

**DEVELOPMENT OF DECORATIVE MOTIFS FOR FLOOR  
AND WALL CERAMIC TILES DERIVED FROM GANDA  
MATERIAL CULTURE**



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**(2008/ U/HD/11/MAID)**

**A GUIDE BOOK SUBMITTED IN PARTIAL FULFILLMENT OF THE  
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTERS OF ART AND  
INDUSTRIAL DESIGN (CERAMICS) OF KYAMBOGO UNIVERSITY**

**DECEMBER 2011**

**DECLARATION**

I, ORIJABO SILAS OYO, do declare that this research report entitled "Development of Decorative Motifs for Floor and Wall Ceramic Tiles Derived from Ganda Material Culture" is my own work and that it has never been presented to any University or any Higher Institution of learning for an award of a Master's Degree.

Signed *Orijabo Silas Oyo*.....

**Orijabo Silas Oyo**

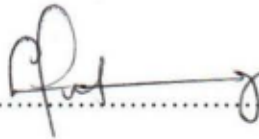
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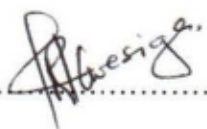
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## **DEDICATION**

This guide book is written in appreciation of my late dad, Samson, Tiyo Oyo, late brothers, Sam, Joseph Oyo, Jonathan Oyo and late sister, Emily Ederu Oyo. May their souls rest in everlasting peace.

Dedicated to all Ceramics art lovers and my dear mum Mrs. Dinah, Anderu Oyo, My brothers, Alfred Oyo, Patrick Oyo, Godfrey Oyo, Godwin Oyo, Joel Oyo, and My Sisters, Lonah Oyo, and Harriet, Mayokia Oyo whose love and faith in me gave early impetus to my career in art. May God bless you all?

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May God reward you abundantly!

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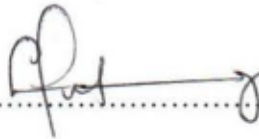
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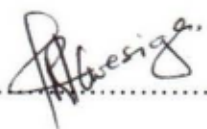
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## ABSTRACT

This study set out to develop decorative motifs for floor and wall ceramic tiles derived from Ganda material culture. The significance of this study is the promotion of Ugandan culture through production of decorative tiles using Ganda material culture as motifs. This will keep the Ugandan culture alive through educating the young and upcoming generation by decorating the tiles using the designs from the indigenous crafts of Uganda specifically the Ganda material culture. The study set out to produce sample tiles with decorative motifs inspired by pottery from Ganda material culture. The study design was an exploratory intervention into developing decorative motifs for floor and wall ceramic tiles. Data was collected from the field using questionnaires for Ceramic dealers and masons (builders) within Kampala city, while interviews were conducted for selected individuals in order to collect information on the history of imported tiles and their use within Uganda. The process of studio work was closely supervised to register findings/results. A number of findings were registered, most of which confirmed to the development of creative use of decorative motifs for floor and wall ceramic tiles derived from Ganda material Culture. From the findings, conclusions were drawn one of the major ones being that the use of Ganda material culture is of the essence in transmitting creative use of traditional culture in decorating floor and wall tiles. Finally, several proposals which were made aimed at highlighting the creative use of traditional culture to decorate floor and wall ceramic tiles in Uganda.



## CHAPTER ONE

### INTRODUCTION

#### 1.0 Background to the Study

Despite the fact that Pottery has been a practice in most of ethnic groups in Uganda, with each displaying its rich material culture (Trowell and Wachsmann, 1953), Contemporary Ceramic tile works have hardly integrated many of the traditional African motifs.

In this study, the definition of pottery in its widest sense includes all objects made from clay and hardened by fire: earthen ware, stoneware, and porcelain. This article deals with pottery as art and craft, covering the kinds of pottery, the processes and techniques of forming and decorating it, and finally the history of pottery; while Ceramics in simple terms is defined as the art of making pots, cups, plates, tiles and bricks out of clay. Accordingly, Nunn and Locke (1984) defined Ceramics as “the art and Science of Pottery” and according to Longman group dictionary, ceramics is defined as:- “the art or practice of making pots, cups, plates, tiles and bricks and so on by shaping bits of clay and baking until hard”.

Writing in early 1990s, Sserunkuuma (1992) defined ceramics as:

*“The art and science of making and using materials which have in their essential components a large proportion of inorganic and non-metallic materials”. “Sserunkuuma, goes on to say that these include a vast range of products, pottery, porcelain, sanitary wares, refractory’s, enamels, glass, cement plaster, mosaics, plastics and metallic magnetic materials”*

It may be extremely difficult to place the origin of Ceramics in any particular region as the use of clay is older than written history. However, ceramics is known to be one of man’s earliest scientific and artistic achievements. To this, Honey (1945) reports that, some of the

earliest ceramics was produced around 5000 BC in Egypt and in China during the Tang period before A.D 25. The earliest known ceramics is a black and brown colored pot with a round bottom and usually with an impressed surface suggesting that a basket was used as a mould. The basket therefore could be regarded as an important object because it showed the surface quality, composition, creativity, originality and inspiration of the traditional ceramist (Kisuule 2000).

In Uganda, the only public ceramic work that integrated traditional motifs are the one at the entrance of the Farmer's House on Parliament Avenue; these indigenous motifs have been used on tiles to promote African culture. It is indeed difficult to find any ceramic ware depicting African motifs on the Ugandan market.



**Plate I: Todd's Mural Mosaic Symbols on Exchange and barter at Tropical African Bank  
(formerly Libyan Arab Bank) on Kampala/Entebbe Road Junction**



**Plate II: African motif at the entrance to Farmers House depicting Women Harvesting**

**Cotton**



**Plate III: African motif at the entrance to Farmers House depicting Women Harvesting**

**Coffee**

In this regard, pottery whether local or foreign, has always been adorned using varied media (cow-dung, clay, lime and coloured soil) craftsmanship is a practice that is passed down from generation to generation. To support the above statement; Nzita and Niwampa (1998) hold that since multi-headed spears are almost always connected with ceremonial or magi co-

religious practices so are the multi-mouthed pots in certain religious rite especially those connected with the birth of twins.

In Egypt, pottery was made in great variety in the pre dynastic period (up to C31000 BC), and a hard fired ware of good quality was attained. The earliest forms of decoration were geometrical of stylized animal or scenic motifs painted in white slip on a red body. There is comparatively little variation until the 26th dynasty (C664-525BC), facts are vessels of one kind or another, although pottery figures of variable quality were made some of the later examples (after 500 BC) show signs of Greek influence.

Egyptian pottery of the Islamic period was at its best during the Fatimid dynasty (969-1171). Wares were at first coarser than those of the Mesopotamia because of the poor quality of local materials, and the shapes were less refined, since Chinese influence was absent. Toward the end of the period, a much whiter type of ware, with a compact body, came in to use and thereafter, became common throughout the Middle East. The pattern suggests the influence of some of the sung wares of China.

The potter's art first reached the Aegean in the Neolithic or new Stone Age. All Neolithic vases are hand made, and the best are highly polished in other respects, various local schools have little in common, since communications were severely limited in this remote period. The main centres of pottery production lay in Thessaly and Crete. Thessalian potters favoured a red monochrome ware but occasionally attempted simple painted decoration consisting of rectilinear patterns, with a vertical or diagonal emphasis. The Neolithic pottery of Crete is remarkable for its finely burnished surface, any decoration usually incised.

Pottery was the first art to recover its standards after the Dorian invasion and the overthrow of Mycenae. Athens escaped there disaster and in the ensuing age became the chief source of the Ceramic ideas.

In quality, the Islamic pottery of Syria, Egypt, Mesopotamia, Persia, Afghanistan and Anatolia rivals even the wares of the far East, and its influence on the development of European pottery was more profound than that of any other region except that of China.

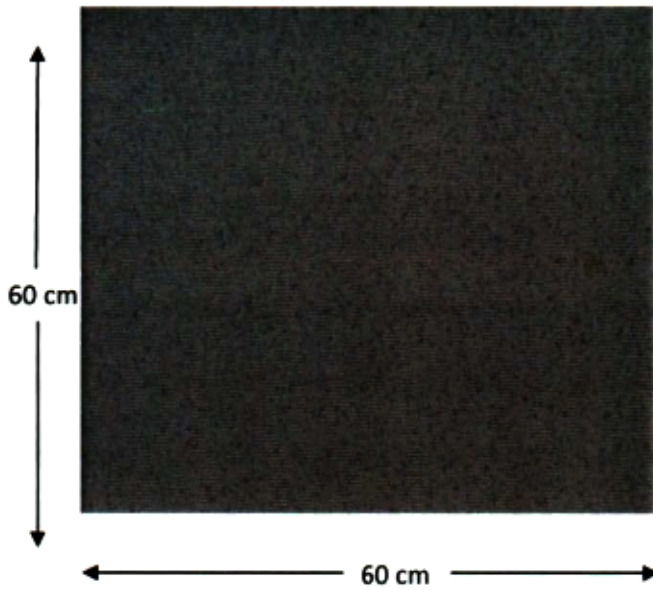
The Islamic potter, in his turn, owes an incalculable debt to the Chinese. Near and Middle Eastern pottery was at its best between the 9<sup>th</sup> and 13<sup>th</sup> centuries, and its history is closely linked to the fortunes of the caliphate (the dominion of the temporal and spiritual head of Islam) each dynasty was surrounded in its capital by a wealthy and beauty-loving court that patronized artists and artisans.

Early Islam Umayyad, there is little pottery of merit from the period of the Umayyad caliphate (661-750). At this time, the capital was at Damascus, and the chief interest of the pottery lies in its mingled Mediterranean and Middle Eastern derivation; for example attempts were made to synthesize the formal repetitive style derived from the ancient Babylonian and Assyrian civilizations with naturalistic ornament in the Greco Roman style.

The Islamic potters were responsible for a number of important technical innovations, the most influential of which was the rediscovery of tin glaze in the 9th century AD. Many fragments of Chinese pottery and porcelain have been found at the site of Samarra; on the Tigris, where the Abbasids build their summer palaces in the 9th century. Among the native wares are some made in a buff body decorated in relief under a green glaze; others with

monochrome green, white and yellow glazes or with glazes in imitation of a well known type of T'ang decoration and those painted with cobalt blue.

Looking at ceramics as a whole, the Chinese ceramics (porcelain) developed faster than in any other part of the world; the Chinese ceramics is translucent and might have involved creative thinking to refine the clay and master its components. While analyzing Chinese clay, Honey (1945) observed that "porcelain may be regarded as the perfect expression of the taste of a period, reflecting the habit as well as embodying its peculiarity for sense of creative bent". However, in Uganda it can be argued, creativity has relaxed and creative process of originality of ideas has not registered well as on the imported tiles from China, India and others in which they lack a sense of artistic values.



**Plate IV: China Floor Tile Sample in the Market (60cmx60cm)**

No where in world has pottery assumed such importance as in China, and the influence of Chinese porcelain on later European pottery has been profound. It is difficult to give much practical evidence on the question of Chinese influences on pottery. Most Chinese pottery shows the name of the dynasty and that of the emperor. The dating of the Chinese pottery is further complicated by the fact that there were traditional and persisting types that overlapped; quite often therefore dynastic labels can not be regarded as anything more than an indication of the affinities of the particular object under discussion.

Chinese decoration is usually symbolic and often exploits the double meaning of certain words; for instance, the Chinese word for bat, fu also means "happiness" five bats represent the five Blessings- longevity, wealth, serenity, virtue and an easy death.

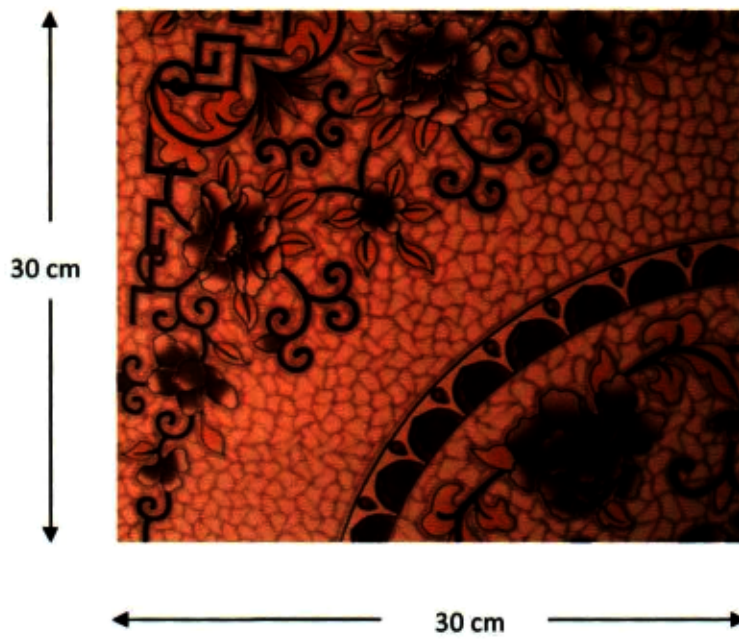
The earliest Chinese pottery is of the Neolithic period and has been discovered in the provinces of Honan and Kansu. Perhaps the best known of these wares is a series of large Urns of red polished pottery with geometric decoration found in the pan-Shan cemetery and at Mach'ange, both in Kansu province. These were made in hand and latest specimens with perhaps some assistance from the slow Wheel, and are at least as earlier as 2000 BC. Much Chou pottery is decorated with rudimentary incised ornament, some of which resembles the impress of coarse textiles referred to as mat markings. Tang dynasty (AD618-907) Chinese pottery reaches an important stage in its development during the T'ang dynasty. Nearly everything that has survived has been excavated from tombs, many of them found accidentally by railway engineers and latterly by more systematic excavation.

Perhaps the most important single decoration was the use of coloured glazes as monochromes or splashed and dappled. The T'ang wares commonest in western collections are

those with either monochrome or dappled glazes covering the highly absorbent, buff, earthen ware body. The dappled glazes were usually applied with a sponge. The Sung dynasty existed between AD 960-1279. The wares of the Sung dynasty are particularly noted for brilliant feldspathic glazes over a stoneware body and their emphasis on simplicity on form. Decoration is frequent but may be incised, molded, impressed, or carved; a certain amount of painted decoration was done at T'zu-chou in chihli (now called Hopeh) Province. In Uganda we may not have such recorded pottery history.

Khorsabad (Dursharrukin), Nimrud (Calah), Susa, and Babylon provide the first instance of the use of the tin glaze; although the date of its introduction can not be certainly determined. Furthermore, for Mesopotamian and Persia in 11th to 15th century, the Seljug Turks overran Persia and Mesopotamia, and their ascendancy lasted until the advent of the Mongols during the 13th century and this could have influenced the changes we see in their ceramics.(The Atlas of world History.)

In Uganda, communities contact with the western Asian cultures through colonialism and trade introduced metallic objects which could have influenced the African pottery to be rejected and the associated with magic and evil (Kwesiga, 2005). The introduction of plastic containers made the already worse situation critical. However, those that still show indigenous motifs reflecting aspects of daily activities and the environments of the people include (Ganda, Nyankole, Kiga, Samia, Lugbara, Madi and others). Ceramics objects like "Ensuwa" and "Ensumbi" (pots) among the Ganda were not widely used as decoration, till the advent of colonialism. In Uganda, it can be argued that craftworks are so varied that one needs to pay attention to various ethnic settings in order to exhaust it. The difference that appears in the crafts is a consequence of the cultural practices of each ethnic group.



**Plate V: Spain Floor Tile in the Kampala hardware Market (30cmx30 cm) This is a sample of the tile in the market which does not depict an African motif (photo by author)**

Indigenous ceramics can be argued that, it has been highly influenced by industrially produced wares from outside Uganda. This perhaps explains why most decorative pottery (flower pots) available today has Greco- Egyptian designs but not indigenous ones of Uganda, even when they are produced by peasants who have limited academic backgrounds like ( Kiteezi potters in Mpigi District). The colonial era and modernization made some of the African crafts as decoration items.

However, the present research is aware of the Uganda National Culture policy on material culture which states that “Art and Crafts are products that result from human manipulation of physical materials for self expression. These products include among others; baskets, mats, ceramics, beads, pots, hand-woven textiles and products, toys, jewellery, bags and

ornaments, leather products, batiks, sculptures and paintings (Uganda National Culture Policy, 2006). The policy is hinged on the idea of promoting the identities of the various communities and creation of avenues for income generation. The identities can be equated to “Indigenous knowledge (IK) which is the traditional local knowledge existing within and developed around the specific conditions of a community indigenous to particular geographical area. Although IK is useful to people, limited research has been done and that is what this research can contribute. The cultural beliefs, traditions and values are core to a community’s mechanism for survival.



**Plate VI: Nok sculpture, Nigeria. Terracotta, 48 cm tall**

**Age: 900 to 1,500 years (Courtesy of the trustees of the British Museum London.)**

The community survival has been well articulated with the NOK culture in Africa. In the widest Africa, life-size terra-cotta heads and figure fragments dating from about 500 BC to AD 200 of the NOK culture were found in Nigeria. Most ceramic pieces were made by the women

upon the objective of that design. Structural design in ceramics is a plan to build up or put together several parts to make a form. Therefore a ceramic piece may combine concepts of both negative and solid form. However, Merriam Webster (1961) defines structure as “something made of more or less interdependent elements”.

Colour and texture both form into decoration. Decorative design in ceramics is a plan to add beauty to the already build structural piece of ceramics. Therefore, decoration is inseparable from the structure such as throwing or stamped and applied clay accents which revealed the plastic nature of the clay. The character of the structure largely determines the type of decoration that is most effective for use. While, Longman dictionary (1970) defines decoration as; “to add something to, so as to make it more attractive”. However, structural design and decorative design are two different aspects but they go hand in hand, one complementing the other. Structural design builds up touch to the build up form. Line, texture, colour, shape and pattern are components which make up originality of ideas, composition and surface quality are highly considered in ceramics. When these are successfully achieved in drawing and application, then the local effect of the art piece. The same piece of art can attract several viewers’ attention in different aspects. Yet, these are the areas which students have not addressed satisfactorily. Nassali (1997) noted how different people commented about the same piece of art.

*“What a charming design, said the Hunter. Its manmade, said the craftsman, an interesting texture said the connoisseur. Its contemporary, said the buyer. But the planner said, we shall need further inspiration. He thought ten years ahead”.*

By pursuing the student’s sketch books and observing them as they work, it was noticed that students did not take sketching and Marquette making seriously. Some made the sketches but did not follow their plan.



**Plate VIII: Luzira Head-Buganda-Uganda before 1750 fired clay 20x17x17cm (Courtesy of the trustees of the British Museum London.)**



**Plate IX: Luzira Head Buganda-Uganda before 1750 fired clay  
12x16x16cm discovered in 1931. (Courtesy of the trustees of the British Museum London.)**



**Plate X: Luzira Maximum Prison (Courtesy of the trustees of the British Museum  
London.)**

From the above, one is left with some unanswered questions: What can today's ceramists turn to for inspiration and technological know-how? Shouldn't today's ceramist learn to display creative process one that goes through right from the inspirational to the finished pieces? Some of these issues begin to be interrogated when Dr Lugira (1970), reminded us of Ganda pottery when he stated that the Ganda were skilled in creating works of art. Among them were excellent craftsmen; bark- cloth makers, weaves and potters as well. They made excellent mats and variety of basketry, pots and chairs. The best bark cloth makers in present Uganda could be found in Ganda. They also made spears, shields, bows and arrows among other things; they also made drums (Ndogo) of various shapes and sizes as well as many other musical instruments such as "Endingidi"

Later, Mugisha (1988) also analyzed the pattern in Ganda and found out that “patterns are applied by roulette and other found objects especially the screws. Painting on pottery was done on very small scale. Fingers are used to apply the crushed red “Engobe” (Ochre) in an already cut design instead of glazing a traditional potter... the pots when leather hard. After biscuit firing, the pots are smoked and polished on a stick over the fire. The pots become hot and juicy and smoke penetrates into pores of the clay. The pots are then rubbed with a piece of back-cloth and they develop the shiny effect, with cow butter, the surface is further polished to enhance the glassy effect” these acts show an achievement demonstrating the creative process to achieve forms, shapes and design.



### **1.1 Statement of the problem**

Although pottery is practiced by all the 54 ethnic groups in Uganda, and one would assume that many communities attach some importance to pottery. There are few contemporary ceramic tile works that integrate indigenous designs derived from these rich diversified cultures. Apart from one old work at the entrance of Farmer’s House on Parliamentary Avenue, and Todd’s Mosaic mural on exchange and barter symbols at Tropical Bank(formerly Libyan Arab Bank) on Kampala Road where indigenous motifs have been used on tiles, it is difficult to find ceramic products and wares depicting Uganda’s traditional material culture on the market.

With the ever increasing Rural-Urban migration which has led to creation of new cultures, there is a worrying trend of forgetting the cultural values that created the identity of communities in Uganda. Aware that society cannot go back to pre-colonial times and that communities must fit in the global economies and space, this research set out to produce

decorative motifs derived from Ganda material culture that can be used on both floor and wall tiles.

## **1.2 Purpose of the study**

The purpose of this study is to produce decorative motifs for floor and wall tiles derived from the Ganda Material Culture.

## **1.3 Objectives of the study**

This study was guided by the following objectives.

- a) To find out factors affecting the use of tiles depicting motifs from the Ganda traditional material culture.
- b) To develop motifs for floor and wall tiles that would educate the young generation about indigenous pottery of the Ganda material culture.
- c) To produce sample tiles with decorative motifs inspired by pottery from the Ganda material culture.

## **1.4 Studio guide questions**

The research was guided by the following research questions.

- a) What are the factors affecting production and use of tiles depicting motifs from the Ganda traditional material culture?
- b) How can motifs that would educate the young generation about indigenous of the Ganda material culture be derived?
- c) How can motifs inspired by the Ganda material culture be applied in decorating tiles?

## **1.5 Scope of the study**

### **1.5.1 Historical scope**

The historical scope of this research dates as far back as the beginning of ceramic tile production in Uganda. It also extends to ceramic tile production from various world civilizations as far back as 4000 years ago for the purpose of comparison and creating a wide range of literature citation.

### **1.5.2 Geographical scope**

The geographical scope of this study covers the whole of Buganda region. Buganda's boundaries are marked by Lake Victoria to the south, the River Nile to the east, Lake Kyoga to the north and River Kafu to the northwest.

To the west, Buganda is bordered by the districts of Isingiro, Kiruhura, Kyenjojo, Kibale, Hoima and Masindi.

The following are the officially recognized counties (Amassaza) of Buganda.

Ggomba, Butambala, Kyaddondo, Busiro, Buddu, Bulemeezi, Ssinga, Kyaggwe, Bugerere, Buweekula, Mawogola, Kabula, Mawokota, Kooki, Ssesa, Buvuma, Busunju, Buluuli.

The study was carried out within the Ganda region because the interest was based within the Ganda region and it was easy to obtain the relevant information on the topic from the royal potters. And the researcher only visited some of the royal potters because the information got from them were the same so it was not necessary to visit all the royal potters within the region since the Ganda region was more advanced culturally compared to other regions.



In **objective three**, the researcher studied and selected motifs to be used for depicting indigenous pottery of the Ganda material culture on tiles. Within this the researcher selected and used the following identified Ganda material culture: These included Ensumbi, Entamu, Emindi, Ensuwa and Ekyogero

In objective three, the researchers developed and produced tiles with decorative motifs inspired by pottery from Ganda material culture.

#### **1.6 Significance of the study.**

The significance of this study is the promotion of Ugandan culture through production of decorative tiles using Ganda material culture as motifs. This will also help in improving the surface quality of glazed indigenous decorative wares by making them more durable and acceptable in Uganda.

The indigenous information of this research shall be published so as to contribute to the international existing knowledge in ceramic decorations for household.

On the other hand this will keep the Ugandan culture alive through educating the young generation by decorating the tiles using the designs from the indigenous crafts of Uganda specifically the Ganda material culture.

To inspire the ceramic artists to come together and institute a ceramic resource centre, which would be used for art appreciation, extension of knowledge on ceramic designs, used by scholars for research purposes.

Curriculum developers can use the study to introduce ceramic design skills in the curriculum of either lower, upper secondary or universities, to develop the learners' creativity, imagination and skills for self reliance and positive attitude towards manual work.

The ministry of education and sports would make art and design to be a compulsory subject at ordinary level in order to develop in her learners the aesthetic values which can make them strive to promote and preserve their artistic skills and cultures.

The study would place the researcher amongst reputable academicians in the field of ceramic designers.

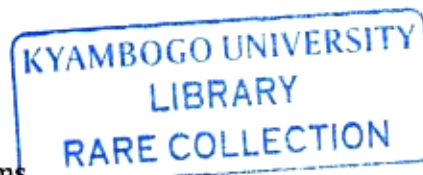
### 1.7 Limitations of the Study

The researcher was faced with the following problems while carrying out the study.

- a) The study could not be accomplished within the stipulated time because there was the problem of insufficient funds to facilitate the movement of the researcher to the resource centres.
- b) The researcher encountered the problem of the local language barrier hence it necessitates the researcher to hire research assistance to translate the Luganda language.
- c) There was a problem of negative attitude from some of the resource persons who had the valuable information, hence not getting required information promptly and this necessitated the researcher to financially motivate them to obtain the information.

### 1.8 Definition of Operational terms

- Biscuit firing:** This is the first firing given to green ware when it is dry and before it is glazed. The biscuit firing temperature of the second (glaze) firing.
- Buganda:** The land.
- Ceramic dealers:** Sellers (suppliers) of ceramic items.



<b>Ceramic Decorations:</b>	Architectural ornaments (vases and tiles) of varied sizes, under this study to reflect various artistic messages and then fired to improve on their visual and aesthetic qualities.
<b>Ceramics:</b>	Enthusiast: An admirer of ceramic decorative items with any other occupation rather than being a ceramics dealer, artist or builder who participated in this project.
<b>Decorative Ceramics:</b>	the term refers to those ceramic wares that are made for the sole purpose of beautifying the surroundings. The art works are made suitable for decorating they are not meant for utilitarian purpose.
<b>Ethnic:</b>	A national or racial group of people
<b>Functional Ceramics:</b>	the term refers to those ceramic wares that are designed to have a functional, specifically for practical use and utilitarian purposes.
<b>Indigenous:</b>	Belonging to and reflecting the nature of the society and environment of the people who own it.
<b>Innovation:</b>	To introduce changes and new ideas.
<b>Luganda:</b>	Language of Baganda.
<b>Motif:</b>	the term refers to objects from which the researcher derived the art forms in ceramics.
<b>Muganda (Ganda):</b>	person, native of the country from the Buganda ethnic group.

- On glaze decoration:** On glaze decoration are applied on top of the unfired glaze. It may be done with a contrasting colour of glaze or with metallic oxides or glaze pigments.
- Over glaze decoration:** Over glaze decoration is often called china painting. The ware is glaze fired first and then is decorated with special low temperature enamels that fire at around 700 degree celcius.
- Stains:** These are colouring oxides that have been stabilised and are used to colour clay glazes.
- Under glaze decoration:** Under glaze decoration is decoration that is applied under the glaze by the use of pigments. A variety of pigments and oxides may be used. Under glazing is usually done under a transparent glaze in order to reveal it clearly.
- Ware:** Ceramic objects in the raw, biscuit or glost state.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.0 Introduction

This chapter will deal with what other researchers have written in relation to this topic Development of Decorative Motifs for Floor and Wall ceramic Tiles Derived from Ganda Material Culture.

The craft used to be a women's profession, but now men have taken over the art to the extent that they are the ones that have started the use of improved Kilns and throwing on potters' wheels.

In the past, Kings and Chiefs had their own potters (Trowell, 1960).

*The King had his own potters whose duty was to furnish the store in the royal enclosure, where numbers of pots were kept and doled out by the store- keeper whenever they were wanted. Many of the chiefs had their own potters. They needed so many pots that it was cheaper to assign land to a potter and to take the taxes in pots, than to buy them from the markets....the kings' potters were called Bajona and their work "Kujona".*

The above statement is also supported by Trowel and Wachsmann (1953) thus:

*"In Buganda, the Royal potters who worked for the Kabaka had special title, special privileges they are called Bajona. Were exempted from paying tax and wore a special skin apron as their Insignia".*

In general analysis, the potter differs from the rest of the peasant community in terms of the crafts on the contrary they were joined by taboos and superstitions.

These were designed to safeguard the pottery industry. It is on this that the traditional pottery industry depended.

During the mining of clay, women in their menstrual periods are not allowed to enter the clay pit. In fact women are forbidden to mine clay when in such conditions. This is not only in Buganda, but also in some other parts of the world as Biffault (1947) vol 2 chapter 29 says:

*It is interesting to note that most superstitious people all over the world believe that women blood acquire some mysterious power during menstrual period and pregnancy. The Bukina, for example, believe that if a woman in such condition walked on the sea shore or near the mouth of the river, the blood would kill all the fish in the water. The North Californian Indians are convinced that if such a woman approached the medicine about to be administered to an invalid, the later would inevitably die on taking it.*

Some women become physically weak during this period, therefore, it was necessary for them to abstain from heavy duties according to Biffault (1947) volume two.

In the company of men, women, were not allowed to enter clay pits, least all pots crack on firing. Yet when women were alone, such a condition did not apply. On this note, it must be realised that when in a clay pit, one needs to bend in order to be in position to mine the clay properly. On bending, the women's thighs may be exposed to the man. Since such could lead to fornication, measures were created to avoid it.

When mixing the clay with grog or crashed stones, one is not supposed to use a single hand least the quantity of clay reduces.

Yet by the virtue of the fact that clay does not reduce in mass when pounded, disqualifies the taboo. There it was introduced to discourage laziness.

The Ganda, who refer to themselves as "Baganda" (singular Muganda), are a people of mixed origins whose ancestors migrated to their present location between the thirteenth and sixteenth centuries. Historically, they were known as a warlike people who conquered many of their neighbours and, at the time of European contact, they were a dominant power in the region.

Buganda was one of the lakeshores kingdoms, along with Bunyoro, Toro, Ankole, and Kiziba. Today Buganda is one of four provinces in the state of Uganda and is situated on the northern and western shores of Lake Victoria, from 2° N to 1° S latitude. The province extends 198 miles (320 kilometres) along the lakeshores and 81 miles (130 kilometres) inland, with a land area of approximately 17,370 square miles (45,000 square kilometres).

The Ganda speak the Bantu language, which they call "Luganda." Linguistically, Luganda can be placed within the interlacustrine group of the northern zone of Bantu languages or within the central branch of the Niger-Congo language family.

In all fields of art, shapes and designs have mostly been derived from our surroundings. Many researchers have written about shapes and designs in various ways with a special regard from the environment as it is an inexhaustible resource. While Nassali (1997) quotes Mangan that "for anything to be design, there must be a designer who made it on purpose". Transformation of the surrounding into art is taken to be difficult by some artists but Nassali (1997) draws our attention to Coomaraswamy. K. Ananda's idea that the perception of shapes and designs from the surrounding is by means of the mind of the artists which may be called intelligible minds. More still the individual response of perception of structure may be conditioned by general education inherent sensibility, initiative response and aesthetic training.

On the contrary this is not the case in Uganda. This can be seen in Steiner (1994, page 25)

*"The art in Africa has degenerated in the last few years and veritable studios have opened to meet the demand of tourists. All that was good in African pottery has disappeared in these examples conceived solely for sale.... contemporary works are far from having the same"*

This study touches some bits of anthropology. Denise (1962) states that: The anthropology of African art in a transitional market was not related with the culture. The

similarity between early diffusionist anthropology and recent studies of world systems and global political economy. (The diffusionists) were not much concerned with people". On the other hand; Maurice de Sousmares also agreed with Peter Lane and went on to say that design was: - "Primarily a form of enquiry not a new art form, not only an enquiry about the marks and structures which appear out of the materials used, but also an enquiry about the sources and term of personal expression to the world around us...". Practically, a piece of ceramic work usually has both structural design and decorative design. The design shows the main features of something to be executed. It can be bad or good depending upon one's judgment, based on past experience. Structural design deals with the buildings while decorative design deals with ornamentation.

This is backed by Dr. Hessayon (1990) who stated that, "good design does not exist as a matter of fact ... it is a matter of opinion". However, several students at the Margaret Trowell School of Industrial and Fine Arts have done much research dealing with inspiration from objects, forms and design, but there are still aspects that need consideration. Nassali (1997) dealt with form and design, texture, colour and patterns, derived from fish and her research is not done practically. Yet a design is only a design when executed practically and proven viable. A plan can look alright in principle but in practice may not succeed. Trowell (1960) looks at a design in a wider sense when she says that when we speak of design in art and that we mean the whole process of planning the shape of an object and its construction.

Similarly, there is that need to execute the developed designs and forms practically. Naggita (1998) looked at fish as a source of inspiration for architectural forms and designs. The sketches were so beautifully developed into very convincing designs and forms for building.

However, until they are executed in the three dimensions of the actual building, they remain simply designs and forms. Eulbeck (1983) supports Trowell when he defines decorations as:

*“Those aspects of form which begin where the essentials of form and function end ... And it’s one of the various elements which interrelate to compromise the quality of a pot”.*

In another development, Muyingo (1989) selected plants at Entebbe Botanical Gardens for deriving ceramic form and designs. He also never executed his forms and designs practically, but simply left them on a paper. So like the two that is Nassali and Naggita, Muyingo did not make Marquette’s as part of the design process to show the development of the designs and forms, creating a gap in the creative process which needs to be addressed.

Motifs play a big role in creative thought which develops through a process of assimilation, the merging of feelings, images and experience, and from the objects seen, heard and touched it is difficult to pin point the exact origin of a specific idea pursued in clay because the boundary between the conscious and unconscious response is often blurred.

Lane (1980) stated that:

*“Often the most eloquent and sensitive work grows out of an accumulation of many things closely observed, digested and stored away in the subconscious. Whether the initial stimulus comes from studying objects and their designs the wider field of the visual arts or the work of other potters, these experiences are never wasted. They will re-emerge as ideas related to form, texture, pattern and colour when the time is right.”*

Concertino (1985) showed some ceramics but he left out the step of making Marquette’s though talked about them. This step is vital as it gives the suggestion of the piece in the three dimensions at a smaller scale. This gives the artists a wider view of what is to be done. Thus the stage for Marquette making is still a gap that needed to be filled up. The researcher agrees with Dr. Hessayon as he believes that for one to call a design good design, it depends

upon the objective of that design. Structural design in ceramics is a plan to build up or put together several parts to make a form. Therefore a ceramic piece may combine concepts of both negative and solid form. However, Merriam Webster (1961) defines structure as “something made of more or less interdependent elements”.

Colour and texture both form into decoration. Decorative design in ceramics is a plan to add beauty to the already build structural piece of ceramics. Therefore, decoration is inseparable from the structure such as throwing or stamped and applied clay accents which revealed the plastic nature of the clay. The character of the structure largely determines the type of decoration that is most effective for use. While, Longman dictionary (1970) defines decoration as; “to add something to, so as to make it more attractive”. However, structural design and decorative design are two different aspects but they go hand in hand, one complementing the other. Structural design builds up touch to the build up form. Line, texture, colour, shape and pattern are components which make up originality of ideas, composition and surface quality are highly considered in ceramics. When these are successfully achieved in drawing and application, then the local effect of the art piece. The same piece of art can attract several viewers’ attention in different aspects. Yet, these are the areas which students have not addressed satisfactorily. Nassali (1997) noted how different people commented about the same piece of art.

*“What a charming design, said the Hunter. Its manmade, said the craftsman, an interesting texture said the connoisseur. Its contemporary, said the buyer. But the planner said, we shall need further inspiration. He thought ten years ahead”.*

By pursuing the student’s sketch books and observing them as they work, it was noticed that students did not take sketching and Marquette making seriously. Some made the sketches but did not follow their plan.

Historically, man has desired to create living spaces which were beautiful, durable and user friendly. With that in mind, ceramic tile has been made by man for 4000 years. Beautiful tiled surfaces have been found in the oldest pyramids, the ruins of Babylon and ancient ruins of Greek cities. Decorative tile work was invented in the near east, where it had enjoyed a longer popularity and assumed a greater variety of design than anywhere in the world. All methods of decoration were brought to perfection in Persia in Europe decorated tiles did not come to general use outside Moorish Spain until the second half of the 12th century.

Nevertheless, durability, strength and beauty in any decorative motifs notwithstanding, the degree of indigenous identity are always maintained as a matter of artistic legacy. Hence, literary descriptions like; Plebeian art (as of the days of Astubury and Whieldon in Britain during the seventeenth century), Byzantine Mosaics (of the early Byzantine period decorating the san Vitale). Chinese...ware (involving the use of Petuntise materials) ware and deft ware pottery are part of the common vocabulary used by many acclaimed Art Historians and critics to classify specific kinds of ceramic decorative wares, produced for architectures (buildings) from different areas, as a basis for identification.

The subject matter, articulated in such projects, have remained loyal reflecting the livelihood and neighbourhood of the artists and thus indigenous, creative and authentic! Even in some of the areas where contemporary liberal economics have resulted into a massive importation of decorative ceramic wares, still some level of "user-identity" have been maintained to render respect to patronage. Thus wares have remained "User-friendly", Cherished and revered.

The ceramics decorative basket has been kept open – ended but as close, artistically to the beneficiaries as possible. This is what is currently lacking on Uganda’s ceramic decorative horizon. All, but a few flower vases, decorative motifs used today are imported and thus foreign oriented. Available clays and glazes have failed to agree to yield stable motifs. Improvements on their batch competitions are, thus a necessary precondition to producing artistically better and competitive motifs with indigenous ideas.

Where attempts have been made to boost the local initiative and raise the production of indigenous ceramic motifs using imported glaze varieties, the finished surfaces have often remained far from desirable. This has reduced the value of the local products in the face of stiff competition from elsewhere! The foundation laid by great ceramists like Professor Todd (1960s) needs revitalization and support.

Hence a case for this research where important and local materials have been improved to create two and local materials have been dimensional decorative wares with indigenous ideas for the decoration of buildings in Uganda. The literature reviewed develops the ideas discussed in the guide book, which includes the development of ideas from the nature (looking at the crafts of the Ganda as a source of inspiration). Through the creative process and creating forms and designs with originality of ideas, composition and surface quality.

Roland Stulz and Murkerji (1993) fired clay products are made:

*“When clay soils (with 20-50% clay), fired at 850-1000°C, they undergo irreversible reactions in which the particles are bonded together by a glassy ceramic materials”.*

The above statement explains the chemistry behind the formation of the popular fired clay products, like tiles. Ellen (1948) from Architectural detailing, points out the deadlock existing in present day society:

*"It won't do to copy one detail from one source, another detail from another patch together a set of details that function well but bear no visible resemblance to one another".*

Then what work will be to create a new revolutionary structure that emanates from the surrounding environment, includes it's functionalise and accommodates what Ellen says, "Building should please the eye."

Meiss (1997) recorded that,

*"Aesthetic experiencing of the environment is a matter of all our sense; smooth tiles invite us to caress them; tactility occupies a special place in architecture".*

When ceramic tiles are talked about, the issue of aestheticism cannot be avoided. Glazed tiles have a beauty that not any other material can provide. Tactibility which Meiss says has a special place in architecture is a quality which is very easily achieved with the fired clay products.

It was noted that several researchers have written about the techniques of forming, peoples biased outlook, sources of inspirational motifs, the size and the shape of the ceramic and this is what they have to say:

Ospir (1993) said as follows:



*The word pottery invariably evokes the image of a craftsman bent over a wheel producing vessels according to traditional while the word ceramicist has a certain ant-conformist ring to it, implying a person who bends the rules and expands the frontier of the craft. The ceramist seems to be more pre-occupied with the conceptual aspect of the piece while the potter appears to be mostly concerned with form and the function.*

This study agrees with Ospir's observation that there is a difference between pottery and ceramics. While pottery aims at obeying the rules and laws of traditional craftsmanship promoting shape and functions, ceramics aims at creating fresh art works from new ideas. As there is little hard thinking in pottery, ceramics encourages conceptual and creative planning. Like ceramics, it requires work done out of a creative process and does not only stress creation of functional but also decorative art works.

Ceramics although it has been greatly influenced by the porcelain figurines of the past as Frazier (1973) wrote:

*"Although strongly influenced by the porcelain figurines of the past, ceramics seemed to embody the new application of traditional techniques and materials in both their forming and glazing methods."*

Ceramics just like any other discipline should be planned throughout creatively and experienced. Artists have always sought for inspirations and subject matter in nature Dubley (1978) declared that:

*Art is not nature. But is made by human beings, artists usually find their inspiration and subject matter in nature as a medium but art itself is not nature.....and no matter how close it is to nature, it always shows that it was made by human beings. Therefore we have a right to ask of any work of art: why did the artist make it? What did the artist want was he/she trying to make it clear?*

Although an artist might be inspired by nature, one should not duplicate nature but rather modify or simplify in order to reveal creativity and originality. This research used the Ganda pots as a source of inspiration. It never intended to imply that there was some magical power in these objects but it was used as a means of expression. There is a tendency among artists to use a human figure as though it was the only source of inspiration in art but if one looked around in nature, it is rich in motifs. Katende (1989) believes that:

*“A sculptor should be experimental on other motifs apart from the human figure. From these subjects, a sculptor should feel free to simplify, distort and elongate certain forms where necessary in order to reveal his creativity and originality”*

Most ceramic is usually made purely for decorative purposes. In some literature, a ceramic was referred to as figurine art, whose function is to beautify the surroundings.

Ceramics is highly developed in America but that does not imply that there is no ceramics work in Africa, and in Uganda. The analysis which Kulubya (1997) made about the state of ceramics at the School of Industrial Fine Arts was not fair when he said:

*“All the ceramics students therefore have never taken up the making of ceramics and yet it is an interesting subject to concentrate on.”*

Ceramic tiles in this study should not just be used everywhere and anyhow. The artist needs to stand out as the designer to change a dull world into an impressive one. Anything less this would otherwise mean we have to breakdown our houses and rebuild them better day after day, using the Ganda material culture.

The preparation process of fired clay products laid out below is not very different from what was used to make the first bricks in the ancient city of Ur in Mesopotamia about 4000 BC. How do these fired clay products come about? Roland Stulz and Kiran Mukerji (1993) reveal that, the firing process can be traced back to more than 4000 years ago.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.0 Introduction**

This chapter deals with collection and analysis of data. It describes the research design employed; the population of the study, the population sample; sampling techniques used; and the methods, procedures and instruments of data collection.

#### **3.1 Research Design**

The research design was exploratory in nature because the researcher was experimenting on the development of decorative motifs for floor and wall ceramic tiles derived from the Ganda material culture. In this items used in the Ganda material culture were analysed which acted as a source of inspiration for the motifs that were used in the study like Emindi, Enswa, Ensumbi, Entamu and Ekyogero.

#### **3.2 Population of the study**

20 (twenty) respondents participated in the largely qualitative study. A random sampling technique was used to select respondents because the data was got from different section or people which included: - Artists, ceramic dealers, and builders.

5 (five) Artists based within Kampala City were selected to give data about the various designs / decorations of the tiles.

5 (five) ceramic dealers were selected for the information about how durable, designs used, module and materials used in the production of the tiles and their own views of the imported tiles from outside the county.

5 (five) builders within Kampala City were selected to give information about the effectiveness and aesthetics of the tiles.

5 (five) Local potters and crafts people were selected to give information about the effectiveness of the crafts used for decorating the tiles.

### **3.3 Sampling technique**

Purposive sampling: This is a type of sampling where a researcher selects a sample that is just convenient without going through random sampling. For example, if there are ten parishes, one can choose three parishes that are the nearest to one. (Kakooza 2002, pg 14)

### **3.4 Methods and Procedures of Data Collection**

#### **3.4.1 Questionnaires**

Only those who could read and write were some written typed questionnaires were issued after not being employed during interviews. It was typed in English using simple language (words).

This was done to extract valuable information from the setters, builders' contractors to give them enough freedom of filling the questionnaires and avoid repetition of the same question here and there

#### **3.4.2 Interviews**

Interviews were employed with the intention of obtaining straight forward information from the field study. The two communities involved were the Busega community and the Nakigalala community off Entebbe road at Kajjansi near Nakigalala tea Estates. Adding to this,

two individuals were asked simple questions pertaining selected types of crafts (Pots).

Noteworthy, satisfactory and relevant information were got from the fully interviewed as regards this research.

Some of the categories of people interviewed were Mr. Remigious Kigongo of Uganda National museum, Mr. Charles M Sekintu, based at Kyadondo- Gayaza road a former curator of Uganda National Museum and Mr. Stephen Mpanga of Kasubi tombs(now extinct).

The categories of the people interviewed in town were the dealers of the ceramic tiles along duster street Nakasero, Shree Enterprises Ltd Plot. 10B African Mall, Nakasero Market, Jiya International Uganda Ltd. (Industrial area) Seventh Street opposite Uganda Biscuit, and Sira General Hard Ware's Ltd. Plot 12 Market Square Nakasero.

The reason for employing interviews was basically to acquire first class information from available sources and utilising the enthusiasm of the eager individuals.

### **3.4.3 Observation**

#### **3.4.3.1 Direct visual observation**

This was employed especially when the researcher visited study sites in town and it was found out to be the most effective method thereafter. The researcher was able to observe different tiles in the market, where they came from and who the buyers are. From observation, one can sort out relevant from irrelevant information.

### 3.4.3.2 Photography:

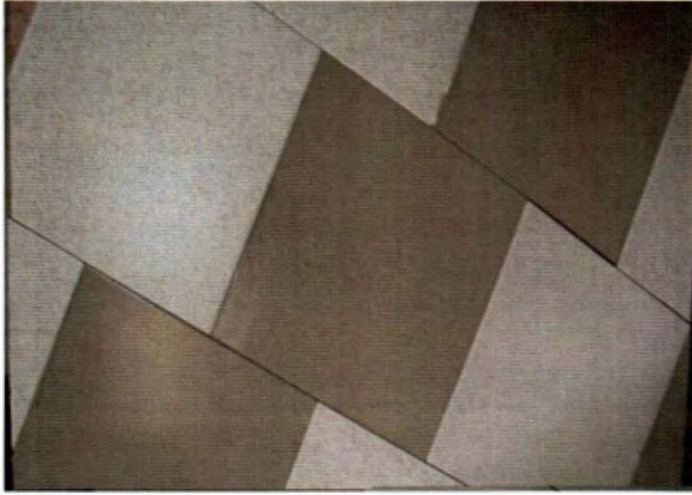
These were taken basically to provide visual evidence of what has been written down in this book. More so, only photographs of products from selected dealers were taken and the researcher used illustration to make the written text understandable.

To compare the tiles in the market and the tiles decorated by the researcher, photographs were taken from the market where the imported tiles were being sold.

Photographs of selected dealers were taken to illustrate different types of existing tiles in the market.



**Plate XI: Duster Street Nakasero (2010) showing tile Dealers. (Photo by author)**

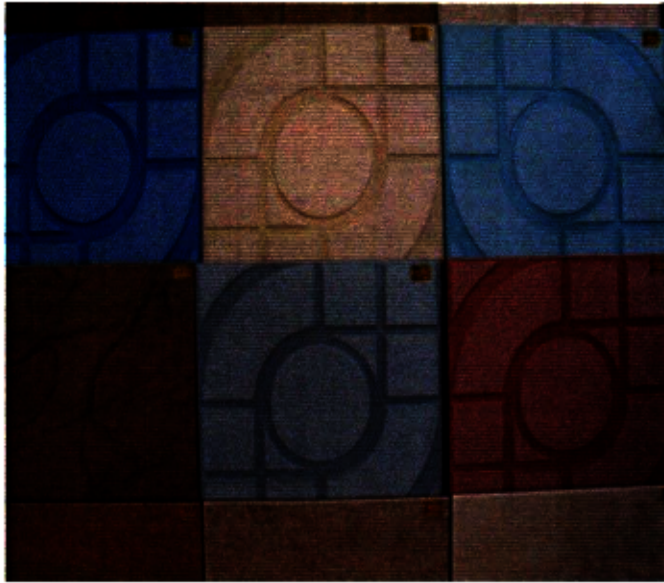


**Plate XII: China floor tile (60x60cms), porcelain the biggest size in the market**

**(Photo by author.)**



**Plate XIII: Spain floor tile in the market along duster street Nakasero (2010)**



**Plate XIV: China wall tile (15cm by 25cm) Jiya-International Uganda Limited Seventh Street, Industrial Area Opposite Uganda Biscuit**

#### **Merits**

Photographs were used to capture ideas from various study sites and fast moving events objects, and hidden aspects. Photography accurately records information for further investigation.

#### **Demerits**

This method could not record everything anytime due to unfavourable weather, hash temperature since some of the tiles in the market were exposed to sun.

#### **3.4.4 Documentation/ Content Analysis**

This involved extracting relevant information from published books, magazines, thesis, news paper video and other written materials that assisted in the research and these were got in

the libraries and archives within Kyambogo University and outside the University like Makerere University main library, the Margaret Trowell School of Industrial and Fine Art book bank and the Uganda National museum, since these were the places the researcher had access to written information both published and unpublished was reviewed which gave the basis for the background information.

#### **3.4.5 Studio Experimentation**

Under studio environments different types of clay like; Mukono, Kajjansi, Busega, Kirinya and Kyambogo were tried and others include Pit sand, Lake sand and Grog.

##### **3.4.5.1 Studio practical work**

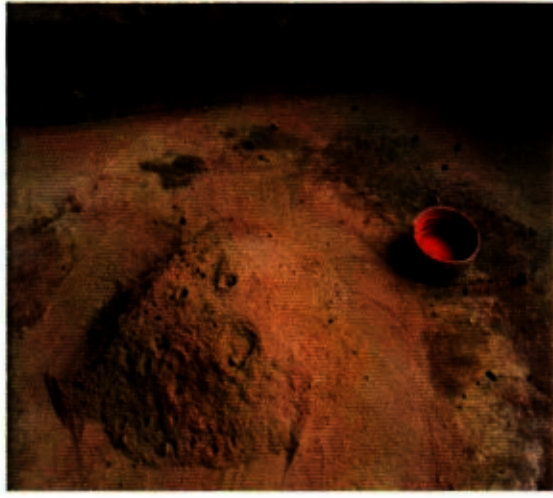
The researcher did a studio practical research involving making sketches of motifs from the Ganda material culture like Ensumbi, Entamu, Ensuwa, Emindi and Ekyogero (pots) and from these sketches, many functional and decorative designs were made and then transferred onto the tiles. Since the researchers aim was based on decoration so researcher used the ceramics department of Kyambogo University for his production and decoration basing on the selected sketches of development of the various pots of Ganda material culture identified for the designs to be used on the tile decorations.



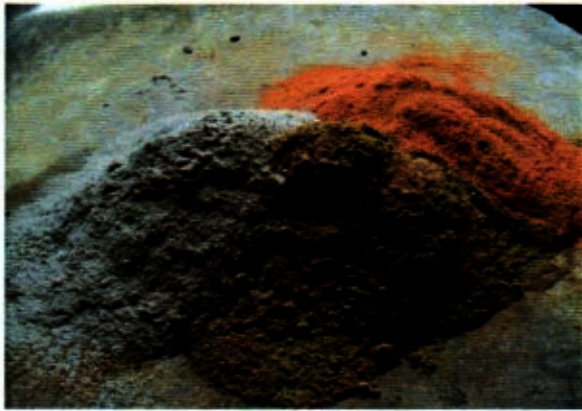
**PlateXV: Showing Clay preparation in the Studio (2010)**



**Plate.XVI: Clay grinding mill. Source: Ceramic Department Kyambogo University**

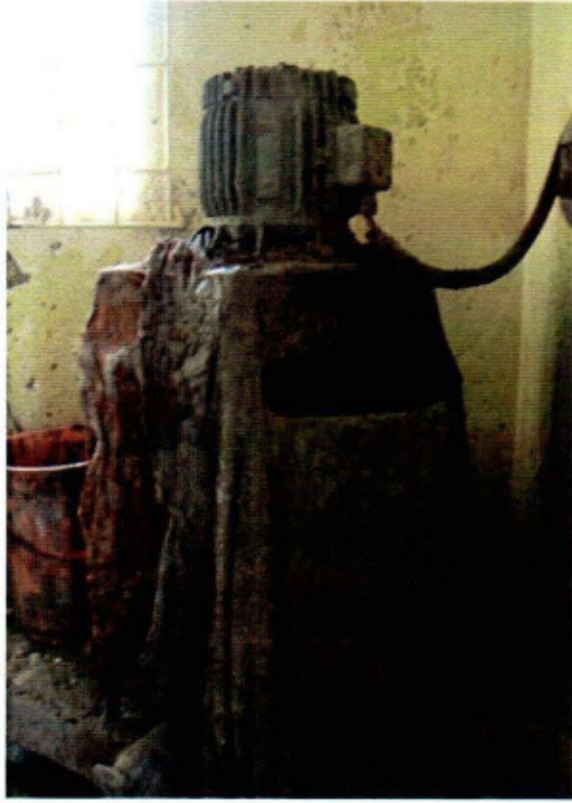


**Plate XVII: Clay Samples Measured (8 parts of Mukono clay)**



**Plate XVIII: Mukono clay (6 parts), Kaolin (3 parts), Red grog (2 parts). Source:  
Ceramic Department Kyambogo University**

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**Plate XIX: Blunger machine. Used for mixing clay in slip form for sieving.**



**Plate XX: Clay which was prepared for making the tiles with the Moulds in to drain water.**

**Source: Ceramic Department Kyambogo University**



**Plate XXI: Pug-mill machine. Used for preparing clay for ceramics (2010)**



**Plate XXII: Prepared Clay using Pug-mill, the action of reconstituting clay by  
Passing it through a pug mill which is a form of mincing machine  
Source: Ceramic Department Kyambogo University**



**Plate XXIII: Different clay bodies mixed with parts of grog, sand and kaolin.**



**Plate XXIV: Making of tile trials using press Machine in the Studio of Ceramics**

**Department Kyambogo University (2010)**

**Source: Courtesy of the author.**



**Plate XXV: Spreading Tiles on the Bart for drying.**



**Plate XXVI: Trials of the tiles made out of the press Machine.**

**Source: Courtesy of the author.**



**Plate XXVII: Trials of the tiles made out of the press Machine with weights on to avoid warping.**

### 3.4.5.2 Materials

#### 3.4.5.2.1 Surfaces

##### a) Ply-wood

##### b) Tiles

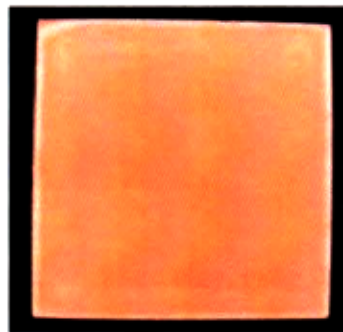
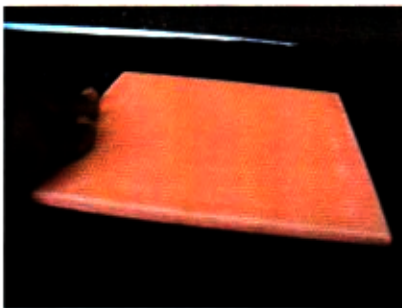


A tile is a manufactured piece of hard-wearing material such as ceramic, stone, metal, or even glass. Tiles are generally used for covering roofs, floors, walls, showers, or other objects such as tabletops. Tiles were in two categories. These were ready made tiles bought from dealers and those made by the researcher

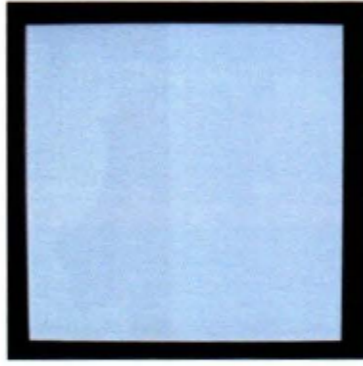
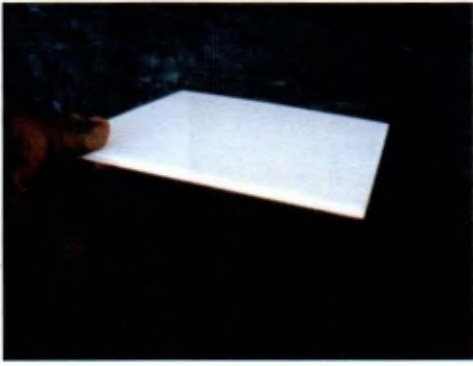
##### c) Ready-made tiles:

The researcher found it convenient to use ready-made tiles since the study was geared towards development of decorative motifs for tiles rather than producing and decorating them.

The following ready-made tiles on the market were used:



**Plate XXVIII: Dodoma Tanzania tiles measuring 15 by 15 by 0.5 cm (unglazed)**



**Plate XXIX: China tiles measuring 15 by 15 by 0.5 cm (Glazed)**

**d) Tiles produced by the researcher:**

In cases where the researcher needed to create decorations using embossed printing, wet tiles were used. These were made by the researcher. The following were tiles produced by the researcher:



**Plate XXX: Wet tiles produced by the researcher from Mukono clay, grog, kaolin and sand for decorating using embossed method.**



**PlateXXXI: Testing oxides on locally made clay bodies.**

**Initial materials explored for tile decorations:**

These were materials used as trials for testing motifs on the tiles before identifying the one to be used for the final decoration. This procedure was important for the researcher to explore and find out the best method that could be used for decoration on tiles. During this experiment the following materials were used:

**e) Printing paste:**

The printing paste is a silk matt protection varnish in paste-like form. It was especially developed for the finishing of printed matters which are printed on matt coated materials

**f) PVC:**

Polyvinyl chloride, [IUPAC Poly (chloroethanediyl)] commonly abbreviated PVC, is a thermoplastic polymer. It is a vinyl polymer constructed of repeating vinyl groups (ethenyls) having one of their hydrogen's replaced with a chloride group.

It can be made softer and more flexible by the addition of plasticizers, the most widely used being phthalates. In this form, it is used in clothing and upholstery, and to make flexible hoses and tubing, flooring, to roofing membranes, and electrical cable insulation. It is also commonly used in figurines and in inflatable products such as waterbeds, pool toys, and inflatable structures.

**g) Ceramic paste:**

Ceramic Paste is a partially synthetic, metal-free universal paste which has been formulated for the most demanding applications.



**Plate XXXII: Ceramic Paste**

**h) Sticker paper:**

This is a white matte paper for use with ink jet printers. This paper has an adhesive backing and is great for making your own stickers. Peel the backing off to expose the permanent sticky surface.

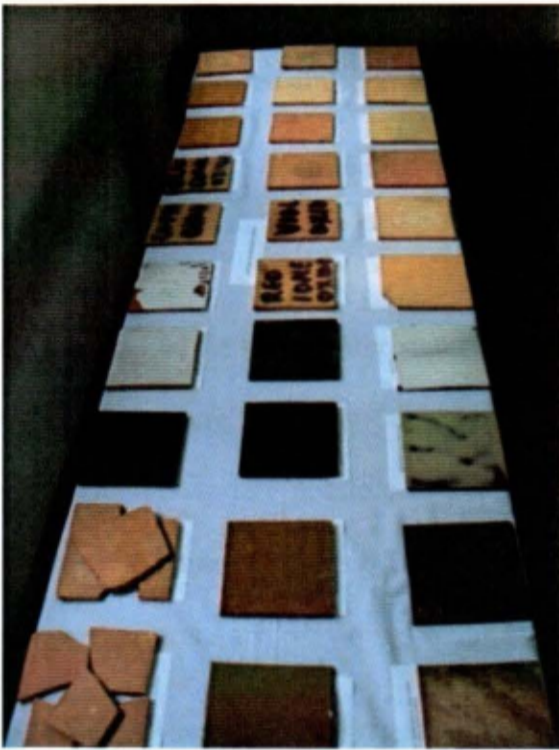
**I) Stains:**

A stain is a discoloration that can be clearly distinguished from the surface, material, or medium it is found upon. Stains are caused by the chemical or physical interaction of two dissimilar materials. Stains are used intentionally in a variety of fields, including in research (biochemical staining), technology (metal staining), and art (wood staining, stained.)

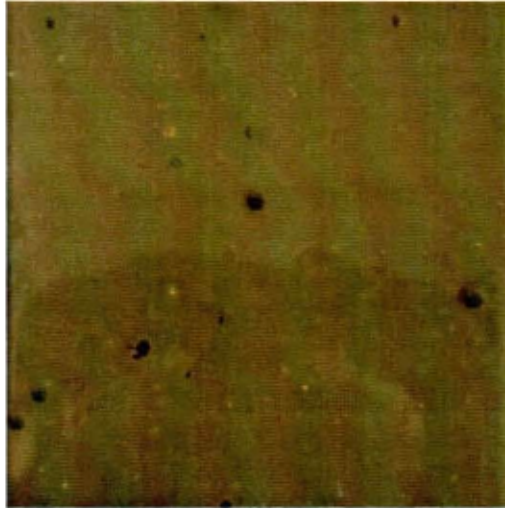
**j) Oxides:**

An oxide is an anion of oxygen in the oxidation state of -2 or a chemical compound formally containing oxygen in this state. Most of the Earth's crust consists of oxides.

Oxides result when elements are oxidized by oxygen in air.



**Plate XXXIII: Experimentation of the clay bodies. Oxides were tested on different glazes (transparent, opaque white) by painting to find out different effects.**



**Plate XXXIV: Over glaze and under glaze stains, Engobe and above clays were the materials used for surface decoration.**

The firing was done at earthen ware temperature (1000 C-1160 C) depending on the desired fired properties expected in the finished ware. All the firing were done under oxidation Kiln environment using electricity.

#### **k) Glazes:**

Glazes are the second of the basic materials used in making ceramics. They are glasslike coatings fused at high temperature to clay surfaces. In many ways, glazing is the most fascinating process in ceramics for the variety possible in glazing is almost infinite. Colours range from soft grey to gemlike reds, blues and greens. They increase the usefulness and beauty of the ceramics by making them non porous and providing colour and texture.

#### **3.4.5.2.2 Preparation of raw materials used in the study**

However, the researcher did not delve into clay.



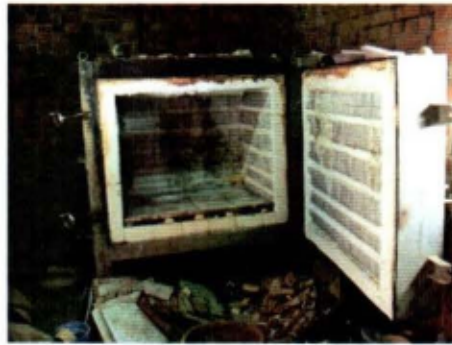
**Plate XXXV: Clay prepared with moulds in to remove excess water.**

Liquid clay with the consistency of double cream used in conjunction with colouring oxides for decoration may also be used for slip moulding.

#### **3.4.5.2.3 Machines and Tools/equipment**

##### **1) Kiln:**

The furnace in which ceramics are fired. Kilns can be electric, natural gas, wood, coal, fuel oil or propane. Ceramics can be manipulated by using different materials to heat the kiln, or by introducing chemicals into the kiln to influence the effects of the firing.



**Plate XXXVI: An electric kiln in the Ceramics Department (Kyambogo University) 2010.**



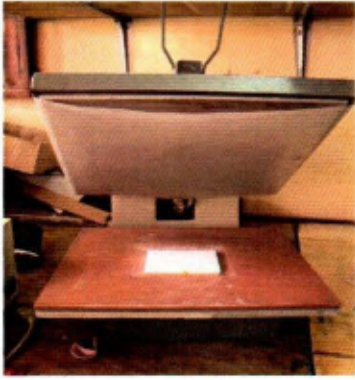
**Plate XXXVII: Program-Controller and Main Switch.**

The program-controller Controls the operation of the elements of the kiln, socking-holding the temperature at certain level at certain time; to put off and on mains-power.

**m) Sublimation Machine:**

Sublimation transfer is a process by which you can use an image that has been created digitally either by scanning a photograph or downloading a picture taken with your digital camera or an image created in a piece of imaging software like Photoshop or Corel Draw and then printing this image with an Epson desktop printer using special inks called sublimation inks onto paper. Once the image is on the paper you place it under a heat transfer press on top of your substrate and heat the paper until the inks turns to a gas and transfer the image onto the item you are trying to make.

A sublimation machine (or dye-sub printer) is a computer printer which employs a printing process that uses heat to transfer dye onto the item you are trying to make for example ceramic ware like a tile.



**Plate XXXVIII: Heat Pressing machine (Flat Heat Press Machine) heats at 200 – 330 °C**

**(photo by author at Plot 21 Dharas House Nkrumah Road.)**



**Plate XXXIX, (a) Epson desktop printer**



**(b) Sublimation ink**



**(c) Sublimation Tape**

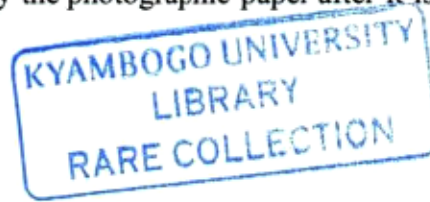


**(d) Sublimation Paper (Photo by author)**

**n) Screen and squeegee:**

In screen-printing, a squeegee is used to spread ink evenly across the back of a stencil or silkscreen, making a clean image on the printed surface. Screen-printing squeegees usually have much thicker and less flexible blades than the window cleaning variety.

A squeegee is also used in photography printing to dry the photographic paper after it is washed, preventing wrinkles or water spots.

**o) Computer:**

A computer is a device that accepts information (in the form of digitalized data) and manipulates it for some result based on a program or sequence of instructions on how the data is to be processed. Complex computers also include the means for storing data (including the program, which is also a form of data) for some necessary duration.

**p) Scanner**

A scanner is a device that optically scans images, printed text, handwriting, or an object, and converts it to a digital image.

**q) Photo copier**

A photocopier (or copier) is a machine that makes paper copies of documents and other visual images quickly and cheaply. A machine for photographically reproducing written, printed, or graphic material, especially by xerography.

**r) Digital Camera:**

A digital camera (also digicam or camera for short) is a camera that takes video or still photographs, or both, digitally by recording images via an electronic image sensor.

**3.4.5.2.4 Procedure of decorating the tiles**

Glazing process: Glazes were applied in two ways such as dipping, and pouring. Glazes fell into two main categories; opaque and transparent glazes. The glaze colours or pigments otherwise were known as stains might be on- glaze, under- glaze, over-glaze or body stains.

**3.4.5.3 Sources of Inspiration from the Ganda material Culture**

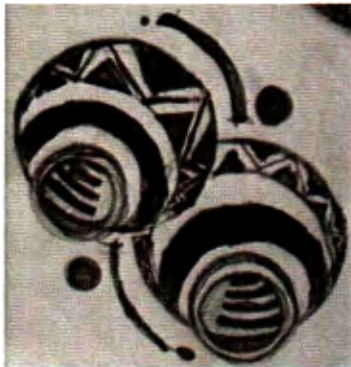
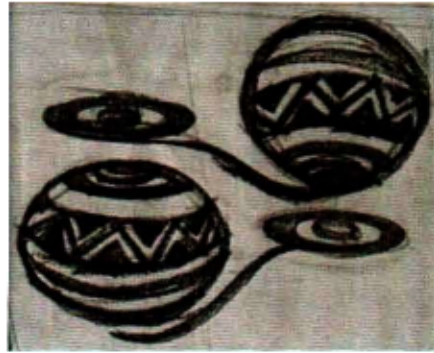
The idea of developing decorative motifs for the tiles was started with the sketches derived from the Ganda material culture, in particular, the pots. Therefore, the types of pots designed in Buganda have almost the same common characteristics; among Ganda tribe for commercial purpose includes the following:

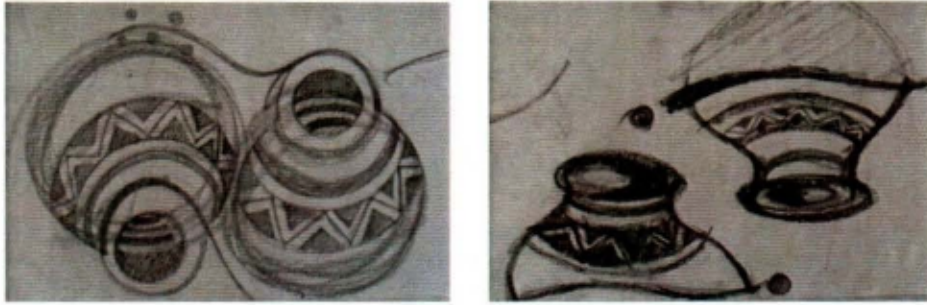
- a) Water pots
- b) Pots for cooking
- c) Pots for smoking
- d) Pots for ritualistic purposes. (multi- mouthed pots)

(b) 3.4.5.2.6 Initial studies of sources of inspiration using Ensuwa pot



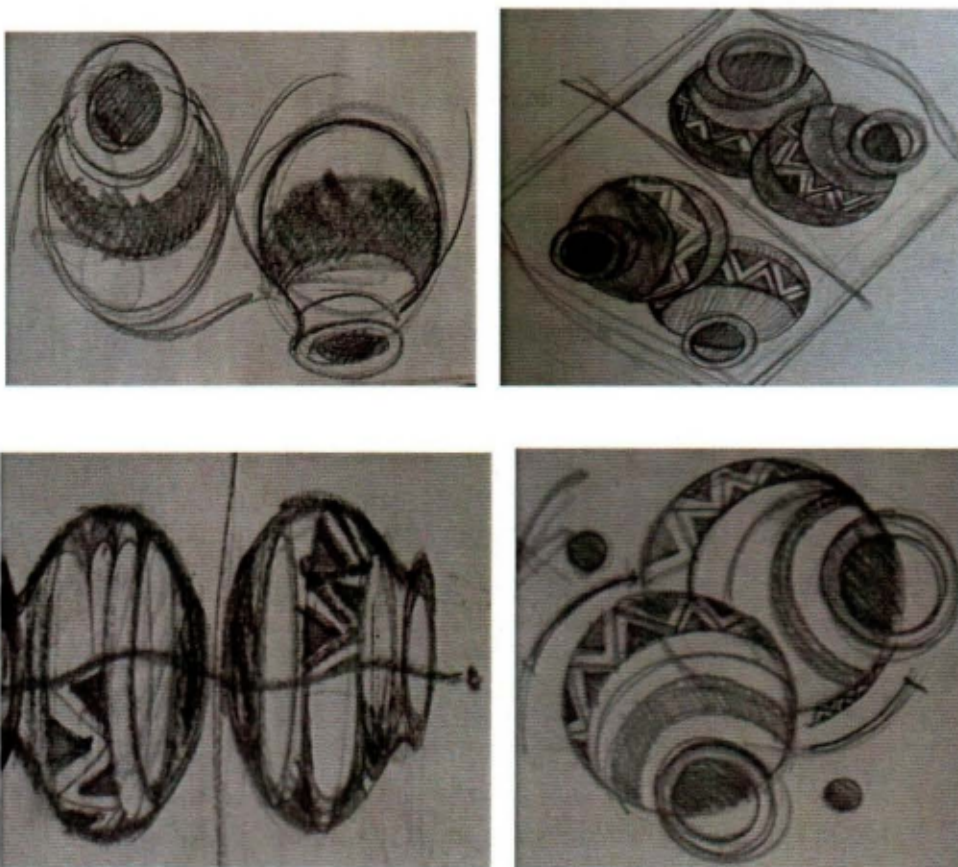
Plate XLI: (a) Ensuwa (cooking pot). Busege Community royal potters.



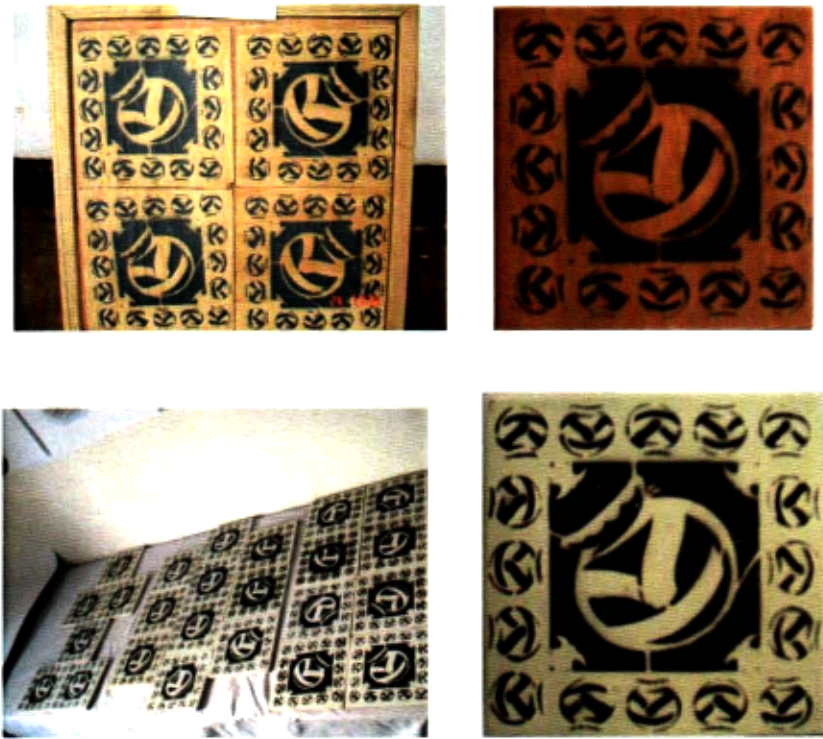


**Phase I: Observational drawing of Ensuwa pot**

**Plate XLII(a): Conceptual drawings of the ensuwa (cooking pot)**



**Plate XLIII(b): Conceptual drawings of the Ensuwa (cooking pot)**



**Plate XLIV: Initial stages of the motifs developed and tried on ply wood and clay tiles made by the researcher**



**Plate XLV: Samples of the tiles decorated with design of pot.**

The different sets of how the arrangement of the tiles is suggested as shown above;

**3.4.5.2.7 Ensumbi (pot with a long neck):**

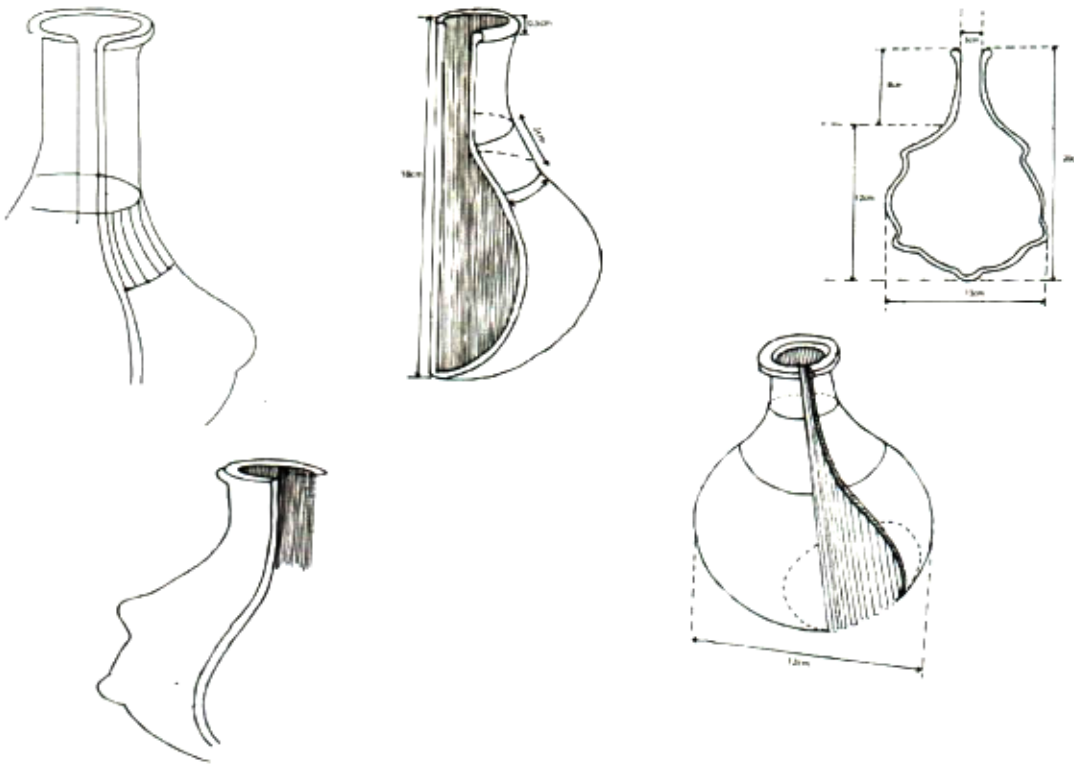
This pot was made out of clay, and is used for storing liquids like beer, drinking water. (Source: Yusuf Kakande Ssendagala). Decoration is done with the help of a roulette made out of sisal rope or nylon, sharp instruments. The reason for selecting this pot is because of its functions which are done in the living room to decorate tiles for the living room.



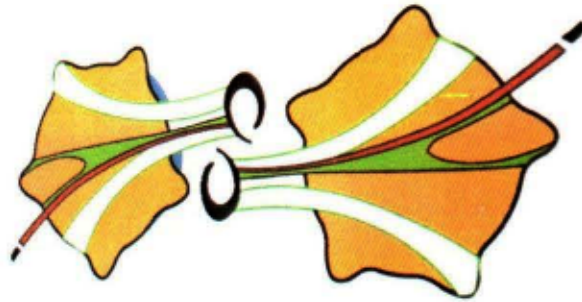
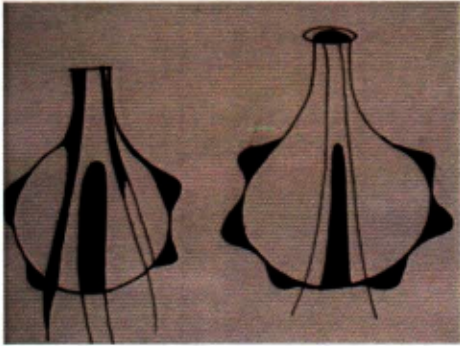
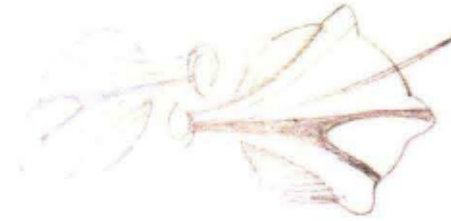
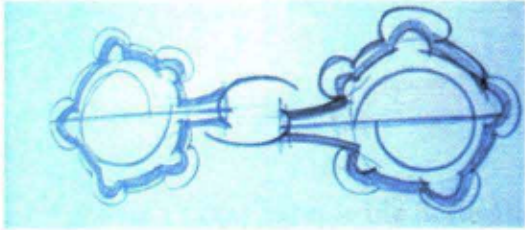
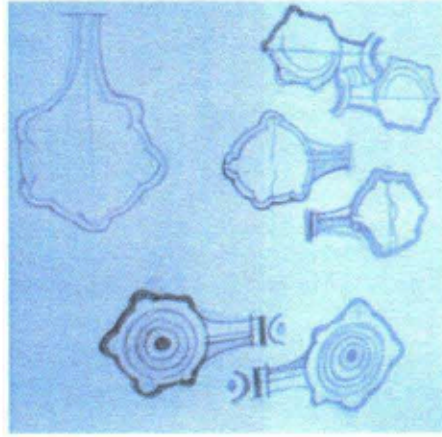
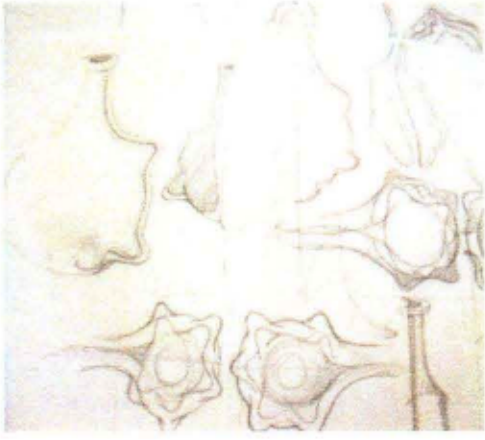
**Plate: XLVI: Ensumbi (Pot with long neck). Busega Community royal potters.**



**Phase I: Observational drawing of Ensumbi pot**



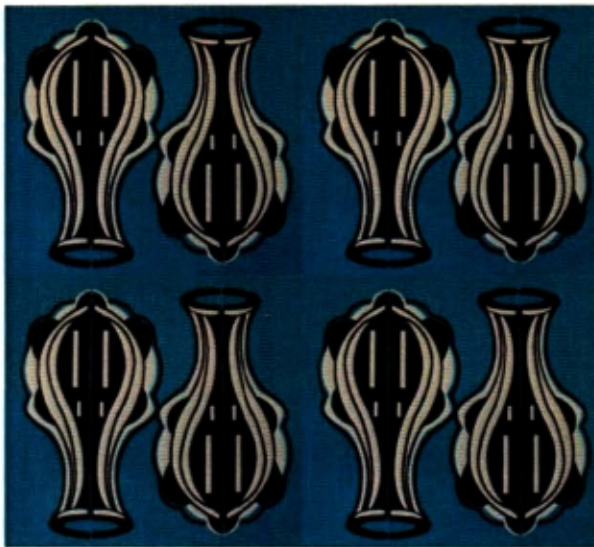
**Phase II: Dimensional drawings of the Ensumbi pot.**



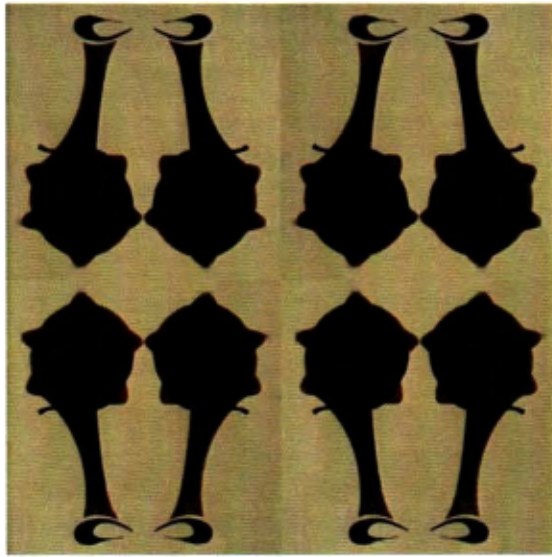
**Phase III: Conceptual drawings of the Ensumbi pot**



**Phase IV: (a) Sample tile decorations using stains and glazes on tiles made by the researcher with design motifs from Ensumbi.**



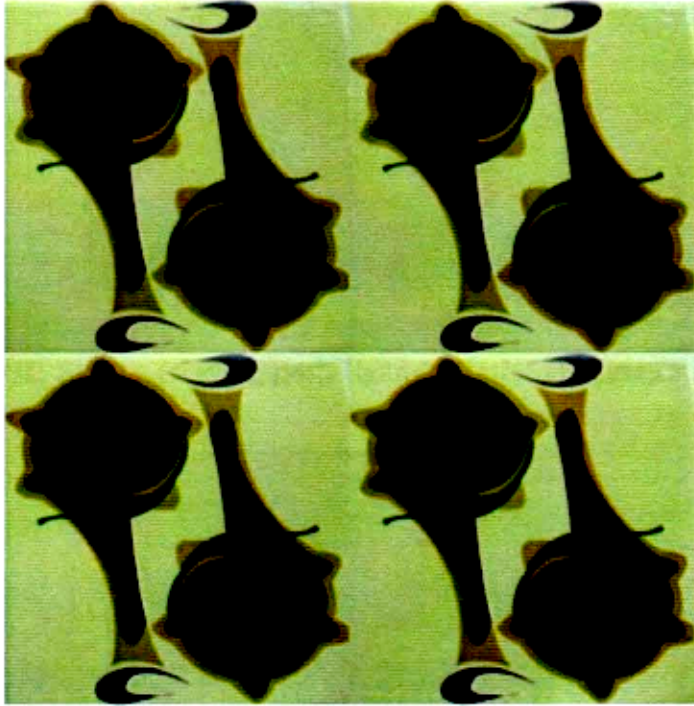
**Phase IV: (b) Sample tile decorations using stickers on tiles made by the researcher with design motifs from Ensumbi.**



**Phase IV (b) Sample tile decorations using sticker paper on Dodoma ceramic tiles from Tanzania with design motifs from Ensumbi.**



**Phase IV Sample decorations using ceramic paste on China ceramic tiles with design motifs from Ensumbi.**



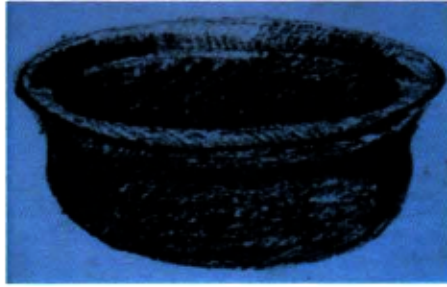
**Phase V Final design motifs from Ensumbi on China tiles using sublimation process.**

#### **3.4.5.2.8 Ekibya (Serving Pot):**

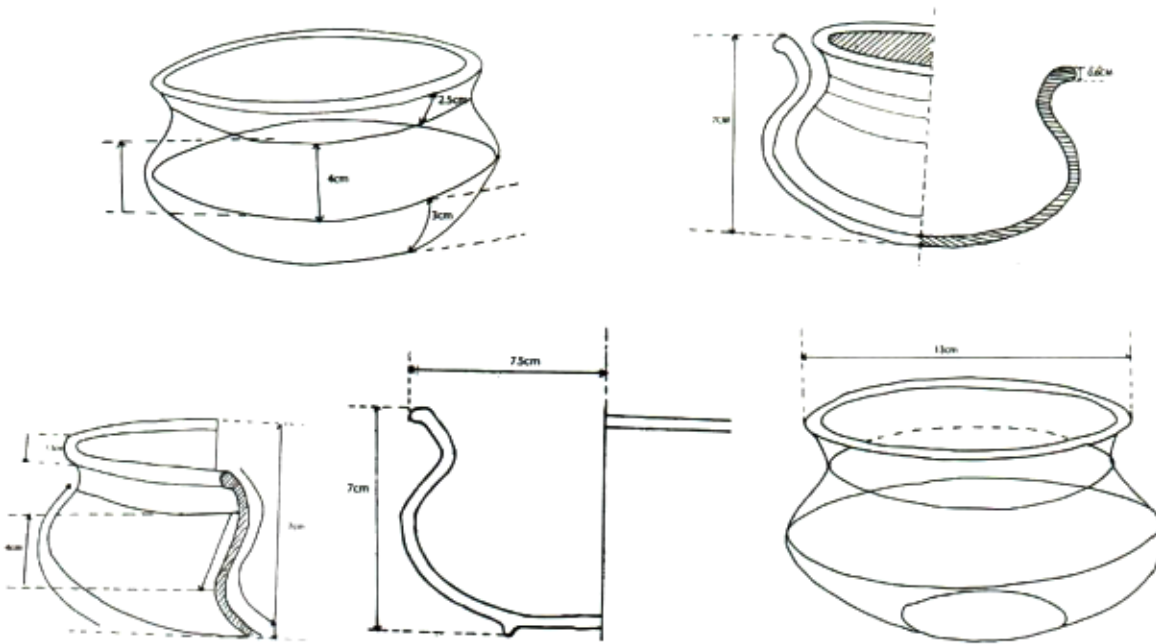
The local name of the pot below is Ekibya. In English, it's called serving pot. One is called Ekibya and when they are many, they are called Ebibya. The functions of the above pot are: for serving soup, vegetables and even medicine, for mixing traditional herbs, for serving sauce and finally for preparing herbs for the women in the community. The decoration of the pot is to enhance beauty using sharp instruments and roulettes. This was selected to decorate motifs for dining room because food is being eaten in the dining room and after meals those sick can take herbs there after using the same pot.



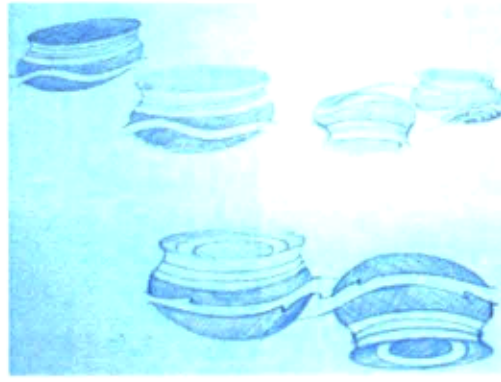
**Plate XLVII: Ekibya (serving pot). Uganda National Museum. (2009)**



**Phase I: Observational drawing of Ekibya (serving pot)**



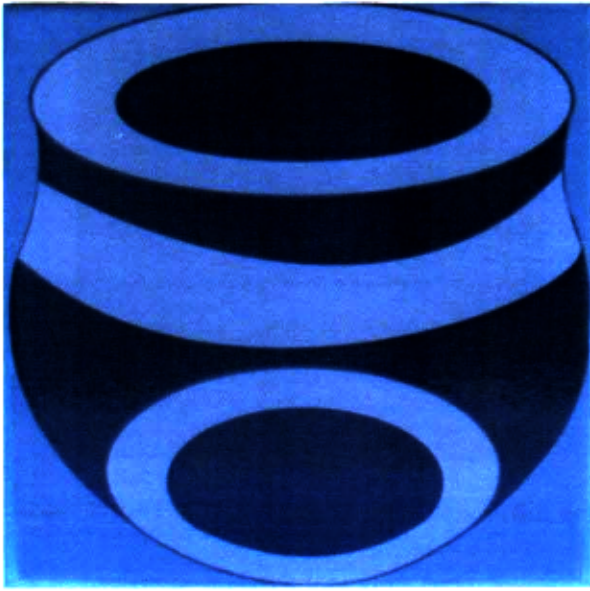
**Phase II: Dimensional drawings of the Ekibya (serving pot).**



**Phase III: Conceptual drawings of the Ekibya (serving pot)**



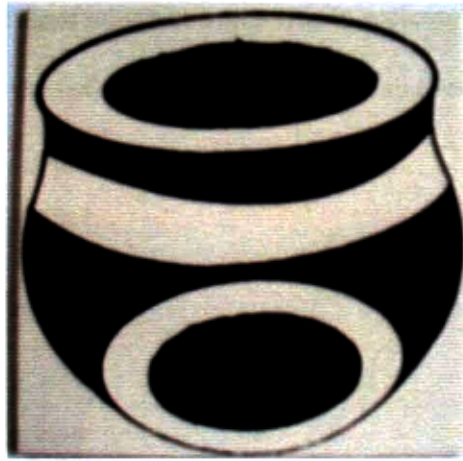
**Phase IV: (a) Sample tile decorations using stains and glazes on tiles made by the researcher with design motifs from Ekibya (serving pot).**



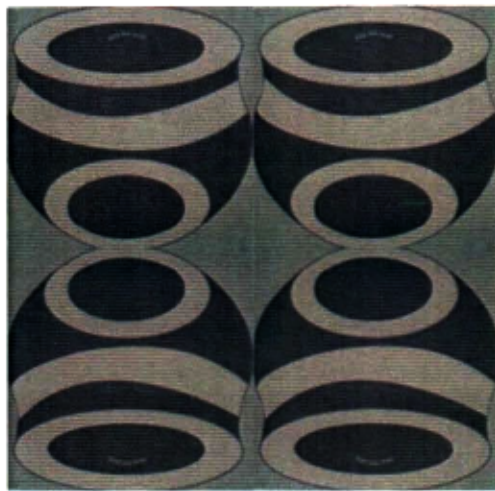
**Phase IV (b) Sample tile decorations using sticker paper on India ceramic tiles with design motifs from Ekibya (serving pot).**



**Phase IV (c) Sample decorations using PVC on India ceramic tiles with motifs from Ekibya (serving pot).**



**Phase IV (d) Sample decorations using ceramic paste on India ceramic tiles with motifs from Ekibya (serving pot).**



**Phase V Final design motifs from Ekibya (serving pot) on China tiles using sublimation process.**

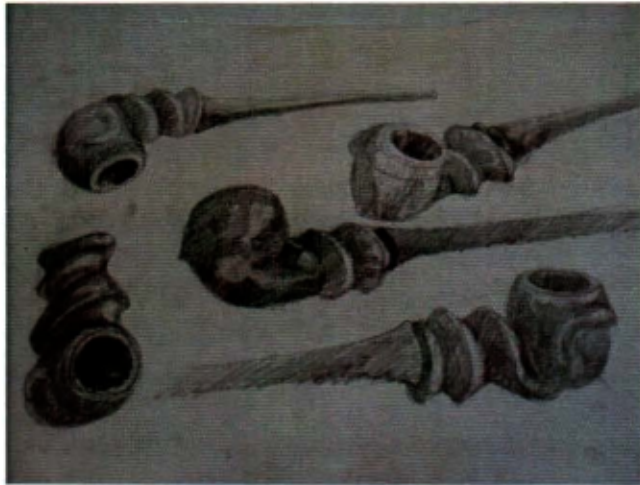
#### **3.4.5.2.9 Emindi (smoking pipe):**

The local name of the above pot is called Emindi in English it's called smoking pipe. This information was got from Mr. Christopher, Kawooya who is the principal researcher of Kabaka from Ngeye Clan. The function of the above pot is for smoking tobacco, coffee beans

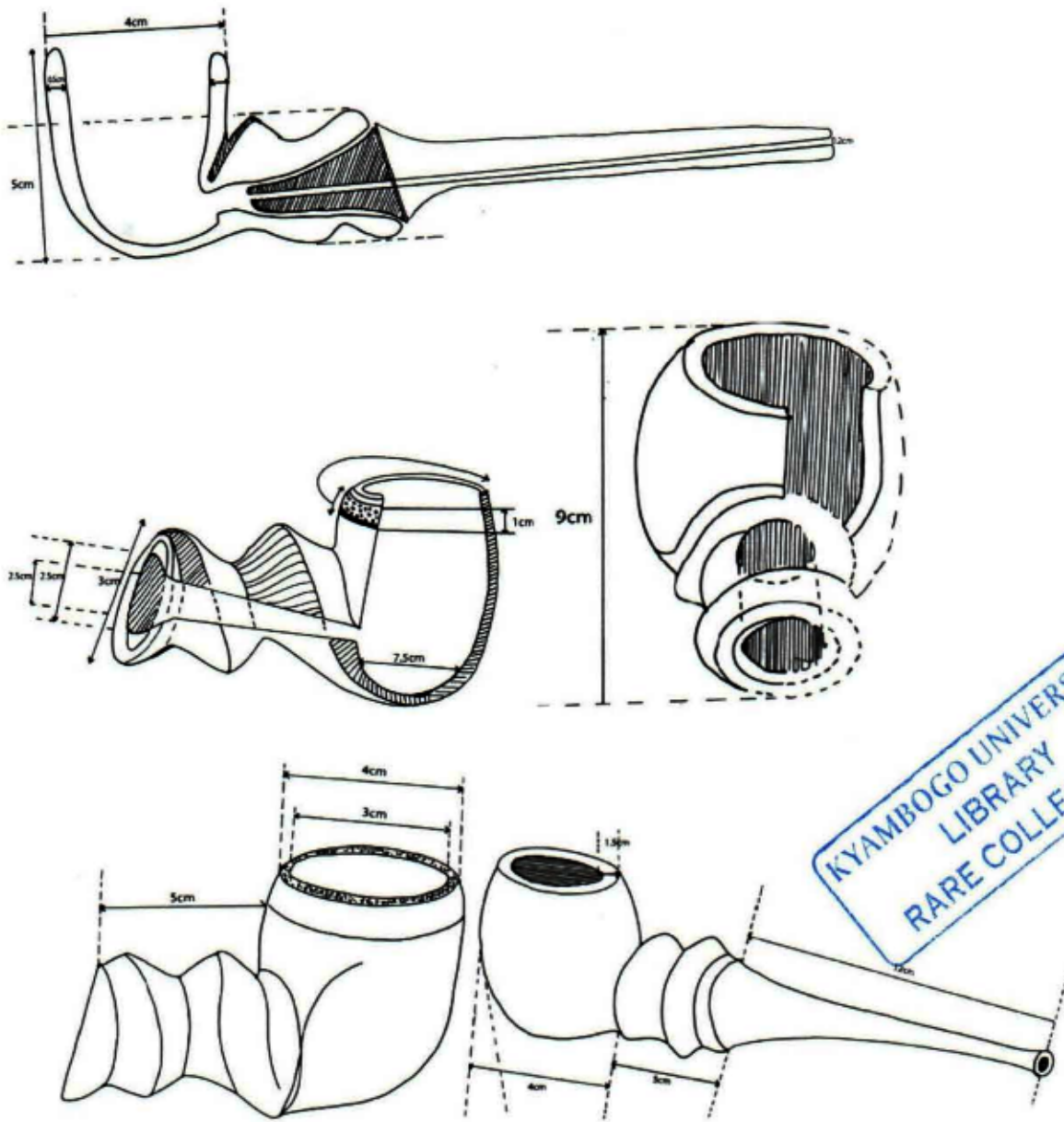
and every home was to have Emindi which at times was to welcome special visitors home. The decoration of the pot was with the help of sharp instruments and roulette. The decoration is special for the kings or for the status of the chiefs.



**Plate XLVIII: Emindi (smoking pipe). Source: Uganda National Museum. (2009)**

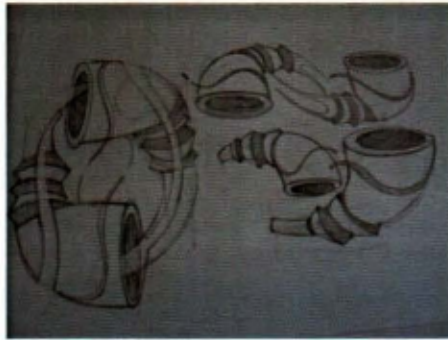


Phase I: Observational drawing of Emindi (smoking pipe).



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**Phase II: Dimensional drawings of the Emindi (smoking pipe)**



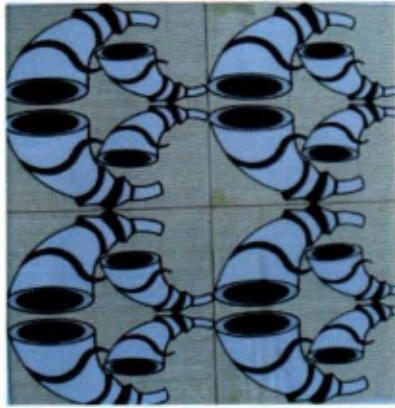
**Phase III: Conceptual drawings of the Emind (smoking pipe)**



**Phase iv: Final Motif design in colour.**



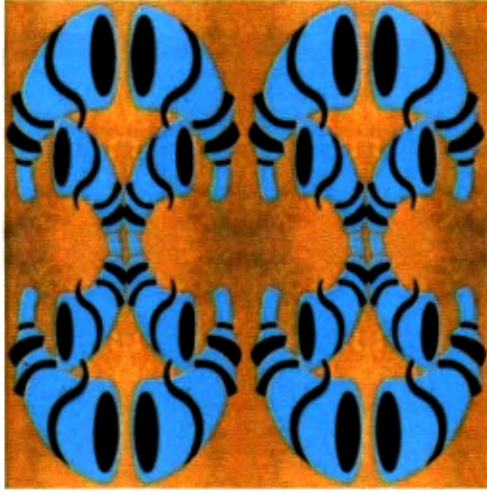
**Phase V: (a) Sample tile decorations using stains and glazes on tiles made by the researcher with design motifs from Emindi (smoking pipe).**



**Phase VI: Trials of the motif designs for development.**



**Phase IV (b) Sample tile decorations using sticker paper on Dodoma ceramic tiles from Tanzania with design motifs from Emindi (smoking pipe).**



**Phase IV (c) Sample decorations using PVC on Dodoma ceramic tiles from Tanzania with design motifs from Emindi (smoking pipe).**



**Phase IV (d) Sample decorations using ceramic paste on India ceramic tiles with design motifs from Emindi (smoking pipe).**



**Phase V Final design motifs from Emindi (smoking pipe) on China tiles using sublimation process.**



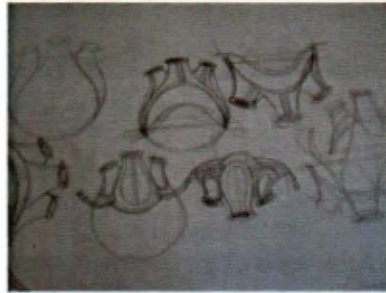
### 3.4.5.2.10 Ensuya (multi-mouthed pot):

The local name of the above pot is Ensuya (Multi mouthed pot). The term Lubale like Mukasa Ewenyanja symbolises “good luck for having children” or “fertility” which implies that rituals were the major purpose of the pot., for smoking traditional herbs, Okunyokeza which means (put fire inside so that fire comes out to appease someone). In most cases it’s found in shrines which also keep Holy water. If the pot has more heads, it has more inspirational activities. The reason for selecting this pot is basically because of its ritualistic value such as keeping holy water, prayers, sacrifice which is a blessing for family through jobs, bearing kids and many other purposes in the community. Blessing for family especially parents can relate to the same function of producing children from the bed room. This is a ceremonial special kind of pot connected to the birth and burial of twins. It’s usually round with two or more thin and narrow mouths at the sides. This kind of pot is called Multi mouthed pot more so, when the mother of the twins too falls sick, she is then made to use the ceremonial pot for treatment.

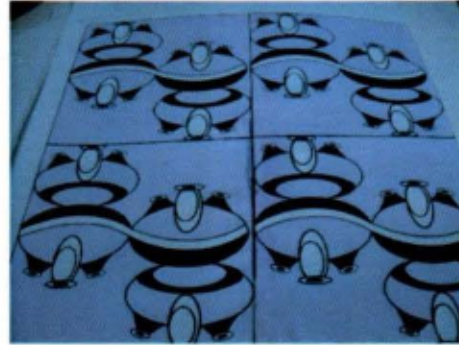
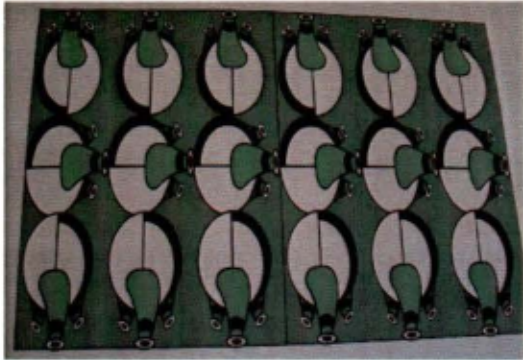


**Plate XLIX: Ensuya (multi-mouthed pot). Shauriyako Market. Allan road. (2009).**

**Phase II (b): Dimensional drawings of the Ensuwa (multi-mouthed pot).**



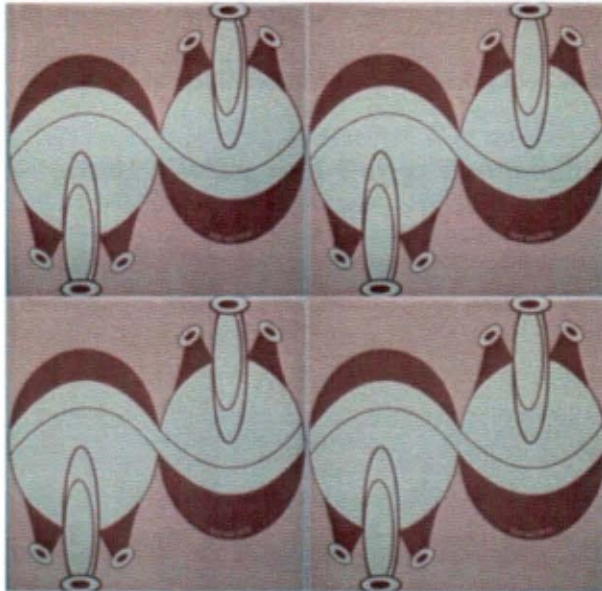
**Phase III: Conceptual drawings of the Ensuwa (multi-mouthed pot).**



**Phase IV (b) Sample tile decorations using sticker paper on Dodoma ceramic tiles from Tanzania with design motifs from Ensuwa (multi-mouthed pot).**



**Phase IV (c) Sample decorations using ceramic paste on China ceramic tiles with design motifs from Ensuwa (multi-mouthed pot).**



**Phase V: Final design motifs from Ensuwa (multi-mouthed pot) on China tiles using**

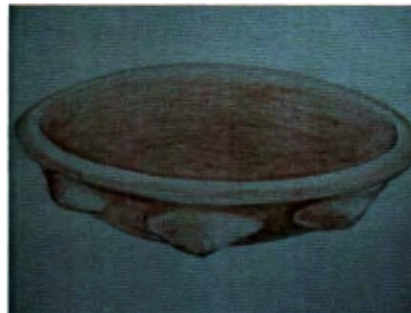
### Sublimation process

#### 3.4.5.2.11 Entamu- Nganda (cooking pot):

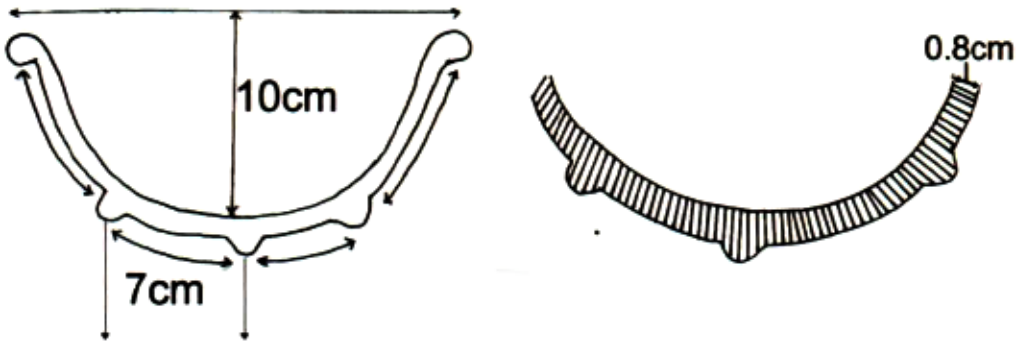
The local name of the above pot is called Entamu- Nganda; the major function of the pot is for cooking food, frying sim-sim, ground nuts, sorghum, millet and coffee beans (all types of grains). One of the functions of the pots is for boiling meat (banana leaves- Luwombo).



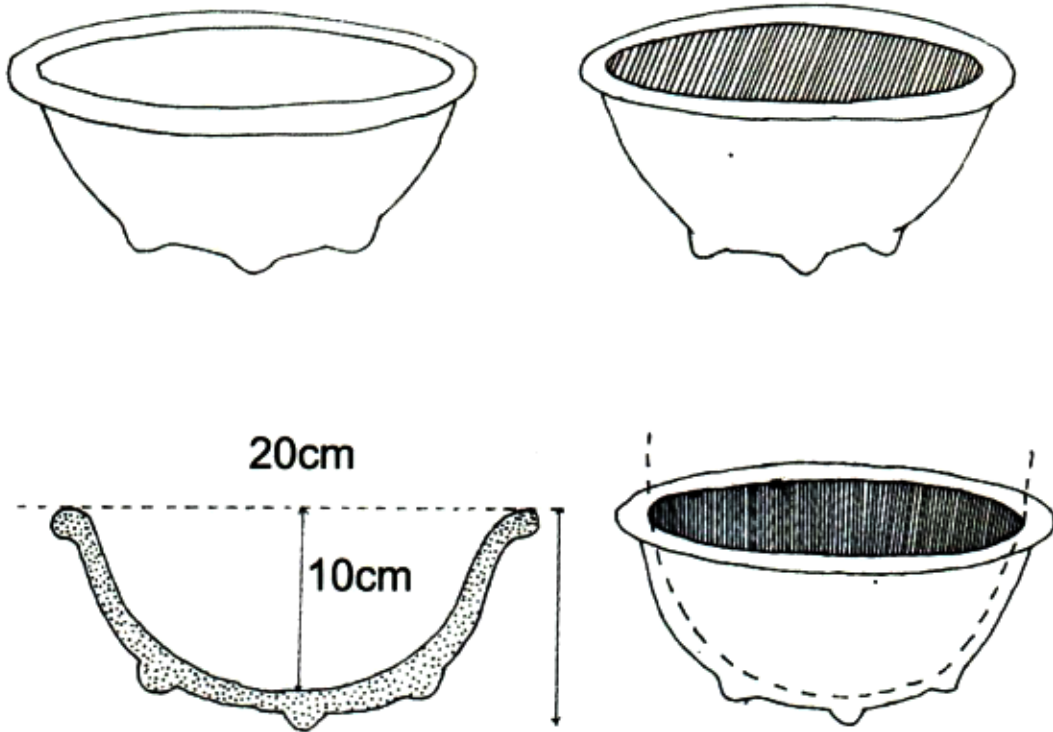
**Plate L: Entamu- Nganda (cooking pot). Busega Community. Lunguja. (2008).**



**Phase I: Observational drawing of Entamu- Nganda (cooking pot).**



**Phase II: Dimensional drawings of the Entamu- Nganda (cooking pot).**





**Phase III:** Conceptual drawings of the Entamu- Nganda (cooking pot).



#### 3.4.5.7.7 Ekyogero (bathing pot):

The local name of the above pot is called Ekyogero, and it's basically used for bathing both children and old people, it's also used for harvesting water during rainy season, it's always used for keeping water at homes, it's also used for boiling herbs for children. The reason for

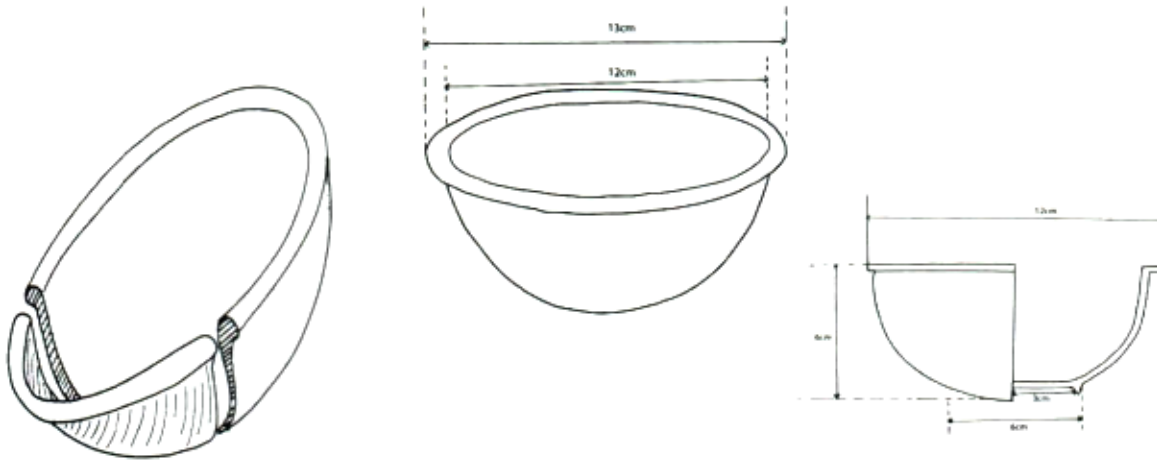
selecting this pot for decoration since it's basically used for bathing and other related bath room purposes; it's suitable for making motifs for bathroom tiles.



**Plate LI: Ekyogero (bathing pot) Source: Uganda National Museum. (2009)**

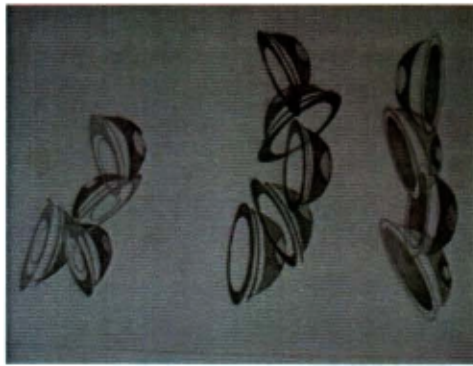
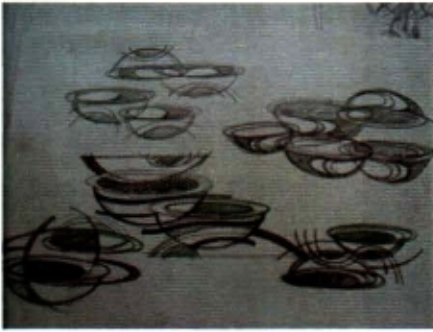


**Phase I: Observational drawing of Ekyogero (bathing pot)**

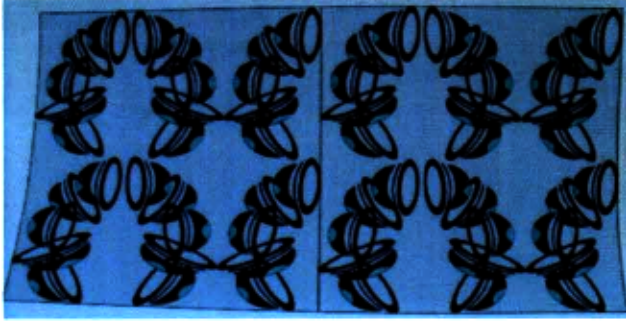




**Phase II: Dimensional drawings of the Ekyogero (bathing pot)**



**Phase III: Conceptual drawings of the Ekyogero (bathing pot)**



**Phase IV (b) Sample tile decorations on paper on with design motifs from Ekyogero**

**(bathing pot)**



**PHASE V: (a) Sample tile decorations using sticker on tiles made in India with design motifs from Ekyogero (bathing pot)**



**Phase VI (c) Sample decorations using ceramic paste on India ceramic tiles with design motifs from Ekyogero (bathing pot)**



**Phase VII (a) Final design motifs from Ekyogero (bathing pot) on unglazed tiles made by the researcher using Mukono clay.**



**Phase VIII (b) Final design motifs from Ekyogero (bathing pot) on glazed tiles made by the researcher using Mukono clay**



**Phase VIX (c) Final design motifs from Ekyogero (bathing pot) on China tiles using sublimation process.**

### 3.5 Drying and Firing

The most important stage in decorating ceramic tiles is the firing. Firing is the action of hardening the ceramics wares to durable products by the action of great heat. The heat can be obtained from flames of fire wood, oil, gas and electricity. The most abundant source of heat is fire wood, hydro-electric power and oil. The researcher used electric kiln for firing the tiles. Clay objects must be dried carefully and slowly to prevent warping or cracking. In drying they may shrink as much as ten per cent, and they may shrink another per cent in firing. Before firing, they are called green ware, and at this stage they break easily and soften or disintegrate in water.

Firing at sufficient temperature completely changes the character of clay; this change is called maturity. The various clays fired at different heats; and temperatures suitable for earthenware, porcelain will harden but not vitrify.

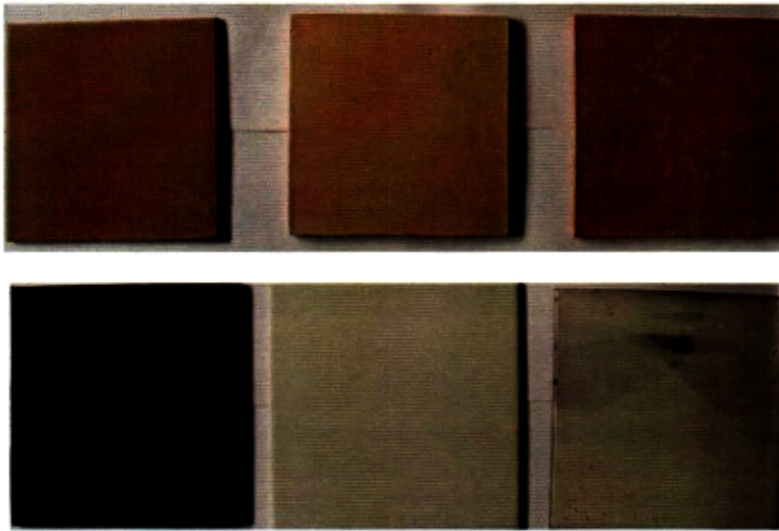
Most ceramic objects are fired twice, Biscuit firing hardens the ware, and this is the only firing that such unglazed objects as flower pots get. Glost firing is the type of firing in which the objects are glazed. A few objects are hardened and glazed in one firing, and some special glaze effects or types of ornament requires several firings.



**Plate LII: Glaze firing using Electric Kiln (October, 2010). Source: Ceramic Department**

**Kyambogo University**

The physical properties of the clay body before adding in the kaolin and grog to the clay body had high plasticity and kaolin had less plasticity. The ball clay greyish in colour and after mixing with the kaolin it changed to light grey and when fired it was off white in colour at a temperature of  $900^{\circ}\text{c}$ . Some of the samples of the fired experiments of the above clay are shown in the plate below;



**Plate LIII: Trials of the glaze and stains on the tiles made for decoration**

Some of the tiles decorated for bathroom had relief designs pressed on by the use of cut stencilling. Plastic papers were cut on and repressed on after four (4) days. Clay bodies which no other body had added in were left to dry in room temperature with some heavy weights pressed on top simply to avoid cracks and the body to warp.



**Plate LIV: Tiles packed to dry with weights on to avoid warping**

The study went further to test other materials like oxides which included iron oxide, copper oxide, cobalt oxide, manganese oxide and other colouring material like clay body stains and enamel glazes as they are illustrated in plate.LV.below. However, it was more physical test that allowed the study to produce studio works for the intended objects



**Plate LV: Preparing Oxides, stains and glaze.**

This was placed back into the kiln for second firing (glost) between 1150°C- 1180 °C and procedures were taken during glaze firing, the biscuit work was coated by glaze, using Deeping method, and painting or by spraying on the body. Glaze was mixed with clay slip, water and the water was absorbed by the porous wares which boarded a coating of glaze and was refired in the kiln up to 1150°C-1180°C. Opaque glazes were mixed with transparent glazes, water and clay slips. This was to stabilise opaque glazes during firing. Stains and oxides were also mixed with glazes, clay and slips and water to change colour of slabs. It was then opened and left to cool in the electric kiln. It had shiny glass like surface that was influenced by the body density and became less porous due to the fact that the glaze melted on the body.

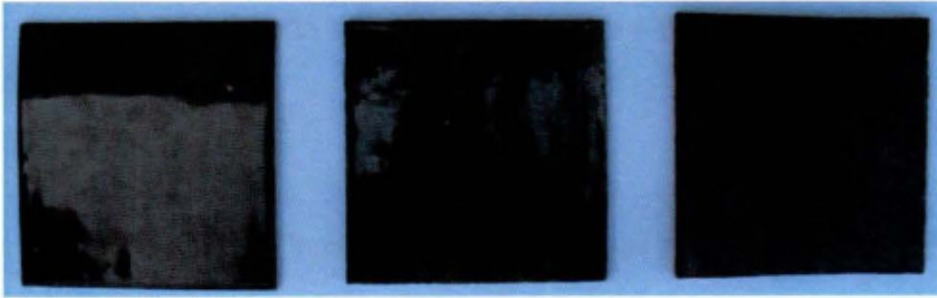


Plate LVI: showing the glaze effect on the tiles

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This is the process of creating transfers that can be applied to materials such as fabric, ceramic and metal by application of heat.

Ceramic and metal products must have a special coating which the sublimation dyes are impregnated into. Fabrics must have at least 65% Polyester or else CLC paper is required on 100% Cotton.

## CHAPTER FOUR

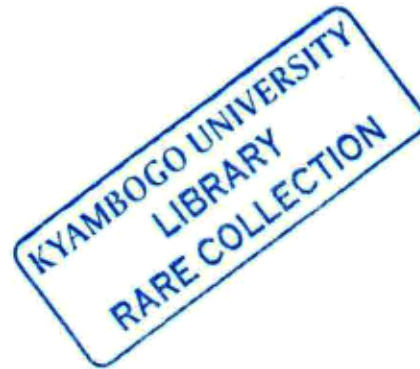
### PRESENTATION OF STUDIO FINDINGS

#### 4.0 Introduction.

This chapter presents and interprets the findings of the study. It gives a detailed account on the results of studio experimentation in Chapter Three. It reports on; the material and technique used in the process of making the tiles, the size of the tile produced, and function of the tile and the symbolic relevance of its design inspired by the Ganda material culture.

#### 4.1 Studio Findings

##### 4.1.1 Designs for floor and wall tiles from Ensumbi pot



**Plate LVII: Ensumbi floor tile (using Ceramic Paste)**

**Design: floor tile**

**Size: 30 cm by 30 cm**

**Material and technique used: Ceramic paste on readymade China tile**

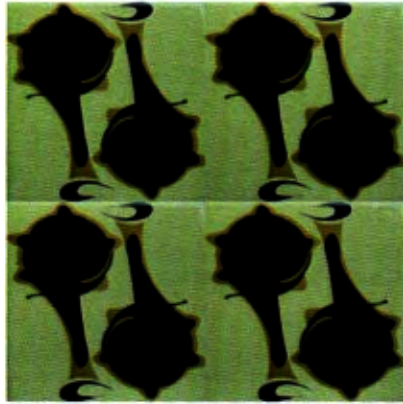


**Plate LVIII: Ensumbi wall tile**

**Design: Wall tile**

**Size: 10.5 cm by 10.5 cm**

**Material and technique used: Sublimation process on readymade China tile**



**Plate LIX: Ensumbi wall tile**

**Design: Wall tile**

**Size: 15 cm by 15 cm**

**Material and technique used: Sublimation process on readymade China tile**



Plate LX: **Ensumbi floor tile**

Design: **floor tile**

Size: **30 cm by 30 cm**

Material and technique used: **Sticker on readymade Indian tile**

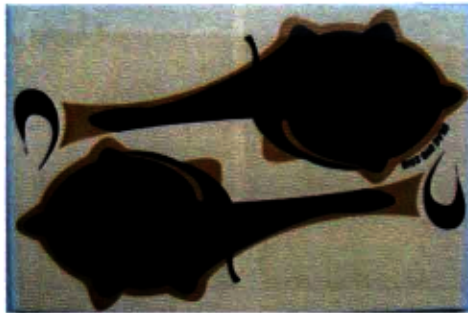
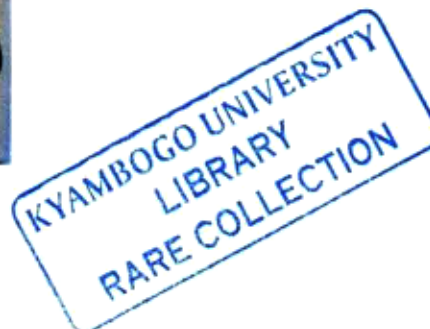


Plate LXI: **Ensumbi floor tile**

Design: **Floor tile**

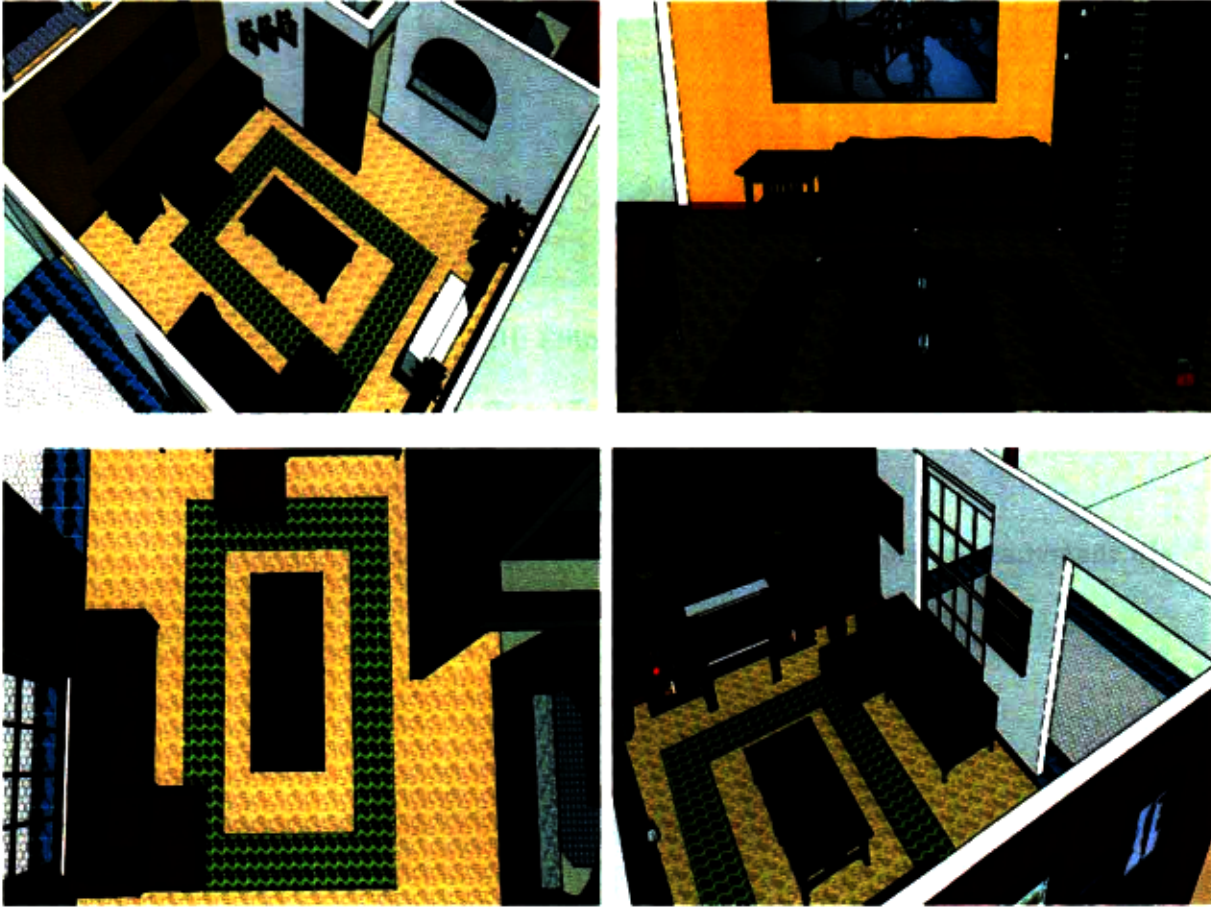
Size: **20 cm by 30 cm**

Material and technique used: **Sublimation process on readymade China tile**



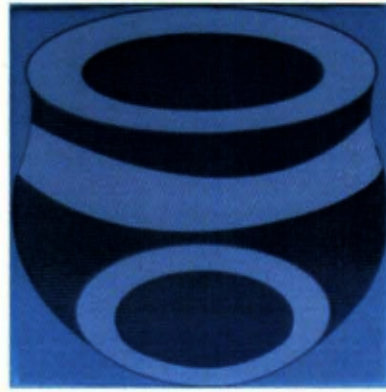
**Source of Inspiration:** The design of the wall and floor tiles is derived from '*Ensumbi*', a pot with a long neck in the Ganda material culture made out of fired clay and is used around traditional healers' places for storing fluids like beer, milk and drinking water. This provided a

source of inspiration for designing wall and floor tiles for sitting rooms where meals are served and eaten as well as a place of relaxation after meals.



**Plate LXII: Final illustrations showing how the Ensumbi motif has been used on tiles to decorate the sitting room**

**4.1.2 Designs for floor and wall tiles from Ebibya pot**



**Plate LXIII: Ebibya floor tile**

**Design: floor tile**

**Size: 30 cm by 30 cm**

**Material and technique used: Sticker paper on readymade tile**



**Plate LXIV: Ebibya wall tile**

**Design: Wall tile**

**Size: 10.5 cm by 10.5 cm**

**Material and technique used: Sublimation process on readymade China tile**

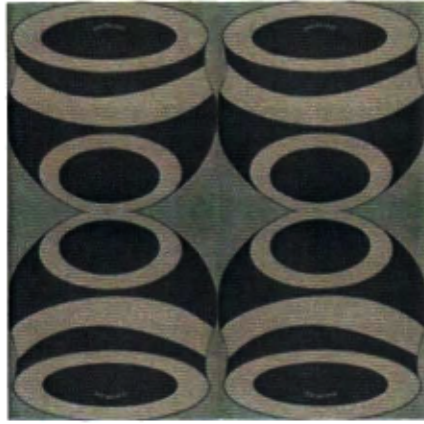


Plate LXV: **Ebibya wall tile**

Design: **Wall tile**

Size: **15 cm by 15 cm**

Material and technique used: **Sublimation process on readymade tile**

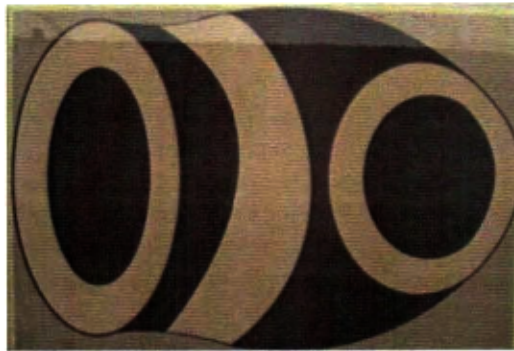


Plate LXVI: **Ebibya floor tile**

Design: **Floor tile**

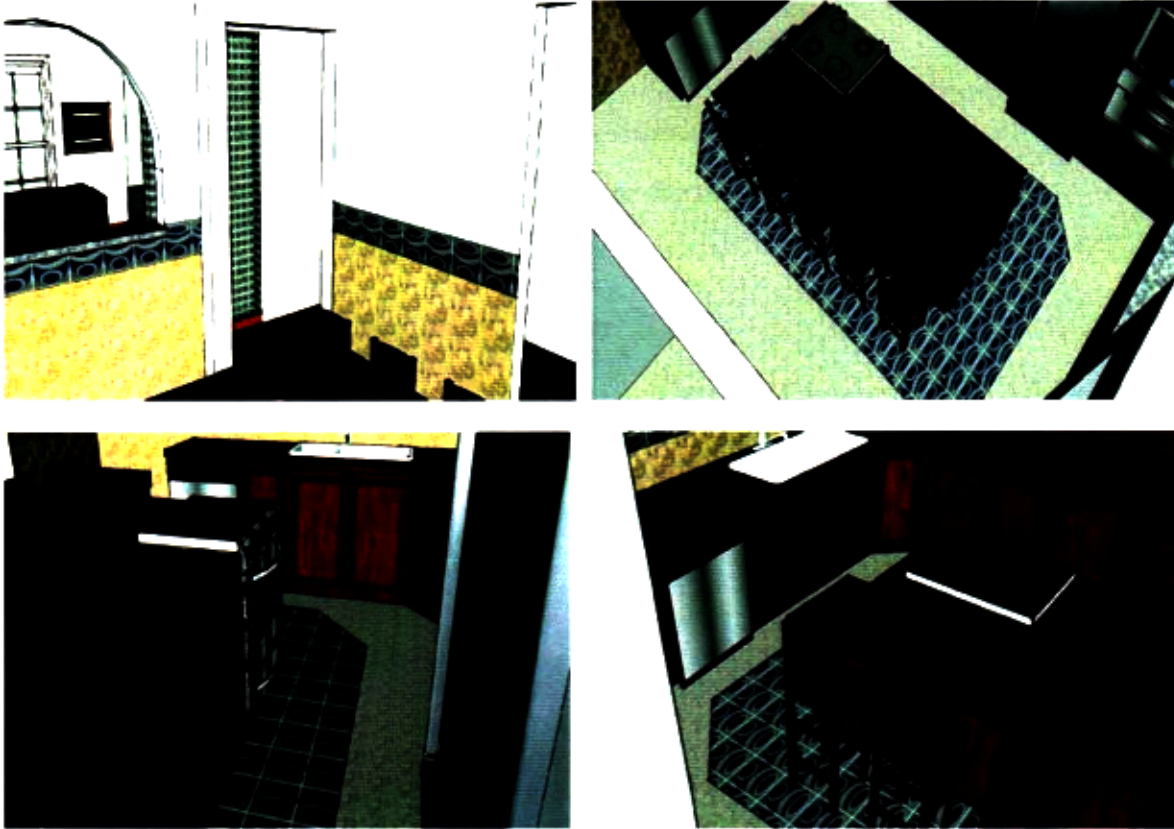
Size: **20 cm by 30 cm**

Material and technique used: **Sublimation process on readymade China tiles**



Source of Inspiration and designer's intent: The design of the wall and floor tiles is derived from '*Ekibya*' ('*Ekibya*' meaning one; '*Ebibya*' meaning many), a serving pot in the

Ganda material culture made out of fired clay and used like a plate for holding soup, vegetables and mixing traditional herbs. This provided a source of inspiration for designing wall and floor tiles for dining or sitting rooms where meals are served and eaten as well as a place of relaxation after meals.



**Plate LXVII: Final illustrations showing how the Ebibya motif has been used on tiles to decorate the dining room**

#### 4.1.3 Designs for floor and wall tiles from Emindi pot



Plate LXVIII: Emindi floor tile (using Ceramic Paste)

Design: floor tile

Size: 28.2 cm by 28.2 cm

Material and technique used: Ceramic Paste on readymade Indian tile



Plate LXIX: Emindi floor tile

Design: floor tile

Size: 28.2 cm by 28.2 cm

Material and technique used: Sticker on readymade Indian tile



Plate LXX: **Emindi wall tile**

Design: **Wall tile**

Size: **10.5 cm by 10.5 cm**

Material and technique used: **Sublimation process on readymade China tile**

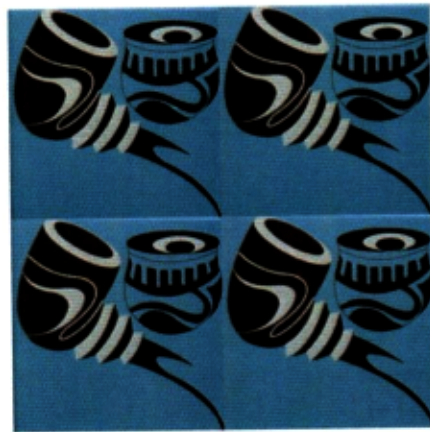


Plate LXXI: **Emindi wall tile**

Design: **Wall tile**

Size: **15 cm by 15 cm**

Material and technique used: **Sublimation process on readymade tile**



Plate LXXII: **Emindi floor tile**

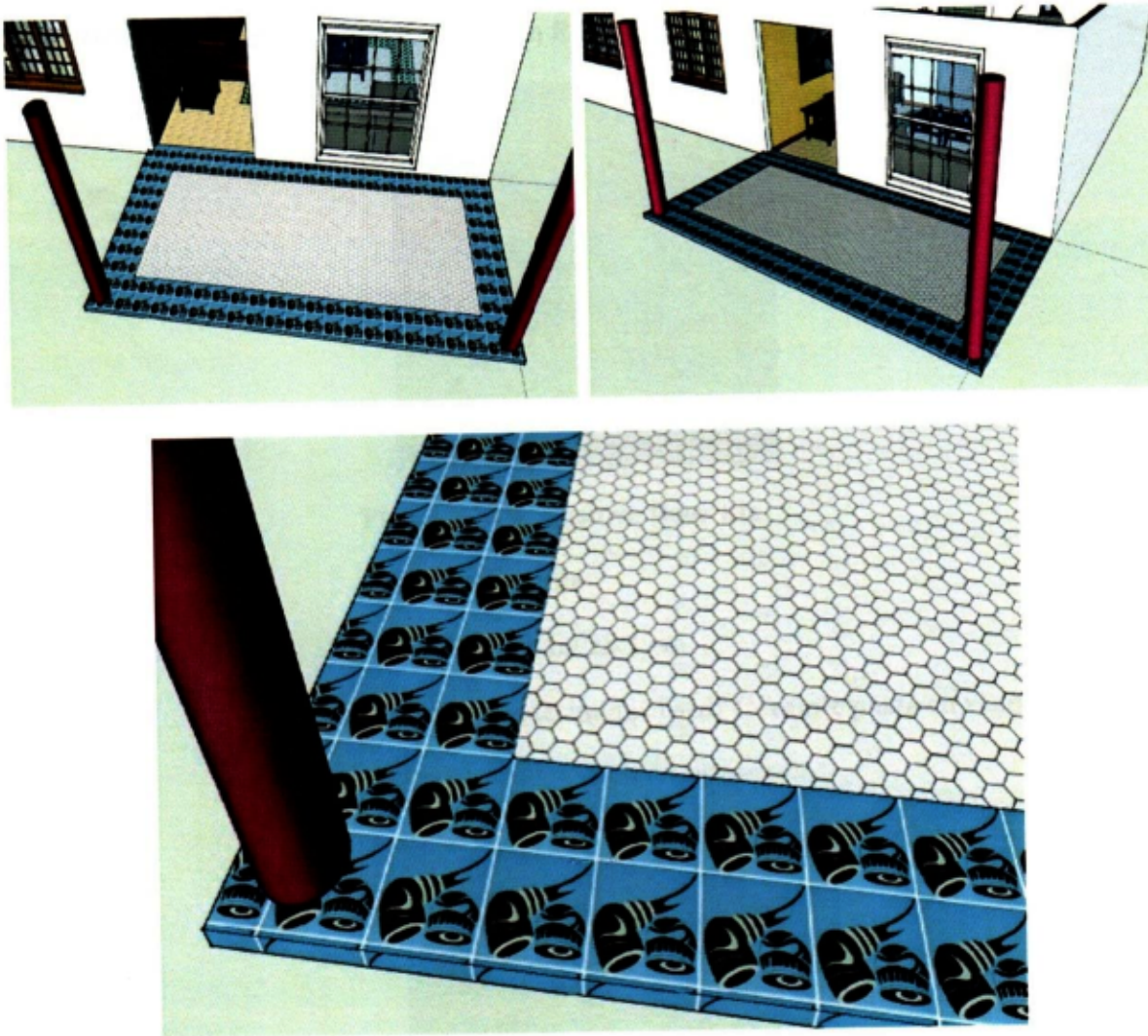
Design: **Floor tile**

Size: **20 cm by 30 cm**

Material and technique used: **Sublimation process on readymade China tiles**

Source of Inspiration and designer's intent: The design of the wall and floor tiles is derived from '*Emindi*', a smoking pipe in the Ganda material culture made out of fired clay and wooden hollow sticks, used for smoking tobacco or coffee beans; often seen with the elderly, it signifies a sense of respect. This provided a source of inspiration for designing wall and floor tiles for the balcony where elders sit and relax.

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**Plate LXXIII: Final illustrations showing how the Emini motif has been used on tiles to decorate the balcony**

1.4 Designs for floor and wall tiles from Ensuwa pot



Plate LXXIV: Ensuwa floor tile

Design: floor tile

Size: 28.2 cm by 28.2 cm

Material and technique used: Ceramic paste on readymade tile

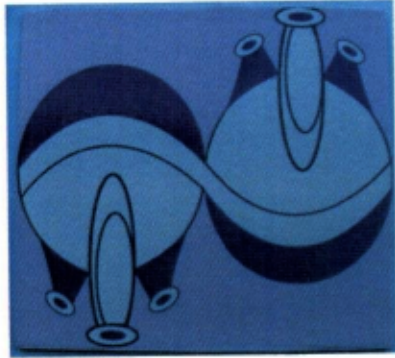


Plate LXXV: Ensuwa floor tile 30 by 30 cm.

Design: floor tile

Size: 28.2 cm by 28.2 cm

Material and technique used: Sticker Paper on readymade tile

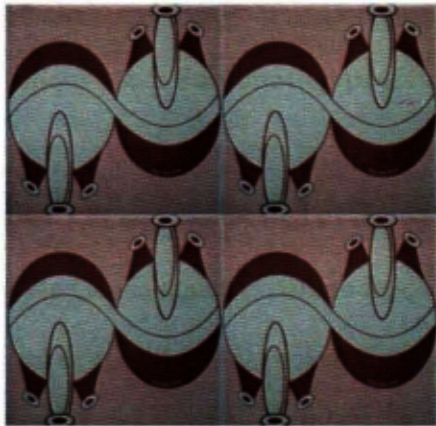


**Plate LXXVI: Ensuwa wall tile**

**Design: Wall tile**

**Size: 10.5 cm by 10.5 cm**

**Material and technique used: Sublimation process on readymade China tile**

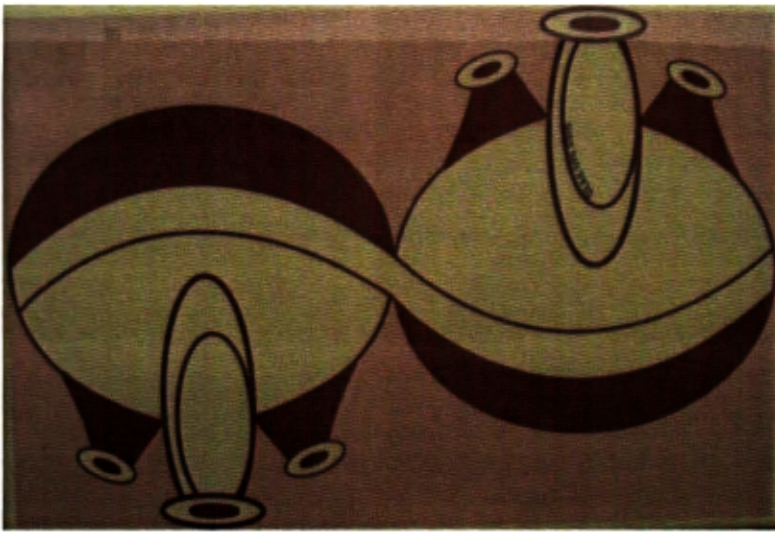


**Plate LXXVII: Ensuwa wall tile**

**Design: Wall tile**

**Size: 15 cm by 15 cm**

**Material and technique used: Sublimation process on readymade China tile**



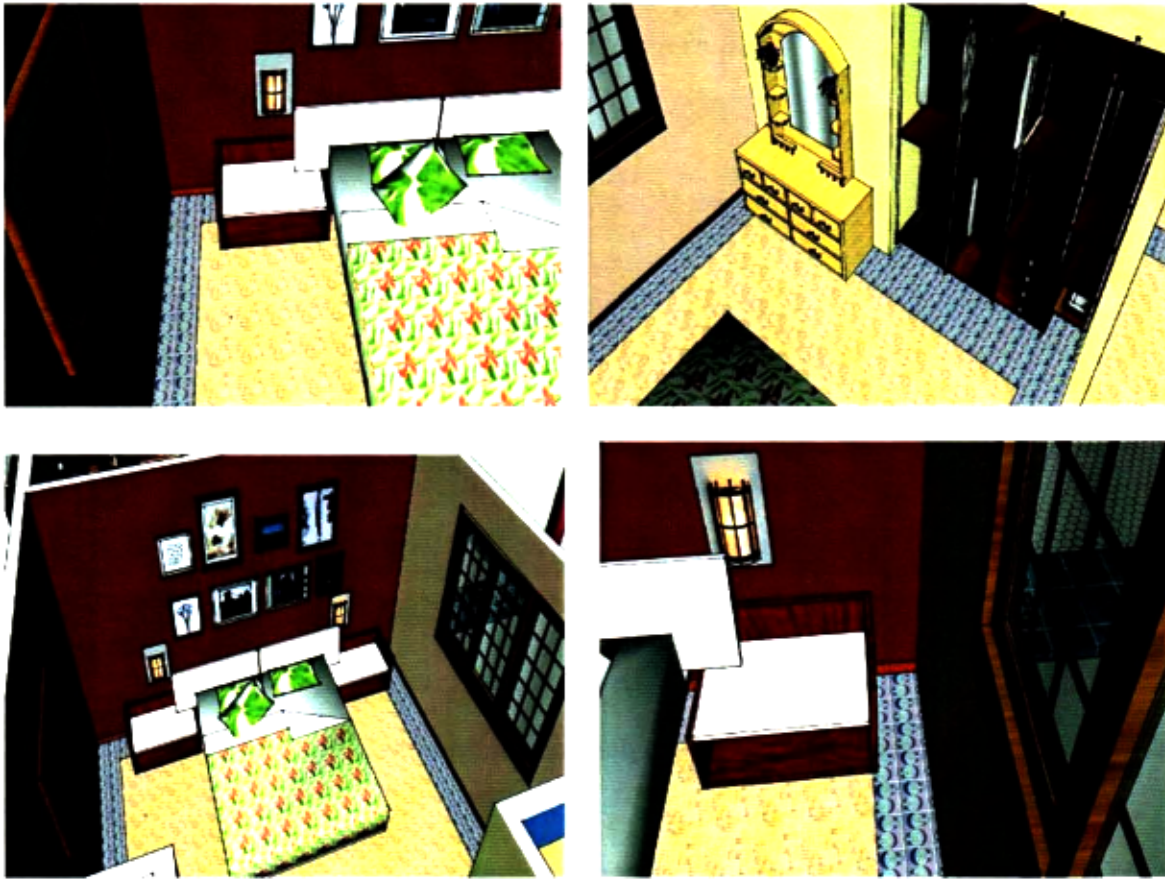
**Plate LXXVIII: Ensuwa floor tile**

**Design: Floor tile**

**Size: 20 cm by 30 cm**

**Material and technique used: Sublimation process on readymade China tiles**

Source of Inspiration and designer's intent: The design of the wall and floor tiles is derived from *Ensuwa*, a multi mouthed pot in the Ganda material culture made out of fired clay, used for ritual purposes and also acts as a symbol of fertility. This provided a source of inspiration for designing wall and floor tiles for the bed room.



**Plate LXXIX: Final illustrations showing how the Ensuya motif has been used on tiles to decorate the bedroom**

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**4.1.5 Designs for floor and wall tiles from Ekyogero pot**



**Plate LXXX: Ekyogero floor tile**

**Design: floor tile**

**Size: 30 cm by 30 cm**

**Material and technique used: Sticker on readymade Indian tile**

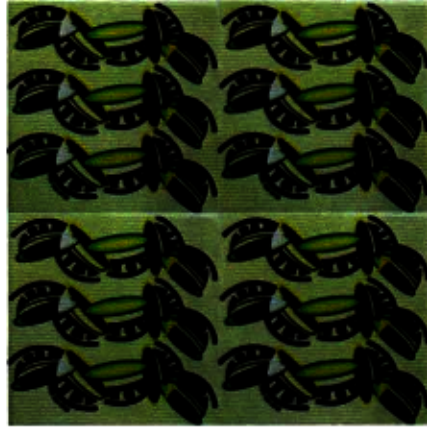


**Plate LXXXI: Ekyogero wall tile**

**Design: Wall tile**

**Size: 10.5 cm by 10.5 cm**

**Material and technique used: Sublimation process on readymade China tile**



**Plate LXXXII: Ekyogero wall tile**

**Design: Wall tile**

**Size: 15 cm by 15 cm**

**Material and technique used: Sublimation process on readymade china tile**



**Plate LXXXIII: Ekyogero floor tile**

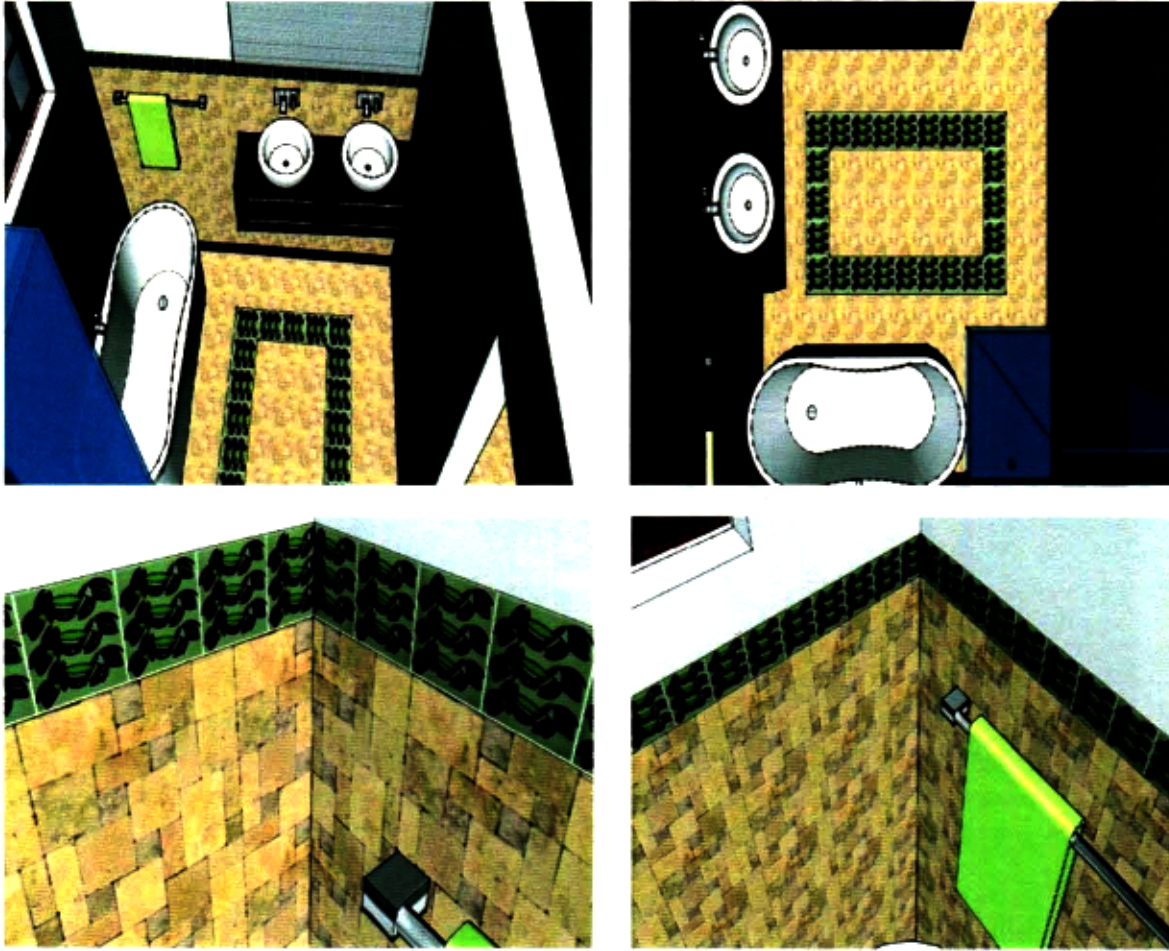
**Design: Floor tile**

**Size: 20 cm by 30 cm**

**Material and technique used: Sublimation process on readymade china tile**

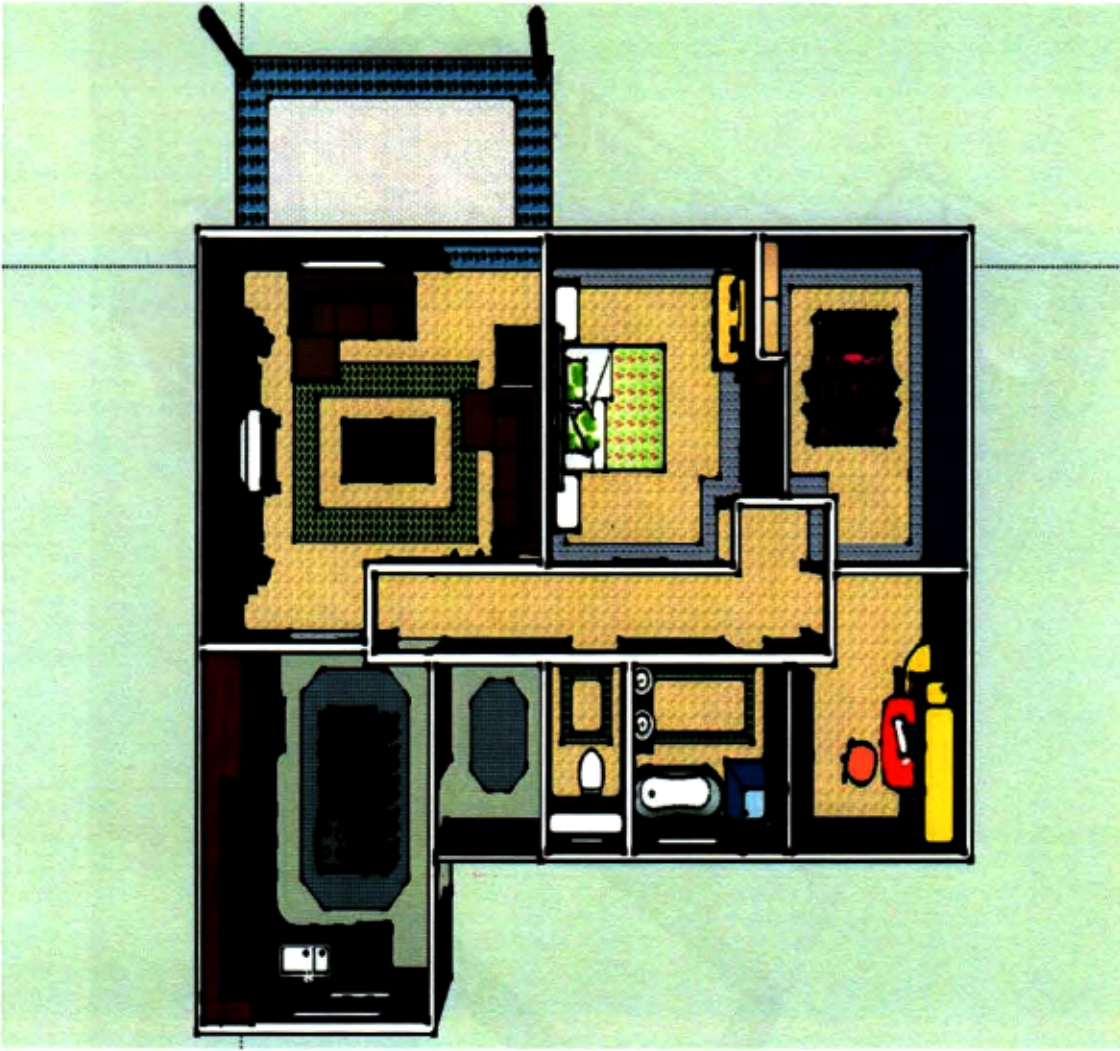
Source of Inspiration and designer's intent: The design of the wall and floor tiles was derived from *Ekyogero*, a pot in the Ganda material culture made out of fired clay and used for

bathing the elderly and young children. This provided a source of inspiration for designing wall and floor tiles for the bathroom where the above activities take place.

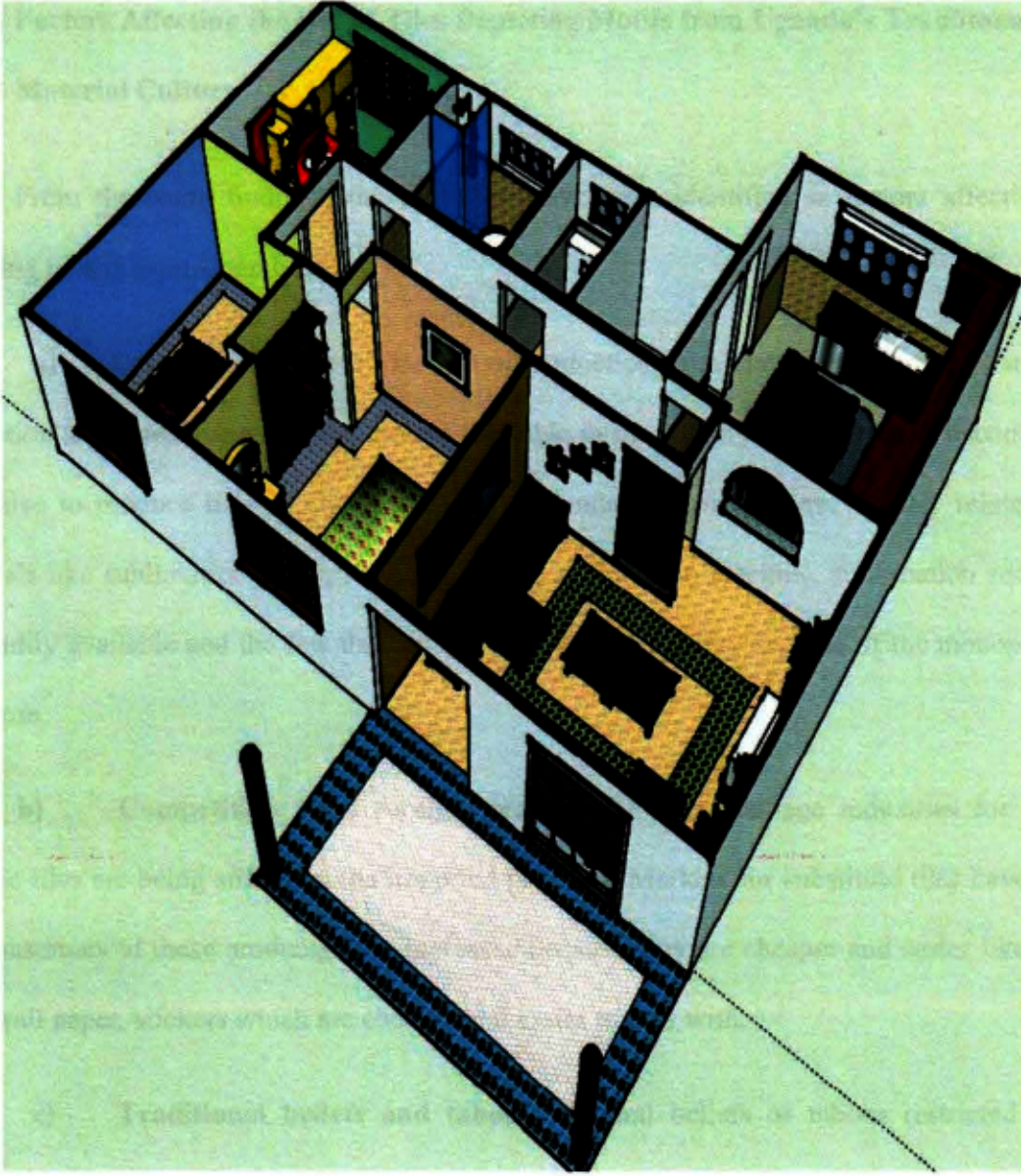


**Plate LXXXIV:** Final illustrations showing how the Ekyogero motif has been used on tiles to decorate the bathroom

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**Plate LXXXVI: Plan view (top elevation) of the whole house showing how tiles have been fitted**



**Plate LXXXVI: Oblique view of the whole house showing how tiles have been fitted**

#### **4.1.6 Factors Affecting the Use of Tiles Depicting Motifs from Uganda's Traditional Material Culture**

From the study findings, the following have been identified as factors affecting tiles depicting motifs from Uganda:

**a) Cost of Production:** The cost of production from materials like oxides, stains for decoration are expensive and some are not available in the country. As a result, it becomes very expensive to produce tiles in Uganda using the Ganda material culture. Closely related some materials like sublimation paper, sublimation ink, sublimation machine, sublimation sticker are not readily available and the few that are there are very expensive because of the monopoly that they pose.

**b) Competition from foreign production:** Local cottage industries for making ceramic tiles are being stifled by the imported products. Markets for substitute tiles have grown and consumers of these products have increased because they are cheaper and easier like plastic tiles, wall paper, stickers which are cheaper and easier to deal with.

**c) Traditional beliefs and taboos:** Cultural beliefs or taboos restricted certain traditional designs to particular motifs agreed upon by the spiritual leaders or elders in the community. These hinder creativity and growth of the ceramic industry in Buganda. In addition, there were limitations in who, where, and when to make pottery; women were restricted by the fact that they underwent menstruation so were not allowed to work in clay pits due to the fact that certain areas are restricted for working, like areas near swamps.

**d) Functionality:** Traditionally, Buganda decorated the houses on the walls (inside the houses using stains locally made and pigments) this did not give the basis of ceramic

decorative. The growth of the floor decoration which necessitates the use of tiles was a later development.

Lack of technical expertise/skills; The growth of technology of decoration in Ganda has been limited by the fact that traditional potters do not plan and develop designs and motifs for floor and wall tiles because they lack the technical skills needed in this process, for example the researcher observed that Mr. Yusuf, Ssendagala Kakande of Busega Community lack the skills of this process.

**e) Lack of Sophisticated Machinery:** Research and development technology in line with tile industry has not taken root in Buganda hence it does not give favourable ground of the growth of the decorative aspect in Buganda.

**f) Poor quality of clay bodies, Oxides and Stains;** this was brought about by lack of appropriate technology needed in the process of Clay preparation. This was also evidenced by lack of technical people such as Ceramic Industrial Chemists.

## **CHAPTER FIVE**

### **DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.0 Overview**

This chapter presents the summary of the main findings of this study; an interpretation of the studio findings in relation to the objectives and after which conclusions and recommendations are made.

#### **5.1 Discussion**

The purpose of this study was to produce decorative tiles using motifs derived from the Ganda Material Culture.

The study had the following objectives posed:

- a) To find out factors affecting the use of tiles depicting motifs from Uganda traditional material culture.
- b) To develop motifs for tiles that would educate the young generation about indigenous pottery of the Ganda material culture.
- c) To produce tiles with decorative motifs inspired by the Ganda material culture.

### **5.1.1 Analysis of the Tile Cottage Industry in Uganda in Relation To Decoration of Tiles Using Ganda Material Culture**

#### **5.1.2 Poor Quality and Scarcity of Materials**

The researcher's findings in the trials are that most of the materials used like stains, oxides and glazes did not mature well with the clay body used. The findings seem to suggest that materials that have been used for the trials are of poor quality and are also scanty to be obtained for the ceramics decoration.

#### **5.1.3 Cottage Industries in Uganda was being suffocated by developed countries like China, India etc**

Most of the cottage industries in Uganda do not decorate tiles with motifs but rather produce tiles that are plane without any design. The researcher's intention of the decoration using Ganda material culture is to give identity to the ceramic industry in Uganda.

- Quality of Designing.
- Machinery which is sophisticated.

In addition, lack of sophisticated machinery, research and development technology in line with tile industry has not taken root in Buganda; hence it does not give favourable ground for the growth of decorative aspect in Buganda.

- Level of Training.

#### **5.2.2 Beliefs and taboos of designing floor and wall tiles using Ganda material culture**

The king had his own potters whose duty was to furnish the store in the royal enclosure. Many of the chiefs had their own potters. They needed so many pots that it was cheaper to assign

land to a potter and to take the taxes in pots. So it was men who were basically involved in the pottery making than women. Cultural beliefs and taboos restricted certain traditional designs to particular motifs agreed upon by the spiritual leaders in the community. This hindered the creativity and growth of the ceramic industry in Buganda.

### **5.2.3 Poor infrastructure**

This has been a problem in the development of the industry because the poor infrastructure limits the access to the raw materials like clay, stains, oxides which hindered the development of the local industries in Uganda, particularly so the ceramics industry.

- a) Cost of Production/expense of final production is high.
- b) Stifling cottage industries in relation to imports.
- c) Traditional beliefs and taboos.
- d) Societal restrictions.
- e) Functionality of tiles.

Traditionally, Baganda decorated their houses on the walls and inside the house using stains, pigments locally made. This did not give the basis of ceramic decoration. The growth of the floor decoration which necessitated the use of tiles was a later development.

Art of making tiles involves both structural and decorative designs (Ugandan potters are not trained).

- f) Sophistication involved in tile making limits the Ugandan Tile Making Industry.

- g) Marquette's sketches making
- h) Lack of Technical expertise/skills

The growth of technology of decoration in Ganda has been limited by the fact that traditional potters did not plan and develop designs for motifs for floor and wall ceramic tiles because they lack the technical skills needed in this process for example the researcher observed that Mr. Emmanuel Mukasa of Nakigalala Community which belongs to the King lack these skills for the process followed in designing a motif for decoration.

- i) Poor Clay Bodies, Oxides and Stain Samples.



The poor quality of clay bodies is brought by the lack of appropriate technology needed in the process of clay preparation. This is also confirmed by lack of technical people such as Industrial Chemists who could prepare quality oxides, stains, glazes and sublimation materials like paper, tape, ink and machines for the ceramics.

### 5.3 Conclusion

Using Ganda material culture for decorating tiles strengthens the elements of belonging amongst the Ganda in Uganda in particular and Ugandans in general. This implies that people feel the service or commodity is prepared for them.

To summarise the conclusion of the study, it has evidently been shown that cultural values or the material culture are increasingly losing meaning especially with the people in urban areas. People are picking up hybridised lifestyles which has no definite roots that is the material culture like the pots which are of value and meaning are being replaced by the use of plastics and

source pans. The researcher sought to rejuvenate the material culture by decorating the tiles using Ganda material culture (pots).

#### **5.4 Recommendations**

Basing on the findings of the study and the conclusions drawn, the researcher strongly recommends; Uganda's stifling cottage industry should institute a body or an organ that will promote the use of Ganda material culture motifs for decorating ceramic ware which can reflect our cultural beliefs and identity. The study has put the Ganda material culture to develop motifs that have been allocated specific rooms like living room, dining room, balcony, bathroom and bedroom depending on the functions of the pots selected. The researcher recommended that other tribes in the country with their material culture be explored and used for the same purpose. This is because Uganda is a country endowed with rich cultural heritage.

Education programme developers and the curriculum should incorporate Uganda's rich material culture. This should be done at all levels of education from Primary to the University. It should be noted that growth to a positive direction must have strong root of culture in Uganda. The study as presented has not exhaustively used the Ganda material culture but only one item (pot) of the material culture has been used for decoration. The researcher on this note recommended that for further exploration into Ganda material culture and for developing more decorating motifs for ceramic ware for identity in the Uganda's cottage industry.

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**APPENDICES****Appendix 1: Check List for Questionnaire**

Name: ..... Age: ..... Sex: .....

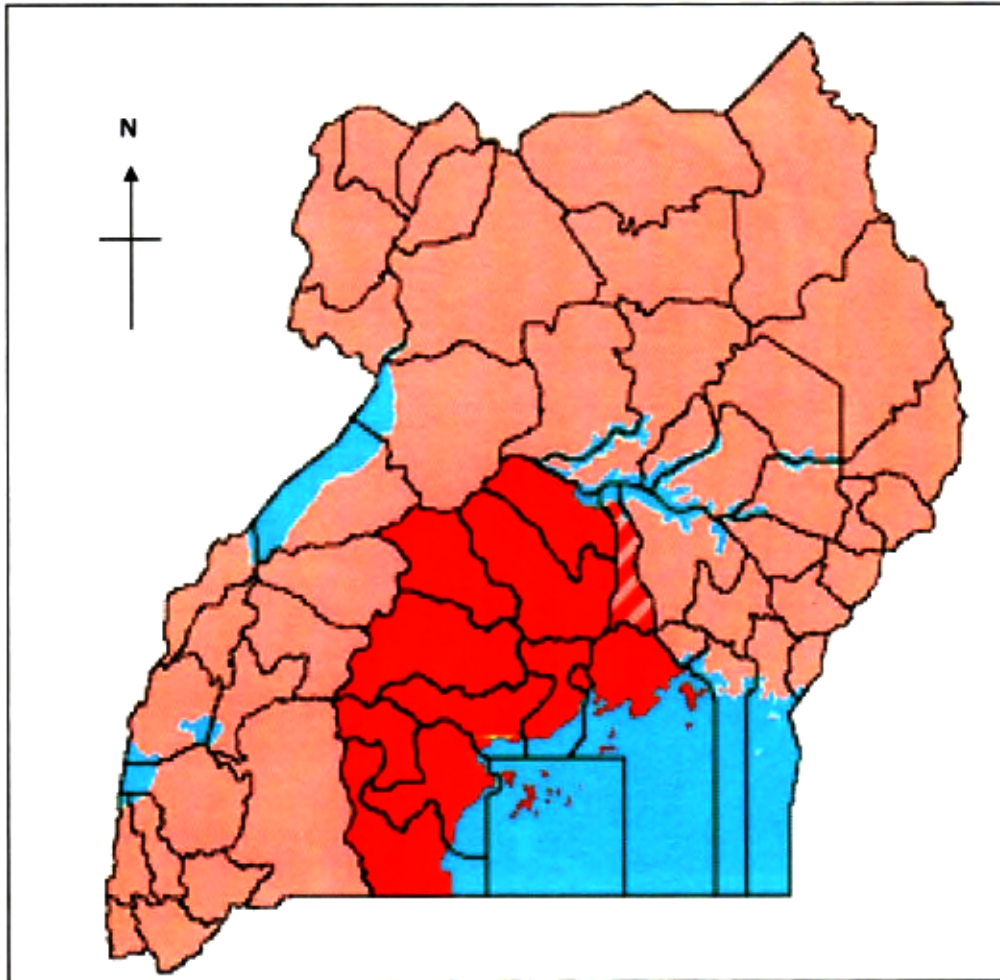
Clan of respondent: ..... Site/Location: ..... Date: .....

1. Season for making pots:
2. Stages of pottery production:
3. Site where raw materials for clay is obtained:
4. Relationship between site of clay and settlement of royal potters:
5. Clay preparation:
6. Decoration of pottery:
7. Tools and equipment or materials used during the production process:
8. Attachment of names to specific pots produced:
9. Specific functions of the various pots produced:
10. Any other activity apart from pottery?
11. How the knowledge and tradition of royal potters is passed from generation to generation:
12. Taboos associated with production of Royal Pottery:
13. How Royal Potters are distinguished from other Potters:
14. Any policies that promote or restrict pottery activities:

**Appendix 2: List of Interviewed Participants**

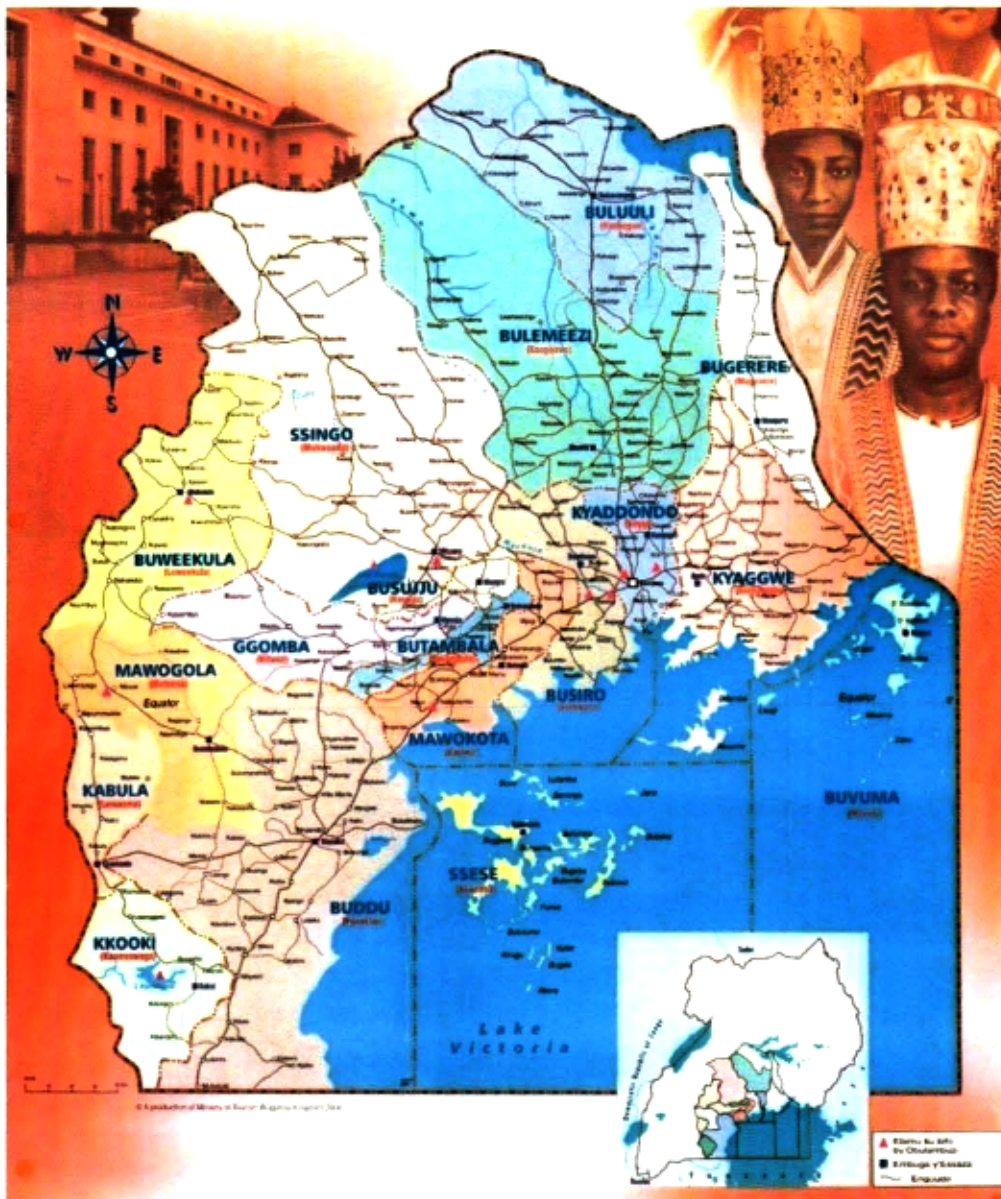
1. Mr. Bob Kabwijamu: Duster Street Nakasero (30-04-2010)
2. Mr. Ismail: Shree enterprises Ltd, Plot No 10-B African Mall, Nakasero (0712-313313)
3. Mr. Arpanshah: Jiya-International, Uganda Limited, Industrial Area, Seventh street opposite Uganda Biscuits (0414232387)
4. Mr. Yusuf Ssendagala Kakande, Busega Pottery Community.
5. Mr. Emmanuel Mukasa, Nakigalala Pottery Community.



**Appendix 3: Map of Uganda Showing the Location of Buganda Region****KEY:**

Source: <http://en.wikipedia.org/wiki/Buganda>

**Appendix 4: Map showing Counties in Buganda region**



**Source: Uganda National Museum (2010)**