

**ARTISTIC REPRESENTATION OF FOOD SECURITY AMONG THE
POKOTS IN MATANY, NAPAK DISTRICT**

EMMANUEL OKIA

19/U/GMAID/20697/WKD

**A DISSERTATION SUBMITTED TO THE DIRECTORATE OF RESEARCH AND
GRADUATE TRAINING IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE AWARD OF MASTER IN ART AND INDUSTRIAL DESIGN OF
KYAMBOGO UNIVERSITY**

NOVEMBER, 2022

DECLARATION

I, Okia Emmanuel, declare that this dissertation titled “Artistic representation of food security among the Pokot in Matany, Napak District” is my original work which has never been presented to any other tertiary institution for assessment.

Signature:

Date.....

Okia Emmanuel

19/U/GMAID/20697/WKD

APPROVAL

This dissertation titled “Artistic representation of food security among the Pokot in Matany, Napak District” was carried out under the supervision of the herewith stated persons.

Signature: _____

Date: _____

Dr. Nabaggala Justine

Principle supervisor

Signature: _____

Date: _____

Dr. Edopu Rita

Second supervisor.

DEDICATION

Special thanks go to my parents; General Jeje Odongo and my beloved mother Mrs. Apio Hellen Stella for the tireless support they rendered to me and whose interest in Education has inspired me to complete my studies.

To my sisters; Auma Judith, Aguti Winnie, Achan Christine, Akello Justinta, Akello Claire, Apio Daniella, Layola together with Ecabu Jonathan and my dear friends; Oron Solomon and Akello Sharon for inspiring me. Thank for the valuable time, love support you extended to my studies.

ACKNOWLEDGEMENT

Glory goes back to the Almighty God, my creator, for His guidance during all difficulty times throughout the period of my studies. The Divine wisdom and the ability to finish up my studies was indeed your making.

In a special way, I would like to give my sincere gratitude to my supervisors; Dr. Nabagala Justine and Dr. Edopu Ritah for their tireless professional guidance and intellectual encouragement during my studies.

I would have to appreciate all my superiors or mentors with the great gratitude; Dr. Nabaggala Justine, Dr. Edopu Ritah, Mr. Wathum Edwin, Mr. Seyondwa John, Mr. Tiga tege, Dr. Kekimuli, Joan, Dr. Senoga Maureen, Dr. Mutungi Emmanuel, Ms. Namulindwa Juliet, Mr. Ediedu Moses and Prof. Gombe Catherine for the team spirit and tireless support rendered to me.

A special thanks is extended to my fellow course mates for the encouragements, especially; Agaba Gabito, Arinda Fankline, Mugisha Wyclife, Apolot Martha and Nasasira Pius who rendered a lot of support to me.

You all are a gift and blessing from God throughout my entire time in the study program. I also want to express my sincere gratitude to each individual participant in my study for their significant contribution to data collecting; everyone in the teams i worked with on this study is deserving of my sincere thanks. Logol, Lochoto, and Lokin, to name a few, gave their expertise and assistance in organizing groups during the interview. I appreciate the technical help and support I received from the Art and Design Department. Also acknowledged are Mr. Tiga Ttege John, Mr. Gyavira, And Mr. Ediedu who gave me numerous helping hands during the studio production.

TABLE OF CONTENTS

| | |
|--|-------------------------------------|
| Declaration | ii |
| Approval | iii |
| Dedication | iv |
| Acknowledgement | v |
| list of figures | vi |
| LIST OF ABBRIVIATIONS/ACRONYMS | xvi |
| ABSTRACT | xvii |
| Chapter One: Introduction..... | Error! Bookmark not defined. |
| 1.0 Overview | 1 |
| 1.1 Study's Historical Context | 1 |
| 1.1.1 Printmaking History..... | 2 |
| 1.1.2 Personal Background in Relation to print making..... | 3 |
| 1.1.3 Motivation..... | 4 |
| 1.2 Statement of the problem | 5 |
| 1.3 Purpose of the study..... | 5 |
| 1.4 Objectives of the study..... | 6 |
| 1.5 Research Questions | 6 |
| 1.6 Significance of the Study | 6 |
| 1.7 Scope of the study..... | 7 |
| 1.7.1 Geographical scope..... | 7 |
| 1.7.2 Content scope..... | 7 |
| 1.7.3 Time scope..... | 8 |
| 1.8 Limitations | 8 |
| 1.9 Definition of key terms | 9 |

| | |
|---|-----------|
| Chapter Two: Literature Review..... | 10 |
| 2.1 Introduction..... | 10 |
| 2.2 Theoretical frame work..... | 10 |
| 2.3 Causes of Famine..... | 12 |
| 2.4 Indigenous practices of food Security..... | 18 |
| 2.5 Artistic representation of food security..... | 27 |
| Chapter Three: Methodology..... | 30 |
| 3.1 Research design | 30 |
| 3.2 Study population | 31 |
| 3.3 Sampling procedure and sample size..... | 31 |
| 3.4 Sample size | 32 |
| 3.5 Methods of data collection..... | 32 |
| 3.6. Photography and Videography | 33 |
| 3.7 Studio experimentation..... | 33 |
| 3.8 Analysis..... | 34 |
| 3.9 Validity and Reliability of the Research Instruments..... | 34 |
| 3.10 Ethical considerations | 35 |
| Chapter Four: Presentation of Data Analysis and Interpretation..... | 36 |
| 4.1 Introduction..... | 36 |
| 4.2 The cause of famine Among the Pokot in Matany community Napak District..... | 36 |
| 4.2. Indigenous Cultural Practices Promoting Food Security In Matany Community | 61 |
| 4.3. The production of prints for artistic representation that promotes food security in Matany . | 71 |
| 4.3.1. Project one: Artistic preservation of Sorghum..... | 72 |

| | |
|---|------------|
| Chapter Five:Discussion of Findings, Conclusion and Recommendation | 105 |
| 5.0 Overview | 105 |
| 5.1 Causes of famine among the Pokot in Matany, Napak district in Karamoja Region, Uganda | 105 |
| 5.2 Indigenous practices of food Security..... | 107 |
| 5.3 Production of prints for artistic representation which would be used in future reference to preserve indigenous practices that promote food security among the Pokot Napak district in Karamoja Region, Uganda..... | 108 |
| 5.3.1 Project One: Painting composition on a cow’s skin | 109 |
| 5.3.2 Project two | 110 |
| 5. 4 Conclusion | 112 |
| 5.5 Recommendation | 113 |
| 5.6 Areas for further research | 114 |
| REFERENCES..... | 115 |
| APPENDICES | 126 |
| Appendix A..... | 126 |
| APPENDIX B | 128 |

LIST OF FIGURES

| | |
|--|----|
| Plate 1: Photograph showing Turkana warriors burning huts of the Pokot community during raiding exercise | 37 |
| Plate 2: Painting of Karamojong Turkana warriors fighting with the army forces trying to fight for the stolen cows of the Pokot community people..... | 38 |
| Plate 3: Photograph of the Turkana cattle warriors running for their safety after being attacked by the Karamojong warriors in the Matany community and accompanied by army forces | 38 |
| Plate 4: A Complete series of paintings of Karamojong Turkana warriors exchanging fire bullets with the army and Turkana people running away with their stolen cows from Matany community. | 39 |
| Plate 5: Image of vehicles being washed away by floods..... | 39 |
| Plate 6: Photograph of children returning from school walking in floods on their way home..... | 40 |
| Plate 7: Photograph of children coming back from school and all the road is flooded as shown above. | 40 |
| Plate 8: A painting depicting the effects of floods to the people of Karamoja especially Matany community, people starving to death, too weak to move, stress and depressed. | 41 |
| Plate 9: A Karamojong woman starving with her two children for days from hunger after all their food was hit by sunshine and early planted crops were also washed away by floods leaving them completely with nothing to eat..... | 42 |
| Plate 10: A Karamojong stressed all day to find a way of meeting a meal just in a day since there is nothing completely to eat, since all the granaries are completely empty and hunger is a challenge. (<i>Source: Researcher, 2021</i>)..... | 43 |
| Plate 11: A Karamojong boy milking sheep as the only solution to hunger since there is nothing left to eat, and all the crops were hit by sunshine, floods during heavy rains of early April and March. | 43 |
| Plate 12: A Karamojong lady eating a thigh of a dead cow with her two children since it is the last option they have and nothing to eat completely left in their granaries. | 44 |

| | |
|---|----|
| Plate 13: A Karamojong boy emaciated to the bones and too weak to walk because he has been seriously starved and hit by famine crisis in Karamoja, Napak District..... | 45 |
| Plate 14: A Karamojong woman and her baby eating from a rubbish pit as the only solution left to fight hunger and only counting days to die since there is nothing completely left to eat again | 46 |
| Plate 15: A Karamojong man and his children affected seriously by hunger and too weak to walk and seriously starved to the bones, and waiting only for a few days to die..... | 47 |
| Plate 16: A group of Karamojong boys emaciated to the bones and finding a way on how to end the day but nowhere to go to get a meal and hunger is only waiting to take away their souls since there is nothing to eat..... | 48 |
| Plate 17: A Karamojong boy emaciated to the bones and finding a way on how to end the day but nowhere to go to get a meal and hunger is only waiting to take away his soul since there is nothing to eat..... | 49 |
| Plate 17: A Karamojong boy emaciated to the bones and finding a way on how to end the day but nowhere to go to get a meal and hunger is only waiting to take away his soul since there is nothing to eat..... | 50 |
| Plate 18: A group of Karamojong children lining up for fresh blood from a dead slaughtered goat that failed to make it due to lack of food to graze on since all the area is affected by drought and heavy winds. | 50 |
| Plate 19: Photographs of families in Karamoja spending a day without having a meal in the worst food crisis that has hit Karamoja sub region..... | 51 |
| Plate 20: A dead body of a Karamojong boy organized to be buried since hunger has taken him and there was nothing to eat completely and on the right is the skeleton of the father who was also starved and killed by hunger..... | 52 |
| Plate 21: Researcher cutting the window in preparation for creation of the background..... | 53 |
| Plate 22: The Manyatta bedsheet ready for application of Matt to create very fine and beautiful backgrounds for printing of the final projects..... | 53 |
| Plate 23: The animal skin ready for application of Matt to create very fine and beautiful backgrounds for printing of the final projects..... | 54 |

| | |
|--|----|
| Plate 24: Researcher stretching of the animal skin ready for application of matt. | 54 |
| Plate 25: Screen is placed on top of the window on the Manyatta bedsheet ready for printing ... | 55 |
| Plate 26: Creation of accuracy in order to come up with straight edges of the print in order to avoid smudging. | 55 |
| Plate 27: Manyatta bedsheets and animal skin supported by the screens placed under sun for drying to take place. | 56 |
| Plate..... | 56 |
| Plate 29: First application of black matt on an animal skin. | 57 |
| Plate 30: First application of brown coloured matt on the Manyatta bedsheet and later drying it using electric drier. | 57 |
| Plate 31: First effect outcome of the first print on the Manyatta bedsheet. | 57 |
| Plate 32: Colour comparison between an orange effect and brown effect on the Manyatta bedsheet. | 58 |
| Plate 33: Preparation of the animal skin for the next application of colour onto the animal skin. | 58 |
| Plate 34: Final projects of the Manyatta bedsheet drying alongside the final project of sisal and windows of bark cloth being created. | 59 |
| Plate 35: Effects of colour on sisal after printing it with matt. | 59 |
| Plate 36: Drying of prints at the studio using sisal surfaces as shown. | 60 |
| Plate 37: Final projects being dried under sunshine and they are ready for the framing exercise that is to say on sisal, skin and Manyatta sheet. | 60 |
| Plate 38: Photographs showing the topography and landscape during the wet and dry season of the Pokots in Matany community Napak District. | 61 |
| Plate 39: Clearing the field for the planting of Sorghum. | 62 |
| Plate 40: The Sorghum plant at the weeding stage. | 63 |
| Plate 41: The Sorghum plant ready for harvesting. | 64 |
| Plate 42: Women drying the sorghum from the garden. | 64 |
| Plate 43: The women threshing the Sorghum. | 65 |

| | |
|--|----|
| Plate 45: The image shows the granaries where the millet is stored after gringing to millet flour for the next season. | 66 |
| Plate 46: A photograph of a Pokot herdsman | 66 |
| 4.4 The production of prints for artistic representation that promotes food security in Matany .. | 71 |
| 4.4.1. Project one: Artistic preservation of Sorghum..... | 72 |
| Plate 47: A sketch portraying a sorghum plant on a manila paper | 72 |
| Plate 48: A woman harvesting sorghum grain and its drawn on a manila paper using asketch HB pencils. | 73 |
| Plate 49: A woman bringing sorghum grains home and spreading on the compound smeared with to sperate the real grain sorghum from the cow dung ready for drying..... | 73 |
| Plate 50: Women beating sorghum grains to remove husks | 74 |
| Plate 51. A drawing of a woman winnowing trying to remove away the threshes from the original grain of sorghum..... | 74 |
| Plate 52: A drawing of a young girl and grandfather providing the sorghum cereal husks from the original grain and its later going to be winnowed and making it ready for grinding | 75 |
| Plate 53: A cow’s skin from Matany community used to make paintings of preservation of indigenous practices that promote food security. | 76 |
| Plate 54: Researcher organising the frame on to which the cow skin is to be stretched and can be placed for the good painting exercise | 77 |
| Plate 55: A stretched skin ready for application of paint with stretched bars..... | 77 |
| Plate 56: A stretched skin being applied paints on it to create a very workable surface for this painting to commence | 78 |
| Plate 57: Colour being applied to create depth as shown in the image..... | 78 |
| Plate 58: Colour application that portray famine and are dry and ready for painting exercise | 79 |
| Plate 59: A sketch of Karamojong Pokot ladies in different postures trying to preserve food in Matany community | 79 |

| | |
|--|----|
| Plate 60: Sorghum grains being beat by the Pokot women in different posture and they are preserving it for the next season when there is nothing completely to eat. | 80 |
| Plate 61: Final stages of application of colour on the skin and the colours of drought were used to come up with the drawing..... | 80 |
| Plate 62: A complete painting series on a cow’s skin depicting ladies in different postures trying to beat the sorghum in order to preserve it for the next generation | 81 |
| Plate 63: Researcher organising the already made frames for the exercise of printing..... | 81 |
| Plate 64: Researcher stretching the nets and making measurements of the quantity require for me to use in for the frames..... | 82 |
| Plate 65: Researcher organising the already made frames and staples are being driven on to the net and them to the wood as shown | 82 |
| Plate 66: Aready stretched frame which is ready for photo emulsion as shown in the diagram. . | 83 |
| Plate 67: Researcher washing away from the photo emulsion exercise. | 83 |
| Plate 68: Researcher making my first print after photo emulsion and washing away paraffin. ... | 84 |
| Plate 69: Researcher washing away the screen to remove unwanted paste so that it is clean for the next printing exercise..... | 84 |
| Plate 70: Plate with his first print on manila paper and is ready for drying as shown in the image. | 85 |
| Plate 72: Final print in blue, red and black colours as sign of Pokot colour for colour on manila paper..... | 85 |
| Plate 71: Different trials on different colours of prints on the manila paper as my printing surface. | 86 |
| Plate 72: Creation of the window being cut in preparation of printing to take place | 86 |
| Plate 73: After cutting the window, the prints are dried to create a background to create a background that is white using matt as a material. | 87 |
| Plate 74: Final print of preservation of sorghum on animal skin using matt with effects of brown, pink and black. | 87 |

| | |
|---|----|
| Plate 75: An effect of paste on canvas on the preservation of sorghum | 88 |
| Plate 76: Final printing of preservation of sorghum on canvas ready for framing | 88 |
| Plate 77: A complete drawing of 3 Pokot men slaughtering | 89 |
| Plate 78: The figure above is showing a drawing of two men cutting the meat in to small pieces after the animal was slaughtered..... | 89 |
| Plate 79: A drawing showing hanged meat on sticks being smoked in order to preserve it from going bad the meat is cut in long slices pieces | 90 |
| Plate 80: A drawing showing a Karamojong man monitoring the drying of meat from other animal like dog cats from attacking it..... | 91 |
| Plate 81: A drawing showing two Karamojong ladies packing dried meat for storage for the future conscription | 91 |
| Plate 82: A drawing portraying storage of preserved meat in the granaries and the girls are helping one another to store the dried meat | 92 |
| Plate 83: Colour being applied to create depth as shown in the image..... | 93 |
| Plate 84: Painting of meat preservation. | 93 |
| Plate 84: A painting series on a Karimojong cloth showing meat preservation process in Matany community | 94 |
| Plate 85: Researcher organising the already made frames for the exercise of printing..... | 94 |
| Plate 86: Researcher stretching the nets and making measurements of the quantity require for me to use in for the frames..... | 95 |
| Plate 87: Researcher organising the already made frames and staples are being driven on to the net and them to the wood as shown. | 95 |
| Plate 88: Already stretched frame which is ready for photo emulsion as shown in the diagram . | 96 |
| Plate 89: Researcher washing away from the photo emulsion exercise. | 96 |
| Plate 90: Researcher making my first print after photo emulsion and washing away paraffin | 97 |
| Plate 91: Researcher washing away the screen to remove unwanted paste so that it is clean for the next printing exercise | 97 |

| | |
|---|-----|
| Plate 92: Different trials on different colours of prints on the manila paper as my printing surface..... | 98 |
| Plate 93: Creation of the window being cut in preparation of printing to take place | 98 |
| Plate 94: After cutting the window, the prints are dried to create a background to create a background that is white using matt as a material. | 99 |
| Plate 95: Effect of orange colour and black colour on the Manyatta bed sheet..... | 99 |
| Plate 96: Effect of orange colour and black colour on the animal skin | 100 |
| Plate 97: Effect of pink and black colour on the Manyatta bed sheet..... | 100 |
| Plate 98: Final print of preservation of meat on Manyatta bedsheet using matt with effects of brown, pink and black..... | 101 |
| Plate 99: Final print of preservation of meat on animal skin using matt with effects of brown, pink and black..... | 101 |
| Plate 100: An effect of paste on canvas on the preservation of meat | 102 |
| Plate 101: Final printing of preservation of meat on canvas ready for framing | 102 |
| Plate 102: Final project art pieces on different surfaces ready for framing exercise at the studio. | 103 |

LIST OF ABBRIVIATIONS/ACRONYMS

| | |
|--------|---|
| SDGs | Sustainable Development Goals |
| UN | United Nations |
| UNDP | United Nations Development Program |
| UNESCO | United Nations Education, Science and Cultural Organisation |

ABSTRACT

This study artistically represented food security among the Pokot in Matany, Napak District. The study was conducted under three objectives: to examine the causes of famine in Matany, Napak District, to establish what artistic representations are used to preserve indigenous practices that promote food security among the Pokots, in Matany, Napak District and; to produce prints for future references to sensitize the people about indigenous practices that promote food security Among the Pokots in Matany, Napak District. The study employed an exploratory approach to unearth the required information about Artistic representation of food security among the Pokot in Matany, Napak District. Forty two respondents were Randomly selected for their knowledge and expertise on the practice of food security and the views of the elders whose respective information guided the studio process, Data was collected using interviews, focus group discussion, photography, documentary analysis and studio experimentation based on the literature search and field work, the findings indicated that food security preservation played a big role amongst the Pokots, the preserved food is sold for purchasing other basic needs like salt, soap, sugar; helps in playing an important role in the society. For example, when in-laws visit the preserved meat is used as sauce and preserved food is also used for future days when there is completely nothing to eat in days of severe food scarcity. Therefore, the Pokot should encourage clan leaders and the elderly to instill the importance of embracing food security preservation among the youth through clan meeting, storytelling and use of food security preservation ways during events like child naming, festive dance and Heritage Day. Although the artifacts were produced for the Pokot community, for the purpose of promoting food security, the outcomes are beneficial to the entire Pokot community, Thus, Artistic representation of food security among the Pokots artifacts can continually be produced especially among the Pokots community and for the public consumption about food security preservation ways.

CHAPTER ONE

1.0 Introduction

This study focused on artistic representation of food security among the Pokots in Matany, Napak district found in Karamoja, North Eastern Uganda. The wide-spread starvation affecting the Pokot in Matany District of Karamoja is discussed in this chapter along with the study's background, explanation of the study problem, goal, aims, questions, and significance. The study's scope and limits are also discussed.

1.1 Background to the study

Pokots in the Matany District have historically had serious social and economic problems, especially vulnerability and poverty (Iyer, Sekajja, & Stites, 2018). The community in this area has the lowest level of human development, and women and girls bear the majority of the burden of supporting the family, particularly during years with bad harvests due to drought and flooding (Auma, 2021). Every two to three years, cyclical drought affects Matany. Floods in Loduk in 2012 damaged crops, triggering a severe famine, while climate change furthered environmental degradation, leading to poverty, vulnerability, and insecurity in the neighborhood (Muwanga, 2020). The loss of assets, particularly animals, as a result of the hard climate, violent cattle raids, and disarmament in the Matany community. In the Matany community, the majority of people engage in petty trading, casual labor, overgrazing, mining, and the gathering of wild fruits, termites, and vegetables. The majority of immigrants are women, children, and young men, while local residents have relocated to major cities in quest of better economic opportunities (Paul, 2019).

Most of these people tend to flee for their lives due to harsh and violent spouses who think that beating is a solution to the problem of hunger. Some of these people flee for their lives due to

political and social reasons such as domestic violence, which is rampant in the society (Lobuche, 2021).

1.1.1 History of Printmaking

Engraving is one of the oldest forms of art. Engravings on prehistoric bones, stones, and cave walls have been found. The technique of image replication is credited to the Sumerians (c. 3000 BCE), who carved artwork and cuneiform writings on cylinder seals, often made of stone, which were subsequently rolled over soft clay tablets to generate relief impressions (Reeves, 2020). They not only developed the idea of multiplication but also the mechanical concept of the roller, which subsequently gave rise to the printing press.

There is suggestion that the Chinese may have created a simple form of print the rubbing in the second century CE based on stone designs and seals discovered in China. Buddhist charms made in Japan between 764 and 770 CE were the earliest verified prints wiped from woodblocks (Machado, & Belkot, 2019). The first woodblock prints on textiles are thought to have been created by the Egyptians in the sixth or seventh century, but the earliest authenticated print is a scroll of the Diamond Sutra (one of the Buddha's discourses) printed by Wang Jie in 868 CE, which was discovered in a cave in eastern Turkistan (Rebel, 2020).

In Europe, printing by rubbing or using a press came before stamping to inscribe royal seals and signatures (Abdullah, Johari, Aziz, Ahmad & Rahaman (2022). The famine had a lasting legacy: Ireland is now the only country in Europe with a lesser population today than it was in the 1800s. This is the earliest known impression of a royal signature. However, artists of the time struggled with how (and if) to depict the horrors of the famine in their works of art (Condo, 2022). The ravenous human body in extreme conditions was rarely depicted according to Victorian painting traditions. More often than not, depictions of the famine in paintings reverted to sweet depictions

of aristocratic peasants at the whim of outside forces, caricatures of Irish laziness and fecklessness, or outright disregard for the situation because it didn't align with the values or interests advocated by academic painting (Machado, & Belkot, 2019).

Since the Illustrated London News didn't begin publication until 1842, illustrated journalism was still in its infancy at the time. One of the most well-known depictions of the famine that has emerged in media portrayals of the crisis is the illustration of Bridget O'Donnel and her children from The Illustrated London News from December 22, 1849. Black '47 makes good use of this source material, with its opening sequences deliberately replicating the monochrome palette of 1840s wood engraving.

Researchers studying "famine memory" nowadays are trying to learn more about how and when the famine evolves or becomes a topic of representation. From the 19th century to the present, the memory of the famine has existed in a wide range of visual and linguistic forms, far from being an unrepresentable catastrophe. Examples include play, political discourse, prints and paintings, photography, and film. Popular and literary fiction is another (de Zwarte & Janssen 2022).

Black '47, which is hailed as the "first famine picture," is an intriguing example of the genre but is not the original. This honor goes to the silent movie Knocknagow (1918), which was the first work wholly shot and produced in Ireland by the Film Company of Ireland. It is roughly set during the famine and is based on the well-known novel by Charles Kickham, which was published in 1873.

1.1.2 Personal Background in Relation to print making

I am qualified graduate teacher in the field of Art and Design; I majored in print making at Kyambogo University in the department of Art and Industrial Design. Which I studied for 3years which offered me printing experiences manually to directly create works of Art to communicate a

particular message without use of a computer. After graduation I joined the world of food production where we harvested food such as sorghum. We dried the sorghum, removed threshes, ground it into flour form. The flour was preserved until the next season when people lacked food and sold at a higher price.

Regarding meat, I learnt that when customers do not come to buy the meat the remaining un sold meat will be smocked and it would be kept and stored in granaries and it would only be eaten when we have received visitors or in laws from cities/towns. The food security competence acquired after university widen my employment, I would work in the Butcher making me have rich knowledge about the preservation of meat and sorghum. I also learnt which meat to sell first and also the competence helped me with rich knowledge on how to preserve sorghum flour since I was self-employed in a business of produce where would specifically monopolize sorghum preservation for next season of famine. Currently I am a student in masters in Art and Industrial design program of Kyambogo University. My work-related experiences in printmaking favoured me to use my past experiences to motivate my research on food security.

1.1.3 Motivation

The motivation to do this study originates from the realisation that famine was one of the massive disasters that left many people helpless in their houses. some elders and children starved to death while others survived on leaves and ants. In the area they cultivated crops but the plants dried up due to prolonged drought while the crops planted during early rains were washed away by floods. This resulted in severe challenges associated with famine; threatening lives of people and living thousands of people without food, bad health and in an impoverished state. The people got thin and emaciated to the bone, too weak to move and eventually died from hunger. Despite the prevalence of famine, a number of development initiatives for the region include mineral exploitation, trading

of livestock on a small scale and through sensitization by the Local Council. The indigenous practices also promoted food security in Matany Moroto district in Karamoja region. In view of contributions towards the challenges of famine various efforts have been initiated by government. There were policy bodies in the area to preserve food security but there have hardly been visual artistic ways to fight famine. Therefore, it is vital to preserve practices that promote food security among the Pokots in Matany, Napak District in Karamoja region.

1.2 Statement of the problem

Famine is one of the massive disasters and hunger has often left many people grounded in their houses and now resorting to eating leaves and ants while the elderly and children starved to death. Residents in the area cultivate crops but the plants dried up due to prolonged drought while those who plant during early rains the crops are washed away with floods. This has resulted in severe challenges associated with famine; threatening lives of people and leaving thousands of people without food, in bad health and in an impoverished state. I have observed people getting thin, and emaciated to the bones, too weak to move and eventually die from hunger. Despite the prevalence of famine, a number of development initiatives for the region include mineral exploitation, trading of livestock on a small scale and through sensitization by the Local Council. However, there have been indigenous cultural practices that have promoted food security in Matany Napak district in Karamoja region. In view of contributions towards famine challenges, I advocate for preservation of indigenous practices that promote food security in Matany Napak District Karamoja region.

1.3 Purpose of the study

The study was purposed to artistically represent food security among the Pokot in Matany, Napak District.

1.4 Objectives of the study

- (i) To examine the causes of famine among the Pokot in Matany, Napak district in Karamoja Region, Uganda.
- ii) To establish artistic representations of indigenous practices on food security in Napak district, Karamoja region, Uganda.
- iii) To produce prints on food security in Napak district in Karamoja Region, Uganda.

1.5 Research Questions

- (i) What are the causes of famine among the Pokot in Matany, Napak district in Karamoja Region, Uganda?
- ii) What are the artistic representations of indigenous practices on food security in Napak district, Karamoja region, Uganda?
- iii) How can we produce prints on food security in Napak district in Karamoja Region, Uganda.

1.6 Significance of the Study

This result will be applied for future references on the preservation of indigenous practices on the printmaking (or any artistic/design) representations that promote food security among the Pokot in Matany Napak district while others will serve as decorations and promote food security in the Pokot community.

The research will provide relevant literature on artistic design/representation of indigenous practices that promote food security among the Pokot and contributes knowledge for academic purposes.

The study will also benefit the government policies to implement the sustainable development Goal 11 whose target is to strengthen and protect the worlds famine.

The study provided me with enough knowledge on how to address famine and preserve indigenous food practices that promote food security in Matany, Napak district.

1.7 Scope of the study

The study's content, geographic, and time scope are all covered under its scope, which is explained in the section below.

1.7.1 Geographical scope

The study was conducted in Matany, Napak district, Karamoja Region, 562km from Kampala Capital City, along Mbale, Soroti, Amuria, Kotido high way, in Karamoja region. The Pokot are closed community of traditional herdsman and farmers whose activity is mainly centered on production of grains of sorghum and cattle keeping to sustain their living. The study was connected to the representations of food security and those who preserve food. The elders who specialized in cattle and food preservation of sorghum and meat were sought to give needed information of knowledge acquired through representation.

1.7.2 Content scope

The content scope focused on the three objectives as guidelines to concentrate on the outcomes of this study on the Pokot in Matany, Napak district in Karamoja Region, Uganda. As such, emphasis was put on the indigenous practices on food security in the community under investigation. Secondly, was the development of concepts for prints for use in their compounds to sensitize them on how to fight famine. Lastly, the production processes associated with painting of drawings and production of prints that represent food security challenge in Karamoja was sought for in order to implement the final project in print making through studio practice. Guided by set objectives, the

relevant content for implementing each activity was gathered from the available literature and studio practice experience as described in the subsequent chapters of this report.

1.7.3 Time scope

The study duration and the literature and related material studied throughout a specific time period were two variables that were examined by the temporal scope. Between March 2019 and March 2021, a span of 1.5 years was used for data collection. The literature that was used covered the time period from March 2019 to March 2021, as well as the literature and relevant materials that were reviewed as the investigation moved forward. The required data supporting the two-year study [2019 to 2022] under which research was conducted was significantly provided throughout this era.

1.8 Limitations

The study limitations were not many and they concluded, a challenge to get the respondent at the time of study since they were preparing to migrate to the nearby districts because of tribal conflicts between the Pokot and the Turkana. Since the selected area was in accessible due to raiding to mitigate this problem, distribution of was done through the studio local leader and were collected later.

Secondly, some respondent had busy schedules where I was forced to re-schedule my appointments for other dates: this extended data-collection beyond the planned period.

Some respondents exhibited extreme reluctance to reveal information that they felt was important for this study. As a result of the sample respondents' lack of sincerity, the results did not accurately reflect the views of the entire population that was included.

It was costly to move to different villages and locate practicing respondents for my inclusion in the study, and they were very high telephone bills that dried up my pockets, accommodation and materials for executing the studio process in order to undertake a successful study.

Lastly, due to the category sample that was available for the study, the results of the study went beyond the specific population from which the sample was drawn. I made sure that the participants had access to information about food preservation from many categories of the population sample.

1.9 Definition of key terms

Artistic Representation; This refers to the production of artworks visually a given phenomenal occurring.

Food security; A state of having reliable access to a sufficient supply of affordable, wholesome food is known as food security.

Painting; Painting is the practice of applying paint, pigment, colour or other medium to solid surface (called the “matrix” or “support”).

Paintings; Paintings are a form of visual art that captures the expression of ideas and emotions on a two-dimensional surface.

Print Making; This refers to the process of creating artworks by printing, normally on paper, but also on fabric, wood, metal and other surfaces.

CHAPTER TWO

2. 0 LITERATURE REVIEW

2.1 Introduction

This chapter provides a theoretical framework that scholarly positions the study and further examines existing literature on artistic depictions of Pokot food security in Matany, Napak District. The chapter is organized in accordance with the study's three main goals, which include: examining the causes of famine among the Pokot in Matany, Napak district in Karamoja Region, Uganda; establishing artistic representations of indigenous practices on food security in Napak district, Karamoja region, Uganda and production prints on food security in Napak district in Karamoja Region, Uganda.

2.2 Theoretical Frame Work

This study examined some selected cultural beliefs held by people who joined together in shared ethnic or clan groups. Cultural beliefs may include a sense of belonging and food security in the form of plants and animals. The symbolic interaction theory of identity developed by Blumer in 1969 contends that understanding of human's relationship with their society by focusing on the symbols that help them give meaning to the experiences in their lives. (Husin, Rahman, & Mukhtar, 2021). The concept explores how individuals develop a sophisticated system of signs or symbols that act as meaning-bearers for diverse universal objectives. The meanings are shaped through interactions with society, which are then interpreted subjectively by the participants to suit the meaning in accordance with the level of food security. Therefore, the theory was relevant in guiding this study in the production of print symbols that conveyed artistic meaning that individuals among the Pokot community can interpret while associating with others in Matany community. I used sorghum which is their staple food and it favours their nature of land and climatic conditions and

meat which is the source of livelihood of the Pokots where they can get fresh blood, milk, meat and skin as a source of food. The argument is supported by Haekel (2020) who highlighted the objective is thought to interact with a given kind group or individual and to save us a symbol or their emblem of food security.

Members of an ethnic group, clan, or family who believe they are ancestrally related to them hold a tutelary spirit to which they have strong emotional attachments regard this greatly. In this study, symbolic interactions also express how the individual develops a sense of self identity through these connections with society. The elders and community leaders in Matany, Napak District chose this representation of sorghum and meat as a symbol of their community's traditional identity and as a source of inspiration for prints promoting Pokot food security. According to the symbolic interaction theory (Blumer, 1969), through our interactions with others, people learn to understand and provide meaning to the world.

The concept explores how individuals develop a complex system of symbols to give the world's objects meaning from their perspective. The meanings are shaped by the interactions with society. Additionally, individuals give their own interpretation to these experiences in order to make sense in light of the symbols currently in use. This theory will serve as a guide to develop printings with symbols that carry meaning that individuals interpret while engaging with others in society.

The symbolic relationships also show how people form identities as a result of their interactions with larger social groups, like the Karamojong clan. A society's distinct ideas, beliefs, values, and knowledge are all included in that society's culture, according to Serrate's (2008) Culture Theory. It illustrates how humans take in their environment. This idea is relevant to the study because it offers conceptual clarity, concrete benefits, and allows for the production of items from natural

resource research that could be utilized to preserve a culture for future generations. Cultural institutions are the best in ways of knowing reality and truth about behavioral norms and values of a given cultural group in a society. This implies that cultural institutions are paramount in terms of opinions and relevant information is concerned therefore they form a center for rich source of information in question. It can aid in comprehending and advancing growth in settings where group ties are prevalent and individualism is restrained. Therefore, the research theory will guide the researcher while executing his tasks in printing production.

2.3 Causes of Famine

Allee et al. (2018) contend that food insecurity, a multifaceted issue at the global, regional, national, and sub-national levels, is what causes malnutrition, extreme hunger, and famine. In Karamoja, the region where my case study's Napak district is situated, there has been food insecurity. With a 61 percent income poverty rate and a 70 percent food poverty rate, Karamoja is one of Uganda's supposedly poorest regions, according to the UNHS' 2016/17 report. There are four subsistence farming zones in the area: one for sorghum and livestock, one for maize and livestock, one for mixed crops, and one for apiaries and potatoes. The majority of the population relies on farming, raising livestock, and other diverse livelihood activities because they live in rural areas. Due to factors like insufficient food, poor dietary diversity, structural poverty, few options for employment, poor hygiene and sanitation, and disease, the region still has the highest rates of food insecurity and malnutrition in Uganda, despite recent improvements in access to safe water sources but low water use. The area is also prone to recurring climate-related shocks, such as extended droughts or mid-season dry spells, irregular rainfall that frequently results in floods or water logging, etc. (Olum, Ongeng, Tumuhimbise, Hennessy, Okello-Uma, & Taylor (2018). There is a clear vulnerability to additional shocks, such as rises in food prices, decreases in the production of crops or livestock, and market disruptions.

The Integrated Food Security Phase Classification (IPC) outlines the generally accepted definition of "famine," which includes severe acute malnutrition, death, and destitution (IPC, 2020). Academics have historically categorized famine as an event, a process, or a system where one in five households experience “an extreme lack of food and other basic needs where starvation, death, and destitution are evident” (Maxwell et al., 2016).

Famine has been extensively studied using an interdisciplinary approach from an economic, sociological, climatological, and political perspective (Wheatcroft, 2012). A number of factors, such as social structure and organization, economy, human institutions, technology, the environment, etc., can be used to differentiate one famine incident from another. For a very long time, the majority of people thought of famines as instances of dramatic rises in mortality and severe malnutrition caused by an abrupt scarcity of food or an unexpected collapse of entitlements (Howe, 2018).

Lack of food or issues with food distribution are the main causes of food shortages in a population; weather changes, authoritarian governments, and armed conflict can further exacerbate them (Daoudy, Sowers, & Weinthal, 2022). Up until 1981, the Food Availability Decline (FAD) hypothesis was the widely accepted explanation for why famines were placed. It was thought that the main cause of all famines was a decline in the food supply. According to Physicians for Social Responsibility (PSR), global climate change is limiting the Earth's ability to produce food, which could lead to famine (Climate Change and Famine 2013).

Some variables make a particular area more vulnerable to hunger. Among problems include population growth, insufficient social infrastructure, oppressive political regimes, and weak or unprepared administrations. (Top 10 causes of hunger in the Horn of Africa in 2016). I agree that global climate change has an effect on the ability of the globe to produce food because the Karamoja

region is prone to recurrent climate-related shocks such extended mid-season dry spells/drought, unpredictable rainfall that regularly results in floods/water logging, etc. Specifically, in the green belt of the Napak, Abim, Kotido, and Karenga districts, the surprisingly above average rains in April to May and July 2020 resulted in water logging that caused the young crops to rot, and later flash floods that swept away the harvests. Famine has also resulted from this in the Matany settlement of the Napak area.

My argument is also supported by IPC Acute Food Insecurity Analysis Report (2022), which revealed that the rains also adversely affected the early growth of sorghum in Kaabong and Moroto districts, forcing farmers to replant, and the mid-season dry spell also adversely affected the late-planted sorghum, leading to low production. The production of maize, sorghum, beans, and millet was hampered by crop pests and diseases, particularly the Fall Army Worm, sorghum smut, meadow-spittle-bug, and bean fly. In addition to resulting in low output of maize that had already been planted, the desert locust invasion that began in February 2020 and nearly continued until September 2020 also resulted in reduced land opening as farmers incorrectly predicted the effects of the invasion/attacks.

Famine has been induced in several areas of East Africa, particularly Kenya, by the worst rains in 60 years. However, poor governance, violence, long-term neglect of distant, dry regions, and underinvestment in small-scale food producers like farmers and herders were the primary causes of the drought and food crisis that hit East Africa in 2011 (Perez, Aalst, Choularton, Hurk, Mason, Nissan, & Schwager, 2019). Numerous people experienced serious consequences, such as the loss of their livelihoods, the death of livestock, and subpar crops. The famine in Somalia is believed to have killed tens of thousands of people. Oxfam provided potable water, sanitation, money, and other assistance to more than 2.8 million people in Somalia, Kenya, and Ethiopia through collaborating

with communities, governments, and local and international NGOs. This support offered communities the ability to adapt to a changing climate and more frequent droughts by providing both immediate humanitarian aid to save lives and long-term development. But it will take persistent work for years to reconstruct lives and livelihoods (FAO, 2018).

I come to an agreement that the locust invasion that took place in Karamoja in March and April 2020 coincided with the start of rains, which would have favored the availability of pasture and water for cattle production and destroyed rangelands for the local pastoralist people. This shows that rains can induce famine. The repercussions of this invasion on livestock production have continued until 2021, which has led to incredibly low agricultural harvests. Famine happens when there is a severe scarcity of food due to a poor harvest.

Thomas Malthus' *Essay the Principle of Population*, which states that many famines are caused by an imbalance between food production and the enormous populations of nations whose population exceeds the regional carrying capacity, has acquired prominence (de Waal, 2018). Professor Alex de Waal, executive director of the World Peace Foundation, rejects the Malthus theory and claims that political factors have been the main causes of recent (within the last 150 years) famines (de Waal, 2018). This is also true in Karamoja, where there are many people and a high birth rate. Due to the growing population of 1.4million people according to (UBOS 2020 Report), not enough food is available for all the families.

A situation in which many people continue to live when the carrying capacity of the land has momentarily reduced drastically can be caused by the loss of a harvest or by changes in weather, such as drought. Subsistence farming is frequently linked to famine. Arizona and other wealthy places import the large majority of their food because they generate enough commercial products

for commerce, despite the fact that the complete lack of agriculture in such areas does not result in starvation (FAO, 2018). I support the statement that drought causes famine in Karamoja because there is insufficient water to produce good yields and this leads to famine because Karamoja is a dry land.

Severe food shortages are a result of ongoing drought, conflict, and instability. There are few government and community support structures for families because many nations have battled extreme poverty for decades. Particularly, recurrent cycles of drought throw populations into a fresh food crisis before they have time to fully recover from the previous one. Millions of people worldwide have fallen farther into poverty as a result of the COVID 19 pandemic's secondary economic and social effects, and these effects are still felt by African children and their communities today. Through 2022, there will be a continued fall in employment prospects, loss of jobs, decreased purchasing power, and restricted access to necessities like food and services. As the region's agricultural season began in late March 2020, the COVID-19 epidemic movement limitations that went into effect at that time forced homeowners to open less acreage than in typical years. I concur that the COVID 19 epidemic caused famine because the Matany village in the Napak district was also impacted given that the pandemic afflicted the entire nation (world). An evaluation of the COVID-19 impacts in Karamoja undertaken by the Karamoja Resilience Support Unit (KRSU) in August 2020 revealed that approximately 45% of the households in the Abim, Amudat, and Moroto districts opened less land compared to a typical year. The same time period saw a spike in insecurity as security personnel focused more on COVID-19 response actions, prompting more households to stop planting and harvesting crops. The cost of agricultural inputs unusually increased by roughly 26 percent as a result of restrictions on mobility and an increase in average transportation expenses (mostly boda boda transport) (Ilukor, Joyce & Okiror, 2022).

Droughts have historically affected agricultural output and food security in Uganda, and as a result of global climate change, they have become more common (OPM GOU 2012). A severe drought brought on by El Nino in 2015–2016 impacted a large portion of East Africa, severely increasing food insecurity in Uganda until 2017. (OPM GOU 2017). The recent drought hit Karamoja particularly hard, and it continues to have the greatest incidence of food insecurity of any region in Uganda. Karamoja is one of the poorest and most food-insecure regions of Uganda, and it has long relied on food aid from donors (FEWS NET 2016, 2017, 2019).

In the Karamoja region, particularly, goats and calves perished due to the drought, according to FAO (2021). Residents currently eat very little food and rarely have three meals a day. The majority of families are suffering and searching for alternative food sources; some have started modest businesses like selling firewood to raise money for food. Residents cultivate some crops, such as sorghum, in anticipation of rain, but because of the rain's irregular behavior, flooding frequently results. Crops are destroyed by the rain and the sun, respectively. Either way, there is little or no harvest at all. Due to factors like insufficient food, poor dietary diversity, structural poverty, few options for employment, poor hygiene and sanitation, and disease, the region still has the highest rates of food insecurity and malnutrition in Uganda, despite recent improvements in access to safe water sources but low water use. The area is also prone to recurring climate-related events like droughts and protracted dry spells throughout the middle of the season, irregular rainfall that frequently results in floods and water logging, etc. There is a clear vulnerability to additional shocks, such as rises in food prices, decreases in the production of crops or livestock, and market disruptions.

2.4 Indigenous Practices of Food Security

Food security is defined as the state of having "everyone, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that suits their dietary needs and food choices for an active and healthy life." According to the World Health Organization, "All people at all times consume food of sufficient quantity and quality in terms of variety, diversity, nutrient content, and safety to meet their dietary needs and food preferences for an active and healthy life, coupled with a sanitary environment, adequate health, education, and care" (FAO, 2005).

The study's authors, Kamwendo and Kamwendo (2014), claim that by storing and conserving food, which translates into access, entitlement, and security, households may preserve food security without risking future food consumption. In the bulk of Africa, the agricultural output is preserved and processed using simple local knowledge and practices. For example, the majority of people consume a lot of cereals and legumes, therefore issues relating to their production, storage, marketing, and processing are vital. These methods, which are mostly utilized by women and generate jobs and money, are important since they offer both. The intended result is to give Africans access to sufficient, nutritionally-balanced diets at reasonable costs in the now and the future. Using local expertise and technology, the cereals cultivated in Ghana can be used in a wide range of dishes. Among the dishes made from maize are fried cakes (akpiti), steamed or baked dumplings (abolo), boiled maize porridge, corn-wine (nmeda), and plain corn on the cob. In Ghana, beans are prepared in a variety of ways, including boiled beans, cakes (akara), stews, and bambara porridge (aboboe) (Mowa, 2018). Groundnuts are also prepared in a variety of ways, including roasted or boiled, groundnut paste, groundnut soup, and groundnut cakes. Indigenous knowledge and practices are unquestionably important in Africa, so residents of the Matany community in the Napak district

should adopt such practices to preserve various foods, particularly meat and sorghum, in order to reduce the problem of food insecurity that is prevalent in the Karamoja region.

According to Asogwa et al., (2017), drying is one of the earliest methods for food preservation. It is essential for food security since reducing water to a bearable level extends the shelf life of agricultural products. The dried goods are rehydrated before use to create a dish that resembles the new harvest, especially during the dry season when people must consume commodities preserved in various ways. Drying is a necessary intermediate stage in the food processing process because, for instance, some foods must be dried before being transformed into flour. As a result, drying is a common technique for conserving extra food for the winter. The process of drying can take the form of standard sun-drying, which entails spreading the food product on bare ground, road sides, or roof tops (Walingo, 2008). One important, conventional, and affordable technique of food preservation is sun drying. This is as a result of its adaptable use with various dishes. Almost any food item, including tubers, cereals, fruits, vegetables, fish, and meat, can be dried in the sun. Foods like maize, peeled cassava, peeled yams, veggies, etc. may all be sun dried to preserve them for a long period without going bad. Drying meat and fish over smoke enhances flavor while also extending shelf life. Since sun drying is an inexpensive method of food preservation since the sun is readily available, I support the idea that Matany community people can implement sun drying as a method of preserving food like sorghum, meat so that in periods where the climatic conditions lead to drought, the people of Matany community have enough food to eat thus preventing food insecurity.

Another author Rahman, (2007) noted that when foods are gathered and separated from their immediate development medium (plant, soil, or water) or from the animal's meat after slaughter,

preservation begins. The techniques of preservation depend on the origin of the foods, particularly whether they are of plant or animal origin (Rahman, 2007). Different processing procedures are used when it comes to dried traditional meat. The traditional dried meat, Koche, is produced from specific sirloin and silverside steak muscle pieces from cow or goat carcasses. Due to the various methods used to remove moisture, these traditional meat products that have been dried can be categorized as dehydrated foods. Meat drying, as defined by Javeed and Ram (2015), as a preservation process intended to extend the shelf-life of raw meat and reduce handling stress by reducing size and weight. I agree that the Matany neighborhood should follow the practice of preserving meat in this way to prevent the problem of food insecurity and famine.

Meat preservation became essential for the long-distance transportation of meat without losing its texture, color, or nutritional value after the introduction and rapid growth of super markets (Nychas et al., 2008). Traditional methods of meat preservation, such as drying, smoking, brining, fermentation, refrigeration, and canning, have been replaced by new preservation techniques, including chemical, bio-preservative, and non-thermal treatments. Reducing oxidation, enzymatic spoilage, and microbiological spoilage are the goals of preservation strategies. Managing temperature, regulating water activity, and utilizing chemical or biological preservatives are the three main ways used today to preserve meat (Zhou et al., 2010). To slow down the process of deterioration, these preservation methods might be combined (Bagamboula et al., 2004). FAO (1990) states that one of the straightforward methods for producing dried meat involves utilizing a basic metal framework with sticks, wire, or plastic ropes to suspend the meat strips as they dry. Due to the environment's accessibility to the sticks and the ability to access the wires. I think the Matany neighborhood should follow the practice of canning meat in this way.

Smoking is another method of preserving meat. It is also known that smoking meat can be used to preserve meat products for a long time. It is now generally known that smoke contains a variety of wood degradation products, such as phenols, organic acids, aldehydes, and ketones. Another element in how smoke preserves meat is the dryness of the surface, which lowers the pH of the surface and the antioxidant qualities of the smoke constituents. Smoking and curing meat have a lot in common. Nowadays, smoking frequently follows treatment. This method is commonly used in African countries such as Nigeria, Ghana, Kenya, and not excluding Uganda. Many community can use smoking because smoking meat preserves it from going bad for some time. This helps to prevent food insecurity in Karamoja region since Karamoja is the district with the highest food insecurity in the country (Adeyeye, Bolaji, Abegunde, & Adesina, 2020).

Sawdust or hard wood, or often both, are burned at a temperature of roughly 300°C in specially constructed smoke houses to produce smoke (Pal, 2014). Numerous chemical molecules and their condensation products are formed together with the creation of smoke. Condensation of aldehydes and phenols, which make up 50% of the smoke components and are primarily responsible for the color of smoked meat products, occurs. The principal bactericidal substances are phenols. In this method meat is exposed to smoke from burning wood to brown, flavour and preserve. Formaldehyde found in wood acts as a natural food preservative. Smoked fish and meat are delicious because they attain a flavour from the process of smoking. The smoked fish and beef will stay a few days without going bad, to preserve it longer keep smoking the meat after skipping a few days in order to preserve it and prevent food insecurity.

Additionally, as a result of the interactions between people and food, a variety of techniques for material processing and storage have been created and kept up. According to Sharma and Kondaiah

(2005), processing aids in the production of a variety of useful meat products to satisfy different lifestyle needs, while preservation supported by processing increases the shelf-life of meat and meat products.

Drying is the oldest method of preserving food and is still practiced by Ugandans living in rural areas. Meat and fish can be dried under the sun or using wind. Drying removes moisture from the meats which prevent them from going bad. In the semi-arid areas of Karamoja beef from the animals is sun-dried and preserved for future use. The sun dried beef can be eaten dry or soaked in water soil that is reabsorbed moisture before cooking. It is then cooked as a beef stew or pasted with ground nuts and can be served with millet bread/Kalo. This method is not any different from that used by the Borona in Kenya.

In Nigeria, tomatoes are first sun-dried, then soaked in warm water before being crushed to form sauce. These dried tomatoes have a one-year shelf life. In Malawi, dried vegetables are first boiled before being sun-dried for a number of days, depending on the degree of insulation. They were stored in large pots known as mtsuko in order to maintain their flavor. These containers contained nothing but these preserved vegetables (Katz and Weaver, 2003). These vegetables would be stored over a year. In Zimbabwe, after short boiling in salted water, vegetables are sun-dried. These are then stored somewhere safe and dry.

This method is also used to dry food insects like caterpillars, termites, and white ants. (Oniang'o et al, 2004) In Karamoja, and particularly in Matany, farming is challenging due to the nature of the soils, which cannot hold water and moisture for long. As a result, I support the adoption of the idea of preserving some foods that are not grown in the area but are very important, such as tomatoes,

by sun drying them and soaking them in warm water to make them last for a long time. In the event of a famine, this avoids food insecurity.

Spreading the food directly in the sunshine is another strategy. The food is first salted if there is a danger that it will spoil while drying, as there is with mushrooms and tomatoes. Food drying is an essential job for women because they are often in charge of food preparation, even during the dry seasons (FAO) (1997). These indigenous knowledge systems help to guarantee that food is always available. Food crops like corn, beans, and groundnuts were sun-dried before storage to increase their shelf life by around six months. In a survey conducted in Anambra state of Nigeria, more than 80% of respondents still used sun drying for food preservation, whereas a study conducted in Uganda revealed that up to 95% of respondents still used sun drying as the primary indigenous practice for food processing (Agea et al., 2008). (Nnadi et al, 2013). Spreading the material on flat stones, linen, canvas, wire-mesh, leaves, or even the earth, where drying is less controlled, is one of the traditional African drying techniques. The traditional method of drying products makes them vulnerable to spoiling from unexpected or sudden showers, wind-borne dirt, vermin, rodent excrement, insects, insect parts, and worms, as well as dirt from worker activities.

In such unregulated drying setups, toxins can also grow, degrading the quality past what is edible. However, the biggest drawbacks of food drying are the loss of vitamins, flavor, and color. Some of these losses can be reduced by not over-drying the food. Sun-drying could be done on elevated platforms rather than flat surfaces to reduce these contaminations.

One of the most significant cereal crops in the semi-arid tropics of Africa and South Asia is sorghum (*Sorghum bicolor* (L.) Moench), which provides food for more than 500 million people globally (Reddy et al. 2012; Macauley 2015). Sorghum is Uganda's second-most significant cereal crop after

maize, with the Northern area producing the bulk of it (UBOS 2010). Smallholder farmers, who typically cultivate the bulk of traditional crop varieties, are the principal producers of sorghum.

Among the important constructions in Nigeria that may be found in the three different climatic zones are granaries, mud rhombuses, thatched rhombuses, platforms, cribs, earthen pots or baskets, domestic or interior storage such as plastic containers, gourds, earthen pots, and metal containers (Muftau, 2019). Another sort of storage structure is a bag, which could be made of jute, hessian, polyethylene, or plant fiber. To reduce these postharvest losses, farmers use coping strategies including applying traditional knowledge in addition to conventional storage systems. These include selling grain quickly after harvest, completely cleaning or pesticide-dusting the storage building before dumping the maize, using herbs like the Mexican marigold and hot pepper in storage, and purchasing new maize storage technology. Farmers in Karamoja (Matany community) can integrate traditional knowledge of preservation of grains to preserve sorghum in order to prevent the problem of food insecurity in Karamoja brought about by different factors.

The primary requirements of all grain storage systems or buildings are protection of the grains from insects and rodents as well as prevention of grain spoilage due to microbiological activity (Hall, 1970). Additionally, the grains must be stored dry and cool. Finding secure, affordable storage options that don't harm the environment or secondary consumables is necessary due to the impact that the creation of synthetic pesticides has put on a range of natural resources. This analysis was conducted to reevaluate the several conventional storage methods employed by resource-constrained farmers in Nigeria and India to preserve their food grain products.

According to Rugumamu, Kichenga, Reli, and Dari (2003), historically, grains were dried and stored in Tanzania at Kihenge, Rodent guards have been put on the poles of the 1.5 m tall elevated

home known as Kihenge. It has a door on one side and is constructed with grass thatch and mud plaster. The building contains sorghum sacks. Kihenge are often constructed outside, on private property, and as a result, offer no defense against vandalism, insect and rodent infestations, or rain. A kichanga, which resembles a table, is often constructed inside a house.

It is constructed with wood pieces that are bound together with ropes and lifted about a meter off the ground. These storage techniques are very prone to insect infestation. According to this view, I support that people in Matany community store their harvest in granaries because the ability of smallholder farmers, individually or in groups, to effectively and efficiently store a significant portion of their harvest at farm level, is a major contributing factor for attaining food sufficiency and eliminating wide spread hunger in the region.

Sorghum is traditionally dried and stored in Kenya and many other East African cultures. Modern ways include the little drum and bags to the complicated silo, while traditional methods include storing on the floor or in a crib. More than 75% of African smallholder farmers' agricultural produce is preserved at the village level for local use and is thus stored using conventional techniques (United State Agency for International Development, 2011). These storage facilities were built by the locals themselves out of natural resources (soil and plant materials). Some buildings, like a maize crib, are used for short-term storage and are primarily used to dry crops. Other buildings are used for long-term storage. Aerial storage is a category for temporary storage techniques. Sometimes bundles of millet and sorghum panicles are tied, stored on the ground, or placed on drying floors and open timber platforms, then strung from tree branches, poles, or tight lines outside or inside the home (Nukenine, 2010).

In Ugandan cuisines, traditional fermented foods have a key role as dietary sources of nutrients such as carbohydrates, proteins, fiber, minerals, and vitamins (Fusco, 2017). Fermentation can improve the nutritional value of these foods, add variation to the taste, lengthen the shelf life of the product, and guarantee food safety (Tamang, 2016; Fusco, 2017). It is also believed that certain of the starter cultures in traditional fermented foods have probiotic qualities that have positive benefits on one's health (Tamang et al, 2016; Fusco, 2017).

In western, southwestern, and central Uganda, popular traditional fermented or non-fermented cereal beverages are referred to as "obushera" (Mukisa, 2012). Malted or unmalted sorghum or millet grain flour is mostly used to make the beverages. Obushera is served at social events like weddings as a beverage, a food for weaning, and a way to satisfy one's thirst (Mukisa, 2012). For a very long time, regional craftspeople have produced the majority of obushera. Only in 2008 did Multiline International Limited introduce Obushera under the trade name "Bessa," kicking off industrial-scale manufacture of the commodity in Uganda.

The procedure of heating grain in the sun to kill insects is known as solarization, and it is a popular way to preserve sorghum in Karamoja. Farmers have long used this method before storing their grains and pulses in areas where the temperature outside reaches 20 °C or more (Chua and Chou, 2003). Depending on the product, different solarization times are used, and dried grains are eaten to see if they have dried sufficiently. It typically relates to grain that is stored for food rather than seed because doing so could lower the viability of the seed. Farmers distribute the food grains on bare ground, spread polythene or tarpaulin, bamboo mats, roadsides, or rooftops to minimize moisture content and destroy the majority of infesting agents in order to sun-dry the stored grains. The grain won't become infested if it is kept in an insect-proof container (Ofor, 2011). According

to Kiruba et al. (2008), *Callosobruchus* perished after spending 24 hours outside in the sun (in various colored polyethylene bags).

2.5 Artistic Representation of Food Security

The Karamoja subregion, one of eastern Africa's most ethnically diverse regions, is linked to Uganda's worst rates of food insecurity (Olum et al, 2017). According to Ndirangu et al. (2013), a household experiences food insecurity when there is not enough food produced by the household (food availability), accessible from outside the household (food accessibility), or used to provide a balanced diet for household members (food availability and accessibility) (improper utilisation of food). Both recurring (e.g., brought on by deteriorating soil fertility, lack of available land, emphasis on limiting diversity, food production for profit, extremely seasonal food production, etc.) and passing (e.g., due to anomalous weather conditions, such as drought, crop disease, etc.) food and nutrition insecurity have significant negative effects on a person's health and finances.

Studies on food security have focused mostly on three areas: food production, the dynamics of drought, and the market for fresh produce. However, analysis of various food security crises in Africa over the past few years has revealed that a number of factors influence food security (Oxfam-GB 2004; Benson 2006; Tibbo & Drimie 2006). The development of already-existing landmarks, environments, infrastructure, art and culture genres, trade collaboration, cross-border trade and exchange, the value of ethno-tourism and cultural tourism, which may generate income and strengthen cultural identity, and infrastructure development are some of these factors that have cultural ramifications (either positively or negatively) (Cleverdon 2002). The function of arts and culture should be positioned within these livelihoods contexts as food security is a subset of a larger sustainable livelihoods' dilemma. A regional agenda for the promotion of the positive contributions of arts and culture to food security can be set using such an approach, which also offers the chance

for a more systematic investigation of issues and limitations. I produced prints for artistic representation which would be used in future reference to preserve indigenous practices that promote food security among the Pokot in Matany community, Napak district in Karamoja region, Uganda.

According to Aoife (2016), food and art go way back. The archaeological relevance of food is one thing: images of bread, wine, dairy and poultry captured on Ancient Egyptians wall paintings has helped historians learn about the diet and way of life of that ancient civilization. Similarly, with ancient Rome, paintings such as the Roman wall painting of a plate of fruit and some vases, unearthed at Pompeii and thought to date to around 70AD, offers us visual proof of this civilization's cultural advances. That particular painting is currently housed in the Naples National Archaeological Museum for visitors to see. But food and art are way more fascinating when looked at through a lense of symbolism. In the Last Supper, which Leonardo da Vinci completed sometime between 1495 and 1498, the food is sparse yet their hidden meanings have been analysed, probed and dissected by art historians for centuries (Aoife, 2016).

There are beliefs that the spilt salt that stands before Judas could symbolise his treachery, despite the fact that some think it is a symbol of his misfortune for being chosen to betray Jesus, according to an article on mentalfloss.com titled "15 Things You Should Know About the Last Supper." Real-life portrayal grew in popularity during the 16th and 17th century as artists moved away from their fixation on religion and showed a greater interest in science and reality. The still life was a complete genre unto itself. The Dutch Golden Age painters who were Flemish and Dutch pretty much perfected this style. Jan Davidszoon de Heem's composition of his Ham with Fruit in a Still Life (1648-49) is the antidote of this piece's simple title; it's all about extravagance and opulence, portraying a table covered in heaps of luscious fruits, a bright pink lobster, and mouthwatering slices

of ham. Surely a food stylist was hired here to assist de Heem in his composition (Hochstrasser, 2021). Willem Claeszoon Heda is another Dutch painter who captured food beautifully, particularly in his *A Banquet-piece* (c 1635), which you can see in Dublin's National Gallery, and no better night to go for a look than Culture Night on September 16th. The piece presents pewter plates and a joint of ham, and I'm struck by how contemporary (perhaps timeless is a better word) the design of the table's wrinkled linen and the pieces of shattered bread. It could be a photograph found on a Kinfolk lifestyle shoot.

Just like the Ancient Egyptians wall paintings has helped historians learn about the diet and way of life of that ancient civilization, I produced prints for artistic representation which would be used in future reference to preserve indigenous practices that promote food security among the Pokot in Matany community, Napak district in Karamoja region, Uganda.

CHAPTER THREE

METHODOLOGY

3.0 INTRODUCTION

This chapter presents the research design, population, sample size and sampling technique, data collection methods, validity and reliability and ethical considerations. The purpose of this study was to visually preserve through prints indigenous cultural practices that promote food security among the Pokots in Matany, Napak District;

These objectives guided the research; to examine the causes of famine among the Pokots in Matany, Napak District; to establish what Artistic representation are used to present indigenous practices that promote food security and produce prints to sensitize the community about food security.

3.1 RESEARCH DESIGN

Ethnography was applied during the course of this study Collin & Shamus (2018) claim that when doing an ethnographic study, a researcher immerses himself in the social dynamics of a particular social environment in order to comprehend and illuminate the participants' actual experiences. This layout was appropriate since it provided a model for prints that artistically portrayed the Pokot population's access to food in Matany, Napak District. The data analysis employed a more qualitative method.

Furthermore, Creswell (2007, P.40) added that “we also use qualitative research to level all individuals to a statistical mean overlooks the uniqueness individuals in our studies. Qualitative approaches are simply a better fit for our research problems”. The qualitative approach was useful in the formulation of open- ended questions to carry out one-on-one interview, focus group discussions and record observations in order together opinions and the views on the three objectives of the study. Analysis and narrative interpretation of the results were done.

3.2 STUDY POPULATION

The population of Matany community comprised of 30,000 people who inhabit the community where this study was conducted. Out of the total population of 30,000 people, the Pokot comprised 80 percent of the all Matany community where this study was conducted. Aleper [personal communication, December 15 2021] study population are critical in any investigations since they provide a basis for categorizing specific communities of validate the activities under inquiry. This is supported by Asiamah [2017] and said that the concept of the general population, is an insight from large population in qualitative inquiry. For that qualitative research can there for identify and specify the general population by identifying characters or topics of a given topic. Basically, the local population was the most ideal given strength and belief and the indigenous practices that promote food security among the Pokot, the outcomes of which were good for establishment of the reliable data for the research study.

3.3 SAMPLING PROCEDURE AND SAMPLE SIZE

Given the large population size [over 3000] people of Matany community where this study was conducted, there was need to choose a specific number of respondents to gather information on the artistic representation of food security among the Pokot, therefore, the different categories of respondents were randomly selected as described in this subsection of the report. The technique was used to identify the key informants, insightful members of the community who were both able and willing to share their information [Benard 2002]. Finding out what needed to be known and which people were willing to supply the information due to their knowledge and experience was beneficial [Lewis 2006].

3.4 SAMPLE SIZE

Lavraka [2008] supports the requirement for a sufficient sample size in research and recommends for carefully choosing the respondents with whom to communicate during the data gathering process. The used sample selected for data collection comprised of 33 elders, 5 youth and 4 local leaders. The Elderly, Local leaders and the youth have rich literature about Karamoja weather focus. These were randomly selected and interviewed because of constructive opinions, concrete knowledge and information on food security. The summary of the population, sample and sampling technique

Table 1: Population, sample and sampling Techniques

| 3N | Category | Sample | | Sample technique |
|----|---------------|--------|------|------------------|
| | | Total | Used | |
| 1 | Elders | 50 | 33 | Simple Random |
| 2 | Youth | 20 | 4 | Simple Random |
| 3 | Local leaders | 10 | 5 | Simple Random |
| 4 | Total | 80 | 42 | |

3.5 METHODS OF DATA COLLECTION

This study was conducted using a variety of methodologies, including interviews, focus groups, photography, studio experiments, and documentaries, in order to process the data.

3.5.1 In-Depth - Interview

Interviews were employed by the researcher to get information from respondents. A dialogue between the interviewer and the subject that has the goal of gathering information from respondents is called an interview. In-depth interviews are a qualitative research method that entails holding protracted one-on-one interviews with a small number of respondents to find out more about their perspectives on a certain idea, strategy, or situation. [Neal, 2006].

In this study open questions were used to conduct interviews with elders of Pokot, local leaders who obtained in-depth interviews about food security. This method allowed the researcher to deeply explore the respondent's feelings and perspective on the artistic representation of food security.

3.5.2 Focus Group Discussion

The focus group was used to gather data on general beliefs and the meanings that underlie such beliefs [Gill, 2008]. Elders and young people from the Pokot community participated in focus groups to examine how food security is shown artistically. The aggregate ideas and opinions of respondents regarding the practice of food security were usefully gathered for this study by FDG.

In addition to jotting down information in the note book, a digital voice recorder was utilized to capture the respondents' opinions.

3.6 PHOTOGRAPHY AND VIDEOGRAPHY

Photographs were taken by the aid of digital camera, photographs of studio practice activities including drawing from the Preliminary studies and images of artistic representations of food security that were fully used throughout the process of conducting this study. Some of the images from internet source the field of the study were integrated into the research activity of food security, and also images of the final walks made from prints. As a method of collecting the pictorial information in a artistic representation. And this study is supported by [Glawet, 2017].

3.7 STUDIO EXPERIMENTATION

Inspirational images were based on personal experiences and collections of photographs are expected to be the different sceneries through studio experimentations, several trails on materials were carried out to test for the workability with the aid of improvised tools to come up with the desired aesthetic and functional printmaking art work. The drawings of paintings were used for creating prints showing artistic representations of food security among the Pokot were carried in the

studio of printmaking of Kyambogo University. And various surfaces were employed when executing the prints of food security.

3.8 ANALYSIS

In order to analyze this document, Kenneth [2005] says that data analysis is returning process that moves back and forth between analyzing data and reconsidering every other aspect of the study. He further says that, it is also away o assuring that the data are complete and relevant to the purpose of the study. The collected data from interview guides was studied and put into comparison in order to come up with relevant conclusion of the study. The interview guide was designed in a way that the respondents' views are protected. And this enabled success in the study.

3.9 VALIDITY AND RELIABILITY OF THE RESEARCH INSTRUMENTS

In order to ensure that reliable data and information are acquired using consistent methods of soliciting evidence in this study, data quality management and reliability were carried out to ensure that the instruments to be used were critical. The following paragraphs in this portion of the report give this information.

The validity of the study was got through sharing the instruments with respondents from Pokot community. This pilot study was necessary to authenticate the instruments of accurate information required through tools. The feedback from the opinions of respondents and the suggestions from the supervisors to improve the instruments were integrated into the reviewed questions for use with respondents. Thereafter respondents were able to provide answers each question on food security.

The various data collection techniques were employed to guarantee reliability.

Focus group discussion and interview were used to ask respondents on their views regarding artistic representations of food security among the Pokot. Through the observations, images of the printmaking of food security were captured and compare to the data obtained through the interview process. The additional information got from online or library helped to analyze information about food security.

3.10 ETHICAL CONSIDERATIONS

Ethical considerations taken into consideration by seeking authorization from different stake holders. As such from obtaining the introductory letter from the Dean Graduate School of Kyambogo University, the local authority in Matany, Napak district was approached for permission to undertake this study. Through the powers of the Elders the LC was granted permission to allow me conduct the study on artistic representations of food security among the Pokot in Matany. During the process of research, data was collected from respondents willing to take part in the study after seeking their consent to participate in the activities and the information obtained would only be used for the study of food security.

CHAPTER FOUR

PRESENTATION OF DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter presents data analysis and interpretation of the findings on the Artistic representation of food security among the Pokot in Matany, Napak District. The three objectives of these study sought to examine the causes famine among the Pokot, to establish which artistic representations to preserve indigenous practices on food security and produce food security prints to preserve food among the Pokot in Matany.

4.2 The cause of famine Among the Pokot in Matany community Napak District

According to Lukoi James a thirty year old from Poron on village, Lorenschora sub out local in form of Napak District famine has affected the community in many ways; The underlying causes are devastating to the food security process in Matany community as described by respondents during the face- to- face interview a community leader stated that, *one of the greatest causes of famine was too much sunshine (drought) which affected the crops in this year 2021, we received excessive sunshine between June to August hence less yields during the harvesting(15th December, 2021)*

A 65-year-old stated that, in an effort explain more devastating issues related to famine, *some dangerous weeds with glass- like appearance in most gardens in Napak with blue and yellow flowers mostly affected the crop after weeding hence regarding redundant growth of crops. (15th December 2021 face to face interview).*

On the same note, a sixteen- year old respondent during a focus group discussion said that, *Insecurity is also one of the foremost causes of famine the area due to inferiority complex the different dialect in the region which involves castle rusting, food plunder to secure places to save their lives hence abandoning agriculture. (15th December 2021, focus group district P.T.02)*

An eighteen-year-old stated that,

Recently the insecurity which happen in Napak starting March caused people to migrate to town to avoiding agriculture size the can kill u easily during the cattle raids; The loss of lives of very many people like the death of one happen to be having 43 women with 2000 cows forcing his wives to now migrate to Moroto in search for better security (15th December 2021, focus group Discussion)



Plate 1: Photograph showing Turkana warriors burning huts of the Pokot community during raiding exercise Source: Researcher, 2021



Plate 2: Painting of Karamojong Turkana warriors fighting with the army forces trying to fight for the stolen cows of the Pokot community people. Source: Researcher, 2021



Plate 3: Photograph of the Turkana cattle warriors running for their safety after being attacked by the Karamojong warriors in the Matany community and accompanied by army forces. Source: Researcher, 2021



Plate 4: A Complete series of paintings of Karamojong Turkana warriors exchanging fire bullets with the army and Turkana people running away with their stolen cows from Matany community. Source: Researcher, 2021

A respondent aged 70 years further stated that,

Famine was also being caused by heavy floods and very strong winds. The Pokot land in Napak district is located in an area with a semidesert vegetation with prolonged dry seasons which hardens the soils and to phonography. (15th December 2021, face to face interview)



Plate 5: Image of vehicles being washed away by floods. **Source: Researcher, 2021**



Plate 6: Photograph of children returning from school walking in floods on their way home. Source: Researcher, 2021



Plate 7: Photograph of children coming back from school and all the road is flooded as shown above. Source: Researcher, 2021



Plate 8: A painting depicting the effects of floods to the people of Karamoja especially Matany community, people starving to death, too weak to move, stress and depressed.

Source: Researcher, 2021





Plate 9: A Karamojong woman starving with her two children for days from hunger after all their food was hit by sunshine and early planted crops were also washed away by floods leaving them completely with nothing to eat. (Source: Researcher, 2021)





Plate 10: A Karamojong stressed all day to find a way of meeting a meal just in a day since there is nothing completely to eat, since all the granaries are completely empty and hunger is a challenge. (Source: Researcher, 2021)



Plate 11: A Karamojong boy milking sheep as the only solution to hunger since there is nothing left to eat, and all the crops were hit by sunshine, floods during heavy rains of early April and March. (Source: Researcher, 2021)



Plate 12: A Karamojong lady eating a thigh of a dead cow with her two children since it is the last option they have and nothing to eat completely left in their granaries.
 (Source: Researcher, 2021)



Plate 13: A Karamojong boy emaciated to the bones and too weak to walk because he has been seriously starved and hit by famine crisis in Karamoja, Napak District (Source: Researcher, 2021)



Plate 14: A Karamojong woman and her baby eating from a rubbish pit as the only solution left to fight hunger and only counting days to die since there is nothing completely left to eat again (Source: Researcher, 2021)

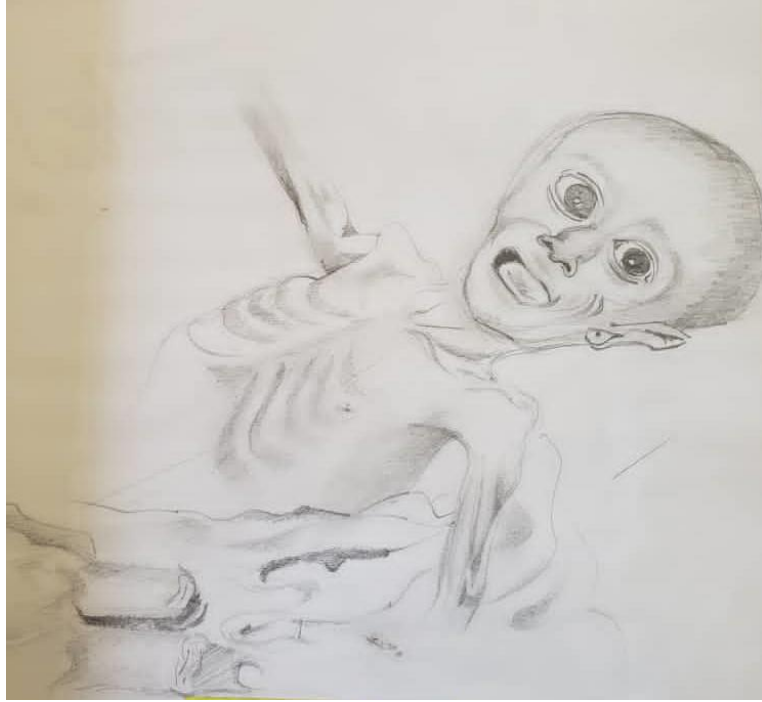


Plate 15: A Karamojong man and his children affected seriously by hunger and too weak to walk and seriously starved to the bones, and waiting only for a few days to die. (Source: *Researcher, 2021*)



Plate 16: A group of Karamojong boys emaciated to the bones and finding a way on how to end the day but nowhere to go to get a meal and hunger is only waiting to take away their souls since there is nothing to eat. (Source: Researcher, 2021)



Plate 17: A Karamojong boy emaciated to the bones and finding a way on how to end the day but nowhere to go to get a meal and hunger is only waiting to take away his soul since there is nothing to eat. (Source: Researcher, 2021)



Plate 17: A Karamojong boy emaciated to the bones and finding a way on how to end the day but nowhere to go to get a meal and hunger is only waiting to take away his soul since there is nothing to eat. (Source: Researcher, 2021)



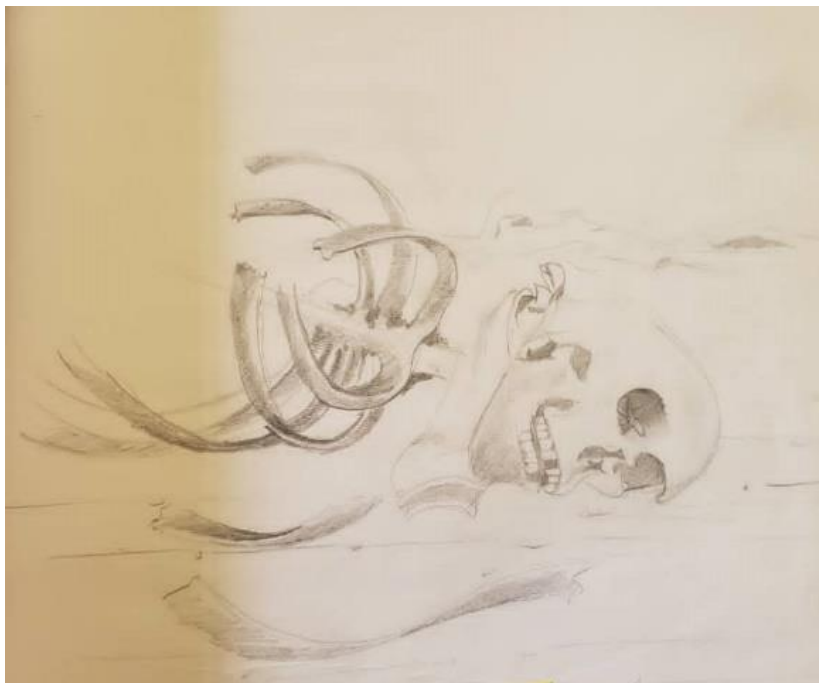
Plate 18: A group of Karamojong children lining up for fresh blood from a dead slaughtered goat that failed to make it due to lack of food to graze on since all the area is affected by drought and heavy winds. (Source: Researcher, 2021)



Plate 19: Photographs of families in Karamoja spending a day without having a meal in the worst food crisis that has hit Karamoja sub region. (Source: *Pearl post*, 2022)



Plate 20: A dead body of a Karamojong boy organized to be buried since hunger has taken him and there was nothing to eat completely and on the right is the skeleton of the father who was also starved and killed by hunger. (Source: Researcher, 2021)



PRINTING



Plate 21: Researcher cutting the window in preparation for creation of the background
(Source: Researcher, 2021)



Plate 22: The Manyatta bedsheet ready for application of Matt to create very fine and beautiful backgrounds for printing of the final projects. (Source: Researcher, 2021)



Plate 23: The animal skin ready for application of Matt to create very fine and beautiful backgrounds for printing of the final projects. (Source: Researcher, 2021)

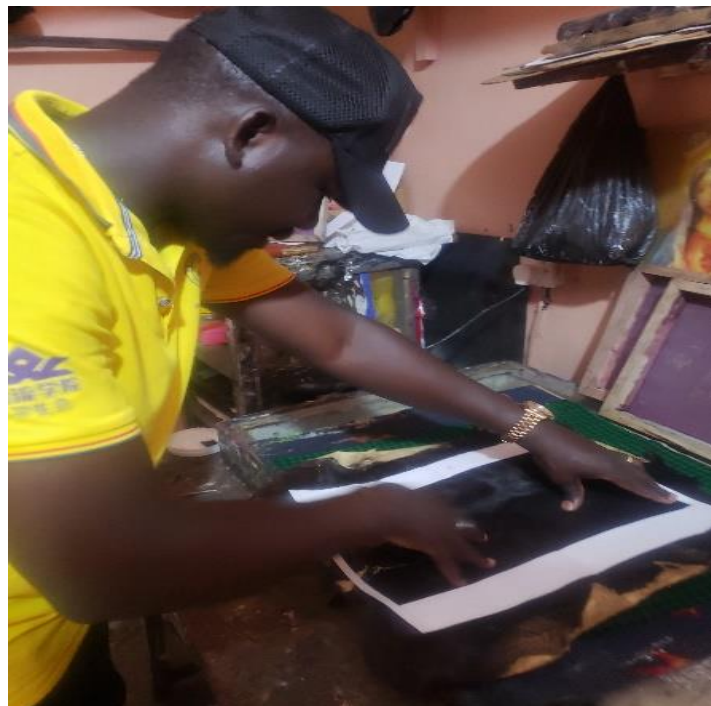


Plate 24: Researcher stretching of the animal skin ready for application of matt.
(Source: Researcher, 2021)



Plate 25: Screen is placed on top of the window on the Manyatta bedsheet ready for printing. (Source: Researcher, 2021)



Plate 26: Creation of accuracy in order to come up with straight edges of the print in order to avoid smudging. (Source: Researcher, 2021)



Plate 27: Manyatta bedsheets and animal skin supported by the screens placed under sun for drying to take place. (Source: Researcher, 2021)



Plate 28: Researcher stretching the Manyatta bedsheets to avoid wind from contaminating the wet matt.

(Source: Researcher, 2021)



Plate 29: First application of black matt on an animal skin. (Source: Researcher, 2021)



Plate 30: First application of brown coloured matt on the Manyatta bedsheet and later drying it using electric drier. (Source: Researcher, 2021)



Plate 31: First effect outcome of the first print on the Manyatta bedsheet. (Source: Researcher, 2021)



Plate 32: Colour comparison between an orange effect and brown effect on the Manyatta bedsheet. (Source: Researcher, 2021)



Plate 33: Preparation of the animal skin for the next application of colour onto the animal skin. (Source: Researcher, 2021)



Plate 34: Final projects of the Manyatta bedsheet drying alongside the final project of sisal and windows of bark cloth being created. (Source: Researcher, 2021)



Plate 35: Effects of colour on sisal after printing it with matt. (Source: Researcher, 2021)



Plate 36: Drying of prints at the studio using sisal surfaces as shown. (Source: Researcher, 2021)



Plate 37: Final projects being dried under sunshine and they are ready for the framing exercise that is to say on sisal, skin and Manyatta sheet. (Source: Researcher, 2021)

4.3 INDIGENOUS CULTURAL PRACTICES PROMOTING FOOD SECURITY IN MATANY COMMUNITY

During the speculative stay in the Land of Matany community, the researcher had an overwhelming experience on the cultural practices that preserve food done by the Pokot people, specifically Sorghum and meat, how they were preserved.

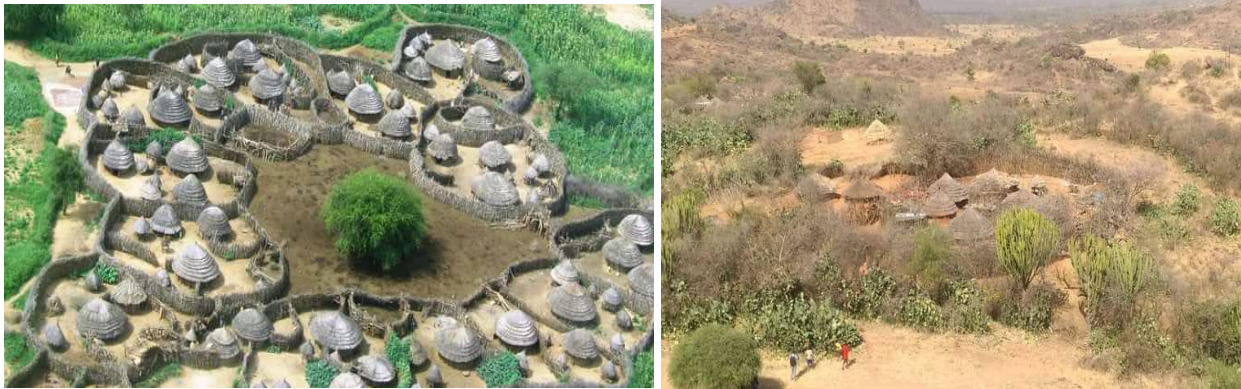


Plate 38: Photographs showing the topography and landscape during the wet and dry season of the Pokots in Matany community Napak District

4.3.1 REPRESENTATION OF SORGHUM

During focus group discussions based on 15/12/2021 with participants, they were asked on how they “preserve” food particularly sorghum. According to John from Lokolo village, he stated that; *“There is numerous practices to be used to present food in their land, most especially sorghum and meat since they are their stable food. He says sorghum being one of their major staple foods, the food preservation journey is very tedious and needs commitment”*

A 25-year-old said that;

“From clearing the garden until it reaches the granary for storage, to preserve sorghum, farmers start by giving attention to their garden so that you can yield more crops.

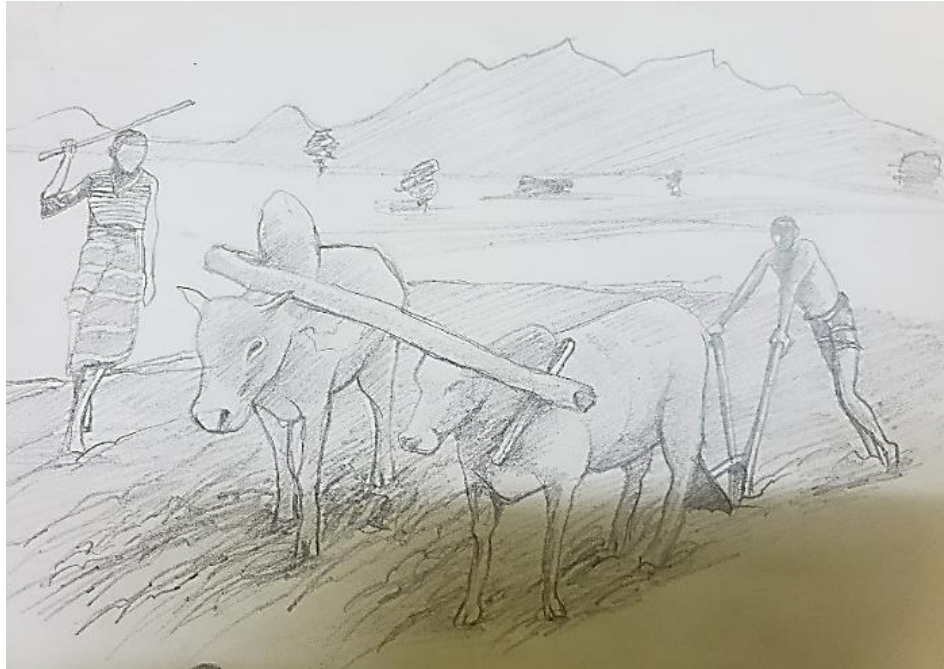


Plate 39: Clearing the field for the planting of Sorghum

A 19year old said that;

However, the yields land had to be cleared and ploughed then the sorghum seeds are sown and are given a few weeks to germinate and later weeded and it stays for 2-3 months and its harvested. (15th December, focus group)





Plate 40: The Sorghum plant at the weeding stage

A 30year old said that;

After harvesting the sorghum is then transported

from the garden to home for drying after sorting and removing the damaged sorghum only grains

are collected (15th December 2021, focus group)





Plate 41: The Sorghum plant ready for harveting

An 18year old said that;

This selection is done in order to remove husks to contract the fine grain of sorghum for next season and later after beating the sorghum its threshed to remove the un wanted threshes and living real sorghum aside (15th December 2021, face to face interview).



Plate 42: Women drying the sorghum from the garden.



Plate 43: The women threshing the Sorghum

A 40year old said that;

*Sorghum is then taken to granaries for storage for like 2 months and then its later taken to the grinding mill to make flour, which is then again stored in around guards and its kept in the granary
(15th December 2021 focus group)*

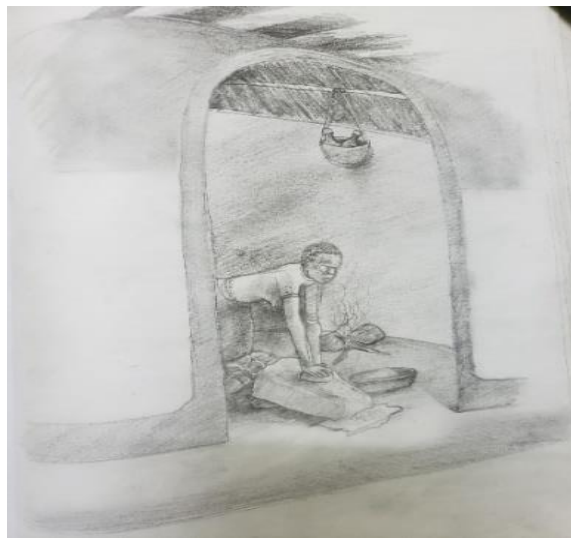


Plate 44: The woman grinding the millet cereals to millet flour using grinding stones.



Plate 45: The image shows the granaries where the millet is stored after gringing to millet flour for the next season.

A 17year old said that;

The granary is smeared with animal dung which helps in acting as the treatment of pests and insects, the free leaves are also plucked and put in the granary which is used as a preservation to control pests like weevils or insects from causing or destroying the food being kept for the next season (15th December 2021 face to face interview).

4.3.2 PRESERVATION OF MEAT IN MATANY COMMUNITY

The Pokot people are basically cattle keepers.



Plate 46: A photograph of a Pokot herdsman

During focus group discussions based on 15/12/2021 with participants, they were asked on how they “preserve” food particularly sorghum. According to John Lokin a 90-year-old,

“Meat eaten by the Pokot is called Akiring since they are more of herdsmen, their source of livelihood is in animal husbandry, and they keep animals like goats, sheep, donkeys, wild game among others.”

An 85-year-old said that;

“When animal is slaughtered ,the meat is cut into small pieces which is the put into boiling butter which is to be cooked for 30-40minutes then put off from fire so as it can cool and it can then late to be put in the pot and then kept for a period of 2 to 3 month which it can be used as food in days of hunger and it can cater for people in far places like Kampala , Mbale, and also used when in-laws have come to visit or to seek for a hand in bride prices . and these meats can only be consumed in seasons of dreadful famine or hunger.”

A 22-year-old said that;

“Using butter is another preservation measure of meat, since butter is normally used in special occasion or instances, during visitors’ visits, but adds there are several other interesting methods for long-term purposes.”

According to Longol Michell in Nabwal village 57year of age from Matany said that;

“They have food stuffs preserved liked sorghum maize, green beans, sunflower, groundnuts, though sorghum is given more attention by the Pokot people since it is staple food, there also other foods grown as listed above by the Pokot Napak community in Nabwal village in Matany Napak district.”

A 16-year-old said that;

“These cereals are harvested and transported to the village for drying, the affected ones are selected aside and the best are put in the granaries for 2-3 months, then put on the smeared compound with cow dung. Threshed to obtain exact sorghum and kept in granary for further purposes like home ceremonies.”

On the same note, a 30-year-old in a face to face interview said that,

“Particularly maize is preserved by first planting in the garden, weeding takes place then harvesting after a certain period of time, the maize is then picked from the steps and then transported home for further drying before it is put in the granaries for the future.”

A 68-year-old stated that,

“The common food crop preserved among the Pokot is sunflower , preservation of this crop involves cutting their Leeds when ready for harvest from the garden and taken home for drying , the sun flower was kept when it was properly dried in a container mostly jerry canes and then picked in small quantities for consumption best of which was supported to be used for the next season the sun flower is further mixed with ash to keep it free from pests and insects from destroying it.”

On the same note a 56-year-old said that;

“The first reasons why Karamojong preserve food is the nature of their land. Food stuff was preserved so as to fight against famines which are economy challenges the Pokot during the early month of April. JUNE TO July, since August is a harvesting month up to December and during their period of August to December all homes in Karamoja are busy in their gardens transporting food stuff unlike January to much is a serious season for drought and heavy winds coming from Ethiopian blowing through Moroto straight to Napak in Matany.”

According to Lochoto 37 years old, he said that in the face to face interview;

“The preserved food stuffs in a source of livelihood in times of challenges like sickness so that they can preserve the food and later sell it to get money which can be used to pay for treatment gotten from the clinics and also sell food stuff to take care of their children when they are at school as school fees and the period food is a ravenous which can be used in the ceremonies like during the paging of dowries.”

A 28-year old respondent said that,

“These cultural practices that promote food security from the time of harvesting, when food is transported home, the compound is smeared with cow dung, and food stuffs like sorghum, maize, sunflower on the hand are dried on the compound smeared with cow dung at the drying the cereals like sorghum are threshed the time they are ready for storage in the granary.”

Forty-nine year said that;

“The main reason why indigenous granaries are smeared using cow dung was to repel insects and pests that affect the stored food stuffs. the seeds for the next season are kept in the jerry cane, cut on top and guards mixed with neem tree leaves which act as a preservative. The jerry canes were also hanged on top of the house roof mostly preferably the kitchen top and then stored food stuff are kept away from rats, and this was done in order to keep the food stuff safe for next season.”

A seventeen-year-old said that;

“Due to the rise of food theft and plundering during the famine seasons, the Pokots people replaced the indigenous granaries with modern granaries like siles. The food stuffs in granaries were kept for a long period of time to cater for famine challenge.”

A 43-year-old respondent said that;

“In regards to majority of the informers who allege that the government of the republic of Uganda (GOU) and development oriented partners have undertaken several food security development projects for Karamoja including irrigation projects, drilling boreholes, constructing dams, disarmament programmes, and food distribution including the World Food Programme(WFP), conducted food distributions such as maize flour, soya flour, cooking oil, sugar, beans, packed nutrition paste for malnourished children among others ,to the community during starvation seasons to mitigate food insecurity.”

Fourteen-year-old said that;

“Water reserved sources were constructed by Government of the Republic of Uganda in order to solve food insecurity among the Pokots in Matany communities. Several water sources and entire Karamoja sub region including irrigation plants bore Holes, dams extended to farmers.”

Matany community in Napak district is located in a dry land sub region. An independent region that holds 20% of the national livestock herd. The Pokot together with other Karimojong pastoral and agro pastoral communities depend on the climatic changes for their sustain, more so, since which supplies nutritious vegetables, additional income into famine. Season sensitization and awareness creation by developmental partners with the government of the republic of Uganda to stop over grazing to mitigate famine in the community.”

A 38-year-old respondent said that;

“The Pokot together with Karimojong Pastoral and Agro Pastoral communities depend on climatic changes for their sustenance, more so, since the rain pattern only allow one cropping season in Matany land Napak District in Karamoja, farmers always expect 3 to 4 harvest each year and the irrigation system, which supplies Nutrition vegetables, additional income in to the same season.”

A 34-year-old said that,

“Sensitization and awareness creation by developmental partner with the government of the republic of Uganda to stop over grazing to mitigate famine in the community. Although there are many causes of grass land degradation, a vital cause appears to be the activities of Pokot pastoralist as they move in search for better grassland such as food for humans and pasture for their animals and other important function like fuel for food. The Pokots in Matany community damages their resources in different difficult ways, results in to overgrazing due to over stocking and has resulted to hard exceeding the range of the grassland. These practices leave the land bare not able to retain water hence low coop yield, poor animal health and damage to human survival.”

Another 77year old said that;

“The disarmament campaigns in Karamoja addressing the rising in security cattle theft not only among the Pokots. But also, in the entire Karamoja region has been one of the factors that the government of the republic of Uganda has been used to reduce famine. The Pokot community together with other Karimojong communities has been engaged to mitigate this practice to zero into a sustainable solution.”

4.4 The production of prints for artistic representation that promotes food security in Matany

This objective focused on the production of prints that communicate food preservation methods in the region. The community prints were reflective of both local and modern approaches of preserving

food for during times of plenty harvest. The storage of food for consumption during dry season are illustrated in these process

4.4.1. Project one: Artistic preservation of Sorghum

Project one

It was inspired by sorghum plant since sorghum is there stable food and it favours their nature of land and climatic conditions I decided to capture it since sorghum has very interesting stages of its preservation process and is consumed by the Pokots in Matany, therefore the research identified it and it aided in the execution of Artistic representations of indigenous practice that promote food security.



Plate 47: A sketch portraying a sorghum plant on a manila paper 40X50 CMs

Source: research 2021



Plate 48: A woman harvesting sorghum grain and its drawn on a manila paper using asketch HB pencils.

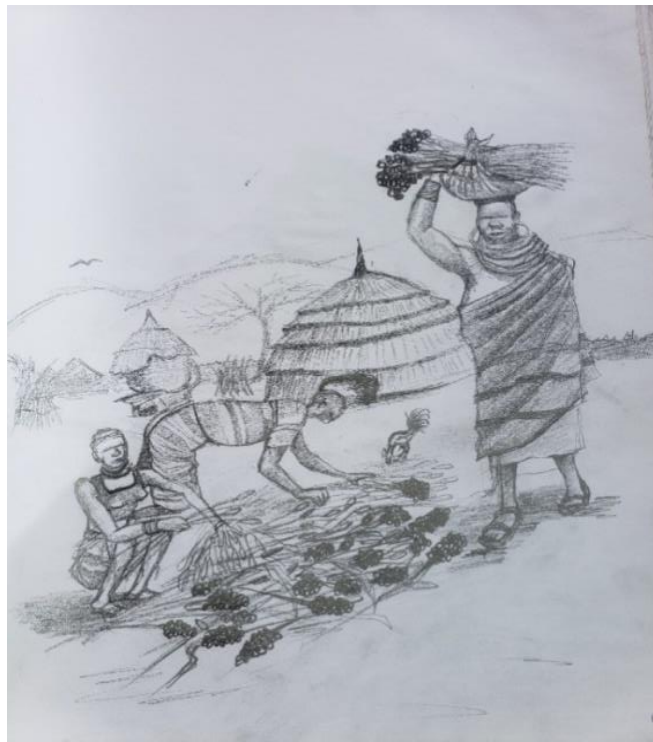


Plate 49: A woman bringing sorghum grains home and spreading on the compound smeared with to sperate the real grain sorghum from the cow dung ready for drying *the sketch was done with the*

pencile on manilar paper 40X50cm source: research 2021

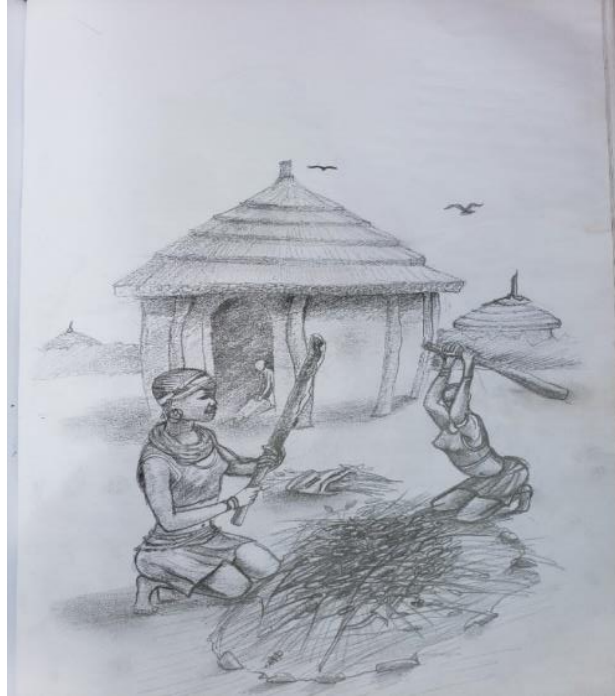


Plate 50: Women beating sorghum grains to remove husks *and it was done using a sketching pencil on the manilar surface 30x40 cm source: 2021*



Plate 51. A drawing of a woman winnowing trying to remove away the threshes from the original grain of sorghum and the drawing was done on manillar using an HB pencils on a manillar paper. 40x40cm



Plate 52: A drawing of a young girl and grandfather providing the sorghum cereal husks from the original grain and its later going to be winnowed and making it ready for grinding and the at work was done using HB pencil and amanillar paper as show below



The drawing of woman grinding sorghum grains was done on a while manila paper with the happy an HB pencil to develop forms and shade as showabove 50x50cm. Source: research 2021.



Plate 53: A cow's skin from Matany community used to make paintings of preservation of indigenous practices that promote food security. The skin is a symbol of their livelihoods, the cow is the source of their life. Source: Researcher, 2021



Plate 54: Researcher organising the frame on to which the cow skin is to be stretched and can be placed for the good painting exercise. Source: Researcher, 2021



Plate 55: A stretched skin ready for application of paint with stretched bars. Source: Researcher, 2021



Plate 56: A stretched skin being applied paints on it to create a very workable surface for this painting to commence Source: Researcher, 2021



Plate 57: Colour being applied to create depth as shown in the image. Source: Researcher, 2021

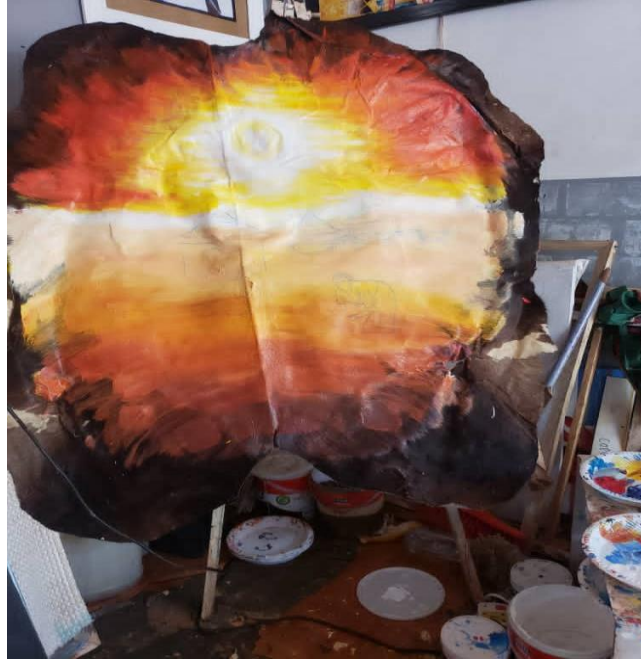


Plate 58: Colour application that portray famine and are dry and ready for painting exercise. Source: Researcher, 2021



Plate 59: A sketch of Karamojong Pokot ladies in different postures trying to preserve food in Matany community. Source: Researcher, 2021



Plate 60: Sorghum grains being beat by the Pokot women in different posture and they are preserving it for the next season when there is nothing completely to eat.

Source: Researcher, 2021



Plate 61: Final stages of application of colour on the skin and the colours of drought were used to come up with the drawing. *Source: Researcher, 2021*



Plate 62: A complete painting series on a cow's skin depicting ladies in different postures trying to beat the sorghum in order to preserve it for the next generation. Source: Researcher, 2021

PREPARATION OF THE SCREEN



Plate 63: Researcher organising the already made frames for the exercise of printing. Source: Researcher, 2021



Plate 64: Researcher stretching the nets and making measurements of the quantity require for me to use in for the frames. Source: Researcher, 2021



Plate 65: Researcher organising the already made frames and staples are being driven on to the net and them to the wood as shown. Source: Researcher, 2021



Plate 66: Aready stretched frame which is ready for photo emulsion as shown in the diagram. *Source: Researcher, 2021*



Plate 67: Researcher washing away from the photo emulsion exercise.
Source: Researcher, 2021



Plate 68: Researcher making my first print after photo emulsion and washing away paraffin.
Source: Researcher, 2021



Plate 69: Researcher washing away the screen to remove unwanted paste so that it is clean for the next printing exercise. Source: Researcher, 2021



Plate 70: Plate with his first print on manila paper and is ready for drying as shown in the image. Source: Researcher, 2021



Plate 72: Final print in blue, red and black colours as sign of Pokot colour for colour on manila paper. Source: Researcher, 2021



Plate 71: Different trials on different colours of prints on the manila paper as my printing surface.

Source: Researcher, 2021

Project two: Artistic preservation of meat

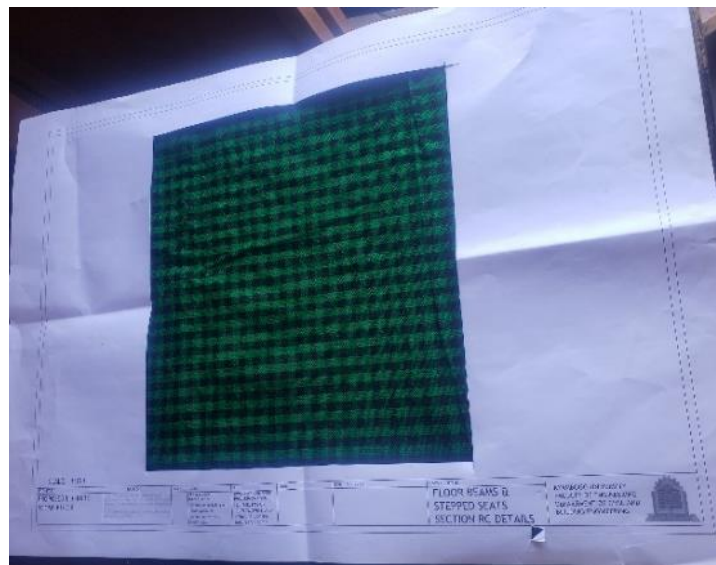


Plate 72: Creation of the window being cut in preparation of printing to take place

Source: Researcher, 2021



Plate 73: After cutting the window, the prints are dried to create a background to create a background that is white using matt as a material. Source: Researcher, 2021



Plate 74: Final print of preservation of sorghum on animal skin using matt with effects of brown, pink and black. Source: Researcher, 2021



Plate 75: An effect of paste on canvas on the preservation of sorghum
Source: Researcher, 2021



Plate 76: Final printing of preservation of sorghum on canvas ready for framing
Source: Researcher, 2021

Project two: Artistic preservation of meat

I was inspired by an animal that is a cow since it's their source of livelihoodness where they can get fresh blood, milk, meat and skin as a source of food therefore the researcher identified chiefly meat as food consumed by the Pokots in Matany to the execution of food security with the preservation process are shown below in the following stages.

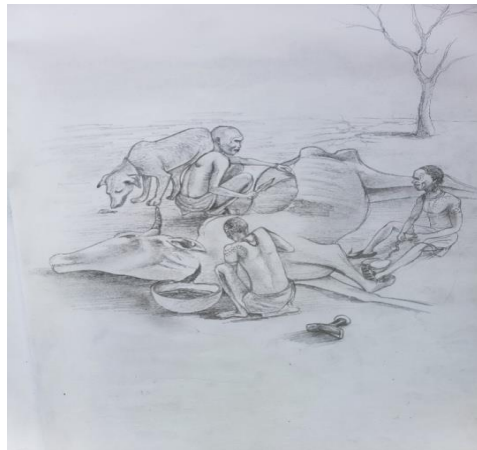


Plate 77: A complete drawing of 3 Pokot men slaughtering a cow as a means of food preservation and the art Work was done on manilar as surface and a HB pencil As a medium as shown below. 40X60cm Source: Research 2021



Plate 78: The figure above is showing a drawing of two men cutting the meat in to small pieces after the animal was slaughtered and like art work was done on a white manilla and HB pencil was used to roduce tones and farms. Source: Research 2021



Plate 79: A drawing showing hanged meat on sticks being smoked in order to preserve it from going bad the meat is cut in long slices pieces and the work of art was done by pencile and a white manilar paper 40x70cm

Source: Research, 2021





Plate 80: A drawing showing a Karamojong man monitoring the drying of meat from other animal like dog cats from attacking it and these drawing art work was done on manillar as surface and pencil as a media

50x70cm Source: Research 2021

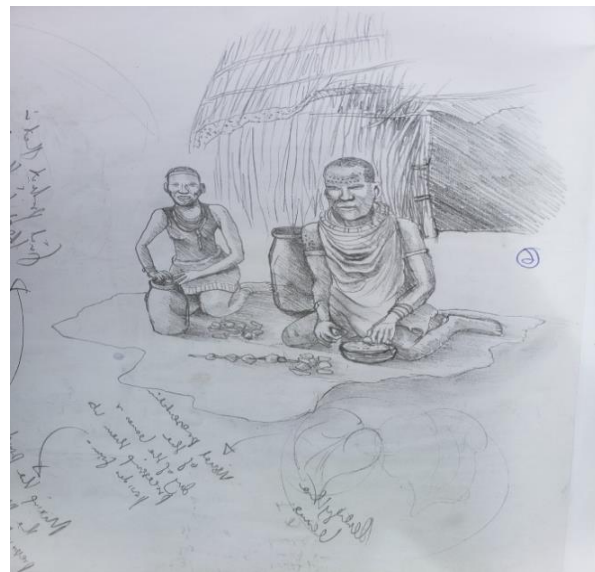


Plate 81: A drawing showing two Karamojong ladies packing dried meat for storage for the future conscription and the drawing was done as manilar paper as seen in the diagram below and HB bencil helps in developing the shades and forms

50x50cm

Source: Research 2021

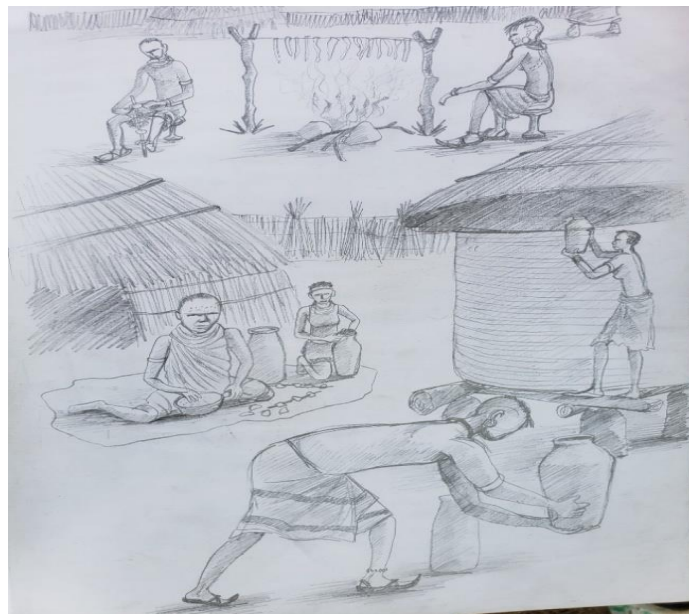


Plate 82: A drawing portraying storage of preserved meat in the granaries and the girls are helping one another to store the dried meat these art work was sketched using a pencil and amanillar paper which helped in acting as a surface for drawing. 60x60cm

Source: Research 2021



Plate 83: Colour being applied to create depth as shown in the image.

Source: Researcher, 2021



Plate 84: Painting of meat preservation.

Source: Researcher, 2021

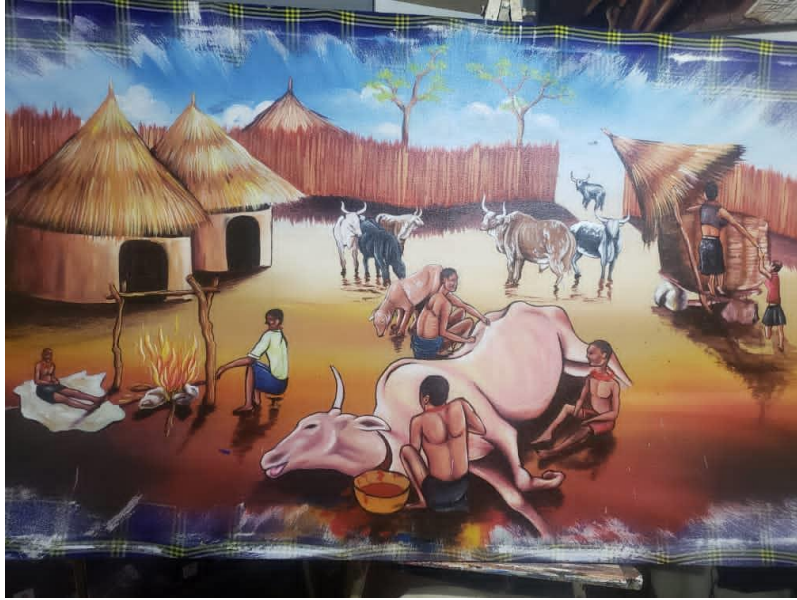


Plate 84: A painting series on a Karimojong cloth showing meat preservation process in Matany community. Source: Researcher, 2021

PREPARATION OF THE SCREEN



Plate 85: Researcher organising the already made frames for the exercise of printing. Source: Researcher, 2021



Plate 86: Researcher stretching the nets and making measurements of the quantity require for me to use in for the frames.

Source: Researcher, 2021



Plate 87: Researcher organising the already made frames and staples are being driven on to the net and them to the wood as shown. Source: Researcher, 2021



Plate 88: Already stretched frame which is ready for photo emulsion as shown in the diagram. Source: Researcher, 2021



Fig 89: Researcher washing away from the photo emulsion exercise. Source: Researcher, 2021



Plate 90: Researcher making my first print after photo emulsion and washing away paraffin. Source: Researcher, 2021



Plate 91: Researcher washing away the screen to remove unwanted paste so that it is clean for the next printing exercise. Source: Researcher, 2021



Plate 92: Different trials on different colours of prints on the manila paper as my printing surface. Source: Researcher, 2021

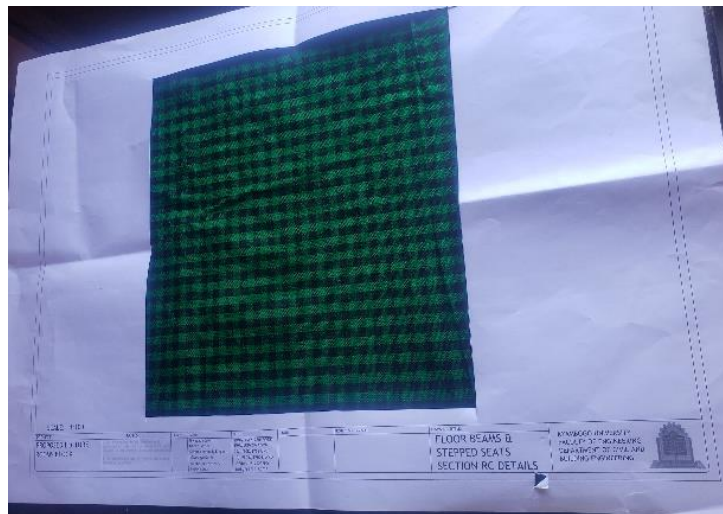


Plate 93: Creation of the window being cut in preparation of printing to take place Source: Researcher, 2021



Plate 94: After cutting the window, the prints are dried to create a background to create a background that is white using matt as a material. Source: Researcher, 2021



Plate 95: Effect of orange colour and black colour on the Manyatta bed sheet
Source: Researcher, 2021



Plate 96: Effect of orange colour and black colour on the animal skin
Source: Researcher, 2021



Plate 97: Effect of pink and black colour on the Manyatta bed sheet
Source: Researcher, 2021



Plate 98: Final print of preservation of meat on Manyatta bedsheet using matt with effects of brown, pink and black. Source: Researcher, 2021



Plate 99: Final print of preservation of meat on animal skin using matt with effects of brown, pink and black. Source: Researcher, 2021



Plate 100: An effect of paste on canvas on the preservation of meat

Source: Researcher, 2021



Plate 101: Final printing of preservation of meat on canvas ready for framing

Source: Researcher, 2021



Plate 102: Final project art pieces on different surfaces ready for framing exercise at the studio.

Source: Researcher, 2021

THE PRINTING SCREEN

The printing screen was useful for the artist in execution of the two projects. The Karamojong people basically Pokot that is to say the locals, supported the arguments of perception of indigenous cultural practices that promotes food security among the Pokot people because most people in the new era do not understand the practice and more the visual way and this could be easily understood by the person who has learnt or not learnt. And for that case the new technology it has really given an impact on the way we live and really it has affected our system and the way of production also it has been affected since the kind of tools, methods and approaches used in production of indigenous foods.

In order to reduce the negative perception and preserve its merits to this practice, the narrative mix media technique of printing and painting were done to preserve the indigenous cultural practices that promote food security, the causes of famine. The findings that were done in the field also indicated that indigenous cultural practices that promoted food security as one of the cultural heritages and that was used to promote the Pokot culture and as well as their livelihood for that is domestic and agricultural purposes,

The study required the practice to be documented and preserved through printing since most of the information is not reached with the history of practice of the Pokot community is verbally kept through riddles, storytelling while sitting at the fire place at night in the crawl and yet it is not rarely done through the art of technique of printing and painting together.

CHAPTER FIVE

DISCUSSION OF FINDINGS, CONCLUSION AND RECOMMENDATION

5.0 Overview

This chapter discusses the findings, draws conclusion and recommendations guided by the purpose and objectives of the study. The purpose of the study was to artistically represent food security among the Pokot in Matany, Napak District. The objectives were to; examine the causes of famine among the Pokot in Matany, indigenous practices that promote food security and produce prints for artistic representation which would be used in future reference to preserve indigenous practices that promote food security among the Pokot Napak district in Karamoja Region, Uganda.

5.1 Causes of famine among the Pokot in Matany, Napak district in Karamoja Region, Uganda

The findings indicated that the main cause of famine among the Pokot in Matany are devastating to the food security process in Matany community as described by respondents. Insecurity is also one of the foremost causes of famine the area due to inferiority complex the different dialect in the region which involves castle rusting, food plunder to secure places to save their lives hence abandoning agriculture. Other causes of famine according to the findings were too much sunshine (drought) which affected the crops in the year 2021, some dangerous weeds with glass- like appearance in most gardens in Napak called” I of lowed which had blue and yellow flows mostly affected the crop after weeding hence regarding redundant growth of crops, heavy floods and very strong winds. According to Allee et al, (2018), food insecurity is a complex problem at the global, regional, national and sub-national levels with multiple, interconnected causes that manifest as malnutrition, extreme hunger, and starvation (Allee et al., 2018).

Famine is one of the massive disasters that has left many people grounded in their houses and now resorting to eating leaves and ants, and the elderly plus children are starved to death. Residences in the area cultivate crops but the plants dried up due to prolonged drought while the crops planted during early rains are washed away due to floods. This has resulted in severe challenges associated with famine; threatening lives of people and living thousands of people without food, bad health and in an impoverished state. The people get thin, and emaciated to the bones, too weak to move and eventually die from hunger. Despite the obstacle of famine there are a number of development initiatives for the region for example mineral exploitation, trading of livestock on the small scale and some minimal ways of fighting famine through sensitization by local LC leaders. However there have been indigenous cultural practices that have promoted food security in Matany Napak district in Karamoja region. In view of contributions towards famine challenges, various aspects have been carried out by government, policy bodies to preserve food security but there have hardly been visual art ways to fight famine. Therefore, it is vital to preserve of cultural practices that promote food security among the Pokots in Matany, Napak District in Karamoja region. In their study, Kamwendo and Kamwendo (2014) asserted that in order to secure food without endangering future food consumption, households must store and preserve food. This ensures access, entitlement, and security.

Furthermore, he adds that insecurity is also one of the foremost causes of famine in the area due to inferiority complex the different dialects in the region which involves Cattle rustling, food plundering and loss of lives. As result of these, people tend to migrate to secure places to save their lives hence abandoning agriculture. Recently the insecurity which happened in Napak starting March caused the loss of lives of very many people like the death of one happen to be having 43 women with 2000 cows forcing his wives to now migrate to Moroto.

More so, famine was also being caused by heavy floods and very strong winds. The Pokot land in Napak district is located in an area with Semi-desert vegetation with prolonged dry seasons which hardens the soils that when rainy season are up and there are heavy down pours, but due to the nature of soil and topography. However, Lokol James (2021) adds that the heavy rains and wind affected the crops by washing them through erosion, soil erosion and also wind erosion here it comes when it is stormy affects our crops hence causing famine in the land.

5.2 Indigenous practices of food Security

The findings from the study indicated that there are numerous practices to be used to present food in their land, most especially sorghum and meat since they are their staple food. He says sorghum being one of their major staple foods, the food preservation journey is very tedious and needs commitment. Lokin John Alepers a resident from Lokolo village in Napak district demonstrated that, there are numerous practices to be used to preserve food in their land, most especially sorghum and meat since they are their staple foods. He says Sorghum being one of their major staple foods, the food preservation journey starts are tedious and needs commitment, from clearing the garden until it reaches the Granary for storage. To preserve Sorghum, the farmer starts by giving attentions to the garden so that you can yield more crops, However, the fields land had to be cleared and ploughed then Sorghum seeds are sown and are given a few weeks to germinate and later sorghum is weeded and it stays for 2-3 month and then it's harvested. After harvesting, the compound at home is smeared with cow dung as a surface to dry the sorghum. The sorghum is then transported from the garden to home for drying, after sorting and removing the damaged sorghum only grains are collected. This selection is done in order to remove to husks to contract the fine grain of sorghum. More than 75% of African smallholder farmers' agricultural produce is preserved at the

village level for local use and is thus stored using conventional techniques (United State Agency for International Development, 2011).

The Pokot people are basically cattle keepers. The results from the study indicated that meat eaten by the Pokot is called Akiring since they are more of herdsmen, their source of livelihood is in animal husbandry, and they keep animals like goats, sheep, donkeys, wild game among others. On the same note, the respondents noted that when animal is slaughtered ,the meat is cut into small pieces which is the put into boiling butter which is to be cooked for 30-40minutes then put off from fire so as it can cool and it can then late to be put in the pot and then kept for a period of 2 to 3 month which it can be used as food in days of hunger and it can cater for people in far places like Kampala , Mbale, and also used when in-laws have come to visit or to seek for a hand in bride prices . and these meats can only be consumed in seasons of dreadful famine or hunger. (15th December 2021, focus group discussion). According to (Zhou et al., 2010), novel preservation techniques like chemical, bio-preservative, and non-thermal approaches have superseded traditional methods of meat preservation such drying, smoking, brining, fermentation, refrigeration, and canning.

5.3 Production of prints for artistic representation which would be used in future reference to preserve indigenous practices that promote food security among the Pokot Napak district in Karamoja Region, Uganda

The sources of inspiration developed for the production process of the artistic representation which would be used in future reference to preserve indigenous cultural practices that promote food security were acquired through photography by observation.

The researcher identified two major food stuffs cheaply consumed by the Pokots in Matany to aid in the execution of artistic representation indigenous cultural practices that promote security through the preservation process. The two crops acted as projects for the execution process.

5.3.1 Project One: Painting composition on a cow's skin

The idea of painting a composition on a cow's skin was inspired by the 4 ladies that were cooking closely together in their home compound. These ladies socialize and move together in the garden a sign of working together and unity which is among the clan values of the Pokot people. The skin of the animal was stretched and was painted first with undercoat to capture the attention of the viewers. The skin of the animal does not only serve as aesthetic value of, but it also serves as a functional purpose. The yellowish and brick-red colours were used for the purpose of creating uniformity and flow of colour and contrast. The animal skin acted as the surface where different postures were drawn to give the viewer a very good impression that the skin surface was also drawn in different sections that is to say the longitudinal section an aerial view half section. Also, motifs are very in designing or printing. These will be on different surfaces such as manila, canvas, bark cloth, sisal, animal skin to kill the monotony of work (Sharma et al, 2016).

In order for one to achieve the sketches and the drawing of food security with the aid of the drawing tools like pencils or coloured pencils guided by the elements and principles of Art and Design the animal skins are stretched using wood frames. The painting drawings are shaded on with dark tones to create an impression of food security effects. The hot colours like the red brick was shaded against it yellow to suggest the contrast that would appear in the final piece of an artwork.

The various postures of women doing work together were created and the conceptual drawings were done to create the final pictures of how the final work would really look like. The size of the animal skin was considered that is approximation of about 100cmx80cm which would accommodate for pictures of the Pokot women performing food security.

5.3.2 Project two

The idea of painting drawing was inspired by meat since meat is their staple food for the Pokot herdsmen. This represents to the Pokot people since most of them are cattle keepers and ideally the painting drawing reflects the indigenous practices of food security. Meat is their life and it is embraced and practices of food security. Meat is their life and it is embraced and appreciated for generations by the Pokot people. The painting drawing portrays different stages of preservation of meat among the Pokot, the older people are responsible for the practice of skinning the animal, slicing the meat, smoking the meat and storing the meat. The meat is a fundamental factor of food security among the Pokot people in their social life while socializing amongst themselves. The artwork has both functional and aesthetical benefits. It is functional because it helps in visually conveying of information about food security among the Pokot people and it is aesthetical because it has space for accommodating some other art jewelries like the beads to represent the Pokot culture. The Mayatta bedsheet being a durable material was used as a surface for painting a drawing on various stages of preservation of food security (meat). The artwork will be displayed on the compound space for example under tree shades where the Karamojong (Pokot) people leave and the public would have a glance. The local leaders and the elders would use this opportunity to teach the young generation about the history of food security, clan values, taboos and indigenous practices that promote food security.

The Art piece would also remind the Non-Pokot people in the community that they too can preserve their food reflecting on the above ideology of preservation of meat and the work was done in realistic forms to create impression.

This art work in the piece gives the flow from the slaughtering process to now cutting meat in slices which are then hanged on sticks for smoking and are monitored from dogs and later they are hanged

on the roof of the hut direct to fire to chase away flies and it is later mixed with salt which acts as quickest preservation for drying and later women put the meat in guards and finally stored in the granary.

The painting drawings have been used for thousands of years for beautification and entertainment and as a means of relaxation and the main reason for producing the Art work is to serve as a visually representation of food security among the Pokots in Matany, Napak District. Following the flow of different stages of meat preservation, different ideas that involved critical thinking were recorded on manila paper or skin surface were recorded using a pencil on bond paper and the exaggeration of some part of the inspiration to create point of focus in an art work. This drawing was done showing all the stages of preservation of meat from slaughtering process to storage and it was drawn in different postures to show complexity and to conceptualize and understand how each part of work is working if all the works are jointed at once, since the Art work is meant for exterior display, the drawing measurements were “100 by 80” long for artistic representation of food security among the Pokot, Napak District in order for them to view very clearly.

Conclusively, the researcher and the respondents agreed to produce the prints, drawings in painting from which were decorative and functional pieces, wall hangings. These prints and drawings of paintings were referred to as projects. Project one was an idea of painting a drawing on animal skin about sorghum preservation and project two was a drawing on the Mayyatta bed sheet on meat preservation.

5.4 Conclusion

Based on the literature search and field work, it was observed that drought, floods, cattle raids, COVID 19, locusts, high population are the main causes of famine in Matany, Napak district.

Additionally, during the speculative stay in the land of Matany community, the researcher had an overwhelming experience on the cultural practices that preserve food done by the Pokot people for example sorghum, the land is cleared, ploughed, seeds are sown, the crops are weeded, harvesting takes place. After harvesting, drying takes place and beating of the sorghum to remove threshes and winnowing at the same time. Later, the sorghum is pounded to remove small threshes, the sorghum is then grinded to powder form which is preserved in gourds and kept in granaries for next season when there is lack of food to eat. On the side of meat, the cow is slaughtered and skinned, then the meat is cut in slices which are smoked or dried under sunshine for a period of 1 week. After smoking, they burn sorghum sticks to form ashes that are applied on the meat plus red pepper and it is stored in gourds and taken to the granary and kept for ceremonies like marriage, twin birth ceremonies and also it is kept when visitors have come from Kampala to the village. It is also kept for lack in the future.

The researcher produced prints under inspiration of sorghum plants since sorghum is their staple food and favours their nature of land and climate condition. Sorghum has very interesting stages of preservation processes and is consumed by the Pokots which aided the artistic representation of indigenous practices that promote food security. The researcher also used, impressionism and semi-realism on the animal skin and canvas to express the print making and painting technique effect for the study during the process of print making and painting together the three projects were identified, the cause of famine and effects, preservation of sorghum and preservation of meat and all the prints

indicate visual documentation intended to preserve indigenous cultural practices that promote food security.

5.5 Recommendation

On the causes of famine, the government should construct security roads to aid agriculture, disarmament of guns from cattle raiders. The Pokot together with Karimojong Pastoral and Agro Pastoral communities depend on climatic changes for their sustenance, more so, since the rain pattern only allow one cropping season in Matany land Napak District in Karamoja, farmers always expect 3 to 4 harvest each year so the Government should construct irrigation systems which aid in growth of fast harvesting crops that can mitigate the famine challenge.

Sensitization and awareness creation should also be carried out by the Government of the Republic of Uganda to stop over grazing to mitigate the problem of prolonged drought which causes famine in the Matany community.

The Government should also tighten on strict disarmament campaign in Karamoja to address the rising insecurity of cattle rustlers not only among the Pokots but also, in the entire Karamoja region.

On the indigenous practices, the Government of the Republic of Uganda should provide modern granaries like siles to replace the indigenous granaries since theft rose up due to food insecurity.

The government should also invest more on the preservation ideas like using Art to support documentation and visually the indigenous practices.

Training should also be conducted by the policy makers on how to preserve the indigenous cultural practices that promote food security for example when they have harvested surplus, they can be educated on how to preserve the surplus so that in seasons where they don't have what to eat, they can survive on that.

On the production of prints, the scholars especially the artist must explore more on preservation of indigenous cultural practices to preserve the knowledge of material culture since printmaking is limited mostly on papers.

5.6 Areas for further research

This study explored the artistic representation of food security among the Pokots in Matany, Napak District. Further studies should investigate the following research gaps.

The printing industry makes significant contributions to sustainable livelihoods through social, economic, and personal advancement.

The significance of arts and culture in nation-building and the promotion of social cohesion; the establishment of personal and communal identities; and the easier resolution of gender issues through cultural activities, such as theatrical shows.

REFERENCES

- Abdullah, M., Johari, M. H., Aziz, M. N. A., Ahmad, A. K. A., & Rahaman, A. A. (2022). An Overview of The Revolution in Printmaking and Monoprint Application Techniques in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 12(9), 620-643.
- Adeyeye, S. A. O., Bolaji, O. T., Abegunde, T. A., & Adesina, T. O. (2020). Processing and utilization of snail meat in alleviating protein malnutrition in Africa: a review. *Nutrition & food science*.
- Agea, J.G., Lugangwa, E., Obua, J. and Kambugu, R.K., (2008). Role of indigenous knowledge in enhancing household food security: A case study of Mukungwe, Masaka district, Central Uganda. *Indilinga - African Journal of Indigenous Knowledge Systems*, 7(1). 65-71.
- Akabwai, Darlington and Priscillar E. Ateyo. (2007). *The Scramble for Cattle, Power and Guns in Karamoja*. Tufts University Feinstein International Center. December 2007.
- Akello, S. B., (2019). Use of paintings to conserve the blacksmith practice among the Ethur (labour)community, Kyambogo University, AbimDistrict, North Eastern Uganda.
- Allee, A., Lynd, L.R. & Vaze, V. (2018). Cross-national analysis of food security drivers: comparing results based on the Food Insecurity Experience Scale and Global Food Security Index. *Food Security*, 13(5), pp. 1245-1261.
- Andriewsky, Olga (2015). "Towards a Decentred History: The Study of the Holodomor and Ukrainian Historiography". *East/West: Journal of Ukrainian Studies*. 2 (1): 28. doi:10.21226/T2301N.

- Aoife McElwain (2016). The art of cookery: how the history of food was preserved through paintings.
- Asiamah, N., Mensah, H. K., & Oteng-Abayie, E.F. (2017). General, Target, and Accessible Population: Demystifying the Concepts for Effective Sampling. *The Qualitative Report*, 22(6), 1607-1621.
- Asogwa I.S., Okoye J.I, Oni K (2017). Promotion of Indigenous Food Preservation and Processing Knowledge and the Challenge of Food Security in Africa. *Journal of Food Security*, 2017, Vol. 5, No. 3, 75-87, Science and Education Publishing.
- AUMA, S. (2021). Assessment of The Impacts of Climate Change on Livestock Water Sources and Livestock Production. “Case Study, Karamoja Region of Uganda” (Master's thesis, PAUWES).
- Bagamboula CF, Uyttendaele M, Debevere J (2004) Inhibitory effect of thyme and basil essential oils, carvacrol, thymol, estragol, linalool and p-cymene towards *Shigella sonnei* and *S. flexneri*. *Food Microbiol* 21: 33-42.
- Benson, T. Nutrition and food quality. *ID21 insights*. Nr. 61. April 2006. P.8
- Blumer, H. (1969). *Symbolic interactionism: Perspective and method*. Englewood Cliffs, N.J: Prentice-Hall.
- Carroll CD, Alvarado CZ (2008) Comparison of air and immersion chilling on meat quality and shelf life of marinated broiler breast fillets. *Poultry Sci* 87: 368-372.

- Chaudhari, B. B (1984). Desai, Meghnad; Rudolph, Susanne Hoeber; Rudra, Ashok (eds.). Agrarian power and agricultural productivity in South Asia. Vol. 1. University of California Press. ISBN 978-0-520-05369-4. Retrieved 1 October 2010.
- Cleverdon, RG. 2002. Tourism development in the SADC region: the opportunities and challenges. *Development Southern Africa*. Vol. 19(1). March 2002. Pp. 7-28.
- Climate Change and Famine. "Physicians for Social Responsibility. Retrieved 23 March 2013
- Davies, Robert W.; Wheatcroft, Stephen (2009). *The Industrialisation of Soviet Russia Volume 5: The Years of Hunger: Soviet Agriculture 1931–1933*. Palgrave Macmillan UK. p. xiv. ISBN 978-0-230-27397-9.
- Condo, H. H. (2022). *The Printmaking Boom and its Effect on the Future for the Market for Prints and Multiples*.
- Coughlan de Perez, E., van Aalst, M., Choularton, R., van den Hurk, B., Mason, S., Nissan, H., & Schwager, S. (2019). From rain to famine: assessing the utility of rainfall observations and seasonal forecasts to anticipate food insecurity in East Africa. *Food security*, 11(1), 57-68.
- Daoudy, M., Sowers, J., & Weinthal, E. (2022). What is climate security? Framing risks around water, food, and migration in the Middle East and North Africa. *Wiley Interdisciplinary Reviews: Water*, 9(3), e1582.
- Davies, Robert W.; Wheatcroft, Stephen G. (2004). *The Years of Hunger: Soviet Agriculture 1931–1933*. Palgrave Macmillan. pp. 436–441.
- Davies, Robert W.; Wheatcroft, Stephen G. (2009). *The Years of Hunger: Soviet Agriculture 1931–1933*. Palgrave Macmillan. p. xv. doi:10.1057/9780230273979. ISBN 9780230238558.

- de Waal, Alex (January 2018). "The end of famine? Prospects for the elimination of mass starvation by political action". *Political Geography*. 62: 184–195. doi:10.1016/j.polgeo.2017.09.004.
- de Zwarte, I., & Janssen, L. (2022). Recalling the Hunger Winter: Evoking famine memory beyond the national. *Memory Studies*, 17506980221126603.
- Don O'Reilly, "Hundred Years' War: Joan of Arc and the Siege of Orléans Archived 9 November 2006 at the Way back Machine", TheHistoryNet.com
- Donkor, B (2011) Nutrition of people in Uganda: Kampala Makerere University, Kampala Uganda.
- Egonu, C (2020). Promoting clan identity through ceramics sculpture. Case study of Ikaribook in Apokor, Soroti District.
- Emily Mark-FitzGerald's Commemorating the Irish Famine: Memory and the Monument is published by Liverpool University Press) 2013. The Conversation UK receives funding from Liverpool University Press.
- FAO (1997). *Agriculture, food and nutrition for Africa*. A Resource Book for Teachers of Agriculture. Food and Agriculture Organization, Rome.
- Fusco V, Oguntoyinbo FA, Franz CM. 2017. Fermentation to improve food security in Africa and Asia. In *Soft Chemistry and Food Fermentation* (pp. 337-378). foods in West Africa: A review. *Trop. Life Sci. Res.* 25 (2): 81-100.
- Getty, J. Arch (1 March 2000). "The Future Did Not Work". *The Atlantic*. Retrieved 2 March 2021. "Similarly, the overwhelming weight of opinion among scholars working in the new

archives (including Courtois's co-editor Werth) is that the terrible famine of the 1930s was the result of Stalinist bungling and rigidity rather than some genocidal plan.”

Glaw, X., Inder, K., Kable, A., & Hazelton, M. (2017). Visual methodologies in qualitative research: Auto photography and photo elicitation applied to mental health research. *International Journal of Qualitative Methods*, 16(1).

Heinz G, Hautzinger P (2007) Meat Processing Technology. For Small-to Medium Scale Producers. Food and Agriculture Organization of the United Nations Regional Office for Asia and the Pacific. <https://dlci-hoa.org › upload › water-document>, Karamoja Uganda.

Hendriks, S.L. (2015). The food security continuum: a novel tool for understanding food insecurity as a range of experiences. *Food Security*, 7, 609–619 (2015).

Hochstrasser, J. B. (2021). Stil-Staende Dingen: Picturing objects in the Dutch Golden Age. In *Early Modern Things* (pp. 103-123). Routledge.

Howe, P. (2018). Famine systems: A new model for understanding the development of famines. *World Development*, 105, pp.144-155.

Husin, S. S., Ab Rahman, A. A., & Mukhtar, D. (2021). The Symbolic Interaction Theory: A Systematic Literature Review of Current Research. *International Journal of Modern Trends in Social Sciences*.

Ibnouf, F.O, (2012) “The value of women's indigenous knowledge in food processing and preservation for achieving household food security in rural Sudan. *Journal of Food Research*. 1(1). 238-253. 2012.

- Ilukor, J., Joyce, A., & Okiror, S. P. (2022). The impacts of COVID-19 on cattle traders and their response in agro-pastoral and pastoral regions in Uganda: A case of Karamoja and Teso cattle traders. *Pastoralism*, 12(1), 1-14.
- IPC. (2020). The IPC famine fact sheet. Integrated Food Security Phase Classification.
- Iyer, P., Sekajja, J., & Stites, E. (2018). The Silent gun: Changes in Alcohol Production, Sale and Consumption in Post-disarmament Karamoja, Uganda. Kampala: Karamoja Resilience Support Unit, USAID/Uganda, UK aid, and Irish Aid, 1-41.
- Katz, H.S. and Weaver W.W, (2003). *Encyclopedia of food culture* Volume 1. 2003.
- Kelvin, L (2017) Food speculation: ‘People die from hunger while banks make a killing on food. New York, USA.
- Kulchytsky, Stanislav (17 February 2007). “Holodomor 1932–1933 rr. yak henotsyd: prohalyny u dokazovii bazi” Голодомор 1932 — 1933 рр. як геноцид: прогалини у доказовій базі [Holodomor 1932–1933 as genocide: gaps in the evidence]. Den (in Ukrainian). Retrieved 19 January 2021.
- Lewis, J. L., & Sheppard, S. R. (2006). Culture and communication: can landscape visualization improve forest management consultation with indigenous communities? *Landscape and urban planning*, 77(3), 291-313.
- Lobuche, G. W. (2021). Implications of drought on pastoral and agropastoral communities in Napak district Karamoja Sub_region (Doctoral dissertation, Makerere University).

- Macauley, H. (2015) '*Cereal crops: rice, maize, millet, sorghum, wheat*', *Feeding Africa: an action plan for African agricultural transformation*. Abdou Diouf International Conference Center, Dakar, SN, 21{23 October.
- Machado, G., & Belkot, M. (2019). Extended Printmaking:(Im) Pure Print practices| Gravura prolongada: Práticas impuras. *Pós-Limiar*, 2(1), 39-50.
- Makalle, A. M., (2012). Post-Harvest Storage as a Rural Household Food Security Strategy in Tanzania, *ARPN Journal of Science and Technology*, 2 (9).
- Marples, David R. (30 November 2005). "The great famine debate goes on..." *Edmont Journal*. University of Alberta. Archived from the original on 15 June 2008. Retrieved 28 November 2021 – via ExpressNews.
- Maxwell, D., Majid, N., Adan, G., Abdirahman, K., & Kim, J. J. (2016). Facing famine: Somali experiences in the famine of 2011. *Food Policy*, 65, 63–73.
- Mowa, K. (2018). Physico-chemical attributes of Nguni chevon prepared and preserved using indigenous methods (Doctoral dissertation).
- Muftau, M. A. (2019). Value of And Constraints to Meat Processing and Preservation Among Households in Some Communities of Kebbi State Nigeria. *Equity Journal of Science and Technology*, 2(1), 33-33.
- Mugerwa S, (2014). Status of Livestock Water Sources in Karamoja Sub-Region ...

- Mukisa IM, Ntaate D, Byakika S. 2017. Application of starter cultures in the production of Enturire – a traditional sorghum-based alcoholic beverage. *Food Sci Nutr* 5 (3): 609–616. DOI:10.1002/fsn3.438
- Mukisa IM. 2012. Sensory characteristics, microbial diversity and starter culture development for Obushera, a traditional cereal fermented beverage from Uganda (dissertation). Norwegian University of Life Sciences. Ås, Norway. 2012
- Muwanga, S. (2020). Influence of selected land use change and indigenous knowledge on soil quality in the Agro-pastoral Semi-Arid Karamoja-Uganda (Doctoral dissertation, University of Nairobi).
- Nangiro S, (2021). Disarmament exercises addressing Karamoja's insecurity ...
- Ndirangu, M., Sachs, S. E., Palm, C., and Deckelbaum, R. J., "HIV affected households in Western Kenya experience greater food insecurity," *Food policy*, 42. 11-17. 2013.
- Nnadi, F.N., Chikaire, J. and Ezudike, K.E, (2013). Assessment of Indigenous Knowledge Practices for Sustainable Agriculture and Food Security in Idemili South Local Government Area of Anambra State. Nigeria. *Journal of Resources Development and Management*. 1. 14-21.
- Nukenine, E. N., (2010), Stored product protection in Africa: Past, present and future, *Proceeding of 10th International Working Conference on Stored Product Protection*, 558-574.
- Nychas GJE, Skandamis PN, Tassou CC, Koutsoumanis KP (2008) Meat spoilage during distribution. *Meat Sci* 78: 77-89.
- Olum, S., Ongeng, D., Tumuhimbise, G. A., Hennessy, M. J., Okello-Uma, I., & Taylor, D. (2018). Understanding intra-community disparity in food and nutrition security in a generally food

- insecure part of eastern Africa. *African Journal of Food, Agriculture, Nutrition and Development*, 18(2), 13317-13337.
- Oniang'o, R., Allotey, J. and Malaba, S.J, (2004). Contribution of indigenous knowledge and practices in food technology to the attainment of food security in Africa. *Journal of Food Science*. 69 (3). CRH87–CRH91. 2004.
- Pal M (2014) Preservation of various foods. Ph.D. Lecture Note, Addis Ababa University, College of Veterinary Medicine and Agriculture, Debre Zeit, Ethiopia. pp. 1-11.
- Paul, P. L. (2019). Women empowerment and social-economic development in Matany sub-county, Napak district, north eastern Uganda.
- Paxson C (2017). The lasting impact of childhood health and circumstance. *Journal of Health Economics*; 24:365–389.
- Paxson C, (2017). The lasting impact of famine on the health of people, Gale. Eastern Michigan University.
- Payaslian, Simon (11 January 2021). "20th Century Genocides". *International Relations*. Oxford University Press. doi:10.1093/OBO/9780199743292-0105. ISBN 978-0-19-974329-2. Retrieved 26 November 2021 – via Oxford Bibliographies Online.
- Rebel, E. (2020). Coordinates of a history of the technical image. In *Perspectives on contemporary printmaking* (pp. 138-140). Manchester University Press.

- Reddy, B.V., Ashok Kumar, A., Sharma, H.C., Rao, P. S., Blummel, M., Ravinder Reddy, C. et al. (2012) 'Sorghum improvement (1980-2010): Status and way forward', Journal of SAT Agricultural Research, 10, pp. 1-14.
- Reeves, K. (2020). The re-vision of printmaking. In Perspectives on contemporary printmaking (pp. 72-81). Manchester University Press.
- Roseboom T, (2016). Coronary heart disease after prenatal exposure to the Dutch famine, 1944–45. Heart; 84 (6):595–598.
- Rugumamu, C. P., (2003). Insect Infestations and Losses of Sorghum Z MAYS (L.) in Indigenous Storage Structures in Morogoro Region Tanzania, Tanzania Journal of science, 29 (2).
- Scanlan, G (2018) How financial market regulation can help prevent another global food crisis University of Chicago, USA.
- Sharma, A., S.S.J., & Rose, N.M. (2016). Development of Motifs: Traditional to Contemporary for Saris. *Research Journal of Recent Sciences* E-ISSN, 2277, 2502.
- Solomon Olum, Ipolto Okello-Uma, Gaston A. Tumuhimbise, David Taylor, and Duncan Ongeng, “The Relationship between Cultural Norms and Food Security in the Karamoja Sub-Region of Uganda.” *Journal of Food and Nutrition Research*, vol. 5, no. 6 (2017): 427-435. doi: 10.12691/jfnr-5-6-10.
- Stites, Elizabeth, Darlington Akabwai, Dyan Mazurana, and Priscillar E. Ateyo. Angering Akuju (2007). Survival and Suffering in Karamoja. Tufts University Feinstein International Center. December 2007.

- Tamang JP, Watanabe K, Holzapfel WH. 2016. Diversity of microorganisms global fermented foods and beverages. *Front. Microbiol.* 7 (377): 1-28. DOI: 10.3389/fmicb.2016.00377
- Tatwangire, A. 2014. Uganda smallholder pigs value chain development: Situation analysis and trends. Nairobi, Kenya: International Livestock Research Institute (ILRI).
- Tauger, Mark (1 July 2018). "Review of Anne Applebaum's 'Red Famine: Stalin's War on Ukraine'". History News Network. George Washington University. Retrieved 22 October 2019.
- Taye A, (2010). Interim report: review of evidence of the health impact of famine in Ethiopia. *Perspectives in Public Health*; 30(5):222-226.
- Taylor, F (2011) Introduction and methods: assessing the environmental burden of disease at national and local levels Geneva, World Health Organization.
- Top 10 culprits' for Horn of Africa hunger:" BBC News. 26 July 2011. Retrieved 1 February 2016.
- UBOS (Uganda Bureau of Statistics) (2010) Uganda census of agriculture, Vol IV: area and production report. Kampala, UG: UBOS.
- United State Agency for International Development, 2011. Staple Crops Storage Handbook, Washington.
- Veerkamp, Y (2017) A clinical handbook/practical therapist manual for assessing and treating people with post-traumatic stress disorder, Australian Institute of Criminology, Canberra.
- Walingo, M.K, *Indigenous Food Processing Methods that Improve Nutrient Bioavailability in Plant-based Diets of the Kenyan Population: the Example of Zinc*. In: Robertson, G.L. and

Lupien, J.R. (Eds), Using Food Science and Technology to Improve Nutrition and Promote National Development.1-9. 2008.

Wen Fan, (2015). Long-term health and socioeconomic consequences of early-life exposure to the 1959–1961 Chinese Famine. *Social Science Research* 2015; 49:53–69.

Wheatcroft, S.G. (2012). *The soviet famine of 1946–1947, the weather and human agency in historical perspective. Eur. Asia Stud.*,64, 987–1005. [CrossRef.

Wheatcroft, Stephen G. (August 2018). “The Turn Away from Economic Explanations for Soviet Famines”. *Contemporary European History*. Cambridge University Press. 27 (3): 465–469. doi:10.1017/S0960777318000358. Retrieved 26 November 2021 – via ResearchGate.

Wheatcroft, Stephen G. (August 2020). “The Complexity of the Kazakh Famine: Food Problems and Faulty Perceptions”. *Journal of Genocide Research*. 23 (4): 593–597. doi:10.1080/14623528.2020.1807143. S2CID 225333205

Zhou GH, Xu XL, Liu Y (2010) Preservation technologies for fresh meat- A review. *Meat Sci* 86: 119-128.

APPENDICES

APPENDIX A

The map showing the Pokot community in Napak district in south western Uganda where the study was conducted



APPENDIX B

Interview Guide for the Elders and Locals

I am Okia Emmanuel, a student from Kyambogo University, pursuing a Masters' Degree in Art and Industrial Design, currently conducting a research study on the Artistic representation of famine management among the Pokots in Matany, Napak district. The data is collected purely for academics and will be confidential.

ARTISTIC REPRESENTATION OF FAMINE MANAGEMENT

- a) What are the causes of famine in Matany Napak District?
- b) What indigenous cultural practices are used to preserve food in Matana Napak?
- c) What indigenous food stuffs are preserved in Matany Napak District?
- d) Why do you preserve food stuffs in Mantany Napak District?
- e) How has the community been involved in preservation of food staffs in Matany Napak District?
- f) How has the government been involved in preservation of food staff in Matany Napak District?

Appendix C
Consent Letter

Introduction

Hello, I would love to thank you for taking the time to meet with me today. My name is Okia Emmanuel pursuing Master of Art and Industrial Design, Kyambogo University. I would like to talk to you about your personal experiences in artistic representation of food security in Matany, Napak District Karamoja region.

The interview should take less than an hour and thirty minutes. I will be doing the recording session in order to capture every detail of the deliberations as I take some notes during the session. I will encourage you to be more audible when speaking up so that we do not miss your comments, and your suggestions and ideas during the discussion sessions.

Every kind of responses will be kept confidential. This means that your interview responses will duly be shared with the researcher and he will ensure that any information included in the report does not identify you are the respondent.

Is there any question about what I have just explained?

Are you willing to participate in this interview?

.....

Interviewee

Witness

Date

.....

KYAMBOGO UNIVERSITY

P. O. Box 1 Kyambogo, Phone: 041-285001/2 Fax: 041-220464
www.kyambogo.ac.ug

School of Art and Industrial Design
Department of Industrial and Commercial Art

Dear Sir/ Madam

RE: RESEARCH PROJECT

This is to introduce..... OKIA EMMANUEL

Registration Number:..... 19/GMAID/20697/WKA

a student of Kyambogo University, Department of Industrial and Commercial Art
Pursuing **Masters in Art and Industrial Design.**

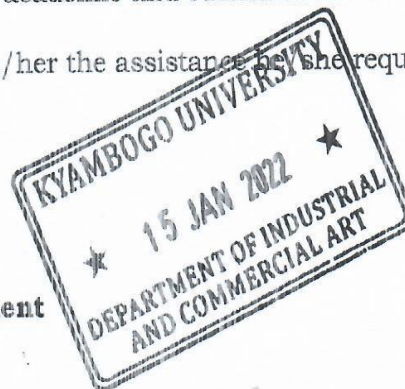
He/She intends to carry out research in your organization/community. The
research is purely academic and ethical issues are strictly observed.

Kindly accord him/her the assistance he/she requires.

Yours Faithfully



Kimari Muturi
Head of Department



Acceptance Letter from the Office of LC1 Lokolo Village

THE OFFICE OF LC1
LOKOLO VILLAGE
MATANY SUB COUNTY
NAPAK DISTRICT

12/December/2021

REF: MR. OKIA EMMANUEL

I kindly hereby inform to you that he is a true person that with above mentioned name and he has been granted a letter from the Office of the LC1. And yet he wishes to carry out his research study of artistic representation of food security in my village Lokolo. So please I do kindly allow him to do carry out his research study in my village.

Thank you,

