H

Name of Informant	Mr. Lenamoi Lesowapir
Age set	Kimaniki
Phratry	Loimisi
Clan	Lmalon
Ethnic group	Ndorobo
Occupation	Senior elder
Date(s) of interview	14th May 2001
Location of interview	Gogoltim
Number of other participants	4

Interview questions on 20th May 2001

- Tell me more about the Ndorobo and hunting.
- I have heard and read that you hunted elephants a lot for food and trade in ivory. Is this true?
- How did you do the hunting?
- Were the same tools used during the poaching era too?
- So the elephants were still elusive even during those early days of hunting?
- Who used to buy the ivory you smuggled from the forest during those colonial days? Did the smugglers and traders ever get in trouble with the government?
- You say that the Samburu ate elephants during the Mutai famine; all Samburus?

- Did the Ndorobo people have any cultural uses for any elephant product?

Q. Do you know about the woman-elephant story?

- How did you manage to win over the Kishili in poaching and smuggling ivory?

Appendix 1 - I

Name of Informant	Mr. Mataiyan Lekalasimi
Age set	Kimaniki
Phratry	Lngwesi
Clan	Lmalon
Ethnic group	Ndorobo
Occupation	Senior elder
Date(s) of interview	15th and 16th May 2001
Location of interview	Gogoltim
Number of other participants	21

Interview questions on 15th May 2001

- Did the poaching affect the elephant migrations?
- Please describe the migrations routes me again
- Were the routes changed during the poaching or hunting era?
- You said that the ndorobo people suffered when the elephants disappeared? Please explain more about this.
- Since the elephants started coming back, which are their favourite haunts?
- Do you also take cows for salt licking at Chapulo and Orka?
- You said that before migrating they assemble and form a group. Which place do they normally assemble?
- Do they make any noises while together? What do you say or think about the trumpeting, why do they trumpet so much then?
- Do they make the trumpeting noise during the day or at night?
- Have you exhausted the information about how the Ndorobo used to hunt elephants?

- Was there a time that elephants were rare or scare in your memory?
- What happended and what did the Ndorobos think of that scarcity?
- In your opinion, where did all those elephants pass; did they stop passing there after the killings?
- If your knowledge has kept elephant alive for so many years, in spite of the *shifta* era, why do you think that my exotic knowledge is better than yours?
- Because you elders can tell all elephant ways and every route that elephants pass and you can tell every single *olturoto* around and even far from your area, but non of those ways or *olturot* have been mapped, but I presume every elder knows this kind of information.
- If that is how the Ndorobo lived, even when an elephant kills, it does so within your culture. In other words, there is coexistence. You benefit from olturot, firewood for your women etc. They are also give signals about rains too through their noise. I understand that you know when the Lorroki elephants have arrived when you hear their noise.

Interview questions on 16th May 2001

- Are there any Ndorobo ceremonies where any elephants products like dung, tusks or skin are used?
- What is a sangalai?
- What is the nature of a sangalai?
- Do Sangalai have specific places in Gogoltim, which they prefer to stay?
- Where in this area can Sangalai be found mostly?
- Are Sangalai aggressive to people or are other elephants worse?
- In what circumstances do Sangalai attack people?
- So Sangalai feeds until he feels full. Do you mean to say he changes its body shape?
- What about if two full Sangalai meet, what would happen?
- Did you say you witness a fatal fight in Kitich?
- Now about the elephant being full, you have said it gets strong, big and full in the neck and around the head area. Someone told me that they urinate while walking and the urine has a very strong smell. Have you noticed that?

- How long does Sangalai stay in 'full condition'?
- In a group, is Sangalai the leader?
- So if somebody says *ngamitoni* is choosen, would that person be wrong?
- But the other old man said its mostly the old mama in the group that remains ngamitoni throughout?
- Is it that when an elephant kills a person and it has that smell, the rest of the herd will not like it and keep avoiding it?
- So what happens if the killer is the *ngamitoni*?
- I have heard that when an elephant kills a person, it puts leaves on the dead person. Is that true?
- What is the lifespan of an elephant?
- So how many age sets did the elephant nicknamed 'Loriung' live?
- I would like you to tell me two things about elephants. Diseases and food. Let us start with diseases.
- Some people tell me that elephants suffer *ngulup*?
- What about the swelling of the foot like the elephant, which died at Tipito?
- What time of the year or season does *lokochum* mostly affect elephants?
- What causes *lokuchum*?
- What's the traditional cure for animal suffering *lokochum*?
- What about a disease that makes an elephant pass blood from the trunk, mouth and rectum?
- Do you know of any elephant diseases that affect the skins, eyes or causes abortion in elephants?
- What kind of trees does elephants like eating during the rainy and dry season?
- Why do you burn elephant dung when your cows return home after the dry season?

Appendix 1 - J

Name of Informant	Mr. Chistopher Lekerpes

Age set	Lmooli
Phratry	Masula
Clan	Sortoi
Sub-clan	
Occupation	Ranger, Samburu County Council
Date(s) of interview	17th and 18th May 2001
Location of interview	Ngilai village
Number of other participants	7

Interview questions on 17th and 18th May 2001

- Anyway, yesterday then talking about the elephant routes, you told me that others come from Marsabit to here. Please repeat the story for me again.
- Is there major reason whey the *Olgilai* woodland disappeared from here?
- You told me that elephant became rare; who finished them?
- You also told me that when elephants first appeared recently many youth and children thought they were moving houses…?
- Were the elephants not nervous or running?
- Do you know of any particular spot where those Kishili actually massacred elephants?
- So the Lmooli age-set did not see many elephants in their childhood? Precisely when, before the last circumcision or not?
- They say many the few elephants that escaped the massacre hide themselves far away in impenetrable mountains. Don't warriors and youth in general ask where the elephants went; don't the elders admit they killed them off?
- But wasn't it a bad thing according to Samburus to kill elephants?
- So they killed and left it to rot?
- Who was the main Ndorobi around who used to do that for the Samburu?
- But didn't they spill the elephant's blood on themselves as they tried to pull out without the assistance of Ndorobo or Turkana?

- Is that the reason whey the Ndorobos were told to come and live on the hills and because of this association began to intermarry with the Samburus?

- So poaching brought them together and since then they have never separated. Is that with all Samburu or Masula phratry only?

- Describe the elephant migratory routes for me, and the migration cycle for each season.

- Do the Masula have any connection with elephants?

- What is the difference between Masula and Lukumae elephant people?

- What is the lifespan of an elephant?

- How many age sets does a human being live?

- When elephants come together and make noise, what do the Samburu say about the calls?

Appendix 1 - K

Name of Informant	Mr. Ilkitais Dukenya
Age set	Kiroro
Phratry	Lukumae
Clan	Lowuagoso
Ethnic group	Samburu
Occupation	Ranger, NWCT
Date(s) of interview	19th May 2001
Location of interview	Sarara
Number of other participants	7

Interview questions on 19th May 2001

- Can you name all the Olturot existing today which were made by elephants before Kishili were circumcised?

- Why are all these olturoto made away from rivers, almost next to human paths? How do elephants decide that, and what do Samburu think of it?

- But how to elephants decide that is the best place for olturoto and not there?

- Are there any olturot that are used by bulls only and not the main?

- You said when it rains, elephants are not found near the river?

- There is something I really don't understand? First how do elephants decide where an olturot is supposed to be? Second, how will it now that there is an olturot there and when there is water and when there is not water and what do Samburu think of the olturoto, is it a blessing or not?

- Describe the elephant migration routes and the annual cycle specific to this area for me.

- How many times do they migrate and pass all those routes?

- What made the Kishili join *magendo*?

- Why didn't the elders curse or stop the Kishili from poaching?

- I have heard that when elephants destroy people's well, they is not doubt that most people will kill the elephant stuck in the well, is that true?

- What puzzles me is the elephants calf they rescued at Lkanto, even recently, there's another one they got and gave it leaves until people took it from then and it survived. I asked why they called for help t remove it from the well. They told me if we killed it, it could have been more problems because it was during the dry spell. So better the calf gets removed and the water stay uncontaminated rather than killing it there and the water becomes useless. Because if you killed it then you have to bury it and nobody will ever know about it because it was during the 1998 drought. Almost six morans while watering their cattle told me it was not because they wanted it taken but in respect to that laborious job, so they called people from Sarara to come and remove and hence leave the well the way it was.

Appendix 1 – L

Name of Informant	Mr. Maringon Loldikir
Age set	Kishili
Phratry	Longeli
Clan	Lpasingir
Ethnic group	Ndorobo
Occupation	
Date(s) of interview	20th May 2001
Location of interview	Wamba
Number of other participants	2

Interview questions on 20th May 2001

- When the Ndorobo people used to eat elephants, are there any parts which they never ate?
- Is there a time when Ndorobos used to trade ivory with Samburu cattle?
- Do the Ndorobo women use any elephant things?
- Do Ndorobo have any supernatural power related to elephants?
- Does bee harvesting or bees have any association with elephants?

Appendix 1 – M

Name of Informant	Mr. Nurr Lepulash
Age set	Mekuri
Phratry	Pisikishu
Clan	Loisilale
Ethnic group	Samburu
Occupation	Retired elder
Date(s) of interview	19th June 2001
Location of interview	Lkalkaloi
Number of other participants	11

Interview questions on 19th June 2001

- What is the relationship between elephants and Samburu people, long time ago and to date?
- Did the elephant fall out with all Samburu or just particular segments of the society?
- But what do Samburu people say about how these particular clan and sub clans got the power while the rest lack it?
- How many clans are there in the Samburu tribe?
- Which clans have elephants?
- Are these people found all over the District, or in specific sections?
- Please narrate to me any cases of such people controlling elephants and vice versa that have happened in this area. Be as specific as possible by giving names of people and places, and dates or periods too.
- I keep hearing of women; how about men. Aren't they powerful?

- Do Samburu perform any special burial rituals for someone killed by elephants? Or seek compensation etc?
- Which animal or person has the worst taboo in Samburu culture?
- But why elephants?
- Can a Samburu kill an elephant intentionally?
- Is he cursed for doing such an act?
- Then what would be the purpose of killing it?
- How about when the Ilkishili killed a lot elephants, did they not get any curse, *leket*?
- Did all the Samburu clans do it?
- How did Samburu people come to wear ivory earplugs?
- As an adult, will the child also put ivory of his children?
- Does that mortality have a specific name?
- Is there any other bone or object used for preventing *Ndarunoto*?
- Which one is preferable?
- What other uses do Samburu people have for elephants?
- Please describe the elephant routes, olturot, and the annual migration cycle.
- Is there any specific reason why they go there? Do you drive your cows towards Chapulo and Sera?

Appendix 1 – N

Name of Informant	Mr. Jacob Lepulkash
Age set	Kiroro
Phratry	Pisikishu
Clan	Loisilale
Ethnic group	Samburu
Occupation	Senior elder
Date(s) of interview	19th June 2001
Location of interview	Lkalkaloi
Number of other participants	3

Interview questions on 19th June 2001

- Why don't Samburu people give their children names of animals or plants?
- Is calling someone the name of an elephant disrespectful then?
- I heard there is family of a family called Loltome, which lives near Mt. Ny'iru.
- Why were they possibly named after elephants?
- I know some Samburu families e.g. Lolmodooni who put their sons ivory bracelets during circumcision. How did that come to be?

Appendix 1 – O

Name of Informant	Mr. Korben Lepulkash
Age set	Kiroro
Phratry	Pisikishu
Clan	Loisilale
Ethnic group	Samburu
Occupation	Probationary elder
Date(s) of interview	19th June 2001
Location of interview	Lkalkaloi
Number of other participants	3

Interview questions on 19th June 2001

- So people from the so-called elephant clans are more powerful than the '*laisi*'?
- Which elephant sub-clan does your wife come from?
- Earlier on you told me about people who have powers to control elephants. Can you remember any more cases?
- What is their water drinking routine ?
- In you opinion, do elephants from Mt. Kenya come here?
- Why don't they cross Swari plains from Mathews range to Loroki?

- Is it elephants from Oldonyo Ng'iro that come here only or there are some from other areas.
- If an elephant dies near a homestead, do you migrate?
- Why would a moran kill an elephant?

Appendix 1 – P

Name of Informant	Mr. Kitilet Longogine
Age set	Kiroro
Phratry	Pisikishu
Clan	Loisilale
Ethnic group	Samburu
Occupation	Probationary elder
Date(s) of interview	20th June 2001
Location of interview	Lodungokwe
Number of other participants	2

Interview questions on 20th June 2001

- The two elephants that died around last year, which month was it?
- But why didn't they avoid the elephant instead of confronting it? I thought that was the norm?
- What about the other elephant?
- What disease did it die from according to the local people?
- So let us review the case where the warriors shot the elephant. What part of the body did they shot?
- Are these morans cursed because they killed an elephant?
- Do you think the morans shot the head?
- In other words, are you saying the warriors are not cursed now?
- Then under what circumstances would elders follow up and curse?
- You have told me that one elephant died of disease in April and the other was killed by morans in July. And that the morans have no curse because they did not kill it with an intention to extract ivory. Would it have been a different story if they killed a female elephant?

- Is that why Samburu people usually don't insist on compensation when an elephant kills someone?

Appendix 1 – Q

Name of Informant	Mr. Nyablan Lenyolkulal
Age set	Kimaniki
Phratry	Masula
Clan	Lotimi
Ethnic group	Samburu
Occupation	Senior elder
Date(s) of interview	21st June 2001
Location of interview	Porro
Number of other participants	2

Interview questions on 21st June 2001

- So what relationship do you have with elephants?
- When did people in Porro begin farming?
- And you don't experience any elephant attacks?
- Do you mean that no Samburu anywhere, even in towns would put up a house on an elephant path?
- So does it mean that no one from your sub-clan has ever complained to wildlife authorities about elephants destroying their maize etc?
- Please repeat the migration routes again.
- Coming from the elephant clan, do you know of other people who have suffered curses from elephants?
- Do you have a story of someone from the Lotimi clan who revenged on an elephant?
- How about the use of dung for any other activities not concerned with *Lorora* and *Ilmugets*?
- Is there another way dung is used that is not ceremonial?
- What is the meaning of burning elephant dung at the entrance of a homestead when cows are returning home after being away during the dry season?

- Please recite the Masula prayer for me.
- Is it people who told the elephant to go in peace or is the elephant who told the people to stay in peace, but despite our enmity, I will always come back to my brethren?
- Why don't Samburu people take animal names, except the Loltome family?
- Why was this family called Loltome?
- The elders have told me that elephants eat many kinds of trees, in fact almost all kinds of trees. During *Lorikine*, which plants do they prefer eating?
- I have a question about the elephant placenta.
- I can see that your lifestyle here is different from the lowlands. But during marriage, do you still make *nkaji naibor*?
- Are there any Samburu people who skip this ritual for whatever reason?
- I was told that the dung must be joined 4 times. Why is that?
- Are there any Ilmasula families that use ivory for good luck and omen, and hence use it on children?
- I would really like to see one of those bracelets. Did you say earlier that when elephants disappear from an area people begin wondering about them?
- Have you noticed any changes about the Samburu perceive elephants? What do you think those changes imply?
- Is it true that a Samburu who has killed elephants is never allowed to marry from a family that has never killed elephants, of that his daughters are never taken in marriage?
- Only when the Samburu has literally eaten elephant flesh. They are never allowed to sleep in the manyatta that evening.
- How about the *Oilgira* people?
- Are there any elephant water pools around here?
- So do they just create mud pools for drinking water only, and not necessarily for mud bathing too?
- Among all those people known to have gained massive wealth from the ivory trade, how many are still alive?

- But can't one be cleansed of the taboo or curse?
- What are your views on compensation from wildlife deaths?
- Can you invest money given out for *ng'iruai*?
- But would Samburu still follow up claim for a cursed victim?
- Did you say earlier that elephants have a mating season?

Appendix 1 – R

Name of Informant	Mr. Letetea
Age set	Lmooli
Phratry	Lorokushu
Clan	Makalilit
Ethnic group	Samburu
Occupation	Community Ranger, NWCT
Date(s) of interview	15th July 2001
Location of interview	Ndonyo Wasin
Number of other participants	5

Interview questions on 20th May 2001

- It is common knowledge that elephants migrate and disperse in this general area. I would like use to sketch map of the migration routes and olturot (water pools). Let us begin with the water pools.
- Do they always disperse in the lowlands in both dry seasons (Jan-March and June to September)?
- We have seen that elephants follow luggas during their migration and make two major crossings: from Lodosoit to Kapai, and from Napasha Kutok heading to Lodosoit and then to Santaait and finally turning to go to Kapai.
- What do the Samburu people think of sangala not following routes?
- Now tell me about the ivory poacher you arrested and charged in a court of law but later acquainted.
- Is the poacher, James Lesikel a Samburu, Turkana or Ndorobo?
- Is poaching in this area attributed to the Ndorobo?
- Does every Samburu clan have Ndorobo people attached to them?

Appendix – S

Name of Informant	Mr. Lenopus Leorkupa
Age set	Kimaniki
Phratry	Lngwesi
Clan	Siria
Ethnic group	Samburu
Occupation	Senior elder
Date(s) of interview	16th July 2001
Location of interview	Ndonyo Wasin
Number of other participants	18

Interview questions on 16th July 2001

- What is the relationship between a Samburu and an elephant? How did that relationship start?
- The legend further claims that the elephant did not fall out with all Samburu people. There are certain clans and sub-clans, namely Talas, Kuro and Lotimi with powers to related directly and effectively with elephants. How did that come to be?
- Do you have specific examples?
- Any case of whereby an elephant was punished an elephant for wrongdoing?
- Are there any other roles that elephants play in your life?
- Tell me, the person who make you the elephant necklace, is there a special relationship arising from that?
- It seems true that elephants have lived with Samburu people for a long time. I am curious to know about your knowledge and views concerning water pools, Olturot, which are made by elephants.
- But I keep wondering how an elephant just decides on a particular spot which all elephants use; what do the Samburu say about it?
- Do water pools have any benefits for the Samburu people?
- I have a question but not sure how sensitive it is. Please do not answer if it sounds too personal. In Ndonyo Wasin, an elder has a lot of wealth. They know themselves. Are they known to have buried an elephant's placenta?

- Given the nature of your short answer, I presume that is a sensitive question and lets change the topic.

- I would like to change the topic. When the Kishili told the elephants to drop their tusks and be spare death "tipika kilo nkop", why didn't the elders stop the habit assuming that killing of elephants for profits is great taboo?

- Is it true that those who hunted and killed elephants are mentally retarded?

- The last question. When an elephant kills a Samburu, don't Samburu people lodge a complaint and apply for compensation?

- Suppose an elephant kills your favourite and healthiest cow, goat or camel, will you bury, slaughter or even touch the killed animal?

- How about your favourite son?

- Would getting compensation be perceived as eating an elephant?

- But suppose you get such compensation, would you really invest it?

- Who, namely did you say uses ivory for the moon ceremony?

Appendix 1 – T

Name of Informant	Mr. Jestine Lesitre
Age set	Lmooli
Phratry	Longeli
Clan	Lpasingir
Ethnic group	Samburu
Occupation	Warrior
Date(s) of interview	17th July 2001
Location of interview	Gogoltim
Number of other participants	2

Interview questions on 17th July 2001

- As you recall you had listed many olturot around Sarara area for me. I would like us to map them out today.

- Now let us look at some Olturoto across the main road starting from Naisunyei area.

- I would like you to mention which areas where elephants reside throughout the year. In other words the distribution of elephants in the district.

- Now let us map out the routes again.

Appendix 1 – U

Name of Informant	Mr. Samari Letaare
Age set	Kiroro
Phratry	Lukumae
Clan	
Ethnic group	Samburu
Occupation	Ritual leader
Date(s) of interview	17th July 2001
Location of interview	Nayebi
Number of other participants	4

Interview questions on 17th July 2001

- What is the work of a spiritual leader, Luanoni?

- Do all *launoni* wear ivory ring?

- You said that an elephant is special because of its size and gracefulness. But does that mean the elephant have any mystical or ritual significance among the Samburu?

- Was the ring inherited?

- After his tenure ends, just like the launoni for the Kishili, does that mean he gives it away or what happens?

- Does the ring have any ritual significance?

Appendix 2

Reference code

Interviews and informants

22nd April 2001 to 18th July 2001

REFERENCE CODE	DATE	LOCATION	NAME OF INTERVIEWEE	INFORMANT'S CODE	OTHER REMARKS
KI220401	22-Apr-01	Kiltamany	Mr. Nauro Lekalaile	MNLK	
KI230401	23-Apr-01	Kiltamany	Mr. Nauro Lekalaile	MNLK	
KI260401	26-Apr-01	Kiltamany	Mr. Nauro Lekalaile	MNLK	
KI270401A	27-Apr-01	Kiltamany	Mrs. Naipaare Lekalaile	FNLK	
KI270401B	27-Apr-01	Kiltamany	Mr. Lepirendon Lekuuk	MLLL	Lost
KI070501	7-May-01	Kiltamany	Mr. Sesen Lekalaile	MSLL	
KI090501A	9-May-01	Kiltamany	Mrs. Veronica Lekalaile	FVLK	
KI090501B	9-May-01	Kiltamany	Mr. Nauro Lekalaile	MNLK	
KI100501	10-May-01	Kiltamany	Mr. Lepirendon Lekuuk	MLLL	
LE120501	12-May-01	Lerata	Mr. Loinyamal Lenanyangerra	MLLK	
LE130501	13-May-01	Lerata	Mr. Loinyamal Lenanyangerra	MLLK	
LO130501	13-May-01	Loijuk	Mr. Leadeke Long'iro	MLLN	
GO140501	14-May-01	Gogoltim	Mr. Lelemoi Lesowapir	MELK	
GO150501	15-May-01	Gogoltim	Mr. Matayian Lekalasimi	MMLK	
GO160501	16-May-01	Gogoltim	Mr. Matayian Lekalasimi	MMLK	
NL180501	18-May-01	Ngilai	Mr. Christopher Lekerpes	MCLL	
SR190501	19-May-01	Sarara	Mr. Dukenya Lkitais	MDLN	
GO200501	20-May-01	Gogoltim	Mr. Naringon Loldikirr	MALS	
LA290501	29-May-01	Laisamis	Mr. Daudi Tokole	MDTL	
NG190601A	19-Jun-01	Ngutuk Olmuget	Mr. Nurr Lepulkash	MULK	
NG190601B	19-Jun-01	Ngutuk Olmuget	Mr. Jacob Lepulkash	MJLN	

NG190601C	19-Jun-01	Ngutuk Olmuget	Mr. Korben Lepulkash	MKLM	
LD200601A	20-Jun-01	Lodungokwe	Mr. Phillip Lenarmorijo	MPLN	
LD200601B	20-Jun-01	Lodungokwe	Mr. Kitelet Longogine	MKLN	
PR220601	22-Jun-01	Porror	Mr. Nyablan Lenyolkulal	MYLK	
BW220601	23-Jun-01	Baawa	Mrs. Lemantampash	FBLM	Lost
LR130701	13-Jul-01	Laresoro	Mr. Lumuria Lenyakopiro	MLLK	Lost
NW160701	16-Jul-01	Ndonyo Wasin	Mr. Lerinya Letetea	MNLL	
SL160701	16-Jul-01	Sereolevi	Mr. Loibor Lesamaja	MOLL	Lost
GO170701	17-Jul-01	Gogoltim	Mr. Festin Lesirte	MFLL	
NY170701	17-Jul-01	Nayebi	Mr. Samare Letaare	MSLN	
NW170701	17-Jul-01	Ndonyo Wasin	Mr. Lenapus Leorkupa	MNLK	
LE180701	18-Jul-01	Lerata	Mr. Loinyamal Lenanyangerra	MLLK	

Decoding the interview code: The first two alphabets are abbreviations for the location of the interview. The following 6 digits represent the date of the interview. The last alphabet is affixed if more than one interview was done in the same location on the same day.

Decoding the informants code: The first letter represents sex of informants (M or F); the last letter is the first letter of the informants age set (K, N, L or M). The two middle aphabets are the initials of the informant's names. The first initial can be changed to avoid duplication

7

Appendix 3

The Samburu age sets: 1765 – 1990

The table below shows Samburu age sets, often referred to in the thesis. Members of the age sets, which participated in the study, are printed in bold/italics. The information was adapted from Spencer (1973, pp. 151 – 167). Additional information was gathered from informants in the study.

Date of initiation	**Name of Age**
1765	Salkanya (this is earliest known age set)
1781	Meishopo
1795	Kurukua
1809	Lpetaa
1823	Kipayang
1837	Kipeko
1851	Kiteki
1865	Tarangik
1879	Marikon
1893	Terito
1912	Merisho
1921	*Kileko*
1936	***Mekuri***
1948	***Kimaniki***
1960	***Kishili***
1977	***Kiroro***
1990	***Lmooli***

Appendix 4

The segmentary system in the Samburu society

The following table shows four main levels of the segmentary system system in the Samburu community. The specific segments with powers to 'control and command' elephants are printed in bold/italics font. The table was adapted from Spencer (1965, pp. 72 – 72) and modified during the study with the assistance of Mr. Nurr Lepulkash, a retired elder (informant code: MULM; interview code: NG190601A)

Moiety	**Phratry**	**Clan**	Sub-clan	Large family or sub-section
Black cattle	Masula	Parasoro	Samburet	
			Nechamsoro	
			Lenjura	
		(Ltoiyo)	Sirikua	
			Partepes	
			Salatet	
		(Parsipia)	Longoiro	
			Longodo	
			Lekupe	
		(Sortoi)	Sortoi - orok	
			Kumu	
		Mosiat	Kwaro	
			Chapetora	
			Kurtenkerta	
			Lowara	
			Lkerna	
		Lotimi	*Sopiroi*	
			Siit	
			Lesempei	
		Maraato	Mair	
			Nyelek	
	Pisikishu	Males	Kumparsek	
			Partomi	
			Parkini	
		Lanat	Lajalmasi	
			Lemocho	
			Latam	
			Lengiro	
		Sitat	Lentao	
			Kashop	
			Lesile	
			Ntamamani	

			Temelet	
			Mosorin	
		Loisilale	Kadodo	
			Letim	
			Lodogishu	
			Ldoropu	
			Lkajales	
			Salana	
	Lngwesi	(Lngwesi)	Napuraulo	
			Lanana	
			Lmusei	
			Siria	
	Nyaparai	(Nyaparai)	Keringishu	
			Salon	
			Lkerena	
			Motina	
White cattle	Lorokushu	Makalilit	Lparsaa	
			Lkise	
			Parsimo	
			Teruk	
			Rupet	
		Pardopa	Kojoka	
			Parsile	
			Perdepe	
	Longeli	(Longeli)	Sikalimi	
			Parsinkir	
			Ltarpasia	
			Soritari	
			((Nkimeron))	
			((Sapania))	
			((Katula))	
	Lukumai	Parakeno	*Kuru*	
			Tiamus	
			Paramusiei	
		Loewogoso	Mokadile	
			Lminisi	
			Soritari	
			Saraiyon	
			Talas	
	Loimusi	(Loimusi)	((Werkile))	
			((Lereet))	

			((Lepartiko))	

Appendix 5

Elephants in Samburu folklore

Introduction

The Samburu have a rich array of folk stories, many of which involve animal characters. This appendix is a collection of four folk stories about elephants, either with elephant characters or that relates to a theme in the dissertation. The study did not analyse the stories in-depth, except for the woman-elephant story, which was done to understand simple variation in the same story (Chapter 5).

Story 1: The woman-elephant story

The story was first collected by Kuriyan (1999b) and adapted by the STE Samburu Elephant Programme. During the study the following interviews collected the same story and transcribed for further examination during the study. Chapter 5 compares the version of interview LE120501 with Kuriyan (1999b) to highlight unfolding differences between the versions.

Date of collection	Informant	Interview code	Location
24th April 2001	Mr. Nauro Lekalaile	K260401	Kiltamany village
9th May 2001	Mrs. Veronica Lekalaile	K090501	Kiltamany village
12th May 2001	Mr. Loinyamal Lenanyangerra	LE120501	Lerata village
19th June 2001	Mr. Nurr Lepulkash	NG1900601	Ilkalkaloi
22nd June 2001	Mr. Nyamblan Lenyolkulal	P220601	Porror
17th July 2001	Lenapus Leorkupa	NW170701	Ndonyo Wasin

Version from Interview LE120501

"When the Samburu people were created by God, elephants were present too. In fact elephants lived with Samburu people. They ate plants and never competed for food with people. In the village, the elephant performed many tasks for the

people, especially helping women with the difficult job of fetching firewood and lifting heavy objects around the homestead.

"Samburu mothers have a habit of sending children on many errands, more frequently than the father. One day, there arose a minor misunderstanding between the woman and the elephant. The woman hurriedly asked the elephant to fetch firewood for immediate use. As usual, to match his strength, the elephant brought very large pieces of firewood, which meant spending time to split them into smaller pieces to use them. "Why have you brought such a big pieces?", the woman asked, "I'm I supposed to roast you with them or what?" she insulted the elephant. Realizing what the woman wanted, the elephant rushed back to the bush and gather very tiny pieces of firewood assuming that is what the woman actually wanted in the first place. When it present them in the village, the enraged woman asked the elephant " "why do you bring such small pieces of wood; are we supposed to be roast termites?" The frustrated elephant was humiliated and embarrassed by the woman's comment.

"The elephant lost its temper and became very angry and said to the woman: "I have worked hard and dedicatedly for Samburu people and have never been criticized or embarrassed in this way before. You have insulted me and abused my kindness to your people – telling me to bring water for you; firewood and doing other work for you – and are not thankful. Therefore, I will leave your homestead and live free in the wild, roaming the bushes and forests". As it stormed out of the village, the elephant grabbed a cowhide, *ngamarie,* from the wall of the woman house and flung it over its head and stuck to become the elephant's ears. It took the cowhide to expose the woman's house and leave it open for predators to enter and persecute the woman and her family. Meanwhile the woman began screaming at the elephants saying: "bring back my cowhide; please don't take it away…I need to protect my children." The elephant turned back and shouted to the woman: "*Ma tooroto*" [which means let us separate forever "You and I are now enemies forthwith. I will never live in you village again. But as I roam in the wilderness, I will never forsake my mother's house [meaning it's Samburu parents, brothers and sisters]. We shall remain friends with my mother's household and I

will extend my goodwill when we meet in the wilderness and always come to their aid when they ask for it." And that is how the Samburu people and elephants started living apart.

Story 2: How the elephant broke its back

All animals in the jungle gathered for a meeting in the jungle. The squirrel was appointed to chair the meeting. The meeting was about lion cubs, which had been affected by a disease called *nepepedo*. The lion wanted to exchange his children with those of the ostrich. Out of fear all other animals in the jungle had overwhelmingly supported the lion to take Ostrich kids. Lion had very powerful friends. One of them was elephant. For this reason, all the members of the jungle supported the lion.

During the meeting, squirrel asked the crowd who owned the children under dispute, lion or ostrich? Before that, due to its small size, the squirrel requested to sit on high ground so as to see every participant. He chose the termite hill. He stood on top of the hill and asked every one, "Have you ever heard of a hairy animal giving birth to a feathery animal?" The other animals replied: "No never, ever heard of such a thing". The squirrel continued, "Have you ever heard of a feathered animal giving birth to a hairy animal". They replied again that they have never heard of such a thing. He pronounced that the children belonged to the ostrich and there was no question about it. Soon after saying that, he gave his alarm call and jumped into the termite hill.

The elephant came and put his hand in the termite hill and grabbed the squirrel's leg. The squirrel laughed and said that the elephant had grabbed a tree route and missed him. The elephant released his grip and held a root. The squirrel screamed pretending that he was seized. The elephant pulled hard, fell, rolled and broke its back.

[The story was collected twice in the same location. It was narrated by Mr. Nauro Lekalaile, informant code: MNLK; interview code: K260401, and Mrs Veronica Lekalailie, informant code: FVLK; interview code K090501A.]

Story 3:When the elephant defied God

This story was first cited in Fratkin (1974) where it has been analysed using Levi-Strauss theory of structural analysis. The study has discussed some of Larick's conclusions (Chapters 3 and 5). I collected the story again twice in Kiltamby village as follows:

One day the elephant told God to leave them alone, grant them independence, and not to interfere any more. They told God that they are equally Almighty and can produce noise and light just like God in the heavens. So God asked them to prove themselves. The elephants rumbled so hard but God made louder noses that almost made the elephant became deaf. Then God asked the elephant to produce lightening (drawing the sword). The elephant tried showing of its ivory but they were not shiny enough to produced light. So the elephant surrendered to God and promised to be obedient again.

According to another Samburu legend, the elephant challenged God. God told the elephant to rumble as hard as possible to surpass the thunder sound. The elephants got together and rumbled in unison. After doing that God asked the elephant to flow the stream. God created a river gulleys, *Ilbaa* (or lugga). Then the elephant went and created a water pool, *olturoto* at the higher end of the gulley. It called its friends to assemble at the water pool. Thereafter they all urinated until the gulleys began to flow. God acknowledged the elephant's efforts and challenges and asked the elephant? "How can you challenge me, your God". God held the nose of the elephant and pulled it to punish it for his blasphemous acts. Since God is almighty, the elephant's small nose did not break but stretched to become its arm. That is how God made elephant's arm.

Narrated by Mr. Sesen Lekalaile informant code MSLL; interview code: K070501, and Mrs Veronica Lekalailie, informant code: FVLK; interview code K090501A.

Story 4: How the Samburu people lost the wild animals

This story has two version. During the study, men (two informants) gave a different version of the story from the women (two informants). Both versions are

presented here. This story has tremendous potential for anthropological analysis, which would be useful for understanding some Samburu perceptions about the natural world.

The myth

[Both versions agree on the following bit] According to the Samburu myth, God created man first and then removed one of his ribs *lmarai* then used it to create the woman. The man and the woman lived together and started having children. There is nowhere in the myth showing the man and woman were married. They just lived together and, children came naturally. The man and woman had no domestic animals. Only wild animals were present. God had given man the animals to care and husband them well. From eating the wild animals, the number of people increased rapidly. Only God knows how this happened. The wild animals could not sustain the people and God decided to give the people a cow to live at home and provide at least the basic food.

[The story diverts at this point and the women informants give the following version]

Man was pre-occupied with his wild animals and hence God put the women responsible for the cow and its off springs. Then they got a domestic animal, a cow. So they occupied themselves on the domestic animal. The men spent time in the wilderness looking after their property, mainly wild animals and other wild things in the bushes. That is where they belonged. The number of cows started increasing and the people decided to separate. The men lived in the bush and the women and children and their livestock lived separately in the enclosure.

Soon the men started coming to where the women lived, especially at night. At the women gave them food and a chance to play with children. It became a routine habit for the men and they started spending more time in the women's home that in their wilderness. Because of neglect, the wild animals decided to run away and stay on their own with the assistance of man. God answered their prayers and granted them their freedom to become independent of man. Due to the loss, man came to live with the women and children, as he had no property to depend on.

Because they had nothing much to do in the village, except sit and chat, the decided to control all the activities women did and took ownership of the cows. To date, the cow belongs to the women and that is why men never milk them.

[This is the men's version of the story.] Since man took care of most animals, he decided to take on the challenge of nurturing the cow by taking it to the fields as the women stayed at home looking after children. Wild animals were already accustomed to the women and they easily caught them for food. In the evening, the men brought back the cattle and the women milked for their food ration. Calves would be left home for children to herd. Before the children went herding, the women were concerned that they will starve to death. So they developed a habit of catching an antelope and slaughtering it just for kidney, liver and heart to feed their children. The wild animals became upset from the abuse and wastage of the woman and decided to abandon the care of people and live on their own. The animals marched out in solidarity to protest the haphazard slaughter of antelopes to feed human children with liver and kidneys by women. God granted them their freedom thereafter and the women came to live with the men and their livestock. They appealed to God and God herd answered their prayers and granted them their freedom. God banished man from ever touching or eating the animals again. And that is why the Samburu never eat the animals. To date, the men exercise always ask women to hand the livestock with care and not abuse them like they did to their livestock.

Reflections

The women informants insisted that their version was more correct than the men. They posed the following questions: "Seriously talking, how can women take over men's livestock? Think about the story; wouldn't you realize that it's the women who can be cheated easily?" It's the cow and the woman the men came for, and the woman was just at home with the cow and the cow was different from the wild animal. So she was only with the cow and then man came along and left the wildlife to go as usual as they usually go together like wild animals.

Both stories agree that the animals are owned by God and belong to no one. They are free to take care of themselves and survive the wild according to the wishes of God.

These version were narrated by Narrated by Mr. Sesen Lekalaile informant code MSLL; interview code: K070501, and Mrs Veronica Lekalailie, informant code: FVLK; interview code K090501A; Mr. Nauro Lekalaile, informant code: MNLK; interview code: K260401, and Mrs Naipaare Lekalaile, informant code FNLK; and interview code K270401A.

Conclusion

This appendix is just a very small part of the Samburu folklore. Interestingly, the relationship between people and wild animals is based on disagreement and then agreement with the intervention of God. During additional interviews about the naming system in among the Samburu (interviews K090501A with informant FVLK; LD200601A with informant MPLN, and NG190601A with informant MJLN), a strong domain began to show. The domain symbolizes kinds of women resistance and their quest for independence in the Samburu society. But this was not an object of the study at all. However, the woman or characters representing 'the woman' seems to a central figure in all the altercations of the above stories, which seem to portray women as symbols of justice, harmony, wealth and cultural continuity in the society.

Appendix 6
Human-Elephant retributions

Introduction

During the study, informants were asked to recount witnessed events of human and elephant retributions involving the social segments with elephant power in Samburu society. The appendix presents 22 accounts of such retributions related to the segments and elephants.

The first kind of retribution involves members of Lotimi clan, Kuro and Talas sub-clans in the social structure (see appendix 3) of the Samburu society, and elephants. The category show first and second hand accounts of members of these segments exercising and demonstrating their power over elephants to protect themselves, revenging an elephant wrongdoing or invoking divine power using elephants as pawns to punish their foes and enemies.

The second category shows accounts of elephant reprisal to individual people and societies in form of an eternal curse, which the Samburu people say cannot be cleansed or removed. This category includes those accounts given by the informants and a few examples derived by applying the Samburu hypothesis on published material about international elephant hunters and an historical episode where elephants have been eliminated en masse.

Each account shows the study codes of informants and their interviews. Where given the accounts have dates, names of people involved and names of places where the incident or event occurred.

Reprisals of the 'elephant' clan and sub-clans

Narrative 1: A quarrel between co-wives

"My uncle (real brother of my father) had two wives. His name was Iltibil Lekarmorijo. One of the women was from the lukumae clan (Lparkeno sub-section), specifically from Leruso's manyatta. The other woman was from Masula

(Lotimi sub-section), specifically the manyatta of Lesuakeri. Both of them came from sub-sections with powers to control the elephant.

So the two women had a big quarrel. I really don't know that the issue was or wasn't. The woman from the Ilmasula cursed the other. She told her co-wife that she will be killed by an elephant. On that day, the curse woman went to Lodungokwe for shopping and was killed by an elephant that evening. As she the elephant killed her, she also cursed the elephant by saying: "I see that you have killed me. You will also die". After the attack, the elephant crossed only one lugga and died shortly thereafter. The lugga is called Ngalait lugga in Muuru sub-location. Nobody knows what killed the elephant, to date. That was in the early 70's. The son's of the deceased are still alive and know well how their mother died. The other woman take the responsibility of what happened and admitted in public. Everybody heard the quarrel in the morning, including the curse. The lady who curse the other story died recently of old age."

By Mr. Phillip Lekarmorijo; informant code: MPLM; interview code: LD200601A

Narrative 2: A calf for a calf

In August 2000, at the manyatta of Lapalo, where my wife comes from, near Tolong Hill, next to Kibashata Rock, an elephant attacked my father-in-law's lactating camel while feeding. It killed the calf. My father in law became very angry about it. He found the elephant. But he came from the elephant clan and could not kill the animal. They were 'brothers'. So he let it go, although he was still very angry. He said that an elephant calf would die in the same place. Recently, a starving juvenile elephant with a wound on its leg died on the same spot where an elephant killed his camel.

By Mr. Korben Lepulkash; informant code: MKLN; interview code NG190601C

Narrative 3: Who stole my hatchet?

In 1997, right inside this village of Ndonyo Wasin, someone stole the panga of an elder called Lehanu, from my family. That was in 1997. The elder declared in public that he will send an elephant to pick out and punish the thief. The elephant came shortly thereafter appeared. The moran who had stolen the panga was

walking to my house. The elephant ambushed him just before he entered my homestead. The moran from the house of Lekushan broke through the thorn fence to escape/seek refuge in the manyatta. After passing one house, he entered the next. The elephant arrived, blocked the entrance and kept vigil. The woman owner of the house started 'spiting on him' to undo the curse to save him. I got out and undid the curse. And the elephant left the vicinity of the village but stood outside. The moran threatened to chase the elephants with rocks, and was stopped. I asked the aggrieved elder to chase the elephant because it had done its job. In the morning, the moran brought back the panga and put it outside the doorstep. The elephant went its way.

By Mr. Lenapu Leorkupa, informant code: MNLK; interview code: NW170701

Narrative 4: Saliva is the key

It so happens that people from the elephant clan don't attack or harm elephants. They can curse it with words and saliva. A cursed elephant could die or drown in a water hole. That has happened in Ndonyo Wasin and witnessed by many people.

At some nearby wells in Ilpiring'ua, an elephant attacked a cow and killed it. The exact place is called Lengata. The cow owner, visiting the area, because of drought was a member of the Lotimi clan. He cursed the elephant. As the elephant tried drinking water from the human well, it slipped and fell with it head first and drowned. This incident happened when Ngororo were warriors, in 1976 or 1977.

By Mr. Lenapu Leorkupa, informant code: MNLK; interview code: NW170701

Narrative 5: Keeping the promise

The Manyatta of Lesampei, also from the Lotimi sub-clan, is known to have cursed an elephant at a place called Nkabune. The elephant had attacked a member of their family at Kikwar. That is a lugga next to one of the nearby hills. The Kishili age-group were not even circumcised. The sister of the victim found the elephant standing next to a tree where the incident happened. She cursed the elephant by saying: "If you are the one who attacked my brother, you will die too. You cannot escape dead and never feed again". The elephant also drowned in a

human well. My father was involved in pulling that elephant out from a well in Lodosoit. There was a rangers outpost in Lodosoit.

By Mr. Lenapu Leorkupa, informant code: MNLK; interview code: NW170701

Narrative 6: Return the goats or else…

Recently, in1997-1998, a deceased warrior from the family of Lekalale went to steal goats. It so happened to the goats of people from the elephant clan. So the owners sent out a general appeal for the goats to be returned. The warriors denied being involved. An elephant can and stood next to Lekalale's homestead for three days. The morans had no choice but confess. Thereafter the elephant disappeared. Nobody was charged or hurt because they cooperated early enough.

There is a woman who died married to a man called Lenkasharr. A man called Siriri stole and ate someone's sheep. He brought fat to the woman. Through the grapevine, the owners learnt who pinched their sheep. The woman was asked to testify. She denied any knowledge of the lost sheep. She was threatened with an elephant. The woman replied: "Where will you get an elephant at this time of the year; I don't care" she mocked them. The owners assured her the elephant would arrive shortly. The woman jeered and dared the owners to please herself. An elephant set off from Maralal. It followed the main migration route up to Wamba. It can and stopped along the path which women use to the river and shopping to Wamba town. The elephant took cover under a tree. Ten women walking towards town were walking on the path. Mr. Lenkasharr's wife was among them carrying four guards of milk to sell. The women got to where the elephant was and passed it without noticing. As the woman approached the tree, she stopped. Immediately the elephant lashed at the woman and tossed her in the air. The guards and her cloths fell some distance away. The guards did not break. The elephant stamped on the woman until she almost became paste. When people came to inspect and check on the woman, they found her stamped to pieces and but the guards intact and not broken at all. That was in 1984.

By Mr. Lenapu Leorkupa, informant code: MNLK; interview code: NW170701

Narrative 7: The fatal alcohol theft

In October 1996, an elephant recently at a place known as Ntulele killed a retired game ranger called Karuri Lenanyukie. He and another woman had stolen a woman's chang'aa. The owner hailed from the elephant clan. As the man walked past Ntulele carrying the stolen chang'aa, an elephant killed him instantly. Ntulele is situated around Sarara. Thereafter the elephant tracked the dead mans footprints to the house of his accomplice. It arrived and set ambush. The woman walked out of her hut to milk her cow some distance away. The elephant attacked and killed her instantly. The woman was the wife of Longogine. That incident happened in 1996. The owner of the chang'aa was called Mrs Lepababiko from Talas sub-clan.

By Mr. Lenapu Leorkupa, informant code: MNLK; interview code: NW170701, and the deaths recorded in KWS occurrence books for Wamba, Maralal and Serolevi outposts.

Narrative 8: Mr. Lengupai's cow

We know that the Talas clan do exactly that. Lets talk about the incident involving Mzee Lengupai's cow. An elephant killed a cow while it drank water at the well. Mzee Lengupai's daughter began crying because she was scared and too young. Mzee Lengupai said addressing the elephant: "Are you the one who killed my prize cow and hence never to be milked again? You will die at the same place and the same ground will swallow you. Thereafter the childen drove their cows home. The next morning, people found the elephant lying dead next to the cow.

By Mr. Loinyamal Lenanyangerra; informant code: MLLK; interview code: LE120501

Narrative 9: The beautiful tusks

Recently after the current warrior age-set had been born, in a place called Pukurr, cows arrived at the well and found elephants who noisily chased the cows and their herdsmen. A Samburu girl from the Talas sub-clan confronted the elephant and said to it: "Why do you want to kill my cows as I go home. May God break you beautiful tusks which you seem to be so proud of". The next morning, the old man and his friends found both tusks broken and lying on the ground. The tusks broke, as the elephant was tried tusking more cows. The elephant left with small pieces of its erstwhile beautiful ivory.

By Mr. Loinyamal Lenanyangerra; informant code: MLLK; interview code: LE120501

Narrative 10: A quarrel of two 'elephant' sub-clans

At the opening of the circumcision season for the Ilmooli age set (1989/1990), two elephant Lukumae sub-sections fought over the circumcisor. The argument took place near the small hill in Ilkalkaloi, at the junction of the road from Ngutuk Ilmuget and the main road, next to a dam called Ngonguwuarak. The Ilparkeno decided to take the operator by force. They were arguing with Ilnimisi. So the Ilnimisi decided to curse the Ilparkeno. So they put and elephant inside the water point. The elephant got stuck in the water and mud. It just got stuck on the fringes of the waterpool where nobody would expect the elephant to get stuck at all. The elephant got so stuck that people went to fetch vehicle from Maralal to pull it out. But they were not successful. So KWS rangers decided to shoot the animal and ends its suffering. So they decided to bring in some Turkana people to chop up the elephants and transport the meat. They cleared the carcass. That was a showdown between two elephant sub-sections, where one showed the other that they are more powerful than they are.

By Mr. Nurr Lepulkash, informant code: MULM; interview code: NG190601A; incident recorded in the KWS Maralal district Headquarters ivory register (in coming)

Narrative 11: Broken leg

Another example is when an elephant killed a lactating cow sometime just before the 1997 elections. The cow belonged to Lemoira's family, Lukumae. So Lemoira cried and lamented the elephants act saying: "Why should an elephant kill my cow on its way home? Go but I will break your leg. The elephant walked a short distance and tripped on the ground, fell down and broke both its tusks. The elephant died on the spot. The incident happened near Lekupe hill in Ilkalkaloi.

By Mr. Nurr Lepulkash, informant code: MULM; interview code: NG190601A

Narrative 12: The jilted sister

Another example: a girl from the Lukumae clan requested her elder sister to mind the livestock for her so that she can get a chance to go for dancing. The sister declined because she hated herding. So she told the elder sister to go, while looked after the herd in bitterness, but she will not return back to their father's homestead. Thereafter she brought the livestock home. On her way back from the dance, the elder sister encountered an elephant and it killed her. These were daughters of Leruso. The incident happended near Nantodo, on the southern side of the Waso river, near a flat topped hill. As the elephant killed the elder sister, she told the elephant: "Why do you kill me, dear one. You will also die next to me with your sharp teeth and never kill anyone else again. The elephant stood next to the girls corpse until it died on the same spot too. At that time, the Ilkishili were morans.

By Mr. Nurr Lepulkash, informant code: MULM; interview code: NG190601A

Narrative 13: Crashing together

There is also another family. A man from the Lukumae clan met an elephant unexpectedly. The elephant overpowered him and crashed him against a tree. Before he died, the man told the elephant that it will suffer the same fate. The elephant stood there, died and decomposed too. The lady (Mrs Lepulkash) just herd the story from her family. She comes from one of the elephant clans.

By Mr. Nurr Lepulkash, informant code: MULM; interview code: NG190601A

Narrative 14: Just a bit, my son

This incident happened in the Legirnas. A lady from the clan came to borrow something. At the same time his mother in law (the mother of his wife) arrived and begged at the same time too. He declined to give his sister some little food for her children who had stayed hungry for three days. So was told that she cannot be given anything because his mother in law also wanted something from him. The man had many goats and sheep. So he gave his mother in law a goat and denied his sister anything. That evening, an elephant came home. People unsuccessfully tried preventing it from breaking the fence and entering the homestead. As the elephant approached the man's house, he jumped into his house. The elephant

came and poked his tusks into the house and fished out the man. It carried him outside the homestead and flushed him some distance away and then followed him. The man landed and remained silent where he fell. The elephant tried looking for him but was unable to find him because his wife overpowered the elephant. She also came from an elephant clan. The elephant walked way noisily frustrated. That incident happened last year. We were still living here. The incident happened in Lowua Ng'iro.

By Mr. Nurr Lepulkash, informant code: MULM; interview code: NG190601A

Narrative 15: Any power, my elder?

In August 2000, I remember some film-making people [BBC filming crew; contact: Saba Douglas-Hamilton] accompanied by my son in law (Antony Leaduma) who came and asked me about elephants, and asked me to bring elephants to Maralal Lodge where they were staying. We informed them that there are no elephants here because Mr. Frank Tundo had chased them all away. Some elders challenged him to pray for an elephant to come. So I become irritated by their challenge but nevertheless told them to wait for elephants. I promised to show them some. There was a party at the lodge. So the elephants come to the lodge. All they wanted to do was ask me some questions about elephants. The elephants came. I made that happen.

By Mr. Nyablan Lenyolkulal; informant code MYLK; interview code: P220601

Narrative 16: The glaring evidence of guilt

In 1974, my elder brother, Karare Lekarabii, during our moranhood, was requested by a fellow moran to help them drive elephants into a trap for killing near the Ndoto Mountains. He obliged. But the elephants escaped. At that time, many morans from other clans were engaged in ivory trade and illegal killing of elephants. 1974 was the height of 'magendo'.

Soon one of his cows got into parturition and was about to give birth. But the birth was difficult and had to be assisted. I was called to do it. So I pulled the new-born out and was astonished by what I saw. The calf had two elongated red teeth protruding from the upper lip; the lip resembled an elephant trunk. Only the

hooves resembled those of a cow. It had very little hair on its body. The calf was not dead. It was struggling noisily. I called my brother and asked him to explain why his cow gave birth to a strange looking calf, resembling an elephant. He looked genuinely shocked and dumb-founded. His cow gave birth to an elephant calf. He confessed that he helped a friend hunt for elephants but he did not kill at all. So I told him that God is great because the punishment is rather mild. His would have been the one to give birth to such a thing. Even my current wife witnessed that phenomenon. We had started getting wives although were still warriors.

When it happened, I was on official leave from work. I was employed since I had gone to school but my brother had not. By that time, we used to live in Lesirikan, near Baragoi. All the villagers saw the strange looking calf.

By Mr. Nyablan Lenyolkulal; informant code MYLK; interview code: P220601

Narrative 17: Not those tusks again

An incident happened to me, at the age of 10 years. In 1958, while I was in school, just after doing the common entrance examinations in standard four, I went home to herd livestock. While herding a large elephant appeared. There are two kinds of elephants. Large size and small size elephants; it has nothing to do with their age or sex. It is just their nature. A short elephant shot from the herd and charged at the cows. That was in Sererit in Lesirikan area. So the elephant chased my livestock and picked especially on one, pursued it and tried stabbing it. I gave out a short loud scream "hai!". The elephant missed the cow and stabbed the ground instead. Both its tusks sunk into the ground. While trying to pull them out, one of the tusks broke and remained on the ground. As soon as it stood up, the elephant just started vomiting and ran away. I dug out the tusk and took it home. People make out earings and other ornaments from ivory. So it was useful for them.

By Mr. Nyablan Lenyolkulal; informant code MYLK; interview code: P220601

Narrative 18: The cow belongs to her

An elephant killed one of my nephews called Mr. Lekarabii in 1963 (the victim was Tito's brother). It so happened that my elder brother gave out one cow to a

relative's family called Lenjalote for a small girl in the family. It was a cow for milking. So when his brother became a moran, one day, he marched to the homestead and confiscated the cow given out by my father. An elder from the Lenjalote homestead put an elephant curse on the moran for his brutal and unfair act of taking away the gift cow by force. This uncle seated here was one of the three people who went to get the cow.

Soon after that the moran accompanied me to move my homestead from Waso. I had married from the Ilpisikishu clan, the manyatta of Lelelit. I found a vehicle and asked my wife to board it upto Baragoi. I alighted with the moran at Porror. So my wife and children drove off to Baragoi. The moran had been betrothed a girl from Lokomaita's family. The elder who cursed the moran for his deed heard that the moran now want to marry. The girl lived in the same homestead as the elder. He told the moran: "I make sure that elephants ambush you at Morijo at a point called Paresoro. You are taking my woman?" The moran replied defiantly in the affirmative. The elder warned the moran that even if he dumps the woman, he should not marry her but let other people do it. The moran said he must marry her in spite of his warning. He continued and said that even if elephants killed him, it will not stop him from marrying the woman. He got hold of the controversial cow and three others of his own and made the down payment for bride wealth. The moran went at night. We prayed to God for his mercy.

A short while later, I told my friend that I feel like the moran has been mortally wounded somewhere. The following day, some herdsmen arrived home. They told me that an elephant has killed a moran and that people there could not identify him because he was attacked at night. So I urged the herdsmen to take me there. They did not know whether he was attacked the previous evening or at night. On arrival at the scene, we found that he was the victim. His clothes had been torn and scattered. The herdsmen fled because it was not their relative and left us at the scene. We got hold of two shuka and wrapped his body. He was still alive. According to Samburu customs, victims of elephant attack must never be brought inside a homestead. The elephant had pierced his body and trampled on his back. We bought a sheep from the manyatta of Lemurnyei to cleanse the taboo and bring

him in to the homestead. The moran spoke and said that he wanted to be taken go into his manyatta. By good luck, the DO's vehicle, on its way to Maralal, arrived. So they put the moran into the vehicle. He died in Maralal.

By Mr. Nyablan Lenyolkulal; informant code MYLK; interview code: P220601

Narrative 19: A woman's curse

If an elephant attacks, kills and flee from the area, the Samburu say that it must be under very special powers, extra ordinary. It has also been sent but in a different style because the mission is not yet accomplished. For example these elephant the elephant in question killed a clinical officer called Longogine; another man called Lemooke and a stranger who people did not identify him by age set or tribe.

A curse influencing such an elephant must have originated from a woman. May be he has not found the target person. There was a person from the Lotimi clan who was killed by an elephant after his own blood sister cast a curse upon him. He drunk his sister's changaa for two days and refused to pay for it. His sister begged for her money but he adamantly refused to pay for it. The incident happened at Lporro Sapuk. He insulted her that she should claim the money from her father. She got angry and asked him: "I am telling you because it is the last time I will never ask you to pay me again. You will be luck to arrive home safely today, then I don't belong to the lotimi clan and so do you. I will get an elephant to attack you at a place called Lolkuchaani, near Maralal. This happened in 1999. This man worked for the forest department. He was a forest guard. His children are still benefiting from his pension. We are still contributing harambee towards the education of his children. He also had a government loan too. So the victim left his sisters place with two other friends. At the said point, the elephant attacked the men and just killed him. It did not even chase his friends who arrived home safely. His name is Lenalaram. They found his corpse in the morning. The sister came and got her money from his pocket and went her own way. He was killed just before arriving in his manyatta, right along the road. So his friends recounted what happened with the sister the previous night.

By Mr. Nyablan Lenyolkulal; informant code MYLK; interview code: P220601

Accounts of Elephant retributions

Narrative 20: A hand for a hand

Yes. Let us start with Mr. Lesampei. When his father was a moran, he speared an elephant and made a gaping hole on its trunk. The elephant did not die. But it suffered for a long time but eventually healed. The same elephant came back for revenge. People knew it was the same elephant because of the spear scare on its trunk. It attacked his son, now Mr. Lomoiko Lesampei. The elephant got hold of Lomoiko's hand and shook it vigorously. It damaged his hand to a state of disrepair. Mr. Lesampei is now an adult, of the Ilkishili age group, with a disabled arm. His hand is completely handicapped. The elephant revenged on the attackers son.

So we know that if you torture an elephant for no apparent reason, you will be punished too. That's why we never attack elephants for the sake of it. You will definitely be punished. If an elephant attacks anyone from our clan, then it will be punished too.

By Mr. Nyablan Lenyolkulal; informant code MYLK; interview code: P220601

Narrative 21: I have murdered a relative

When I got married, in Ngorika, we had small gardens. An elephant entered my garden. I had already 'put sand' around the garden to prevent elephants from invading my garden. I became angry after finding that an elephant had entered my garden and destroyed crops. I took my spear and speared the elephant because of what it did to me. The spear bruised its back and did not enter the flesh. My intention was to actually hurt it very much. After throwing the spear my hand became paralysed. The following day, the elephant came. Another elder called Leseiya arrived too. Another elder, now deceased, called Lolorija was present. The elephant invaded my again the same day. The late Lolorija was on transit to Morijo. The late Leseiya was carrying a heavy spear, similar to that of Turkana tribesmen. He had placed his spear on top of my house.

So the elephant came and started destroying his shamba again. I went and called the elders. On arrival, an argument broke out about who was to spear the elephant. He warned the late Leseiya that his hand became paralysed trying to spear the same elephant. So shortly thereafter, they went to observe the elephant. It had completely destroyed the garden. On of the elders speared the base of the elephant's tusk. The spear almost got lodged in the bone. The elephant removed the spear and thrust it away and fled. They decided to look for the spear but in vain. In the morning we decided to track the elephant and found out spear. The elephant died some distance away. The carcass lay in the middle of the road. This happened a long time when I was a senior moran. An elder called Lemborosoi was a senior game ranger. The game warden in Maralal was a white man.

So we were afraid that the killers would be known. I walked to Maralal and reported the incident to the game office. I brought 'game' to the scene. They brought a vehicle with them. I explained the whole incident to them and showed them my garden and gave a verbal account of what happened. They extracted the ivory. He was taken back to Maralal and rewarded with KSh 200. It was not a fine at all but a token of appreciation from the government for reporting the dead elephant. That is when 'magendo' started. They rewarded me for my honesty and loyalty. I moved from Nkorika and started living in Porror.

By Mr. Nyablan Lenyolkulal; informant code MYLK; interview code: P220601

Narrative 22: Curse of the Kishili

Anyone who has eaten or hunted elephants cannot prosper in life no matter what. His descendants would suffer the same curse. I know of one such person called Lejara. His does not lead a normal life at all. He is from the lotimi clan. Killing an elephant just for ivory is a hideous crime. The curse does not disappear in life.

Any Ilkishili who participated in magendo languishes in poverty today. A Somali called Hussein Jirte, a famous trader in Lesirikan, died in his sleep. All his transportation trucks are stalled and parked on stone blocks. Two deceased kikuyu businessmen known as Garaba Gathurai and King'ori , the owner of Jamhuri bus

service, the company has closed down and their dependents are living in desperation; Another person is the late Juma from Wamba. Another person is Mr. Lekurchala, a Kishili from Lorokushu clan. He is still alive. He is mentally retarded. All sorts of ailments and problems ride his family. He was an officer in the game department stationed in Maralal. The gentleman became very rich overnight because of trading in ivory and organizing clandestine elephant hunting in the area and an important player in the magendo. It has all dawned on him. His wealth has all disappeared.

Since our childhood, we were warned by elders never to 'eat' elephants or anything connected to elephants because it is curse and is a great taboo, ng'ooki. We were also told that for a rhino, one can become rich overnight from selling rhino horn and has no curse at all. In fact some sections of the Ilmasula clan eat rhinos. But never 'eat' elephants or a leopard. That's what I remember elders drumming into our heads a long time ago. Eating an elephant would make your family perish; the same case with leopards.

There is no formula for cleansing sins against elephants and leopards. Death of the sinner and penance by his descendants are the only redress for committing such taboo. But there are cleansing ceremonies for eating zebras and animals classified as 'Ngiro'.

By Mr. Nyablan Lenyolkulal; informant code MYLK; interview code: P220601

The curse is universal

World –renowned elephant hunters have died in equally mysterious circumstances or contracted abysmal misfortunes while hunting elephants in Kenya. In 1892, shortly after shooting elephants for sport in Loroki forest, misery began for Ludwig von Hohnel and William Chanler expeditions in northern Kenya. A rhino viciously attacked Von Hohnel as he pursued more elephants through the forest. Strangely, more rhino attacks happened in the plains as porters carried him for treatment. He never recovered. A battery of bizarre incidents brought the expedition to a halt (Brown 1989: 133 – 136). "Chanler's expedition was undoubtedly hounded by ill luck. Others before him had experienced severe

hardships in their roaming quests but few had such persistent poor fortune" (Brown 1989: 136). Another prolific elephant hunter was Authur Newman, described by Theodore Roosevelt as "once the most famous elephant hunter between the Tana and Lake Rudolf (now lake Turkana)" (Roosevelt 1909: 136). After a successful career as an elephant hunter, tragedy followed and culminated in 1907 when "Newman shot himself with one of the rifles he so often used on his African hunts" (Brown 1989: 142).

In 1970's, in Rwanda and Burundi, local people who had suffered so much from elephants became uneasy about the Government's plan to exterminate all the elephants in both countries for a variety of 'scientific reasons'. Killing elephants that raided their farms was right but total elimination was frightening. "It will invoke the wrath of God and there will be retribution", they said. Planning meetings were marred by the death of the Rwandan Director of Parks son. A few hours later, the Director died. The plan went ahead and over 120 elephants were killed *en masse* and about 26 juveniles were trapped and taken to Akagera National Park in Zaire. In effect, the elephants were totally eliminated from the countries. A young woman photographer Lee Lyon was pummelled to death by one of the calves being released into the Park. The local people said more retribution would follow (Parker and Amin, 1983: 87 – 93). In 1991, the human genocide took place in Rwanda and Burundi. In retrospect, was this part of the elephant retribution the local people so feared?

Conclusion

The cases above have been presented as they appear in the interviews. The study would have recorded many others, were it not for the shortage of time and other logistic resources. These experiences reinforce their beliefs that the Samburu people have a direct relationship with elephants. The informants did not know of any other ethnic groups with similar supernatural capabilities. The last section of the second category was added to extrapolate the Samburu hypothesis that the elephant curse is universal.

Appendix 7

Samburu knowledge of elephants and their characteristics

Introduction

According to the informants in this study, elephants have discernible characteristics based on their physical appearances, individual and social behaviour patterns. These characteristics are influenced or depend on an age, elephant's gender, geographical location and history with pastoralists, non-pastoralists and other kinds of human activities in general.

The appendix provides supplementary and more detailed information, mainly for Chapters 3 and 4 of this dissertation. The information was gathered using the DRS technique outlined in Chapter 2.

General Characteristics

Using local terms, informants described different kinds of elephant and the characteristics of those elephants that can be found in Samburu District. Begins by descriptionsof different parts of an elephant's body and thereafter interpretations of different observable habits of elephants.

Parts of the body

The local descriptions tend to classify the body into four inter-dependent components: The head, *nkwe*, the neck, *murit*, central body, *sesen*, and the hind-parts, *sedi*.

The head gives unique features of each animal. It is composed of eyes *ekongo*, the forehead *nkumum*, the 'hand' *ekaina*, the ears *ngiok*, mouth *nkutuk*, tusks *lalae*, and the chin, *lgoos*. The head contains the brain *lakunya* too. The neck, *murrt*, follows the head. It joins the head with the rest of the body. Without the neck, the head would not have support and there would be no connection between the head and the rest of the body. The body is supported by the front legs, *ngewat* and back legs *muro*, back *nkoriung*, ribs cage *marei* which contains all the vital blood organs, like lungs, *Marei*, heart, spleen, and liver. The belly, *Ngocheke* contains

the stomach, intestines, kidneys and uterus. Lastly, the hind part, *sedi*, starts from the rump and has the fatty tissue, the anus, the vulva, the penis, and the tail and its parts. A hide and skin, *njoni* covers the whole body.

Habits and characteristics

Each part of the body described above has its primary function, as indicated by the linguistic term or name and structural position. I will not iterate the functions of each part or structure but instead describe the key functions of various body parts and their local interpretation.

Differences between bull and cows

Bulls, *Laingoni*, have a larger body size, bigger foreheads, and taller shoulders, sip, and front legs than cows. As they walk, bulls tower the largest female in the group. In descriptive terms, any elephant taller or larger than the largest cow in a group is definitely a bull. Habits indicate the 'age group' and status of the bull in relation to other bulls around it. For instance juvenile males and young bulls rarely compete for mating opportunities. Adult bulls stand and challenge each other in such circumstances. Their 'teeth' *lalae* (Samburu term for elephant tusks) are different too. With the exception of lactating calves, *nguoo*, elephants have two white teeth growing from the mouth along each side of 'the arm', *ekaina* (Samburu term for 'the proboscis of an elephant'). The general appearance of the tusks shows that bulls have thicker and stouter tusks than cows.

The importance of tusks, or 'teeth'

Elephants use their teeth, 'hands' and feet to feed by grazing and browsing. They use 'the hands' to drink water too. Along the Waso River, elephants use their teeth to peel off the bark of the *sesei* tree (latin name is *Acacia elatior*), which they relish during the dry season. It is not uncommon to see a cow using its tusks to lift its calf over rocks and steep river valley. Elephants use both their tusks, and feet to dig for water and salt in the river valleys. The tusks are vital for defence from aggression and attacks. The Samburu say that elephants with large tusks are 'boastful' and are more likely to be aggressive than elephant with both broken tusks. Elephants break their tusks easily when lifting heavy loads, feeding or

fighting. Broken pieces of tusks can be found in the river valleys where elephants visit for water or salt lick. Many elephants seen by the Samburu have broken tusks. Tusks either break at the tip, middle section, near the base or right at the base of the tusk. Therefore tusks can give each elephant a unique appearance, which can change depending on the habits of each elephant. The Samburu people can refer to elephants or elephant group using the unique appearance of their tusks, ears or body size. Figure 5 a – f shows the descriptions of elephants based on their tusk and ear appearances.

Figure 5a – ***Ltome lalae seriani*** - (straight unbroken tusks)

Figure 5b – ***Longuro lalae*** – one half broken tusk

Figure 5c – ***Ndome o orr*** – Very curved inwards

Figure 5d – ***Ltome o Lmaalo*** – Upward curved tusks

Figure 5e – ***Ltome lala obo*** – One tusk elephant

Figure 5f – ***Kiruma*** – tuskless

Figure 5g – ***Laapa cha kwe*** – splayed tusks

Figure 5h – ***Ngusut naana*** – short tusks

Figure 5i – ***Ntome seur*** – long tusks

Figure 5j – ***Mboo ngurees*** – short-eared elephants

The elephant's versatile 'arm'

The Samburu believe that elephants have very poor eyesight, especially during daytime. Elephants use eyes, ears and proboscis in combination to detect danger. The ears and the hand are the most reliable and acute. Elephants have a strong sense of smell and can detect things far away using very scanty signs. To explore the air for scent or smell, the elephant lifts 'the hand' vertically above its head and directs the nostrils, *ngumeshin*, at the tip of 'the hand' to pick up scent and decide. Also, it may lay 'the hand' (proboscis) along the ground or along its body. Mzee Lesowapir said: "When elephants get human smell, they lift their trunks and swing then from side to side looking for the source of the smell. They put their 'hands' facing behind in case the smell comes from behind. It touches the ground to look for smell of human beings if any". If the scent is too close, the elephant directs the trunk tip at the object. An elephant proboscis is versatile. It can lift, pull or push heavy loads like branchers, etc, as well pick tiny items like *sacaram* (the fruit of *Acacia tortilis* tree). In addition, the Samburu people believe the 'the hand' is

delicate and sensitive as an elderly informant put it: “When the elephant decided to fight rather than run away, I remembered being told to aim the hand because it is a source of great pain for elephants”.

Uncharacteristic gait

The elephant has a weird gait perhaps because of its large body size and big heavy head. As two informants put it, the walking gait resembles a tired or overloaded person, mostly women, using a walking stick, *sotua*. As the elephant gets older or weaker, the more pronounced the gait becomes. In spite of their large size and ungainly gait, the swift and fast movements of the elephant awe the Samburu. Using long strides and good balance, Elephants ‘run’ faster than people and hence the Samburu people consider it unwise to run as a defence against an elephant attack. But due to poor eyesight, and leeward wind, people avoid elephants before they animals detect the presence.

Reproductive organs

All my informants said it was taboo to discuss or mention female genitals, even when describing the elephant. Although the Samburu use the term *nderege*, which actually means scrotum, to mean that an elephant has one. At one point, some participants tossed a bet when suggested that an elephant has not external scrotum (a scientific fact). On ethical grounds, and consistency in the study, the bet never happened as the informants were given the benefit of doubt.

To age an elephant

Local people say ‘…tough as an elephant skin…’ referring to the character of a steadfast person. Elephant skin is tough and hard considering the rubbing it takes against the acacia trees. But a rhino skin is tougher. Many Samburu people used to consume rhino meat and thought the animal had very tough skin. Since the rhinos are virtually extinct in the District, then recent generations who never co-existed with rhinos find it appropriate to use elephant skin for the metaphor. As an elephant gets older or looses body good body condition, its skin seems hanging loosely on the body. Also, as elephants grow old, their footprints get bigger and

visible. One informant remarked: “Like one common elephant, who usually passes here next to the villages, is so old that people know it’s footprints”.

I wondered whether the informants could estimate the age of an elephant by physical appearance. In their response, they divided the age-sets into five categories: new born, calves and juveniles (males and females). Bulls and cows acquire different terms depending on their breeding condition. Breeding females are called. Sexually active bulls are called *laingoni* and sexually inactive ones (young and senile) are included in the general term, *sangalai*. An old female is called *narikoni*.

When I asked: “What is the lifespan of an elephant?” informants said that an elephant lifespan is equivalent to nine human age-sets. Asked why nine age sets, they referred to the ritual prayer chanted in the home of a newly wed couple: “Teeria saali, naarok laingoni lo oltome” which translates: “May your marriage stay nine age-sets like the lifespan of elephant bull”. A human lifespan is eleven age sets. Informants in Gogoltim area told me of a bull elephant called ‘Loriung’ a nickname for its habit of snoring loudly when sound asleep, lived for about 10 age-sets. ‘Loriung’ was first noticed by warriors of the Merisho age set, who were circumcised in 1912 (Spencer, 1973). The elephant died of old age in Nchok area in 1974 just before the Kiroro age-set initiated into warriorhood. According to another informant in Kiltamany, bulls are known to live longer than cows. Also, some elephants outlive human beings too.

Kinds of elephants in Samburu District

Aggressive and docile elephants

The Samburu people say there are different ‘kinds of’ and ‘types of’ elephants found in the District. Some elephants are docile and tolerant of people and livestock. They are not shy, skulking or nervous amongst human settlements and activities. Docile elephants are known to enter a homestead to browse on the trees. Sometimes they get so close that almost touching a hut with their proboscis.

On the other hand, elephant from 'the lodge' are known to have a short-tempered and are very aggressive. Informants in Lerata area say the elephant population in 'the lodge' (a local term for Samburu National Reserve) did not exists 80 years ago. Before 'game' (a local term for all government wildlife protection personnel) started protecting them intensively in the 1960's, elephants from lodge were more aggressive and intolerant of people. These elephants were known to track down cows using noise from cowbells and attack. Elephant behaviour and character depends on the prevailing climate of where it comes from and also the kind of food it eats in its area of origin. Elephants from the lowlands, *lpurkel* eat 'hot bushes' and are hence hot tempered and aggressive. Elephants from the highlands and mountain regions, *Osupuko* e.g. Loroki, Kirisia, Sarara and Ilkerei eat 'cold plants that make then docile. The elephants live closely with livestock and herdsmen. Elephants in cooler areas have cold blood because of the kind of trees they eat. Those found in hot areas eat trees that are tolerant of heat. The hot plants change their bodies and temperament.

Black and brown elephants

According to the informants, the local people can tell where the elephants 'have come from' using the colour on the animal's coat. In the lowlands, *lpurkel*, elephants acquire a brown colour, *werikoi*, from mud bathing. The colour washes off in the highlands as elephants splash water on their bodies. They never have mud baths because the soils are different and don't smear well – stick on the surface. Elephants would get frustrated trying to have mud baths in the highlands. Instead they rub their bodies against rocks and tree trunks. While in the highlands, their skin colour turns greyish or blackish, *orok*. Elephants from Mt. Kenya region can be whitish or ashy because of whitish soils found around Isiolo and Ngare Mara areas.

Distinguishing the unit groups – *Mboo oo ltome*

Composition of unit groups

The Samburu say that elephant live in a distinctive unit group, referred to as *mboo o ltome* ((translates to 'group' 'enclosure', or 'kraal' of elephants). A unit is composed of a dominant bull, *sangalai*; one protector, *ngamitoni*; cows, and their calves, *nguo*. The cows are related to their calves but it is not clear how cows forming a unit group are related. A female informant said: "A *mboo* originates from one female and male. The group builds on the female line because a male is chased away and becomes a *sangalai*. Females give birth and stay with their calves. On maturity male and females leave the group but females stay with their mother. I presume that is how a group gets formed". Cows are known to be very protective of their calves. The younger it is the fiercer a female becomes. Other cows cooperate to protect and care for calves in their unit. The cows in a unit group cooperate to care and protection all calves in their group. Adult cows in a unit group are not sisters or close blood relatives. The cows come from different groups and areas. After giving birth at least once, a female off spring wanders off to join other unit groups or forms a new group with other wandering young cows from different groups, if they are friends. Members of a unit group have unique peculiarities common characteristics and appearances, for instance, broken tusks, worn ears etc

Unit groups do not mix unless during migration where they unit and move together. At other times units just avoid each other and pass their own way. A unit group is composed of between 5 and twenty individual animals. A bull adopts a family unit usually by displacement or opportunistic. Usually, bulls are stronger than females and hence they impose themselves on the family and assume the role of overall leader. Therefore, a unit group experiences a bull turnover but the cow-cow relations in a unit group are stable unless when disturbed by poaching or stressed by extreme climatic conditions like drought and floods.

Unique characteristics for each unit group

According to the informants, each *mboo* – which will be called a unit group henceforth in this study - has unique peculiarities either arising from genetics or wanderings. Members of a unit have similar characteristics and appearances.

There are families whose majority of members have broken tusks, or worn ears. Some would have splayed tusks while others would have rugged, heavily notched and torn ears. Some elephants are naturally tuskless. Local terms that describe the common appearance of individual elephants are used for attaching a label to group. A unit group with most of the individuals having broken tusks is called *mboo lungurr e lalae*; a unit with splayed tusks is referred to as *lapaa cha kwe*; with short tusks *mboo ngusut naana*; long tusks, *mboo entome seur*. A unit groups where individuals have very curved tusks is known as *mboo lemaalo lokop*. A unit with short-eared elephants is called *mboo ngurees*.. The informants said that migrating elephants from Mt. Kenya region look different and unique because of their short and small body size and tusks. The Samburu say that these characteristics depend on 'the seeds' (genetics) or the kind of environment and habit pattern of the unit group.

An extinct unit group – 'mboo le shere'

Before 1980's when the elephant population was high, the Samburu claim that there was a kind of elephants known as *mboo le shere*. One aspect of these elephants was their large unit group. They ranged between 50 and 100 animals in one unit. Also, an elephant within the group called. The informant described the sound as more or a long drawn out howl than a rumble. Some cattle have *mboo le shere* too. This kind of elephants was common during seasonal migrations. But no informant has heard of encountered such a unit in the past twenty or so years. This kind of group was exterminated during the intensive poaching era between 1970 and the early 1980's. Informants claim that poachers located them easily by tracking them down from the elephants continuous drawn out 'mowing' calls.

***Sangalai* – the unpredictable bull**

The local people use the term *Sangalai* (plural *Sangala*) referring to a solitary bull elephant. Solitude arises when the bull is displaced as the dominant bull from a unit group either. The term also refers to an aloof non-breeding bull in a unit group. Also, a solitary sick bull is referred to as *Sangalai*. But a bull courting or mating an estrus female is called *laingoni*, which means the active bull. If agreeable to each other, solitary bulls stay together for short spells of time

especially during and immediately after the wet season. It is not uncommon to find two, four or even eight together. In the dry seasons, they usually resume their solitary life. Those that like each other stay for a little longer.

Sangala are very brave, fearless animals that even displace cattle from a water trough. This usually leads to 'a fight' with warriors. A *sangalai* can lay ambush to attack a pedestrian. Most victims are warriors. Informants who have witnessed or experienced the wrath of s*angalai* recounted how they survived, speared, shot or maimed the elephant. They also talk about their experience of swallowing large amounts of dust during the confrontation. It is not quite known how dust enters the mouth. If shot, a s*angalai* retreats and flees. Some die later. The scenario accounts for most human-elephant related deaths in the District. If spotted before, most warriors avoid a confrontation with a *sangalai*. Unlike cow groups, a *sangalai* can be so calm that goats and sheep close almost touching the animal. It is not uncommon to see a *sangalai* and livestock grazing in the same area and drinking water on the opposite sides of a sizeable mud-pool. *Sangalai* remains clam if not disturbed or irritated otherwise they are known for voracious attacks when irritated or cornered.

Sangalai can be so arrogant that they wander anywhere they like, like Samburu warriors. Their carefree tendencies are known and never challenged. Cattle bulls behave in the same way. When herding they stray to reach the best pastures, leaving the rest of the herd away. The Samburu say it is kind of bull habit, a form of defiance. The headmaster of Ndonyo Wasin Primary School informed me that Sangala visit the school's compound every night to feed on *sacaram* when the fruit is in season. They pass everywhere and never follow the usual elephant routes like the unit groups.

According to informants, *sangala* usually stay in bushy places with sufficient tree cover and easily accessible water. In Kiltamany area, *sangalai* saunter the western side of the Reserve on the banks of the Waso River, their favorite haunt. *Sangala* are also common in Sarara, Gogoltim, Santait, Loijuk, Kalama, Loidadapo areas. A sangalai spends most of its time in solitude feeding and resting. Eventually it

becomes ‘full’ (a term referring to stoutness, and good health) or rotund. Its skin looks smoother and firm on its body. At this time, *sangalai*’s walk is very confident. This full condition is attained in the middle of a rainy season, and usually once a year for each bull, especially the rainy seasons. In this condition, *sangalai* walk miles of end looking for his unit group and to find any females ready for mating. He is also keen to fight any male in his unit. He must fight with incumbent bull in unit and take over if successful but retreats if defeated. Whenever there is an estrus female, bulls must fight and the winner mates the female. Full bulls fight and usually win because of their good health. Bulls don’t agree to mate one female; one must dominate. When full, the bull becomes nervous and aggressive. It is most dangerous to people and charge or attack at the slightest provocation. Because he is so active, moving, fighting and mating, and eats less, the bull looses its healthy condition, ousted by a healthier bull, and resumes back to solitude, *sangalai*. Elephants become old and senile in their ninth and last age-set. Old senile males don’t get ‘full’ or compete for females. They rarely adopt a unit group.

A *sangalai* has a special duty of finding a place with rain and taking his unit group there. When the elephant travels and fails to find green fodder, the bull becomes a nuisance because of competing intensively for water and pasture within Samburu people and their livestock. A long time ago, local people would verify by traveling to the same area, which an elephant had visited. The Samburu people can tell when a bull is on such a mission. They usually, the *sangalai* walks hastily alone without feeding, stopping for rest except drinking when it comes across rivers or dams.

In a unit group, a *sangalai* is a leader and has the responsibility of protecting the family from dangers. As the unit group moves, a *sangalai* trails behinds and is usually the last individual in the queue, and sometimes its comes hobbling along after the group minutes or even hours later! It is usually a very tricky situation because he feels threatened if people get between it and its group. The only time you see the bull in the middle of a herd is only when consorting an estrus female. The Samburu people say that *sangalai* is brave and courageous, fearing nothing.

He wants to keep an eye on his herd. When the herd is frightened, the bull is always the first to protect them from danger.

***Ngamitoni* – the guardian cow**

Unit groups have a stable leader cow known as *ngamitoni*, which means protector or guardian. '*Ngamitoni*' is a 'middle-aged middle-sized' cow usually with calves of her own. A female, which has not given birth cannot be an *ngamitoni*. It is the main criteria for becoming an *ngamitoni*. The guardian female controls the group and protects them from any intrusion. It is aggressive and above all dangerous. Her name means 'protector'. The animal must be strong and agile, not necessarily the smartest in a unit group. According to the Samburu people, *ngamitoni* leads her unit group except when *sangalai* decides to do it. Sometimes *ngamitoni* chases away *sangalai* or even frustrates the bull just to 'get it off their backs' for a while. Sangalai obliges and take his leave but returns later. *Ngamitoni* is the strongest and very energetic and motivated elephant in the group. Therefore, no other elephant would dare confront the female at all. This character is important protecting her family from the aggression of other families and also to be able to control everyone in the unit group. Not even bulls can overpower or subdue an *ngamitoni*. They are very powerful and determined females.

Units have only one *ngamitoni*. The Samburu say that *ngamitoni* can be identified by its unique behaviour. First, she is the most restless member in the unit, moving and fidgeting all the time. Secondly, if a person abruptly meets a unit group, *ngamitoni* charges the person and the rest follow her. But if she does not bother, then none in the herd will do so. Before an *ngamitoni* charges directly, it wanders around the herd several times and then abruptly dash directly at the intruder. Other unit members charge only after *ngamitoni* gives it a first go. If its livestock, when other elephant try rushing towards the livestock to attack and disperse them, *ngamitoni* holds them back and discourages them from attacking livestock. She even pokes some of them very hard. When satisfied, she approaches the livestock herself and reacts. You will rarely find a situation where more than one elephant attacking. One comes and charges then retreats before the charge is repeated again several times. Also, if it gets smell of a place where a lion has been, *ngamitoni*

will break and destroy every single bush at that point. In case a *ngamitoni* dies, another younger cow takes over. *Ngamitoni* cannot be easily expelled from the group. It is very are to find to ngamitoni in one unit group.

Ngamitoni protects and controls the unit group. Also, the leader controls the movement programme and general activities of the group. For instance *ngamitoni* decide whether they go to drink water or not; makes and supervises their travel schedule; knows where to find water, and also where to hide from danger. When migrating, or meeting at a water hole, unit groups don't mix just like that. Each *ngamitoni* controls their respective groups. *Ngamitoni* rarely fight each other. They avoid a confrontation and drive their groups in different directions.

Ngamitoni is not the oldest female in the group. The position depends of power and agility rather than age. Old females beyond reproductive stage are not *ngamitoni*. In old age, an *ngamitoni* retires and her eldest daughter takes over. A old elephant cow is called *narikon*i.

Conclusion

According to the study, these local descriptions are the defining parameters of the 'elephants tribe' a term often used by the informants. The elephant tribe is composed of individual elephants from different areas, of various character traits, distinct unit groups, a power hierarchy order among bulls and a system of 'administration' entrenched in the 'institutions' of Sangalai and Ngamitoni. The Samburu people perceive the elephant tribe as a social functional unit that each aspect of an elephant is dependent on the state of the elephant tribe as a whole.

Appendix 8

Elephant distribution patterns and migration behaviour

Introduction

Historical records show that the Samburu people have always lived with elephants, as well as many other kinds of wildlife. Informants in the ethnographic study claim that elephants have unique long distance migratory habits within and beyond the border of Samburu District. This chapter examines the local knowledge about elephant migration, a common theme in the study. In addition, informants' claims that elephants are common animals in Samburu District are investigated.

Distriution pattern

Residents, migrants and vagrants

Informants stated that the distribution pattern in Samburu District can be described in three ways: first, areas to find elephants throughout the year, second, areas to find elephants only during migration, and third, areas where elephants are scarce and rarely found the whole year. The pattern changes frequently, both in specific areas, and the district in general caused by four main inter-related factors, namely: the intensity of elephant killing for food and ivory (number of elephants killed over a duration), vegetation cover, human density (the number of people in a given area), and aridity.

One hundred and thirty two names of locations (Annex 1 of this Appendix) on an authentic paper map (attached at the back of this thesis) of Samburu were selected. Informants in Ndonyo Wasin and Lerata were asked to grade locations using a scale to indicate the presence or absence of elephants in the area. The scale is as follows: 1 – to represent areas where elephants are found throughout the year; 2 – to represent areas where elephants are only found during migration; and 3 - area where elephants are scarce and rarely visit even during migration. The response variation was negligible. Areas with permanent natural water springs are perceived to have elephants throughout the year. Most of the lowlands have elephants only during the migration season. The northern part of the district is practically devoid of elephants at any time of the year.

Water pools, *olturot*

During the rains, elephants spend most of their time in the lowlands, *lpurkel* gleaning the lush herbs and bushes. They seldom visit rivers for drinking or water splashing. Instead they prefer to drink water from any nearby natural springs and their own made water pools known as *olturot* (singular is *olturoto*) and *mailoti*. The pools don't exist in the highlands because there is plenty of water for elephants to drink. According to the local people, only elephants make water pools, *olturot* and *mailoti*. The process begins with a elephant spoor filling with mud and water during one season. Passing elephants splatter the little mud and hence expanding the small pool. The elephants wallow on the spot and enlarge it gradually every rainy season. Elephants return to the mud pools during the migrations. The difference between an *olturoto* and a *mailoti* is that *olturot* are made on flat surface while a *mailoti* is made from a muddy lugga which the elephants gradually expand for wallowing

The presence of mud pools indicates that elephants perceive the location as their home. It also means the area is a favourite place for elephants; the opposite is considered true. Places with very few or not water pools shows that the area is used for migration only. My informant says that the furthest known water pool Ndonyo Wasin is in Koya. That means that elephants only disperse as far as Koya.

Elephant water pools have irregular shapes depending on their age, frequency of elephant visits and usage by local people, and depth. The bigger the water pool the more water is holds. Bigger olturot attract more elephants. However, some elephants are known to avoid 'common areas' and specialize in 'patronizing' the smaller pools. The size of an elephant water pool varies between 10meter and 40 meters. Although some of them have been expanded using tractors into earth dams to provide harvest rainwater for livestock, elephants still visit them. A good example is known as Loidikidiko. Elephants made most of the water pools before 1950s.

Each water pool has a local name and term. They feature in the daily speech of local people, especially in conversations about sources of water, pasture and general navigation in the vast lowlands.

The water pools fill up fast with water during the rains and retain the water for a long time after the rains have stopped. The local people fetch water and bath in them. When an olturot dries up, soft grasses, known as *lenturot, lonono, lanana* and *seyiai* sprouts. Most livestock eat the grass.

The following are names of the main water pools given informants. Due to shortage of time for the field study, only a few water pools were mapped using GPS gadget. The list below would be a beginning for a mapping exercise in future.

Names of water pools in Ndonyo Wasin-Ilkerei area

- Nd
- Olturoto Kilakir
- Olturoto Lolgiria
- Olturoto Longoiyesen
- Olturoto Lemoile
- Olturoto Murit
- Olturoto Lolgeresire
- Olturoto Lolkidongoe
- Olturoto Lengosuwuan
- Olturoto Lirer
- Olturoto Lalkarkar
- Olturoto Nyukie/Lenturrlege
- Olturoto Lesoit
- Olturoto Lalngatuny
- Olturoto Lengii

Water pools in Serolevi area

- Olturoto Lolkidong'oe
- Olturoto Loongunjit
- Olturoto la lashau
- Lmailoti Lalashau
- Olturoto Lekauda
- Olturoto le soit
- Olturoto le ntasim
- Olturoto Lepindira
- Olturoto Laambartan

Water pools around Wamba, Gogoltim, Barsalinga and Ilkalkaloi areas

- Silango Nkutuk Ngiron.
- Olturoto Kalama
- Olturoto Samarmar
- Olturoto Lasantait.
- Olturoto Nongowuarak.
- Olturoto Laljai
- Olturoto next to Tulong
- Olturoto Lesarai
- Olturoto Kerikeri
- Olturoto Nontuburuani
- Olturoto Nolkuniyani
- Olturoto Nantawuo
- Olturoto Tamamburu
- Olturoto Loltepes
- Olturoto Lolmotio
- Mailoti Loloikamban
- Olturoto Lolchorro
- Olturoto Loibor ngare
- Olturoto Laraso

- Silango Loidikidiko
- Silango ya lengaila
- Olturoto Murgusiani
- Olturoto Lerok

-

- Olturoto Lemasai

Colour Plate 3: Loikidikidiko water pool with elephant dung in the foreground and livestock drinking water in the background.

Colour Plate 4: Olturot Momoiyok in Sarara area during the dry season

Distribution and migration patterns

Conditions for migration

Climatic changes

The Samburu people claim that elephants are long-distance moving animals, and that all elephants move from one area to another searching for food and water. Elephant are known to migrate in search of food variety rather than because of scarcity. Food variety is caused by changes in climatic seasons from dry to wet conditions, and vice versa. The changes are not distributed the district (Synott, 1979a). A little amount of rain stimulates a prolific herbaceous growth in the lowlands (Bronner 1989, Synnot 1979a).

Attached to this thesis is a copy a topographical map showing all the names of locations mentioned in this Appendix.

Forage

Elephants feed during the day and night. Local people believe that an elephant eats all kinds of plants. This is illustrated by a common blessing for unity among all clans of the Ilmasula phratry: "*Maata ngae o ltome*" (let us be like the stomach of an elephant). During the rainy season (*ngerngerwa* and *ntumuren*), while in the lowlands, elephant are said to eat 'hot' plants like: *ludupai*, *ntepes*, *aduum* when its very green, *siteti*, *silapani*, *lchurai*, *lpopoi*, *lgweita*, *lkirdidia*, *lashimi* although not a favourite, and *suchai*. It also feeds on different kinds of grass namely *loonono*, *lkawa*, *lanana*, *ntalangwani*, and *lgurme*. The elephant feeds on grasses by holding the leaves and pulling without uprooting the plant. In the highlands they feed on 'cool plants' like *ng'eriyoi*, *olmisigiyoi* (not found in the lowlands), their favourites: *lching'ei* and *morijo*i, and poisonous ones like *lpere ntai*. Elephants invade farms in the highlands to feed maize and wheat. Elephants like salts too. They migrate to salty luggas in Santai, Lodosoit, Kapai, Sira, Chapulo, Kauro and Ilkisin.

Water

Elephants prefer staying in places with plenty of water to drink daily during the rainy season or after three days in the dry season. Many localized movements of

considerable distance are not season-related but a search for water. For instance, elephants around Kiltamany and the Reserve feed mostly at Loijuk and travel to Waso Nyiro River to drink. Many drink at Archer's post during the night where perennial natural streams from the Nyambene Hills permanently feed the water flow. Elephants dig for water in dry riverbeds too. Although elephant drink water from human-dug wells, they avoid them when too deep for their proboscis to reach. Elephants are known to detect sub-surface water more accurately than people.

Migration cycle

The rain errands of Sangalai

The local people define migration as 'a continuous movement from one end of the district to another and beyond the district boundaries'. The migration is not a haphazard phenomenon. The process begins when elephants detect rain by testing the wind with their proboscis. Bulls from most unit groups, leave immediately and follows rain scent until they find the rain. After feeding and splashing their body with the rainwater, the bulls return to their groups, many miles away, and make a special noise to announce their findings. Elephants within the noise range start assembling. It takes several days and thereafter the bulls direct the heard to the lush vegetation. The unit groups cannot leave until the bulls' return with positive response.

The first dry season and wet season

Elephants migrate four times during the year. During short dry season, *Lamei dorop*, (between January and March), the elephants move to the nearby mountain areas and swamps after water and vegetation in the lowlands dry up completely. The areas usually retain pools of water and have lush green and edible vegetation. At the end of *lamei dorop*, the elephants detect rain in the lowlands and begin gathering at foothills a few days or weeks later. The rains are called *ngerngerwa* (April to May). Elephants are said to originate 'coming from' five mountainous regions, namely: Rumuruti areas, Loroki (which includes Loroki and Kirisia forests, Sukuta, Maralal highlands), Mt. Kenya (includes Oldonyo Ngiro, Mpala, Ingwesi, Ngare Ndare), Ilkerei (Sarara, Ngurunit, Ndonyo Wasin, Meiuwa, Irrer,

Marsabit) and the National Reserve. While in the Samburu lowlands, they disperse to Sarara, Lerata, Ndonyo Wasin, and head for the salt likes in Lodosoit, Kauro, Sera, Chapulo etc. The local people recently began to notice that migration groups have different population sizes. The Loroki-Kirisia population is considered the biggest and the Ilkerei-Sarara is the smallest population.

The second dry season and wet season

The lowlands begin drying up again at the end of May and desiccate in June. The change indicates the start of *lamei odo*, the long dry season for the lowlands and the Mathews Range. At the same time, Loroki, Kirisia, Rumuruti, Marsabit and Mt. Kenya and Maralal highlands receive orographic rain in July and August. This season is called *lorikine*. Elephants leave the lowlands and head to Loroki, Rumuruti and Mt. Kenya. Others travel back to Marsabit and Mt. Nyiro areas. In addition, although the Mathews Ranges don't receive rain during *lorikine*, the vegetation remains lush and the springs flow, providing elephants with food and water. In July, the common acacia tortilis tree gets into fruit and produces sakaram. Elephants relish it and feed on it as they migrate. Those groups, which remain oscillate between the hills and the plains to feed on *sakaram*.

The long dry season ends in October when the next rains fall in the lowlands but not in the mountain ranges. The rains are called *ntumuren* and they fall between November and December. Again, the elephants leave the mountains and migrate to the lowlands for the lush vegetation and salty water, and begin moving to the hills in January as the short dry season, *lamei dorop* begin. The cycle is repeats itself again as shown in figure 8. Figure 9 shows the migration patterns (sources and dispersal) of elephants.

Other considerations

The elephants can travel during any time of the day, but mostly prefers night-time. In 1970's and early 80's elephant migration was not wholly season dependent but the intensive poaching by Somali bandits. At that time they had no specific escape route or corridor. Therefore, they chose any safe direction. But their favourite hideouts were thick bushes and forests to hide. Elephants move in a trail

following one another for miles on end until they arrive at their destination. As they walk to a bushy water place, elephants tend to follow a line. But when feeding as they walk, they spread out a bit more and feed in the same general direction. They prefer walking in areas thickly covered with bush and shrubs. They also consider the shortest distance with fewer obstacles like steep escarpments and deep galleys. At daytime, elephants avoid human settlements and areas with lots of human activity.

Migration routes

Bulls are not known to follow particular routes or paths when moving from one area to another. Unlike the bulls, unit groups follow and must keep to very specific routes throughout the migration. As a result, large tracks have formed from usage over the years. The local people described the major routes or highways and their main tributary routes in the District. Generally, a migration route was described to have entry/exit points along the district boundary at Milgis lugga, Merti e Serteta-Kom, Samburu National Reserve, Ngutuk Ngiron, Sukuta Marmar-Amaya and Loroki Plateau.

Figure 10: A flow diagram of 5 migration routes in the district made using using descriptions given by informants.

Conclusion

The above information represents local knowledge about elephant distribution and movement patterns in Samburu District. According to the local people, elephants have been migrating since time immemorial mainly to feed on different varieties of food. Migration depends of rainfall; hence they are unpredictable as the rainfall itself. This information is potentially useful for scientific studies about elephants in Samburu District.

Annex 1: Distribution notes of elephant around the Samburu

Amaya :Very few residents and migrants: Hunted by Suk people

Archers : Migratory

Arsim : Residents and migratory

Aruba : Nil

Baawa : Residents and migratory

Baragoi : Very few remaining and seldom visited by elephants. Usually hunted by Turkana people

Barsalinga and Tulolong: This is an elephant hot spot areas. Many are residents; it is a major migration corridor

Chapulo: Residents and migratory; a favourite salt lick during the rainy season

Derekes and Lodongejek: A major elephant migratory route. That is the main corridor for elephants to move into Seiya

Donyo Wasin : One of the main hot spots and favourite areas for elephants in and around Samburu; has residents and used for migratory

Emuruangon :Residents and migratory

Gogoltim :A hot spot too. Residents and migratory

Ilaut/Arsim :Migratory for elephants from Marsabit

Ilbaa oibor :Residents and migratory

Ilkerei : Residents and migratory

Ilkisin : Mostly migratory and occasional visits for salt licks

Inkiposorogi : Migratory

Irer : Residents and migratory

Kalama: : Residents and migratory

Kamanga : Resident and migratory

Kangaramak : No elephants at all; harassed and hunted by the Turkana

Kapai : Resident and migratory

Kinya : Residents and migratory

Kirimon : Migratory only

Kisima : A few residents and mostly migratory; there is a dam around there which they like to drink water.

Koiya : Residents and migratory

Kom : Resident and migratory (although they like the area very much, insecurity deters them; a few residents and migratory

Kongop, South Horr etc: Not known

Larapang : Status not known- ?

Larisoro : Migratory and residents

Latakweny : Migratory

Lemisigiyo : This is a hot spot for elephants; residents and migratory

Lenana : Migration area

Lengei : Migratory to the hill, migratory, a major route passes there

Lengoli : Resident and migratory

Lengusaka : Migratory

Lerata : It is the 'headquarters of elephants in northern Kenya; residents and migratory

Leshamunya : Migratory

Lesirikan : Migratory

Lkailipai : Migratory

'Lodge' : This is a hot spot too; residents and migratory

Lodo nkejek : Residents and migratory

Lodosoit and Napasha Kutok: Residents and migratory

Lodungokwe : Residents and migratory

Loijuk : Residents and migratory

Lomolok : This is another hot spot; residents and migratory

Lonjipiship : No elephants found there

Lonyori Pesho : Residents and migratory

Loosuk : Residents and migratory

Lorian : Another hot spot; resident and migratory

Lorroki : This is a home for elephants and the main dispersal area between July and Septmber; residents and migratory

Losesia : Resident and migratory

Lowua Mara (Latakweni): Migratory to Maralal; residents and migratory

Lowua Werikoi : This is a hotspot too; residents and migratory

Lulushin : No elephants found here??

Marti Kaingos : Residents and

Maseketa : Migratory

Ngare Narok : Residents and migratory

Milgis : Residents and migratory

Morijo Residents and migratory

Moru : This is another hot spot for elephants

Murit : Residents and migratory

Murua Kipen/Leparkaram : Residents and migratory

Musawa : Status unknown

Naimurua kirin: Almost nil, it is Turkana country

Naingamkama : Residents and migratory

Nairimirimo : Another elephant hot spot

Naisamunye : Migratory.

Naisunyei : Migratory

Namanyarobo : Major migratory en route to Maralal; residents and migratory

Napasha Kutok : M migratory

Nashola : No elephants live here

Nderikes : Migratory

Ndikirr Eldebe : Migratory, that is where their main route passes.

Ndonyo Lalasai : A hot spot; residents and migratory

Ndonyo Lemelop : Status unknown

Ndonyo Werikon : Migratory

Ndoto : Residents and migratory (many elephants)

Ngalipai : Migratory

Ngarmasuro : A former hot spot

Ngaroni : Too open; migratory.

Ngata Nanyukie : Residents and migratory

Ngeny : Residents and migratory

Ngilai : Hot spot; residents and migratory

Ngorika : The home of elephants; Residents and migratory

Ngurunit : Hot spot; residents and migratory.

Ngutuk Ngiron : Hot spot at the moment; residents and migratory

Nkii : Residents and migratory

Nolkiek : Status unknown

Nolkunyani : Migratory

Nolotoro : Residents and migratory

Nonguarak : Residents and migratory

Noolotoro : No elephants

Ntumo leserem : Hot spot for elephants; residents and migratory.

Ntumot eseren : status unknown

Oldonyo Lalasai : Migratory and residents

Oldonyo Sabachi : Residents and migratory

Oldonyo Werekon near Ngaroni : No elephants

Olkanjao : Migratory

Oromodei : a hot spot; residents and migratory

Parsaloi : Residents and migratory

Pidilo : Status unknown

Pokol : Status unknown

Porro : Resident and migratory

Purkir : Residents and migratory

Raraiti : Residents and migratory; a hot spot

Remote : Residents and migratory

Sanga/Lesiolo : Tesidents

Santait : Resident and migratory, especially bulls

Sasani : Migratory uring the dry season, around Kauro because of the salt.

Seiya and Larapa lugga : Migratory; that is the main corridor to Maralal and Kirisia

Sera : Residents and migratory

Sesia : Residents and migratory

Siambu : Migratory

Sirata Oirobi : Residents and migratory

Suiyani : Hot spot; residents and migratory. It is inside a lugga. The elephants like it very much, especially near the junction with Seiya. There is another Suiyani near Barsaloi.

Sukuta Marmar – few elephants; most migratory

Sura doru : Migratory – the main migration enroute to Loroki

Swari plains and Nairimirimo – Migratory; the elephants pass there very fast and in haste. They never stop to graze or feed at all.

Terengwe : Migratory

Tipaku : Migratory

Tulolong : Very few during migration

Uaso Rongai, Nyiru, Suro, Tum : No elephants there.

Wamba : Migratory and residents

Appendix 9

Chronology of Samburu - Elephant Association in Samburu District:

1908 - 1961;

1971 - 1978.

Date/period	Remarks	Source
1908	Loroki: Elephant evidently causing considerable pressure as spore seen every few hundred yards. P 213	Sobania 1979
1911	Ngurunit: elephants previously watering here although now dry; Ilaout: appeared as if elephants stood around watering like herds of cattle (May)	Sobania 1979
1921	Seya areaL Elephants in large numbers; remarkable for your of about five years. Dead elephants aften found below the Ndotos; Kulal area: Ethiopians have almost cleared the area of elephants - survivors in Horr Valley and Ndoto Mountains. P. 214	Sobania 1979
1921	The Samburu and Rendille do not kill game or interfere with elephants as they look among the latter as relative of the human race. Elephants exist in large numbers and all herds are remarkable at present for the large number of young about Seya and below Ndoto dead elephant are often found by natives who state that a disease or poison exists in this part of the district. Abyssynian raiders have almost cleared the Kulal District of elephant. The survivors appear to have taken refuge in the lower Horr valley and the ndoto mountains. As the reserve is inhabited by a non-game killing race and one who reverence the elephant, it is most suitable as a reserve. Pp 4 - 5	Samburu District Annual Report
1924 - 1925	In 1924 up to the time of writing, 1,139 pounds of ivory has been brought in or confiscated. In 1923 for the first 6 months 1866 pounts for the second 6, 966.25 pounds. The killers are the ndorobo on the Mathews Range. The killing is done using traps with a short arrow head with poison fixed so as when sprung to penetrate into the elephants back. I attribute the ivory trade primarily to the Somali shopkeepers at Barsaloi. p 12 - 13	Lieut Lytton's report for 1923 and 1924; Sobania 1979. P. 214

1926	The poaching of game in the reserve by natives has I think on the whole decreased. The Samburu are not great poachers, and any killing takes place is done more often by the young moran, and consists of shooting at small game like grants, gazelle, impala, whilst tending their herds. At the same time the killing of elephant,rhino and giraffes by the Wandorobo on the Mathews range still goes on to a more or less degree and for the reasons mentioned in previous reports is exceedingly difficult to stop. These people kill elephant chiefly for the meat and the ivory is a secondary consideration, they being content tohide and leave any tusks for years if necessary. There is undoubtedly stil a quantity of hidden ivory in the district, but each year some of it is brought in and recovered. During october I saw such a large herd near Sugota Marmar on the Loroki plateau consisting of young bulls, females and young and numbering about 100. I myself counted over 75. This is interesting to note in view of probable future events in connection with this locality. Other herds have been seen at Obirgoi, Barsaloin Ngurugur and elsewhere. No elephants in Kulal. Ivory purchased during 1926 is 21 pounds; ivory confiscated in 1926 was 288 pounds. P 12 - 13	Samburu District Annual Report 1926
1926	The Samburu do not kill much game as a general rule with the possible exception of giraffe, whose skin they favour for making gourds and sandals. The Turkana kill a certain amount chiefly for food on the El Barta plains and around Baragoi. The ndorobo living on the mathews range are the chief offenders against elephant and rhinopoaching, and the greater portion of the ivory recovered is the result of their ilegal activities. Large tuskers are becoming rarer but females and young are holding their own as regards their numbers. Ivory purchased in 1925 was 462.5 pounds; ivory confiscated was 425 pounds. pp 9 - 10	Samburu District Annual Report 1925
1927	In August, a policeman, Mr. Kiptanui was killed by an elephant which attacked him without provocation on the main road. P 15	Annual Report Samburu District 1927
1928	In various parts quantities of the rare fauna about and with one or two exceptions wild animals have cause little damage or inconveniences to man or beast. The most noteworthy of these exceptions is an elephant who at one time displaed a propensity for disputing the right to use one of the water holes at Barsaloi. His exploits were perhaps due as much to a sadly perverted sense of humour, as to any rougish. Another or perhaps the same elephant attacked more than one human being on Loroki. One intended victim narrowly escaped serious injuries. Practically speaking, the Samburu kill no game unless some animal takes offensive against the or their flocks or herd. The ndorobo, and particularly those in the Mathews Range and on Mount Wargess, kill a very large quantity of game, especially rhino and giraffe. Large herds of elephants were encountered fromtime to time in most of their favourite haunts. In the main, they have little fear of human beings and are sometimes embarassingly unresponsible to efforts made to induce them to remove themselves from the line of advance in a safari. pp. 20 - 21	Samburu District - Norther Frontier Province Annual Report 1928

1933	It is thought by some authorities that elephant are increasing or at least keeping up in numbers, but as fas as this district is concerned this would appear doubtful p. 30	Samburu District Annual Report 1933
1935	There has not been many game offences in court though numbers have been committed by Turkana, Wandorobo and Somali poachers in Samburu. P. 23	Samburu District Annual Report 1935
1936	Again elephants almost depleted the shamba. Mr. E. Cunningham a young local settler who was doing elephant control work met his death from an elephant in July. Destruction of all kinds of animals, from snales to mice to elephants goes on in the Game Reserve in Samburu. A few ndorobo are responsible for a little of it but Turkana are the main destroyers. pp. 30 - 31	Samburu District Annual Report 1936
1937	Game scouts did excellent work; through their offices, several poachers were imprisoned, and 72 tusks weighing 2174 punds, and 42 rhino horn were recovered. In 1936 the equivalent figures were 13 tusks weighing 202 pounds and rhino horn p. 23	Samburu District Annual Report 1937
1938	…the game warden flew up to Rumuruti to investigate the shooting of 15 elephants out of a herd of 19 on a farm… p. 21	Samburu District Annual Report 1939
1939	…In May the assistant game warden shot and fatally wounded an elephant which was rushing into his tent. He was mauled by a lioness in the left leg and right arm at Arsim in the north east corner of Samburu. For several months, elephant became a real nuisance at Maralal and interfered with work and recreation. A samburu was killed by an elephant near Maralal p. 25	Samburu District Annual Report 1939
1944	…in May elephant destroyed the vegetable shamba at Maralal. P. 4	Samburu District Annual Report 1944
1946	Several deaths daused by elephant and rhino were reported. The aasistant game warden, Mr. Rundgren, visited the district several times on control work and shot a few elephant, lion and other game. Some elephant ere thought to have died of anthraz and also buffalo were reported to have died of rinderpest at Amaya. p. 9	Samburu District Annual Report 1946
1948	…The laioni take of their birds skins and their black robes and put on for the first time a red warrior [cloth] and apply red ochre. They take out the beads and grass which they have worn in their ear lobes and put in circular earings mode of wood or ivory. Ivory is most prized and stealing of elephant ivory has to be watched at this stage. p. 10	Sherrifff, 1948

1948	The greater part of the district become part of the Marsabit National Reserve in 1949 under GN 236 of 24/2/48. There seems to be a high mortality among elephants from anthrax, particularly in the Seya and Mathews Range. Also, there has been a difinite case of an attempt to steal ivory for the manufacture of earrings in which two young moran were convicted. Also there have been several reports of natives being killed by big game, particularly elephant. Most of the unlucky ones are women who are too heavuly loaded with wire ornaments to the able to get out of the way. p. 24	Samburu District Annual Report 1948
1949	There were a number of casualties among Samburu from big game and the question of compensation for loss of life from big game was raised at the August LNC meetings. The Director of National Parks decreed that no compensation could be paid. P. 16	Samburu District Annual Report 1950
1950	As usual there were a number of casualties among the Samburu from big game and officers on safari had narrow escapes. The question of compensation for loss of life from big game wa raised in the August, 1949, Local Native Council meetings has still not been settled. It would be interesting to know the number of elephant in the district. They must run into thousands and they increase every year. Nine elephant licences have been taken out during the year. p17	Samburu District Annual Report 1950
1952	The Director of National Parks has agreed to pay a sum of money to the ADC for trophies brought in by the tribesmen	Handing over report 1952
1952	The District is now divided between the Marsabit National Reserve and the northern game reserve… Lions caused little trouble but elephant and buffalo competed violently with stock at the few watering places available and elephant did much damage to dam walls p. 21	Samburu District Annual Report 1952
1953	…The warden's task is impossible in the area to he has to cover, assisted only by practically untrained scouts armed mainly with .303 rifles. The Samburu, fortunately, are little interested in killing game save in defence of their cattle so that little poaching takes place. Turkana and ndorobo are usualy responsible for what there is... pp 23 - 24	Samburu District Annual Report 1953
1954	…there were few cases of poacing by Samburu or Turkana p. 28	Samburu District Annual Report 1954
1955	Mr. Rodney Elliot, the new game ranger recorded 6 elephant, 8 rhino, 15 buffalo and 7 leopard shot in 10 game safari parties… p.27	Samburu District Annual Report 1955
1956	…without doubt, the depredations of wild game is the foremost complaint in the minds of the Samburu. Three main offenders are elephant…for keeping stock away from grazing areas and for personal injury…. Clearly a modus vivendi must be found…game laws are well respected p. 19	Samburu District Annual Report 1956

1957	Game cotrol is a subject on which much heat is generated in the district. The Samburu feel very strongly that the game department, and national parks should (b) stop elephant damaging dams c) pay compensation for deaths and injuries inflicted by game (18 killed, 13 wounded). The turkana are invertebrate game poachers, but the Samburu also kill game, generally spearing it to shw their courage. It has been necessary to impose stiff sentences for poaching. point 20	Samburu District Annual Report 1957
1958	There seem, on the whole, to have been rather less complaints this year than last about game. This may be due to increase control by the game warden (although he cannot operate within the national park save occasionally by special permission which is never granted for the purpose of reducing the numbers of game. The Samburu feel most strongly that: (b) compensation should be paid by government to the people or their dependants, who have been wounded or killed by game (9 killed and 9 wounded this year, compared to 13 killed an18 wounded in 1957) p. 23	Samburu District Annual Report 1958
1959	The Samburu feel more sore about the government's game policy than about any other subject. Briefly their case is: that plains game make nonesense of any attempt to preserve grass (which cattle owners pay grazing fees) in controlled grazing schemes; elephants and other heavy game do great damage to ADC dams and dam fencing; between 20 and thirty people are killed every year by wild animals. Although it is argued that game are an economic benefit to the colony, the government will neither pay conpensation for the game damage nor (in the National Reserve which covers nearly all the district) do anything to cull or control game. The Samburu think this is scandalous and they are right (p13)	Samburu District Annual Report 1959
1960	1960 was a very bad year for poaching, with 73 convictions agains a previous annual average of 20. The number of rhino killed indicates a new development among the Samburu, commercial poaching. Previously it was done only for sport or revenge. (p. 12)	Samburu District Annual Report 1960
1961	This remained one of the more carbuncular Samburu topics and antipathy for government policy grew still more. The Samburu attidude was summed up by the Chairman of Council's game committee: "If a moran kills a rhino, he gets a heavy fine and probably a term in jain; if a rhino kills a moran, his family gets nothing. The game wardens were kept fully busy throughout the year on both control work and the detection of offences again the ordinance. Thought relatively few of of the numerous slayings of rhino and elephant were fore gain, particular offence reached large proporptions in Wamba Division. (p. 14)	Samburu District Annual report 1961

1971 - 1978	One of the more recent and interesting event to influence the form, use and symbolism of Samburu spears was the poaching of elephant ivory and rhino horm during the 1970s. Ivory poaching became attractive to Samburu warriors in 1971, when Somali and other African black marketeers began to operate within the District. During those eight years, the elephants and rhinocerous (and leopard) populations of Samburu were attacked relentlessly by grops of Kishili warriors. Poaching stopped in the District in 1978, after the government and wildlife conservation preservation groups eclipsed the ivory market in East Africa. p 26	Larick 1984