CONTINUITY AND CHANGE OF INDIGENOUS INDUSTRIES AMONG THE TUGEN COMMUNITY OF BARINGO COUNTY, KENYA, 1895-1963

BY

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A THESIS SUBMITTED TO THE DEPARTMENT OF HISTORY, POLITICAL SCIENCES AND PUBLIC ADMINISTRATION, SCHOOL OF ARTS AND SOCIAL SCIENCES IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE CONFERMENT OF THE DEGREE OF DOCTOR OF PHILOSOPHY IN HISTORY

MOI UNIVERSITY

2022

DECLARATION

Declaration by Candidate

This study is my original work and has not been submitted for conferment of a degree in any university. No one should produce any part of this thesis without the consent of the author or Moi University.

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I dedicate this thesis to my children Victor Kiptoo, Festus Kipsang, Tracy Jepkemboi, Peter Kimutai and Joy Jebiwott for moral support during the research.

ACKNOWLEDGEMENT

There are many people I would like to acknowledge the various supports they offered to me when I was preparing, developing and writing the thesis.

First, I am sincerely grateful to my supervisors Dr Paul Opondo and Prof. John Changach for their comments, suggestions, criticisms, and patience in reading this work, thereby enriching the work that culminated in completing the thesis.

Secondly, I would wish to thank the teaching and non-teaching staff of the Department of History at Moi University for their guidance and encouragement at various stages from the proposal to the final thesis. I thank my classmate Lyn Kavulavu and Walter Kodhipo for their constant support, correction and encouragement in the entire period.

Thirdly, I am grateful to my research assistants led by Silas Bartonjo and respondents such as kokob chelagat, Musa kitombul, Joshua Changwony, among others, who were willing to share their knowledge. They set aside their time to be interviewed and generously gave all the information required. Without the willing co-operation and hospitality of most informants, I would not finish this thesis.

Fourthly, I am grateful to the Staff of Kenya National Archives, Kabarnet Documentation Centre, Kabarnet Museum, Nairobi national museum, Jomo Kenyatta Memorial Library, Margaret Thatcher Library, Kenya National Library at Eldoret who availed research materials willingly. I owe a debt of gratitude to the authors of the reference used in this work whose illustrations, emphasis and ideas enabled me to complete this thesis.

I cannot forget my department members at Kabarak University who encouraged, assisted, guided and created an excellent academic research environment. I specifically

thank Prof Omwoyo for always guiding me in the research and continuously monitoring my work progress.

I also express my gratitude to my family, Isaac Sambu, Victor Kiptoo, Festus Kipsang, Tracy Jepkemboi, Peter Kimutai and Joy Jebiwott, for their kindness, understanding and encouragement during the entire period. Special thanks to my parents, brothers and sisters, for their support. I express my profound gratitude to them in full acknowledgement that I would not have written this thesis without them.

The essential aspects contributing to my research's success were the friendships and warmth that I exchanged with friends. It is impossible to mention all those who assisted me, but to all those who gave their input, comments and criticism, God bless you all. I thank God for giving me the strength and patience to undertake this research. However, if there are any errors or mistakes, I bear full responsibility.

ABSTRACT

Africa has been proven by scholars to be the cradle land of mankind in terms of origins, civilizations and technology. This has placed Africans in a position to conduct experimentations in various fields as they adapted to the diverse environment. The early exposure enabled them to be creative in terms of acquiring skills and knowledge in various fields. This came to be referred to as indigenous knowledge where Africans brought to light the superb civilization of pre-colonial communities. Some of the technological inventions included blacksmithing, leatherwork, pottery, basketry, woodcarving etc. During the colonial period the Tugen experienced great changes in response to the colonial government aggressive implementation of colonial policies which adversely affected the superb technology. The study focused on an attempt to reconstruct the history of industry under colonial rule in Baringo County between 1895 and 1963. The origins, development and the resilience to change through the turbulent years of colonialism is the interest of this study. The position that is strongly advanced through this study is that even before colonialism the Tugen of Baringo County were involved in indigenous industries using knowledge and skills which they developed independently. The study's main objective was to investigate the factors that enabled the Tugen indigenous industries to survive throughout the colonial period. .Specifically, it investigated the continuities and changes to ascertain the extend of modification, dismantling and subordination during the period. The study was conducted using the historical research method. The sources used to collect data were primary sources, secondary sources, and archival assessment. The study targeted men and women believed to be having in-depth knowledge of the Tugen indigenous industries. It also targeted areas with a concentration of the identified indigenous industries. The snowball and purposive techniques was used and a total of 28 members were interviewed. The articulating modes of production theory was used as the main tool of analysis, which showed the linkage between the capitalist and the non-capitalist mode meant to preserve and not destroy them. The findings from the study was that, the pre-colonial industry was dynamic, innovative, efficient, diverse, and self-sufficient and suited the needs of the Tugen because the technology was anchored on the environment. Secondly,the colonial conquest set a chain of events which systematically modified, marginalized, destroyed and sub-ordinated the Tugen indigenous industries. This was done through the introduction of settler economy, forced labor, currency etc geared towards achieving maximum profits. Thirdly,the Tugen response to the colonial intrusion especially after 1945, was one of survival, readjusting, co-existing and articulating with the capitalist system. Fourtly, during the Post-World War II industry was intensified by the tugen and actually saw a revolution in the sector. The tugen accepted the practices that would benefit them and rejected the undesirable ones. By independence the tugen industry had been transformed and integrated to Kenya’s colonial economy and world capitalist system. The study concluded that, the Tugen had evolved a system that enabled them to survive in the hilly environment but were ready to adopt new changes brought by colonialism. The study recommends measures to be taken geared towards orientating, reconstructing and restoring technology to its proper place in the Tugen economy.

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ABBREVIATIONS AND ACRONYMS

The following abbreviations were used in the study;

ADC -	African District Council
AIM -	Africa Inland Mission
ALDEV –	African Land Development Board
AR -	Annual Reports
ASAL -	Arid and Semi-Arid Lands
BAR -	Baringo Annual Reports
DC -	District Commissioner
FGM –	Female Genital Mutilation
GAS -	Government African School
GK -	Government of Kenya
IK -	Indigenous Knowledge
KNA -	Kenya National Archives
Kshs -	Kenya shillings
LNC -	Local Native Councils
OI -	Oral Interview
TIK -	Traditional Indigenous Knowledge
UN -	United Nations
USA -	United States of America
WW -	World War

DEFINITION OF TERMS USED IN THE STUDY

During the study, terms used were;

Act – a bill which has passed through the various legislative steps required for it and which has become law

Adaptation - It refers to the action or process of adapting or being adapted to a social and economic setting.

Articulation of modes of production – It is a concept where separate methods of production are seen as coexisting within one society or social formation

Capitalism – It is an economic and political system in which a country's trade and Industry are controlled by private owners for profit, rather than by the state.

Change – make or become different. It is a transition process from one state to another.

Continuity – the unbroken and consistent existence or operation of something over time

Crown land – land belonging to the British crown.

Culture – the arts and other manifestations of human intellectual achievement regarded collectively. It is man's way of life

Culture dynamism- refers to a culture's susceptibility to receive and add to itself specific other cultural values.

Discontinuity – refers to a state of having intervals or gaps.

Environment – it is the surroundings or conditions in which a person, animals, or plant lives or operates.

Indigenous - is used to describe a thing that originates or occurs naturally in a particular place or is native to the region.

Indigenous knowledge – refers to knowledge systems embedded in communities' cultural traditions, with long histories of their natural environment interactions.

Industry – refers to an economic activity concerned with the processing of raw materials.

Modes of production refer to the varied ways human beings collectively produce subsistence to survive and enhance social being.

Resilient – refers to an ability to withstand or recover quickly from difficult conditions.

Technology - is the application of scientific knowledge for practical purposes, especially in Industry. It is technical and creative excellence exhibited by the people through the materials and other creative crafts works.

Traditional indigenous knowledge – refers to the unique experience given to a culture or society.

CHAPTER ONE

BACKGROUND TO THE STUDY

1.1 Introduction

This chapter lays the foundation and the justification of the study on the development of the Indigenous Industries' as practiced by the Tugen Community of Baringo County from 1895-1963. To start with, the study traced the origins, migration, and settlement of the Tugen, to assess the influence of their settlement and the level of adaptation and interaction with the communities they met on the way. As the Tugen settled in the Tugen hills, they manipulated the environment and utilized the natural raw materials to develop a complex industry. Secondly, the study examined the Tugen indigenous state from 1895- 1910 to determine their level of development before colonial influence. Thirdly, the study analyzed the impact of colonialism on Tugen indigenous industries from 1910-1930 to assess the industries' extent of interference. Fourthly, the study examined Tugen's response to colonial influence to determine the continuities and the discontinuities of the industries from 1930 -1945. Finally, discussion on Post World War II development and Tugen's transformation efforts. The background information in this chapter, therefore, provided the basis for evaluating the subsequent chapters.

1.2 Origins of the Tugen Indigenous Industries.

Indigenous industry has played an important role within the tugen society for many years, yet the means by which the products were produced or obtained by this community has not been thoroughly documented. The bulk of our understanding is presently based on a limited number of studies which have tended to focus on functional nature of the products and omitting the crucial aspects such as the process of procuring, making the products and level of intaractions which occurred during the colonial period. The research presented here provides the first opportunity to add to this narrow

knowledge base by reconstructing the techniques and the changes that occurred during the colonial period. To begin with, Societies worldwide have engaged in some form of Industry, as dictated by the environment and available natural resources. Ever since man emerged on earth around 5 million years ago,[1] the earth's climate which determines the environment has been changing. Regions covered by forests have disintegrated by man through deforestation to create room for agriculture. These human actions led to the emergence of grasslands and fractured landscapes, which led to the endless search for pasture and food by man. Within this swiftly changing landscape and environment, man evolved large brains and capacity for adaptive behavior. In such a world, the ability to think creatively, to invent solutions to survival threats proved a significant asset. The evolution of the brains became the most prominent examples of how man evolved to adapt to the environment.[2]

Early human beings are believed to have lived towards the end of the Old Stone Age period, a period associated majorly with plants and animals' domestication[3]. As pastoralists, man depended heavily on their environment for pasture, water, food, and shelter, thus moving from place to place to find these items for their livestock. The stated example utilized their indigenous knowledge (IK) to manipulate their varied environment for their survival. Human beings no longer lived under the mercy of wild animals, storms, colds or famine, because they made tools, weapons, and other artifacts out of the materials at hand, that is, stone, bone, or wood.[4] They built fires for cooking and used animal skins for clothing, stored grain for consumption all year round, and made efficient weapons for protection.

With the dawn of agriculture around 10,000 years ago, man embarked on a new experiment rather than adapting to the environment by inventing tools that enabled

them to slash and burn the forest to create room for agriculture. Hence yielding higher and constant food production that allowed man to have more leisure time, societies grew and led to a freer exchange of information. Leading to the exposure of humankind to more challenging experiences that required solutions.[5]

One area that enabled man to excel was in the industry sector, as evidenced by the world's remarkable indigenous industries. Early man in China, for example, slowly discovered that fire could be humanmade and some grasses' seeds could be planted in the soil and germinate to yield food requirements. Those discoveries helped China inhabitants invent simple farming instruments using stone tools to produce enough food supply for subsistence. By the time of the Tang dynasty in the 7th century AD, China had expanded its economic capacity to manufacture a wide variety of items such as silks, porcelain, ships, and scientific devices.[6] China developed their own devices based on their indigenous knowledge. Chinese success story revealed that the instruments of an industrial base be built on culture and traditional practices. In 1200 BC, China had come up with the first Chinese dictionary and by 1250 BC had manufactured silk fabric. In Asia, the fibers of a kind of grass called flax – the first grass-grown not for its grain or flour but for clothing, was invented. The early Sumerians wore clothes made of lamb's skin as well as wearing woollen cloth.[8]

European nations, on the other hand, were involved in some form of Industry. European indigenous industries were characterized by the changeover from domestic production to factory system during the seventeen-century industrial revolution. The guild making, for example, was developed. It was an association of specialists passing on a skill by training apprentices to learn the skill and provide continuity to the craft. The USA also

created a civilization based on the most up-to-date innovation in science and information technology and unparalleled development in all human endeavors.

Africa in the Industry and other technological development spheres was not left out in the past, contrary to the view that Africa contributed nothing to world-historical development. For the more significant part of Africa, industry development was complicated and entrenched in the societies, although these changes were gradual rather than revolutionary. What was probably of more relevance for early African industrial growth is that development over the world's territories has always been uneven.[9] While societies have experienced industrial development, it is apparent that different regions within each continent increased their command over nature at different rates.

The earliest forms of Industry in Africa were rock art, pictures of animals drawn on caves by human beings who lived in caves. It signified a critical phase in man's development because it showed coordination between the brain and the hands. The most famous examples are in the Tassili Mountains in the central Sahara. These paintings show the lives of the area's peoples as they shifted from hunting wild game to herding of animals and eventually to trade.[10]

Africa has further shown advances in the development of Industry in the pre-colonial period. These developments were in the exploitation of minerals, developments in art and crafts and manufacturing such as leatherworks, pottery, woodwork, basketry, and textile work. At times, hunting with bows and arrows and wooden clubs depended on survival in most African continent parts. Egypt produced wealth in abundance 25 centuries ago because of the mastery of many scientific natural laws and their technological invention. The Craftsmen, Goldsmiths, Coppersmiths, and Gum cutters made beautiful delicate Jewelry for wealthy noblemen and their wives to wear. They

also made cups, bowls ornaments for use in their houses. Carpenters carved wood and made furniture. In 2500 BC, Egyptians discovered papyrus and ink for writing, which enabled them to write much literature and constructed the first libraries.[11]

At the time of the Bantu migration from West Africa to other parts of Africa in the early seventeenth century, including Kenya, they already had the iron smelting idea they learned during the Nok culture in West Africa. The Bantu are associated with iron smelting, and Urewe ceramics in western Kenya were made by almost all subsequent early farming communities in eastern, southern, central, and southern Africa.[12] They were similar to those made by early farmers around Lake Victoria. As the Tugen migrated, they interacted with the Bantus, where they learned the art of iron smelting.

More information was obtained from the forages in Eastern Kenya, principally from work in the Taita-Tsavo.[13] Archaeological evidence of Glass beads, pottery, and metal artifacts were found in this region, associated with trade in ivory, Rhinoceros, and skins with early European and Arab traders. The Sirikwa holes are related to the Kalenjin pastoralists of the Mid-Second Millennium AD to the Ugandan border.[14] One of the most notable aspects of Kalenjin history involves the Sirikwa holes. These are hollows that measure from 4.5 m to 9 m (15–30 ft) in diameter made in hillsides. Kalenjin legend says that the Sirikwa people used these as cattle pens to guard their animals at night. Archaeological excavation at several Sirikwa holes reinforces this image that the outer fence was housing with the door facing inward toward the stock enclosure. There would have been only one way to enter the entire complex, and that was closely watched and heavily guarded. Lanet pottery was found at the sites and was used to prepare and store honey[15]

The location of the Tugen community is at the heart of the rift valley landmass. Illiffe pointed out that the East Africa Rift Valley provided a range of environments in which living creatures could survive.[16] The Tugen had to use their traditional indigenous knowledge (TIK) to invent items using available materials in the environment and fashioned them to suit the hilly terrain where they lived. Tugens divided themselves into clans, and each line specialized in a skill. It enabled them to produce quality products that they exchanged with those from other societies, such as the Bantus, who had perfected their wares.

There is much knowledge embedded in Tugen beliefs and practices, particularly in the contexts of livestock and medicines and the traditional understanding of the use and control of resources within their lands. Knowledge was locally situated and based on traditional customs, handed down through generations, and modified by cultural and environmental adaptations. Themes of indigenity are encountered in local people's voices, primarily in advocacy, activism, and land claims. [17] What is apparent is that the Tugen developed Industry independently or borrowed from the communities they met as they were migrating.

Towards the end of the 18th century, the Tugen culture changed due to cultural authentication and environmental changes, which primarily affected their industrial base. The difference is an inherent aspect of culture. No culture remains static. There are currently several social and cultural changes globally that will affect other communities even with a history of stable culture like the Tugen. According to Uwandu and Nwankwor, [18]We must distinguish between culture change and dynamism, which refers to just the susceptibility of culture to receive and add individual other cultural values. Culture in itself grows and changes over some time.

With the advent of colonialism in African in the 19th century, the African indigenous industries were systematically in-subordinated by the British through taxation, government policies, legislation, and structural changes in the economy. The indigenous industries were either destroyed utterly, modified, survived or new products emerged. The disorganization followed colonialism and well-nerved exploitation of Africa, and the Peoples ways of life are altered. For example, Europe flooded African markets with imported plastic and enamel wares, thereby killing the African industrial initiatives, marking the beginning of consumerist culture in Africa.[19]

However, after the Second World War, or in 1946, the Tugen scholars and nationalists encouraged the tugen people not to abandon their indigenous industries but to realign them to their encountering changes. They were worried that the younger generations might not know the creative achievements or the technological achievements of their forefathers. They had to be encouraged to give continuity to their heritage and culture because their past knowledge would be a source of cultural pride and identity.[20]The Tugen response was that of preserving their indigenous industries even with the Onslaught of colonialism.

Although this colonial process was meant to arrest the development of the indigenous forces of production, some indigenous industries continued to prosper even at independence in 1963.

1.3 Statement of the Problem

Indigenous industry played a very vital role within lifestyle of the tugen community for many years, yet this fundamental role has not been thoroughly discussed and documented by scholars. The bulk of our understanding is presently based on a limited number of ethnographic and artefact studies, which have tended to focus on the

functional nature of the products. This functions include; it acts as a source of livelihood and promotes social, cultural, and economic functions. It serves to raise the standard of living of a community and secures their safety against risks and unforeseen calamities, for example, drought where people can sell their wares to buy food. Moreover, the measurement of People's wealth is done by the number of industrial products they have and their ability to trade with those items. The Industry is a highly valued sector, and communities believe that all the industry aspects should thrive if they are to prosper and survive. The Tugen, like other societies, practiced Industry as a way of life, and this has not been discussed by scholars, thus creating a gap that this study seeks to fill.

However, with the infiltration of colonial rule, most indigenous industries were articulated into the pre-capitalist economy. They either continued to survive, were destroyed, modified, or were subordinated. The current study sought to unravel the level of change portrayed. Some of these industries have been resilient and persistent in withstanding foreign influence and have continued to survive in the face of colonialism's radical changes. Some were, however, modified to suit the colonial economy and the introduction of capitalism. Hence, the industries changed shape, form, or face. Some disappeared because the factor that ensured their existence became extinct. The strong attachment and appreciation by the Tugen to their indigenous industries is the concern of this study. The Tugen interaction with the European colonizers and their neighbors such as the Keiyo, Nandi, and Kipsigis enabled them to borrow some aspects which influenced their attitude towards foreign items. The interaction level was analyzed to give meaning and justification for the changes in the face of a stable Tugen culture.

The study's primary motivation is that the indigenous industries' vital role has not been accorded adequate attention. For instance, the British colonialist's attempts to discredit the importance of indigenous Industry failed, and this, coupled with the Tugen culture, ensured continuity and change. The research presented here provides the first opportunity to add to this narrow knowledge base by reconstructing the industries from a historical perspective approach. The changes and many other factors have ensured a necessity to find out why such industries continued to exist.

1.4 Objectives of the Study

The Objectives of the study were to;

i. Trace and examine the origin, migration, and settlement of the Tugen community.
ii. Investigate the types of the Tugen indigenous industries between 1895 and 1910.
iii. Assess the influence of the British colonial policies on Tugen indigenous industries from 1910 to 1930.
iv. Explore the responses of the Tugen to the colonial influences on their indigenous industries between 1930 and 1945.
v. Analyze the Post World War II development and the Tugen indigenous industries transformation from 1945 to 1963.

1.5 Research Questions

The following research questions guided the study;

i. What were the origins of the Tugen, and how did it influence the development of their indigenous industries?

ii. What was the nature of the Tugen indigenous industries in Baringo County between 1895 and 1910?

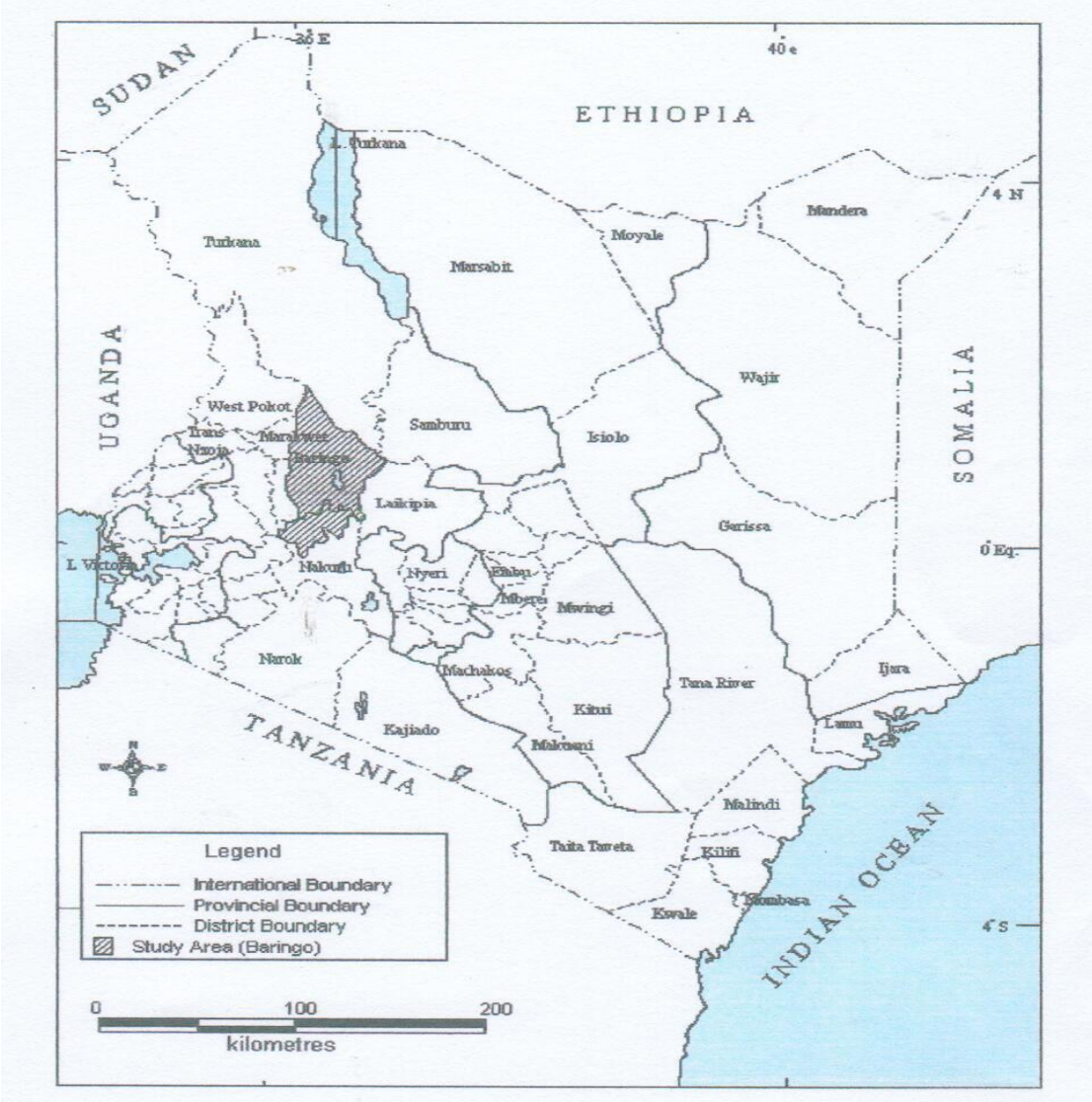
iii. To what extent did British colonialism influence the Tugen indigenous industries between 1910 and 1930?

iv. How did the Tugen respond to the factors that affected their industries between 1930 and 1945?

v. What developments took place in the Post World War II period which transformed the Tugen industries?

1.6 The Study Area

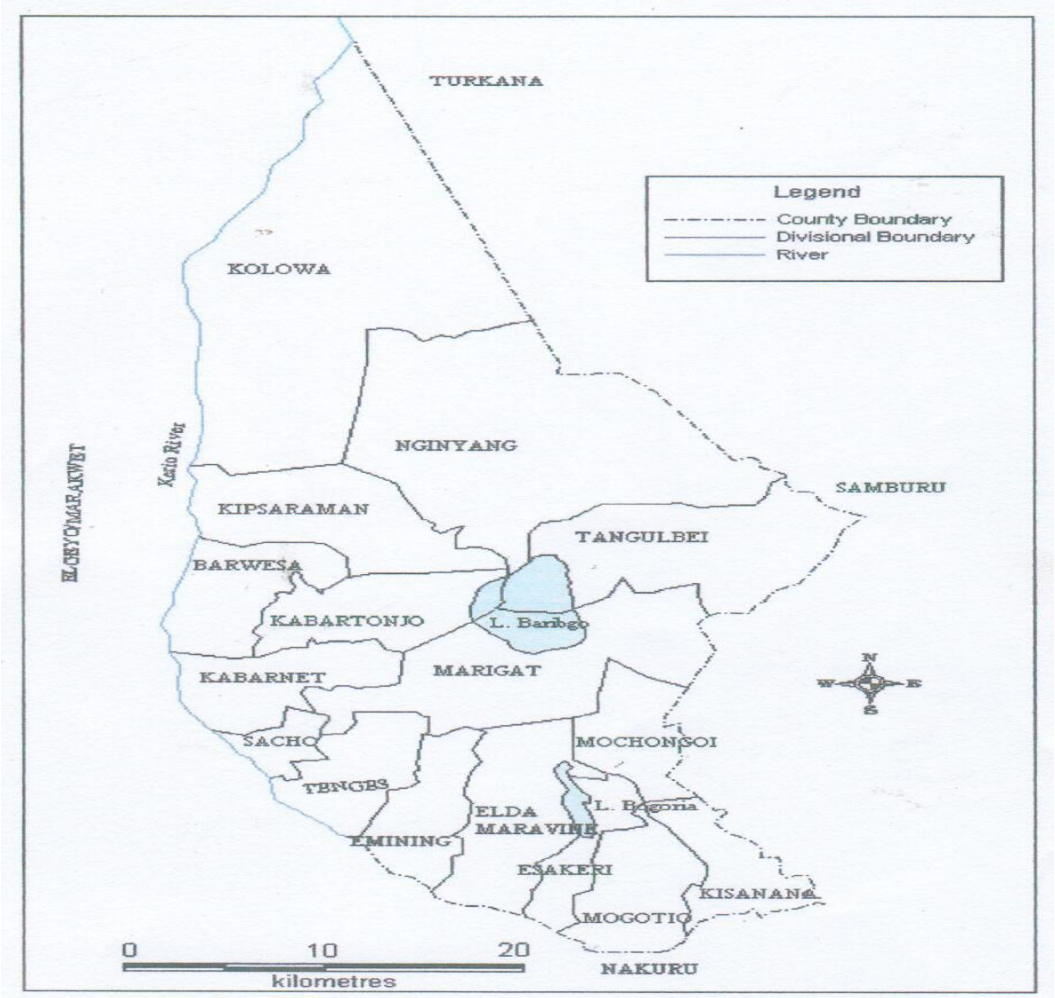
The study was conducted in Baringo County, Kenya, between Nov 2019 and April 2020.



Map 1.1: Map of Kenya showing location of Baringo County

Source. Geography Department GIS lab, Moi University 2020

A MAP OF BARINGO SHOWING DIVISIONS



Map 1.2 : Map of Baringo County showing the Divisions

Source. Geography Department GIS lab, Moi University 2020

Baringo County is one of the 47 Counties in Kenya. Baringo County is situated in the Rift Valley region of Kenya. It borders Elgeyo Escarpment to the East, forming the Eastern wall, and Ngelesha hills(Mochongoi) to the West, forming the Western wall. To the East of the Tugen country is the Kerio Valley, where river Kerio cuts along the valley floor marking a natural boundary between Baringo and Elgeyo Marakwet County. The county's southern boundary is appropriately marked by the road between Eldama Ravine and Kampi Ya Moto. It is located between 35 30' and 36 30' East and Latitudes 0 10' South and1 40' North. The equator cuts across the country in the

southern part. It covers some 11,015 Square Kilometers, of which 165 Square Kilometers are water surface.[20]

Baringo county shares borders with eight counties, namely, Turkana to the North and North East, Samburu to the North East, Laikipia to the East, Nakuru to the South, Kericho, and Uasin-Gishu to the South West, Elgeyo Marakwet to the West and West Pokot to the North West.

The county administrative units comprise six sub-counties: Baringo South, Baringo North, Mogotio, Eldama Ravine, Baringo Central, Baringo North, and Tiaty. It has 30 wards with varied area coverage.

Table 1: Population distribution of Baringo County according to the Wards

Constituency	No of the county wards	Name of the Wards	Population census as per 2009	Area (KM2)	Density
Baringo North	5	Barwesa, Kabartonjo, Saimo/ Kipsaraman, Saimo Soi, Bartabwa	93,789	1705	55
Baringo central	5	Kabarnet, Sacho, Tenges, Ewalael-Chapchap, Kapropita	89,174	803	111
Eldama Ravine	6	Lembus Kwen, Ravine, Mumberes, Maji Mazuri, Perkerra, Koibatek	105, 273	1002	105
Mogotio	3	Mogotio, Emining, Kisanana	60, 959	1325	46
Tiaty	7	Tirioko, Kolowa,Ribkwo,Silaleloi Lamorok,Tangulbei-Korossi,Churo-Amaya	133,189	4592	29
Baringo South	4	Marigat, Illchamus, Machongoi, Makutani	73,177	1663	44
Total	30		555,561	11,090	50

Source; KNBS, Baringo 2012. IEBC 2012

The population of Baringo County was 555,561, according to the 2009 Kenya Population and Housing Census. It has a male population of 279081 and a female population of 276480. It has a population density of 50 people per km^2.[21]

1.7 Scope and Limitations of the Study

The study was conducted in Baringo County, a region occupied by the Tugen community. It covered the indigenous Industry as practiced by the Tugen community, which varied based on the varied ecology of the Tugenland. The raw material for constructing a specific industry was not found in all regions; thus, various clans located in the specific regions specialized in the aspect and perfected it. The study concentrated on these contextual areas.The scope therefore, is limited to Baringo County and more specifically to the indigenous industries. The study was conducted for six months between August 2021 and January 2022.

Chronologically, the study covered from 1895 and 1963, which is referred to as the colonial period. In 1895, the British declared Kenya a British protectorate and started imposing their rule in all sectors of the economy. In 1963, Kenya attained independence from British rule, and colonial rule ended. Kenya regained their independence, which they lost in 1895. The study consciously extracted the relevant information on indigenous industries throughout the colonial period. The researcher encountered a challenge on the respondent's responses. The respondents did not fully explain the concepts as required due to lack of confidence on the concepts and some kept on repeating themselves. This led to insufficient data collected within the specified time. However, the researcher had to supplement the data with secondary data especially on the figures The chapters were dealt with using a topical or thematic approach.

1.8 Justification and Significance of the Study

The study on Tugen indigenous industries is critical because of the significant role in the economic development. It is history that is now urgently needed, and the collection of information must be done before the present generation of elders who preserve it in their memory die. It is essential to record and document Tugen indigenous industries in written form for future use. It will show how the Tugen harnessed the surrounding environment for survival and, in the process, contribute to knowledge about African indigenous industries. It was the Tugen way of life and did not record it.

Moreover, the available literature of previous studies did not adequately explain the phenomenon. They tend to contradict the existing knowledge about the phenomenon. The study will offer fresh insight into the study. It is also clear that other Kalenjin groups' scholarly work has to be done, such as Peristany of the Kipsigis, Goldsmith of the Sebei, Kipkorir on the Marakwet, Hunting Ford of the Nandi, leaving the Tugen with little recorded work.

The research will impact on policy by shaping policy debate and mediating policy makers dialogue with health reliable research based eveidence. Policy makers on industry will be able to identify specific issues or problem. They will identify areas for improvement and refine solutions and implement strategies using the research findings. All policy makers should follow what research recommend.

1.9 Literature Review

This section entails the review of the related and relevant literature on Industry. The reviewed literature acknowledged other scholars' contributions on Indigenous Industries themes catered from the world and Baringo County in particular. It analyzed the literature related to the study, which formed the basis for research questions and

objectives to broaden the topic's ideas. It also addressed historical gaps the study needed to fill. Based on the reviewed literature, several gaps were identified in the nature of the Tugen Indigenous Industries that the current study attempted to cover.

The first part focused on the origins, migration, and settlement of the Tugen community to establish how their origin, interaction, and settlement determined the industries they developed. Also, the study did a review of the contact of the Tugen with other communities. The second part discusses some aspects of the Tugen indigenous industries from 1895-1920 to determine how they developed under the various contexts. The third part assesses the extent of colonial influence on the Tugen indigenous industries between 1895 and 1945 to determine how colonialism influenced the Tugen indigenous industries. The fourth part dealt with the response of the Tugen on their indigenous industries during the post-world war two periods, from 1945 up to 1963, to determine how the Tugen entrepreneurs emerged and revolutionist the Industry.

1.9.1 The Origins of the Tugen and the Early Contacts of the Tugen with the British Colonizers up to 1895.

The origin of the Tugen indigenous industries reflected the essential features of a highly skillful and diversified society. The reviewed literature enhanced the understanding of the nature of the indigenous industries. As the Tugen settled in the Tugen Hills in the seventeenth century, they utilized production and raw materials that were available and were ready for use by society. For the Tugen community, there was minimal contact with Europeans except for travelers, missionaries, and traders who were crossing the region on their pursuits. This group left some literature about the Tugen, which were reviewed in the study.

One of the travelers was Joseph Thompson, who was regarded as the first white man to traverse Tugen land in 1883. In his work, "Through Maaisailand," [26] Thompson described his experience as cordial as he received gifts in the form of beads, shells, and bracelets from the Tugens. Another traveler was Carl Peters, who also traversed Tugen land to Uganda and gave his experiences with the Tugen people he described as hardworking. F.D Lugard, in his work "The rise of our East Africa Empire," [27] described his experience when he crossed Kerio River to Baringo where he encountered a group who were independent and advanced in development. This information was critical in analyzing Tugen industries before 1895.

Fredrick. Jackson was posted to Eldama Ravine in 1884 as a representative of the Imperial British East African Company (IBEAC).[28] His domain embraced the Keiyo, Nandi, Kipsigis, and the Tugen. He transformed Eldama Ravine Station from a mere resting and replenishing point for the caravans to an active station for spreading British imperialism. Jackson had the dual responsibility of bringing the various African groups under British dominance and making the company administration pay for its costs. Jackson's work, therefore, described the methods used by the colonial administration to bring the Tugen under foreign rule, a process which became a reality in 1902 when the control of the Eastern Province of Uganda was transferred to Kenya.[29]

R.O Henning, in his work, "African Morning" [30] discussed his experience among the Tugen in the 1930s. Henning presents a picture of a self-reliant people who were determined to preserve their cultural institutions and eager to adapt to new changes brought in by colonial administration. Henning's pre-occupation was with Tugen reaction to the building of the road from Kabarnet to Tambach in the 1930s. He was very interested in curbing cattle rustling, which saw him traveling long distances to

caution the people, particularly the Tugen. The work, however, suffers from generalization and stereotypes partly because of its autobiographical nature. However, it was very helpful in appreciating the methods used by the colonial administration in subjugating the Tugen under their rule.

Some scholars have given a detailed history of the Kalenjin speaking people as a group. These are Christopher Ehret's work, "The History of the Southern Nilotes" [32] JEG Suttons work, "The Archaeology of the Western Highlands of Kenya" [33] and J.A Di Stefano's dissertation entitled "The pre-colonial History of the Kalenjin of Kenya; A Methodological Comparison of Linguistic and Oral Tradition Evidence" [34]. These works have gone to great lengths to discuss Kalenjin pre-colonial history and were valuable in writing the study's historical background. A more pertinent concern of the above works has been using linguistic and archaeological data to answer specific questions concerning the ethnicity of the early occupants of the rift valley regions and Kalenjin origins/economy and other related phenomena, which is very crucial in the study.

J.A. Massams' work, "*The Cliff Dwellers of Kenya*," [35]gave a detailed study of the Keiyo. While he was traversing the Rift Valley region, Massam gave a record of the Keiyo, especially on the early inhabitants' way of life, particularly their age groups, inheritance among others. He attributed it to their living in the escarpment, which they manipulated to earn a living through hunting and gathering, honey collection, herding, and some cultivation. In the process, they interacted with their neighbors, i.e., the Tugen, Nandi, Marakwet, and exchanged produce, especially during famine. They also interacted with the British, especially between 1919 and 1923 when the British launched expeditions against the Keiyo led by E.M.S Grogan. This work showed that

the Keiyo interacted with their neighbors and exchanged wares. Therefore, the study explored interaction levels between the Tugen and the Keiyo to determine how they benefitted from the interactions.

B.E Kipkorir's work, "The Marakwet of Kenya," [36] B.K. Kipkulei's dissertation on "The Origins and Migrations of the Tugen" [37] and David Anderson's thesis entitled "Herder, Settler, and colonial Rule; A History of the Peoples of the Baringo Plains, Kenya, Circa, 1890 to 1940," [38] provided excellent ideas in understanding the colonial period. In particular, Anderson's thesis on the Tugen provides a theoretical and hypothetical rationale for this thesis. According to Anderson, colonialism entailed political results of crisis, confrontation, conquest, and control. The crisis was evident in environmental and economic spheres, rather than the purely political spheres. Confrontation is presented by the complex interaction of African herder, European settler, and colonial administration. The study gives the nature of the interaction between the Tugen and colonialists during the colonial period the study seeks to investigate.

In addition to the above thesis, Tarus Isaac's unpublished thesis on "*An Outline History of the Keiyo"*[39] gave a detailed history of the Keiyo community. Though he concentrated on the Keiyo community, one of the Kalenjin speaking people's communities, the content was invaluable in studying the Kalenjin group's historical background. The Tugen and the Keiyo share a common ancestry. The use of linguistic and archaeological data to answer specific questions concerning the ethnicity of the early inhabitants of the Rift Valley region was portrayed well in the study. And more specifically, the Kalenjin origins, economy, and other related phenomena. Kalenjin groups share many aspects in common. Apart from the origins, he also gave a detailed account of the British contact with the Keiyo. The British found a group who had exerted themselves to the

escarpment and adjacent Uasin Gishu plateau. When the settlers and colonial state arrived, they subjected the Keiyo to many policies in their economy to enable them to fit in the colonial state. He further examined the changes and continuities that resulted from their contacts with the Keiyo making it crucial, considering that there was the disruption of indigenous institutions to the colonial state's whims in most colonial situations. This work is essential because it will show how the British disrupted the Tugen economy as they imposed their rule in the region.

Hodder Ian gave detailed information on distributing material culture items among the Tugen, Pokot, and Illchamus of Baringo County. It further describes the settlement patterns and the social organizations and the organizations of the mentioned ethnic groups' compounds. It, therefore, provides relevant literature required for the study

1.9.2 The Types of Tugen Indigenous Industries from 1895-1910

Kalenjin groups such as the Marakwets, Pokots, and a few Tugen manufactured weapons from a particular type of stone found in Kapsiliot in Cherangany near Mt, Elgon dispersal area. Scholars had argued that when the Tugen were migrating from the Mt Elgon region, they moved with the industry technology. As they settled in the Tugen Hills, they adapted to the environment by utilizing what was provided by nature, using iron implements. Most clans were agriculturalists, but they required implements to work on the farms. Settled life also enabled man to be keen and produce high-quality items.

Lanes[40] review of the expansion of food production across East Africa emphasizes the variability of initial hunter-gatherer responses during a prolonged pioneer phase of pastoralist expansion that ended around 3000Bc. One trajectory involved local foragers adopting ceramics as attested at Enkapune Ya Muto[40] among other groups such as the

Ogiek and Hadzabe in East Africa and the Mbuti of the Congo basin, [41] have historical and archaeological sources which emphasize the ability of foragers to maintain themselves as independent, often essential players in wide-ranging networks of interaction. Foragers may also have chosen to adopt newly available resources for their ends as in the Western Cape region of South Africa. This literature helped analyze whether the Tugen developed their skill independently or borrowed from outside their system.

The Sirikwa hole, in the Kenya Uganda border, is attributed to the mid-second millennium AD. Kalenjin pastrolists[42] Lanet pottery found at the sites closely resembles modern Ogiek ceramics used to prepare and store honey. Ogiek is a section of the Kalenjin community to which the Tugen belong, showing the nature of the interaction between Tugens and her neighbors.

Mathias A. Ogutu and Simon S Kenyanchui[43] have discussed traditional African economies, including hunting and gathering, pastoralism, and agriculture. Their findings have required useful raw materials, e.g., the development of agriculture was made possible by the wide use of iron tools, which led to the rise of blacksmiths products and various iron tools and implements. The study revealed that "progress in agriculture led to the manufacture of certain essential items for domestic use so that people could improve their standards of living" [44]. This study discussed the essential items manufactured by the Tugen community to improve their standard of living.

Since ancient times the hides of wild and domesticated animals have provided essential materials used by people worldwide, which also applies to Africa. Above all, leather is one of Africa's oldest materials to make clothing and utensils by nomads. Hunting and [pastoral African tribes. The number of different kinds of wild animals whose hides had

been used in the making of shields because of the large size, stiffness, and thickness was from the Buffalo, Hippopotamus, Rhinoceros, Elephant, Giraffe and various kinds of Antelopes.[45]

In Africa, the making of clay pots and unique objects always had some superstition or magical ritual associated with it. In some tribes, only the women are allowed to make pots, others the men, and still in other tribes, both genders. In some cultures, there had to be a cleansing ritual before any work on pottery can begin. [46]

In West Africa, most industrial production was done by craftsmen in workshops run by families or guilds. Africa had elements of the guild system in almost all areas. There were tailoring guilds at Timbuktu, while in Benin, guilds of a very restricted caste type controlled the famous brass and bronze industry. In Nupe (now northern Nigeria), the glass and bead industry operated on a guild basis. Some of these earlier recorded technological breakthroughs and discoveries by most African nations, including Nigeria (Nok culture), are considered the earliest ironworking tradition and pre-dates European and Asia civilizations. Furthermore, archaeological evidence has also shown that other cultural areas in Nigeria, such as Benin with the popular wax casting, Ife art, and Igbo-Ukwu cultures, were the earliest cultures smelting metal casting.

Wood-carvers throughout Africa made remarkable masks and statues. The carvings often represented gods, spirits, or ancestral figures and were believed to embody the subjects' spiritual powers. Terra-cotta (clay) and metal figurines served a similar purpose. For example, terra-cotta human figures and human heads found near the Nigerian city of Nok are thought to have had religious significance. The Nok culture is the oldest known West African culture to have created sculpture.

In the thirteenth and fourteenth centuries, metalworkers at Ife, the Yoruba people's capital, produced handsome bronze and iron statues in Nigeria. The Ife sculptures may have influenced Benin artists in West Africa, who produced equally impressive works in bronze during the same period. The Benin sculptures include bronze heads, many kings, and figures of various types of animals.

As observed, bees' primary natural ranges are in the savannah and semi-arid lands, where temperature variations are extreme. Often the few nesting enclosures available to the bees are in ant-hills and rocks from which honeycombs cannot be easily harvested. Large trees are scarce; few have hollows large enough to house a colony. With the increased interest in beekeeping and the growing demand for bees' products and services, bees can no longer be maintained in their few natural dwelling places but must be provided with special artificial hollows in the form of beehives. Beekeeping is not new in Africa. It has been practiced from time immemorial, especially in the Sahel regions. In these large areas, wooden boards or timber are scarce, and therefore grass and mud have played significant roles in providing material for beehive construction. [47]

Kettle D.W.D presents an analysis of the social organization and marriage alliance rules which underlay the kinship systems of the Tugen of Kenya. From the review, the author was able to document the social organization's and further derive its influence on their social built forms, showing the connections with the Tugen indigenous industries that the current research seeks to unravel.

Gleave M.B gave an elaborate explanation of the development of indigenous industries in Africa. He stated that manufacturing in Africa was represented by small scale craft industries that existed throughout pre-colonial tropical Africa. For example, most

African cultures were familiar with ironworking, pottery, and woodcarving, ranging from elaborate carvings to simple tools and utensils. Africa also had the curing and preparation of animal skins and their manufacture into a wide diversity of articles from clothing to musical instruments and bark cloth manufacture.[48]

Susan Chebet, in "*climbing the cliff*," pointed out that the blacksmiths who were referred to as the Kitony were people who specialized in metal works. The society considered these artisans as outcasts who carried their livelihood through metal and iron tools. In most cases, their contact with the rest of society's members was considered taboo. Women were discouraged from marrying blacksmiths, not only because of them to pay dowry but also their low status in society. The existence of blacksmiths became a necessity to society as the need arose for mastering the environment. They cleared thick forest for the cultivation of food. The tools for this purpose could only be obtained from the blacksmiths who used various types of soils and that contained iron ore deposits.[49]

Kate Moore [49] acknowledges the importance of culture and cultural differences in research as a decolonizing process to balance Eurocentric thinking. He dealt with traditional knowledge and local values that he discussed to understand that they are hybridized through connections to colonial, western, and other African societies and evolving through cultural and environmental change. From this review, the author documented the interactions the Tugen had with the British colonizers and the Tugen neighbors, which are crucial in the study.

1.9.3 The British Conquest and the Onslaught over the Tugen Indigenous Industries from 1910-1930

The historiography of European settlement in Kenya reflects the current circumstances under which the literature was written. A chronological overview of the various sectors is therefore appropriate at this juncture.

An influx of settlers after 1900 opened up new areas to European farming. The colonial government strived to accommodate white demands, which were at variance with African interests. Unprecedented criticism of European excesses was published in book form by two colonial officials in Kenya; Norman leys "underdevelopment in Kenya" and William McGregor Ross's "Kenya from within," which highlighted the discriminatory social and economic policy adopted by the colonialist and provide informative accounts of recent efforts, to promote European interests by suppressing African peasants and laborers.

The local politics of ecology reveal conflicts between the Tugen communities of Baringo and their European settler neighbor, and much of their conflict revolves around the perceived rewards or losers of land and the re-allocation of resources. The history of rural development in Baringo between the 1920s and 1963 shows the intensification of disputes within tugen Communities.

Kendagor[50] assessed the Tugen economic transformation between 1895 and 1963. He highlighted two significant factors responsible for transforming the Tugen economy as the general circumstances of colonial rules, such as government policies and the missionary/western education. He asserted that education, particularly agricultural education, transformed the agricultural economy so that when the colonial era ended in 1963, very few Tugen were still practicing traditional agricultural methods. His

emphasis was on agricultural education. The study gave a detailed account of the Tugen economies systems and is hence relevant in the Tugen culture's organizations' documentation.

David Anderson[51] asserted that the colonial processes marginalized Baringo. Under colonialism, the marginalizing of African interests was evident in terms of both power and knowledge. The solution to rural problems is the gift of development, as defined solely in terms of the western colonial system with little or no sensitivity to indigenous African practices or prevailing social organization systems. Indigenous knowledge systems were not recognized as having any validity or relevance with progress and modernization under colonialism. Colonial development programs, therefore, too often proved to be experiments that were doomed to failure because of errors, ignorance, misjudgments, and misunderstandings on the part of developers. For this historical reconstruction, it was essential to understand the interaction between these two sets of views, colonial and indigenous, and see how the differences were made manifest in policy implementation or the policy's reaction.

According to Bade Adeyeye[52], commenting on African technology, the technological development in Africa from the pre-historic to the pre-colonial period was undergoing a systematic and natural process or growth when the Europeans abruptly disrupted this process. The disruption began in the 15th century, first with the Arabs and later with the long slave trade. Colonialism was followed by the total disorganization and well-nerved exploitation of Africa. People's ways of life were also polluted. The Europeans, thus, imposed their own technological culture instead of encouraging traditional African technologies they met. For example, Europe flooded African markets with

imported plastic and enamel wares, thereby killing the African industrial initiatives, marking the beginning of consumerist culture.

Anderson [53,] in his work *eroding the Commons,* noted that in the 1930s, Baringo was the first district to implement development programs. It was a testing ground for ideas on how reform should be implemented. He further noted that in the years after the second world war, as the colonial government carried an enlarged rural development program, Baringo became a critical reference point for others. The work will be handy in the current study in tracing the origin and culture of the Tugen.

1.9.4 Post Economic Depression and the Re-Organisation of the Tugen Indigenous Industries from 1930-1945

The Tugen and the British Colonial Administration contacts led to erratic and uncoordinated changes and the continuity of indigenous industries. Change and continuity are the central focus and argue that where new influences impinge on any society, one is confronted with how much of the pre-existing body of custom and belief is either discarded, modified, or retained.

The concept of change and continuity has been well developed by various scholars such as van Zwanenberg with Anne King has a given graphic description of change and continuity in East Africa as follows

If a man born a hundred and seventy years ago were still alive and looked back at his youth's east African society, it is quite likely that he would recognize some aspects of the present scene. He would feel familiar at the sight of the women bent in the fields carrying water, he might not recognize the shape of the imported Japanese pangas or the debris they used, but the scene itself would be familiar enough. He would probably

find some of the square houses a bit odd, and he would certainly not feel at home in today's clothing and transport.[54]

This forms the fundamental premise of understanding change and continuity among the Tugen. The central argument here is that change may not be transparent, but evidence shows aspects of transformation. On the other hand, the same forms of rural existence and institutions persist in the British Onslaught.

Andah [55] noted that colonial experience undermined local industries and practices, especially by undermining local artisans and experts; be they weavers, potters, carpenters, architects, or doctors; systematically but rather surreptitiously. European styles of doing things, including even speaking, became the hallmark of achievement. The situation was made worse because European entrepreneurs and government agencies actively looted local patents and designs in weaving, furniture making, architecture, and medical practices. Today, the surprising thing is that, despite these efforts at killing local initiatives and creativity in science and technology, these indigenous industries still survived, although not in as vibrant molds as one would wish.

Raid gave a detailed insight into the influence of imported goods on the indigenous industries. He argued that the degree to which imported commodities destroyed indigenous craft, textile, and metal industries should not be exaggerated as done by individual scholars. For example, the cloth industry along the Angolan coast was undoubtedly damaged, and there is evidence that iron smelting in Senegal was undermined by imported iron, but the impact of manufacturers in most areas was nowhere near as destructive. Nonetheless, it remains broadly correct that imported commodities certainly did little to stimulate change or innovation in African economic systems, nor did the transport system of the Atlantic hinterland develop due to overseas

contact. This view helped determine that indigenous industries took different forms due to European influence and the study will ascertain these changes.

However, after the Second World War, or in 1946, some nationalist movements and African scholars encouraged Tugen people not to abandon their indigenous industries while still patronizing foreign products. They were worried that many students and younger generations might not know the creative achievements or the technological achievements of their forefathers at the end of the day.[56] Giving continuity to one's heritage was necessary, according to the nationalists, because the knowledge of the past would be a source of cultural pride and identity. Not only that, the present generation will be inspired to build on their technological heritage. This view will give recommendations for the study based on the fact that indigenous knowledge should be preserved.

Zeleza found out that art historians' wrote history of crafts in Africa instead of economic historians. He also found out that textiles and other crafts were a significant branch of the pre-colonial economy. He outlined a wide range of materials and technologies used in the Industry. He also found out that the textile industry has proven to be more resilient in withstanding foreign competition in many parts of the continent than recognized. Some of the local industries have continued to survive up to the 20th century. He suggested a need to know more about the industries' fate as a viable economic activity. He called for more research to unravel the changes that took place in the production processes of textiles and crafts as well as in the construction industry.[57]

Similarly, independent African countries have continued to encourage the decline of indigenous technology by importing foreign technology. There has been a tendency towards establishing imported technology that is not viable within African society's

culture and environment. On the part of Africans, the general feeling of inferiority has given rise to negative ideas about indigenous technology products while foreign products are seen as superior. As rightly argued by Okpoko [58] all these have had adverse effects on what indigenous technology can contribute to Africa's sustainable development. There is a need to work out a technological system that is economically efficient and appropriate to African resources. Such a system would require an African scientific system that is directly applicable to the changing societies.

According to Ajahi [59,] he stressed that the community changes with development. He mentioned that culture is dynamic. Culture continually undergoes changes, modifications, or adjustments either for better or worse. Culture is transmutable, meaning that it is being transmitted as it undergoes changes that may be subtle or extreme. Discontinuity or change of industries may be abandoning, adding or altering the materials, color, and styles of material used. For instance, on the discontinuity of meaning (hill) states that, until recently, lavish beadwork was applied to men's and women's daily wear. The dress included leather, cloaks, headbands, and Jewelry. Today some of the artifacts are reserved for special ceremonies like initiation ceremonies.

Heinrich explores aspects of the socio-economic and political history of the Marakwet of Kenya. It does so by focusing on a particular material culture category – pottery – and tracing transformations in its production, use, and exchange over several generations from the early twentieth century to the present day. This approach serves to unearth a series of personal and quotidian narratives that comprise an individual account of Marakwet's past and shed light on the material consequences of various ongoing infrastructural and economic development processes. It has shown that Marakwet farming, landscape, and ecological change, have occurred throughout the last

century via various shifting daily practices. The historical innovations, adaptations, and movements attest to a resilience deeply rooted in Marakwet society that continues to be articulated in the contemporary world. This work gave insight into the changes that occurred in Marakwet, and the work enriched the study.

1.10 Theoretical Framework

In analyzing the Tugen indigenous industries, articulation of modes of production theory guided the study. The theory's proponents included Lancau, Claude Meillassoux, and African scholars such as John Lonsdale and Bruce Berman. The theory's main argument is that when the capitalist mode of production occurs, it does not automatically and immediately replace the pre-capitalist modes of production. The two modes, i.e., pre-capitalist and capitalist mode, were operating side by side hence articulating each other. The two modes of production were then locked in a complex and sometimes contradictory struggle, hence articulation.[22] Gradually, the capitalist mode of production began to modify, marginalize, destroy, or sub-ordinate the pre-capitalist mode of production by utilizing it rather than casting it aside. [22]

The capitalist mode of production occurs when the production forces are combined and organized through commodity exchange. That is to say, under the capitalist mode of production, labor, and land, as well as capital, become commodities freely exchanged in the market, where forces of supply and demand determine their relative price.

The proponents of the theory, such as Laclau, points out imperialist exploitation. Metropolitan capitalism did not establish capitalist relations of production when it brought the world market to the satellite countries.[23] Rather, and it brought about an alliance between capitalist relations of production and existing pre-capitalist relations of production. It articulated capitalist modes of surplus appropriation (commodity

exchange) with pre-capitalist modes of surplus appropriation (tribute collection, servile exactions, use of slave labor). In this way, capitalism overseas came to have the best of both worlds; it introduced commodity exchange worldwide, arranging for an international labor division. At the same time, it could get overseas products at prices obtained through extra-economic means.

Claude Meillassoux [24] argued that, under colonialism, the Europeans themselves were very keen to preserve native authority, native kinship, and tribal life. They were eager to preserve the organization of domestic subsistence production because that meant that commodity production (on their plantations and in the mines) would not have to lead to full proletarianization, i.e., wages need to be sufficient to reproduce labor and take care of the family. In this manner, the cash wage became a mere supplement to reproduce wage labor itself.

European scholars borrowed the idea and used it to explain African situations. They include John Lonsdale and Bruce Berman. They defined articulations as how the capitalist mode establishes dominance over the non-capitalist modes of production. The proponents explained that pre-capitalist modes of production might continue to exist although sub-ordinated of capital through a process of preservation, destruction, or conservation. Goodman[26] puts it that pre-capitalist modes of production may have continued to exist although subordinated to the capitalist system through a process of "preservation and destruction" or dissolution and conservation. Berman argued that a capitalist metropolis interacted with various indigenous systems creating a linkage through the concept of articulation.[27]

The scholars state that articulation varied according to the particular character of capitalist penetration, the nature of indigenous modes of production, and the local

ecology and resource endowment. The resulting variation in subjugation and transformation of local societies and the degree to which capitalist forms of production were introduced also determined the differing class formation patterns within and between colonies.[28]

The theory goes further to explain the specific forms of articulation and class struggles that have taken place in different regions of the third world. It provides the framework for analyzing the different social forms of capitalist penetration, their dynamism, and the resulting degree of articulation. The theory has explained the forms of uneven capitalist development as emerging from unequal exchange patterns, the process of accumulation, the forms of labor, and the appropriation of surplus-value. The theory has been used extensively in analyzing African economic history during the colonial period. It is in line with these arguments that the Tugen indigenous industries have been analyzed. The theory was used to assess the local environmental situations of the Tugen community and how they changed to adapt to both internal and external factors. The Tugen were not easily integrated into the colonial economy but were used to provide the much-needed labor force in the settler farms, which was more beneficial to the colonial system than the tugen. The processes of articulation and disarticulation, therefore, went on hand in hand. In contrast, specific sectors were being preserved through articulation. Others were destroyed through disarticulation, and vice versa, since the entire pre-capitalist economy could not be integrated into totality though subordinated to the capitalist system.

However, although the theory tries to explain the process of articulation, it has its weaknesses. First, the possibility of applying the theory in Africa has been disproved. All cultures change through time. No culture is static. However, most cultures are

conservative in that they tend to resist change. Some resist more than others by enacting laws to preserve and protect traditional cultural patterns while putting up barriers to alien ideas and things. E.g., the Tugen are rigid to foreign cultures and forbids foreign material that does not conform to their cultures. It is now abundantly clear that we are in an accelerating culture change period all around the world regardless of whether we try to resist it or not. African culture should act to check, adopt, and transmit such changes as technological, political, and social development. An urgent need for cultural restoration in Africa is required to avoid cultural extinction due to erroneous impressions of Western indoctrination. Therefore, it is indispensable because people without a culture are people without an identity.[29]

From the above explanation, it is clear that theories have specific weaknesses. However, the way forward is not to abandon them altogether but to use them cautiously. The independent and the dependent theories can be used to reinforce the theory in order to sustain the theoretical perspectives.

1.11 Research Methodology

Historical Research Method was used to conduct this study [60] Historical Research Method refers to the objective location, collection, recording, and evaluation of evidence to establish facts and draw conclusions concerning past historical events. It is research that attempts to explore deeper into what occurred in the past. The study investigated some aspects of the indigenous industries as practiced by the Tugen community of Baringo County and then establishes how colonialism influenced the practice. The study was on the Tugen way of life and thus was linked to their oral traditions.

The current study was conducted using an elaborate procedure that ensured that authentic information is collected. The first step was involved a prior preparation for the study by reading widely on the research topic to be well acquainted with the themes. A reconnaissance study was conducted between May 2019 and August 2019 in the contextual areas, to familiarize with the study area, the research assistants, and the respondent. This involved the researcher integrating with the community by arranging an introductory meeting with village chiefs, elders, research assistants, and key informants research. It was also to seek their assistance and involvement because they are well conversant with the community. To invert perceived power relations, the researcher asked the community to be teachers, as the researcher was a student, and wished to learn from them. Chapin [62] remarked that ground preparation should be time-consuming to overcome suspicion and build trust; transparency and time are the prerequisites for establishing a trust for successful interaction within a community. The researcher was aided by 4 research assistants or agents' who were members of the community and were well conversant with the community, thus, my community's acceptance was reasonably rapid. The researcher spent time training the members to ask questions and fill the questionnaire because historical research involves many discussions.

Informants were selected on the criterion of people born and lived in Baringo county and worked or interacted with Europeans at any juncture during the 68 years covered by the research. As a result of the intaractions those selected were 4 members of the tugen councils, 3 Chiefs, 3 religious leaders, 6 Farmers, 3 Blacksmiths, 3 Basket makers, 3 Beehive makers and 3 Pottery makers within the community. A total of 28 members were consulted. They were chosen because of the specific knowledge they were bestowed with as essential cultural consultants of the Tugen community. They

were believed to be having an in-depth understanding of issues of industry and any other related theme. The instruments were designed to be relevant to each of the groups of informants mentioned above and were ultimately useful in achieving the research objectives. (see appendix) The researcher further targeted youth who are children of the key informants who learned the art through apprenticeship to verify the information's authenticity. However, an informant's current social status or occupation was not a deterrent because the determining factor was the informant's grasp of the subject. The selection was also made on locations with an incidental concentration of valuable evidence such as iron-making area.

The study was on a sample selected from the study area, Baringo County, where the Tugen reside. The Tugen were divided into eighteen (18) clans, and each clan specialized in a specific aspect based on the raw materials in the locality, and it formed a research site.[63] To ensure objective and comprehensive data, selection of the informants was made using sampling techniques. One of the techniques is Purposive sampling.[64] This is where people who have similar characteristics were chosen so that the information they give will be more homogeneous. Using this technique, the researcher identified sixteen (16) Tugen men and women whose ages range between 45 and 102 years, who provided useful information on specific issues that the study sought to investigate. These people were then used as informants to identify others who qualified for inclusion in the study. The second technique was by the Snowball Technique. It is a technique where existing members recruit other members from among the community members who have relevant information, and these in turn identified others yet, hence the number kept on snowballing. [65] The sample group appears to grow like a snowball. Using this technique a total of 12 people were interviewed.

As the sample builds up, enough data was gathered to be useful for research. This sampling technique was used in hidden populations that are difficult for researchers to access. This method enabled the researcher to get most knowledgeable experts. In the case of iron smelting, Kitombuls son from Emboruto gave direction to Kipros from Kaptere, who further gave direction to Chepkonga from Ossen. Some of the informants were identified from the Kenya National Archives (KNA) while undertaking a collection of archival sources. Others were identified in the fieldwork by informants. Eventually, 28 informants were consulted, and the data used for concluding the study of the Tugen indigenous industries. This was after the researcher established that the data was sufficient for making a conclusion on the study.

The actual field study followed this. Information about Tugen indigenous industries in Baringo County was obtained from two sources i.e., Primary and Secondary Data. Primary Data was obtained through direct communication with the practitioners using structured questionnaires, focused group discussions, and oral interviews.

The qualitative nature of historical evidence sought required oral and structured interviews for a sample survey. Interview schedules guided the interviews among the key informants. Items were designed to be relevant to the informants and were ultimately useful in achieving research objectives. (see appendix)The interview guide contained items covering all the objectives of the study.

Structured interviews were conducted along similar lines to solicit relevant information by allowing each informant to recall his personal experience without the interviewer distorting answers. The interviewer asks leading questions to the respondents. It ensured that questions were logically adressed. The questioning skill was paramount in the research. Informants talked freely, and I interjected only when too much time

taken discussing unimportant issues. The questions were also composed of close-ended questions to answer specific demands.

Oral interviews were administered to collect data from the public, and it reflected the views of the Tugen community on indigenous industries and the influence of European colonial officials. Oral interviews offered freedom and flexibility to both the informants and the interviewer to organize, plan, and implement the interview questions and the content. The oral interview requires a high degree of rapport between interviewer and informants. The interviewer should clearly explain the purpose of the exercise to avoid suspicion and answer the questions freely. In-depth interviews were tape-recorded from five respondents to ascertain their views on the specific areas of interest, ranging from pre-colonial to colonial. In the other cases, short notes were written. Most informants were not comfortable with video taking and preferred photographs.

Interviews were conducted at an informant's home to retain a relaxed and informal setting. The language was Tugen, which is the informants' mother tongue or/and Kiswahili, where the informant wanted to express a point, the lingua franca of the country. An informant who cannot express himself clearly in Kiswahili required a translator who asked questions in vernacular and then translates the answers to English or Kiswahili. There were some words that did not have an equivalent of the Kiswahili word. Each interview was tape-recorded or videotaped and later transferred to written text. The information collected from oral interviews with Tugen informants in the field represented the African version of Baringo County events during the period under study.

All the participants were interested in the study and were equally keen to be involved. All men spoke English but one younger woman translated for the older women

participants. I wanted the participants to control the process as far as possible so I encouraged them to give the information freely without much of my interference. After video taking, in some cases, we would watch the clips and discuss concepts that were not clear with them before proceeding. Lack of electricity and computers in some areas meant that I did the editing, but one of the research assistants helped construct the films from the video clips and translate from Kalenjin to English. Two factors made it difficult to arrange regular meetings in some areas. First, the patriarchal nature of the Tugen people made it difficult for the participants to meet at certain times as participation had to fit into their daily domestic lives. Second, men and women were heavily involved in planting seeds during March and April to make use of the unpredictable rains, so I had to structure interviews with this in mind, and for a while, this limited the research activities.

Nevertheless,, the participants told me they felt they had benefitted from the interviews, which helped them reflect on the community use of resources and their problems. For the majority, who previously had had no opportunity to participate in such research, this process was a rare opportunity for ‘building community’ and acknowledging their role in developing their industries. The research attracted all groups, even the younger boys and girls who had not participated in research before. The interviews were later transcribed, analyzed, and extracts were used extensively throughout the study.

It was necessary to supplement interviews by collecting data from the Archival source, which is the primary data source. Archival material was obtained from Kenya National Archives based in Nairobi, Provincial Archives based in Nakuru, and District Documentation Centers in Baringo County. Archival material was in the form of Annual Reports, handing over Reports, Official Correspondences, minute of meetings,

Monographs, Trade books, Native Affairs, District Records and other relevant materials deposited in KNA by the British colonizers. Materials relating to European colonialism and settlement in Baringo County was retrieved from monthly, quarterly, and annual reports, memoranda, and minutes of Baringo District Councils. Also consulted were articles and letters published in the East African Standard, Kenya Weekly Review, and the Kenya Gazette available in Kenya National Archives. Personal letters and diaries of colonial officials deposited with KNA were also crucial. However, caution was required when extracting this information because they covered events and reflected European editors and contributors' opinions, which present a Eurocentric outlook. Apparently, such information was not entirely reliable, as most of it is prejudiced, biased and largely reflect the colonialists' view. It has therefore corroborated with other data, especially findings from oral sources.

Data obtained from internet sources became usefull in the study. Different websites were utilised to obtain relevant data, maps, and images, which were essential for the study. The entire list of the aforementioned is provided in the reference section of the document.

A digital record was done to capture building technology, artifacts, and weaponry, and musical instruments found in the tugen community. The record included taking photographs, sketching, video taking, and tape recording, which will be displayed later. Recording was done consciously, using the skilled person to avoid recording irrelevant information. Only four informants agreed to be tape-recorded, although they were so conscious. Other informants were scared of tape-recorder created curiosity which was counter-productive. Wriiten notes were preferred, although summarized notes to save time. A digital camera utilized was appreciated by most informants wanted to see how

the photographs looked like and even suggested the one to be framed. Ethical consideration should also be upheld because some members may not be comfortable with historical information and take photographs without permission.

Supplementary data on Tugen indigenous industries were obtained from published and unpublished Secondary data deposited in the various libraries and institutes such as Jomo Kenyatta Memorial library of the University of Nairobi, Margeret Thatcher Library of Moi University, Moi Library of Kenyatta University, Daniel Arap Moi Library of Kabarak University and the Kenya National Libraries found across the country. Institutes include the institute of development studies and the Institute of African studies library. They are records of accounts prepared by someone other than those who participated in or observed an event. They include going through Books, Journals, Thesis Reports, Dissertations, and policy reports. Relevant information to the study were extracted only. The review of available literature by scholars such as Anderson [66] and Chesaina [67] was done, majorly for acquiring information about traditional knowledge and how it was utilized in developing indigenous industries. Early travelers, missionaries, and government administrators was handy particularly for the early colonial period. Relevant information was obtained from the above sources, and this was analyzed and integrated with archival and oral information to provide reliable, relevant, and accurate information for the writing of the research results.

The critical undertaking in analyzing qualitative research was for the researcher to manage and organize the data. The researcher constructed patterns that emerged from the data and tried to get meaning out of them. Starting from many issues and data, the researcher progressively narrowed them into smaller and essential groups of the critical data as acknowledged by earlier scholars and based on the research objectives.[68] Data

was analyzed using the thematic analysis method. The researcher undertook to organize, categorize, synthesize, and interpret the data.[69] This was done several times to narrow and get the meaning of the emerging themes and categories that formed the organizing framework in the study. Airasian [70] identified four steps in analyzing qualitative research data, which were applied in this study, namely, reading, describing, classifying, and interpreting.

The corroborative analysis method will then be applied to compare information from different sources: Kenya National Archives, museums, documentation centers, Oral Interviews and Secondary or Document Analysis. This method will combine the results of several studies that address a set of related research questions.

Comparative analysis of the data collected was done to evaluate the information and minimize inaccuracy. It was cosidered to cross-check the validity of the information collected. Information was cross-checked by comparing the contents of interviews conducted in different places. It was expected that informants will give the same information. Also, significant events will be frequently mentioned. Some information will also tally with archival evidence. The resultant sample will be reliable and will be a fair representative profile of the Tugen experience before and during the colonial period.

1.12 Philosophical Justification of the Study

One of the main goals of Philosophy , is to ask why we have this life and how we meant to live it. As such it has been the backbone of many cultures throughout the world and history to apply it. In everything we do there is a philosophy underlying it. Societies place a lot of importance on culture and philosophy can help people regain their cultural integrity especially in the era of destruction such as colonialism.

Philosophical justification in history study, deals with the finding of knowledge, reality and the evidence. This branch enables historians to describe how knowledge in any culture appeared, what forms it has and how it evolved over the years. This knowledge will explain why their was continuity and change in the Tugen industries. It helps interpret the investigated question in the appropriate context by establishing logical explainations. It provides an opportunity to put the phenomena into the social context and invstigate them according to their relations with to human nature. It is trying to establish the truth which can only be found by studying people as they interact with their social economic settings. Qualitative research is conducted in the natural settings, asking questions, interviewing the respondents and doing archival research.

It enables the researcher to explore perception, feelings, thoughts, beleifs, expectations, and behavior to obtain knowledge about the phenomena of interest. The researcher has an active part in the study from data collection to data presentation through in depth conversations, diary keeping, extensive interviews, extended observations and focus group interviews to acquire insight regarding their subjective nature. The researcher should have authentic evidence to justify the truth and belief he is holding about the study on indigenous industries.

1.13 Ethical Consideration

For a study to be successful ethical consideration should be followed to the latter. Permission to conduct the research was obtained from the university, where an introductory letter was given to the field. A research permit from NACOSTI was obtained to ensure that the research was valid was also obtained, followed by piloting and introducing the selected sites' local authorities. A letter of consent was also obtained from the chief who informed other administrators in the region. The informants were

also informed in advance about the interview schedule to enable them to prepare. They chiefs led the researcher to the key respondents who were informed about the research's purpose, the expected duration of participation, and the procedure to be followed. The respondents were informed of the research value and that the information obtained will be used only for research. The researcher further established an appropriate environment through which the interviewee felt more at ease hence be open. In the interview, the respondents' motivation was maintained by keeping boredom at bay, Keeping to a minimum personal and demographic questions such as status, income, age. The participants in the research had the right to remain anonymous. The researcher managed ethical issues by being responsible and sensitive to human dignity. The respondents ignored items that the respondents did not wish to respond to. The respondents were given a chance to express their feelings at the end of the interview session.

1.14 Conclusion

This research study traced the origins, migration, and settlement of the Tugen from 1895 up to 1963. The chapter gave the procedure, which was followed when researching from a historical perspective. The study's primary purpose was to evaluate the Tugen indigenous industries' types and show how these industries were undermined by the colonial policy and fragile nature during the colonial period. The procedure unravels the continuity and changes of the Tugen industries, as discussed in the preceding chapters.

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CHAPTER TWO

THE ORIGIN MIGRATION AND SETTLEMENT OF THE TUGEN IN BARINGO COUNTY 1895- 1910

2.1 Introduction

The chapter traced the origin, migration, and settlement in Baringo County in order to examine the underlying factors determining their established industries. It showed that, when the Tugen settled in Baringo County, they manipulated the environment for their survival through the development of industry, among other things. This work's crucial concern is the evolution, continuity, and discontinuity of the Tugen indigenous industries throughout the colonial period. Therefore it is imperative to begin the discussions with the pre-colonial history of the Tugen to gather, analyze and interpret information that led to the continuities and discontinuities that took place during the colonial period. The Tugen contact with their neighbors such as the Keiyo, the Nandi, and the Kipsigis, among others, and the British, was discussed to ascertain the level of interaction and influence, particularly in industry, and in the subsequent Periods. It should be borne in mind that the British did not create the social, economic, and political systems of the Tugen that the indigenous industries were based on, and any change on it was bound to have a major impact on the society.

2.2 Origins, Migrations and Settlement

The Tugen community's origin has been assessed using various evidence, which includes archaeological, linguistic, and oral traditions shreds of evidence, to enable us to acquire much information required for analysis. The evidence will enhance the fact that people in the past travelled as one group or from a common origin.

Archaeological evidence on the emergence of the Tugen dates back to three thousand years ago. According to Sutton, the Tugen lived in Ethiopia's western highlands near the Omo valley where they evolved as a cultural and linguistic group. [1] He further mentioned that it was the same region that the highlands or southern division of Nilotic speakers from which the Kalenjin descended. The Kalenjin split into three groups: the River Lake Nilotes, the highland Nilotes, and the Plain Nilotes when they arrived on the borders of southern Sudan and the Ethiopian highlands around two thousand years ago. Some archaeological evidence by Gideon Were points to an area to the North and North West of Lake Rudolf in neighboring Ethiopia as their original home.[2]

Linguistic evidence shows that the Kalenjin languages are closely related and derived from the same proto-language groups. Kenya is divided into three major linguistic groups of the Bantu, Cushites, and Nilotes. These groups form the 42 communities found in Kenya today. The Tugen is a sub-section to the Kalenjin, which is a Nilotic group. The Kalenjin are further divided into seven main branches, namely Keiyo, Kipsigis, Tugen, Marakwet, Nandi, Pokot and Sabaot.[3]

The Kalenjin are a collection of related ethnic groups who speak closely similar languages, and the division was done linguistically. Linguistic evidence has been discussed in detail by Christopher Ehret, who argued that the Kalenjin are a Nilotic group whose original homeland was somewhere, where the Barl-el-Ghazel meets the Nile in southern Sudan.[4] He further argued that by the beginning of the present millennium, a proto Kalenjin people lived somewhere in a belt of the country running south-west from Mt. Elgon to the Rift Valley. It was from here that the present Kalenjin eventually emerged. They entered Kenya from near the corridor formed between Mt Elgon and Cherangani hills.[5]

Based on the evidence of oral traditions, many informants mentioned that the Kalenjin ancestors stayed in Mt Elgon for eight hundred years, though they were not sure of the dates. Most oral evidence supports the theory that initially, all the Kalenjin groups belonged to a single group. The Kalenjin settled in Mt Elgon as a distinct group before the tenth century. Further, Towett gave an elaborate piece of oral evidence that the Kalenjin migrated from Misri, which he places somewhere to the North of Kenya. [7]

From Misri, the Kalenjin supposedly stopped at Burgei (a hot place). According to a recorded account by Ehret, the Kalenjin migrated from their original homes in Northern Africa in the 12th century A.D [8]and moved southwards along the river Nile at the beginning of the 17th century. This country according to Kipkorir[9] and chesaina[10] was either Sudan or Egypt and was referred to as '*emetab burgei'* meaning the hot country. They then moved Eastwards and by the end of the 17th century, they had reached and settled around Mount Elgon or *tulwetab kony where* a second primary dispersal occurred. It was based on this that the sects of the Kalenjin were founded.

The Kalenjin settled in Mt Elgon where there was a considerable amount of wandering within the concentration area before some sections settled permanently i.e. the Saboat. Others moved away to the present habitats. The migrations were caused by natural calamities resulting in famine and severe drought or desire to seek better grazing and more conducive habitat. The group separated into the present various Kalenjin groups

2.3 Emergence of the Tugen Community

Scholars who have written on the Tugen community have not been precise when the Tugen settled in their current settlement. In his work Eroding the Commons, Anderson attempted to highlight the pre-colonial history of the Tugen though he was subjective and even refers to the Tugen as 'lazy'.[11] This means any attempt to assess the Tugen

origin, migration, and settlement has to be done consciously because of its misconception.

One group moved out of Mt. Elgon around the 18th Century through Kerio valley to the North of Lake Baringo called Somo. [12] At this region, the Tugen separated from the other groups like the Nandi and the Kipsigis caused by a famine known in Kalenjin as *Kemeutab Reresik* chesaina[13,] which means famine of bats. During this famine, a bat brought blades of green grass, which were taken as a sign of good omen, signifying that the famine could be averted through movement to greener pastures. The Tugen therefore moved and settled around Tugen Hills, which was generally greener. From Somo, a section of the group moved westwards to form the Pokot, as they are known today. The Kipsigis and the Nandi moved Eastwards and settled around Rongai, where they co-existed for many years before splitting again due to aggression from the warring Maasai subgroups from the Uasin Gishu area. From Rongai, the Kipsigis and the Nandi moved southwards and settled in their present area.

The second wave moved from *Tuluop Kony* (Mt. Elgon)in the early 18th century and traveled Southwards through *Katalel (*Kitale), *Oldorito plains* (Eldoret), Ainabkoi, and to Londiani area near Molo where they lived up to the mid-18th century when the various groups moved in various directions.[14] The Kipsigis group left Londiani and went Southward's towards Kericho, the Keiyo group went northwards towards Kipkabus area, the Nandi group went westwards towards Kesses area, and the Tugen group went Eastwards towards Rongai, Kipsogon, and Solai areas.[15]

The third group of the Tugens left *Tuluop Kony* in the latter half of the 18th century and traveled through *Katalel*, Cherangany, crossed over the Kerio river and settled in the now Tugen hills.[16] They chose the Tugen hills because of security reasons. They wanted

to avoid confrontations with the Maasai who were crisscrossing the area, and they were considered the most militant and influential group. The last wave of Kalenjin speaking group left *Tuluop Kony* through Cherangany for Tugen hills around the early 19th century. On arrival to the Tugen hills area, they found another group who had occupied the area. They were directed to move southwards towards the Solai area. This group was later called the *Samor* people, as they are called today. Those who directed them (*Kiror*) remained behind in the Tugen Hills and became known as the *Arror* people to date. Another split occurred here, and a group trekked further to Eldama Ravine where they mixed with the Maasai, Kipsigis, and the Nandi. Today, the Tugen Somor group of mixed origin while the Tugen Arror are seen as the pure-blooded ethnic group.

Apart from the historically documented accounts, oral traditions and myths give other varying accounts that an ancestor of all Kalenjin groups lived at T*ulwob Kony* with his seven sons when in the middle of the 17th century, a drought occurred.[17] They all dispersed, forming the present-day seven Kalenjin groups. From the interviewees' narratives, they confirm that the Tugen did not enter Baringo district in the single migratory file. Deducing from the historical accounts, relevant facts, and stories, it is clear that they entered the district in four groups, and each was composed of several clans.

By 1903 the areas between *Kamasia* or Tugen Hills, Londiani Mountains, the Nandi, and Uasin Gishu plateau were sparsely occupied. A few of Tugen lived over the Tugen Hills' edge down the rivers of Lake Baringo and up the slope of the Tugen Hills near Ravine station in the southern region. The early inhabitants were a few Dorobo or Okiek who were living in the forest.[18]

By 1910, Tugen from *Arror, Ewalel,* and *Chapchap* were still roaming in the district. Tugen Arror were not rich in cattle, and their attempts to make fuller use of the northern Baringo pastures were then being challenged by the Pokot, who kept on attacking them for their livestock. As early as 1904, several Tugen families were reported to be living close to Arabel, and a significant number of Tugen had crossed the Molo River and entered the Northern portion of Endorois by 1911. Others moved to Maji Moto along the western shore of Lake Bogoria, where they settled and formed the Endorois subgroup of the Tugen. [19]

To the west near Perkerra*, Radad* and *Koitegan* Hills became key settlement areas for Tugen emerging from the forested hillside of Tenges and Kabarak. By around 1914, overcrowding became acute here, and there was a severe drought in 1918. They then moved to Solai escarpment, including the Tugen of *Kamaruswo, Keben, Kakimor, Lembus, Endoros* and *Pokor*. This place was green and had water from Lake Solai.[20]

To the south, European settlers interrupted their settlement which took concession of lands such as Torongo and Sabatia and the Lembus forest to start a timber Industry. People's continued movements into this southernmost part of Baringo were to create severe land pressure and contribute significantly to the high level of trespass on European farmlands that by then bordered Baringo. [21] Further migrations depended mostly on the fortunes of the individual member or families. A determinant factor was how they adjusted economically to the new environment. The physical state of the Tugen hills determined not only the course of clan settlement but also their mode of subsistence. There are three ecological zones in the Tugen area: *soin, kurget* and *mosop,* which fitted well with Tugen hunting and herding activities.

Further migration was witnessed when a small section of Nandi who had settled in Kesses moved towards Koibatek hill, through Torongo area, traveled on to Kipsogon in Lembus and lived there the Tugen.[22] There are several reasons for the expansion of the Tugen in the 19th century. First, the Maasai movement from Baringo plains lessened competition for grazing and water, thus creating a more settled and safer herding environment. From 1900 onwards, cattle raiding was much less prevalent than before. Secondly, land pressure had become more acute in the Tugen hills towards the end of the 19th century. Tugen stock holdings also increased primarily due to their herds' better survival on the Tugen hills' hilltops during the Rinderpest pandemic. The expansion between 1900 and 1920 coincided with a climatically favorable period. Evidence of this is to be found in the traditions of the Tugen. During the time of *Kipnyige* age set there was generally good rains and prosperity. [23] Rainfall data for government stations within the Molo catchment areas indicating heavy rains for the years 1904 to 1917.[24] The oral tradition indicates that security from enemies was the primary factor of expansion. The Tugen found the hills (Tugen Hills) secure for themselves and animals and therefore settled there.[25]

The Tugen migration was checked by the arrival of Europeans in the early 20th century. This migration between 1900 and 1920 coincided with the arrival of European settlers in Kenya. The colonial government forcefully moved the Tugen out of their territories in North West Nakuru area and some parts of *Lembus*. Solai and Subukia, bordering Baringo to the east and Ol Bonata, Lomolo, Rongai, and Eldama Ravine, lying along with the southern marches, were all alienated as areas of European settlement before 1920. These farmlands came to mark the administrative limits of Baringo District, [26] but more importantly, the limits of Tugen grazing to the south. In taking possession of this land, the European settler community had seized seasonal grazing areas and

watering points that were crucial to the survival of the African herders on the lowlands of southern Baringo. The states might reinforce their property in this land, and they sought to keep it to themselves.[28]

The central ethnic communities inhabiting Baringo County are the Tugen, Pokot, and Ilchmus, with minority groups such as the Endorois, Nubians, Ogiek, Kikuyu, Turkana. The Tugen people occupy the area. Tugen community can be divided geographically into three sections; The Southern (Lembus), the Central (Somorr), and the Northern (Arror).[29] The Tugen inhabit the rugged territory, although a few have migrated to neighbouring counties such as Nakuru, Uasin Gishu, Trans Nzoia, and Laikipia. The Tugen lived on the hills for a long time in fear of the Maasai, but when the white men came, the Tugen people spread out across Molo River to the Rift Valley's far side since the Maasai had vacated the region.

Map 2.1 : Landscape of Baringo County

Source; A photograph taken from Kapchumba view point in Saimo hill on 12/12/2020

2.4 Topographical Features

The District's main topographical features are river valleys and plains, the Tugen Hills, the Rift Valley floor, and the Northern plateau.[30]

The eastern area of the county between Lake Baringo and L. Bogoria is the Loboi plains covered mainly by salt, silts, and deposits. The Tugen Hills runs in a North South direction and forms a conspicuous topographical feature in the county's South Western part. The hills have steep slopes with prominent gullies. The Tugen Hills rise from Eldama Ravine in the south to the Kito pass and Pokot territory in the North. From a floor of about 4,000 feet, the hills peak roughly at 7,000 and 8,000 feet, where most Tugen reside.[31]The Tugen region has several other hills spread across the county, including Saimo, Morop, Kapkein, Kipngochoch, Seguton, Nuregoi, and Timboroa Mochongoi and koibatek. This Hills influenced the type of agricultural activity in the region.

On the Eastern and Western parts of the hills, there are escarpments. They are separated by the Rift Valley floor, which owes its origins to the tectonic and volcanic disturbances, which dislocated surfaces, forming separate ridges. The troughs of the Rift that have a North-South alignment are occupied by Lakes such as Lake Baringo and Lake Bogoria, which occupy 164 $Km^{2,}$ and Lake Kapnarok, which as an ox-bow lake and covers 1 $Km.^{2}$

The altitude varies from 762 M above Sea Level in the lowlands up to 2600 M in the steep hills bound by escarpments on the Eastern and Western parts. The valley floor consists of dry plains, and the land rises once more in the Eastern part of the District towards the Laikipia escarpment.

2.4.1 Climate

The Tugen regions have different climatic zones; The highlands (Mosop), the lowlands (Soin), and the intermediate (Kurget) zone. To the West of Tugen Hills was the soin zone referred to as Turukwei, while the Soin to the East of the Tugen Hills was called Mogoswek. The lowlands and the intermediate zones are hot and dry.

Mean annual rainfall varies from 1500 mm in the highlands to 600 mm in the lowlands and is about 50% reliable. There usually are two rainfall seasons in a year; the long rains starting from the end of March to the beginning of July, while short rains start at the end of September and end in November. Temperature is greatly influenced by altitude. Mean Annual Maximum temperature is between 25^{o}C to 30^{o}C in the Southern part of the County, the hottest months being January to March. Mean annual temperature varies between 16^{o}C – 18^{o}C, but this can drop to 10^{o}C in the Tugen Hills. Higher average temperatures are experienced further northwards. [31]

2.4.2 Land and Soils

Highland areas have well-drained fertile soils with high potential for agriculture. In the lowlands, problematic soils of various textures and drainage conditions occur. There are areas with rich alluvial deposits but shallow stony soils with rocky outcrops. This makes the lowlands essentially rangeland with socio-economic activities based around beekeeping and livestock rearing. The lower midland area around Marigat is overgrazed, and the soil cannot support meaningful agriculture. Thus, subsistence farming is undertaken where irrigation is possible in the lowlands. [32]

2.4.3 Water Resources

The region also has several rivers crossing the county, such Kerio River, which is 400km long and has a subsidiary source at Timboroa forest. It runs through Kerio valley

and forms a boundary between Baringo, Elgeyo Marakwet, West and East Pokot, and Turkana counties. Another important river is the Perkerra, which starts from Chemasusu forest and runs in a northerly direction for some 100km and enters Lake Baringo in Marigat. The Molo River is also important in the county. It originates from the Mau forest, and it runs through Molo and Mogotio, and it flows in a Northern direction and empties into Lake Baringo. Berekei River starts from Katimok and Saimo forest in the Northern Tugen hills and flows in a northern, then western direction through the Kerio valley to Barwessa. Others are Endao, Waseges, Loboi, Emom, suguta, olarabel etc. Except for Weseges, rivers in the District (Perkerra, Molo, Kerio, Loboi, Suguta, Ol Arabel) are freshwater sources with a fluoride content is less than 1.5 mg/l. Water shortages are prevalent throughout the District, with occupants of rangelands travelling long distances searching for scarce resources. Lack of water in marginal and dry areas, especially during prolonged drought, accelerates loss of livestock. Springs in the county are unevenly distributed, with over 80% being found along the Tugen Hills. The most immense potential for irrigation is found in the lowlands east of the Tugen Hills in the Lake Bogoria-Baringo basin and in the Kerio Valley (Chepalambus – Kinyach area). [33]

2.4.4 Forests and Vegetation

Forests set aside by law (gazetted) cover an area of 22,954 ha and make 94% of the total forest cover of Baringo Country. Natural forests cover 96.5% of the total area designated as forests. Plantations of exotic timber species take up the balance. Exotic forests exist in the county, but the known indigenous forests are found in Kabarnet, Kabartonjo, Tenges, Lembus, Saimo, Sacho and Arabel. The main exotic species are; Grevillea Rabusta, Cuppressuslusitanic andeucalyptus saligna. Prosopisjulifloraalso

exists in Marigat area. Kipngochoch forest in Sacho, one of the 10 forest blocks under Tenges forest station, is an example of a well-conserved indigenous forest.[34]

The area around Lake Baringo is heavily eroded due to overgrazing. The scrub and small acacia species that cover this zone attest that the climate tends to be arid. Altitude and the occasional forest cover influence the highlands' temperature, but even here, the scrub and tree types such as combretum, acacia, wild olive, and euphorbia candelabra survive.

Timber is the primary forest product, where posts, poles, fuel-wood, and tree seedlings are minor products. Other critical additional benefits derived from forests include amelioration of climate, water flow regulation, and soil conservation.

2.5 Economic Organization

Different groups of the Tugen experience different geographical conditions, but they have a common occupational and economic culture.

2.5.1 Keeping of Livestock

The most important occupation of the Tugen was keeping livestock, which involves the rearing of livestock such as cattle, goats, and sheep. Rearing was dictated by the climatic conditions of the area and the terrain of the region. Land for grazing was abundant in the Tugen hills and valleys because the Tugen cultivated a small area and left the rest for grazing. The land was owned communally; thus, the grazing of livestock was communal. Livestock products have had an important place in the culture of the Tugen. They provided milk, blood, and hides for making shoes, clothing, bedding, and material for making bags.[35] It also determines man's social standings in that the larger the herd, the greater the respect a man earned. Wealth was measured by the number of cattle one owned. All livestock belonged to the father, who was the head of the

homestead. Owing to the vital contribution cattle made towards the livelihood of the Tugen, they are regarded as economic assets and a source of life. Livestock was a source of wealth and measure of the individual's value and in the community at large. It can be said that exclusive male ownership of livestock in pre-colonial Tugen enabled men to occupy higher accumulation cycles. The men looked after the cattle and other livestock and were responsible for all kinds of transactions related to livestock transfer in relationships such as marriage. [36]

Cattle raiding between the Tugen and other groups, particularly the Keiyo, Nandi and Maasai added to their stock and led to cultural exchanges such as marriage. When a Tugen man wants to marry, he should have enough cattle to pay as pride prize. Those who did not have cattle obtained them through raiding. The men had control over this valuable resource and it made it possible for older men to exert a domineering influence over the younger group.[37]OI

2.5.2 Crop cultivation

The Tugen were also cultivators who cultivated land to grow crops. The crops grown are dictated by the ecological location in the Tugen area that is the lowland plains (S*oin* zones), the area between highland and the lowlands (*Kurget)* and the highlands (*Mosop).* The crops grown were mostly finger millet and sorghum. It was done through the shifting cultivation method, which involved the cultivation of one piece of land for one season and leaves it fallow for the next season to regain its fertility. In the southern region, cash crops such as maize, coffee, beans were introduced by the Europeans. [38]

The Tugen are divided into two sections, known as Arror and Samor. The Northern Arror live in the highlands called *Mogoswek* and the Kerio valley called *Turgwen*. They are largely agriculturalists who grew *Wimbi* (finger millet) and *Matama* (sorghum) with

little stock. They are used to a challenging and precarious livelihood as heavy rains often damaged their crops and hill storms or else failed because of drought, while locusts have been a recurring menace. The agricultural methods involved families from the same location who work a large piece of land together, the men working and the women, and each man owns a strip of land alongside his neighbor. If the location is large, a man may have several strips of land in various places. The field is fenced but only temporarily, and after one or two years' crops have been reaped, the land is allowed to revert to bush fallowing, and more land is sought for cultivation. Trevelyn stresses in his work 'English Social History' that this system was economically sound as long as each farmer's object was to raise food for his family rather than for the market.[39]

2.5.3 Trade

Trade became an important economic activity of the Tugen. There were two forms of trade i.e. internal and external trade. Internal trade was conducted among the various Tugen communities and was conducted through barter systems. It was a system in which traders exchanged goods for other goods directly. Those living in the hills to the west of Lake Baringo and in the areas of *Kipcherere, Sibilo,* and *Sabor* obtained grains from the *Ill Chamus* in exchange for stock. [40] Similarly, the lowland Tugen, living to the south of Marigat did not grow sufficient cereals to meet their requirements and expected to trade with people in the hills and Lake Baringo in exchange of livestock, which they had in plenty. Those in the highlands of Kabartonjo with millet exchanged it with honey from *Kipsaraman*. It was based on a willing buyer willing seller.[41]

The Tugen were not self-sufficient in everything, so they resorted to external trade which was done with other communities. The community leaders organized trading points called *Kapsiro* (Market place) where trade was conducted.[42] (OI) It was

normally conducted under a tree and such places were found in every Tugen village. The Tugen exchanged what they had with what they did not have for example they exchanged swords with the Maasai and the Keiyo.

The *Ill Chamus* and the Pokot supplied cattle, goats, and pottery in exchange for grains and honey. External trade helped the Tugen when they were affected by a severe drought and famine around 1897 -1899, referred to as 'hunger of chemng'al. Many Tugen sought assistance at this time from Nandi, and they moved southwards through Lembus and into Tinderet in the hope of finding supplies of grain or other foodstuffs. [43] In 1918, there was another drought called the drought of *Kipngosia.* The Tugen traveled across the Kerio Valley to the west and south west of Nandi in search of grains to be exchanged with whatever they had, especially iron implements. Another drought of 1924 – 1927, referred to as Kiplel Kowo because of piles of bones of dead cattle, led to external trade. Commercial traders in grain began to travel through Baringo by the early 1920s. These traders, mostly Asian immigrants and Sudanese ex-soldiers based at Eldama Ravine and Mogotio continued to trade with the Tugen.[44]

2.5.4 Hunting and Gathering

Hunting and gathering were practiced by the Tugens' as a way of obtaining food. It was also used to train initiates how to use weapons and to inculcate courage on them to be able to face any dangerous situation. The Tugen made constant attempt s to survive by exploiting the environment to provide their basic needs. The Tugen occupied various ecological zones, which provided a variety of game hunted. Boys and herdsmen did hunting as a sport and a way of eliminating carnivorous animals that were a threat to their livestock. Hunting was done with the assistance of traps, snares, arrows, and spears. Most of the game was also for food. Substantial herds of game found in Baringo

such as large numbers of antelope, zebra, elephants, and rhinoceros. By 1920, the large animals were rare, having been shot out by ivory traders and European hunters' demands.[45]

Gathering, which was the everyday subsistence companion of hunting, remained important. There were the edible berries of *ngosiek* tree. These fruits were gathered and boiled for several hours before the berry's white flesh could be eaten. Other fruits were *lamayek, arya, kabiker,bobek and talamik*.[46] These fruits and games were obtained from the forests such as *Katimok, Lembus* and *Mochongoi*. During the drought of 1924 – 1927 (*Kiplel kowo),* which was the worst drought within living memory, hunting and gathering played a significant role in providing alternative food from the dying animals. They were supplemented with vegetables collected when they were in season and dried through dehydration to be used during the dry season.[47]

2.6 Political Organisations of the Tugen

The Tugen had a well developed political system that dealt with all the community's political concern issues. How the political systems were founded could not be readily established and most informants were not sure of their answers. They only knew that it was not planned. [48]As the Tugen settled in the Tugen Hills in the 18th century, and the population increased due to the abundant food supply, there was a need to have a system that will maintain law and order. Although the Tugen advocated for communal ownership of property and working together with elaborate systems, quarrels and disagreements were inevitable. Traditionally, a political organization started from the family, which was considered central in the daily life of the Tugen. Family (*kapchich*) meant the household and the extended family or homesteads. A homestead consisted of the father, mother and children. [49] The property belonged to the father/man, and he

shared them equally among his wives. Tugen residence patterns were mostly patrilocal. That is, typically, after marriage, a man brings his wife to live with him in or very near to his father's homestead. Their homesteads were, therefore, spread all over their country and several hundred meters from one another. Marriage of one man to multiple wives (polygamy) was permitted, although most men could not afford such unions' expense because of bride-price's burden. Regardless of the type of marriage, children were traditionally seen as a blessing from God and having many children bestowed one with prestige and status in society. The father was the head of the family, and he gave instructions which were followed to the latter. The Tugen believed that if a father can manage the family properly, he can be entrusted with more significant responsibilities in terms of control of property and discipline. This system was where the political organization of the Tugen began.

The next unit of indigenous political organization among the tugen was the *kokwet*.[50] This was a collection of anywhere from 20 to 100 scattered homesteads. It comprised of lineages called *bikab oret* who came from common ancestry. Lineages are the beginning of clans called *oret.* The leaders of the various homesteads joined together to form a larger unit known as kokwet. Membership to the *kokwet* council was acquired by seniority and personality, and within it, decisions were taken by a small number of elders whose authority was derived from their natural powers of leadership. [51] refer to a *Kokwet* as a group of people who lived in several adjoining localities or *korosiek.* Three or more *kokwetinwek* or villages were grouped as a unit, stretching from four to ten kilometres or more. It was administered by a council of adult males known collectively as the *kokwet* and was led by a spokesman called *poiyot ap kokwet*. [52] This spokesman was not a hereditary or elected leader in the sense of a chief. Rather, he was recognized for his knowledge of tribal laws, oratorical abilities, forceful personality,

wealth, and social position. Although the poiyot ap kokwet was the first to speak at public proceedings, all elders were allowed to state their opinions. Rather than making decisions himself, the *poiyot ap kokwet* expressed the consensus, always phrased in terms of a group decision. The primary duties of the *kokwet* were to allocate land for cultivation, to solve disputes emanating from the society such as marriage, land, divorce, thefts and witch craft

Many *koretinwek* formed the next level of the political organization known as the pororiet. It was a territorial group, and the most important institution and the political system revolved around it. These groups formed *pororiosiek,* of which there were twenty-two. (See the attached list on Tugen clans). Each was led by a council, who were referred to as the *kiruokwet ap pororiet*. This council consisted of the spokesmen of the individual *koret*, and consisted of active old men called *kiruokik* or the "councillors." If the kokwet authority did not settle a case, or if there was a case between men of different *kokwetinwek*, and in all cases of divorce, theft, and witchcraft, decisions were given by the *kiruogindet neo*-the great judge of the group who was assisted by a council of elders to which he was only its mouthpiece. The council's decision prevailed, and the *kiruogindet* could give no contrary order to their ruling in any case. [53]

The *kiruogin* also had its war leader, and he decided on severe issues affecting the community. The village leaders were under his control and orders. *Kiruogin* officiated marriages, initiations, harvest, festivals, and other ceremonies and performed rituals for cleansing persons with incestuous relations with relatives and such offenses. In all ceremonies, his central role was offering prayers to god and was regarded as the community's priest. He made decisions on when the community can wage war on another community.[54]

Table 2: Name of Location and their Economic activity.

PORORIET	LOCATION	ACTIVITY
Ewalel	Northern Tugen	Iron making
Chapchap	Northern Tugen	Beehive
Sacho	Northern Tugen	Pottery
Ossen	Northern Tugen	Farm tools/weaving
Ngorora	Northern Tugen	Beehive
Maoi	Northern Tugen	Beekeeping
Kapropita east	Northern Tugen	Crops/weaving
Kapropita west	Northern Tugen	Crops/weaving
Kabarnet	Northern Tugen	Iron smelting
Kelyo	Northern Tugen	Crops/pottery
Kabutie	Northern Tugen	Iron smelting
Endorios east	Southern Tugen	Pastoralism/leatherwork
Endorois west	Southern Tugen	Pastoralism/leatherwork
West lembus	Southern Tugen	pastoralism/leatherwork
East lembus	Southern Tugen	pastoralism/leatherwork
Emom	Southern Tugen	pastoralism/weapons
Pokorr	Southern Tugen	Weapons
El keben	Southern Tugen	Weaving
Kamaruswa	Southern Tugen	Farm tools
Kakimor	Southern Tugen	Pottery
Chepkero	Southern Tugen	Weapons

(Source; Oral Interview with Japhet Chepkalum on 2nd March 2020)

2.6.1 Warriors

Homesteads were self-sufficient but several aspects of the Tugen community involved joint cooperation; some activities could not be undertaken by one homestead alone because it affected the whole community, for example, cattle raiding and external aggression. A combination of all *murenik* (warriors) from all homesteads would go for raiding. They were young men who have been initiated and graduated to Junior Warriors. During communal grazing, all warriors kept watching for the enemies. The

warriors went hunting in the forest, and after they got the game, they divided amongst themselves. The warriors of a village were under a *murenek*- a war leader - and their duties were to protect the village against the attack and drive its cattle to the grazing grounds and salt licks. The warriors were majorly a defensive unit. [55]

2.7 Tugen Social Organisations

2.7.1 Tugen Clans

Tugen, have clans, which are relational groups that identify through common heredity. The Tugen society is divided into 18 patrilineal clans. [56] Each person recognizes, as part of his name, the name of his clan. All clan names are referred to almost all the wild animals in the jungle and game parks, water, and air. People traditionally believed that the wild animals also talked in the past and so belonged to a specific clan group called totem. Clan symbols (*tiondo*) range from birds, wild animals, frogs, snakes, and bees.[57]

Residence was in totemic settlements scattered widely through Tugen, and this ensured solidarity of the clan. It also dictated marriage patterns where one was allowed to marry from the same clan. Each clan had an associated symbolic totem taken from the environment and a personal link to animals is found through clan symbols.[58] This is used as a means of recognizing relations from different clans to prevent intermarriage. Most respondents knew and related to their clan symbol. However, there were no evidence that these clan associations had any corresponding meaning relating to the animals character of a person or family.

Table 3: Tugen Clans with their Associated Totem

Clan	Sub-group	Totem-tugen name	Totem-english name
Tarkok	Kapchesum	Chechelei	Jackel
	Kapbarkute	Kiplewe	Wild dog
	Kapkerwa	Arawe	Moon
	Kapchelai	Terkek	Guinea fowl
Kabon	Kaplegenui,	Mose	Baboon
	Kabaraot,	Mose	Baboon
	Kapkuluny,	Chelelei	Silver backed jackel
	Kapsiry,		
	Kamasirget,		
	Kaptilil, Kipyegen		
Teriki	Kiptoikeny	Belio	Elephant
	Kipkwony	Belio	Elephant
Sote	Kaparturo	Asis	Sun
	Kapmamer	Kipchorise	Squirrel
	Kapbarkinyo	Mechwe	Tortoise
	Kapsangut		
	Kipcheret		
Kobilo	Kaapsoto,	Saptet	Porcupine
	Kabartonjo,	Kumuyon	Porcupine,
	Kabarsire, Kapsang,		Crow,
	Kabarkoke,		Warthog,
	Kapsinyal,		Antelope,
	Kabariomis,		Fox
	Kabargasau,		
	Kapcheberakwa,		
	Kaptulel		
Tingo	Tingo	kimageetiet	Hyena
Kimoi	Kapcherono	Soeet	Buffalo
	Kapchepkilot	chebente	Gecko
	Kapchepkech *	kongoony	Crane
	Kapkurui		Crocodile
			Ostrich
Sokome	Kapmoronoi	Chesirere	Hawk
Talai		Mororoche	Frog
Saniako		Moseet	Monkey
Kipsochon	Ng'eleno	Sigeriet	Zebra
			Donkey
Mokiy	Mokiy		Moon
			Rhino
Kapshokwei	Siokwei	Segemiat	Bee
		Birechik	Warlike ants
Toyoi	Toyoi	Ilat	Thunder
			Bebsol
Tolo	Tolo	Seset	Dog
Ringoi	Ringoi		Pelican
Kong'at	Kong'ato	Maat	Fire, columbers
Kiboroki	Kabon	Birechik	Ants

.(Source: Oral Interview with Japhet Chepkalum on 2nd March 2020)

2.7.2 Tugen Religious Practices

Traditional Tugen religion is based upon a concept of a supreme god, *Asis or Cheptalel* , who is represented in the form of the sun, although this is not God himself.[59] Beneath *Asis is Elat*, who controls thunder and lightning. Spirits of the dead, *oyi*k, can also intervene in the affairs of humans, and sacrifices of meat and/or beer, *Koros*, can be made to placate them. Diviners, *Orkoik* have magical powers and help in appeals for rain or to end floods. Their chief role was to foretell the fortune of raids in return for which they received part of the booty. They used to occupy a position between that of man and God. They used to forewarn the people about any impending phenomenal catastrophes, such as the coming of drought, the visitation of an epidemic against cattle or humans, the losing of battles and raids, the productiveness of the country and livestock, and so on. [60] Because some or more of what they had predicted came to be true, the people gave them an enviable honor and fear.

The Tugen have a definite belief in spirits and in God whom they called Asis and to whom they pray. Their prayers were usually sublications for rain and take place on the top of a high hill or mountains by the elder men of the tribe. A favorite hill for prayer is Morop near Kabarnet. It has the shape of an elephant with a long trunk and is a landmark for the Tugen.[61] When there is a drought or the rains are late, a pilgrimage is made by elders.

2.7.3 Rites of Passage, the formation of Age-Sets and Age -Groups

Age is a fundamental organizing principle in all Kalenjin societies, as it across much of Africa. The status a person occupies and the roles he or she performs are still to a large degree ordained by age. For both males and females, becoming an adult in Kalenjin society is a matter of undergoing an initiation ceremony. Traditionally, these were held

about every seven years. Everyone undergoing initiation or *Tumdo* thereby becomes a member of a named age-set, or *ipinda*.[62] Age-sets were traditionally "open" for about 15 years. There are eight male age-sets and they are cyclical, repeating approximately every 100 years. The *sakobei* ceremony marked the closing of an age-set about every 15 years, and the elevation of a new age-set to the warrior age-grade.

The Tugen traditionally practiced circumcision of both sexes as a rite of passage to adulthood. After male youths were circumcised, they were secluded for lengthy periods during which they were instructed in the skills necessary for adulthood. Afterward, they would begin a phase of warriorhood during which they acted as the military force of the tribe. Elders provided guidance and wisdom.

Boys circumcised, at the same time, were considered to belong to the same age set *(Ibindo*). *Ibindo* was given out at initiation, and by simple arrangements, there ought to be one I*bindo* between father and son. These age sets (*Ibindo*) were given names from a limited fixed cycle. Each age set was further subdivided into a subset (*Siritieet*).[63] About five years after the festival, the previous generation officially handed over the country's defense to the newly circumcised youths. Girls' circumcision took place in preparation for marriage. The Tugen do not consider a woman to have an age set, hence she can marry any age set except that her father belongs. There were seven age sets (*Ibinweek),* which were rotational, meaning that new members of that generation were born at the end of one age set. The order is outlined below.

Table 4. The Tugen Age-Set Chronology

Age set name for male	Age set name for female	Estimated rating on 14 year circle
Korongoro	Chemasinya	1876 – 1890
Kipkoimet	Chesur	1886 – 1900
Kaplelach	Kosaiya	1896 – 1910
Kipnyigew	Kipnyigew	1906 – 1920
Nyongi	Chebargamai	1916 – 1930
Chumo	Chebingwek	1926 – 1940
Sowe	Chesiran	1936 – 1950
Korongoro		1946 – 1960

Source; Anderson; Eroding the Commons pp 303 and oral interview with Japhet Chepkalum on 2nd March 2020

Among the other Kalenjin groups, an age set called *Maina* exists. However, among the Tugen, this age set is extinct. Oral traditions have it that the members of the *Ibindo* were wiped out in a war. The *maina* generation was wiped out at the height off their Moran hood at Cheploch Bridge over the Kerio River in around 1900. [64](Kiptala) For fear of the recurrence of a similar war associated with the *Ibindo* the Tugen elders retired the *Maina* generation together with their feminine sisters' *Silingwich* thereby remaining only with seven generations to date. It must be stressed that the Tugen Age set system's operation in the first haft of theTwentieth Century was the product of an evolutionary process of change that has continued ever since. [66]

2.7.4 Tugen Houses

Traditionally Tugen houses were round, with walls constructed of bent saplings anchored to larger posts and covered with a mixture of mud and cow dung, while roofs were thatched with local grasses. This structure was a clear indication that the Tugen knew the importance of having a cone-shaped structure. One informant mentioned that it allowed water to drain off quickly, and the grass dried faster and could not retain

water, which could have caused diseases.[67] Houses were constructed by men who used twigs gathered from the forest. However, the smearing of the walls was done by women. The house had subdivisions, including the *Tabut* where food was stored. [68] There were sections where utensils and beddings were kept. The huts were constructed depending on the number of wives in the homestead. Each wife had her hut and a granary. The husband house was in the middle of the homestead because he was the family's central figure.

Map 2.2 A layout of tugen homestead.

Source. A photograph taken in Bartolimooverseeing the Tugen hills on 12/12/2020

2.7.5 Cultural Heritage (Songs, Dances)

Traditional music and dance had many different functions. Songs would accompany many work-related activities, including men, herding livestock and digging the fields, and, for women, grinding corn, washing clothes, and putting babies to sleep (with lullabies).[69] Music would also be an integral part of ceremonial occasions such as births, initiations, and weddings. Dances to punctuate these occasions would be performed while wearing ankle bells and accompanied by traditional instruments such

as flutes, horns, and drums. Oral stories, proverbs, and riddles, among others, all convey important messages to be passed from generation to generation.

2.7.6 Division of Labour

In Tugen society, much of the work, at least traditionally speaking, was divided along gender lines. Men were expected to do the heavy work of initially clearing the fields that were to be used for planting, as well as turning over the soil. Women take over the bulk of the farming work from there on, including planting, several weeding, harvesting (although here men tend to pitch in), and processing crops. Among the Tugen, tradition holds that men were supposedly more concerned with herding livestock than other pursuits. Besides, women were expected to perform nearly all of the domestic work involved in keeping a household running. [70] In doing so, they often enlist the help of young girls, who were expected to assist their mothers and other female relatives in chores such as fetching water from wells or streams and collecting the firewood that most families use for cooking. Young boys will sometimes perform these same tasks and do things such as grazing and watering livestock. It was clear that duties were done based on gender, and no duty was left out.

2.8 Conclusion

This chapter examined the Tugen origin, migration and settlement, and their social, economic, and political organizations. It has shown the diversity, productiveness, and innovativeness of various aspects of the economy. The Tugen settled in the Tugen Hills and manipulated the environment to come up with a system that was suitable for the society. All the social, economic, and political practices were geared towards what was provided by nature. Whenever the Tugen encountered a challenge such as a drought or famine, they always discovered ways of dealing with it. The agricultural sector, the

Tugen discovered seeds, how to prepare the land properly for a specific crop, planting, weeding and harvesting and storing demonstrated the Tugen mastery of knowledge related to crop production. Livestock kept were not for prestige. It provided them with their daily diets such as milk, meat, blood, and clothing. They uniquely prepared them to suit their interest. This activity also showed their mastery of knowledge on the grass, diseases, how they were treated, how the products are preserved for the time of drought, and giving to neighbors as gifts or through trade. Politically, the Tugen had to come up with rules to maintain order in society. It was hierarchical from the family unit to the territorial unit. This activity also showed a mastery of how disputes could be solved in a dynamic society. Socially, the Tugen had an elaborate system that created a cohesive society. Each sector was well structured, and every member knew their roles. A clan system was adopted, and every member belonged to one. This activity also ensured peaceful coexistence, and marriage was controlled based on the clans. The rites of passage were so elaborate and followed later because it ensured continuity of the society. They believed in a supreme being who controlled man's way of life, and reference was made to him. Therefore, the chapter gave an elaborate system that was independent before the colonialists interfered with it. The major Tugen indigenous industries of interest in this study will be dealt with in chapter three.

ENDNOTES

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CHAPTER THREE

THE TUGEN INDIGENOUS INDUSTRIES; 1895-1910

3.1 Introduction

This chapter provides a descriptive picture of the pre-colonial tugen industries. Scholars have suggested that agricultural progress led to the manufacture of certain essential items for domestic use to improve their living standards. The study captures how the Tugen developed an independent technology using local raw materials, labor and skills, and markets for a specific need in society. For example, agriculturalists developed agricultural artifacts, while livestock keepers developed artifacts for livestock. It was experimental, and that is why different clans invented different industries in which they shared the products with the other Tugen clans and their neighbors. Some of the industries dealt with in this chapter include Iron Making, Pottery, Basketry, Leatherwork, and Woodcarving. The themes covered include the location of the aspect, skill acquisition, apprenticeship, Acquisition of raw materials, preparing the product, and the product's uses. However, other indigenous industries exist, such as bead working, salt harvesting, medicine procurement, and traditional architecture, but this topic has not tackled them. The few tackled hopefully will portray an accurate image of the Tugen indigenous industries.

3.2 Pottery Making

The discovery of fire and the need to cook and store food led to the pot's invention. [1] Pottery is modeling, drying, and firing of clay, usually with a glaze or finish, into a vessel or decorative object. Clay is a natural product dug from the earth which has decomposed from rock within the earth’s crust for millions of years. Decomposition occurs when water erodes the rock, breaks it down, and deposits them. Making Pottery involves a mixture of clay and several organic and inorganic properties. From the

available archaeological evidence, pottery evolved in many parts of the world, taking different shapes and various uses. Scholars such as P.M. Rice stated that 'pottery evolved from a simple activity performed by self-sufficient households along with a variety of other tasks.'[2]

There are two types of clay; that is primary clay and secondary clay. Primary clay is found in the same place as the rock from which it is derived. It has not been transported by water and thus has not mixed with other forms of sediments. Primary clay is heavy and pure. Secondary clay is formed of lighter sediments that are carried further and deposited. This secondary clay is more refined and lighter because it contains sediments.

The Tugen made pottery that was unique and designed to meet the needs of society. Some pottery styles were unique to specific regions in other African societies, for example, the singon found in Soninke, Bamana, Maninka, Somono, and Fula cultures across the north, but it is rarely seen in Jula and not at all in Senufo or other potteries to the south or east. Another example would be the bamadaga, whose pottery is found all across the south from Guinea to Benin, but not seen in the north. [3]

3.2.1 Location of Pottery Making

The making of pots and ceramics was an essential indigenous industry among the Tugen. The location of the clay determined the location of the pottery industry. Clay found in places where parent rock had weathered down, and the drained soil went into swamps, marshes, or along river banks. It was in forested areas where streams and rivers ran all year round and carried the soil to the lower levels. The sites were poorly drained and were unfit for agriculture or cannot be utilised into any other economic use. Potting

was a way of utilizing land which otherwise would be wasted. It was developed based on the environmental conditions and how specific clans adapted to it.[4]

Clay was chosen based on plasticity, and therefore not all areas were exploited. Clay with light plasticity was preferred because it guaranteed the potters of good molding and successful firing.

The clay sites were for clans who collected the clay at no cost. The land belonged to the community. Thus, they were community-owned sites. When clay got exhausted in the region, it was obtained from neighboring communities through trade. Pottery was common in other parts of Africa; for example, the Ovambo, Kavango, and Caprivi tribes in Namibia use the hardened clay from termite hills, as it contains glue saliva from the termites. This termite clay makes pots quite strong and helps with the clay's binding in the pot's formation. In the rain forest areas of West Africa, where streams and rivers are abundant, clay is usually mined close to existing watercourses and dug from the streams of streams when the water is low. Digging enough Clay is done while the pits are accessible to keep the potters supplied throughout the rainy season when they are full of water. The best time to dig in the more arid regions is after the fall harvest and before the dry season. [6]

In Tugenland, potting was developed during the dry season (*Telelo*) between November and March, mostly after harvesting.[7] This was when the marshes' water levels were low, and one can easily collect the clay. The dry season was also favorable for drying the pots, and the potters incurred few costs. Having just gathered her harvest, the potter has time in which to pot. Simultaneously, clay is considered suitable for modeling, and the clay can dry in the sun and are most durable.

3.2.2 Acquisition of Pottery Making Skills

Tugen Oral tradition states that the art of potting was discovered by women who experimented on the clay soil in their environment and taught the craft to other women. Records suggest pottery idea was learned by Elgeyos living west of Baringo. [8] Women were the leading producers of food, processed it, and served it to the family members. They, therefore, needed vessels that can be used for that purpose.

Potting among the tugen was exclusively in the hands of highly skilled women and worked with considerable rapidity. The women use the skill to produce various shapes or types of pots with outstanding results. However, in other parts, it was done by both women and men. Among the Hausa in Sokoto, men were responsible for much domestic pottery; in Ife Terra-Cotta and Bronze-casting sculpture was in men's hands; in Ashanti, men made pots which incorporated decorations.[9]

The pots were all of the same simple short-necked, round bottom shapes. They developed the same shape for generations, and little attempt has been made to create new designs. For example, no lids are used for pots as yet; the old age small whole gourd is still considered adequate as a cover despite the prolonged contact with lid using cultures from outside Kenya. Other regions have developed unique designs as well, where they were ‘stamped, impressed, carved, punched, rolled, modeled, scratched, scraped, polished, or printed.”[10]

The potter’s skills were passed down from one generation to the next. The daughters of the potter who showed interest were encouraged. They can be identified from the girls who were seen making simple pots or modeling clay, and such interest attracted the potter's attention, who gave them instructions on what to do.

The daughter of a potter who has been married and gone off with is not obliged to continue practicing the art. A woman married to the clan who lacked skills to develop pots had to be trained, but the husband had to pay for the training, like giving a goat to the trainee. Pottery was considered very important for every female in society to learn. Any woman from outside the family who expressed a desire to learn the craft was trained as an apprentice. Women taught the craft started by doing manual work first, such as digging and carrying the clay and preparing it for the potter to use. Lessons started with preparing the clay and simple shaping of pots, which required the learner to have a high level of concentration. They assisted their tutors with fetching of water, clay collection, kneading, and firing, which gave them first- hand experience of the practices. On average, it took them up to age 15 or 18 to sell their first pots after rigorously engaging in all the technical processes, and first producing small vessels before being able to make large ones. [11]

Acquisition of pottery-making skills is by choice, and male members of the tugen families can choose to be or not be potters. The interviewed potters were females and males between 30 and 60 years old. Two were brothers living a kilometer apart, while the other two were a mother and daughter. They asserted that potting is a very specialized job, which can only be practiced by skilled workers.[12]

3.2.3 Acquisition and Processing of the Clay

There were Different stages of making pots. Every stage was guided by specific preparation on how to acquire clay, which portrays the high levels of awareness of the Tugen on pottery making. A site with ideal clay was identified by potters who knew about it through tradition and experience. In most cases, such clay occurred on the banks

of rivers or in swamps or marshes. The clay can also be procured from the surrounding villages through trade and from nearby bonds and marshes.

Acquisition of clay involved quarrying, which was removed with a sharpened hardwood prepared in advance. Each Tugen clan had its own rules and observations governing the quarrying of clay. The clay is piled up high on the banks above the watermark to be carried to the work area later. Enough clay is dug while the pits are accessible to keep the potters supplied throughout the rainy season when the pits are full of water. The quarried clay was taken to the potter's home using baskets or by hand, shaped into bundles. The Tugen had a designated place where the manufacture of pots took place. It was either under a shady tree near the home or overhanging rock. At times it was done in the verandah of potter's house.

Figure 3.1 A section of women acquiring the clay.
Source Kabarnet Museum on 18/12/2020

It had to be prepared before the clay could be used for potting. First, it was left in piles to dry, then broken up by pounding using wooden mortars. This preparation involved

the removal by hand of any stone or observable foreign object. It was done to make the clay particles small and easy to knead. A sieving process also filtered the clay to separate stones, mud lumps, and other impurities.

The clay was sun-dried to kill any living organism or grains, which might cause cracking of the pots. The clay goes through thorough kneading until it acquired the desired consistency then it was ready for use. The processed clay is made into the dough by adding and mixing with water. The dough is then mashed by mixing and by the stumping process so that the clay's elasticity will be enhanced and for the easy molding process. The clay was soaked in water and left to ferment or soak for several days. It is covered with leaves to retain moisture, increase its plasticity, and make it easy to mold. Now it is ready for the molding process.[12]

A temper prevents the pots from cracking. The temper creates space for the clay molecules to expand without cracking the pots. There are two types of tempers; organic tempers and inorganic tempers. Organic tempers include finely chopped straw, millet, sorghum chaff, and dried animal dung pounded into a powder. Inorganic tempers include ground-up dried river mud or shards of old pottery reduced to a fine powder by pounding it in a wooden mortar. As the tempers are being added and absorb excess water from the soaked material, the clay is the right consistency for use.

The clay is thickness shaped, which the potter will use in forming her pots, followed by wedging. Wedging is a process of beating one piece of clay against another on a hard surface that helps push out any air bubbles trapped within the clay. Air bubbles will cause bulging when molding the clay, and the potters knew that if air remained in the clay during firing, it could cause the clay body to break or even explode.

The molding process followed this. The Tugen potters built their pots from the bottom upwards. It involved molding the base placed in an appropriate base and pulling the clay upwards to give a vessel shape. The potter performs the application of pressure with both hands for proper shaping and evenness. The potter removed excess mud from the product being made to maintain even thickness of the walls. The potter scraps the interior to create extraordinary thin walls. Once the product is done, it is removed consciously to avoid sticking to the base. Small pots are done in one season. However, large vessels required several seasons during which the walls were given time to dry and harden. They are turned rim downward on three large stones, which keep them off the ground. A small fire is built beneath each pot to complete the drying process. When the pots are sufficiently dry, they are stacked with others for the final firing. The final firing must begin before the pots have cooled from the pre-firing. If pottery is allowed to cool after the pre-firing, it will re-absorb moisture from the atmosphere and crack during the final firing. The finished product is allowed to dry under the sun for two to three days and sent for firing process.[13] (sp)

Figure 3.2 Initial preparation of the Pot.
Source Kabarnet Museum on 18/12/2020

The firing process is an essential part of pottery. Firing clay transforms it from its humble soft beginnings into a new, durable substance called ceramics. Pieces of pottery have survived for thousands of years because of firing. Firing is a process of bringing clay up to a high temperature. The aim is to heat the object to the point that the clay is mature; that is, it has reached its optimal melting level.

A kiln is a container in which heat builds to the temperatures required to fire ceramics used for firing. A kiln gives high temperatures of about 1500 degrees Fahrenheit needed for firing clay. The kiln consists of a low, circular, mud-brick wall, with pierced small holes on the pot's base, which provides air for the firing. Some kilns also have one or larger holes that permit the addition of fuel during the firing—a thick layer of laid fuel over the bottom of the kiln. The dry pottery, interspersed with additional fuel, is piled on top, covered with large pieces of broken pottery that helps retain some heat and protect the pottery from direct contact with cool air. The kiln is lit from the bottom.[14]

The molded pots are loaded into the kiln carefully. In most cases, waxing helps prevent the pots from sticking to the kiln's bottom, which can crack the pot or ruin the kiln itself. The kiln is closed, and heating slowly begins. Slow temperatures rise critical. When a kiln reaches about 660 degrees Fahrenheit, the chemically bonded water is driven off. By the time the degrees reach 990 degrees Fahrenheit, the clay becomes completely dehydrated. At this point, the clay changes forever; it is now a ceramic material. Ceramics are tough and robust and similar in some ways to stone. The firing continues until the kiln reaches about 1730 degrees Fahrenheit. At these temperatures, the pot has been transformed to the point that it is less fragile. After reaching the desired temperature, the potter turns off the kiln. The cooling is slow to avoid breaking the pots

due to stress from the temperature changes. After the kiln is completely cool, it is opened, and the potter removes the newly created ware.

Glaze firing then follows when applying impervious layers of coating to the ware to color, decorate, or waterproof an item. For earth ware such as fired clay pottery to hold water, it needs a glaze. Tugen potters apply a layer of glaze to the ware, left to dry, then loaded to the kiln for its final stage, glaze firing. The pots must not touch each other, or the glaze will melt together, fusing the pots permanently. The potters ensure that any sharp edge is removed by scrapping with sand or graphite. The kiln is heated slowly to the proper temperatures of below 200 degrees Fahrenheit to bring the clay and glazes to maturity then it is slowly cooled again. The kiln is opened and unloaded after it has cooled completely.[15]

Once the pottery has fired, cooled, and removed from the kiln, the potter decorates it. However, in some cases, the pre-firing decoration was done before, and it was generally permanent and survived handling and extensive use of the pot. The pre-firing decoration is applied at different stages in the drying process, after completing the pot's basic shape and before the firing. Simple decorations include ones incised into the damp clay with a sharp blade or comb-like tool, impressed with a stamp made, for example, from split seed pods or shells, or rolled with a roulette made from dried corn cob. The potter can choose to add different shapes to the surface. Handles or elegant ridges for holding can be molded and attached to adorn the pots. In Burkina Fuso, the decoration of vessels happens once the pot has completely dried. The potter can choose between adding different shapes (like human or animal figures and geometric or abstract forms) to the surface or incising motifs like zigzags or cross hatchings with a sharp blade or combs.

Handles or lids can be molded and attached to adorn the pots, or textural patterns can be impressed with roulette. [16]

Post-firing decorations never become an integral part of the pot and will eventually wear off the surface. They are mostly coloring or splashing with natural dye. They were colored with a liquid made of leaves or tree-trunk, which gave them a shiny surface. They are, however, not long-lasting.

Polishing pots was one of the principal forms of decoration, and a strong effect can be achieved by rubbing the surface with animal fat, soot, or a pebble and then re-fired to achieve a deep glossing finish. Graphite can also be rubbed onto the exterior to remove any extra or protruding material.

Figure 3.3 Some of the finished Tugen Pots.
Source Kipsaraman Museum on 20/12/2020

The whole heap of pottery and burning materials is destroyed to ensure cleanliness and readiness for the next season. After a few hours, all the burning materials have burned

away, and the pots are left to cool down. The broken and defective pots are separated from the good ones and later used as temper with the clay again.

3.2.4 Uses of Pots

Clay pots that have passed the test were safe for carrying items, cooking, serving, and storing food. Pottery was constructed for entirely practical use. The vessels were modelled as long as clay was locally available.

3.2.4.1 Precautions on how to use Pots

Before cooking using clay pots, they need to prepared.. The pots were immersed in water for a couple of hours. It is then removed and left to dry completely. Any vegetable oil is rubbed nicely all over the pot. Water is added and left to heat for 2 to 3 hours before removing it from the heat. Let it cool down before washing. This process hardens the pots and makes them crack-resistant, and helps eliminate the clay smell. Place the pot in the center of the fire and let it slowly heat. Always cook food on low or medium heat. Never add cold water or cold spices while the pot is hot, leading to breakage or cracks. If required, add only warm water. Place the pot on a wooden surface to avoid cracking of the pot. While cleaning the vessel, immerse it in warm water to loosen the bits of food.[17]

The food is simmered in a closed environment inside the pot. There will be less loss of nutrients, and all cooking fluids are incorporated into the dish making the meals taste and delicious. All foods are cooked at low to medium heat. The heat-retaining capacity of a clay pot helps food to stay hot longer. In some cases, the fire is put off, and the food continues to cook with the residual heat. Clay also will keep food warm for several hours after taking it out of the fire oven.

Clay pots are porous and allow the heat and moisture to circulate evenly during the cooking process... Meat prepared in clay pots remains juicy and tender. Clay pots require less oil for cooking. They take longer to heat and use a slower cooking process to retain the natural moisture and natural oil present in the food. The actual aroma of the food is retained when cooked in an earthen or clay pot. It uses a slow cooking process. Clay pots circulate steam throughout the cooking. This provides plenty of moisture and means that you can cook with less oil or fat.

Boiling food in pots can also reduce its bacterial load, extending the food use life by preventing or post ponding spoilage. It is a very time and labor efficient means of processing food. For example, meat can be boiled at high temperatures for prolonged periods with little labor needed to tend the hearth fire cooking pots by the Tugen is done for these reasons

Cooking in clay pots requires much caution. It might affect food taste because they have holes in which previously cooked food particles might get stuck and affect the current cooking taste. In most cases, the pots are not soaked in water to remove the food remains. Detergents are also not used. More so, clay pots can easily break if you accidentally drop them, and it cannot be repaired. Also, absolute temperature extremes can cause clay pots to crack, rendering them useless clay pots may be challenging to handle, incredibly when hot. All this limitation makes pots use a delicate process but can yield a very remarkable result when handled carefully.

3.2.4.2 Cooking and Boiling Food

Nearly all Tugen pots were cooking pots. From a purely functional standpoint, cooking pots can serve a wide range of uses and are uniquely suited to certain food preparation types. This may be associated with pastoralist nature. Pastoralist societies rely on milk,

meat, and blood. They keep many cattle, goats, and sheep, and every effort is made to keep them alive because of their value. Consuming meat every day was avoided, and people were encouraged to consume milk. They even have a saying that you cannot eat meat and drink milk at the same time. They are slaughtered during communal feasts such as during circumcision ceremonies, ceremonial occasions such as a child's birth, or a wedding ceremony. Special soup might be made, for example, when someone was seriously ill. All this food was cooked in cooking pots.

The preparation of meat is highly gendered. Women rarely ate roasted meat. Highly formalized rules dictated meat sharing by the Tugen, many of which are described by spencer (1973). Individual plants can be boiled to reduce toxicity, potentially increasing wild plants' breadth fit for human consumption. Boiling bones in pots allow for greater nutrition extraction than does roasting or baking. Pottery was essential to the tugen for survival, particularly for the preparation of bone soups, wild plants, and other foods during times of drought and food insecurity. Galvan and little gave a comparison with the tugen and asserted that the samburu, who are pastoralists boil blood with milk and fat to make a brown porridge-like mix. Blood might also be boiled until it coagulates to make it less frightening for children and turn it into proper food. Post-partum women also drink blood because they say it serves to replace lost blood during childbirth.[18]

All Tugen cooking pots had the same design. They are made black by smudging process during the firing process. Small Clay bowls are used apparently for soup and the children's food. Another small pot is for cooking vegetables and for cooking and serving the milk. One big one is for cooking meat and soups. Women also need bigger pots if they had elderly sons. The most giant pot is, in fact, associated with meat feasting during ceremonies such as *tumdo*. The pot they use when cooking soups or frying meat

in the home generally depends on the amount of meat being cooked, but this choice comes from small to slightly large but should easily be transported from one place to another. [19]

In West Africa, the Somono Potters make the largest and most diverse pottery selection consisting of everyday cooking, serving, and storage pots. They also have various architectural ceramics – rainspouts, window grills, roof vents, and toilet shafts. The Soninke, Bamana, and Manika Potters make water jars and pitchers, braziers, couscous steamers, and cooking pots and build large, unfired clay granaries (bono). The Jula have more in common with the Senufo when regarding styles and types. They create dolodagaba vessels, which are 4-5 feet tall and used to brew/store millet beer but are used more now for water and grain storage. They have a bowl Bamadaga "crocodile" pot for storing sacred medicines and a Biyèlè sauce bowl along with a Ngomifaga pancake griddle. The Dogon have a limited range of simple pottery.20

From the above description, it was clear that the Tugen pottery was unique compared to pottery making in other regions. Unlike many other traditional technologies, pottery making remains the most accurate record of the community's identity both in the historical and archaeological record. Gosselain (2000)[21] points out that more excellent stability characterizes pottery-making techniques through time and space, and hence has a tendency to reflect those most deeply rooted and enduring facets of identity.

Table 5. Types of Tugen Pots and their uses

Kipanyinyit	cooking-pot	vegetables only
Kipungut	cooking-pot	vegetables and meat
Kimwanit	Cooking and storing –pot	Fat
	Cooking, boiling,storing	Meat
Kipiitinit,	and serving -pot	
Kipkorotit	Cooking and serving -pot	Blood
Loet	roasting –Pot	Malt
Kipteregit	boiling –Pot	malt (large size)
Riseyuot	boiling –Pot	malt (small size).
Tapokut	Storing and brewing –Pot	beer
Teret-ap-kirnoi	Cooking and serving –	Porridge
	Pot	
Teret-ap-pei	Storing and drinking -	Water jar
	Pot	
Saiget	Drinking – Pot	Cup.
Tapet	Drinking- Pot	Porridge

Source; Anderson. Eroding the commons

3.3 Leatherwork

Leather is a material made from the skin of an animal. The hides of wild and domesticated animals provided the materials used to make leather materials, such as clothing and utensils by nomadic, hunting, and pastoral African tribe.[22]

The Tugen were mixed farmers and therefore kept various livestock, notably goats, sheep, and cattle. Apart from domesticated animals, the tugen hunted wild animals to obtain skins for making leather. Clothing was a family responsibility.[23] The style and type of clothing depended to a great extent on climatic conditions. The most common material for clothing was leather and animal skins. Hides with the largest possible size, stiffness and thickness obtained from antelopes, snakes, elephants and giraffes were preferred.

Animals were slaughtered on many occasions among the Tugen, which ensured the skins' continuous availability. Hunting for wild game in the many forests was a continuous process. It is important to note that animals were slaughtered purposely to provide skins and provide meat, blood, and even horns to be used by man. The hair, teeth, whisks, muscles, bones, horns, and fur were also utilized for man's other purposes.

Once obtained, skins were dried with the inner part facing the sun for about two to four days, depending on the weather conditions. Holes were pierced at the sides, and sharp sticks were used to pin the skin to the ground, thus helping to stretch the skin to the desired size and shape. They then pegged it on the ground using small pieces of sharpened sticks to dry. Skins were sun-dried in order to kill the fleshy parts in the skins, which could cause decomposition. One of the processes employed by the Maasai people of Kenya was the stretching of hides on a wooden rack, where it remained until it had dried completely. One widespread method used in Africa was pegging hides to the ground to dry and keep its shape or stretch it.[25]

Figure 3.4 Hides being sun-dried.

Source. photograph taken in Kabartai home of Amon Chelagat on 16/12/2020

While the skin was being sun-dried, the adipose layer (inner layer) was also scrapped using a stone knife. Moreover, this removed the remaining flesh from the skin. This called for precision in order to avoid tearing the skin. The flesh was removed whereby the adipose layer was rolled on a piece of wood to facilitate this. This technique of rolling ensured that the skin gained some evenness and smoothness qualities, which customers valued.

The furs were shaved using a sharp stone knife by plucking or scrapping. After drying in the sun for about four hours, it was soaked in water to facilitate the fur's removal. In the lowlands regions, they used stones to remove the fur, while in the highlands regions, they used sharp objects acquired through trade from the Nandi. The Nandi stole the metal for making sharp objects from the Europeans who were constructing the Uganda railway.[26] (kipkorir and ssem) The epidermis was also removed so that when the tannin was added, a chemical reaction will take place, and it will produce leather. The craftsman understanding of the crude chemical reaction shows development in chemistry among the Tugen and the vast understanding of their surroundings. The craftsmen had some basic knowledge of treating this skin and making it suitable for human clothing and other uses.

3.3.1 Leather Making processes

The skin of animals is divided into an outer layer (epidermis), middle layer (dermis, corium), and bottom layer (sub-Curtis). Once the skin is obtained, it is prepared and treated through tanning process. Tanning was a fundamental invention by the tugen, and it reflected the people’s advancement in technological development in leatherwork during the pre-colonial era.

Among the tugen, Tanning was done was carried out in most homesteads. Almost every family had a person who prepared their clothing. Clothing was a family responsibility. [23] the style and shape depended on climatic conditions and family choice. Tanning was not done in particular workshops but carried out under granaries or any shade within the homestead.[24]

The leather tanning skills were learned through an apprenticeship where Skin craftsmen instructed the youths on leatherwork's necessary skills. The instruction process ensured the continuous passing of the skill for generations. In most cases, Tanning training lasted for about one to two years, depending on the learner's tanning techniques, designing the various leather garments, and dyeing of the products.

There are two types of tannin used by the tugen: the fat tannin and the vegetable tannin. The most uncomplicated process was the fat tanning or oil tanning, where the Tugen rubbed milk butter or fat into the hide. The second process was using individual vegetable plants such as roots, leaves or extracts from barks such as Solonum in Cunum and Vangeuna where they were pounded to provide tannin. The skin was then rubbed with tannin, which ensured that the living matter on the skin was removed through corrosion. The upper surface was rubbed between the hands until it became soft, and a little oil such as castor oil was added. The skins were sometimes smoked to make it more weather resistant. Often combination-tanning methods were employed. This made the skin tender, reduced the weight, and left the fibrous part of the skin intact. The under skin maintained the tanned skin in place, and it gave strength, while the middle skin gave the leather an admirable smooth look. Any stubborn fleshy remains were removed using a rough stone. One of the 'vegetable tanning' plants used in Southern Africa is called the Eland-bean (Elephantorhiza elephantina). The underground rhizomes / roots

are dug up and used in rural areas for dyeing and tanning. In the Kalahari Desert region, the bark is removed, and the root pounded to a pulp, with a little water added. The paste is then smeared on the hide to help in making it soft. By continuously rubbing the skin over tree branch or by hand till the skin is soft.[27]

3.3.2 Uses of leather products

After the skins were ready, they were cut into various garments for various purposes. The next section addresses the products which were made out of leather.

3.3.2.1 Clothing

Animal skins are used in Africa by communities who practice nomadism and own herds of cattle, goats, and sheep. Animal skins for clothing; bags, shoes, jackets, seat covers, and water bags because they do not radiate heat and prevent possible evaporation and make knife/dagger/sword sheathes, shoes, caps, and horse/donkey/Carmel saddles.[28] The Tugen community was also renowned for their traditional clothing, which essentially consisted of animal skins of either domesticated or wild animals. The clothes differed for men and women.

3.3.2.2 Women

BELT

The Tugen prepared a special belt called *legetyo* for a new mother where the midwife tied it on the new mother's waist and could only be removed in a ceremony after two years. It was made by cutting a sizeable piece from a strong cowhide and shaping it to fit the new mother's belly. Women used this belt to tie and hold their bellies after delivery. It would restore their bellies to or closest to their original state. It was a belt considered sacred. It was worn by mothers around their bellies and was treated with respect. It was superstitiously essential. The main reasoning behind this interesting

culture is to implement family planning and also to ensure that the child is given enough care before getting pregnant with another child.[29]

Figure 3.5 The belt used by Tugen women

Source .Photograph taken in Nairobi National Museum on 02/12/2020

Other belts were made for decoration purposes and were combined with cowrie shells and beads. A girl wore a belt with one row of cowrie shells. When she gets married a second row was added and when she becomes a mother a third row was added. A grandmother will wear one with four rows of beads. This ensured that women could easily be identified by the belts they put on.

Another garment was referred to as *sir*. This was a body cover that was of great value to the Tugen. It was made from several soft goatskins, which were stitched together to make a triangular skirt. To the front of the skirt are attached several strings of leather through threaded beads and bone ornaments. The sir is a women's body cover received from the mother's home at initiation and marriage. A traditional married Tugen woman wore this beautiful skirt with many strings until she became a widow. When the husband dies, the strings were ceremoniously cut off, leaving the bare leather surface. The undecorated skirt was then a sign of widowhood.

A full dress made from the goat's skins was made for ladies who were elder and were going for circumcision. Girls undergoing initiation ceremonies were it for an extended period ranging from a month to one year. In their initiation ceremonies, they were taught so many things, among which was how to decorate the skins, treatment, sewing and drying.[30]

3.3.2.3 Men

Young boys used traditional attire at certain times of the year or on particular occasions only. When they go for initiation and are in the camp, they are kept away from any other dress form. It acted as both cloth and a blanket. It was continuously oiled to make it soft and flexible

The more older men have attire made from cow skin, which is sewn together from the middle. He uses it to cover the chest and back. When traveling or herding animals, the garment is wrapped around his body so that the right arm is trained to use a tool like a club or spear. In case of a sudden attack by wild animals or enemies, the pastoralist is ready to defend himself.

Ceremonial attire was also made for the Tugen men. It was made from a Columbus monkey skin. There lived wild animals in the Tugen Hills, namely the Columbus monkey, bushbabies, monkeys, and baboons. Many of these animals were hunted and killed, and their skins were converted into ceremonial costumes. The skins were dried in the sun, oiled with castor oil, sewed into a hat and overcoat, and kept in the house for ceremonies. The color combination of black and white provided the beauty aspect. The hat got from the skin of a Columbus monkey is called *kutwet*. They also make attire which covered the whole body. They were made by joining two or three skins skillfully.

They were also for ceremonies and referred to as *sambut*. It was worn by specific members in the society and signified authority and power.[31l]

Figure 3.6 The Columbus Monkey for making the Tugen Gown and headgear. Source National geographer website

Figure 3.7 A Tugen leader wearing the head gear. Source. Baringo County documentary

Although many African communities wore animal skins or leather clothes, a number had developed the weaving and spinning of cotton and other fibers to make cloths. In several parts of Africa, a variety of fibers were employed in the manufacture of cloth such as bark, bast, raphia, silk, wool, and cotton[32] The Berbers of North Africa, on the

other hand, made their woven rugs by blending wool and goat hair with esparto grass, dwarf palm, and rush. Among the Baganda, clothes were made from trees' bark, and the product was commonly known barkcloth. In central Africa they used Bast fibers and Raphia, which was obtained from the marsh or swamp vegetation. Silk production was done in Nigeria and Madagascar where various species of moth of the genius Anaphe were found. It was obtained from the larvae of these moths, which bred on tamarind tress—details of the preparation process of cloth varied from place to place. For example, the Yoruba built furnaces of four feet high or five feet wide to prepare the potash for the alkaline medium. Dyeing was carried out either in large earthenware pots or pits in the ground. [33]

Besides leather clothes, other products were made from animal skins and hides, such as sandals, bags, and beddings. The tugen, like other African communities such as the Tuareg, the Beja, the Somali, and the Ajar made their shelter or tents out of animal skins. [34] The hard work in leather has been associated more with the pastoralist communities.

Table 6. The Tugen garment and their uses.

S/N	Type
Sambut	Gown worn in ceremonies
Chepkulet	Head gear for ceremonial purposes
Legetyo	The belt for women
Sir	Different garments for women
Motoget	Variety of bags for holding items, storing valuables
Songe	For storing arrows
Longe	Shields
Muito	Beddings (variety), drying grains, covering the door
	Sheaths – swords, spears, walking sticks

Source. Kabarnet museum

3.4 Basketry

The term *basketry* covers a wide range of material culture usually made out of vegetable fibers from wild and domesticated plants.[35] Basketry was closely associated with agrarian societies. Thus it was dynamic and was heavily influenced by societal changes, agricultural changes and environmental factors.

The agricultural and pastoral economy of the Tugen influenced the development of basketry. The designs and techniques used in basketry were developed to suit the local surroundings where the Tugen occupied. Baringo County is endowed with forests and shrubs vegetation, which provided various fiber needed for basket making. However, large-scale production was confined to areas where fibers were easily obtainable such as around Lake Baringo and Salawa . In some areas, they had to obtain the material from elsewhere through trade especially in kabartonjo and kabarnet. To ensure a constant supply of suitable materials, they had to be collected, dried, and stored.[35]

3.4.1 Materials required for basketry

The materials used included sisal leaves, African bamboo fibrous tree plant roots, leaves, cane, bark wood, and papyrus. Some of the plants with fleshy stems and leaves dry out beautifully to create a silky smooth fiber. In the dry season, many plants die down in preparation for the wet season.. For some, you can remove the center rib and coil them with the shiny side into the center so that they do not shrivel into a tight cylinder. Other fibers had to be boiled and allowed to cool for a day or two. Others such as vines need to be peeled or stripped off to obtain the inner bark, and they form the strings used in the weaving of the baskets. Harvesting of this material goes on throughout the year.[36]

Suitable materials for basketry varied depending on the baskets to be made. This material needed to be obtained with care. Any material which is flexible and can be bent may be suitable. They can be tested out by twisting and wrapping around the finger. If it is flexible when fresh, then it will be pliable when dried. You can also bend the poles or sticks to find out if they bend the amount required. Dry plants at different seasons were obtained, to test flexibility and what they look like. Some materials are better used when fresh and others when dried. Fresh materials will shrink as they dry, leaving a loose weave. You should also have rigid fibers, which are durable, clean strands and can easily be dyed. Reed, which is a tropical plant with its leaves and stems are used in basketry

Among the Tugen the available raw materials include a wide range of plant fibers, including roots, cane, twigs, and grass reeds. Concentrated dyes are also used in some types of baskets to produce unique colorations. Wood is also used for some designs, particularly when the type of baskets needs a solid bottom and handles. The basket

maker needed tools like saws, awls, knives, and beaters for hammering or bending pieces of reeds other than the raw materials. A tub is required for soaking fibers, and the baskets are woven when the fibers are damp. If coiled baskets are to be made, sewing tools like blunt needles and thread are required. Tree barks also need to be prepared by scrapping to get a smooth finish.

Once the materials have been identified they are cut or pulled from the base of the plant. They are then tied together in bundles and any damaged, dirty or moldy leaves are discarded. They can be spread out on a clean, dry surface in a shady area with plenty of air movement. The bundles are turned frequently to allow them to dry evenly. When dry, they are tied in bundles and hanged in a dry shed, preferably a well-ventilated area. They should be protected from dust and moisture.

3.4.2 Skills required in basketry

Skills in basketry were passed on from one generation to the next to ensure continuity of the craft. Innovativeness in this industry was manifested in the materials used and design employed. Basketry was carried out by both males and females. Baskets were mainly by females, while men were charged with weaving granaries. Basket weaving was practiced during the dry season when women enjoyed a short respite from garden work as the grains were ripening in the fields, and there was very little farm work. Women could afford to remain in the homesteads where they weaved the baskets.

Weaving was done by all women who showed interest. Young girls who were seen plaiting grass or making small baskets for their games were encouraged and taught how to weave. Special lessons were given to them. By the age of 10-16, each girl had learned the skill of weaving with time, they perfected their skill in weaving and became expert

weavers. There was no fee charged for learning the art thus, most people could learn the trade so long as they had the interest.

3.4.3 Process in making baskets

Baskets are containers made by basketry techniques. They are carried on the head or back or in hand. Every basket had a character that is mostly determined by the kind of fiber used to make it. Weaving will depend on the available fibers, or conversely, to produce a particular design, appropriate fibers need to be purchased or found. Fibers are rounding, flexible, or flat. Round rods are usually woven among other round rods.

Similarly, flat strips can be woven together or twisted around stiff rods, grasses, crushed stems or other flexible fibers are rubbed together to form a coil. The basket maker has to determine what fibers are available and plans the basket type accordingly. The types are based on the use or purpose of the basket or the size and shape required for practical use or desired for.

The yarn was made skillfully and technically by rolling on the thighs and twisted one against another, and this will produce a long twisted cord. A weaver must ensure that there were no gaps left in between the rods to reduce the chances of having a loose-woven basket. Such baskets could be used for carrying or storing small grains. This ensured that the strings used in weaving were strong enough, and the baskets could last for over 50 years before showing signs of tearing, even with constant use.

Baskets are made in very standard shapes and sizes. Materials are gathered, and the necessary tools for working these materials are assembled. If the fibers are such that they need to be soaked, then soaking is done in advance, depending on the fiber's nature. Fibers are also dyed in advance of weaving or coiling. If the design calls for a wood base, the base is shaped, and holes are bored in the wood to accommodate the spokes

forming the basket's sides. Coiled baskets are crafted from one continuous strand or bundles of fibers sewn together in a spiral. In contrast, woven baskets are made from discontinuous elements that are interlaced and typically held together by binding at the edge

A basket is built from the base up. For around basket with a flat bottom, the base is made by laying out a series of strings that are stiff and work like rods to support the more flexible woven material. Other rods called weavers are woven in and out among the strings. The weavers are lighter, thinner and more flexible so that they can be woven and will not be strong enough to distort the strings. Initially, the base's strings can be cut to be long enough to form the sides of the basket as well. When the base is finished, the strings are soaked to soften them, squeezed at the base's perimeter and then bent up to form the sides. The base is important because it will determine the shape of the basket.[37]

After the base has been formed, the rest of the basket is then made. This involved simple weaving dominated by continuous alternating manipulation of the already prepared string. The sides are also formed by cutting side strings and weaving them through the base and then up again to form side strings. Side strings are essential if the bass strings are large. The sides are then woven with flexible weavers that are passed over and under the side strings. Again these weavers need to be smaller than the material forming the string to not be destroyed. If the sides strings are longer than the finished basket,, then the strings' remaining ends are used to finish the top edge of the basket with a border. The ends need to be soaked before the border can be made so the yarn can more easily be woven in and out of each other and the ends turned down into the basket sides.

After finishing making the basket, the weaver can now fix a strap or a handle. The handle of the basket is chosen from the best available reed to be healthy, durable, and attractive, and relatively smooth to the touch so that it can be held comfortably. The ends of the handle reeds are soaked in water and threaded down into the sides of the basket. The overlap has to be long enough to prevent the handle from pulling out of the sides when the basket is being used. In some cases, a piece of hiding is fixed on the baskets. This ensured that the strap and the basket do not get direct friction, which could cause the tearing of the basket. The uses of baskets, the materials available to make them, and the skill and inventiveness of basket makers determine baskets' ultimate appearance.

3.4.4 Uses of baskets

Baskets are a staple in every culture and play a pivotal role in daily life – storing foods, clothes, important items, knick-knacks, and shopping. Basket weaving skills have survived for centuries and highlight the stories and traditions of these cultures.

Baskets are used for agricultural practices such as winnowing and sifting of grains. A winnowing tray is a circular or elongated vessel that is constructed skillfully for it not to allow the small grains to pass through. It is used to clear freshly pounded millet or sorghum from chaff. They can also be used as surfaces on which seeds are dried. They were similar to the wide winnowing baskets, known as fanners, which were the earliest and most important coiled basketry made by Africans in North America. From rice introduction in the late 1600s to well into the 20th century, fanner baskets were used to separate rice grains from husks. Pounded grains of raw rice was placed in a fanner and tossed into the air or dropped from one basket to another. After the wind blew away the chaff, the rice was ready for cooking. Fanners were also used to carry food and even

cradle babies while their mothers worked in the fields.[38]. Coiled baskets made in Senegal and Angola look similar to African American fanner baskets, whereas fanners made in other places, such as Sierra Leone, are woven rather than coiled. Preference for one technique over another most likely is due to the kinds of plant materials available.[39]

Figure 3.8 A Winnowing Tray.

Source. Photograph taken in informants home in Talai on 17/12/2020

Some are used for collecting and carrying of crops as well as portage of produce to the market. The Tugen practiced barter trade in designated places, and the items had to be carried. The Tugen made a basket bag for carrying water from the river to their houses. This basket had straps that the women wore on their backs with calabashes filled with water placed inside. It was referred to as lakwele.[40]

Household usage included storage and serving food. . The Tugen had a specific basket for serving food, and it remained warm for a long time. It was referred to as Kibis.

[41]Tobaccos used by elders were stored in basket containers. They were used to store grains in the granaries. This helped to preserve the foodstuffs, which were not mixed to keep off weevils and other pests. The Tugen granaries are raised; thus rodents and ants are kept off by the raised floors of the granaries.

Figure 3.9 A Bowl for serving Ugali

Source. Photograph taken in informants home in Talai on 17/12/2020

Figure 3.10 A Tugen Granary

Source. Photograph taken in informants home in Tenges on 14/12/2020

Among the Agikuyu community of Kenya, basketry formed important commodities in the trade between the Kikuyu and the Maasai. Kikuyu women went to trade as far as

Lake Naivasha, Narok, Kajiado, and Nyanyuki. They exchanged the baskets for foodstuffs, sewn skins, untanned goat and sheepskins, and livestock. In the late nineteenth-century, Kikuyu women used their baskets to obtain coastal items such as cowrie shells, salt, and beads. [42]

3.5 Iron Making

Iron ores are rocks and minerals from which iron can be extracted. An iron ore deposit is a mineral body of sufficient size, iron content, and chemical composition with physical and economic characteristics that will allow it to be a source of iron either immediately or potentially For centuries, most of the iron used in African was locally produced.[43] Most African societies were able to produce their own iron or obtain it from neighbouring communities through trade. Iron ore was available in virtually all parts of the continent, especially in the lateritic crust covering much of the savanna regions. The origin and use of iron implements in Africa were influenced by the agricultural revolution which led to iron tools for cultivation and farming. The demand for trade items resulted in some societies working as smelters or smiths specializing in the many skills necessary for the production process.

After the Tugen settled in the Tugen hills, they manipulated the environment for their survival. The Tugen being an agricultural and pastoral community, required iron tools and other implements. Stone implements had proved ineffective in the hilly terrain because they broke often and could not be reshaped or resharpened. That called for the need for better implements. Irom making was done by some known Tugen blacksmiths referred to as kitonyik.[45]

In other parts of Africa, iron deposits were easily obtained. Wainwright stated that: ‘Iron ore is found freely on the surface of the Nubian sandstone which forms large areas

of northern Sudan … There is, therefore, no question that Meroe was well situated as regards supplies of iron ore' [46]

3.5.1 Raw Materials for Iron Making

In its natural state, iron ore is embedded in rocks. The ore was exposed due to weathering, and when it was detected, exploitation of the ore begun. The traditional ironworking in Baringo was a complex, skilled, lengthy, and very labor-intensive process. It had to be carried out by a workgroup (kitonyik) and never by an individual smelter. Iron ore deposits were very scarce and unevenly distributed in Baringo County, and that explains why it was only practiced by a few families such as Kap Kiptombul from Embo Rutto, from Kaptere. [47] The Iron Ore, which was usually dug up from ferriferous quarries on the slopes of the Tugen hills. The smith men had a complex and highly specialized system of mining Iron stones. The miners dug to a depth of between 50 to 60 feet to obtain high-quality ore.

The training was by apprenticeship. However, due to the intensity of the work male adults were mostly involved and women were exempted to do other chores in the society. This knowledge was passed from father to the son to ensure continuity of the craft. However, members from other communities who showed interest were trained. Apprentices were taught the basics in iron- smelting, such as how to procure the ore, make and feed fire through the bellows, make charcoal, and later refining and forging the ore. The training process took ten to fifteen years when the learner had acquired enough skill and was able to show evidence of what he had learned by showing the implements such as knives to the smith. The blacksmith then approved the learner's ability as a smith. The learner was given a bracelet as an identification mark and also to show social differentiation in the society. Blacksmiths were highly respected in

society and held a high status in society. The tugen held their technology with much secrecy as a control system to avoid having the trade being practiced by many people. It was a way of licensing a few blacksmiths in the trade. The public was not allowed in the smithy except when there were rituals for anointing the blacksmith. During rituals the blacksmith was given powers over the production process in the whole community since he controlled production in the society. Having graduated as a blacksmith, one was allowed to operate his smithy whereby he engaged in smelting and smiting.[47] The smelting process was often carried out away from the rest of the community. Ironworkers performed rituals to encourage good production and ward off bad spirits by singing, praying, giving medicines, and offering sacrifices.

It was almost similar to those practiced in other parts of Africa. Among the Hausa in Kano areas of Nigeria, a blacksmith begins to train his male children from six or seven years upwards. The small son of a smith, whose main job is to work the bellows, participates in subsidiary work around the forge, assisting his father and elder brothers, gradually working himself into the more important and technically difficult tasks, and perhaps earning a little pocket money at the same time. Snithing is an industry that requires some technical ability, quite apart from patience and physical strength, and a lengthy training period is quite essential if the boy is to master the craft. In this way, by the time he reaches his mid-to-late teens, he will probably have broken away from his father's anvil (uwar malcera. literally 'mother of the forge*), and become a 'perfect blacksmith*, just as his elder brothers will have done in their time.[49]

3.5.2 Stages involved in iron making

Ironworking consists of two main stages, that are smelting and smiting. Smelting is a process of extracting the ore from its rock material. Smiting, on the other hand, is when

the extracted ore is converted into items for human use such as knives, hoes, spears etc., both smelting and smiting were carried out in a series of stages, each of which was accompanied by elaborate religious rituals.

The first stage was the identification of the ore. The Tugen blacksmiths dug a hole on the ground, and a big pot was placed inside, which was used for collecting the ore. Since ironworking is labor-intensive, division of labor was paramount. Therefore after the ore has been extracted, another group picked it and carried it for smelting using pots, baskets, and trays.[49]

The second stage was the procurement of wood and charcoal, which served as the fuel during the combustion of iron ore. Only hardwood trees were preferred because they produced much heat and kept the fire glowing for a long. The popular tress species were dalbergia melanoxylon (ebony), brachylaena huillensis (khaya), newtonia buchananii(hagania abyssinica), olea Africana(oak), combretum schumannii, cynometre webberi, Terminalia brownie. Wood was the main fuel used, and therefore, its acquisition and availability were paramount. The vast forested land in Baringo such as katimok, saimo, mochongoi and chemasusu made the iron-making industry possible. The trees were felled, chopped up into convenient logs, assembled at a point, and arranged appropriately to obtain charcoal. To prepare charcoal, the smelters dug trenches in form of a cross. The floor was overlaid with combustible materials such as dry twigs. The logs were carefully packed in the trench, with combustible materials inserted at regular intervals. The pack was then covered with fresh leaves and finally overlaid with wet sand. Fire was then introduced to the pack through side openings. After the burning had been completed, the workgroup undid the pack and picked the charcoal. The rationalee for bringing the wood into the enclosure was scientific, that is, to restrict the intake of

oxygen and minimize the byproduct of ash. Charcoal from the hardwood are considered to produce a great heat required for the furnace, which was kept going on all the year round.[50]

The next stage was the construction of the smelting furnace. A furnace was a small structure that was grass thatched without walls. A hearth was dug in the middle, and it was to produce high temperatures of about 700 -9000 ^{0}c to smelt the iron. The floor of the heath was smeared with clay, which acted as an insulator. This ensured that the heat was retained within the furnace for a long period. Smelting was conducted using the blast furnace method. It was used to produce liquid iron. It was operated at higher temperatures and a greater reducing condition. This was achieved by increasing the fuel to the ore ratio. More carbon reacted with the ore and produced a cast-iron rather than solid iron.

Fire was introduced into the furnace through the holes at the base of the furnace and it was activated and sustained by the use of bellows connected to a pass through the furnace wall into the combustion chamber. The smelter kept replenishing the furnace with firewood. The fire released heat in great intensity, thus facilitating the smelting process whereby iron got separated from the slag. The furnace was charged for about 36 to 48 hours or so during which it was fed with more ores and charcoal at regular intervals. The ores used in ancient smelting processes were rarely pure metal compounds. The impurities were removed from the ore through the process of slag. Slag is the material in which the impurities from ores and furnace lining and charcoal ash collect.

When the charge attained high enough temperatures, the molten material flowed through the drainpipe into the pit, leaving behind, mainly iron globules. After the

furnace has cooled, these were collected and consolidated by hammering them into large lamps. After the smelting process, the blacksmith removed the bloom from the furnace. The slag was removed and disposed of. To remove the bloom from the furnace, a pair of tongs was used. The iron bloom was dipped in water and kept by the smithy until he required refining and forging.

The furnace was located in the bush far away from the homestead. The reason for this was to avoid the risk of the homestead catching fire and keep it away from the public. The Tugen were religious and associated with the failure of smiting to bad Omen caused by people who had ill intentions. That is why before any activity was done, cleansing ceremony has to be conducted. As kitombul observed,[51] indigenous smelters did not comprehend the chemistry of the bloomer process in iron smelting. Nevertheless, the Tugen practical knowledge of smelting was based on scientific rationale as can be seen from their charcoal production techniques and the loading of the furnace with ironstones and charcoal.

Figure 3.11 A Kiln for Iron Smithing

Source a photograph taken in informants home in Emboruto on 12/12/2020

Furnaces which were constructed for smelting iron varied from one region to the other. In Buhaya, Tanzania, furnaces were built of ant-earth and slag lumps from previous smelts and cemented with clay [53]. According to Goucher, this constituted a significant technological innovation unique to African industries, with the smelted product being intentional steel. [54]

3.5.3 Uses of Iron Implements by the Tugen

When the Tugen were making iron implements, it was based on the specific needs of the community.[52] However, any surplus was sold to a neighboring communities or given out as gifts to visitors. The implements included tools, weapons, and ornaments.

3.5.3.1 Tools and Knives

Tools and weapons were made using the same technique, but they were shaped differently according to the use. After making the bloom, the blacksmith will then reheat it, beat it, and mold it with the shape he intends to have. This enables the blacksmith to make a variety of tools and weapons. The most important farming tool was referred to as *mogombee* (hoe), which was virtually used in all homesteads for plowing.[54] To make the hoe, the blacksmith took a piece of iron bloom and reheated it, beat it, and molded it to get a long blade. It was leaf-shaped with two cutting edges and a sharp pointed top for breaking the soil. This blade can be fitted with a wooden haft by the farmer to make it longer for handling. The Tugen are agriculturalists and any invention that enhances its development was highly valued. They made sickles, which were used for harvesting millet and sorghum, and kitchen knives, which were used for slaughtering animals and cutting meat and vegetables into smaller pieces to facilitate easy cooking. They made branding tools for marking their animals for security reasons, distinguishing their animals from those of other clans and marking ownership of cattle.

The branding tool was a long iron rod. They made bells tied around the animal's neck so that they could locate them easily when they go out to graze in the forests or when they get lost you could hear the bell. Also, when raiding occurs, they can easily trace their movement. They made circumcision knives for both males and females as circumcision was practiced by the Tugen. Others were the ax, which was made for falling trees, especially when preparing plowing land, and also for splitting firewood for various uses.

Figure 3.12 An Iron digging hoe.

Source A photograph taken in informants home in emboruto on 12/12/2020

3.5.3.2 Weapons

This was another area where the Tugen exhibited its dynamism in the manufacture of weaponry. To make a weapon, the blacksmith first reheated the bloom until it became malleable, and when it was hot it was hammered into the shape desired. The head was sharpened on both sides' using whetstones. The head was then hafted into a wooden handle, ready for use. A variety of knives were made using this method.

The Tugen also made spears using this method. A spear that was 1-2 meters, was referred to as *ngotet*. The iron head was hafted into a wooden spear, which was prepared in advance from a hardwood tree. The spears varied depending on the use and the age set of the user. For example, an elder had short spears, which were used for personal defense and for the defense of the family given that the Tugen culture considers the father as the head of the family. The warriors carried more giant spears because they were to defend society from external aggression. They were the influential members of society responsible for the the internal and external security of the society. In most cases, this was accompanied by the shield, which was made from animal skin for protection purposes.

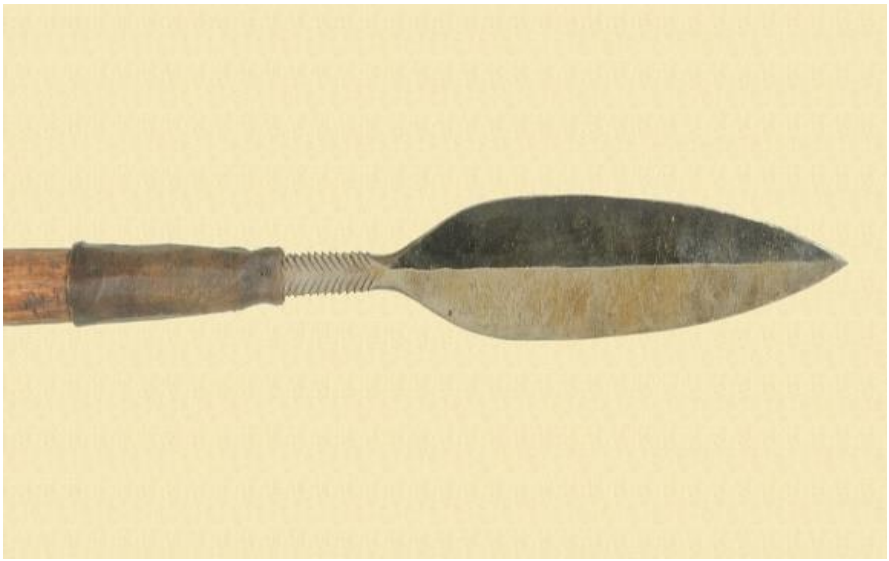

Figure 3.13 An Iron spear.

Source . A photograph taken in informants home in Emboruto on 12/12/2020

The other item made by blacksmiths was the arrowheads. The blacksmith hammered some hot blooms into metals that were supposed to be light to make arrow head. They were sharpened on both sides and had a pointed end. They were hafted into a wooden stick which was prepared earlier. They should be as straight as possible, clear of branches and knots. Some of the arrowheads were smeared with poison which was

extracted from certain plants for controlled use in the society. Others use a snake or spider poison though it is done secretly and strictly to avoid misuse by society members. The arrows were then fletched by adding feathers to the arrow shaft in order to stabilize the arrow. They are then stored in a quivar (*songe*) and placed in a strategic place in the house. The arrow works with the bow, a stick with a string tied between ends that propel the arrow to its target. The arrows could not travel at far speed. The bow (*kiyang*) increased the speed, and the range Arrows were used for warfare and hunting, which was the main source of obtaining food by the Tugen. The use of the bows and the arrows manifested a clear change in technology by the Tugen. It is also clear that the use of poison which was used demonstrated a high level of knowledge and technique of the Tugen.[55]

Figure 3.14 Tugen Bow and Arrows

Source. A photograph taken in informants home in emboruto on 12/12/2020

3.5.3.3 Ornaments

The Tugen valued beauty and made all forms of decorations for that purpose. Most of the items were made from iron, and others were combined with other materials such as wood, seeds, fruits, and even bones to obtain an excellent item. The Tugen utilized what

was available in the community, although when the Arab traders arrived in Baringo in the 18th century, the Tugen obtained beads from them, which they used. This signified an advanced stage of human evolution where beauty was appreciated. Ornaments were worn according to age, gender and status.

Ornaments for females

Young uncircumcised girls made and wore necklaces made of beads and covered with red ochre. They were made of twelve strings of beads. These were made from the wood of the *kipungeiwa* tree and cowhide spacers, threaded using wild sisal thread (*kilembele*). The wooden beads were cut out with a knife for decoration, and the outer edge is a string of white beads, each separated by four to six red beads threaded on the wire. They also had ear blocks, which the girls used to stretch their earlobes for decoration purposes. Earrings which were worn were made of iron rods which produced sound as they walked around.[55]

When the girls were circumcised, they are married off with an elaborate marriage ceremony at the age of fifteen. Traditionally, the Tugen did not consider a woman to belong to an age set until she is married. She could marry any age set except that to which his father belongs. Marriage ceremonies were highly valued in the Tugen community. The girl will be adorned with earrings (*mwanak ab itik*) with beads stitched on cowhide all around the edge.

Ornaments for males

The young uncircumcised boys had their earlobes pierced as they approached the time for circumcision. They will then wear earplugs (*sora*), which were iron wire-like earrings in each earlobe after circumcision. In each age set, the initiates were bundled into *siritie,* and they were the same earlobes for identification.[56]. They also wore

anklets, which were made from small bells of iron filled with pieces of iron. These anklets produced sound when they are shaken.

Status

The Tugen blacksmiths were respected and held high positions in society, just like in other parts of Africa. The Mande blacksmiths hold important positions in society. Blacksmiths are often called upon by the chief for guidance in major decisions regarding the village. The power of the blacksmith is thought to be so great that they are also feared. Mande Blacksmiths control a force called nyama. This means that they control all energy and power in the village and the makeup and workings of the Mande society. [57] The Bamana society is very similar to the Mande. Bamana society is also endogamous, so blacksmith families are the only Blacksmiths in the village, and they hold a very high status due to the extreme power and responsibility that they possess.[58]

Among the Tugen a blacksmith position in the society was marked by the bracelet they wore for identification purposes. Village heads also wore them as a sign of their power in society. It categorized the young and the old, the circumcised and the uncircumcised, and the rich and the poor who wore different ornaments.

The Tugen were traditionally involved in recreational activities that involved playing musical instruments and dancing. Songs would accompany many work-related activities for both men and women. They sang during ceremonial occasions such as births, initiations, and weddings. Dances to punctuate these occasions would be performed while wearing ankle bells and accompanied by traditional instruments such as flutes, horns, and drums.

The Tugen community developed iron technology that was unique and meant specifically for the community from the explanation above.

3.6 Wood Carving

Woodcarving is the art or technique of carving objects by hand from wood. The Tugen practiced wood carving and it was necessary because it produced household goods that were essential in the community. The precision to which these items were fashioned and designed was to suit the Tugen specific needs, and it portrayed the people's creativity, innovation, and adaptation to situational challenges.

Woodcarving was carried out by specific clans or families who specialized in the practice because in the Tugen community, division of labor was practiced. It was done in the homestead of the sculptor because there were no specific workshops. Most of the items were utilized after they were prepared because they were made as the need arises. Also given that they made high-quality products, with precise skill, it was possible to make one product that lasted for many years. The carvers worked together as they shared tools while working. The training was by apprenticeship and the apprentice acquired the skill once he had mastered the art. Apprentices in particular borrowed some basic tools like the 'V' and 'U' gouges and chisels from their friends and other apprentices until they obtained their own. In some cases, some masters sent apprentices to other masters for some tools to execute some certain jobs.[59]

3.6.1 Raw Materials for Wood Carving

The Tugen community is endowed with a variety of vegetation, which provided the materials for wood carving. Several different tree species were used for carving. The main criteria for choice were that the wood should be close-grained and should not crack. The preferred colors ranged from brown to black. Hardwood trees were preferred because the products were durable and were of high quality.the popular tress species were dalbergia melanoxylon (ebony), brachylaena huillensis (khaya), newtonia

buchananii (hagania abyssinica), olea Africana (oak), combretum schumannii, cynometre webberi, Terminalia brownie, erythrina abyssinica. In some cases softwoods such as grevellia robusta, mango mangifera, indica, acacia melanoxylon, were used because they were easier to carve, but they were prone to damage. They were therefore reserved for decoration of the products. It should be borne in mind that any wood can be carved, but they all have different qualities and characteristics. The choice will depend on the requirements of carving being done

3.6.2 Woodcarving Process

A woodcarver begins a new carving by selecting a chunk of wood with the appropriate size and shape of the figure he wishes to create. If the carving is to be several large pieces of wood may be laminated together to create the required size. Once the sculptor has selected their wood, he begins a general shaping process using gouges of various sizes. A gouge is a curved blade that can remove a large portion of wood smoothly. For harder wood, the sculptor may use sharp gouges, chisels, knives, and a hammer. They are local tools forged by local blacksmiths. They were cheaper, sharper, and more durable. They were forged to the specifications of the carvers. The sculptor will cut the wood across the grain and not against the grain of the wood.[60]

Once the general shape is made, the sculptor will use various tools for creating details and then finish the surface. The method chosen depends on the required quality of the surface finish. If a completely smooth surface is required, general smoothing can be done with tools such as rasps, which are flat-bladed tools with a pointed end. They also use knives that are smaller and are used for shaping crevasses or folds.

After the carving and finishing is completed, the sculptor may color the wood with various natural oils such as walnuts, which protect the wood from dirt and moisture.

They are finished with a wax layer that protects the wood and gives a soft sheen or brightens the wood.

3.6.3 Uses of Wood Carvings

3.6.3.1 Digging Sticks

Once the hardwood had been procured, the wood is hardened by placing it on fire. It was then designed to be strong enough to loosen soil, especially for plowing land for growing millet and sorghum. They were carved out of certain hardwoods and reshaped to get the desired shape. This was majorly used by men.

The Tugen also had shorter digging sticks were used by women to break up the soil after the men had cultivated the land. They were simple to produce and were produced for the family members only. Trees were available, and when one breaks, another one will be made by the father, who was the head of the family. Division of labor was practiced effectively by the Tugen.

3.6.3.2 Mortar and Pestle

Mortar and pestle was a device for milling by pounding. The mortar is a durable bowl commonly made of stone, ceramic, or wood. The pestle is a rounded grinding club often made of the same material as the mortar.[61] Together with the saddle quern (a round stone rolled or rubbed on a flat stone bed), the mortar and pestle was the first means known for grinding grain such as millet and sorghum; the grain was placed in a shallow depression in a stone, the mortar, and pounded with a rod like stone, the pestle. Some seeds and nuts and many types of tree barks are also pounding for tanning skins. Some herbs for curing diseases are also pounded using the mortar. A mortar and pestle were used when pounding grain such as millet or sorghum to separate the grain's chaff.

The mortar and the pestle were made using an elaborate procedure. First, a log of hardwood was cut from hardwood trees, but non-toxic and could withstand the pounding process of hard grains and nuts. The carvers ensured that it was wholly seasoned otherwise, it will likely split severally as it dries. The bark of the wood should also be removed as this harbor wood-eating beetle larvae. Secondly, the mortar is hallowed into a vase shape until the mortar cup is the desired depth and size. The carver thoroughly scrapped it using a crook knife or a sharp hatchet to remove any logs' undulations. The top and bottom of the mortar are shaped nicely and then leveled. After removing the outer bark of the log, the outer side can also be scrapped.

The Tugen were conscious not to use medicinal trees such as *sogee* as they consider it a taboo. Mortars are prepared throughout the year. However, after a bumper harvest, more mortars were prepared due to high demand for them. After a bumper harvest, there were many festivities and ceremonies that required a lot of food, especially millet *ugali*.

Figure 3.15 A Mortar and a Pestle.

Source. A photograph taken in informants home in Maoi on 30/12/2020

In western Africa, cooked yam or cocoyam is also pounded into foo-foo. In Uganda, roasted groundnuts are pounded into odii paste, while raw groundnuts are pounded into ebinyewa groundnut powder.[62]

The Africa mortar and pestle are large for heavy-duty pounding, differing from their counterpart standard in western cooking, which is a small utensil for gently rubbing spices.

3.6.3.3 Winnowing Trays

A winnowing tray is prepared from wood and is useful for sorting grain. After pounding or threshing, maize, millet, sorghum, and groundnuts they are then winnowed in a tray to separate the grain from the chaff.[63].

The Tugen made a winnowing tray used to separate cereals from the thrash. The tray was referred to as *keibe*. It was prepared by cutting a suitable log from a felled tree, which was not poisonous. The woodcarver then shapes the vessel to have an oval shape and can be used for a very long time.[65]The size varied depending on the use. The large one can be one meter wide, which can facilitate holding by one person.

After harvesting, the millet was hit with sticks to separate the husks and the millet. It is done carefully not to damage the grain. The threshed grain was then gathered and set to be cleaned by some means of winnowing using *keibe*. This vessel served other purposes apart from winnowing. It can be used for drying grains, serving food, cutting meat and vegetables. In some communities, special trays were used to serve food for festive occasions.

3.6.3.4 Cooking Sticks

After the grains have been pound into flour, it had to be cooked. Most African kitchens have a variety of cooking sticks, or indeed a whole collection of them. They are made of wood and come in all sizes and many different shapes. The most common is the wooden mingling stick with a flat head, used to stir food, but more often to mingle posho, ugali - maize meal or millet meal. [66]

Ugali was the staple food for the Tugen. To prepare the *ugali*, a mingling stick referred to as *burbe* was made. It was cut from a hardwood tree and it had three projections shaped precisely by the carvers. It was used for stirring the mixture. When it was ready, and the flour was well mixed, another cooking stick called *magange* was used to turn the *ugali* until it was tender enough. The *ugali* was left to cook for about an hour. The sizes varied depending on the size of *ugali* to be prepared.[67]

To serve the *ugali,* the Tugen prepared a serving spoon from wood. The hardwood tree was cut and shaped like a knife with a long cutting edge, which was blunt and thick. Tugen men used an adze to curve out wood and make food bowls referred to as *Tubei*. It was the Tugen microwave because it kept food warm for a long period. They were usually for families who ate together and passed food around in smaller bowls. Other smaller bowls were made for soup and meat. The Tugen preferred iron or calabash mugs for soup, porridge, and milk.

Figure 3.16 A serving bowl.

Source A photograph taken in informants home in Maoi on 30/12/2020

3.6.3.5 Stools and Head Rests

Stools and headrests were the most fascinating earliest forms of seating furniture made by the Tugen. With a deep concave surface and elegantly curved legs,, the Tugen could make a whole piece without jointing.

It was made from a tree that was uprooted by elders. It was a single block of the log from wood obtained between stem and roots twisted and had grains that were more durable and could not break or crack. The tabletop takes the shape of legs, and the legs are shaped to have three stands to develop balance. The stool was used every day by both men and women. The women's stool was differently shaped and were firm enough because they used it regularly when cooking and grinding. It was kept in their huts and should not be transferred elsewhere. The men had their stools they used every day when they were sitting for meals or in a meeting. In fact, in meeting, women sat on the ground because they were supposed to be submissive to men. One way of showing submission is to sit on the ground with their children, who were not supposed to have seats on the floor even in the house.[68]

Figure 3.17 A Tugen stool and headrest.
Source A photograph taken in informants home in Maoi on 30/12/2020

Apart from the three-legged stool, the Tugen men had headrests, which they used when sitting outside. It is equated to current pillows. The Dinka of southern Sudan had multi-purpose headrests/stools which provided a convenient place to sit as it is not considered proper for elderly men to sit directly on the ground". [69] They were accompanied by walking sticks which were used by older people. In Cameroon, a wide variety of stools were made. Some were carved from a single block of wood and could be either broadly cubic or cylindrical while others were constructed out of palm, bamboo, wicker, and other materials. In Ashanti, there was a prestige chair known as Asipim used by the wealthy. There were also royal stools such as the famous golden stool among the Ashanti; others are in Bunyoro, Rwanda, among the Kuba and Luba. In many societies, Woodcarving was regarded as a specialized craft.[70]

3.6.3.6 Beehives

Beekeeping (or apiculture) is the maintenance of bee colonies, commonly in human-made hives, by humans. Most such bees are honey bees in the genus Apis, but other honey-producing bees such as Melipona stingless bees are also kept. A beekeeper (or apiarist) keeps bees to collect their honey and other products that the hive produce

(including beeswax, propolis, flower pollen, bee pollen, and royal jelly), to pollinate crops, or to produce bees for sale to other beekeepers. A location where bees are kept is called an apiary or "bee yard".[71]

A beehive is an enclosed, humanmade structure in which some honey bee species live and raise their young ones. A fixed comb hive is a hive in which the combs cannot be removed or manipulated for management or harvesting without permanently damaging the comb. Almost any hollow structure can be used for this purpose, such as a log gum, skep, wooden box, or a clay pot or tube. In many developing countries, fixed comb hives are widely used because they can be made from any locally available material. Beekeeping using fixed comb hives is an essential part of the livelihoods of many communities in developing countries. The charity Bees for Development recognizes that local skills to manage bees in fixed comb hives[72] are widespread in Africa, Asia, and South America. The internal size of fixed comb hives ranges from 32.7 liters (2000 cubic inches), typical of the clay tube hives used in Egypt to 282 liters (17209 cubic inches) for the Perone hive.

Many west African tribes practice beekeeping especially those in the more open (savannah) areas eg the Ewes of Togoland and parts of Senegal. In east Africa, the lango of Uganda,warega warundi, watuta,uyagoma and uzige of Tanzania have various trees utilized by bees to produce honey. According to Dundas,[73] the Kenya hill tribes all keep bees.www the akamba of Kenya are great beekeepers, and among the Maasai, honey is eaten by everyone who can get it.[74]

To construct a beehive, a tree is felled and cut out into cylindrical logs, which are carefully scooped out to form hollows. To carve out this hollow a chisel is used. It was done carefully to ensure the walls of the trunk were even on all sides. The Tugen split

the hive into halves before the beekeeper attaches for installations. In some cases where the trunk was removed evenly, circular disks were prepared to seal the sides. As they seal, they leave some small holes for exit and entry of the bees.[75]

They are attached to specific trees and tied with strings to maintain firmness. At harvest time, the opening on the sides of the hive is split open using a knife and the honeycombs removed. The halves are then rejoined for the bees to start the next honey crop. Harvest of honey from these did not destroy the colony, as only a protective piece of wood was removed from the opening, and smoke was used to pacify the bees temporarily.

Figure 3.18 A Tugen Beehive attached to a tree.
Source. A photograph taken in informants home in Marigat on 29/12/2020

The design of the hive entrance is essential because it determines the quality of the honey. The workers tend to rebuild it by closing some entrance section and leaving suitable space to prevent birds, reptiles, and larger insects such as beetles and butterflies from entering. It also prevents water from entering and destroying the honey.

The hardwoods desired are from the specific tree species. These trees are hardwoods yet comparatively lighter to work with. Termites find the wood sour testing, yet the

flower provides the honey bee with sweet nectar. The sizes of a beehive vary from one meter to three meters. A well-constructed beehive has a lifespan of not less than 40 years. The beekeeper has to be careful and alert with the wax-moth larvae, which seriously damage the hive body by eating away the wood to form shells that protect them during the papal period. Poisonous trees was avoided since honey as food for the Tugen.

Different clans, such as the kimoi clan, specialized in beekeeping on a relatively large scale,[76](kendagor), although other clans did it on a small scale. Clans had to mark their beehives, and every clan knew their mark. Different clans hung Beehives in any territory, and the other clans will respect them. This ensured the solidarity of the clans. Harvesting was seasonal, but beehive making was carried out throughout the year. Beehive making was done by specialists who exchanged the ware with agricultural products which they did not have. This was done through the barter system of exchange.

Honey from beehives served as medicine and cures various ailments such as stomach upsets and fire burns. They are used in the preparation of liquor (*kipketin*), which was highly consumed. They also gave out honey as bridewealth where the groom had to give a barrel of honey to the in-laws. Thus making beehive was very important in the Tugen community, although geographical conditions determined their spatial distribution

Knowledge, skills, and attitudes were passed from generation to generation mostly through word of mouth in the African societies. This is because African societies, just like any other society, share a common ancestry, which has led to the unique characteristics: the ability to adapt the environment to suit the inhabitants. For instance, Leakey (1982) does indicate that the use of tools, the construction of huts all suggest

that human society, including African societies, became much complicated during the past million years. This complication, it has to be explained, was necessitated by the ever-changing societal exigencies and the need to adapt to emerging changes. This understanding provides enough evidence that African societies through interacting with their environments learned skills that were required for them to survive. For instance, the making of hunting tools characterized most African societies, mostly during the time they were peripatetic or nomadic. As noted by Vanqa, wandering in the bush enabled African societies members to know their immediate surroundings such as river systems, the hills and forests, the type of flora and fauna, and other characteristics. This means knowledge and skills about resource management was unquestionably obligatory.

It has to be also noted that the knowledge that Africans had was scientific and as intricate as any other from other parts of the world. Emeagwali (2006) noted that while interacting with their environment and transforming various raw materials overtime, arrived at various hypotheses about nature, the natural world, and society. The fabrication of metallic tools and implements, textile production, traditional medicine, or food processing involved applying various techniques, principles, and propositions arrived at through observation of the environment and experimentation at various levels.

3.7 Conclusion

The chapter provided a descriptive picture of some of the significant crafts that flourished in Baringo during the pre-colonial period. The major industries were iron making, pottery, weaving, leatherwork, and woodcarving, which have been dealt with in this chapter. It captured how the people of Baringo developed an independent

technology using local raw materials, labour and skills and markets without any influence from outside. The Tugen used what was available in the environment to create an indigenous industry that was unique and developed only for them. Each industry was developed for a specific need in society. The study found out that the system was structurally linked to other productive activities and formed part of the local and international networks.

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CHAPTER FOUR

THE BRITISH CONQUEST AND ONSLAUGHT OVER THE TUGEN INDIGENOUS INDUSTRIES 1910 - 1930

4.1 Introduction

This chapter examines the arrival of the British Colonialist in Baringo County and how they influenced the tugen indigenous industries from 1910-1930. In Chapter Three, we examined the various ways in which the Tugen were able to evolve a system that was best suited to the hilly terrain without external influence. However, when the colonialist arrived, they started dismantling the system through policies and disarticulation such as taxation, competition, legislation, and structural changes in the economy because they wanted to establish a colonial economy. As the Tugen struggled to maintain their industrial base, they encountered challenges that adversely affected their natural raw materials. The British found this to be an opportunity to further dismantle the tugen industries by coming up with alternative products, which the Tugen used out of desperation. Destruction continued up to the end of World War Two in 1945.

4.2 The British Conquest

The Tugen community of Baringo County has four distinct groups, namely, the Arror, the Samor, the Lembus, and the Endorois. This division was very distinct and operated almost independently. The colonialists took advantage of this division to create further division among the Tugen, creating districts based on the division.

Before the advent of colonialism in Baringo County, the Tugen had contacts with the European missionaries, explorers, traders, and travelers who had traversed East Africa's interior as early as the 16th century. From 1888 the Imperial British East Africa Company had succeeded in establishing its presence on the Kenya Coast and in

Buganda, as well as along the caravan route linking these two areas, but this did not produce an administrative system.[1]The process of transforming Kenya into a colonial state and creating a colonial administration began in 1895. In 1895 Sir A.H. Hardinge was appointed the first Commissioner of the East Africa Protectorate. Hardinge used former servants of the I.B.E.A. to establish control over the different peoples and the selection of a suitable administrative system. C.W. Hobley assisted him and J.F. Jackson was key persons in these processes among the tugen and other Western Kenya peoples.[2]

The arrival of the Imperial British East Africa Company (IBEAC), a chartered company that was to open up trade between the coast and Buganda in 1895, marked the official contact of the Tugen and the Europeans.[3] The British established an administrative post at Eldama Ravine, in southern Baringo, in 1894, and Fredrick Jackson was in charge of the station. This site was located because it was in an important strategic position that provided food and other requirements to the traders traveling to the North, South, and East of the region. Secondly, the Sclater road,[4] named after Captain Bernard Sclater, the company's military engineer to survey the route from Kibwezi to Uganda, passed through Eldama Ravine. This road made most caravans divert from the northerly route through Lake Baringo to Eldama Ravine for greater security for all traders and travelers. Thirdly, the colonial administrators required a regular supply of food, which was to be bought from the neighboring Tugen community. Fourthly, it was a resting place for the British garrison and a military post where they could launch attacks on the uncooperative groups. Lastly, Eldama Ravine was conducive because the British administrators would get military materials and even additional personnel through the nearby railway station in Maji Mazuri. This was to ensure efficiency in the administration of the region. [5]

In 1895, with the declaration of the British protectorate over Uganda and East Africa,, Eldama Ravine's administration passed from the IBEAC to the British government.[6] This act can be said to have initiated the colonial conquest of Baringo, although the Tugen around Eldama Ravine had already began to feel the impact of the European presence in the region

The colonial administrators experienced continual difficulties in obtaining sufficient food for its garrison and in supplying food to the passing caravans. [7] The Tugen Samor living around Eldama Ravine kept few livestock and planted few grains and therefore had no surplus for sale or trade. The Tugen Samor was self-sufficient in terms of food security and did not cooperate with the British and resisted them. They were unwilling to trade their food with the British. They refused to offer labor to the European farms which had been established around Eldama Ravine. They even refused to offer security to the Fort from external attacks. This forced the British administrators to divert their attention to food acquisition, from 1896 the British started by persuading the uncooperative Tugen to establish a food market in Eldama Ravine but to no success.

The Tugen Arror, on the other hand, did not resist British rule. In fact, they used the opportunity to seize property and expand to neighboring territories. One informant mentioned that the reason for not resisting was unfavorable climatic conditions and that the Europeans took less interest in Northern Baringo than Southern Baringo.[8] They British did not interfere with their independent way of life at that time.

This act of the Tugen Samor prompted Fredrick Jackson in 1896 to look for a solution. First, he encouraged Maasai families from Uasin Gishu who were cooperative to settle close to the Fort and were placed under British protection. They were even given grazing lands in return for their agreement to supply the garrison with foodstuffs. [9]

Secondly, he also encouraged a few cooperative Tugen who were in densely settled areas to assist in food supply to the Fort. This group had taken advantage of the newly enlarged market economy created by the region's British imperial presence.

When all this was going on, the settlers quickly opened conflict with the Tugen and their neighbors. The Maasai who were brought in had already stolen the Tugen cattle and when the Tugen reported the case they were blamed, because the British wanted to assist their allies, the Maasai. When the Tugen were blamed for the cases, they were dissatisfied with the free favors, which sparked off a conflict between the Tugen, the Maasai, and the British. The British obtained more troops from the colonial government through the railway camp at Maji Mazuri.

On 6th November 1896, the British mounted the first punitive expedition against the Tugen of South Baringo, attacking the Kakimor section which was accused of Maasai cattle's theft.[10] The garrison from Eldama Ravine went through lembus, Kakimor, and Kamuruswa, shooting people and burning down huts and granaries. This marked the beginning of British intrusion in the county. A second expedition took place in May 1897 in an attempt to force the Tugen to supply grain to the station. A more powerful military force of 5 Europeans, 220 regular troops, 150 porters, and 200 Uasin Gishu Maasai were dispatched on the resisting Tugen. [11] The military force was so forceful that the region witnessed much destruction of property and life. About 150 people died and the colonial government took around 10,000 herds of cattle, sheep and goats. They burnt down grain granaries and farms were destroyed.[12]

The expedition started in Sigoro where they destroyed grain stores, burnt millet fields, confiscated livestock, and killed many people. The result was that it caused famine in the region as foodstuffs were destroyed in the granaries and the fields. Also, livestock

was lost through confiscation. The productive young men who were guarding the granaries and fields were killed.

The British in 1898 resorted to expeditions by applying a scorched earth policy to force the Tugen to accept British rule. Every house that had no tax receipt was razed to the ground, and all food supplies in the granaries were destroyed. The only things that remained were goats, cattle, and seeds taken in gourds to the bush for hiding by the owners. At the end of it all, they left a burning trail extending from Eldama Ravine to Kapluk in the Kerio Valley near Kapnorok. For the Tugen this was the final straw as far as their opposition to Colonial rule was concerned. In short, it destroyed any other form of resistance to colonial rule by the Tugen.[13] Indeed, the Tugen succumbed to colonial brutality and found out that it was easier to look for various ways of paying their taxes by selling hides and skins and livestock to save their property from being burned. This desperation had the effect of making them sell their produce at throwaway prices to the Swahili and Somali traders. Several Tugen who feared further destruction migrated with their little property to neighboring Keiyo and Uasin Gishu areas. With the destruction, a famine swept through the region between 1896 and 1898 which again led to further migration of the Tugen to Nandi and Elgeyo. [13]

another expedition occurred in 1899, which led the British to establish their rule. Government stations were established in the county, and the Tugen now had access to the influence of a western way of life. The colonial government adopted the Pororiosiek and territorial regions for effective administration. The chiefs of the Pororiosiek had to adopt colonial policies and assist in effective colonial rule in the region.[14] The Tugen were not enthusiastic about the British presence, and resisted obtaining even the trade goods they were selling. This indicated that the Tugen indigenous industries were not

interfered with at the beginning of colonial rule in Baringo County. However, the punitive expeditions and the ensuring drought and famine marked the incipient threat to the indigenous industries.

After the conquest, Eldama Ravine's post became a vast government transport and depot. Many *safaris* had to be supplied with transport, and a lot of them consisted of rations for Indian troops as a large number had been brought over from India to help quell the mutiny. The most critical event in1901 was the formation of a new district in the Eastern Province, which was called Baringo. [15] A post was built at Kalloa, known later as Ribo post on the instruction of Sir H.H.Jackson. Hyder Baker was the first officer in charge. The Tugen again refused to cooperate with them, and they even stole all the government stock and clothing belonging to the officer in charge. They were attacked and defeated. In 1904, Mr. Hobley, who was the sub commissioner at Naivasha instructed Archer the officer in charge of Ravine post, to move the Boma to Ol Arabel. Archer again moved the Boma to Makutani, which was only a few miles away but situated on higher ground. The post remained there until 1912 when E.B.Hopkins was in charge of the post, transferred the post to Kabarnet in the Kamasia hills.[16] The main reason for the transfer was because the district had entirely changed its character. It was now a Tugen district, and the Turkana, Njemps, and the Suk had left and remained in the old district.

Having established their headquarters in Kabarnet, it became the place to administer the rest of the district . In any case, it was centrally located. As the British imposed their rule in Baringo County, they introduced western culture in all fields, for example, buildings, crops grown, infrastructure, weaponry etc. These developments initiated the local populations into the western culture, which destroyed the indigenous systems. The

British colonizers started dismantling the Tugen indigenous industries from this base. However, in some areas like northern parts of Baringo, which attracted less attention because of its arid conditions were left and the British preserved their indigenous systems instead.

4.3 Methods used by the British Colonisers to dismantle the Tugen Indigenous Industries

When the British settled in Baringo, they affected the colonial administration system to be in charge of the various areas of their jurisdiction. District officers were posted to the region, and they were responsible for establishing the departments to manage various sectors. Beech was posted to Kabarnet and was in charge of Baringo District. In his first report, he complained about his encounter with the Tugen. He narrated how the natives used a tiny *Jembe* for hoeing and digging sticks for turning the soil. He went ahead to mention that the Tugen lived a hard life in the hilly country and considered that the community would always require the labour of the whole able bodied male population for its maintenance.[17] However, his reaction was actually to justify the introduction of measures to disrupt the vibrant indigenous economy; He noted that;

> "a people living as the majority of these do, should first of all be placed beyond the reach of constantly recurring famine. This can be affected by eradicating nsect pests; by teaching improved agriculture methods and by increasing the variety of crops. The hill people should be taught to make better huts for themselves; lastly,trades and industries must be created. Tax should be collected in cash and not in kind so that demand would be created for currency-the economic advantages of coinage to natives of a district such as this cannot be over-estimated.'He further eluded that; 'I believe that there will be found in these ives latent potentials of much future Progress. I consider that the future of the Baringo district lies in the hills, provided we choose to give Baringo district a future.'

This quote shows that the colonialist did not appreciate the Natives' efforts and only wanted to impose their systems by manipulating their indigenous system. They did this in the following ways;

4.3.1 Land Alienation and settling of the Tugen in the reserves

The system of land ownership in pre-colonial Africa was managed on a traditional basis. The position of land in African societies was of paramount importance for the natives. It was the premium and the primitive natural resource on which the Africans had to rely on in order to secure their livelihoods. The land also had signed for the Africans not only as a property but also as a cultural marker of the African traditional societies. Moreover, the land was regarded as being the pillar that sustained labor in African sedentary societies. It was the Africans economic capital.[18] The usage of land in the Tugen community was mainly communal and was owned by clans. The clans were given different rights on how to exploit it for various purposes. The acquisition of these rights was basically through inheritance.[19]

The conquest of Africa by the European powers devastated this system of land ownership in three main ways. First, the land was owned by the European colonizers by directly acquiring it for their use, such as settlement. Secondly, the land was used to foster development schemes such as building dams, factories, housing projects, and routes to facilitate transportation of goods and humans. Third, land was used for commercial purposes by encouraging cash crop production.

The intrusion of the British into Africa at the end of the 19th century altered the legal status of the land. The land was lost owing to the signing of treaties between the European powers and the African rulers. The British intention was to exploit the

Kenyan soil and dominate the Africans through the exploitation and deprivation of their means of production, that is, land.

The 1890s witnessed a significant influx of Europeans to the East African Protectorate and mainly to Kenya. The colonial settlement represents the central aspects of colonial policy sought to generate revenues in order to secure a stable financial subsidy for the new protectorate of East Africa. The idea of settlement was championed by the commissioner of Kenya, Sir Charles Eliot, who eagerly called up the European settlers to come and settle in East Africa. The idea resting behind the encouragement of settlement in Kenya was to open up new economic opportunities in the protectorate of East Africa and to make the railway to be a profitable project that could pay back to the British treasury the enormous sums of money spent on it. The 1890s witnessed a large influx of European settlers who came with the hope of staying in East Africa. The first European settled in Kenya arrived in 1896 in central Kenya.[20] This was followed by settlement in other areas, including Baringo county. European Commissioner Sir Charles Eliot wanted to clear land for European settlers who were coming to Kenya and needed to be awarded large tracts of land for commercial purposes.

To make settlement attractive, the British government enacted a set of ordinances, known as the East African Land Order in Council issued respectively in1895, 1897, and 1907, which led to the beginning of organized settlement in the protectorate. From 1902 onwards, land was available to the settlers to purchase or lease. [21]. From the beginning, Sir Eliots adopted a fairly great strategy for attracting white settlers, such as giving free land, grants, nominal rents for all leasehold land, and flexible development conditions for applicants.[22] To the settler mind, this implied unrestricted freedom of disposition, subject only to such restrictions as they considered necessary. From 1904 the British

started occupying the areas to the South and East of Baringo. They encountered a group of Tugen who were also looking for land for settlement. The Tugen herders and European farmers struggled to establish rights to access and ownership over the land. The two groups confronted one another, where the Tugen wanted to continue with an established land use system, and the European settlers started to impose their notion of good animal husbandry by acquiring as much land as possible.[23]

The wetter margins of Baringo to the East and South were considered suitable for white settlement and were occupied rapidly to avoid further confrontation with the Tugen. The process of land alienation began in1903 with the granting of a concession in the Lembus forest to the west of Eldama Ravine to Messrs Lingham and Grogan, who wanted to establish a timber industry in the area. In 1907, the allotment of the first group of Rift Valley farms was made, where forty-seven farms, each approximately 5,000 acres having been alienated, surveyed, and allocated to European claimants. These included lands in southern Baringo in Eldama Ravine to Kisanana in the East.[24]

The zone of European settlement was finally defined along the Baringo boundary by 1920. In 1923, the Baringo native reserves were created under the title Kerio Native Land Unit. This comprised the Kamasia Reserve, the East Suk Reserve, and the Njemps reserve. The Uasin Gushu reserve was retained under the direct administration of Eldama Ravine.[25] Africans were confined to the reserves with vast European settler farms separating them. Fencing of the boundaries between European farmlands and African reserves was done from 1920. The settlers acquired titles to the lands as prove to ownership.

These policies were formulated and implemented incrementally during specific stages of colonialism: the pre-1920 period, which was interrupted by the outbreak of the First

World War; the interwar period which also saw the great depression between 1929 and 1934; the Second World War 1939-45 and the post- War era.[25] The implementation of these policies was characterized by a series of contradictions with which the colonial state had to cope, rarely with any success. There was, for instance, a clash of interests between metropolitan capitalists and the colonial state in Kenya. The colonial state wanted to dismantle the African economy by introducing a capitalist economy and entrenching it into the pre-capitalist economy.

In allowing the alienation and settlement of these areas, the colonial administration had failed to realize, or perhaps had chosen to ignore, the historical fact that Baringo had always functioned as a pastoral community. Restricting the Tugen to reserves could not give them the resources to support them because it interrupted grazing and expansion to new grazing lands.

The alienation of land and the creation of reserves affected the Tugen domestic economy. The land, which was a source of livelihood for the Tugen community, was now converted into a commercial asset. The indigenous industries which derived raw materials from the environment lost their accessibility. The woodcarvers did not have wood, the landowners claimed iron deposits, and the forests were alienated for timber extraction. The wood and fibers which were formerly easily accessible became scarce. The majority gave up the trade as others looked for alternatives, even changing their economic activity.[26]

Before the fencing ordinance was enacted, some Tugen moved to settler farms of absentee settlers and utilized these areas for their economic use. This continued up to 1920, when European farmers began to exert firmer control on Africans in their land. The control imposed on the land undermined the development of traditional industries.

The forested land becomes the property of the government. They passed ordinances to protect the use of the forest. For example, there was no cutting of trees without the consent of the colonial government. They even allocated the Lembus forest to Messrs Lingham and Grogan to establish a timber industry at the Tugen indigenous industry's expense.[27]

As a permanent solution, the colonialists recommended that Africans should be grouped into definite reserves far removed from European centers or any lands likely to be suitable for European settlement[28]. Confining the Tugen to the reserves denied them the rights to acquire raw materials at will. In any case, their economic activity changed to accommodate the colonial economy, which adversely affected the Tugen indigenous industries. The creation of boundaries meant restricted access to raw materials. In an attempt to secure land for Africans, including pastoralists, the British government established “native reserves” with fixed boundaries (the Maasai and others negotiated “treaties” for their reserves to better secure their lands from alienation by white settlers). The boundaries of reserves for pastoralists were drawn with little regard to seasonal variation and their need to move their animals to water and greener pastures. The rigid boundaries also undermined the marketing networks that had previously existed between pastoralists and neighboring agriculturalists.

The colonial government focused on developing commercial agriculture in the White highlands but also made investments in the Arid and Semi Arid Lands (ASALS), especially to reduce overgrazing and soil erosion. Initially, the British supported African cattle production, and settlers used local breeds for their ranches. At this point, the british colonizers incorporated the best breeds of the Tugen cattle into their animal production. The two systems complemented each other. Later, however, the British

isolated local breeds and discouraged African pastoralism through punitive quarantine regulations that confined cattle to particular areas. With no official outlet for surplus stock, the regulations lead to overgrazing and declining pasture conditions in the native reserves, especially after the 1927-1928 droughts.

Land which was a source of livelihood for the entire population was now converted into a commercial asset by the Europeans. It became inaccessible to a great majority of the population. The industrialists who derived raw materials from the environment lost their accessibility. The woodcarvers did not have wood to carve, the landowners claimed the iron deposits, and the forests were put under the government's control.

The land alienation disrupted the pre-colonial economy adversely. Some of the Tugen became landless and were forced to migrate to other regions such as Solai as squatters. [29] Some moved to urban areas to look for paid employment. This disruption did not u augur well for the development of the traditional industries. Therefore, the colonial administration indirectly affected the exploitation of the natural resources used in the indigenous industries. Worst still, the British colonizers started taking the land from the fleeing Tugen, and those who were left behind were even scared to do any meaningful industrial activity.

4.3.2 Forced Labour

Another useful instrument or strategy which destroyed the Tugen indigenous industries was the use of Forced labor. The Tugen were forced to work in the colonial plantations and industries such as sisal plantations in Mogotio and Solai, Maize plantations, and Timber Industry in Eldama Ravine. The Tugen were not used to colonial economy and production system, and thus there was need to compel them by force to work for the colonialists. The new economy was alien to them, and there was no way they could

willingly and voluntarily give their labor force. In any case, the Tugen culture advocated for the use of family labor for production. To force the Tugen to work in the plantations and industries the colonialists employed several strategies to compel them to make their labor force available. Commenting on the colonial order and the use of forced labor in Africa, Chinwezu [30] observed that "having by conquest become masters of the continent, the European rulers of Africa began to seize resources and organize their rule for long profitable stay".

First, they began to take whatever land they wanted, and they assembled African labor to farm in the established settler farms. However, as the African people were reluctant to dispossess themselves of their lands and unwilling to work for Europeans' profit, such land as the Europeans wanted had to be confiscated and African labor compelled. The means of doing this was the adoption by a white ruling race of legal measures designed to compel the tugen to quit land, which they occupy and by which they can live to work in white service for the private gain of the white man. When lands formerly occupied by tugen are confiscated or otherwise annexed for white owners, creating a labor supply out of the dispossessed natives is usually a secondary object. The creation of labor supply out of the dispossessed natives is a secondary issue because the people living on land and make their means of livelihood or survival from tilling and working on the land. Since they had been dispossessed of their lands, they had no other means of survival or livelihood than to work for the colonialists unwillingly. They were compelled to work for the colonialists because they must survive together with members of their families.[31]

In Baringo County, apart from livestock keeping, the settlers grew maize, wheat, cotton, coffee, potatoes, and sisal. Moreover, since the settlers could not work on their farms

themselves, they required cheap labor. In the pursuit of this goal, the following methods were generally applied: the creation of squatter laborers, taxation, the 'kipande' system, and recruitment of labor by chiefs. This was the case also by the Enugu laborers in Gold Coast who were press-ganged by unscrupulous chiefs into work on the coal mines in the early years from 1915 until 1922 [32] The Tugen found themselves confronted in all these processes and sought labor in the settler farms as a response to the above colonial initiatives.

In 1920 large numbers of the Tugen left their reserves and worked on farms in ravine and Nakuru districts. This was the first time that a regular labor supply had left their houses. Considerable work was done on the Nakuru Ravine road and was described by governor and Lord Delemere as the county's finest road.

It is worth noting that the Tugen had realized that it was possible to improve their economic life more quickly by working for money rather than depending only on agriculture or industry. Wage labor which was introduced by the white settlers brought results more quickly than raising livestock naturally. With cash, a Tugen worker could double his wares by buying rather than spending a long time producing an artifact. Wage labor also improved their economic base because a worker with money could employ several other Tugen instead of working it alone. The inhabitants on the lowlands, where drought was most frequent, were greatly alleviated economically by wage labor since they could multiply their limited production using the money they had got while at work.

4.3.3 Taxation

Another important development in the early period of colonization was the implementation of taxation policies. At first, a series of regulated pressures were

applied to secure the necessary labor. These included the imposition of taxes and administrative officers' use to persuade or coerce able-bodied Africans onto the Europeans farms. The earliest colonial measure to subject African people to a crude form of property tax was via the hut tax regulations of 1901, which, to the colonial administration, immediately epitomized the 'sacrament of submission'.[33] Sir Charles Eliot was the architect of the hut tax in Kenya. He issued various instructions on its mode of operation by publishing the regulations in the East African gazette No.18 of 1901. A tax of R 1 per annum was authorized on all houses used as dwellings. This figure was raised in 1902 to Rs 3, and by 1906, the colonial administration was charging Rs 6, which had increased to Rs 7 by 1907 but went down to Rs 5 in 1910 due to the African people to raise the higher figure.[34]

The colonial authority insisted that Africans should pay their taxes in colonial currency. The implication of this was that Africans would be compelled to work either in the colonial civil service or in the colonial farms in order to earn their colonial currency to pay their tax. The colonialists imposed taxes on the Africans for two reasons; the first was that it was a source of labor for their farms, and the second was that they wanted the colonies to bear the cost of the personnel and the administration. The colonialists were not ready to use their funds to run the colonial territories and administration.[35] The Tugen had accumulated wealth in the form of cattle and farm produce, which the colonizers did not acknowledge because it will mean not utilizing them for the much-needed labor. According to the hut tax regulations, a man living with his wife and children in one hut was liable for the tax on their occupied. Given that the African society was then mainly polygamous, the more huts there were in a homestead, the more the tax for the homestead owner. It was also customary at that time too, all grown-up sons lived in their huts even if they had no wives. Therefore, a man with several

wives and children was hard pressed to clear his family's tax liability and that of his grown-up children. Taxation thus punished polygamous families.[36] In the words of van Zwanenberg, 'the argument then explained that a woman's hut, thus belonged to her male relative, who was her owner; hence, a tax on huts was a wife tax was property tax. This provided the simplest and easiest way of differentiating between rich and poor Africans'.[37]

In 1902, a hut tax was introduced to Tugen people to be paid in cash, in kind or labour, upon every native hut in the protectorate. One rupee per hut was the rate at which the tax was to be paid. This was meant to be paid by the head of the household and it depended on the number of huts he had. Most Africans evaded paying the tax. However, in order to counter these evasions, a new hut tax ordinance was passed in 1903 (No 9), which levied the tax specifically upon the owner of the hut and also made it quite clear that any male adults living in a hut owned by somebody else were also liable to pay an equivalent amount. [38]

In 1910, another tax was introduced, known as native hut and poll tax,[39] to widen the tax net because women and male adults above sixteen years were not included in the tax bracket. The poll tax provision of 1910 provided that every male over sixteen years of age was liable to pay taxes. Thus, even though a person did not own a hut, he had to pay a tax for his mere existence. Young men who had not been circumcised and did not have their hut had to find their means of raising their taxes. As a result,, many young men left their homes to search for tax money by engaging in wage labor. After two or three months, they deserted their employment after paying their taxes, which was normally collected by employers acting on behalf of the colonial administration. Most of these young men deserted the employment after paying the tax and thus declared as

defaulters. The punishment against tax defaulters was enormous and overwhelming. Africans did not attempt to evade paying the taxes. Tax evasion was also very difficult because the colonialist devised a very effective collection and accountability system the colonialists held up to date records of adult taxpayers in any community. In the Tugen community, they did the collection through the assistance of chiefs.[37] They were made to see taxation as a civic responsibility to the state. The implication of this was that a defaulter was treated as a criminal and the offence committed was against the state. The intimidator's' approach to taxation was strong enough to compel almost all adult Tugen males to seek employment in the colonial services to earn adequate money to pay for their tax.

By introducing hut tax, the colonial state argued that the tax was entirely a revenue matter and, therefore, concerned only with tapping wealth from Africans in the form of cattle and land. According to the government, there was no accurate way of getting at the true value of this wealth other than by looking at the number of wives a man had.

This was perhaps the most significant source of African frustrations and objections to hut tax. It extensively punished polygamous families without taking into consideration the ability of the family to pay. These regulations were repealed by the Hut Tax Ordinance of 1903, whereby the East Africa Protectorate Commissioner was empowered to impose a tax on all huts and to vary it from time to time provided that the rate imposed would not exceed three rupees per year. Indeed, the colonial justification for taxing according to the number of huts was that it was easy to collect and that, in most cases, there was an adequate number of people to work and contribute towards a household’s taxable resources. Any such person, who lived with them, was

liable for the hut tax on his own behalf irrespective of the hut tax paid by the hut owner. However, at all times, the owner of the house was to be held responsible for the tax.

From the start, the hut tax was extremely unpopular. The tax on houses was imposed on almost everyone; hardly anyone possessing a dwelling, whatever its quality and condition, escaped its incidence. This was a source of great resentment, which drew repeated representations urging either its repeal or revision. People had little cash and many paid in kind. And as the tax levy became more burdensome, the people countered by overcrowding into fewer huts with the effect that peasants were no longer constructing new huts.[40]

The colonial administration countered this overcrowding by introducing in 1910 in the Legislative Council, a Native Hut and Poll Tax Ordinance 'which exacted taxes not only from the owners of huts but also from every adult male who did not own a hut'.[41] This came into operation in 1910, and it became known officially as the poll tax. It was meant to prevent the circumvention of the hut tax ordinance. This act empowered the protectorate commissioner to impose a tax on anyone who was not covered by the hut tax. This poll tax ran parallel to the hut tax. In other words, under the Hut and Poll Tax Ordinance of 1910, every adult male not liable for hut tax was required to pay a poll tax of three rupees. A poll tax was levied on every non-disabled male over the age of sixteen. Of course, the collecting officers did not know whether a youth was sixteen years of age or not, and one rough method of estimating age was to look under his arms to see if there was any growth of hair in the armpit. However, in most other cases, an arbitrary decision was always taken on who was liable to pay a tax.

By 1912, the Tugen headmen were slow in grasping the objective of taxation. The natives looked upon tax as a form of tribute only and not as a means of prosperity. The

District Governor Crew- Read had sanctioned a fine of five hundred cattle due to stock theft cases of the European cattle by the Tugen.[42] He also sanctioned a fifty (Kenya African Rifles) KAR patrol accompanied by the District Commissioner (DC) to collect the fine. This made the Tugen headmen realize that the fine was forced and a punishment. In 1912, chiefs were allowed to employ persons to help them maintain order and assist them in tax collection. It was also the chief's responsibility to call out any number of non-disabled persons to labor without pay on public works. In a nutshell, chiefs in Kenya, according to Ochieng [43] were created to collect hut and poll taxes – an imposition of the colonial powers on the Kenyan people and to keep law and order, and also to provide cheap labour for the public and the settlers'

Coercion often seems to be an essential feature of taxation of peasant economies. As contemporary China experiences also indicate [44], the financial burdens imposed on the rural population have become a significant source of discontent in many poor, small-holder societies and a source of political and social instability. Underlying peasant tax burdens is the relations between state and society and hence the issue of democracy. Taxation became a major cause for the rise of nationalism in African societies.

In 1916, the hut tax was introduced and was being collected in the Boma at Kabarnet.[45] The colonialists thought that the natives should have been acquainted with the station and participate in its development. During the same year, a tax of five rupees for hut and poll tax was paid by the northern Tugen natives to the colonial government. They had shown some indifference of the Europeans whom they even referred to as strangers (*chumbek*) and 'on the approach of a white man bolted into the bush.'[46] Logan took over from E. B Hoskings as District Commissioner took a census of the northern Tugen

and introduced a regular annual tax collection system. He also demarcated the various administrative locational boundaries for an easy taxation system.

The taxes introduced by the colonialists were meant to detract the Tugen from their indigenous industries. The traditional artifacts became expensive due to the unavailability of the products. However, the tax made the Tugen move to the settler farms as wage laborers and earned money to buy these products. Secondly, those who were exempted from taxation continued making traditional artifacts that were used in the community.

4.3.4 Missionary activities in Baringo

The introduction of colonial churches and schools in Baringo County started after the establishment of colonial rule. The missionaries from Rabai near Mombasa arrived in Baringo and first settled in Kiplombe in southern Baringo. They encouraged the colonial administration to establish a station for their security. They faced many hostility from the Tugen in kiplombe, and their mission station was even burnt down. They relocated to Eldama Ravine from Kiplombe in 1907 led by Reverend C.E Hurlbert, the general director of AIM and Messrs Propst and Raynor.[47] In Eldama Ravine they asked the colonial government to give them land for building a mission station. After establishing the station, they used it as a base to penetrate to the interior. In 1908, they traveled along the old footpath to Kapropita near Kabarnet, where they again established a mission station.

In 1913 Messrs Anderson of the AIM established three other stations in the district at Kapropita, Kiplombe Hills, and Elkeben. Up to 1915, the missionary school established in the mission station had registered only five pupils. The missionaries started pleading with parents to allow their children to join a school, which they even referred to as

church prayer school. The Tugen was adamant because theyy considered children to be providers of family labor such as herding cattle. The initial aim of the missionaries was to prepare the children for evangelization and the spreading of Christianity. Other roles were teaching the Tugen how to read and write, plant crops, and build houses.[48] Souten, who was in charge of the station, also aimed to instill respect into the Tugen, especially for colonial authority. However, the Tugen were reluctant to join the Mission Station. Between 1916 and 1917, Dubbeldam and his wife joined Scouten and his family at the AIM Kapropita, but little progress was witnessed. In 1926, Danziel and his wife of the AIM opened up a branch at Kabartonjo thirteen miles North of Kabarnet.[49]

The missionaries had to devise ways of luring the Tugen to accept Christianity. Danziel of Kabartonjo mission started distributing relief food using the mission as a depot. They established another depot in Isaas near Kipsaraman and the process, constructed the Kabarnet, Kabartonjo and Kipsaraman road. In 1928, there was a severe famine in Tugen land, and the people relied on the AIM station for relief food. The people were forced by circumstances to listen to the missionaries. On the other hand, the missionaries took advantage of this to perform even more activities like expanding their missions and constructing of hospitals and schools. Abdou Moumouni argues that the missionaries taught Africans the values of nonracialism, pluralism and nonviolence, which naturally led them to see the hypocrisy in their colonized status[49]

First, they started expanding the number of schools and providing colonial education. In 1931, they began an outdoor School in Sacho, in 1932, they established another one in Kabartonjo. The number of pupils and teachers increased considerably. While in schools the boys at Kapropita and Sacho were taught to spin and the mission girls in

Kabartonjo also learnt to knit socks from their homespun wool for the Askaris in the military camp in Kabarnet

Valuable work was done in giving medical treatment and in teaching the women methods of hygiene and proper care of their children. They won the confidence of the Tugen, who even agreed to go to Kabarnet hospital for treatment.[50]

From the above explanation, it is clear that the missionary education, which was colonial in nature, was not rooted in African culture and could not foster any meaningful development within the African environment because it had no linkage. The Tugen accepted it because they were facing a challenge. Furthermore, missionary education was essentially literacy, and it had no technological base and therefore had no idea for industrial development. Missionary education aimed at training clerks, interpreters, produce inspectors, and artisans would help them exploit the rich resources in the region.

This system was similar to the system in southern Africa where Africans were trained as clerks, interpreters, and good capitalist consumers. Like Walter Rodney, David Chanaiwa from South Africa argues that those Africans educated by colonial powers were taught to see the inherent value of western industry and culture at the expense of their African identities.[51] Colonial education brought about distortion and disarticulation of African indigenous patterns of education rooted in African technology. The introduction of colonial education made Africans abandon their indigenous technical skills and education in preference to one which mainly emphasizes reading and writing

The missionaries played a significant role in eroding the importance of traditional industries. The missionaries started negotiating for land to establish their mission

station, and they established them in Eldama Ravine and Emining, from where they expanded to Kapropita and Kabartonjo. Their activities further interfered with the indigenous industries, especially when they started missionary education where they offered western formal education, which was not in line with the Tugen informal education. The missionaries spearheaded the introduction of formal education. They introduced industrial training for the Africans where they started courses such as carpentry, bricklaying, masonry, and agriculture. The early converts had to apply this skill in the reserves. The carpenters who were trained in the mission built schools and made furniture. The techniques which were learned in carpentry were different from those used in traditional woodcarving. The trained carpenters adopted European tool kits. That is the saw, lathe, adzes, chisels, and sandpaper, which took the place of traditional chisels and leaves used in smoothing the surfaces of furniture. Glue took the place of gum, which was formerly obtained from certain trees. Cupboards were now used for storing item instead of baskets and pots.[52]

It was also through the training by missionaries that the western lifestyle penetrated the district. Western clothing, for example, was encouraged through the early converts. Shoes were worn in the mission station, which replaced the indigenous leather shoes made by the Tugen. Mission girls were taught how to spun wool to make socks and other products, which discouraged indigenous industries. However, the Tugen could still revert to their indigenous attire whenever they were away from the mission stations.

4.3.5 Currency

Before the establishment of colonial rule, the money economy was unknown in most parts of Tugen land. The Tugen economy was essentially based on the barter system. Furthermore, even where the currency was introduced, they lacked general

acceptability. They were too heavy or bulky and hardly divisible into smaller exchange units. However, the British had to introduce the currency to integrate the economy into the world market and international trade. The currencies which were introduced are those used by the colonialists back in the European countries. It was, therefore, easy for them to regulate the use and value of the currency to maintain effective control of the economy and their administration.

Money was introduced into East Africa's interior by the Imperial British East African Company (IBEAC) for trading purposes towards the end of the 19th century.[53] It did not affect until taxation and low wages forced the Africans to acquire the currency referred to as the rupee. This currency infiltrated to Tugenland where the caravans had gone to acquire trade items. The Tugen associated rupees with hut tax because all along, the Tugen people had not known anything about currency. They traded their commodities by barter and did not use the money for purchases. The use of rupees by the Tugen was thus triggered off by the need to pay hut tax in cash. This forced the Tugen to sell animals or work for wages so as to acquire rupees. At the same time, traders began to demand payment in money, using rupees as a means of exchange. Thus the Tugen was introduced to the practice of money economy. Barter trade changed gradually as the money economy took its place.

The British made the currency too tricky for the Tugen to obtain. They did this by making the prices of raw materials and agricultural materials produced by the Tugen to be too cheap. On the other hand, the British made the prices of goods they manufactured to be very expensive so that the Tugen would spend all he had toiled for, for the year or made to purchase a little of the foreign goods. The implication of this was that the Tugen kept on working hard and making their labor services available to the colonialists

to enjoy some of the foreign manufactured goods they required. The consequence of this was that while the Tugen kept on becoming more imperfect, the colonialist profits increased. Since the currency used was controlled by the colonialists, they de termined the character and nature of the Tugen economy's development. The Tugen could not produce items that could have been used for barter trade, which consequently affected their indigenous industries that relied on these items to prosper.

4.3.6 Trade and Commerce

Trade was another method used by the British to disarticulate the Tugen indigenous industry. Prior to the arrival of the British,, the Tugen had their own trade system, which was barter trade. It involved the exchange of goods for goods. The Tugen trading activities were at local and regional markets centers established throughout Tugenland. The trade varied from region to region based on what was produced in the area. The northern Tugen Arror lived in the highlands called Mogoswok and the Kerio valley called Turukwel. They were largely agriculturalists who grew Wimbi and sorghum/ Matama. The southern Tugen or Samor were rich in stock and were considered beef barons of the tribe. These communities exchanged their items mutually. There was also trade between Mosop (highlands), Kurget (intermediate) and Soin (lowlands) inhabitants. Apart from local trade, there is also evidence of trade between the Tugen and their neighbours the Elgeyo, the Maasai, the Nandi and the Marakwet and they were using barter system. Trade was conducted in designated points such as border points, riverside, roadside or under a tree on specific market days. For example, there was a market at Cheploch between the Keiyo and the Tugen where the barter system was used. The Tugen preferred trading with the Keiyo because of easy communication as their dialects were closely linked. In the barter system, the price of an item was determined by a certain number or quantity of the other exchange item. For example, a

cow will be exchanged with a certain amount of grain. The major commodities exchanged were honey, weaponry, mortars, baskets, grains, livestock etc. they were exchanged with agricultural products from the highland areas of Keiyo. [54]

This trade system was disrupted with the arrival of the British caravans in Baringo. Trade routes were established through Baringo to Uganda and also to Elgeyo through Kerio valley. The areas where trade was established in the pre-colonial period became central points for enterprising people. Some of the well-established centres were kabarnet, Kabartonjo, Kipsaraman, Marigat , Emining and Eldama Ravine. As early as 1859 Arab and Swahili caravans entered the region led by Pere Leon Dos Avanchers, who drew the map of baringo.[55] By 1894, some Tugen were reportedly involved in the selling of millet and sorghum to the Europeans and traders who passed through Eldama Ravine on their way to Uganda. They also sold items to the Indian and Kamba traders from Keiyo. It should be borne in mind that Eldama Ravine was the headquarters of the eastern province, and for one to trade, he had to obtain trading rights from the commissioner. On October 16th 1894 a caravan arrived in Eldama Ravine led by Goan Clerk De Silva and wrote a book entitled *Diary of camps* where he recorded his experience. Another caravan led by Martin camped in Ravine in 1895 before proceeding to Mumias in western Kenya. This arrival of caravans introduced the Tugen to external trade.[56]

Indian shops were opened in Eldama Ravine where Hajee Noor Mohammed established shops as early as 1895 as manager of the well-known Ali Dina Visram shops.(kna) Mr Juma Hajee joined his father in the business in 1905 where he opened a branch in Makutani. Others were Saudi Musa who opened a shop in Maji Mazuri. Items of trade were salt, clothes, utensils, beads.

In 1906 Mr Hobley, who was the sub commissioner of Naivasha organised for camels to be procured form Jubaland to be used in the long-distance safaris in Baringo safaris. He had noticed that it was not easy to administer the region because people were scattered, and the region was inhospitable.[57] However, the Tugen had trading items because they were actively involved in agriculture, where they kept livestock and planted crops. They also had products they obtained from the early industries, and they were required to sell the surplus to communities who did not have it. According to an informant[58] a blacksmith from the region, the iron implements were exceptionally unique and in high demand by the neighboring communities and the Arabs. From the available records, the Tugen sold 27,125 goats' skins, 855 sheepskins, and 448 cattle to the Europeans in 1910.[56] Leopard and cheetah skins of full sizes and in good condition were valued at three rupees each while ivory was only accepted when the separate tusks weighed over fifteen pounds at the rate of two rupees and eight Annas per pound. Female ivory was not accepted.

Between 1917 and 1918 Somali traders were the main buyers of the Tugen livestock after they obtained their licenses from Eldama Ravine at 150 rupees[59]. However, the government stopped the selling of livestock except for a few oxen for plowing their farms. The Tugen faced many challenges that did not encourage them into trading, such as the droughts and crop failure. It was not until 1924 that Tugen entrepreneurs first emerged. The northern Tugen only operated small shops which were poorly located. For example, a trading center called Sibilo were an Arab trader called Ali Bin Salim operated a shop. In 1927 the first Tugen entrepreneur in shopping called Arap *Arrorin* from Talai emerged, and for the first time, Tugen began to challenge the Indian shopkeepers. In 1928 another Tugen trader from southern Baringo opened and operated a shop and a lorry. He was called *Arap Sadalla* from Mogotio. [60]

Apart from the shops that were opened, the European settler farmers moved to Baringo to get trade items themselves and considered the region a hunter paradise. They could not rely on the Tugen, who had shown open opposition to the presence in the region. Lord Delemere often went for hunting for ivory, Major Abel Chapman collected Oryn, Major Powell Cotton was an elephant hunter, Arkwell Hardwick was an ivory trader in Northern Baringo and Lord Bade hunted antelopes in Baringo district. [61]

In other parts of Kenya the government introduced a licensing system intended to restrict trade movement in north eastern Kenya.in order to travel, ‘ a permit, with the names of all Somali with a caravan, was needed for this privilege a trader paid a security deposit of Rs 500.’[62] While old patterns of trade were being altered or even destroyed, new groups of traders were emerging. These traders, however, faced challenges or obstacles. They had ‘problems obtaining credit, capital, accurate market information, and access to other resources.’[60]The colonial government imposed legal restrictions against granting credit to Africans. Under the credit to natives’ ordinance, passed in 1903, no credit of more than $ 10 could be given to an African trader unless approved by a district officer. It is a testimony to their resilience that traders increased despite all these obstacles. 1n the 1910’s African owned shops began to spread in the reserves and other African areas. Most of these early shopkeepers had originally been itinerant traders, ‘hawking’ simple consumer goods in exchange for produce, either on their behalf or as employees of Asian shopkeepers. [63]

However, Tugen were not enthusiastic about the British presence, and they resisted obtaining even the trade goods they were selling. This indicates that the Tugen indigenous industries were not interfered with at the beginning of colonial rule in Baringo County. However, with the continued exploitation of the forests for-trade items

by the colonialists, the raw materials became scarce. For example, skins that were vital for the running of the leather industry were reduced, sparing non for tanning. The animals used for food among the Tugen started diminishing, and hunting, which was the source of food, was reduced. A few Tugen got attracted to the European goods and started diverting their trade items to them, which reduced the indigenous industries' raw materials. It left the Tugen with a limited food supply, which weakened them and their economy and left them unprepared for the British intrusion into the area. The British took advantage of the vulnerability to introduce their wares. It also exposed Tugenland to the outside world because the rich nature of the region was now exposed. As early as 1906, Sir Charles Eliot had said that there were jewels of great quantities in some of the rivers and they have not been exploited.[64]

4.3.7 Series of Calamities

The Tugen communities had a network of relationships that integrated them to be one. The nature of kinship and the relationship between herders and farmers are proper economic and social ties that enabled them to assist each other in catastrophe. These network s have particular importance when ill fortune strikes a household, especially when more widespread drought or disease affects a community. According to the Tugen customs, hospitality cannot be denied to an age mate or a clan's mate. In this way, no member of the society could be excluded from assistance in time of need, and enhanced security. These customs could only work when all systems in the society were operating normally.

However, a study of colonial reports between 1915 and 1940 reveals an almost annual catalog of environmental difficulties and diseases that affected both human and

livestock and led to economic decline. The district was experiencing steady deterioration, and the system of mutual assistance in time of need could not work.

To start with, in 1915 an alarming epidemic of cerebral – spinal meningitis led to the death of over 300 Tugen.[65] This disease was prevalent in Baringo though it was on a far smaller scale than 1915. In 1915, there was a climate change that resulted in heavy rains that caused flooding in the region. Records show that the amount of rain was more than usual. This affected Marigat and neighboring Kipcherere, Sibilo and Sabor, where torrential rains and destructive storms were witnessed. The rains were in concentrations between April and May 1917 and the grains that had been planted, notably millet and sorghum, were swept away. These rains continued up to October, and it resulted in the flooding of River Perkerra in Marigat.[66] The River also changed its course and in so doing, left the irrigated fields of Ilchamus without any source of water. The irrigated fields were destroyed, and crops also destroyed. The Tugen living to the south of Marigat did not grow sufficient grain to meet their requirements, and they expected to acquire through trade from the Tugens living in the hills and from Lake Baringo.

This was followed by another catastrophe in 1918 when there was a drought known to Tugen *as Kipngasia*. It was severe and widespread. The name *Kipngasia* was derived from the edible berries of the N*gosiek* tree, which was widely consumed at the drought height. These fruits were gathered and boiled for several hours before the white flesh of the berry could be eaten. Other fruits such as *yaganiek*, *chemoniek* and *sumbeek* were gathered in large quantities and eaten. The Tugen even used to smoke or sun-dry meat to be consumed in dry season but even this was finished. With no grain stored from the previous year, the effects were quickly felt across the whole of Tugenland. This act

forced some of the Tugen to travel across the Kerio Valley to the West and southwest into Nandi searching for grains.[67]

When *kipngasia* came to an end in 1920, and with rains falling, an outbreak of rinderpest followed. This affected the remaining herds along the eastern border of the district.

Another complete failure of rains in 1927 marked the beginning of the drought that became widely known as *kiplel kowo* or the white bones. *Kiplel kowo* was the worst drought within human memory and it was sometimes referred to as *sarangach* by the Tugen, which meant a hardship that should not be talked about. *Kiplel kowo* was so widespread, prolonged, and devastating. By 1929, stock losses had been very heavy, and famine was reported from the district's northern parts. Most families went through tribulations during *kiplel kowo*. Stories relating to the piles of bones of dead cattle, the distances traveled to find grass, the generosity of the neighbors, the humbling of the wealthy, and the stealing of grass from the Europeans through trespass on neighboring farms all showed the magnitude of the catastrophe.[68]

This was followed by locust invasions where the swamps invaded the area in 1927, 1928, and 1929. The vast swamps settled in many parts of the southern and central Baringo, devouring whatever pasture, crops, and green foliage they could find. Areas of several miles were destroyed. Crop production in the hills was also badly hit, the cereal crops of 1927 and 1928 being almost completely lost.

Another drought occurred again in 1933-1934, and it was known as *kipkoikoio*. It was equally destructive like the other two. This drought magnified the level of frustrations and disappointment felt by the Tugen population. For most of the Tugen it was a time of suffering, hopelessness, and despair where life seemed beset continuously with

difficulties. Colonial officials had begun to dismiss the district as a hopeless case, a rural slum whose peoples were forever condemned to poverty. A tone of inevitability had come to dominate the correspondence of officials in the district, reflecting the prevailing mood of the Tugen.

With crops destroyed over such a wide area, the commercial traders in grain who had begun to travel through Baringo by the early 1920s also found supplies challenging to obtain. Those traders, mostly of Asian and Sudanese ex-soldiers based at Eldama Ravine and Mogotio, continued to trade, but their supplies were limited, and the prices they demanded were very high.

Substantial herds of game were found in Baringo, notably antelopes, zebras, elephants, and rhinoceros. With these catastrophes, larger animals were rarely seen, having died because of the drought and being shot out by the demands of ivory traders and European hunters. Only small and scattered herds of other animals remained to provide an alternative food supply.

The Tugen who were dependent on livestock production in the drought years suffered economically. The small export market in hides and skins collapsed as prices fell, and cattle's exchange value reduced. With harvest failures in the more arid reserves such as Baringo, where cattle herding dominated, grain had to be purchased at high prices. Many people saw a dramatic decline in their household wealth. Some suffered famine.

Following the droughts, migrations were witnessed in Baringo, and it was driven by the search of basic needs prompted by a widespread shortage of grains in the hill regions. Those who migrated did not come back, thus depleting the Tugen population. Also, this groups was the skilled young and energetic young men who could have continued to develop the indigenous industries. Some other Tugen moved to the lowlands ‘where

they could eat the meat of the dying cattle'. Other families bartered their children with the Nandi women to obtain grain. Others labored for wealthier kin in exchange for food. Famine must therefore be considered as a significant factor in the many disruptions of the Tugen people. They were forced to abandon their homes and migrate with their livestock looking for pasture and watering points. The Tugen herds went to areas far beyond the Baringo boundary, such as Weseges, Sipili, Marmanet forest, and Subukia where they encountered other problems such as tsetse fly disease.[69] This movement did not give time to the Tugen to develop the indigenous industries.

From 1897, floods, drought, famine, diseases, locust invasions, and hunger spread across Baringo County, and this severely affected the indigenous industries due to the unavailability of raw materials.

Table 7. Droughts and associated impacts in Baringo County between 1917 and 1934

Year	Droughts	Crop plagues	Animal disease	Human disease
1917	Kipngosia		Rinderpest	Influenza
1918	Kipngosia	Stalk borer		
1919	Kipngosia	Army worm		
1920				
1921	Drought		Goat mange	Cerebral meningitis
1922	Drought			
1923				
1924	Drought		Rinderpest	
1925	Drought			
1926				
1927	Kiplel kowo	Locust	Foot and mouth	
1928	Kiplel kowo	Locust	Foot and mouth	
1930	Talamwa	Locust		
1931	Talamwa	Locust		
1932	Talamwa			
1933	Kipkoikoio	Stalk borer	Sheep scab	Smallpox
1934	Kipkoikoio	Army worm	Rinderpest	

Source . Anderson. Eroding the commons

The raw materials, which were mainly derived from the surrounding, became scarce. For example, timber, was used in the running of the woodcarving industry tried up sparing none for preparing wood products. Secondly, labor, which was directed towards industrial production, was diverted towards the food search. These disasters hindered the development of indigenous industries. The calamities made the Tugen to migrate to neighboring areas such as Nandi and Keiyo with their livestock. This led to the stagnation of indigenous industries because the raw materials were left behind as they were migrating. They were left ill-prepared for any development in the future. It disrupted the whole process of industrial development. Although the indigenous industries continued to survive after 1945, the structure, color, and form of some industries such as iron-making, cloth making, and leatherwork were not obliterated.

4.3.8 Settler Farming

The Tugen are predominantly agriculturalists where they kept animals and grew crops, notably maize and sorghum. The output was enough for their daily living, and shortages, they supplemented with hunting and gathering.

However, the nineteenth century saw the imposition of European colonial rule throughout Africa, a process which was endorsed by the 1885 Berlin Conference. The East African Protectorate was to be administered by the German and British as their sphere of influence. This led to the establishment of the British occupation and rule in Kenya. Accordingly, the British had to look for ways of making the colony viable to enable them to to administer the region.

In 1895 Sir .H Hardinge was appointed the first Commissioner of the East Africa Protectorate, and he attempted to minister the region using the imperial British East African company.[65]

Sir Charles Eliot was appointed the east African protectorate's commissioner in 1900 and was an outspoken advocate for European settlement in the protectorate. He wanted to introduce a crown colony type of administration and find new revenue sources for administration and to maintain the railway. Taxation was introduced but was not sufficient. Contemporary colonial land and legislation served his objectives. The 1897 land regulations had authorized the issue of certificates of occupancy valid for ninety-nine years. The East Africa (Lands) Order in Council empowered the commissioner to grant or lease crown land subject to foreign office approval, a development which left the terms of disposal to local discretion. This order was superseded by the 1902 Crown Lands Ordinance, which legalized the private sale of land under ninety-nine year leases.[70]

Administration of the western highlands was transferred from Uganda to the East African Protectorate in 1902, bringing the entire region crossed by the railway under one governing authority. This large area was suitable for European settlement and exploitation. This land however was not vacant and the inhabitants had to be evacuated to leave room for white settlement. The administration of Eliot laid the foundation for European settlement in Kenya. Settlers came from Australia, Canada, Britain, and South Africa. European settlement of this region was underway by 1903 and Eliot’s instructions to his land officer in September 1903 stipulated that no grants besides small plots were to be made to Indians between Machakos and Fort Ternan. The principle of racial discrimination in the highlands was thus officially introduced.[71]

The law officer interpreted African land rights in terms of actual occupation only. Therefore, occupation of the land was asserted by the crown, which subsequently reserved the rights to alienate land at will. On this basis, Eliot proceeded to make

generous land grants to concessionaire interest of which one of 100,000 acres between Njoro and Molo to Lord Delemere was probably the most publicized.[72]

When the Europeans established their station in Eldama Ravine in 1895, their major interest was to establish settler farming because the Tugen were reluctant to sell them food, water, and other supplies. However, a series of invasions mounted by the Tugen against the Europeans delayed their full occupation of the region. The Tugen even burned down house to force them not to settle in the region. All these resistances were quelled by the Europeans, and this pave the way for their occupation of the region. The European administration encouraged settlers to occupy the region. Thus, the first settler arrived in 1910 in Baringo, and he was referred to as Mr. Fortheringhum. He bought about 10,000 acres of land in Eldama Ravine. He later sold some of his lands to Mr. Payzzant and to a well-known settler called P.J.Smith and Hopkins in 1912. By then, there were 22 white populations in the district of whom seven were farmers.[73]

White settlement encouraged the practice of farming along with European models of stock rearing, with exotic stock being introduced for cross-breeding with indigenous stock to provide the basis for the development of beef and dairy herds. The crops grown were mainly cash crops such as coffee, sisal, maize, cotton, and wheat. Most farmers experimented with coffee, but it did less well in Baringo than in the higher, wetter farms of the central highlands. Sisal fared well in drier areas, and major plantations were developed by 1920 along the Baringo boundary of Lomolo and Ol Punyata. It was also grown in small quantities in Kabartonjo. Cotton was grown in Kiboina and Salawa of Kerio Valley, where a ginnery was established. Beech was in charge of the Baringo district, introduced maize from South Africa, bananas, sweet potatoes, and groundnuts. Groundnuts did well in the lowland areas of Cheplambus and Kapkelelwa.

In 1912 Kittermaster had to take Lembere, the Maasai chief, to attend Nakuru agricultural show to see the kind of animals that could be exchanged for his own. He realized that the Tugen were conservative and had to be trained on new farming technology.

The profit margins from these agricultural activities were minimal. The government had to devise ways of encouraging farmers to produce more products. They did this by constructing roads and railway links to the affected areas; for example, a railway line from Rongai to Solai was completed in 1922.[75] With improved access to the rail system in only three years from 1922-1924, the acreage under maize on the European farmlands was already increasing. This paved way for exporting the crops to other markets, which was the target of the European settlers.

However, in 1924 - 1929 market prices for coffee, which represented almost half the total value of all agricultural exports from the white highlands, remained high throughout the period. Sisal farmers were equally not making a profit. The European farmers resorted to maize growing, which yielded not much profit than the other cash crops, which faced stiff competition. In Baringo and particularly Eldama Ravine, forty farms for European settlers had been established by 1926. Maize cultivation was increasing and even doubled between 1923 and 1929. However, price fluctuations affected its production. The farmers received 11.28 bags of maize per acre in 1926, but it reduced to 1.7 bags per acre following the disastrous drought of 1927.[76] Therefore, based on the above analysis, land became the property of the government following ordinances that were enacted, and the government had control of the use of the land as opposed to the Tugen view that the land belonged to the community and had the sole role of determining its use. This curtailed the free use of the land mainly to obtain raw

materials for the indigenous industries. Planting of exotic plants denied the Tugen access to indigenous trees, which they used in their industries. The introduction of maize replaced their indigenous crops like sorghum and millet. Plowing of land was done using modern machinery, which replaced the indigenous hoe and digging sticks, thus reducing the work of blacksmiths. The colonial government required labor to work in the settler farms, and they devised methods of forcing the Tugen to seek wage employment in the settler farms this denied the Tugen the able bodied men who could have participated in the construction of indigenous products.

4.4 Conclusion

This chapter dealt with the colonial intrusion to Baringo County and the ways in which they used to dismantle the Tugen indigenous industries. As the British colonizers settled in Baringo and particularly in their Eldama Ravine post, the Tugen reacted negatively towards their presence. The British launched massive punitive expedition which led to them losing the products that provided them with the raw materials for their industries such as trees, animals, labor etc. throughout the colonial period, the British imposed stringent measures such as forced labor, taxation, land alienation, and unequal exchange rates through monetization. All this forced the Tugen to change their pre-colonial mode of production as they were forced to adapt to the new lifestyle brought by the colonialist Also, the Tugen faced many challenges caused by adverse climatic conditions such as drought, diseases, locust invasion etc. All this destroyed their economic base for industrial take-off. With these two systems operating hand in hand, colonial capitalism eventually started to modify, marginalize, destroy, and eventually subordinate the Tugen pre-colonial industry by utilizing it rather than casting it away.

ENDNOTES

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CHAPTER FIVE

POST ECONOMIC DEPRESSION AND THE RE-ORGANISATION OF THE TUGEN INDIGENOUS INDUSTRIES; 1930 TO 1945

5.1 Introduction

This chapter traced the factors that enabled the Tugen indigenous industries to change in the 1930s. Change, in the current study, implied that some industries survived, others were modified to suit the prevailing situation, and others declined while others disappeared completely. This chapter expounds factors which made the Tugens to respond to changes from colonial influence. The trajectory for the change could be attributed to many factors.

5.2 Re-Organising of Marketing Strategies

The 1920s were characterized by an increased consolidation of the settler economy. There were lucrative prices for settler crops. By 1929 the settlers could have been at the strongest and most productive point of their history.[1] However, the Great Depression of 1929, which was caused by a collapse of the world market system, occurred. Although the center of the catastrophe was in the American capital New York, where the wall -street stock tumbled, this economic collapse affected the capitalist market system over the world wherever its tentacles were spread. In general, the prices of primary commodities in the world market dropped sharply, and colonial trade was reduced to a new low. The depression dislocated the primary commodities export trade.

As a result of the depression, many squatters could not continue working in the settler farms, causing a massive retrenchment. The ex squatters had to move back to the reserves. This forced the government to deliberate on the settlement of Africans in the reserves. In 1933, the Morris carter commission was set up for this purpose. [2]

During this period, however, African farming expanded, and they adopted new crops, new techniques of cultivation and production for export was in the increase the Tugen producers did not escape the ravages of the depression. However, they proved to be resilient and bounced back with more vigor for economic reconstruction. In some other parts of Africa, such as Senegal;

By 1930 families exported groundnuts to Europe , in exchange for imported cloths, utensils and rice. However, even with the prediction of famine and political upheaval, they were able to revert to subsistence production. In 1932, Millet Sorghum and Taro were substituted for imported rice. Homegrown tobacco replaced imported varieties. Honey was gathered in the place of sugar, and local soap and perfumes were produced again, thus stimulating the subsistence economy.

For example, in other parts of Kenya, the Nyanza peasants responded to market changes that appeared as a result of the depression, and contrary to the norm, they benefitted from the post-depression price rise which took place. Their peasant production, including Sesame seed, Groundnuts, Beans, Maize, Fruits, and Millet, continued to expand. To enhance production further, they had to change their production skills. The plow began to replace the iron hoe and traditional wooden cultivation implements.[4] It was during this period, the pre-capitalist economy and capitalist economy operated side by side, complementing each other in the production process.

Generally in Africa, as argued by Reid,[5] the global depression brought some relief for the Africans as demands for cash crops fell in the early 1930s as many settlers faced ruin, and a number drifted home, abandoning land and homesteads and allowing Africans to creep back onto farms, cultivating for themselves and local markets. They were relatively unaffected by the global slump.

In the 1930s, where European settlers dominated, African farmers continued to dominate cash crop production. Groundnuts flowed out of Senegal, and out of Nigeria, too, where palm oil was also central to the colonial economy; the economies of Cote d' Voire, Angola, Tanganyika, and Uganda rested on cotton and coffee. All these territories demonstrated how African producers responded energetically to the opportunities provided by colonial economics.

During the 1930s, there was the building of road networks and the introduction of motor transport, which had a major impact on the Tugen community. Lorries penetrated the interior, carrying commercial agriculture to villages previously out of reach of global trade and opening up commercial opportunities in rural areas. Agriculture intensified and diversified communities often experienced population pressure. Farmers fell back on the pre-colonial habit of moving to new lands to colonize and cultivate, a phenomenon now made possible by the relative peace and security imposed by the colonial state.[6]

5.3 Enhanced desire for Foreign Products

The period between 1929 and 1939 witnessed commercialization and desire for foreign goods. This means that there was an increasing demand cash for various services and commodities. As the Africans continued to play an increasingly greater role in the exchange commodity, their taste for alien products, including footwear, clothing, household utensils, furniture, hoes, plows increased.[7] The African pre-capitalist economy penetrated the capitalist economy, and the Africans were integrated into the world's capitalist system through the importation of foreign goods.

In Nigeria, however, a little of the bulk of the people were affected by the European dominated import-export economy, and the governor Clifford's report to the Nigerian council in 1923 alluded that;

The vast majority of the indigenous populations are still independent of the outside world for all their essential supplies. They can and do spin their thread, weave their garments, provide their foodstuffs, and even, when the necessity arises, forge their tools and make their pottery. For them, imports from Europe are still, in the main, luxuries with which, if needs must, they can wholly dispense, and the sole exception to this in pre-war days was imported spirits of European manufacture.[8]

By the late 1930s imported scrap had all but replaced native-mined iron as the smiths' raw material in Baringo County, except perhaps in some of the more remote regions. An offsetting factor inevitably was the associated decline of the traditional profession of iron ore mining and smelting. In the short period of the British's initial arrival, assorted supplies of foreign scrap began to filter through to Maji Mazuri railway from the south, usually transported by ox-drawn carts, by donkey, or by carriers. [9] These supplies consisted mainly of imported corrugated iron roofing sheets, some iron plate bars from, and long strips of tin that were used for tying up packages of sisal. Since however, both the volume and quality of these supplies were relatively low, native-mined iron continued to be the blacksmith's basic raw material.

Apart from the imported scrap metal, brick making industry was established in Baringo County. In 1943, about 40,000 bricks had been burnt and used by the education officer Berridge to construct the new government school in Kabarnet. An Italian artisan was obtained with three carpenters and two masons. They worked exceptionally well, and their labor was a practical example to the natives showing them new, quickly good work

can be completed in the hands of craftsmen.[10] Most of the wood was from the sawn timber from the nearby forest, such as katimok and kipngochoch. Transport was also improved and was done using a lorry in the boma kabarnet. It became apparent that the Tugen was beginning to value colonial products and appreciating that the world was becoming dynamic. Some of the products were relatively cheaper than the indigenous products, which lost market because the tugen stated buying the cheap imported goods.

5.4 Tugen Cultural Transformation

The colonial activities in Baringo County in the Nineteenth Century caused a cultural transformation of the Tugen community. This has been necessitated by cultural authentication which is a process of assimilating an artifact or idea by a community from external forces.[9] A non-indigenous culture cause change into the indigenous culture. It is believed that the Tugen culture underwent a transformation when the European colonizers introduced western culture in the form of khaki clothes, money, music, and medicine, which was hitherto unknown to them. Simultaneously, the Tugen interaction with their neighbors such as the Nandi, Kipsigis, Maasai, Marakwet and the Keiyo through trade, intermarriage, wars may have caused the transformation.

However, the Tugen continued with their indigenous practices as they adapted to the changes. They continued to weave, for example, for their use, as dictated by cultural practices. Serving bowls for serving food meant to preserve food and keep it warm for a given period, continued to be weaved. The *kisero* for serving ugali for initiates, was well crafted, and it ensured that the ugali was warm for many hours.[11] Ugali was a mixture of millet and sorghum and later maize mixed with water. It was prepared by mingling water and flour in cooking pots until it is tender. It was served with fermented milk and cooked meat. The Tugen made calabashes for fermenting milk which was

referred to as *cheekab mugo* and it resembled mursik prepared in other Kalenjin communities. [12] The science involved in its preparation was so complicated and could not have been prepared using any other vessel.

A variety of baskets continued to be made. It may not exactly serve the original roles of preserving items but has been modified for other purposes. The making and use of cupboards, wardrobes, and cabinets have been introduced and have taken baskets. However, they are used as adornments in sitting rooms, restaurants, and hotels.

The impressive skill involved made some crafters to produce them for purely aesthetic reasons alone. Museums worldwide purchase these beautifully designed baskets for their collections while art galleries sell them as studio items, recognizing their value as collectors' art pieces.[13] Basketry co-operatives have been formed, and they bring income to rural areas through the sale of the baskets and keep the craft tradition alive. Given this wide dispersal of productss, improvements were made, making them bright and colorful by applying commercial dyestuffs to widen their appeal. One can argue that this takes away the authenticity of products, but the Tugen baskets are dynamic, and this is just one of the ways that it has moved forward.

On the other hand, continuity in clothing was influenced by customs, values, cultural gatherings, raw materials, and economic purposes. The value for ethnic identity dictates that the Columbus monkey skin remains the most essential material employed in the construction of cloaks (*sambut*), headdresses *(chepkulet*) and bags (*motoge*t).[14] The study has revealed that the Columbus skin has remained unchanged as the material used to construct the indigenous attire – *sambut*. Their distinctive black and white fur has made them status symbols for tribal ceremonies, although taboos on reckless killing have also helped preserve them.[15] Likewise, the colonial system of administration was

biased, and at the lower levels, chiefs were made to be in charge of the political administration. This allowed them to put on the *sambut* during ceremonies. In any case, the British colonizers did not have a ready replacement for the *sambut*. The Columbus monkey was only found in tropical regions and not in the temperate regions. Thus the practice of hunting them for their skin continued uninterrupted.

Due to cultural authentication, some Tugen boys have joined their neighbors, the Nandi and the Kipsigis, for circumcision, and they follow their rituals to the latter. This was the situation in east Endorois in 1929, immediately after the drought of kiplel kowo, resulting in many members of the prospective chumo age-set traveling to Nandi areas to be initiated. This has led to adopting some of the Nandi cultures, such as using walking sticks called *mukwajit* during such ceremonies.[16] The use of the walking stick can be said to have undergone cultural authentication.

The abandonment of some rituals and beliefs has resulted in discontinuing some aspects of the Tugen industries. Female genital mutilation (FGM) was abandoned to some extent due to the influence of Missionary teaching, which condemned the act; thus no ceremony or prescribed ethnic attire and gifts for those purposes were prepared. The campaign against female genital mutilation in colonial Kenya (1929–1932), known as the female circumcision controversy, is a period within Kenyan historiography known for efforts by British missionaries, particularly from the Church of Scotland, to stop the practice of female circumcision in Kenya. The Tugen girls considered female circumcision as harmful on health reasons and associated the artifacts for conducting it with the practice. The younger generation has no interest in attire and chepkulet.[17] It is only the older generation who still appreciate female circumcision. The circumcision knives stopped being prepared, and even the dress for the girl were no longer prepared.

Ritually shaving of bereaved family members' hair was abandoned, and that meant all the artifacts associated with it were abandoned.

The inferiority complex among the Tugen brought about by neighbors' prejudice led to individuals abandoning their attire. One informant mentioned that he could not wear his attire anywhere, even to the market, for fear of being labeled insane. The ethnic Tugen attire mainly comprised of adornments such as *sanai*, earrings, bracelets, and necklaces. The men had their ears pierced, and earrings which were rounded rings were worn. This culture was abandoned, thus the making of earrings was abandoned. There were no alternatives to replace the practice. The Tugen Women only pierce their lower earlobes, but they do not stretch them. The earlobes which are hanging are not appreciated by the younger generation, who prefer small holes in the lower earlobes. Moreover, the earrings which were obtained through trade from the Europeans were for small earlobes. Most of the traditional attire and beads were only worn during occasions such as *tumdo* ceremonies and wedding ceremonies.[18]

The art of blacksmithing continued in Baringo, especially in the making of initiation knives. They were ritual items that were not changed or modified but continued to be used the same way as they were used in the pre-colonial period. The blacksmiths continued manufacturing them to be used because of both circumcisions for maless and females until the government banned female circumcision. The circumcision knives were made of pure iron, and the process of making them was unique, and was a process that was irreplaceable. Similar studies done among the Mande of West Africa showed that spears were presented to young men after their initiations and as part of circumcision rituals. As spears were the primary weapons used for both war and hunting

before introducing guns, they continue to be considered an important symbol of manhood.[19]

The removal of the two lower teeth (*lotet ap kelegg*) by the Tugen continued. This was because the Tugen believed that the opening would provide an avenue for medicine when someone was sick. The teeth were removed when the children were fifteen years old when the flesh was still tender and ill quickly. Thus, the implements used for removing the teeth continued being manufactured. The role of the blacksmiths did not interfere with cultural authentication.

Taboos associated with some aspects of Tugen indigenous industries were rendered irrelevant with the coming of Christianity and western civilization. Some practices were considered taboos and should not be shared among a certain group of society. For example, the utensils for men and women were different. Children were prohibited from using their parents' beddings or utensils. The husband could not also touch the Tugen belt legetyet until it was removed during a ceremony.[20] However, when people started leading a sedentary life,, these practices were slowly abandoned, especially those living in urban areas. A section of the Tugen who became impatient abandoned and accepted friendly other cultures. For example, iron smiting was a preserve for male members of the society, and it was a taboo for women to go to a blacksmith's house. A blacksmith can curse a society when they do wrong things because they believed he held all the production tools, but when other alternative products were obtained, the Tugen easily accepted them. Christianity played a major role in changing the Tugen mentality towards their culture. [21]

Leather and weaving enjoyed more excellent durability because it was mostly a household activity and the organisation's structure and labor were family-based. So they

continued making them for family use .some of the leather products were prepared specifically for the community, and they were only admired by other communities who had their own. From the 1940s, tugen aesthetics changed. Women began to include a wide range of colors and overwhelmed their compositions with geometric and figurative symbols from everyday life. Symbols were used to represent almost any characteristic and are seen adorning everything from clothing to pottery. Due to these symbols' succinct and profound nature, they are also often seen tattooed on people.

Indigenous technologies do not only include the techniques of making an end product, but they also depend on supernatural powers for their success. The technological processes are governed by rules and regulations and rituals and sacrifices that form an integral part of the overall production. Besides, remedial practices exist to appease the powers that may be, for anyone who might break the rules knowingly or unknowingly. However, the rituals and sacrifices to the supernatural are no longer relevant, and anybody can engage in the craft.[22]

5.5 The labour Re-Organisation and Inventiveness

A further significant point to emerge is that despite the gradual conversion of a large segment of the traditional craft into a more modern form and the changes in technology and labor organization, relatively little dislocation took place in the indigenous social structure. This was made possible by several factors: the continuing strength of traditional Tugen culture and values; the fact that many of the developments within the craft in the colonial period were in effect consistent with pre-colonial practices; and lastly, the fact that the participants in the new infant industry formed an extremely

close-knit group, membership of which was "based almost entirely upon kinship and common residence. People lived close together to do the division of labor of the craft.

The Tugen lived in fear that there will be wars from the British and other external forces. This made them make weapons in anticipation for any other invasion to not get unawares. Bows and arrows wear made, and every male members of the community needed to have. They were also modified to suit the prevailing conditions. They discovered that the British used powerful guns that were very destructive. The age-set systems were reorganized so that the supply of warriors became a continuous process. This meant that the blacksmiths had to manufacture more weapons for the warriors.

Given that the forests were destroyed due to the drought, hunting game reduced, and it was their main livelihood source. This meant that the Tugen had to modify the hunting weapons that will be used with precision. The arrows were made with additional protruding sections to not easily come out once the prey has been shot.

In interacting with the British, Indians, Somalis, and other African groups, the Tugen borrowed some skill and artifacts from them that they used to modify their indigenous wares. For example, the use of wires to make the bows became widespread among the Tugen. Some even learned to use the European gun, especially those who were conscripted into the British army and fought in the first and second world war. They could not have taken their weapons

Another major factor concerns the formation of a web of basically economic networks linking Tugen-entrepreneurs with other blacksmithing groups, both urban and rural. The basic point to emerge is that the reorientation in production served to boost the rural output of traditional craft and intensified these urban-rural relationships. Its economic survival may be primarily explained by the simple fact that none of the

traditional products of the craft were, in this case, 'outcompeted by foreign substitutes; and its expansion was because the domestic market for these crafts, far from shrinking during the period of British rule, indeed increased in time as the numbers and affluence of potential consumers rose.[23] Traders continued selling this wares locally and externally. It was the labor production and inventiveness that changed, but the raw materials remained the same.

5.6 Influence of Western Christianity and Education

Western education structure involved introducing a school curriculum that was taught in a classroom setting and was formulated, fashioned, and relished with western cultural ideals and values. Minimal reference was made to indigenous African social and physical ecology or to African cultural values and ideals.[24] Ruther [25] argues that the missionaries defined literacy as a subordinate instrument employable only to attain religious goals. This led to the rapid acquisition of literacy and Christian values in societies since missionaries were seen as agents or bearers of civilization. Consequently, young people were taught to look down on traditional industries or manual labor, and more value was given to white-collar jobs.[26] This paradigm shift resulted in profound adverse effects on African spirituality and the organization of labor.

After the Tugen made contact with the British colonizers, things took a different turn. Formal education and Christianity came and took root, almost replacing the informal education and religion of the Tugen. In the process, pupils were discouraged from wearing their cultural skin clothes. They were provided with a uniform made from cotton cloth. This started eroding the traditional dress with no alternative given to replace it.

Furthermore, people were getting more and more exposed to the modern style of dressing. The Tugen who were educated and some who dwell in urban centers did not wear the ethnic dress because to do so would be considered backward and inferior. Consequently, education takes away fear; thus the people did not fear combining the ethnic and western styles of dress, especially the younger generation.

With the drastic reduction in land ratio, the number of livestock concerning the population of the Tugen, obtaining the skin became expensive and unavailable easily. Hunting of wild game had also reduced the number of animals who were to provide skins. Skins of wild animals were also tough to get since the ministry of tourism had prohibited their killing.[27] Thus, the Tugen people slowly reduced their interest in these traditional skins, as fewer and fewer people embraced the elaborate traditional attire. Christian missionaries in Baringo started giving the Tugen women leso or khanga a rectangular piece of 100% cotton fabric. The Tugen women adopted the *khanga* as part of their dress and referred to it as *angeet*. It is wrapped around the shoulder and knotted at the chest in the same way as their ethnic attire. Boys were forced to wear shorts and a shirt, especially when they went to school. Studies done among the Kuria (Western Kenya), showed that the missionaries were against their dressing style by implying that it was a sin to wear few clothes and therefore suggest the Kuria women be fully clothed.[28]

The Government Schools such as Kabarnet Government School offered training of Tugen artisans such as Carpenters, Masons, Tailors. This enabled them to practice this skill in their villages producing items that were very nicely made. This led to the construction of timber houses with iron sheets.[17] Contrary to the Western mode of Education, the African societies educated their children through ongoing life processes.

Through certain religious rituals and practices, communal attainment of spiritual ideas was established. This way, children acquired the techniques of communication, making a living and acquiring the means of creative expressions within the culture.[29] Likewise, teaching was carried on informally by family, by the playgroup, through initiation ceremonies, and apprenticeship, given by any professional group into which the individual was adopted.[30] For example, in the case of pottery making, several recent studies have shown that, where the craft is still in practice, the learning is done at home, and it occurs during childhood, and the learner acquires the skills through theory and practice.[31] Due to consistent repetition of the steps involved over several years, the craft becomes a motor skill, and should the learner make any inventions during the apprenticeship, it would only involve operations like decoration of vessels rather than the invention of new forming skills.[32]

The church became a social change channel and instigated early converts to give up traditional clothing, skins, rings, beads, and adopt European wear and decorations. The wage laborers who had acquired western skills resorted to the use of blankets, *sufurias*, jerry cans etc., the British settlers gave them as gifts to lure them into settler farming. They took them to the reserves where a few Tugen embraced their use. Some of these wares were made available in the shops and they were cheap. The Asian expansion in trade with African agricultural surplus produces and imported goods like utensils, textiles, benefited from the shift in consumer patterns away from homemade and locally produced items towards imported items at the expense of African artisans. The process of social change occurred slowly in the district, and by 1940, the impact of western capitalism was indisputable.

5.7 Technological Advances

Given the inherently dynamic nature of technology, conservation of indigenous technologies in many African communities remains threatened because they tend to become obsolete. Indigenous technologies also have a perceived lack of value-added for the end products, depressing market demand, hence making the practice unattractive to the practitioners.[22]Although traditional knowledge is essential for indigenous technologies, artisans can manipulate their traditional skills to cope with modern demands and to remain relevant. This is possible where the technology is not socially embedded, and the production processes are not considered delicate and hazardous since they do not involve the transformation of the raw material from one state to another through firing. These would include carving, bead working, weaving, and traditional architecture. These technologies do not require craft specialization, and the knowledge is not passed through kinship. Any interested member of a traditional society can learn the skills and practice them as they wish. Therefore, several traditional products that rely on skill which is not specific to individuals or particular communities are still in production, though not in their pure traditional forms and with a high degree of modifications to suit the changing market demands and cultural dynamic.[33]

However, technological advances have resulted in mass production of items that are easily availed to the Tugen consumers. The Tugen can buy material such as the *panga* from any shop and use it. In any case, the Tugen who had worked in the settler farms as wage earners had enough money to purchase these items. Some had taken part in the First World War and had experienced the use of these items, which they appreciated.

Changes in South Africa in the 1940s were influenced heavily by the arrival of new materials from Europe and the Eurocentric view about the body and clothing.

Traditional clothing made with local materials was incorporated with new style, and items from Europe. Glass beads and plastic beads from Europe added new materials to the definitive collection of materials that South African indigenous people used to make beadworks. They articulated the pre-capitalist mode of production to their mode of dressing.[34]

The British colonialists introduced western wares such as *pangas*, axes, and hoes, which were made of iron. They were meant to be used in the farms to produce agricultural products such as maize, beans, coffee, sisal, which were not indigenous to the Tugen. The instruction given was that they should clear the land using *pangas and jembes*.[35] The Tugen were used to the digging sticks referred to as *mogombe*. They also practiced shifting cultivation due to the nature of their hilly land.

Further, the colonialist introduced the use of tractors to plow the land. Most respondents did not object to the new technology, but they were concerned about the complete negation of indigenous technology. Kobilo Chesang [36]from Kabargoge stated that 'Development is good, but then everything old should not be destroyed. We should try to keep some of our good old items such as food and tools.' She was concerned about the wholesale acceptance of new technology. Although the tractors saved time and are more efficient than manually operated technologies, women could not claim ownership. They were considered impersonal and had no intrinsic qualities beyond their use. Indigenous technologies were personal, and the food prepared using them enabled them to touch, smell, and judge.

The grinding stone was tiring and took much time, grinding the flour and preparing the food. The flour was basically for preparing *Busaa,* which was significant foods for marriage, circumcision, and baby naming. These were ceremonial food, and when you

cease to prepare them, you abandon your traditions. Although new forms of foods become part of the Tugen diet in the 1930's Kimoi Chepkieng [37]still believes that indigenous food still has more to offer than the new food.

Jerono Kandie, [38,] who represented the younger generation, saw the new technology as a source of positive alternatives and a timely blessing. 'I think all these were appropriate for my parents' era. The Grinding Stone, Mortar, and Pestle now have alternatives.' Admittedly some women did not have alternatives but to take advantage of these choices depending on family financial capabilities. The study noted that women who committed to using the new technology faced severe constraints if they did not have financial resources. It was clear that the younger generation who had not acquired the skills and knowledge to use indigenous technology were placed at a disadvantage when they could not afford to purchase new technological equipment. However, those who could afford embraced the change. Change is inherent, and if one does not move with the change they will be left behind.

However, the *pangas* and the *jembes* were not suitable for the rocky terrain, and they broke quickly because they were not pure iron. Some Tugen people insisted on using their iron implements made of local iron with their specifications. The technique helped sustain iron smelting in the district. The blacksmiths, whose status was lowered to repairing *pangas* and *jembes* lost their social position in the community. When the Tugen insisted on using their implements, the production increased. The wooden digging sticks continued even up to 1963 because they were made based on the environment's dictates. The political instability during the struggle for independence necessitated the production of war implements such as spears, bows, arrows, and clubs. The political consciousness created by the Tugen who had gone to the Second World

War helped to sustain the traditional industry. There were also civil wars with their neighbors, notably the keiyo, in 1950 and the pokot over cattle theft. The wars made the blacksmith design arrows and spears which could be utilised during this time. One informant, a police reservist, insisted that even if the European weapons were powerful, the Tugen bows and arrows were powerfully effective, and should not be discarded. (*Amomete chebo kuko*) [39] every male adult kept a quiver of arrows in his house. The way the arrows were designed could not be equalled with the making of any other weapon. Even the poison was unique because it can kill animals, and the animal will still be eaten as food.

Due to acculturation, the Tugen adopted farming and livestock rearing and engaged in very little beekeeping and hunting. The adoption was determined by deforestation and changing weather patterns, thus reducing honey availability and the need for constructing *motoget* honey bags and the construction of beehives. Marigat has been the key producer of honey and had the potential for beekeeping. The situation changed over time because of the general increase in both human and animal population in the region. The increased population was caused by various improvements in infrastructure, water resources, and health facilities. Most of the land has also been used for other uses such as game parks and irrigation, leaving less land available for beekeeping. Even with these limitations, honey remained basic in the Tugen community. There has been no substitute for honey as medicine and for making the honey beer *kipketinik*. Every household had to keep a reasonable amount of honey, and that meant the construction of more beehives and the accompanying materials for use in honey harvesting.[40]

Ironmaking continued to survive because local iron was preferred, both by the producers and the users, for qualitative and cultural reasons. It was generally of higher quality than imported iron. The durability of the implements was admirable. Moreover, local iron was associated with ritual, religious and cultural practices that were against imported iron. Like in other places such as in Nigeria Pole suggested that " It was not until imported iron was cheaper by a factor of six that preference for the local product was outweighed" for some smelters, imported iron was not an alternative raw material if they could afford to buy it.[41]

Woodcarving, which led to the production of bee-hives, has continued to survive during the colonial period. The present work brings to light the case of an ancient craft industry which not only survived in its preexisting form during the colonial era, but in reality, expanded, and, amongst one group of craftsmen at least, was eventually transformed into a modern, bee-keeping industry in Baringo.

Technological advances in textile production resulted in the new mass production of fabrics that were readily available to consumers. Thus cotton fabric was available to be used for the making of cloths with a different designs. Cotton growing was established in Baringo, and a cotton ginnery was put up in salawa. The development boosted the production of cotton cloth in the district.

Patternings of indigenous artifacts in most parts of Africa have ensured that the crafts continue to survive. Patterning baskets can be in the form of decorative bands or geometric shapes; lozenges, triangles, diamonds, star or flower shapes, zigzags, swirls, or chequerboard motifs. The use of different contrasting colours can emphasize the design of the pattern or the fiber can be left in its natural state, producing lovely textural effects. Weaving an intricate design into the basket can be equally lengthy a task as

preparing the fiber. Each country and community in Africa have "master weavers" who guide aspiring weavers to improve their skills and the essential prep work for a basket. A 'Master Weaver ' in the community acquired skill in fiber preparation and dyeing. Such as tightness of weave, transition of pattern and design, design spacing, ability to shape large bowls, create unusual pull at the same pressure ensuring an even basket.[42] *Given this wide dispersal of product, bright, colorful commercial dyestuffs have been applied to widen their appeal and make them 'market-friendly'. One can argue that this takes away from the authenticity of the product, but African basketry is a dynamic thing, and this is just one of the ways it has moved forward.*

5.8 Anti-Poaching Policy

Between 1895 and 1963, the colonialists were out to destroy the Tugen by destroying their economic livelihoods. Although the Tugen had very organized crop, animal, land tenure systems, the colonialists described them as people with no fixed abode. Since the colonialists knew the real truth about the Tugen, they planned to justify their allegations by mistreating the Tugen, as they felt threatened. Hence, the Tugen were declared landless and became trespassers and squatters on their ancestral lands in what later became Government Land, originally Crown Land.[45]

Historically, the Tugen are known pastoralists, agriculture, hunters, and gatherers before the Kenya nation was born in 1895. The Tugen ancestral land has been intact ever since. The Kenya government banned game hunting in 1934 when the east Africa professional association was created to regulate the hunting of wild game, especially elephants facing extinction. The act further increased Tugen problems, with some government officers viewing the Tugen as lawless poachers. They hunted gazelles, antelopes, and tree hyrax mainly for food. With the restriction on poaching, their

traditional sources of food were also restricted, and they were compelled to an increasing dependence on arable cultivation and cattle keeping. The limited areas at their disposal, the absence of secure land tenure, and their tradition was supposed to prevent them from becoming very successful arable farmers.

Despite this, the Tugen has been able to sustain without any external assistance. They have led their normal way of life despite the pressure from hostile quarters that have institutionalized marginalization. The Tugen were self-sufficient in forest products except for a few irons to make arrowheads, spears, and knives. The products were easily obtained from their neighbors. The secret of their skills and expertise in the hunting of wild game lay in their marksmanship with their powerful bows and arrows, which they made precisely and with skill. Secondly, they had skills in management and hunting dogs, which helped them locate where the wild animals are and assist in chasing them. Thirdly, their ability to recognize and identify both flora and fauna obtained through gathering. They also have good mapping skills and knowledge of the forest and hilly terrains. Finally, the Tugen sharp eyesight coupled with good training skills in hunting and gathering. These factors gave the Tugen an advantage over the colonizers that they used to continue hunting even with anti-poaching restrictions. They were able to obtain skins, logs for making farming implements, lianas for making baskets. the Tugen even devised ways of storing meat and other foodstuffs for a long time through smoking and drying. All this was practiced in the Tugen Hills, where all the items needed by the Tugen were available. The culture of begging and destitution is unheard of in the Tugen world. [46]

5.9 The Restrictions on the use of Forest

Before establishing British rule in 1895, Kenyan communities occupied certain portions of land where they lived either as pastoralists, cultivators, or as hunters and gatherers, while some communities cultivated and fished. Their land laws were the customary laws. After the the establishment of the British rule in 1895, the Crown asserted it was the sole owner of all the land and defined the rights that were to be recognized.[47] This was made clear in the Crown Lands Ordinance, which was effected up to the 1930s.

The British colonial administrators executed evictions of the Tugen from their ancestral lands. In these evictions, those who had remained on lands converted to settler farms were forced into the reserves, particularly the forests. However, these forests had already been declared Crown Land. Therefore, the Forestry Department was unwilling to allow them into the forests, and further evictions took place. Fierce resistance led to a ceasefire between the Tugen, the colonial administration, and the white settlers. The department led to the Morris charter agreement dated 23rd September 1932. [48] In an attempt to secure land for Africans, including pastoralists, the British government established “native reserves” with fixed boundaries (the Maasai and others negotiated “treaties” for their reserves to better secure their lands from alienation by white settlers). The boundaries of reserves for pastoralists were aligned with little regard to seasonal variation and their need to move their animals to water and greener pastures. The rigid boundaries also undermined the marketing networks that had previously existed between pastoralists and neighboring agriculturalists.

The history of Kenya in the 1930s was one of trying to increase the indigenous people’s security of tenure, and since the economy was agricultural, the land question was a constitutional issue. The British government appointed the Kenya Land Commission,

which inquired into the land issue and made its recommendations. The commission developed far-reaching recommendations that resulted in the establishment in 1938 of Land Racial Reserves. Under the Forest Act, , land, which was once a forest, could cease to be a forest. The Forest Act, Chapter 385, came into operation on 1st March, 1942.[49] This is an act of parliament to provide for the establishment, control, and regulations of and forest and alienated government land. Forest areas mean an area of land declared under section 4 to be a forest area.

Section 4(1) empowers the Minister from time to time, by notice in the Gazette:-

a. Declare any unalienated Government land to be a forest area:-
b. Declare the boundaries of a forest and from time to time after those boundaries;
c. Declare that a forest area shall cease to be a forest area;

The Forest Act was enacted and became operational on 1st March 1942.

The policies were inclined towards the expansion of capitalism and did not auger well with indigenous industrialists. The colonial state acted as an agent of metropolitan capital by introducing coercive policies forcing the Tugen to change their living and consumption habits. The British settler farmers notably advocated for policies that expanded their productions and markets by increasing exports and excluding competition from other supply sources. The forest act was to deny the Tugen access to forest products, hence demanding their products such as utensils and plowing hoes. However, these policies made a section of the Tugen to continue with their wares to suit their hilly environment where the British colonizers could not alienate. It was only in the southern Baringo areas where the Tugen industries were severely interfered with by the British colonizers. They had to acquire them from the Tugen Arror, who continued to produce them. The Tugen neighbors such as the Nandi, Keiyo, and

Kipsigis continued trading with the Tugen artifacts, which made them continue producing.

The manufacture of weapons was unique to the Tugen. The British did not know how they were made and even how the poison was applied. The idea gave the tugen an advantage, which enabled them to monopolize the art. Moreover, they devised new hunting techniquess such as trapping and the dogs, which proved to be effective. Thus, the making of clothes using animals' skins continued, though they were subsidized with the British's cheap cotton cloth.

The artificial creation of landlessness due to colonial land policies affected the Tugen industries. However, the few resources that remained were shared by the Tugen for the equal benefit of all. The Tugen culture called for mutual support for each other and being mindful of other's welfare. The wooden sticks for plowing were shared and the pottery clay that various clans can obtain from other clans. It was declared a taboo to steal or destroy another person beehive because the land owned by the comminity , and hives can be placed in any territory as long as they were marked. The Tugen evolved a culture suitable for the community, and it survived even with the British influence.

The government's many policies and legislation regarding protecting and promoting local industries were mostly paper declarations. The Tugen realized the attempts to use legislation to weaken their industries. They used the knowledge to perfect their wares.

Climate shift in the nineteenth century towards drier conditions severely slowed the natural rate of replacement of species and original forest which was exploited. Pressures for charcoal supply from charcoal dealers in urban areas demanded the exploitation of younger species, thus interfering with the replacement of cut trees.The exploitation did not deter the Tugen from making iron products that required charcoal for smelting. The

Tugen modified the furnaces to have those which conserved charcoal and continued making iron implements.

They had to adapt to the changing climatic conditions and create new items that can be utilised during this period. They became creative and modified the indigenous wares. They used the experience to make better products or plant crops that will withstand the harsh climatic conditions. Their indigenous crops of millet and sorghum were drought-resistant; thus they continued planting them using their digging sticks. The cooking of the food continued to be done using the cooking pot because there was no change. However, human and animal diseases proved a challenge, although they had to make more mortars and pestle for crushing the herbs for use. They even made baskets and pots for storing food in case of a catastrophe like a drought and famine. They resorted to trading where they acquired the necessary items. The catastrophes instilled the act of hard work and innovation on the Tugen, which helped them devise ways of improving their lives when there is a challenge. For example, they could dry the food products so that they consume them during periods of drought.[50]

Some of the trees for making furniture such as the stools became extinct. Climatic conditions also changed, which led to deforestation, further destroying the trees. Lianas and fibers for making baskets disappeared, and thus, the Tugen lacked the raw materials to use. Firewood for smelting iron reduced due to deforestation, and clay for making pots was minimal. The experience of the Tugen made them venture into other fields so that when a catastrophe occurs, they will not suffer like before.

5.10 Conclusion

In this chapter, the study found that the production of industrial products was a significant branch of the pre-colonial economy, and any change attributed to it must be

considered seriously. It determined their way of life, and the survival of the community lied entirely on the industry. The study found out that during the colonial period, the Tugen continued with their indigenous systems even with the European colonizers' persistent attempt to dismantle them to affect the colonial system in the colony. The initial reasons that led to the innovation of making indigenous items were still relevant. Given that the raw materials were obtained in the environment, the Tugen saw no need to abandon the crafts.

In most cases, there was no suitable replacement for the artifacts. It became possible to modify the artifacts to suit the prevailing situation. The study found out that the Tugen did not develop a strong interest in European products and used them with the European names. They did not coin a word for it. However, they were not rigid and abandoned those industries producing obsolete products. Apparently, the production and labor pattern changed, but the raw materials were still the same. Loss of interest and subsequent demise of traditional technologies is attributable to several factors among which Christianity and Western education have played a significant role. These factors include labor intensiveness, low market prices, poor marketing strategies, competition from metal and plastic products, and rapid shift from traditional cultural values to Western values' embracement. The latter has seen eligible youth apprentices move to urban areas searching for jobs and tutors abandon their crafts.

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CHAPTER SIX

POST WORLD WAR II AND THE TRANSFORMATION OF THE TUGEN INDIGENOUS INDUSTRIES; 1945 TO 1963

6.1 Introduction

This chapter examined the crucial period of experimentation and transition amongst artisans within the Tugen community. It involved experimentation with the new, substitutive manufacture of modern, imported metal wares and transition from an economic system inclined to traditional needs catering for modern consumer tastes. The term 'transitional' is used deliberately to designate the emergence of the modern nature of the industry, which has sprung up since World War 11. World war 11 marked the beginning of the major transitional stage in which emphasis gradually focused on African agriculture. [1]It is a system that is still based upon indigenous technology and has not fully entered the modern formal sector. This ultimate step is, along with the emergence of a group of successful entrepreneurs, is the concern of the chapter. It established how the Tugen responded to changes witnessed in the Post World War II period, such as changes in labor, forests, agriculture, trade, and production and marketing of the products. The study established that the Tugen indigenous industries continued to survive and even improved in this period in terms of the range of goods produced based on what was determined by the prevailing market demands.

6.2 Impact of World War 11

The Post-War developments under consideration have their roots in the War itself, a period of general economic stagnation that proved fortuitous to the development of the import-replacing industry. In the years preceding the war, there had been a growing consumer desire for a large variety of imported European hardware, especially door-bolts, hasps, hinges, shovels, and head pans, all of which were needed for the

construction of an increasing number of Western-style buildings. During the Wartime period of scarcity, shipments from Europe of manufactured goods were severely curtailed, including essential metalware products. At the time, the lucrative wholesale and retail trade in these products was reduced. The impact of world war 11 was such that by 1945, it was clear that both Europe and Africa had entered new chapters in their respective narratives and those new conversations would be required between them, perhaps for the first time since the consolidation of imperialism in the 1900s.[2]

One can only understand the post-war developments in Baringo's industry with knowledge of the prevailing situation before, during, and after the war. Before the outbreak of the war, Baringo was already set for a dramatic acceleration in rural change pace. The Kenyan administration was committed to developments in the African Reserves.[3] Baringo's new District Commissioner Hyde Clarke had drafted a new scheme in 1939 to rehabilitate the district. He had proposed a gradual process of developments rather than immediate clearance of land and legislated control. However, when the war occurred, Hyde Clarke's proposals were suspended from 1940-1944. There was the need to prepare a plan for post-war reconstruction, and rehabilitation works in the wider Baringo. Several factors informed this decision.[4]

First of all, Africans were recruited to serve in the War. According to Shiroya [5], about 98,000 Kenyans served in the armed forces in one capacity or another at home or abroad. The irony of using "unfree" African soldiers to fight against German imperialism and die for the freedom of the allied countries in Europe, the Middle East, and Africa itself was of great concern. However, they learned modern military skills in battle and demonstrated leadership abilities. Many of them performed acts of bravery and endurance that should have banished once and for all any racist notions that

Africans, given a chance, could not measure up to Europeans. Once the war ended, African veterans felt that they had earned at least the right to be treated with respect. Basil Davidson quotes a Nigerian soldier who wrote home from India during the war:

We all overseas soldiers are coming home with new ideas. We have been told what we fought for. That is 'freedom.' We want freedom, nothing but freedom.[6]

African veterans resented very much the lack of gratitude shown by their colonial masters. Many British veterans were rewarded for their part in saving Britain and her empire with generous pensions and offers of nearly free land in the colonies. The African soldiers were given handshakes and train tickets for the journey back home. They could keep their *khakhi* uniforms and nothing else. After returning home, these African soldiers were willing to use their new skills to assist nationalist movements fighting for freedom that was beginning to take shape in the colonies. Service in the colonial army made it possible for Africans from different regions of the same colony to meet and get to know one another, an important step in the breakdown of ethnic barriers and shared identification with the country as a whole.

Beyond the military and leadership skills acquired and the sharpening of contradictions inherent in colonized Africans fighting in wars to save their colonial masters from the tyranny of a fellow white man (Hitler), the world war had a critical psychological dimension. Because the conquest of Africa had been accomplished so thoroughly and so effectively, a myth of the white man's superiority and invincibility had developed. The white man, through his policy of racial segregation in the colonies and his harsh treatment of the "natives," had nurtured this myth. He had behaved in Africa with impunity, as though nothing the African could do about it. At least for the African soldiers who had fought side by side with the white man, the war experience changed

all that. The Africans noticed that, in war, the white man bled, cried, was scared, and, when shot, died just like anyone else. They also saw that he displayed a range of emotions and abilities that Africans knew they had. It dawned on the African that there was no difference between him and the European beneath the skin. In the words of the Zimbabwean nationalist, Ndabaningi Sithole, "This discovery, for indeed it was an eye-opening discovery, had a revolutionizing psychological impact on the African."[7] From that point on, it would be impossible to convince the African that the Europeans was some kind of "superman."

Finally, economic conditions deteriorated considerably in the colonies during the Second World War; high unemployment, accelerated rural-urban migration resulting in overcrowded cities, inadequate schools, and health facilities. All resources were diverted to the war effort, and Africans were coerced to produce more to feed Europe even as they were not producing enough to feed themselves. Africans were taxed more, and forced labor became more widespread. European colonial powers were exhausted physically and economically after the war. Thus, they were not willing to commit substantial resources to improve their social and economic conditions in the African colonies. They were unwilling militarily to suppress nationalist movements that had been fuelled by the devastation of the war.

In effect, World War II marked the beginning of a central transitional stage in which emphasis came to be gradually focused on African agriculture.[8] With the focus on agriculture, the implements for use such as plows, tractors had to be devised, which involved industry.

Upon returning, a number of the soldiers were recruited into the Tribal Police and some as Headmen while others entered the Government service as lorry drivers, agricultural

instructors, trained artisans. Yet, many more were to become better farmers as they were more receptive to better methods of farming. Shiroya [9] has shown that the average askari returned home with better general education and skills than his non-veteran counterpart. Zeleza observed that the crisis was a sober inspiration from which future reconstruction sprang[10]

6.3 Implementation of Development Plans

The onset of World War II and the growing demands for agricultural goods made pastoralists to manage pastures and grazed individually-owned livestock extensively to meet the demands. By the end of World War II, the quality of (Arid and Semi-Arid Lands) ASALS had significantly deteriorated due to the colonial government's policy of forced sedentarization of pastoralists. The British ordered destocking (a reduction in the number of livestock), but the measure provoked considerable local and political dissent and was soon abandoned. In 1945, the African Resettlement Board was created to address land degradation; the Board was later taken over by the African land development Board (ALDEV) [11] as an agency of the development and reconstruction Agency (DARA). ALDEV was charged with implementing the Ten-year development plan (1946-55), which had much wider objectives.

By 1948, the whole process by which colonies planned for economic development had been radically overhauled, and each territory had been encouraged to prepare a formal development plan of a wide-ranging and integrated nature. This shift towards a more centrally planned and coordinated development program became the guiding principle of post-war colonial policy throughout British East Africa. The first development plan was for 1946-1955

The Ten-year development plan was intended for all African areas, but ALDEV efforts mainly concentrated in the ASALS, especially in Machakos, Kiambu, Kajiado, Baringo and Narok districts. Pastoralists were organized to occupy large grazing schemes and supported by various government projects, including tsetse fly eradication, locust control, and vaccination against rinderpest virus, soil conservation, afforestation, boreholes, dam construction, and small scale irrigation. Marketing was also developed to some extent, and stock routes were organized between the ASALS and urban centers.

Grazing management plans were developed for the initial grazing schemes, but ALDEV did not well enforce them. Pastoralists readily accepted the short-term benefits but continued to move outside the schemes and migrate in search of pasture and water during periods of hardship. Most pastoral groups also viewed the colonial administration with suspicion and believed that the British did not understand their cultures' real nature or way of life. Moreover, ALDEV efforts were so extensive and expensive that they were suspended in the pilot districts and not expanded or replicated in other areas. This planned development ensured that the Tugen produced quality products and it motivated them to venture into sustainable economic projects. From the proceeds of their products, they improved on their industrial base with a constant supply of raw materials.

Planned irrigation development was established during the period after World War II. The need to feed the British troops in East Africa during the war was another event that triggered irrigation development. They were established in 1946 when the ALDEV embarked on a comprehensive agricultural rehabilitation programs in native reserves whose primary aims were to contain African agitation for land occupied by the European settlers.[12] The onset of the Mau Mau uprising and agitation for independence

gave an added impetus to this program and initiated many irrigation schemes using the Mau Mau detainees as free labor.

6.4 Recommendations of the Swynnerton plan

In 1955, the "swynnerton plan for the Reform of African land Tenure" established a new land-use policy. The policy sought to formalize African farmers' land rights in high potential agricultural areas and support communal grazing in pastoral areas[13]. In pastoral areas, the plan aimed to reduce livestock numbers, avoid overuse of vegetation, limit soil erosion, and realize reasonable annual off-takes. It identified five conditions for sound, productive use of rangelands: 1) stock numbers limited to a prescribed carrying capacity for the land; 2) regular outlets to absorb excess stock; 3) construction of permanent water supplies; 4) controlled grazing and grazing areas managed at a productive level; and, 5) eradication of the tsetse fly, which infected cattle with trypanosomiasis (sleeping sickness).

To implement the swynnerton plan, the British launched 40 grazing schemes in Kajiado, Narok, Baringo, Samburu, Elgeyo Marakwet, Lower Kiambu, Mukogodo, West Pokot, Lamu, Kwale, South Nyanza, Taiti, Kitui, and Machakos. The schemes involved stock limitation, livestock marketing, water development, and tsetse fly eradication. A livestock officer was attached to each scheme. However, many grazing schemes failed because restrictions on the movements of animals proved difficult given the unreliability of rainfall and variability of grazing. By the early 1960s, most schemes had been abandoned.

Following the severe drought of 1961-62, concern over the ASALS became more urgent. With independence in 1963, the Kenyan government established the Range Management division in the Ministry of Agriculture to upgrade the range economy by

conserving, managing and developing the ASALS. The division recognized that major changes in a land tenure would be needed to promote rangeland development. [14]

6.5 The Emergence of an Import-Substitution Metalware Industry

This entails the fundamental reorientation in the system of production and distribution within the indigenous industry, a transition which was to foreshadow the later establishment of a modern metal-working factory. We have already studied the situation in which two distinct types of pre-industrial manufacturing industries, the one traditional and the other modem import-replacing, coexisted and thrived alongside each other. The economic revolution that took place amongst the Tugen blacksmiths exclusively, involved a fundamental change-over from producing traditional metal wares to manufacturing, still by hand, import-replacing modem metal wares and so catering the more up-to-date needs of the society. This development is attributable to the following exogenous and endogenous factors: firstly, the Wartime restrictions on importing modern European hardware, which served to stimulate the local substitutive production of what had by then become essential consumer items. Secondly, the remarkable degree of innovation, enterprise, and adaptability was shown by many individuals who were rapidly accommodating themselves to the new opportunities that came their way. Thirdly, the already highly favorable location of this complex for craft-production and trade, allied to its long-established industrial and commercial tradition. There has also been an expansion in the range and volume of modern metal wares produced. They make new and popular consumer products, such as the door-bolts, hinges, hasps, shovels, and head pans, which were the first substitutive articles to be made locally, such items as bicycle-stands, mouse-traps, trowels, rakes, metal cooking trivets, watering-cans, and even tin piggy-banks. This growth in the level and type of production has been greatly facilitated by increasing the amounts and types of scrap

metal available. This period saw a diversification of specialist occupational roles in this industry, which cater to the seemingly unlimited desire of the public for a growing variety of such up-to-date articles. Iron smelting, however, continued but was subordinated to the capitalist system. This was because of scrap metals' ready availability, especially after new industrial firms were opened up after 1945. Blacksmiths relied on steel materials for the production of essential household and agricultural products.[15]

Figure 6.1 use of cooking pan

Source. A photograph taken in informants home in Saos on 15/12/2020

During this period, youth Polythecnics, technical institutions, and women groups emerged in Baringo County. They became channels through which traditional arts and crafts were disseminated. The Jua-Kali Industries emerged, and they embraced traditional skill and combined with modern technology to create a hybrid system.[16] The industrial goods produced in these institutions were a product of societal consciousness and worldview. The artistic expressions manifested in the crafts were of both individual and societal values. Thus for the development of society, the products had to be

produced. Some of the youth had prior knowledge of industrial development, and they only perfected now that they had a regular supply of raw materials, resources, and markets.

6.6 Changes in the Social Organization of Production

The growth in both the size and complexity of the metalware industry here since its beginnings in the Second World War and the associated prosperity of its workers have inevitably brought about several innovations in a labor organization. One of the more evident changes has been the increased commercialization of labor and the introduction of casual wage-labor. Young workers entered into contractual relationships with their seniors, expecting and receiving cash-payment, even from kin, for work completed. In this way, new forms of relationships have developed, still based largely upon kinship ties, but expressing new sets of values and interests. The production of arts and crafts depicted changing tastes and demands. The production of aesthetic objects dominated the markets.[17] The changes ensured the production of modern goods, which integrated the Tugen into the world capitalist state. They could now compete with world products in the international markets. The persistence of traditional technology depicted dynamism and adaptability to the changing world

6.7 The Role of Forests and Forest Products

The East African Protectorate government awarded Lembus forest to a Commercial company for the development of a Timber Industry.[20] It proved one of the largest and most favorable Land Concessions made to Europeans in Colonial Kenya. Through this concession, the Lembus forest was separated from the subsequent administration of the native reserves of the adjoining districts and separated from the forest department's district jurisdiction who was responsible for forest reserves in other parts of the colony.

The political awakening of the Tugen had been furthered after 1945 by broader currents of change sweeping through Baringo. Lembus played a prominent part in Baringo's period of economic prosperity after the Second World War. They saw the taking over of the forest department when the concessionaires' lease or termination of Grogan concession was to end in 1958.[21]

The Tugen argued in a *baraza* held that the forest was incorporated within Baringo ADC. For example, in 1948, when Simpson, the district commissioner, supported the tugen claim over the forest land., [22]They would be the beneficiaries of substantial income, which would be used for accelerated development of the entire district. By 1952 senior forest department officials openly sided with the right holders, notifying them of the legal position and even encouraging those with capital to fence their lands in the forest glades. By 1955 the Tugen had moved to the forest areas and occupied with their animals. In February 1956, the entire forest was transferred to Baringo ADC.[22] The historic claims of the Tugen were accepted as strong and the Tugen leaders from now on would not accept anything other than placing the forest under ADC authority. Any other policy met with the bitterest opposition from the entire tribe, and it might require a tremendous force to impose the government's orders upon the people.

On the economic side, the entire district's future development could be improved if the forest royalties were available. After the struggle spanning more than fifty years, the Tugen of southern Baringo had at least won a decisive victory over the forest department. They had successfully captured lembus forest for themselves. In their victory, the people of lembus had secured land for their permanent settlement and potentially sustainable revenues that might underwrite the development of the whole district of Baringo for many years. The forester in lembus would have no powers to

interfere on the smallholdings in Torongo and Poror, which would be regulated under the authority of the Baringo administration in common with the rest of the district. The forested areas of lembus would now be subject to the forest ordinance rules governing African controlled forests. The benefits were not for the forest department or shareholders of the sawmilling companies.

Through the struggle of the Tugen the transfer of control of the forest was done to the Baringo ADC in 1958. This marked a political victory for those Tugen in Southern Baringo who had long campaigned for their rights in Lembus to be formally recognized. The Tugen could now graze their animals within Lembus forest. They could now access the forest.[24]

In lembus forest, the colonial government faced a similar wave of opposition to its development programs.it became clear that the Tugen had control of their forest, and they used it for their benefit. The forest products used for their indigenous industries were now available, enabling woodwork, leatherwork, and weaving to continue. However, the Tugen employed in the saw mills started earning income and started buying items from the shops established in Eldama Ravine. They started using power saws instead of axes to cut trees, they used *jembes* instead of hoes to plow the land, used *pangas* to clear the land, and mentioned that they were more efficient. They realized that they could fight for their rights successfully.

6.8 Agricultural transformation

Even before the colonialists set foot in Baringo, the Tugen practiced indigenous agriculture, which involved the growing of crops and animals' keeping. During the colonial period, the Europeans disarticulated the Tugen agriculture by imposing their systems. This saw the Tugen agriculture changing to cope with the capitalism system

introduced by the colonialist. However, after 1945, the Tugen were awakened and started agitating for some form of agriculture that will suit their environment and cultural practices. They discovered that the British established agriculture for their development without considering the climate, boundaries, and culture of the Tugen. in the years immediately after the war, then, baringo had appeared on the verge of economic revolution.[25] These revolutions influence the Tugen industries as they tried to modify them to suit the colonial system and integrate into the world economic systems. in the middle of 1947, it was estimated that # 2,000 per month was entering the district from cattle sales alone.[26]

Figure 6.2 Tugen women planting maize

Source. A photograph taken in informants home in Solian on 14/12/2020

6.8.1 Land consolidation

The first attempt to change their agriculture was through the process of land consolidation. The Tugen individuals who had known the capitalist system triggered off the land consolidation issues by their initiative in 1949. Land consolidation was done through survey, demarcation on the ground, and allocation of land to individuals.[27] Development was now individually-based as opposed to communal based. It was the individual efforts towards development in agriculture that mattered. In 1952 the

department of agriculture came in to assist the individuals through advice and consultations. By 1956, the department of lands was already involved in the registration, official allocation of land to individuals and control of the whole process. The Tugen were able to consolidate, enclose, and fence their land. The Tugen benefitted because they did not have to work on different fragmented farms scattered in several places. The holdings were manageable than the fragmented holdings, which were effective under shifting cultivation. Through this process, the Tugen were able to protect their crops from destruction by fencing was done, and the department of agriculture was assisting the individual holders, the farmers were able to apply for loans, particularly when title deeds had been issued to them. By 1956, some farmers had been given loans, and the issue of individualism was witnessed in Baringo where communal ownership of land was the norm. The farmers who pioneered land consolidation early in the 1950s became the first people to build permanent houses, to buy grade cows, and to plant European fruits and flowers around their houses. With cash in hand, fewer tugen volunteered for work on the farms or the various government development projects starting up throughout the districts. To attract labor in the farms, wages were raised from 10s to 12s in early 1947. With the need to find the cash to pay their taxes, people preferred to use their labor on their shambas. [28]

Land consolidation brought about far-reaching changes among the Tugen people who had previously lived freely with their neighbors. With fragmented and undefined land boundaries, the Tugen began to have well-defined boundaries. This became a turning point in the Tugen life. Individuals had mastery over their farms, and this created an incentive of hard work, which was not known before. Individuals were now able to choose how to make the best wares, especially industrial products. Families started specializing in a certain ware without outside pressure. The growing of crops enabled

the Tugen to remain at home because they had income instead of going for wage labor in settler farms.

6.8.2 Growing of crops

Before 1954 the colonial government did not allow the Tugen to grow cash crops because they feared competition from them if they are allowed. They were also going to be rebellious and not offer the much-needed labor in their farms. In 1954 the colonial government introduced two crops i.e. coffee and pyrethrum. Other cash crops that were introduced later were cotton, castor oil, and sisal, which were introduced on an experimental basis in different parts of the district.[29]

With the arrival of the new crops, the Tugen diversified their diet and had a regular food supply. Due to the recurring natural calamities such as locust invasions, famine, and drought, the Tugen attitudes towards economic matters changed. They began to diversify the crops and decided to plant some crops that were deemed to counteract any future calamities, such as cassava, which was drought resistant. in 1950 alone, 50 acres of cassava were planted, 15 acres of sweet potatoes, and 15 acres of bananas were planted at demonstration plots in such places as Kipsoit, Salawa, Bartolimo and Sandai. [30]

Sisal was introduced around Mogotio 1950s, where large estates were established. They were also introduced in Solai, Banita, Kisanana, and in small quantities in Kabartonjo. [31] Sisal produced material for the weaving baskets and making ropes and sacks. Sisal proved to be a better yarn because it was easily obtained in the reserves, and the tedious process of searching for fiber was overcome. Sisal baskets were stronger and more durable. It could last for thirty years if put into proper use. The twined sisal yarn could be obtained from a sisal factory established in Mogotio. With the growing of maize,

coffee and pyrethrum the demand for bags increased. They were to be used in the drying of the maize and coffee. They were to be used for carrying the produce from the farm to the market. From sisal, ropes were obtained, which the Tugen used for tethering their livestock now that land for individuals was fenced and animals could not move freely looking for pasture. They were also used for tying Jerri cans when carrying water from the rivers and firewood from the forests.[31]

Figure 6.3 Woman carrying water to the village
Source. A photograph taken in informants home in marigat on 15/12/2020

6.8.3 Keeping of animals

The type of animals kept by the Tugen was improved in terms of quality. This was done through destocking and culling to reduce the number. They were also confined in ranches and were constantly dipped to kill ticks. Through the ADC, about 48,000 acres of land had been set aside for dairy farming. In the kurget and mosop zones in the Tugen country, there has been an increased emphasis on animal husbandry in preparation for the importation of grade animals, namely jersey into Mosop and Red Poll into Chemogoch Kisikon area.[32] A trial for herds of exotic sheep was demonstrated at Torongo in preparation for the importation of sheep into the higher areas of lembus forest settlement scheme. By 1960, Tugens had realized importance of having reduced but quality herd of cattle, goats and sheep. The change depicted in Esageri was

remarkable and left a mark in the history of Tugen society. [33] With improved animal keeping, Tugens could no longer wander looking for pasture but spend more time improving on the quality. The animals obtained high quality skins that they sold through the lucrative hides and skins trade. They no longer put on the skin as garments because the Europeans had introduced cotton cloth, which the Tugen wore. At the same time, cooperative dairy society was established where the Tugen took their milk for sale, and they used the proceeds to buy other items which they used to supplement their dairy products. This led to the development of a ghee production factory in eldama ravine. It started with a field dairy at Kuress by the Veterinary officer in conjunction with the LNC. This field diary was to produce 114 sterling pounds from the sale ghee produced by the cattle keepers in Kuress. The Inspector Eldama Ravine carried out supervision for this. The ghee production at the Kuress, under the Stock Inspector at Ravine continued to function for three months and collapsed suddenly because the milk suppliers failed to bring the milk. To revive the industry, the Officers decided to sell the ghee industry machines to the Iljamus, who had to set up such an industry on the shores of Lake Baringo. The Iljamus chief, Cheptiony Ole Nabori, took the initiative of taking care of the industry, but within no time, the industry also collapsed among the Iljamus. Informants say that the ghee industry which began on an experimental basis, became unpopular among the Tugen only a few months because the industry was associated with the practice of keeping huge herds of livestock.[34]

It became clear that the colonial land and labor policies continued throughout the colonial period.the introduction of new crops such as sisal, coffee, and cotton facilitated the indigenous industries' survival because the artifacts for its production were now required at a larger scale. The indigenous plowing hoe was modified and fitted into a

tractor that plowed large areas. But in the Tugen hilly terrain, the hoe continued to be used because capitalism did not develop a hoe for these regions.

The making of bee-hives continued uninterrupted because the farmers relied on bees for the pollination of their crops. They, therefore, encouraged the beekeepers to install beehives in all areas where farms were established. At the same time, honey continued being used as food and medicine in all households. Every household was encouraged to keep honey, and when the recurrent droughts occur, they will not suffer. Honey continued to be used in ceremonies and given out as gifts during ceremonies, and the British did not substitute for it. As manufacturing continued in the 1950s, a few modificationss were done on the beehive, such as the top bar beehive construction, which still served the same purpose.

6.9 Trade

The introduction of western capitalism affected the development of traditional industries. What occurred after the infiltration of western capitalism was the subordination and articulation of traditional industries. The articulation of modes of production became clear at this period as the two modes started operating side by side or co-existed. During the War period, crucial supplies of scrap were low and hence expensive, and moreover only a few men were at the time engaged in the innovative manufacture of these products. Moreover, so many individuals took up production of these popular and profitable items that profit-margins were inevitably lowered. Increasing inflation over the years and higher production costs has also acted to reduce percentage profits.

Investment in new technology also helped to allow individual African producers to enter the market. The local marketing of milled maize was transformed by hand-turned

maize mills (*posho* mills). Maize grain was significant and could not be ground using the mortars and the grinding stones that the Tugen used to grind millet and sorghum. After 1945, local demand for the hand mills rocketed, but supply was short. In 1948, only three mills were available for purchase in the district.[35] In 1950, hand mills were reported to be in use all over Baringo, though demand still greatly exceeded supply.

Plows and tractors were also being used in southern locations, especially in Lembus where more significant land acreages were being cultivated under cereals.

For those who had accumulated more considerable sums of money, trade also presented an attractive investment opportunity. Ex-*askaris* were prominent among the many new Tugen trading companies applying for plots in the Baringo trading centers, especially in Eldama ravine. The dc granted twenty-eight licenses to a native traders and by 1947, other licenses were given to traders in Kabartonjo, Tenges, Poror, and Esageri.[36] By 1949, more licenses were given to all the main trading centers throughout Baringo.

With the Tugen actively involved in trade, friction occurred between the Indian traders F.D.Patel in Mogotio. C.B.Patel in Eldama Ravine, Ali Dan Visram, and Juma Hajee in ravine.[37] The Tugen ventured into the grain trade which was controlled by the Indian traders, by forming the lembus trading company, an entirely Tugen owned company. They controlled the market by buying up to 1,000 bags of maize from ravine and selling them throughout Baringo District. They even procured a lorry for transportation. The government suspended its contract with the Indian merchants and allowed the Lembus traders to take over the district's supply of maize. In the 1950s, the Tugen traders gradually displaced Indians as a dominant force in all areas of retailing.

The trade-in hides and skins enjoyed a revival in the early 1950s, where they acquired hides and sold in Eldoret. There was also charcoal burning, which was done by a few

Tugen and supplied them to Nakuru. In the 1940s, an enterprising few in southern Baringo began charcoal burning to supply the demands of Nakuru's burgeoning African locations.

The long interaction between the Tugen and the European in their farms and shops enabled the Tugen to acquire skills that they used to develop their own. The Tugen who worked in the European farms were able to plow land using the tractors and learned the secret of selling the products. The Indian traders had kept their skill a secret, but those who assisted in the shops like security guards, sweepers, and drivers learned the skill. They opened their shops where they employed the newly acquired skill. In fact,, the items sold in the Indians shops were the same ones sold in the Tugen shops throughout the district. Hand mills replaced the grinding stones used by the Tugen because they were efficient and could grind the large-grained maize. This shortened the time the Tugen used for grinding the grain, and more time was available to perform other duties. This changed the Tugen life completely. Individuals, entrepreneurs, and traders took the lead in transforming the industrial sector by investing heavily in it. They even started sending their children for training in carpentry, masonry, farm instructors because they had seen the value of such skills.

Figure 6.4 Cow auctioning

Source. A photograph taken in Kimalel on 12/12/2020

6.10 Missionary Education

The provision of formal education in Baringo was in the hands of the Christian missionaries. To understand the state of the Tugen education system after 1945, it will be imperative to find out the world's situation.

The church's role in the colonial period arose from the education that the church schools provided in colonial Africa. In many African colonies, mission schools were the prominent educational institutions, and the expense of educating Africans was often borne entirely by the missions. In other colonies, the colonial government provided the funding, but the teaching staff and the curriculum were responsible for the missions.

Mission education had three modest goals: First, to provide the basic literacy that would enable Africans to absorb religious education and training and help in the spread of the Gospel; second, to impart the values of Western society, without which missionaries believed the Africans could not progress; and third, to raise the level of productivity of the African workers (both semiskilled and clerical) without necessarily empowering them sufficiently to challenge colonial rule. Mission education was generally inadequate, especially in its emphasis on a religious education that Western society was already finding anachronistic. However, limited or flawed as it might have been, it was enough to whet African people's appetite for more education. In Baringo, for instance, the Tugen people were fascinated by the possibilities offered by a good education. However, they were so dissatisfied with the missionary education provided by the African missionary church and Roman Catholic that they began to found their schools. African parents wanted the kind of education that would equip their children with more than just reading the Bible and writing in their indigenous languages. They wanted their children to acquire the intellectual skills and language abilities necessary to fight for

the land that had been taken away from their parents by European settlers and colonizers. Parents also wanted their children to succeed in the white man's world, the glimpse of which had been provided by colonial and missionary education. When colonial authorities restricted the number of African-run schools, some parents showed their defiance by keeping their children out of mission institutions.[38]

Missionary education then had dual consequences for the Africans: it gave them skills to articulate their demands and question the legitimacy of colonial authorities; it also turned out to be a powerful medium of African acculturation of Western Christian values. Ali Mazrui puts it like this: "The destruction of the 'pagan' African culture was naturally accompanied by attempts to replace it with *some* aspects of the English way of life. Next to making the boys and girls upright Christians, this was an essential aim of the Christian educators."[35] He concludes that missionary education was perhaps far more successful at producing a new cultural African than a consistent Christian. The impact of the Christian church is evident all over the African continent. The development of formal education engineered the development of local technology.

Figure 6.5 children attending a class.

Source Kabarnet Museum

The missionaries excluded the Africans from any meaningful role in running the churches. They maintained a discrete social distance from the Africans, interacting with them in a patronizing manner, preaching the Gospel or teaching African school children simply as a job to do, not a sacred calling. Missionaries who had children, for instance, would send them abroad for education rather than to the same schools with African children. They looked down upon African rituals, customs, and languages and, in some cases, deliberately attempted to destroy African institutions. One informant commented that,

The tugen disliked school because they were less subjected to the continuous practice of their own culture in school. In the mission schools, many aspects of African ways of life that continued to be highly esteemed, or were important for society's functioning, fell under missionary disapprobation and were attacked in the classroom.[40]

There was no attempt in such schools to consider points often raised in defense of certain African customs and rituals. In defense of polygamy, when Africans pointed to the early Biblical tradition of polygamy, the missionaries responded simply by quoting the Church’s dogma on monogamy as God’s only sanctioned practice. When some sought to continue the veneration of their ancestral spirits and Christian rituals, the missionaries threatened them with expulsion or ex-communication from the church. Even the use of traditional music and dance in worship was severely discouraged as barbaric and heathen. In addition to differences over doctrine, colonial education, in general, was not designed to prepare young people for their country's service. Instead, it was motivated by a desire to inculcate the values of the colonial society and train individuals for the service of the colonial state. This meant that colonial education

induced attitudes of human inequality and, in practice, underpinned the domination of the weak by the strong, especially in the economic field.[41]

The Christian church became an unwitting catalyst in the development of African nationalism by equipping the African intellectually to fight for his freedom and by presenting disparities between doctrine and practice in such a way as to arouse the African who expected equal and fair treatment

Dramatic examples of independent Christian churches established with a clear political agenda are those that were built in kolloa in eastern Baringo during the kolloa rebellion of 1950.[42]

There was an increased demand for quality education from 1940. The Tugen realized that without a good school with the relevant curriculum, they will not compete with other Kenyans for opportunities offered in the changing world. They, therefore, changed their attitudes and even voted in funds for the construction of schools. The colonial government developed the colonial development and Welfare Act of 1940 and 1945, which marked a significant shift from the traditional policy of colonial self-sufficiency to a policy of giving increased amounts of aid to the colonies. [43] Following this act, several changes were made in the education sector, which included the following.

The system of financing education was revised in 1945.Local native councils financed primary education but there was an increased expansion of schools. The passage of the 1945 grant in aid rules was supposed to finance an expansion of primary education, which, if unchecked, the LNC will not be able to finance given that it had other services.

The colonial government thus established a ten-year development program in Kenya. The plan called for providing 50% of the school-age population with a six-year introductory course at the end of a ten year period. The funds were available to each colony upon the presentation of a development plan. In 1947 a committee was appointed to draw up a ten-year plan for African education development.

The colonial government was dissatisfied with the slow base of colonial education in Kenya and formed a commission in 1949 and which was led by Archdeacon L.J. Beecher mainly to examine the whole system of financing African education. The commission was empowered to examine and report the "scope of content and methods of the African Education system. It became the first commission to consider African interest.[44]

In the mid 1950s the colonial office realized that it needed a completely new policy of education. This made them speed up the output of high-level African human resources by expanding higher and secondary education. In 1957, a development plan was drawn up emphasizing the maintenance of European standards raising those of Asians and creating African standards, for example, using vernacular as a means of instruction.[45] A special D.E.B meeting was held in Kabarnet to approve the new 1957 – 1960 development plan for education.

6.11 Fisheries

The Tugen were not traditionally eating fish. Only the Tugen who lived near rivers and Lake Baringo would do some little fishing to supplement their diet. Up to 1943, the Tugen people would fish using a rod and sometimes barter their catch for maize flour (*posho*) for consumption purposes. In early 1943, a fishing industry was started for the first time by the Tugen.[46]

For some years, the tribe had been bartering their sundried fish for *posho*. The dried tilapia were bought by Luo middlemen who conveyed the fish stacked in baskets on donkey backs to laborers working on the sisal estates near lower Molo. Tugens were experts in rod and line nets making, using long barbless hooks baited with dragonflies. As the food situation was grave and *posho* supplies became limited, the government felt that all possible means of exploiting the district's natural resources should be employed. A fishery instructor from Kisumu was engaged to teach the Tugen new methods of catching fish. Seine nets, binder twine, were made by two disabled men in Kabarnet as flax nets were then unobtainable and imported from Ireland later.[47] Zabulon, the Luo instructor, improved the fishing camp at Kampi Ya Samaki and built smoke ovens for kippering the tilapia.[48] Baringo kippers were sent to the government Bio Chemists in Nairobi to be tested, and their food value was declared to be excellent with good keeping qualities. A big Luo canoe was imported from Kisumu and a flat bottomed boat which had remained idle for many years was repaired and fitted with an outboard engine. The Tugen used small canoes made out of am batch wood, which grows in the lake, and on the shore, it resembles cork as it floats buoyantly. The stems are lashed together with reeds, and small paddles are made from the bark of thorn trees. The canoe appeared fragile but being buoyant, and the natives paddle across the lake easily and quickly.

In 1948, two Tugen fish traders set up a fish business as fish merchants[49.] The Tugen again had started netting their fish and buying from the local fishermen. In 1959, the Tugen fishermen registered the highest sale of fish. The Tugen had started diversifying their economy to integrate into the broader economy. Diversification called for making better implement for the growing fishing industry. This also encouraged other economic activities that relied on fishing as well. As a result, the Tugen indigenous industries that

made fishing vessels continued to prosper, though admittedly modified to fit the current situation.

6.12 Patterns of Marketing and Distribution

The nature of this rapidly .growing industry necessitated an expansion of and changes in the system of marketing. Thus, the Transitional Phase saw increases in the numbers of full-time specialist traders dealing in both traditional and modern hardware here, quite apart from those men who have come to combine actual production with marketing on a large scale. Buying and selling the vast array of items produced involves complex arrangements, and several significant changes have overtaken traditional patterns of distribution. Firstly, the steady expansion of the domestic market in all kinds of metalware was accompanied by and was partially contingent upon further transportation and communications improvements in the post-War years. This particular era witnessed the growing importance of road transport, a transshipment mode that reduced distribution costs and because motor Lorries were more mobile, speedy, and flexible than the railway. Distributing of items such as bolts, hasps, hinges, and head pans became straightforward and convenient. There have also been significant improvements in the road network system, particularly over the period; whereas in 1945 there were only 500 miles of tarred, all-weather roads, this number had risen to 8,000 miles. Added to this, in the early 1950s several changes were made in the actual layout, designed to make access easier for the increasing amount of pedestrian and vehicular traffic. The Eldoret Kabarnet road was constructed in the 1950s. This new road now allowed visiting freight-lorries to load and unload metal ware obtained from Eldoret. The tugen traders in turn, purchased vehicles in the 1950s. Several regular bus and taxi services were operating, including a Ford V8 converted pick up operating between Eldoret and Kabartonjo.[50] Mainly, because of the subsequent expansion in trading

activities, ironware dealers were able to amass much greater profits and capital than had been previously possible. Commercialization has positively influenced the production of contemporary craft, especially in basketry and ceramics, woodcarving, and jewelry. Some countries have borrowed the idea and developed very complex artifacts. Tourism has also helped sell the idea of Tugen crafts, especially the woodcarvings taken by tourists as a souvenir. The ministry of culture and social services played a major role in maintaining the culture by establishing museums and cultural festivals.

6.13 Conclusion

The chapter has elaborated on the revolutionary changes which occurred following the end of the Second World War and their impact on the Tugen indigenous industry. The study found out that two indigenous industries continued to operate and even expanded after 1945, iron making and bee hive making. The others continued to operate but only producing household items but continued even after 1963. Some items like basketry and weaving were modified to fit the current demands as the indigenous system operated side by side with European industries to create a hybrid system. In all, adaptation, and not disruption, has been the keynote of their concern, and it is against this background of innovation and receptiveness to change that was considered in the chapter. Individuals were most successful in translating their craft's potential into a modern industry, which has shaped the industry in Baringo County.

ENDNOTES

1. Omwoyo.S.O., *The agricultural changes in the kipsigis* land .
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CHAPTER SEVEN

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

7.1 Summary

The study analyzed the continuity and change in Tugen Indigenous Industries as practiced between 1895–1963. In a work of this magnitude, a number of issues have emerged and in this conclusion a few salient points need to be clearly re-emphasised.

Chapter one provided the foundation of the theoretical study framework and research methodology that was used. The study utilized the articulation of modes of production theory. The articulation of modes of production theory tries to give emphasis to local situations happening in a community and how they are changed to adapt to both internal and external factors. In kenya, colonialism generated a dynamic process driven by distinctive internal and external contradictions. Articulation, thus, becomes a concept for understanding the distinctive forms of uneven capitalist development as emerging from patterns of unequal exchange, the process of accumulation, the forms of labour and the appropriation of surplus value. The methodology adopted was the Historical Research Method because much of the data collected required a narrative format to relay information. Purposive Sampling Technique was used to get information; however, whoever could provide information and was willing to discuss the subject matter and provide evidence of his information was interviewed. All interviewees had information concerning Indigenous Industries.

Chapter two addressed the origins, migrations, and settlement of the Tugen, the geographical settings, social,-political organizations. This enables a better understanding of the environment in which the Tugen settled and how they manipulated it for their survival between 1895-1910.

The study found that the Tugen originated from Ethiopia and settled in Mt. Elgon, which became their second dispersal area. They settled here with their Kalenjin communities. Tugen settled in the Tugen hills for security reasons and manipulated it for their use. They evolved a community that was unique and best suited for the environment socially. The social-political organisation determined the distribution and utilisation of resources. The tugen productive activities, such as pastoralism, agriculture, hunting and gathering demonstrates their response to the conditions imposed by their physical environment. The tugen emerged as a resourceful people, well versed with their environment and knowledgeable in their economic persuits. Their innovativeness, dynamism, efficiency, diversity and self-sustenance were reflected in all aspects of their economic fields This formed the background of the study.

Chapter three provided the relevant historical analysis of the Tugen Indigenous Industries to trace the changes that have taken place over the colonial period. This assessment of pre-existing arrangements helps in the later evaluation of the subsequent changes in the craft's character and condition, culminating in its present form. It explains how indigenous crafts were a solution to their industrial challenges in the pre-colonial period and in and after the colonial era. The indigenous industry was done based on the needs of society. They used the available resources to develop industrial products needed in society. The raw materials for the industries such as ironworking, potter, and wood craving were major industries obtained from the environmental industries. The Tugen had many specialists who were the source of raw materials because it was heavy and cannot be carried far. The high-quality pots were designed for a specific function i.e., cooking pots were different from storing pots. Weaving was done for a specific item needed by society. Weavers used indigenous raw materials such

as reeds, treebanks, to make baskets. However, most of these items were made for domestic purposes.

Wood carving was done with specific trees, mostly hardwoods, which lasted for an extended period. They were done skillfully and unique, for example, beehives, which were hollow wood tied on a tree.

The science involved in the making it was so complex. They tactfully placed it in strategic point because bees did more work than producing honey. They were responsible for the pollination of grains in the farms. Other products include weapons, tools, mortars, pestles.

The Tugen also did leatherwork. Skins from both domestic and wild animals were obtained and cured carefully to make garments. A good example is the ceremonial attire *Sambut,* which was made from Columbus monkey. Everybody in the society had specific attire. Later they started decorating themselves with beads, earrings, bangles, which showed that they valued beauty.

Ironworking was another essential industry that was practiced by the Tugen iron smelters. It was a complex practice that the Tugen because there was no evidence of external influence. The blacksmiths were highly respected because they held what determined the development of society. They produced tools that were used in crop production, weapons for hunting, and gathering.

The study gave the techniques used in obtaining the raw materials, the skills used, apprenticeship and the uses of the industrial products. From the findings, it is clear that the Tugen industries involved much science, which was complex as per the standards of that time. How they could extract iron from the ore required a complex skill that the

Tugen discovered without external influence.it is only an advanced culture that could do that. The burning of the pots and shaping was also very unique and what informed the decision was complex. Some Tugen informants argued that the European colonizers copied this skill from them and made utensils with the same shape.

The study also found out that the knowledge on Indigenous Industry was passed on from one generation to the next to ensure continuity of the practice. It was done from father to son and from mother to daughter either automatically or through some elaborate ceremony attracting several relatives and neighbors. Payment to the indigenous practitioners was in most cases in kinds such as goats, finger-millet, and cows. Rarely was cash involved because the system used was the barter system. There was also an exchange of the products by different clans as clans produced different products which supplemented or complemented each other.

The study also found out that the Tugen could in some occasions teach the craft to members of other communities who were interested through apprenticeship. Women who were married in the community were taught the art, but the husband appreciated the work by giving a goat to the mentor. Most of the items were of high quality and valued. In the study, some people still had those items in their houses and display them to show that they were necessary. They have also been preserved in museums such as the Kabarnet museum and cultural center, and Nairobi national museum. It is a history that will not be lost easily.

Chapter four centered on the encounter between the Tugen indigenous practitioners and the colonialist between 1910-1930. It considers the consequences, positive and negative, which the Pax Britannica had both for the craft organization in Baringo and urban-rural relationships brought about by colonialism. The study demonstrates that

colonialism and western culture did not destroy the indigenous industries. They competed against each other but thrived side by side. There was an articulation of production modes between the pre-capitalist Tugen industry and the colonial capitalist system. There were instances where each borrowed from the other system produced a hybrid system, especially in the settler-dominated areas. The study established that the colonialist devised ways to disrupt the indigenous industries to affect the colonial system. This was through land alienation, taxation, forced labor, introduction of western education and Christianity, and currency use among other things. Unfortunately, the Tugen encountered some challenges which distracted the smooth running of indigenous industries, such as the outbreak of diseases which affected man and the animals, locust invasions, flooding, drought, and famine. All this reduced the raw materials required for industrial development.

The study further demonstrates that the colonialists condemned indigenous industries as “backward” and “primitive.” However, no dispute was registered that the Tugen doubted their products' superiority in favor of colonial products. They respected their products, and that is why they were not intimidated by the coming of colonialism.

Chapter five analyzed the responses of the Tugen to the colonial disruption of their industries. Colonialism did not dampen the people's resilience and rationality to make rational choices as rational human beings on the alternative industrial products available to them. The Tugen respected their industries, so those who had access to them continued using them even with cheap colonial products. Whether educated or not, the Tugen had a strong affinity to traditional industries. Persistence, resilience, and experience forced them to continue with the traditional industries. They continued with what they knew best. They include the uniqueness of the products, affordability, and

nearness of consumers, absence of alternative products, rituals involved, and the presence of raw materials in the vicinity.

Rather than abandoning their indigenous industries in favor of more potent western products, the Tugen continued to use indigenous products. The dismantling of indigenous industries by the colonialists did not deter the use, and they even produced more. They did this against the onslaught of western culture.

The study established that the indigenous industries were vulnerable to extinction due to adversities brought by western culture. However, both systems developed side by side and what emerged was a hybrid system that offered solutions to the challenges among the Tugen. Some practitioners were able to modify the products to cope with the wave of colonialism. The Tugen were able to apply their skills, abilities, knowledge, and insights that they had accumulated over time with no doubt.

The Tugen were able to absorb disturbances brought by western culture and re-organize while adapting to changes. They retained key elements of structure and identity as a distinct community. Their cultural beliefs were paramount at this point. Some implements could not be replaced e.g., circumcision knives. Some cultural aspects were abandoned by the Tugen because the factor that made it to be applied became extinct and could not continue making artifacts for the same. Thus, the Tugen re-organized their industries to cope with the changes.

Chapter six dealt with the state of Tugen indigenous industries after 1945. It dealt with the more pervasive changes that overtook this industry in the crucial post-War period 1945-63 in all industry sectors. The findings suggest that in any study of change, it is important to realize that qualitative differences in economic behavior do exist at the individual level and that there is really no such thing as 'averages'. The work's dominant

theme is concerned with the remarkable transformation, within the so-called Transitional Phase, of a large sector of the traditional craft in the modem, import-replacing industry. It also explores the repercussions that this fundamental reorientation had on the indigenous system of labor and upon craft organization in the region. This stage was associated with economic revolution of Tugens community. The Tugen had gone through a state of instability before 1945, caused by the colonial intrusion and associated disturbances and the natural catastrophes that affected their industries. The Tugen realized that they had lost their independence, and a foreign culture was interfering with their system. The wind of change was sweeping through Africa, and the Tugen were not exempted. They had participated in the Second World War and had acquired much experience to develop the region. The Tugen were now keen on the type of education their children received. They realized the discriminatory nature of colonial education. The Tugen children acquired skills which they used to improve the industries.

The study found out that the colonial government did not develop an industrial policy for the colony, and attempted to develop an import-substitution economy. The colonialists only wanted to obtain raw materials for their industries in Europe. The industries which were developed were extractive. The Tugen efforts were seen when they initiated development plans, and the Swynnerton Plans aimed at demarcating African land and giving Africans title deeds. They also wanted ownership of forests, education systems, and working on policies that were favorable to them.

Industries were initiated and transformed during this period, for example fishing industry in Kampi Ya Samaki, the Sisal factory in Mogotio, Sawmilling in Ossen and Maji Mazuri, Ghee production in Eldama Ravine and Kimose, Cotton Ginnery in

Salawa, among others. Trade was expanded during the period. Tugen entrepreneurs emerged to compete with the Indians in Mogotio and Eldama Ravine. Trades were given licenses in almost all centers in Baringo, where they opened shops selling almost all European items such as detergent, utensils, tools etc. posho mills for grinding grains emerged throughout the district by 1950. There was a transformation of the Tugen industries during this period.

The chapter charts the rise of a group of trader - entrepreneurs in the region. This does by examining how these capable and highly motivated men have managed to build up a series of interlocking economic networks showing the precise nature of the urban-rural links. This chapter ends with a discussion of the outcome of these local entrepreneurs' drive and ambition— their plan to start a modem factory system that will stir industrial development to a higher level. The study found out that the idea of generalizations that the Tugen changed tremendously due to the the western industry should be justified. The change processes considered amongst one group of blacksmiths in one area did not develop in other areas in the same phase. The entrepreneurs who effected significant changes in the indigenous system of production and marketing were responsible for the development.

7.2 Conclusions

The study examined the continuity and change of Indigenous industries of the Tugen community of Baringo County during the colonial period between 1895 – 1963. The study established that the Tugen region is endowed with resources such as fertile land, rivers, lakes, forests,and other natural resources which provided opportunity for the Tugen to exploit. This enabled them to practice economic activities such as domestication of animals, growing of crops and indigenous industries such as

pottery,craft, weaving, blacksmith and leatherwork which were flourishing profession among the Tugen people. The Tugen productive activities, such as pastoralism, agriculture, hunting and gathering demonstrates their response to the constraints imposed by their physical environment. The Tugen emerged as a resourceful people, well versed with their environment and knowledgeable in their economic persuits. Their innovativeness, dynamism, efficiency, diversity and self-sustenance were reflected in all aspects of their economic fields. This activities were advanced before the advent of colonial rule and they actually determined the level of contact with their neighbours and the outside world through trade.

The establishment of colonial rule in the tugenland was achieved through use of military force on one hand and indirectly through such methods as levying of taxes, seizure of livestock, labour conscription and so on. The implantation of colonial rule in the tugenland brought about a number of external regulations and influences that were set to gradually modify and change the Tugen indigenous economy. Such aspects as the monetization of the Tugen economy, the levying of poll and hut taxes, the recruitment of the tugen labour for colonial purposes, the exploitation of the Tugen agricultural surplus and the introduction of new crops were all set to change the economic and Industrial landscape of the Tugen. The ensuing articulation of the Tugen indigenous economy with the colonial capitalist one was nevertheless a gradual one. The introduction of the capitalist mode of production did not immediately replace the pre-capitalist mode of production, but rather it reinforced them (Leys, 1985). With time the capitalist mode of production gradually started to establish and assert itself over the Tugen indigenous mode of production. The two modes of production were then locked in a complex and sometimes contradictory struggle. But gradually colonial capitalism

started to modify, marginalise, destroy or eventually subordinate the Tugen pre-colonial economy by utilising it rather than casting it aside.

The Tugen indigenous technology began to decline during the colonial period because of the policies the colonial government introduced in parts of Baringo County. Some of the policies included agriculture, taxation, labour, anti-poaching etc. which deprived the Tugen of the raw materials to be used in the industries. Following the contact with European culture, the indigenous technology lost most of its value in Baringo County. However, the Tugen realised that the products from indigenous technology, with its rigorous processes of making are more durable and perhaps expensive compared to simple and cheap European products. Additionally, the tugen taste for foreign made goods outweighed the value of locally made products provided by modern civilisation. In effect the mere transfer of technology of supposedly sophisticated international technology led to growth of uneven development in Baringo County because it did not reach all areas at the same time. This has led to the harmfull effects of displacing previously existing and still relevant forms of technology without serving as an adequate cultural substitute. However, from 1945, the tugen realised that they needed to adjust to the prevailing world order. This called for re-organising , strategizing and reforming the sector.

Finally, with the continued colonial dismantling of the tugen indigenous industries, the tugen responded by selling their animals and later they were engaged in wage labour and more importantly expanded commodity production to earn enough cash for taxes and other requirements. Coupled with the need to buy imported hoes and ox- ploughs, extensive cultivation and trade became widespread, resulting in widespread soil erosion and degradation of the 1940s. The introduction of cash crops was consolidated by the

Swynnerton Plan of 1954 and led to further colonialist appropriation of the peasants produce. By the coming of independence in 1963, therefore, the Tugen industries had been radically transformed from its pre-colonial state to become an integral part of the international capitalist economy.

Conclusively, it is beyond dispute that Tugenland was endowed with indigenous materials and technologies that if harnessed could relieve the region of its environmental, political and social – economic related problems and advance communities development. The harnessing of such technologies would relieve region the burden of relying too much on western modes of production that require modern materials, tools and equipment that in most cases are too expensive or rather difficult to acquire. To this end the revival of indigenous industries is imperative for the future of African race.

7.3 Recommendations

Based on the above discussions, the following recommendations were suggested;

i. The study established that the knowledge of indigenous technology exists in oral form or is learned from elders through apprenticeship. However, the complex unfolding of events steaming fom severe cultural disruption faced by native Africans during the colonial period has affected the industry. During this period, traditional practices involving the use of traditional knowledge system were largely ignored, undervalued or replaced by colonial practices. The current study majored in some Tugen indigenous industries such as pottery, leatherwork, basketry, woodcarving, and iron smiting. Other indigenous crafts and technology which have not been studied are rooted in our history, such as beads making, canoe making, salt production etc are equaaly important. These

crafts should be integrated with our living patterns.The demise of that knowledge is unimaginable. Blacksmiths are lamenting on the death of apprentices for the industry. Youths are more interested in software technology rather than indigenous technology.The government should therefore revive indigenous creativity in crafts and technology and promote their progressive updating to serve modern development needs.

ii. The influences of western civilisation are still very heavy on the indigenous industries. The study recommends that the two systems i.e., indigenous and colonial, should complement each other. Since the industry is a critical sector in the economy,, there is a need for cooperation and collaboration in tackling the people's challenges. This cooperation between the two systems will cause continuity in both indigenous and western industries.

iii. The study found out that the underdeveloped nature of indigenous technology is counter to its productivity..Thus the government should introduce a policy which will be fashioned to their benefits. Policy makers who rely on this kind of research should be encouraged to enable them develop policies geared towards making the industry efficient and long lasting. The government can further impose heavy import duty on foreign products to protect local industrial goods.There is a need for government and other organizations to engage in public enlightenment to educate the citizenry on the importance of patronizing Kenyan products. This may generate a real appreciation of the indigenous products and skills of the Tugen.The government should provide loans and other incentives to the local crafts makers. This will enhance the production of quality products to compete with their counterparts from industrial countries.

iv. The study further established that through the process of articulation of colonial capitalism with the indigenous tugen economy there was the deepening stratification and differentiation of the local Tugen population. From the 1930's the chiefs and others in the civil service employment formed the early group of wealth accumulators. They were later joined by the educated elite, the 'rich' peasants, soldiers and some rural wage workers. This group of the rural rich accumulated wealth in various forms - shops, plots, ox-ploughs, vehicles, posho mills, good houses, bicycles, grade animals, and many more. They also proved successful in farming since, with enough capital, they could easily employ more labour and adopt modern methods of farming. On the other end there were the pauperised peasants who relied on wage labour for subsistence. In other words, education, civil employment, enterprising farming, cash crop production and the enclosure of private land deepened the process of social differentiation among the Tugen in their own land. This calls for Community capacity-building activities and improvement of local cohesion strategies. As demonstrated in the study, work is done by individuals or families and are not ready to share ideas and find ways of countering emerging challenges such as unequal development caused by colonialism. Therefore, it would be necessary to organize groups where they have leaders, create proper records, and keep books of accounts. They will put their resources together, which will enhance their working environment and increase their ability to penetrate the market and to negotiate with local authorities as a team. This will ensure continuity of production and, therefore, the conservation of technology and practice.

v. The study established that the changes brought by technology has shifted the tugen enthusiasm to indigenous industry. They developed taste for European

products therefore the study recommends an enhancement of transmission methods. Indigenous skills, rules, and regulations are passed to family apprentices during production. This limits opportunities for other members of society to learn. This strategy also extends the learning period over the years. Therefore, as a conservation strategy, indigenous skills could be introduced as an extracurricular activity in schools, where teachers could invite practitioners to talk to students and offer practical lessons on the technology during school club days. In sum, the stability of techniques through time and space can only be maintained through concerted conservation efforts. Such conservation efforts should not only be the museum conservators' headache, but a responsibility of community leaders and scholars since indigenous techniques attest to a community's deep-rooted identity.

7.4 Recommendations for Further Research

i. The highland Tugen, living in the Tugen Hills, follow different livelihoods with greater reliance on forest resources and farming the steep slopes of the escarpments from the study. Their counterparts, the lowland, and intermediate Tugen, are in more gentle terrain, influencing their livelihood. A comparative study would complement this research in looking for commonalities and differences in knowledge and values.

ii. The specific problems encountered by participants of craft industries from a broader perspective varied. The general implications of each enterprise for industrial growth in underdeveloped areas should be dealt with by other researchers.

iii. The current study analyzed some indigenous industries such as iron-making, pottery, basketry, woodcarving, and leatherwood. Other industries that were equally important such as beads making, could be handled in another research.

iv. The current research was limited to the colonial period and was done extensively. Other research covering the post-colonial period can be conducted for comparison purposes.

v. The research also recommends a study like this using another theoretical perspective such as underdevelopment theory. This will bring other results that will evaluate the Tugen industries from a different perspective.

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2	OBADIAH KALYA	KABARNET	22/3/20
3	MARY CHEBOIWO	KABARNET	23/3/20
4	KOKO NYANDUSI	TIRIMIONIN	28/3/20
5	CHARLES KANGOGO	MOGOTIO	22/1/20
6	MARGERET KIPSAMBU	MOGOTIO	22/1/20
7	SAMWEL KIBARGOI	EMINING	21/1/20
8	RICHARD CHELIMO	KURES	21/1/20
9	DAVID KIPLABAT	KABIMOI	24/1/20
10	DANIEL YATOR	TENGES	27/1/20
11	JAPHET CHEPKALUM	TIRIMIONIN	2/2/20
12	PHILIP CHONGWO	MARIGAT	4/2/20
13	KOKOB SAMWEL	KAMPI YA SAMAKI	4/2/20
14	CHRITINE CHEROP	KABARTONJO	5/3/20
15	JOSHUA TALLAM	KABARTONJO	5/3/20
16	MUSA KITOMBUL	EMBORUTTO	6/3/20
17	RUTTO AENGWO	KAPCHERAMBA	7/3/20
18	PIUS RONO	SALAWA	8/2/20

19	LABAN CHANGWONY	KAPTERE	7/3/20
20	ISAAC CHANGWONY	KAPTERE	7/3//20
21	KOBILO CHEPNGAL	SIBILO	2/4/20
22	INSPECTOR BARKENYA	PEMWAI	27/3/20
23	JERONO KANDIE	OSSEN	27/3/20
24	KIMOI CHEPKIYENG	KIPSARAMAN	25/3/20
25	KOBILO CHESANG	KIPSARAMAN	25/3/20
26	ISAAC CHELELGO	KASISIT	24/3/20
27	KOBILO CHEPSONGOL	KASESYA	24/3/20
28	DANIEL KIMULWO	TALAI	25/3/20

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APPENDICES

Appendix 1: Letter of Introduction

Dear Sir/Madam,

You have been selected to participate as a respondent in the study "Continuity and Change of Indigenous Industries among the Tugen Community of Baringo county; Kenya between 1895-1963." conducted by Sarah J. Kiptala of Moi University as a requirement to complete a degree of Doctor of Philosophy in History. It is hoped that the findings of this study will help in establishing the historical background, development, and changes of indigenous industries in Baringo County.

The researcher kindly requests you to be honest when responding to the questions and assures you that all the information provided will be treated with confidentiality during and after the study.

Thank you,

Yours faithfully,

SARAH J. KIPTALA

Appendix 2: Sample Guiding Question

Iron Industry

1. What motivated you to think about iron making?
2. Where do you get iron ore?
3. Did the iron smelters belong to certain clans?
4. Describe the characteristics of the ore that make them distinct?
5. How did one train to be a blacksmith?
6. How do you extract the ore?
7. Does the ore require storage or are they used directly?
8. How many people are required in the whole process of extraction?
9. Where was iron smelting done?
10. Which clans mostly specialize in iron making, and how do you ensure that their activity is maintained over generations?
11. What status did the ironworkers hold in society?
12. Describe how iron smelting is done, and where do you obtain the resources to use?
13. What are some of the products which you get after smelting, and of what use are they put?
14. Are the products used locally or they are sold to other communities? If sold, what is the mode of exchange?
15. Highlight any problems you encounter in the whole process?
16. What are the benefits of iron making?
17. What is the attitude of the Tugen to colonial industrial goods?
18. Did iron smelting continue during the colonial period- was there any change, modification, or destruction

19. What is the future of iron making given the changing technology?

Leather Work

1. What were the materials used to make leather?
2. Which animals were slaughtered specifically to provide leather
3. Are there clans who specialized in leatherwork?
4. Was it a preserve for children, women, or men? Who did the work?
5. Describe the process of tanning leather
6. Identify some products obtained from leatherwork
7. How were the garments different among the members in the community? Were there garments for children, men and women? If so give a brief explanation or description
8. How did colonialism change the Tugen attitude to the indigenous industry?
9. Were there any evidence of indigenous industry in Kenya in 1963

Wood Work

1. Where did the Tugen get the wood from?
2. Were there trees for specific woodcarvers?
3. Were there families or clans who were specialized in wood carving?
4. What status did woodcarvers hold in society?
5. There was wood curving done
6. Identify the items which were produced by woodcarver's
7. How did colonialism affect the development of the industry?
8. How did the introduction of a course in carpentry in the mission schools affect indigenous wood curving?
9. What was the state of wood curving in Kenya in 1963?

Basketry

1. Where were the materials for basketry obtained from?
2. Give the various categories of baskets that were made and their uses.
3. Describe how the various baskets were made
4. Did specific clans do it?
5. How did this industry assist agriculture?
6. Were they used alone, or they were used with other items such as guards, straps

Pottery Making

1. What motivated your community to think about making pots?
2. What materials do you use when making pots, and where do you get them from?
3. Is pottery making a family activity that you developed independently, or you borrowed the idea from other communities?
4. Describe how the various types of pots are made?
5. How are the varieties of the pots used?
6. Does pottery making require specialization?
7. How do you store the pots?
8. What are some of the benefits of pottery making?
9. Highlight the benefits of pottery making, and has the activity transformed society?
10. Highlight the challenges you encounter in the whole process?
11. What is the future of pottery making to the community given the changing technology?

Bee Hive Making

1. Bees' stings are very poisonous; how did you discover that you can extract honey from bees?
2. Beekeeping goes hand in hand with bee-hive making; describe how the bee-hive is made?
3. What determines the various shapes of the hives?
4. Are there other items used together with the hives?
5. Are there families who specialize in beehive making
6. How are the beehives placed on trees?
7. How are the hives maintained to ensure a good harvest?
8. How do you ensure that the hives or not destroyed by wild animals looking for honey?
9. Did the Tugen encounter any challenges on bee hive making during the colonial period?

Appendix 3: Glossary

The following Tugen words and other foreign words were used in the study.

Angeet – women cloth
Arap – son of
Arror – Tugen of northern baringo
Asis/Cheptailel – God
Askaris – policemen
Baraza - public meeting
Burbe – cooking stick for stirring the liquid
Chekab mugo – fermented milk
Chemngal – drought which occurred in 1897 to 1899
Chumbeek - white person
Duka - small shop
Elat – thunder/lightening
Emetab burgei – hot country
Endorios – Tugen of eastern baringo
Ibindo – age set
Jembe – digging hoe
Kamasia – Tugen hills
Kapchich – family
Kapngosia – drought which occurred in 1918
Kapsiro – market place
Katalel – Kitale
Kemeutab reresiek –famine of bats
Kenu – mortar
Kibis – basket used for storing food
Kilembele – sisal thread
Kipketin – liquor
Kiplel kowo – drought which occurred between years of 1924-1927
Kiror – direct
Kiruogindet neo – great judge
Kiruokik – councilors

Kitany –iron smelting

Koitab kenu – pestle

Kokwet – a collection of homesteads

Kokwotinwek – villages

Koros – sacrifices

Kurget – intermediate areas

Kutwet – headdress made from Columbus monkey skin

Lakwele – basket used for carrying water

Legetyo – a special belt that was worn by women

Lembus – Tugen of southern baringo

Lotet ab keleg – removal of teeth

Magange – cooking stick for ugali

Mogombe – hoe

Moinge – beehive

Mosop – highland areas

Motoget – bag

Mtama – sorghum

Murenik – warriors

Ngosiek – wild fruits gathered by the Tugen

Oldorito plains – eldoret

Oret – lineages

Orkoik – diviners

Panga –machete

Poiyot ab kokwet – spokesman

Pororiesiek – territorial council of elders

Sambut – ceremonial cloaks

Samor – Tugen of central baringo

Sanai –beads

Shamba - farm or smallholding; specific plots of cropland

Sir – women garment

Siritiet – sub-age set

Soin – lowlands areas

Songe – quiver for storing arrows

Soote – calabash

Sora – earings

Sufuria - cooking pan

Tabut – the upper side of a hut

Telelo – dry season

Tiondo – animal

Tube – food bowl

Tulwetab kony –mt. elgon

Tumdo – initiation

Turkwei –Kerio valley

Ugali/ kumnye – food made from maize flour

Wimbi – finger millet

Appendix 4: Research Authorisation

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone:+ 254-20-2213471, 2241349,3310571,2219420
Fax:+254-20-318245,3 1 8249
Email: dg@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/19/5343/24230** Date 6^{th} **May, 2019**

Mrs. Sarah Kiptala

Moi University

Kenya.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Continuity and Change of Indigenous Industries Among the Tugen Community of Baringo County"*** I am pleased to inform you that you have been authorized to undertake research in **all Counties** for the period ending **6^{th} May, 2020.**

You are advised to report to **the County Commissioners and the County Directors of Education, all Counties** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

DR. STEPHEN K. KIBIRU, PhD.
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioners
All Counties.

The County Directors of Education
All Counties.