

**UNIVERSITY OF GHANA
COLLEGE OF HUMANITIES**

**A ZOO-ARCHAEOLOGICAL INVESTIGATION OF THE NYARKO QUARTER OF
BEGHO, BONO REGION, GHANA**



BY

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**THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON, IN PARTIAL
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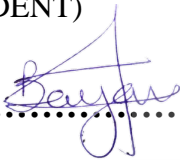
Declaration

I hereby declare that this work, with the exception of duly acknowledged quotes, ideas and references, represents my own research carried out at the Department of Archaeology and Heritage Studies, University of Ghana, Legon, under the meticulous supervision of Professor Fritz Biveridge and Professor Daniel K. Attuquayefio. This work has not been presented in part or in full to any other institution for examination.

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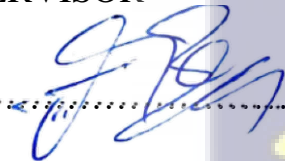
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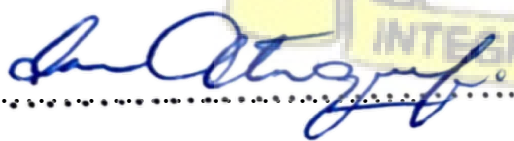
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Abstract

The focus of this study is on the identification and documentation of faunal remains recovered from the Nyarko Quarter. It is one of six quarters of Begho discovered by Merrick Posnansky in the early 1970s. Begho was an ancient market town located in the Bono Region of Ghana, and noted to have had extensive trade links with Jenne, Timbuktu and Gao, located along the Niger River, as well as with several coastal polities during the era of the Trans Saharan and Atlantic trade respectively. Its importance has been documented in several early Arabic manuscripts, European records and ethno historical accounts of the Hani people, ancestors of the people of ancient Begho. The modern Hani settlement overlies parts of the ancient Begho settlement.

The study revealed that the people of the Nyarko Quarter exploited and procured for themselves wide varieties of domesticated and undomesticated animal and plant species. Some of the recovered bones identified belonged to wild/undomesticated animals species and included grasscutter, duiker, squirrels and antelopes. Some of these animals were captured through various means such as hunting and the use of snares and pitfall traps. A few of the bones recovered also displayed charred marks and cut marks, indicating that smoking over open fire was probably an important mode of processing meat in the past. Other faunal material recovered from the Nyarko Quarter comprised mollusc shells, indication that the inhabitants of that quarter exploited these resources. The recovery of palm kernel and cowpea seeds is direct evidential data supporting the cultivation of these crops and may have served as important dietary complements during the period. Other notable non-faunal recoveries from the excavations included daub and lateritic stones, which could have been used for the construction of wattle and daub house structures. Veritable quantities of locally manufactured potsherds were also recovered. The settlers had

extensive socio-economic interactions with neighboring communities' like Menji, Namasa, Debibi, Wenchi and Nsoko



Dedication

This work is dedicated to my mother, Madam Eva Afia



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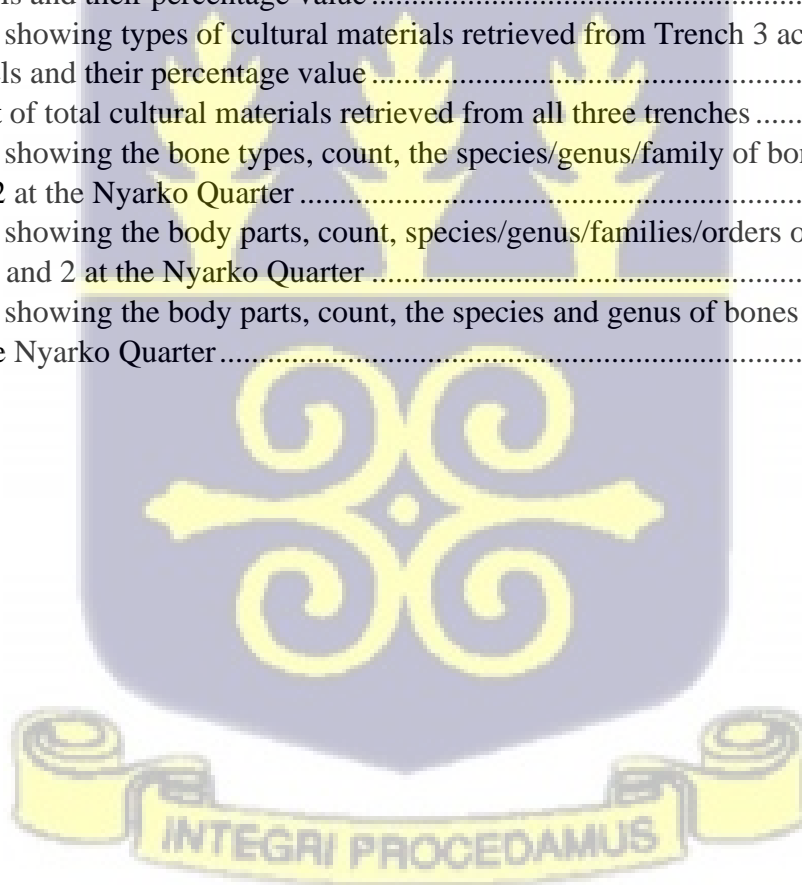
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Chapter One

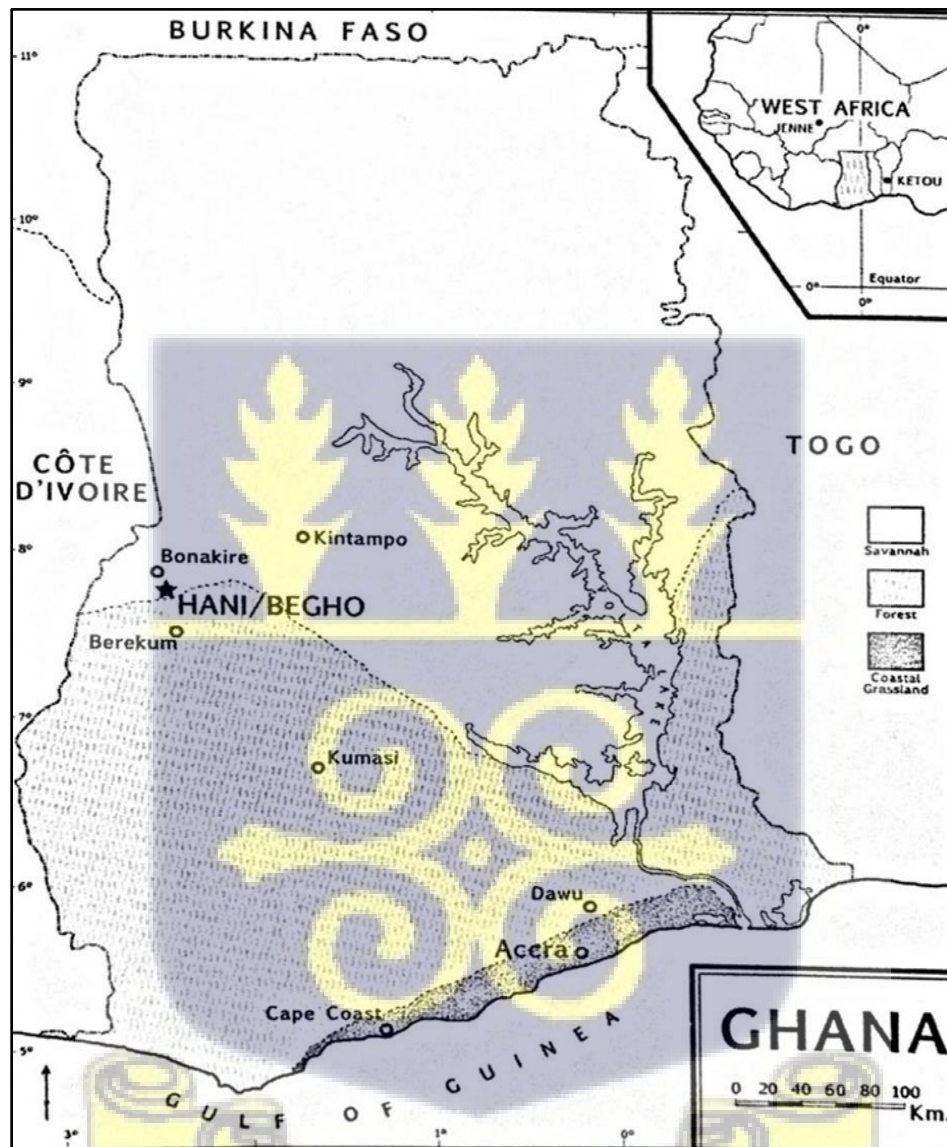
1.0 Introduction

This research is a zoo-archaeological study of faunal remains recovered from the Nyarko Quarter, at Begho (Map 1.0) present day Hani. According early Arabic records dating to the 1650's, until its collapse and final demise in the sixteenth century as a result of a bloody civil war, Begho was a prosperous and thriving metropolitan market center that connected the peoples of the heavily forested gold bearing regions to the south and the two Sahelian Empires of Mali and Songhai to the north. Oral traditional data gathered from some indigenous resource persons at Hani, the inhabitants of Begho fearing for their lives thereafter, fled and resettled at Debibi and Bondoku. According to these traditions, it was abandoned and lay decrepit for many years until a few of the town's original settlers who fled the civil war returned to resettle there. Shocked and dismayed by the level of destruction, the returnees are reported to have exclaimed "*éha nie?*" which in the Bono dialect translates, "is this the place?" in English. With time, the term was corrupted to Hani which is the current name of the place. It is worth noting that a substantial portion of the new settlement of Hani overlies part of the ancient Begho settlement.

Begho (7° 50' 53' north, 2° 28' 41') lies in the Tain District of the Bono Region, Ghana, and is approximately 434.5 kilometers north of Accra, the Capital City of Ghana. Some important neighbouring towns close to Hani (the research area) are Nsawkaw to the east, Kokooa to the west, Debibi, to the north and Seikwa to the south. The current settlers of Hani intimate in their oral traditions that their progenitors are the people of Begho.

Bones, mollusc shells, teeth, and horns recovered via surface surveys and excavations constituted the primary faunal remains used for the study. These remains oftentimes, are the commonest and

most veritable faunal materials recovered for zoo-archaeological investigations at archaeological sites. Hair, chitin, and hoofs constitute other less notable faunal remains of interest to zoo-archaeologists. These however, were not recovered at Begho. Palm kernel shells constituted the only botanical remains recovered from the site and used for the study.



Map 1. 1 Modern map of Ghana showing Hani/Begho and some neighboring towns mentioned in the text. (Reproduced from Posnansky, 2015)

Locally manufactured pottery constituted the most ubiquitous non-faunal artifact retrieved from the Begho excavations and also played a central role in facilitating the archaeological reconstruction of past lifeways of the people who settled ancient Begho. Other artifacts retrieved there comprised body beautification accessories like beads.

The study spanned two seasons in 2021 and 2022 with each season spanning two months. The researcher was assisted in the field by several final year students of the Department of Archaeology and Heritage Studies, University of Ghana, Legon.

Zoo-archaeology is one of several sub-disciplines of archaeology and can be defined as the study of biological remains (including human) in archaeological context for purposes of reconstructing aspects of the human past. Most people in the remote past considered varieties of recovered fauna including human skeletal remains as just bones with no connection to the past. In recent times however, scholars like Larsen (1997, 2000, 2002), Posnansky (1984), White and Folkens (2005) and Killgrove (2013) have shown via their focused scientific researches that they constitute impressive storehouses of knowledge, thanks to advances in forensic zoo-archaeology. Bones and teeth for example, record circumstances of growth and development as evidenced by factors such as stress, activity, injury, environment, disease, diet, and nutrition (Larsen, 2000). Fauna can also speak volumes about issues relating to human genetics and physiological reactions to the environment, past dietary patterns, vegetation types, and paleo environmental conditions among many others.

The study of micro plant remains (archaeobotany) like pollen grains, fossil cuticles, and diatoms; and fossilized macro plant remains like seeds, charcoal, grains and fruits recovered from archaeological contexts have also helped shed to light on how varieties of plant species were utilized in the past. It also facilitates comparative environmental studies. Larsen (2000) for

example, has noted that it can shed light on what species were exploited for food, house construction, fuel, and medicines. In recent times, they have helped archaeologists and anthropologists to recreate past vegetation types, explain how humans interacted with their surroundings, and past inter-societal trade relations between different societies. Zoo-archaeology and Archaeobotany have thus, contributed immensely to our understanding of when and why early humans switched from a hunter-gatherer subsistence strategy to agriculture, human impact on the natural environment, and the dynamic interrelationships between humans and animals.

1.1. Organization of Chapters

The thesis is made up of seven chapters. The main constituents of Chapter One comprised an introduction which briefly outlines the thrust and focus of the study. It states the research problem, the aim and objectives of the study, the research methods and approaches employed by the researcher to derive data and the interpretative framework used. Other topical issues discussed include the main challenges encountered by the researcher during the course of the research and the significance of the research.

Chapter Two provides an extensive literature review of the research area. This aspect critically examined the historical and archaeological works of previous researchers at Begho/Hani and some of the existing knowledge gaps in their studies. Chapter Three is divided into two parts. The first part discussed the historical background of Begho/Hani and its environs, and the second outlined the geographical setting of the study area.

Chapter Four discusses the results of the ethnographic research at Hani. Animal husbandry, hunting and trapping were the main subsistence strategies researched. Chapter Five discusses the

archaeological fieldwork conducted in the study region. Chapter Six is devoted to a qualitative and quantitative analysis of the archaeological finds recovered from the Nyarko Quarter. Chapter Seven is divided into two sections. The first attempts a comprehensive reconstruction of the past socio-economic and cultural lifeways of the ancient settlers of the Nyarko Quarter of Begho, based on the cumulative evidence. Topics covered in this section included ethnicity, their early migration and settlement history, past dietary patterns, past subsistence strategies, vocations and adaptive strategies, exchange, and early demography. The second section detailed the salient conclusions gauged from the study and some recommendations for future research at the Nyarko Quarter of Begho.

1.2. Research Problem

It's worth noting that Merrick Posnansky who was the first to uncover and discuss the archaeological significance of Begho in the 1970's undertook eight separate missions to the place under the "**West African Trade Project**." The missions occurred in 1970, 1971, 1972 (twice), 1975 (twice), 1975 – 76, and 1979 with the technical staff and students of the Department of Archaeology (now Department of Archaeology and Heritage Studies). Unlike the previous missions, the 1979 mission was a mixed one and included students and faculty of the University of California, Los Angeles, and students and faculty of the Department of Archaeology, University of Ghana, Legon. The "Project's main goal was to unearth the origins and evolution of long-distance trade between the Middle Niger Bend area in Mali and the forest regions of Ghana from an archaeological and ethno-historical standpoint.

Despite these comprehensive and extensive archaeological investigations by Merrick Posnansky, and later Leonard Brighton Crossland, James Anquandah, and lately Daniel Kumah; significant gaps still exist regarding our understanding of the archaeology of the Nyarko Quarter. This is partly due to the fact that very few of the investigations focused on that quarter of Begho, which incidentally was the first to be settled by the people. Furthermore, the bulk of the faunal and botanical remains of these part research works were cursorily examined and no comprehensive reports were issued. Presently, unlike the other quarters, little is known about the settlers of the Nyarko quarter and the types of resources its inhabitants exploited and subsisted on. The above problem necessitated my investigation of the Nyarko Quarter from an archaeological perspective to shed light on its past.

1.3. Aim of the Research

The research focused on identifying and documenting the faunal remains recovered from Begho's Nyarko Quarter

1.4. Research Objectives.

The study had three overarching objectives. These were to:

1. Identify and document the different body parts, animal species and genus that constituted the faunal assemblage recovered at the Nyarko Quarter of Begho
2. Determine the predominant animal species exploited by the native population in the past.

3. Determine using the Radio-carbon dating method to date the occupation period of the Nyarko Quarter of Begho.

1.5. Research Questions

A number of questions guided this research. They included:

1. What animal/faunal species were recovered?
2. What animal species dominated the faunal assemblage?
3. What part of animal remains (i.e., bone, shell, ivory, etc.) was recovered?
4. Did the natives use traps to capture some animals recovered from the excavations at the Nyarko Quarter of Begho in the past?
5. Were all the animals retrieved from the archaeological record exploited for food or were they used for other purposes?
6. Which of the animals discovered in the archaeological record were endemic to the Begho area and which were procured from external origins?
7. Were all parts consumed or were they used for other purposes?
8. If some were procured externally, how were they procured?

1.6. Research Approach and Methodology

The study employed multidisciplinary approaches and methods to derive data. These can be categorized broadly into two namely; non-field and field investigations. The former constituted the first phase of the research and involved library and archival investigations. The purpose was

to derive as much information about Begho's great past from historical and archaeological perspectives, and from the earliest to contemporary times. It was also to shed light on Begho's past geographical condition such as its topography, climate, drainage systems, faunal and floral resources and other environmental conditions which prevailed during the period.

This aspect of the study spanned eight weeks and involved several visits to the Libraries of the Department of Archaeology and Heritage Studies and University of Ghana (Balme). Other libraries visited to derive data were The African Library at the Norwegian University of Science and Technology and the Library of Norwegian University of Science and Technology (NTNU), Norway. All of the archival investigations were conducted at the Public Records and Archival Administration (PRAAD), Accra, Ghana.

Documents perused comprised both primary and secondary historical sources relating to Begho and its neighbourhoods, as well as early Arabic records and European records. The Arabic authors included Al Bakri, Al Iddris and Tarikh es-Sudan while the European writers include William Bosman, Pieter De Marees, John Barbot and Olfert Dapper among others. The relevance of these records cannot be overemphasized for three reasons. First, the writers provided very excellent depictions of customary and cultural lifeways of the local peoples they encountered. Second, many provided a wealth of information on the botanical and faunal resources of the coastal and hinterland regions of the Gold Coast (now Ghana) and third, they documented important events and occurrences of the period. Despite their relevance, many aspects of their writings were problematic, mainly for the following reasons. First, the writers did not comprehend the local languages of the people they interacted with. They thus, lacked the capacity to fully understand the meanings of some of the things they heard and recorded. Second, several of them depended on local interpreters who themselves did not fully understand European languages. Other documents

perused comprised almost all the contemporary historical archaeology reports on Begho. The bulk covered the period from 1970 to 2019 (Posnansky, Crossland, Anquandah and Kumah).

The field research constituted the next phase of the study and involved ethnographic investigations at Hani and its environs. Like the non-field research, it covered four weeks of group-focused discussions with the indigenes to derive information. Areas covered during this phase comprised their main subsistence strategies which included farming practices, charcoal production, animal husbandry practices and hunting. The above activities involved the majority of the working adult populace and constituted the mainstays of the local economy. Other less notable subsistence strategies investigated included potting, trapping, basketry and traditional medical practices. Another aspect of the ethnographic research involved direct observation of the indigenes undertaking some of the above practices, and my occasional participation in the activities. The ethnographic study was undertaken to facilitate scientifically interpretation and reconstruction of the archaeological materials recovered.

A total of five surface surveys and the opening of three trenches at different locations at the Nyarko Quarter constituted the focus of the archaeological investigations this was the last data acquisition method used, and immediately followed the ethnographic research. It must be emphasized here that though the surface survey covered all six quarters of Begho, the Nyarko Quarter was the principal geographical focus of this aspect of the investigation. The purpose of the surface survey was four-fold: First, it was to delineate/note the borderlines of the six quarters, and by implication, determine their geographical extents. Second was to document the spatial distribution and density of surface artifact scatters at the Nyarko Quarter, and the third involved noting the principal geographical and cultural features unique to the Nyarko Quarter such as the topography,

vegetation, mounds (probably collapsed houses) and soils to help determine which locations to sink my trenches.

The last data derivation method employed involved the collection of varieties of soil samples from the various stratigraphy levels to facilitate flotation analysis in the laboratory. This was purposed to aid recovery of macro\micro-faunal remains whose analysis could illuminate past animal resources which may have been exploited by the people for food and other activities.

1.7. Interpretative Framework

Archaeologists use material remains discarded by past societies/cultures to analyze and reconstruct past cultural lifeways of the societies that made and used them. To further understand and facilitate the reconstruction process, archaeologists oftentimes rely on anthropological and paleontological models and theories to achieve this objective (Kankpeyeng, *et al* 2011: 205). Material Culture Studies was the interpretive framework used for this study. The phrase 'interpretive framework' as used in this work refers to a set of assumptions, concepts, and principles that establish a specific, theoretically informed perspective and a set of relevant practices for the interpretation process, thereby allowing different interpretations to be made of the facts (Moisander and Valtonen, 2006, Patnaik, 1995)

All human societies, via their activities leave tangible material traces in the form of artifacts and ecofacts, modified and unmodified, which eventually ends up in the archaeological record. In other words, the presence of man-made objects in the archaeological record provides tangible evidence/proof of the presence of a human intelligence acting at the period of production" which is central to the study of material culture (Prown 1982: 1 - 2). Their recovery by archaeologists,

sometimes after several millennia, analysis, and interpretations can oftentimes provide insightful glimpses about peculiar events, occurrences, and activities undertaken at those occupation sites. As noted by Leone (1981: 7), material culture studies can also "give knowledge about a component of a culture unknown to the individuals who made and utilized the artifacts." As a result, artifacts provide a way for us to give shape to and comprehend ourselves (Miller 1994: 397). Overall, discarded cultural items provide invaluable information about a society's unconscious characteristics that underpin their use as well as past socio-economic and cultural lifeways of those societies (Patnaik 1995: 59). Material Culture Studies thus, reveal very valuable and fascinating insights about prehistoric and historical societies and communities, as well as how people used to live and think, even though items may have diverse meanings for different individuals (Elmer & Harrison, 2016).

Furthermore, the "**Object-Centered Approach**" and the "**Object-Driven Approach**" to researching material culture, as advocated by Herman (1992), was applied in the analysis of the retrieved archaeological data. When it comes to researching material culture, the "Object-Centered Approach" focuses on the object itself. This method pays close attention to the object's physical characteristics. As a result, "the capacity to characterize the thing by engaging it with a set of descriptive criteria by replying to a checklist of questions such as how the object was constructed, the media used, its form, size, texture, weight, colour, design/style and/or decoration constitute pertinent questions which can facilitate the reconstruction of the past. What necessitated the manufacture of an artifact and when it happened constitute other relevant questions often asked in material culture studies (Apoah and Gavua, 2010:217). These concerns are at the heart of the "Object-Centered Approach". The "Object-Driven Approach" on the other hand focuses on understanding how items connect to people, cultures and the societies that created and utilized

them (Elmer and Harrison, 2016). In other words, the concepts concerning contextualization and function are very important.

It is also worth noting that material culture studies as a paradigm for interpretation has flaws. Such limitations can be data misinterpretation or over interpretation. According to Patnaik (1995: 64), this “can be avoided by taking into account the fact that activity areas may occur horizontally or vertically across or over a site. Further, the distinction between the three types of material cultural objects – technomic, socio technique and ideotechnic – along with their stylistic or formal aspect can guard against sweeping generalizations”

The Nyarko Quarter at Begho, like other sites which have been previously settled has concrete material evidence in the archaeological record that can enlightened researchers on issues pertaining to trade interactions, space utilization, and identity in the past. Such evidence can aid reconstruction of their past lifeways, chronology, and the nature of cultural affinities that may have existed between the Nyarko Quarter residents and the other quarters.

1.8. Major Limitations of the Study

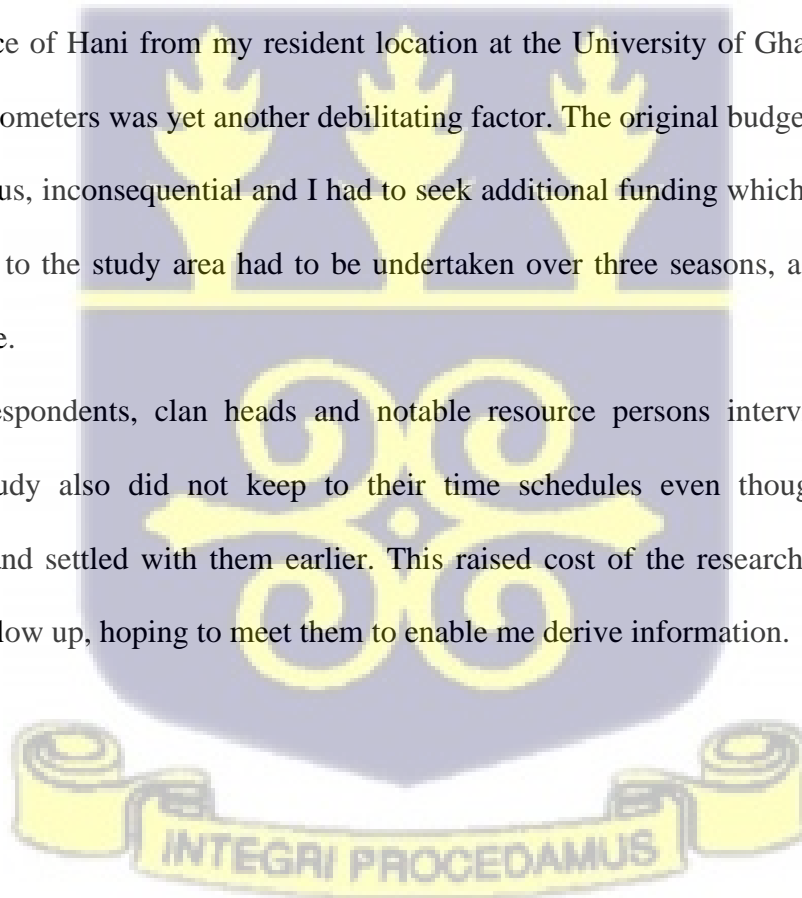
Perhaps, the most outstanding problem encountered during the course of the study was gaining access to the original Arabic documents. Some of these primary records in storage at the national archives of Mali and Niger were unavailable at the time of writing this thesis because they had recently been destroyed by Islamists jihadists. I therefore had to refer to the works of earlier authors who had perused them for information. It was also difficult understanding some of the early Arabic records because I was not fluent in Arabic and so required the services of a translator.

Another limitation was that the majority of both the Arabic and European records focused almost entirely on trade and Islam which were not the primary focus of this study. The few that described trade relations at the research areas aside their difficult interpretation, were also not exhaustive enough as there was a dearth of information on the faunal and floral resources of the research area. They were thus, only partly valuable as source materials.

A third limitation was that there were many time gaps in these records which did not allow for proper correlation and appreciation of the comprehensive history of Begho. For example, there were documented records of events and commercial transactions for particular months followed by gaps in subsequent months for that same year.

The long distance of Hani from my resident location at the University of Ghana campus which was over 358 kilometers was yet another debilitating factor. The original budgetary allocation for the study was thus, inconsequential and I had to seek additional funding which raised the cost of the study. Trips to the study area had to be undertaken over three seasons, as and when funds became available.

Many of the respondents, clan heads and notable resource persons interviewed during the ethnographic study also did not keep to their time schedules even though this had been communicated and settled with them earlier. This raised cost of the research because I had to continuously follow up, hoping to meet them to enable me derive information.



Chapter Two

Review of Literature on Past Investigations at Begho/Hani

2.0. Introduction

Chapter two provides an extensive review of literature of past investigations undertaken in the research area. It examined extant archaeological, historical and ethnographic research conducted at the various quarters of Begho and its environs, including the Nyarko Quarter by some scholars over the last forty years. An integral aspect of the study was that it also outlined and brought to the fore some existing gaps in these investigations.

Among the Akan, Begho was called as 'Bew' and 'Nsoko' (Konadu, 2010, Posnansky 2015: 95). In early Arabic and Islamic literature, Begho was referred to variously as 'Bicu' or 'Begho,' while on a 1629 Dutch map of the Gold Coast, the name 'Nsoko' and 'Insoco' was recorded (Propheet, 1629). In the early Twentieth Century, numerous scholars were clearly undecided as to its true geographical location and this culminated in several of them proffering and pinning different sites, sometimes many kilometers apart from each other. For example, one school of thought asserted that it was near Bondoukou, in Ivory Coast (Anquandah, 1981). Another argued that it was located on the northeast borderline of present-day Namasa settlement (Wilks, 1993). He used historical sources, oral traditions, and cultural anthropological data to assign this area as the site where ancient Begho was located.

Prior to the early 1970's, this controversy persisted until Bravemann and Mathewson (1970) discovered the ancient site of Begho near Hani. They named a 40 - 50 km² region in the Hani-Namasa area 'Bicu,' noting that the oral histories of Hani and Nsawkaw is fairly specific, inputting 'Bicu' or Begho at a site known to the indigenous peoples as *Amanfokeseeso*. According to Lamptey (2019), the controversy arose mainly because the ancestors of the current settlers of Hani

had long since replaced the name Begho with Hani. The modern township of Hani is located about 6 kilometers south of Namasa, and 51 kilometers north of Wenchi.

Kwabena Ameyaw (1965) was one of the earliest scholars to have undertaken research on Begho in the 1940s and 1950s. The unique aspect of his research was that he derived much of his data from oral account narratives, not just on Begho but also on other Akan peoples in Ghana. According to these traditions, the Begho peoples were said to have originally come from a sacred hole called Bonkeseso (literally translated means a large hole), near Nsesrekeseso, which is located 4.8 kilometers from the modern town of Hani. Nsesrekeseso according to Hani/Begho and Nsawkaw traditions and legends was situated on a wide grassy plain. The legends further asserted that in its heyday, ancient Begho was the capital of the Old Banda Kingdom and a fierce competitor of Bono-Manso of the Bono Kingdom, especially in the trading of gold and kola nuts.

The main limitation of Kwabena Ameyaw's research was three-fold. First, all the data he derived from his research were based solely on oral traditions. Second, he did not make any concerted effort to identify and establish the various quarters/suburbs of Begho, or establish their geographical parameters, and third, he did not undertake any archaeological investigations (excavations and surface surveys) to facilitate the recovery of cultural materials (notable charcoal) or the use of stratigraphy to generate a chronological sequence for the site.

A number of written sources, mainly Arabic and European, make reference to Begho, Bicu, Bighu, or Insoco in several ways. For example, much of what is known about the textile, gold and kola nut trade, and wars fought in the region were sourced from these documents. The Tarikh es-Sudan, a manuscript written in the 1650s by Abderrahman al Sadi of Timbuktu noted that Begho supplied goods to Jenne and made it prosperous. The Tarikh said a pioneer of Islamic learners, Mohammed

Saghanughu lived at Begho before assuming the post of First Qadi of Jenne under the 16th century Songhai Emperor, Askia Mohammad (Wilks, 1962).

Also, both the manuscript *Wusul Bighu* and the manuscript *Isnad Sudan*, an Arabic record written by the Bondonkou's Karamoko Muslims, are based on Begho Khabar, or Oral Traditions. The *Isnad* and *Wusul* both discussed how Mande and Dyula immigrants contributed to the growth of the Begho Township and its people, and how, following a civil war, the people of Begho scattered to establish new towns at Bondunku, Kong, Bouna (Ivory Coast), Namasa, Menji, and New Nsoko.

According to two other manuscripts based on Gonja oral traditions titled the *Kitab Ghunja* and *Umur Adajdina al Ghunjawiyyin*, the Mali Emperor between the years 1550 and 1580, dispatched two Malinke Princes called Naba and Umar to conquer Begho in retaliation for failing to constantly maintain Mali's gold supply. Both manuscripts reported that Shenu Wangara was taken prisoner by the invaders, who also appointed Umar as the new governor of the Dyula settlement in Begho. A vibrant kola trade between Begho and Jenne was also attested to by the notable Arabic physician Said el Gafiki, before his passing in AD 1116 (Adu Boahen, 1977).

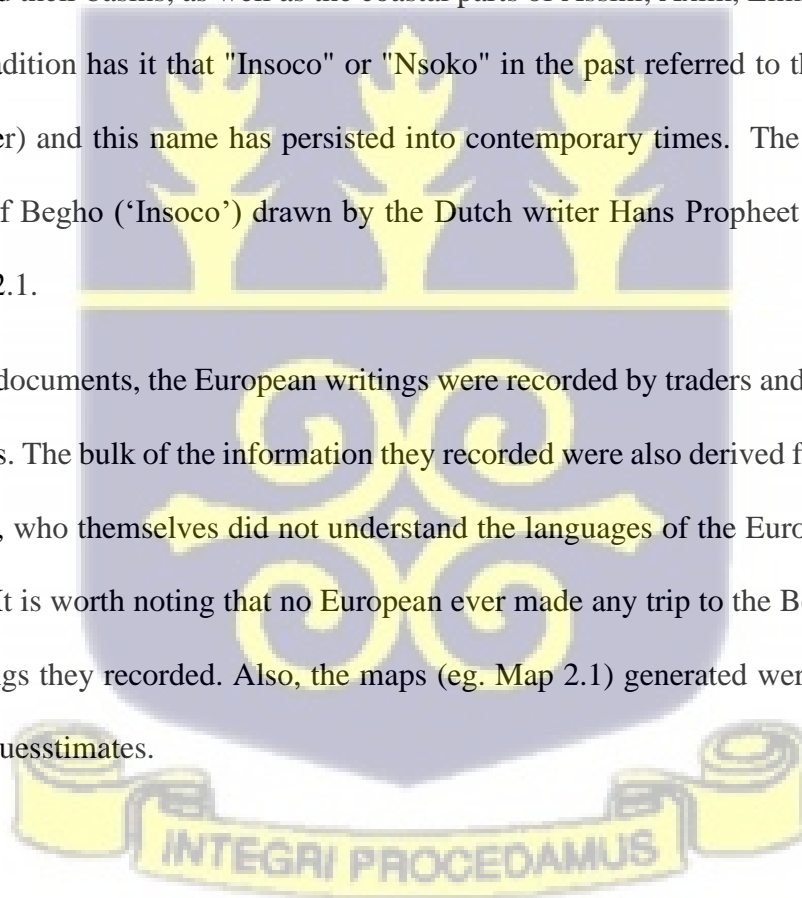
Kola nuts were initially brought to Hausa land during the 1421–1438 reign of Dauda, King of Kano, according to the *Kano Chronicles*, from Gonja, which is northeast of Begho. The same chronicle mentions the monarch of Nupe offering Zaria a tribute consisting of 10,000 kola nuts and 40 eunuchs. It appears that kola nuts were traded from the Begho region to the north as early as the 12th century (Kumah, 2021).

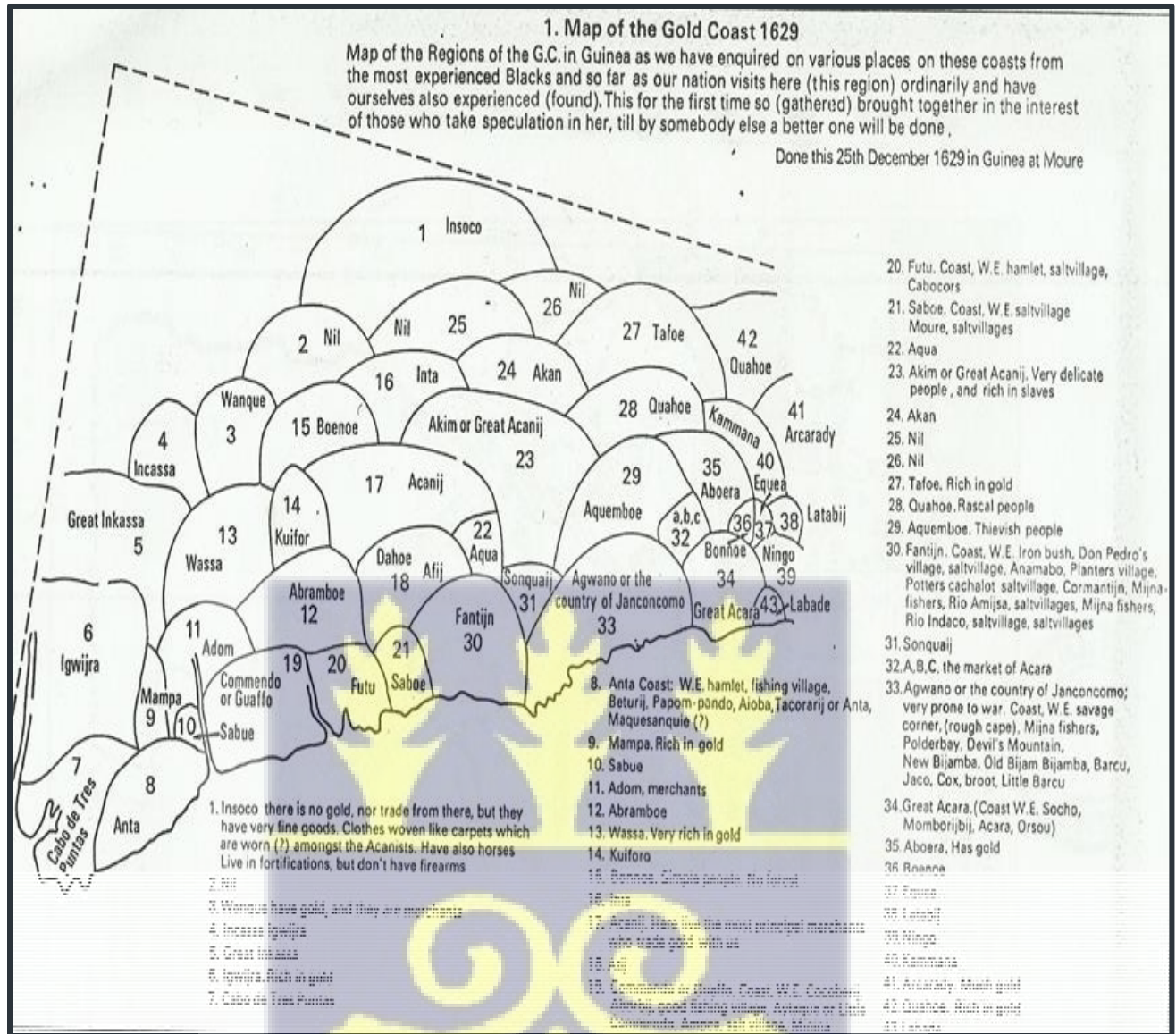
The main limitation of the Arabic sources are that much of the information documented were not first-hand but derived from second and sometimes, third parties. The writers thus, did not witness many of the incidents they recorded. Many were also untrained in historiography. Their writing

thus, were more of myths and legends than true historical events and happenings. These records notwithstanding, have proved very useful because the majority aptly described in a comprehensive manner the people, the commodities traded, their origins, and the nature of the various trade networks that linked ancient Begho to the northern Sahelian empires of Mali and Songhai.

The significance of Begho as an important urban center has also been highlighted by European sources. The European sources which included the Dutch Map of the Gold Coast in the 17th and 18th Centuries make reference to Begho as (Insoco) a major gold trade route prior to the 1720s. This trade route connected the Begho region with the gold fields of the Rivers Tano, Ankobra, Ofin, and Pra and their basins, as well as the coastal parts of Assini, Axim, Elmina, and Komenda (Kea, 1982). Tradition has it that "Insoco" or "Nsoko" in the past referred to the Kramo Quarter ((Muslim Quarter) and this name has persisted into contemporary times. The earliest European account (map) of Begho ('Insoco') drawn by the Dutch writer Hans Propheet in 1629 is shown below in figure 2.1.

Like the Arabic documents, the European writings were recorded by traders and explorers and not trained historians. The bulk of the information they recorded were also derived from native second and third parties, who themselves did not understand the languages of the Europeans with whom they interacted. It is worth noting that no European ever made any trip to the Begho hinterland to describe the things they recorded. Also, the maps (eg. Map 2.1) generated were all not drawn to scale and were guesstimates.





Map 2. 1 Early Dutch map of the Gold Coast showing Begho (indicated as Insoco (1)). (Source: Propheet, 1629)

Oliver Davies was the first archaeologist to conduct archaeological investigations at Begho. This was in the late 1950's. His work did not involve any excavations but it focused primarily on reconnaissance surveys. His objective was mainly to discover sites of archaeological significance for future investigations. He however, collected and documented several surface finds mainly

potsherds, faunal remains (bones and mollusc shells), iron slag, and metal objects at Begho (Davies 1970).

The main limitation of Oliver Davies work was that he did not undertake excavations which would have enabled him recover cultural materials below ground level to facilitate reconstruction of Begho's great past as well as establish a chronological sequence of the site. He also merely collected finds from the surface which he did not analyze.

Merrick Posnansky was the first to uncover the archaeological significance of Begho in 1970. The project titled "**The West African Trade Project**" Spanned 28 years (1970 – 1998) and involved eight separate missions to Begho. Seven of those missions were by faculty and staff of the University of Ghana's Department of Archaeology in 1970 (two trips), 1971 (two trips), 1972 (two trips), 1975 (two trips), and 1975–76 (one trip). The eighth mission was a joint one and involved teams from University of California, Los Angeles and University of Ghana's Department of Archaeology in 1979. The project's broad goal was to look into the origins and evolution of long-distance trade between the Middle Niger bend (Mali) and Ghana from an archaeological and ethno-historical standpoints.

Unlike Davis, Posnansky employed a multi-disciplinary approach to derive data. For example, aside his archaeological research, his seven missions also involved extensive ethno-archaeological studies and the collection of ethno-historical narratives/oral information from the people of Hani, Nsawkaw, and Debibi (Posnansky 1972, 1976, 2015) and (Anquandah 1975). He also conducted extensive ethnographic studies and perused historical data of Arabic and European origins.

Prior to the archaeological excavations, Posnansky undertook a series of surface surveys and identified between 1,000 and 1,500 low lying mounds within the occupation zone at ancient Begho, and 26 significant iron slag mounds, at about seven kilometers west of Begho. He intimated in his report which followed the surface surveys and excavations that the low lying mounds, the majority of which were L-shaped were collapsed/demolished house structures and middens. The slag mounds which he dated to the 1300's - 1650's, indicated the existence of a sizable and specialized iron smelting industry in the past at Begho (Posnansky 1977, 1980).

The major cultural materials recovered by Posnansky from his excavations at the six quarters comprised varieties of pottery (bowls and jars), worked and unworked ivory objects, glass beads (only from the Brong Quarter), varieties of metal artifacts (remains of knives, mattocks, cutlasses), clay crucibles, iron slag, fragments of tuyeres, animal and human remains (bones). Other material remains found included profuse quantities of palm kernel nuts, mollusc shells, fragments of daub and spindle whorls.

Perhaps, the most notable and eventful result of his work was that he was able to identify, delineate, and name the six major quarters/suburbs of ancient Begho. The suburbs comprised: the Brong Quarter (excavated in 1970, 1972 and 1975), the Kramo Quarter (excavated in 1971 and 1979), the Dwabirim Quarter (excavated in 1972), the Dwimfour (excavated in 1975), the Dapaa Quarter (excavated in 1971 and 1979), and the Nyarko Quarter (excavated in 1971 and 1979).

Evidence from his investigations established that Afua Nyarko founded the Nyarko Quarter which was the first suburb at Begho to be occupied. According to Posnansky, the Brong Quarter was the residential quarter for the chief of Begho and also home to the Akan royals, the dominant ethnic group at Begho (Posnansky, 1976). The Kramo Quarter was home to the Moslem Mande, most of

who were of Mali origin who came to trade at Begho. The Dwabirim Quarter (also called Gyetu Quarter) was the market center where much of the exchange and trade at Begho was conducted. The Dwimfour Quarter was settled by various artisanal groups, and the Dapaa Quarter was the iron smelting factory site of Begho (Posnansky 1972, 1976, 2015; Anquandah 1975).

Other notable outcomes of Posnansky's work was that it marked out the chronological parameters of the ancient Begho, between the 11th and 18th century AD. This was based on a number of radio-carbon dates which he obtained from dating several charcoal samples he recovered from the various suburbs at Begho. They included the following:

Nami (*Atwetwebooso* iron slag mound) - A.D. 1820 \pm 75.

Nyarko Quarter - A.D. 1045 \pm 80 and A.D. 1120 \pm 80.

Brong Quarter I - A.D. 1450 \pm 100 and A.D. 1565 \pm 100.

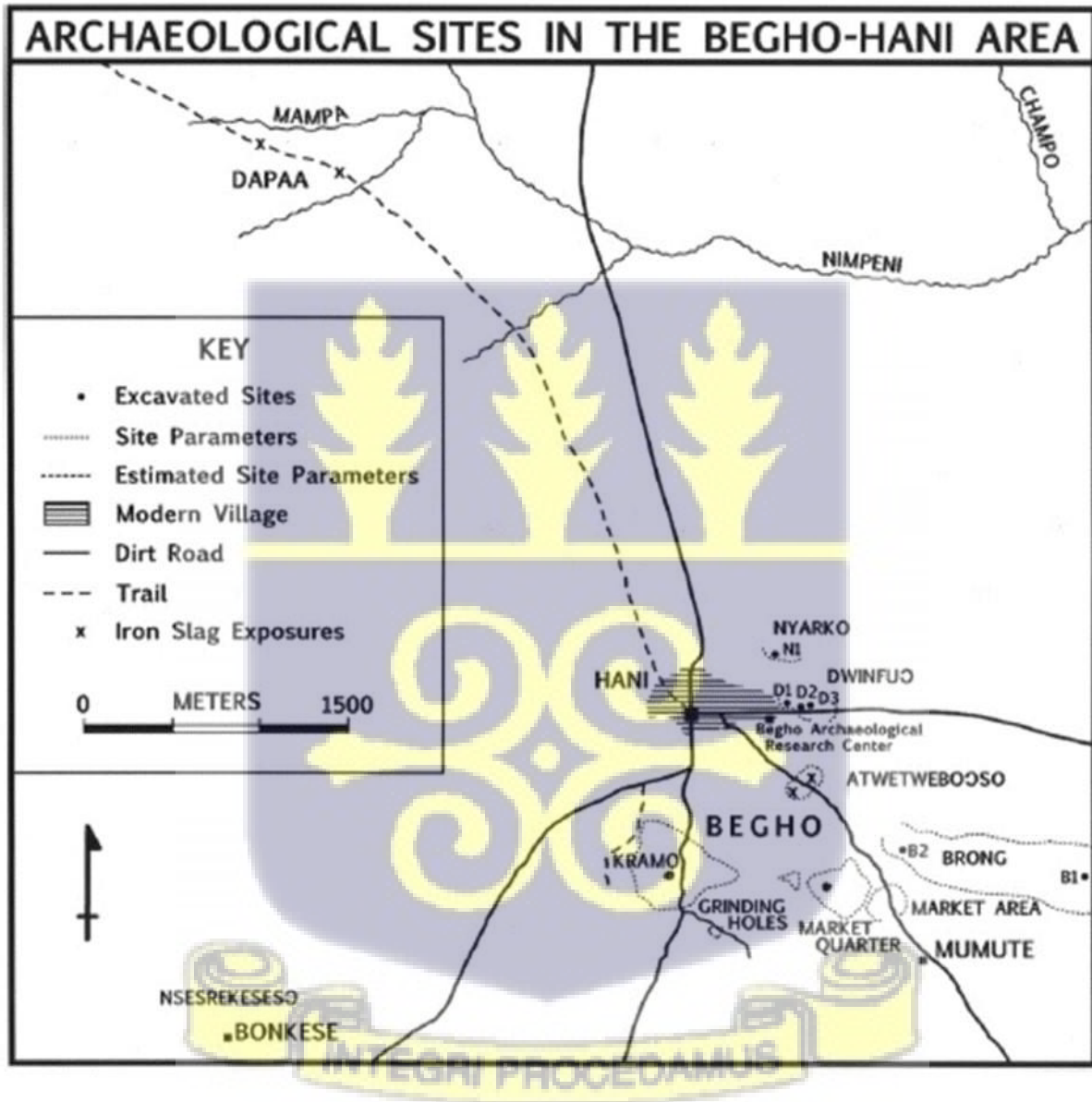
Brong Quarter II - A.D. 1450 \pm 100 and A.D. 1550 \pm 95.

Dwimfour Quarter - III A.D. 1520 \pm 75 and A.D. 1595 \pm 60 and

Dapaa Quarter slag mound I and II - A.D. 1400 \pm 100, A.D. 1480 \pm 65 and A.D. 1650 \pm 95.

The status differences of the occupants of the six dominant quarters of Begho was clearly gleaned from the recovered material inventory. The Brong Quarter for example, was occupied by a wealthy elitists' class, this was evidenced by the recovery from archaeological contexts of side-blown ivory trumpets, several ivory combs and bangles and other worked ivory objects connected to Akan royalty and political power (Posnansky, 1977). It is imperative to note also that relative to the other quarters, the quantum of bones of domesticated animals (notably goats, sheep and cattle) found at

the Brong Quarter far exceeded those from the others, and the element were also bigger in size. The Brong quarter was occupied by royalty appears to receive support from Hani oral traditional narratives which intimate that there existed several domestic slaves and a well-functioning clan structure at the Brong Quarter (Posnansky 1980).



Map 2. 2 Map showing the six quarters at ancient Begho (Source: Merrick Posnansky 1977, 1980)

Posnansky (1970, 1972, 1976 and 1979) and Insoll (2003) have noted that the Kramo Quarter was not only inhabited by Muslims but was also under Muslim rule. The archaeological evidence supports this notion that the settlement was occupied by Muslims. For example, two graves found there had the heads of the buried corpses fully extended and directionally oriented towards Mecca as is the Islamic tradition (Posnansky, 1987). In contrast, graves at the Brong and Dwinfour Quarters were bent and oriented inconsistently. The animal bones recovered from the Kramo Quarter significantly varied in terms of species types, from those recovered from the other quarters is yet another archaeological evidence supporting the notion that the quarter was settled by Muslims. Though plentiful as those from the other quarters, there was clear absence of rodents (Order: Rodentia) like Grasscutter (*Thryonomys swinderianus*) and Giant rat (*Cricetomys gambianus*) bones. The assemblage comprised only bones of bovids (Family: Bovidae) like cattle (*Bos* sp.), sheep and goats. Comparatively, the other quarters had all three bovid types heavily represented (Posnansky 1976).

Ethno-historical narratives of the indigenes of Hani posit that the Dwinfour Quarter was settled by craftsmen and artisans. Archaeological evidence in the form of furnace fragments, over 500 copper crucibles and fragments of daub believed to be the structural remains of what appeared to be iron smelting workshops were discovered (Posnansky 1980: 22). According to Anquandah (1981: 134), iron implements like knives, blades, arrowheads and rings may have been manufactured there and exported to neighbouring states. Other cultural materials discovered comprised several spindle whorls, worked ivory objects like combs and remains of a trumpet and some hallowed pits which Posnansky 1987: 10) and Agorsah (1973: 38) have postulated may have been utilized as dye pits

to colour cloth. Ethno-archaeological investigations by a team led by Schildkrout (1987: 51) revealed that the spindle whorls from the Dwinfour Quarter had very similar morphological dimensions and shape akin to those from Jenne Jenou. According to Posnansky (1987: 17-18) their abundance at the Dwinfour Quarter strongly suggests that they may have existed vibrant and innovative textile weaving, spinning and dyeing industries there during the period. It is worthy to note that early Dutch documents such as the map by (Propheet,1629) intimated that Begho was an important commercial hub in the interior center noted for its weaving and dyeing industries. Debibi which is close to Begho is a residential community where men still use looms with wooden frames to weave cloth while women spin cotton. According to Fante legends documented by Anquadah (1981: 140), salt and fish were transported from the shore to the Begho region in exchange for Begho cloth.

Begho may also have had a vibrant ivory carving industry evidenced with the recovery of remains of a side-blown trumpet (Posnansky, 1975, 1979a). According to Posnansky (1973), Schildkrout (1987) and York (1973), traditional architecture at Begho probably consisted of flat-roofed buildings, similar to those of the Middle Niger area. This is because several ceramic drain pipes were recovered from archaeological context. These pipes were used to drain rainwater from the flat roofs (Posnansky 1987). The technology may have been disseminated through socio-cultural interactions with peoples of the northern Sudanic Empires and the Begho area.

The archaeological excavations by Posnansky revealed several fragments of iron slag of no identifiable size or shape littering the Dapaa Quarter. Occasionally, a few scatter of iron slag mounds extending about a metre above ground surface were also found at the quarter. Other cultural materials discovered there and associated with iron smelting included 31 fragments of tuyeres, a fractured hammer stone with width measuring 15 centimeters and a few remains of

furnaces measuring averagely about 10 centimeters along their longest axis (Posnansky, 1975: 21-23). The recovery of small quantities of animal bones identified as belonging to horses, fragments of tobacco pipes, and a metal spurs according to Posnansky (1980) and Stahl (1999) point to interactions with the northern Islamic Sudanic Kingdoms. According to Posnansky (1980), tobacco was probably available at Begho after the 1590's

Posnansky followed the archaeological research with ethnographic investigations at Hani and Bonakyere. Bonakyere is located approximately 18 kilometers northwest of Hani and the purpose was to identify the major vocations and traditional life-ways of the people of ancient Begho. The study indicated that potting, farming, hunting, gold mining, iron smiting, textile weaving and dyeing constituted the primary subsistence strategies of the people of the two communities.

The Nyarko Quarter, located north of the Dwinfour Quarter was archaeologically investigated by Leonard Crossland in 1975. Like Posnansky, he conducted extensive surface surveys primarily to determine the geographical extent of the site, additional to excavations undertaken to the north and east, along a farm road that runs to the northeast. According to tradition, the village was established by a woman called Afua Nyarko and was an integral part of the ancient Begho settlement. Crossland's excavations revealed ubiquitous quantities of locally manufactured potsherds (mostly bowls), several unidentified metal objects, and bones belonging to a variety of animal species. A date of 1120 +/- 75 A.D. was acquired from charcoal samples taken from a thick black layer, while another date of 1045 +/- 80 A.D. was obtained from the top of the sterile layer (Crossland, 1975). After exploring the Nyarko Quarter, Crossland followed-up with smaller archaeological exploratory work at the Dwinfour Quarter. The site yielded cultural materials similar to those recovered from the Nyarko Quarter.

The main advantage of Crossland's investigations was that through the use of radiocarbon dates he was able to establish that the Nyarko Quarter was the oldest and first to be settled at ancient Begho. By using data from ceramic analysis, he also categorized the occupation period at Begho into two distinct phases/eras. He named these the Nyarko Phase and the Begho Phase. Pottery belonging to the Nyarko Phase on one hand had thick body fabrics measuring approximately 2 – 2.2 centimeters thick, and were largely unburnished. The Begho Phase pottery was found at all the other quarters. It was characterized on the other hand with thin body fabrics which measured approximately 1 – 2 centimeters thick. They also came in a variety of decorative embossments, mostly found below the neck area and extending lower onto the main body of the vessels. According to him, the Nyarko Phase had occurred earlier and was distinct from the other pottery types recovered from the other quarters.

Based on the close similarities between pots manufactured at Mo country and those from the Begho Quarter, Crossland postulated that the latter probably procured the bulk of their pottery from the Mo-speaking people of Bondakile, located about 20 kilometers north-west of Begho and who still have a thriving and vibrant local pottery manufacturing industry (Crossland (1975). This assertion has been supported by (Stahl 1994a), (Posnansky 1976, 1978). The main limitation of his work was that he focused primarily on classification and analysis of the pottery. The bulk of the other cultural materials recovered were not analyzed and have remained so to-date.

The Begho site lay fallow archaeological for over forty years after Crossland's investigations until 2016 when Mr. Daniel Kumah, an Assistant Lecturer at the Department of Archaeology and Heritage Studies initiated archaeological investigations there as part of his Doctoral research which was completed in 2020. His study spanned four seasons and his team included seven persons who

had in the early to mid-1970's worked with Merrick Posnansky and Mr. Leonard Crossland at Begho.

For his study, Kumah derived data/information from multiple sources aside the archaeological data which constituted the principal material data used. The other major data sources he perused included primary sources (early Arabic writers), early European sources, geographical information relating to the research area and ethnographic research. He also gathered oral accounts and oral histories from some prominent indigenes and resource persons at Hani and its neighbourhoods.

The main objectives of Kumah's study was three-fold. The first was to establish the geographical parameters of all the six quarters of Begho. The second was to document using a GPS the surface configurations of all notable geographical and archaeological features at the six quarters, and the third was to discover if any existed, new quarters/archaeological sites in the region which Posnansky's team may have overlooked.

The archaeological research involved several comprehensive surface surveys undertaken on foot across all the six suburbs earlier identified by Posnansky. It also included excavations and analysis of over 26,000 finds, of which 20,000 were potsherds. Other finds comprised bones belonging to a variety of animals (mainly mammals), carved ivory objects, mollusc shells, iron slag, furnace remains, tuyeres, bead polishers and crucibles believed to have been used to smelt bronze. Other finds included clay drain pipes, remains of metal objects such as arrow heads, nails, bangles, knives, cutlasses and mattocks, glass beads, spindle whorls, several locally manufactured smoking pipes and ceramic plates believed to have been used to weigh gold dust.

At the Nyarko Quarter, Kumah discovered all the Temporary Bench Marks earlier established by Posnansky and Crossland which enabled him to locate where previous excavations had been

undertaken. During his surface survey there, he also discovered 3 middens, 24 mounds, and several scatter of locally manufactured pottery at the North West end of Nyarko Quarter which the two earlier investigators missed. Aside discovering the above, he documented their GPS coordinates in his field notebook

Kumah confirmed from his investigations that the Dwinfour Quarter which Posnansky had earlier asserted in his reports was an artisan quarter was indeed so. He supported his assertion with veritable recoveries of iron objects like arrowheads, knives, iron slag, furnace and tuyere remains among others which was unprecedented and non-existent at the other quarters (Kumah 2022). Using a GPS, he also discovered and documented 18 new mounds, three iron-smelting sites, and a midden.

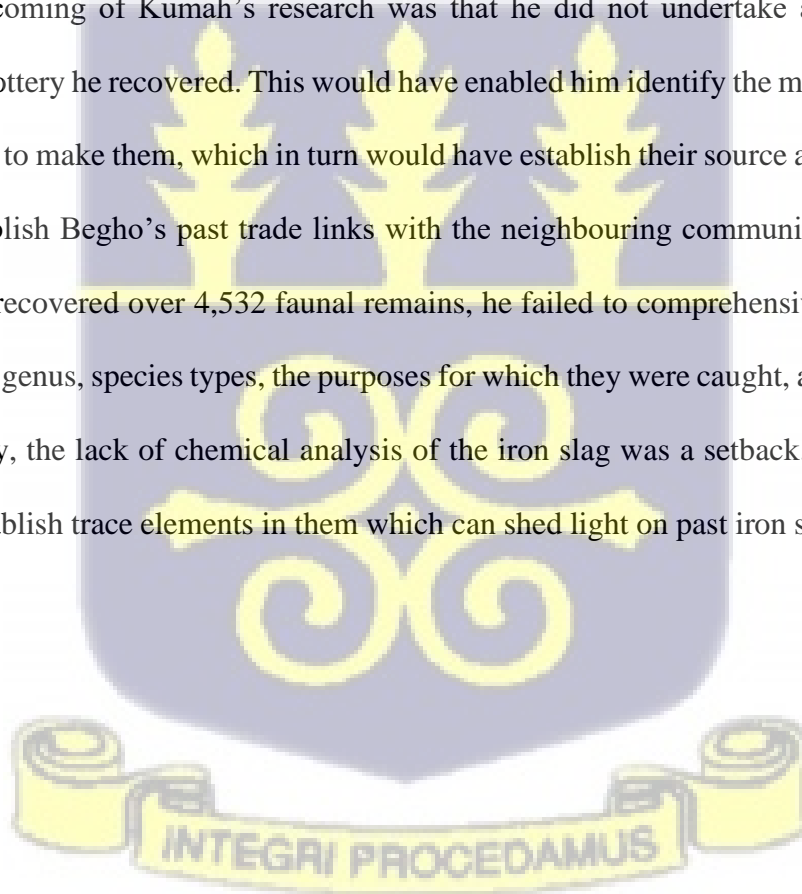
At The Brong and Kramo Quarters which were believed to have been settled by Akan royals and Muslims respectively (Posnansky 1973, 1975 and 1989), hundreds of acres of land and their overlying vegetation had been cleared and cultivated with cashew which had destroyed the archaeological significance of the sites. Kumah discovered and documented the GPS locations of several artifacts including imported and locally made ceramics, locally manufactured smoking pipes and clay pedestals believed to have been used to vertically support illuminants and other lighting systems during the surface survey. He also discovered features such as large compound house mounds. At the Brong Quarter, he opened a large Trench measuring 10 x 2 metres which yielded copious quantities of artifacts of which pottery constituted over 80% of the total. Other notable finds from the Brong Quarter comprised several tubular whitish drawn glass beads, a ceramic gold weight, bead polisher and drain pipes (Kumah 2022).

Kumah's study chalked several achievements. Some of the main ones include the following: he confirmed earlier oral traditional accounts gathered by Posnansky that the Nyarko Quarter was

created/first settled by a woman called Afua Nyarko, hence the name Nyarko. Interestingly, this assertion that it is the earliest quarter to have been settled is supported archaeologically because the dates generated from charcoal samples retrieved from that quarter are the oldest, namely 855+/- 80 B.P., 830+/- 75 B.P., and 905+/- 8- B.P (Kumah, 2022).

Another notable achievement was that he discovered two new quarters which he named Donkotire and Nkokramu Quarters. In the Twi language, Donkotire literally means “slaves assembling point” while the latter literally translates “the place of the elderly.” The former site was believed to have served as a slave market center.

The main shortcoming of Kumah’s research was that he did not undertake any mineralogical analysis of the pottery he recovered. This would have enabled him identify the mineral constituents of the clays used to make them, which in turn would have established their source areas, and possibly reconstruct/establish Begho’s past trade links with the neighbouring communities. Additionally, even though he recovered over 4,532 faunal remains, he failed to comprehensively analyze them to establish their genus, species types, the purposes for which they were caught, and how they were caught. Similarly, the lack of chemical analysis of the iron slag was a setback. This would have enabled him establish trace elements in them which can shed light on past iron smelting processes of the people.



Chapter Three

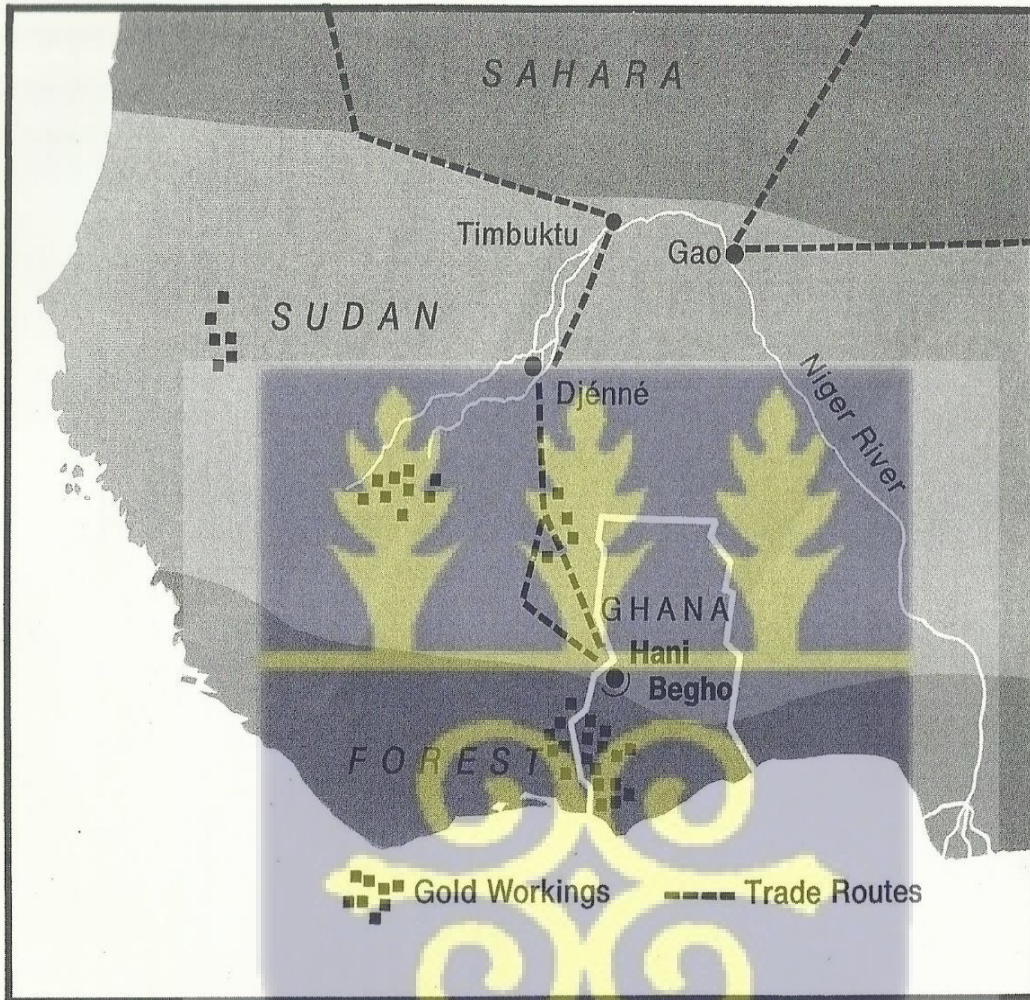
A Brief Historical Background of the People and Geographical Setting of the Study Area

3.0 Introduction

This chapter is divided into two parts. The first part discussed the historical background of Begho and its environs. Early trade and exchanges, early relations with neighbouring polities and some conflicts that occurred between the indigenes and neighbouring states are some sub topics discussed. Data for this aspect of the study was derived from written sources documented by early European traders/explorers on the Gold Coast and Arabic scholars/traders. Some of the former writers visited ancient Begho and interacted with the indigenous population there. The second outlined the geographical setting of the study area. The climate, vegetation, relief and drainage and geology, demographic structure and population, linguistics of ancient Begho are some topics comprehensively discussed under this section.

Begho in ancient times was referred to in Islamic literature and by Arabic scholars and traders as '*Bicu*' and '*Begho*' (Tarikh es-Sudan 1650, Abderrahman al Sadi 1720, Naba and Omar 1580). The Akans however referred to Begho as '*Bew*' and '*Nsoko*' (Konadu, 2010). A 1629 Dutch map of the Gold Coast also referred to Begho variously as '*Nsoko*' and '*Insoco*' (Propheet, 1629). All of the above-named writers intimated that Begho was an ancient trading town located south of the Black Volta River, along the transitional zone between the forest and savanna of the north-western part of the Bono Region. Merrick Posnansky (2005) noted that it was probably the largest town and market center in the interior of present-day Ghana around the time of the Portuguese arrival on the Gold Coast in 1471. It lay along a major trade route running from the middle Niger River bend to

Akan-land (Posnansky 2005). The main trade routes in the region with connections to Begho were the north-south Djene – Bolo – Doulasso – Kong route, and the east-west Bondoku - Begho route. According to Anquandah (1995), Begho may have existed between the 11th and 15th centuries A.D.



Map 3. 1 Map showing trade links between Begho and Djenne during the era of the Trans-Saharan Trade (Source: McIntosh 1976)

Ethno-historical narratives gathered from some indigenous resource persons and clan heads at Hani, the current descendants of the people of Begho assert that sometime in the early sixteenth century, a civil war broke out between residents of the Brong and Kramo Quarters, and that this

led to the weakening and final collapse of Begho. According to these narratives, several homes located within the two quarters were raided, burnt and destroyed by the protagonists, leaving both settlements in ruins (Kumah, 2021). Consequently, members of the two communities fled to the surrounding towns and villages. For example, many of the Muslim residents of the Kramo Quarter fled and resettled at Bonduku and Kong, located in Ivory Coast, while the local Brong refugees dispersed to notable nearby Akan settlements like Nsawkaw and Debibi (Anquandah, 1981).

There are currently two schools of thought regarding the cause of the civil war. The first reason was that a royal from the ruling Brong Quarter whose name and rank was not divulged to me was reported to have gone to the Begho market to purchase salt. Other narratives posit that it was a piece of cloth. The trader selling the commodity, a Muslim from the Kramo Quarter however, refused to sell the product to him. Infuriated and feeling belittled by the attitude of the trader, the angry royal assisted by other royals and the Akan people from the Brong Quarter attacked the trader and destroyed his salt/cloth. News of the occurrence reached other Muslim residents at the Kramo Quarter who are reported to have rallied and came to the aid of the trader. The subsequent infraction led to a conflagration and civil war. The second account intimates that the Brong rulers of Begho were politically autocratic and tyrannical in their dealings with residents of the other quarters. They are reported to have been generally unresponsive, especially to complaints from residents of the Kramo Quarter, a situation which strained relations between the two groups. The general discontent is reported to have been the underlying factor which started the civil war and the subsequent destruction of Begho.

According to these narratives, trading activities later resumed at Begho a few years after the civil war. Its strategic geographical location; nearness to agricultural and mineral resources from the forested south, such as kola nuts and gold, according to Anquandah (1981), was primarily

responsible for this development. Kumah, (2021) has also postulated that their desire to return to their ancestral home could have been another contributing factor.

Prior to commencement of the first archaeological investigations at Begho in the 1970's, scholars were undecided as to its real geographical location. Various sites were initially proffered by researchers and this was primarily because the town's name had changed from Begho to Hani (Lamprey, 2019). Until its discovery by Posnansky within the modern township of Hani, it was the view of some scholars at that time that Begho was situated at Bondoukou in Ivory Coast (Bravemann and Mathewson 1970). Yet others like Wilks (1993) and Anquandah (1981) using historical sources, oral traditions, and cultural anthropological data held that it was located northeast of the present-day Namasa settlement.

Hani lies approximately 6 kilometers south of Namasa, and 51 kilometers north of Wenchi. The current settlers posit in their oral traditions that they migrated from a large hole called *Bonkeseso* (literally meaning a large hole) at *Amanfokeseeso* which is located 4.8 kilometers from Hani (Ameyaw, 1965) and (Posnansky, 1970). During its heyday, ancient Begho was the capital of the Old Banda Kingdom and was a fierce competitor in the gold and kola nut trade with Bono-Manso, the Capital of the Bono Kingdom (Stahl 2016: 51). At its zenith, Begho and its neighborhoods experienced an economic boom, primarily because of its vibrant commercial relations with the northern Sudanic Empires of Mali and Songhai, and the heavily forested Akan polities lying south of it. The main commodities produced and traded by the people of Begho during the period comprised gold, ivory, slaves, pottery and kola nuts which were all sourced from the south. The above-named commodities were exchanged for finished metal products, Islamic books, brassware, blankets, glass beads, horses, textiles, cattle, and leather products from the north (Anquandah 1982, 1995, Posnansky 2005, 2015, Kumah 2021). Stahl (2016) noted that this all important exchange network did not only facilitate and

establish Begho as one of the most important metropolitan trading/market center in Sahel/savanna region but also facilitated and propelled the economic growth and development of nearby polities like Old Banda, Ahwene Koko and Techiman. She intimated that these towns flourished to also become important but ancillary trading centers primarily because they lay along the north-south trade route. Camels and donkeys were the main beasts of burdens used to transport commodities along the trade routes. The traders mostly travelled in caravans, purposely for security reasons while exchange was undertaken using cowries which served as the main medium of exchanging. Occasionally however, goods were bartered (Stahl 2016).

According to Posnansky (2015: 98), ancient Begho was also central in facilitating the development of trade relations/networks with various Mo settlements such as Bondakyire, Brawhani, and Debibi which were located west of it. Pottery, finished iron products, and hand-crafted narrow-stripped indigo-coloured fabrics from the Mo villages were among the notable commodities derived via exchange with the neighbouring Mo states. Numerous spindle whorls, many of which were painted, and which closely resemble spindle whorls from the significant trade town of Jenne Jenne located along the Niger River attests to textile manufacture in ancient times (Posnansky, 1987:17-18).

Posnansky using archaeological, ethno-historical and historical data identified the five major quarters that constituted Begho. They comprised the Nyarko Quarter, founded by Afua Nyarko which was the earliest to be settled in ancient Begho. The others were the Kramo, Brong, Dwinfuor, Dwabrim and Dapaa Quarters. Using the above-named data sources, he was also able to pin-point the integrating roles the various quarters played in the development and growth of ancient Begho. The ruling Akan class for example, occupied the Brong Quarter and the Kramo Quarter was settled primarily by Mande Moslem traders, mostly of Mali origin. The Dwabirim

Quarter (also called Gyetu) was the market center where much of the business undertaken at Begho was conducted while the Dwimfour Quarter was settled by artisans. The Dapaa Quarter was the iron smelting factory site of Begho and is presently littered with vast heaps of slag, some extending beyond three metres in height.

Ethnographic investigations by Posnansky at Hani and Bonakyere, located approximately 18 kilometers northwest of Hani, specifically to identify some major traditional life-ways of the people of ancient Begho, established that potting was a notable commercial enterprise of the past settlers. The industry is still vibrant at the present-day community where the skills associated with the industry have passed down from mother to daughter over several generations. It is noteworthy that their pottery have been recovered from archaeological contexts at distant sites like Bondoukou (Anquandah 1981). Other notable past subsistence strategies of the people of Begho were farming, hunting, blacksmithing, gold mining, iron working and smiting, textile weaving, and dyeing (Kumah 2021).

3.1 Occupation of the people of Hani

The current population of Hani are principally farmers. Crops such as yam (*Dioscorea alata*), sorghum (*Sorghum bicolor*), millet (*Pennisetum glaucum*), dry rice (*Oryza glabberima*), and oil palm (*Elaeis guineensis*) are the main crops cultivated. A significant number are also into commercial cashew (*Anacardium occidentale*) production and animal husbandry, purposely to supplement their incomes. Sheep (*Ovis aries*) and chickens (*Gallus gallus*) are reared on the sidelines by most families at Hani, primarily for food. During hard times however, some of these animals are exchanged for money and for ritual/sacrificial purposes. It is a taboo to rear goats in the community because the town's deity forbids it. Goats brought in by residents die mysteriously and residents who flout this law are required to make sacrificial offerings to appease the deity.

Other less notable vocations undertaken by the current population of Hani are hunting using metal entrapments, mat weaving/basketry using the bark of the *kyenkyen* tree (*Antiaris toxicaria*), the collection/gathering of wild herbs and roots for food/medicinal purposes, and petty trading constitute other vocations of the people. Grasscutter (*Thryonomys swinderianus*), Hares (*Lepus*), and Giant rat (*Cricetomys gambianus*) are among the commonest animals hunted by the people (Posnansky, 1984b, 2004: .38 - 40).

The leaves of the Acheampong plant (*Chromolaena odorata*) is the most important herb in the research area. A mixture of its freshly grounded leaves for example, is applied to fresh wounds to stop bleeding. According to some notable resource persons in the community (pers. comm. Darko Anderson, Victor Gyamfi, Boamah Koomson, June 2022), prior to the introduction of modern mortuaries, the leaves of the Acheampong plant were also used for preservation of human corpses. Families who did not have the financial means to pay for a spot at a morgue for their departed ones continue to use it in the community (Lampsey, 2019).

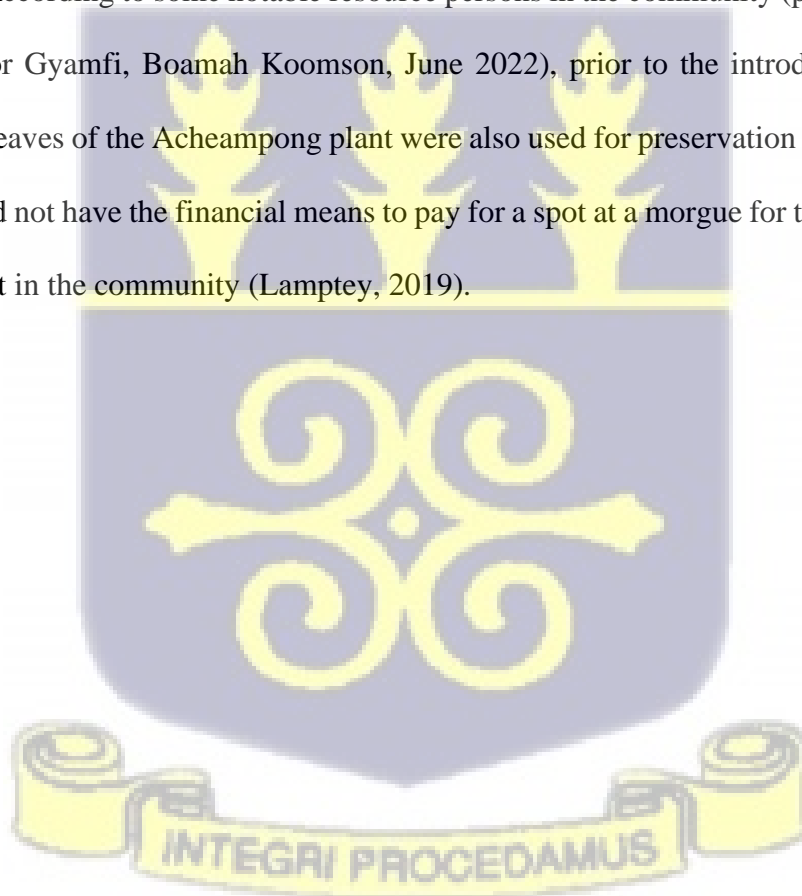




Figure 3. 1 “Acheampong” (*Chromolaena odorata*) leaves. (Picture source: Google)

3.2. Language

The people of the research area speak the Bono language. Their forebears at Begho existed at the frontier of many linguistic groups, including the Akan Brong, the Voltaic peoples to the north, Hausa-land to the north-east, and the Mande-speaking peoples to the west (Posnansky 2015). The letter ‘b’ or the phrase ‘bɛ’ appears at the beginning of most words in this language. This diversity of languages reflects the area’s historical importance as a meeting site for many people. The majority of the people in the community can read and write both the Bono dialect, and English.

Studies undertaken in the 1970s by the linguist Mary Kropp Dakabu, revealed that Old Begho was a cosmopolitan commercial entrepot that attracted individuals of many languages, faiths, cultures, and economic practices. Kumah (2021: 23) who recently conducted archaeological investigations at Hani confirmed this assertion when he stated that “the economic attractiveness of trading goods like gold, ivory, and kola nuts boosted commercial activity in the Begho region. According to Stahl

(2016), this exchange not only aided in the establishment of Begho as a major commercial center, but also aided in the establishment of other trade towns in Ghana's Brong Region, such as Old Banda and Ahwene Koko, Techiman, and Bono-Manso all of which are located in the Bono-East Region.

3.3 Religion and Festivals

There are three main religious groupings at Hani. They are Christianity which is the predominant sect, followed by Islam and Traditional African religion. The Catholics, Presbyterians, and Methodists constitute the main Christian denominations there.

The people of the research area celebrate the *Apoo* and *Kwafie* festivals. The two festivals are generally purposed to honour their ancestors and to seek spiritual purification and blessings from them. The cycle of the two festivals are linked to their history and structure of the society and each clan at Hani have specific roles and function to play.

The *Apoo* festival is an annual festival of the Bono People. The word '*apoo*' is derived from the Bono word '*po*,' which means "to reject". It lasts a week and begins in March or April every year. Several rituals and cleansing rites, all undertaken in secret by the elders are practiced during the first two or three days of the festival to primarily ward off evil, and ritually cleanse and protect the people. The festival also serves as a uniting "force" as it brings indigenes from all walks of life and vocations together during the celebrations.

Prior to the start of the "*Apoo*" festival of the people of Hani, the entire populace, especially the women clean their house surroundings, utensils, and link roads in preparation for the festival. The belief is that it prevents/dissipates evil from coming to their homes and the town. Another important preliminary tradition observed during the initial phase of the festival is '*Hyereko*' which

literally means 'the collection of white clay'. White clay is collected by women from the nearby Aponkosu River and is used to decorate the local shrines before the festival begins. The various priests and priestesses also use some of the clay to decorate their bodies

The *Apo* festival starts with a procession led by the Paramount Chief of Hani, the town's elders, secondary chiefs, and palace/court officials. All priests in the town also participate in this procession march through all the principal streets in the town to spiritually eliminate malevolent spirit beings and spells advanced by demonic spirits on the people. The procession team then converge at the grave of the last *Bonohene* (traditional leader of the Bono people). The priests sacrifice a sheep and pour libation while the rest of the procession team stay a distance away and wait. Traditionally, the ordinary town-folks are not allowed or made privy to the rites performed. Thereafter, the '*Banmuhene*', custodian of the Royal Graveyard, prepares a dish of oiled, mashed yam, called '*eto*'; which is then offered to the ancestral spirits. Thereafter, the secondary chiefs also pour libations on the Black Stool and place "*eto*" on the grave while the *Banmuhene* asks the ancestral spirits for prosperity and peace.

The *Kwafie* festival is also celebrated annually to commemorate the introduction of fire to the area by their ancestors. The festival spans three days and is generally observed in November, December or January, after consultations between the traditional priests and the principal deities of the area. The celebration begins with a torchlight parade in the evening, beginning from the chief's palace to particular homes where the town's sacred stools are kept. After prayer offerings and the pouring of libations to the ancestors, the procession returns to the palace.

The next morning, the indigenous town folks assemble at the chief's palace to deposit firewood which they had collected the day before. The chief assisted by the town's elders/family heads presides over the meeting and the highest-ranking official among them selects three logs out of the

lot to light a fire which is central to the commencement of the rituals associated with the festival. After the rituals, the fire is used to prepare the ritual meal which was not divulged to me.

An even bigger procession follows later in the day and it involves the carrying of the ancestral stools to a nearby river for ritual cleaning. The stool cleansing also involves the observation of several other secret religious rituals which were also not divulged to me because I am not an indigene of the area. The celebration ends on the third day with displays of exuberant dancing, singing and feasting around the environs of the palace grounds. During the period of the festival, each clan at Hani have specific roles and function to play which are linked to their history and structure of the society.

3.4 The Geographical Setting of the Research Area

3.4.1 Climate

The average annual temperature of the research area is 26.5 °C. The average maximum is 32.9 °C and the minimum is 23.2 °C. The warmest months are February through to April. The seasonality of the rainfall in the area is a limiting factor for agriculture. There are two primary seasons in the district: the wet (rainy) season, and the dry season. The former lasts from mid-April to late October, with a brief respite in August. The average annual rainfall is between 1,140 and 1,270 millimeters annually (Ghana Statistical Service 2012), and spans four months every year in the research area.

3.4.2 Vegetation

Two primary vegetation zones can be found in the Bono Region. These are the moist Semi-Deciduous Forests and the Guinea Savannah woodlands (Dickson & Benneh, 1970). These vegetation zones are home to major tree species such as Odum (*Milicia excelsa*), Sapele

(*Entandrophragma cylindricum*), Wawa (*Triplochiton scleroxylon*) and Mahogany (*Swietenia mahagoni*). The Guinea Savannah and the Semi-deciduous Forest vegetation zones are ideal for cultivation of crops and animal husbandry. Cash crops such as cashew, maize, cassava, plantain, cocoyam, tomatoes, and a variety of other crops are also cultivated annually. Several trees that survive annual bush burning are commonly found there, and are interspersed with continuous grass covers of varying heights, some of which grow to heights of three metres in moist places.

Human actions in the form of controlled brush fires, deliberately set annually, have undoubtedly and directly impacted on the natural vegetative cover of the research area which have also been extensively farmed over the last century. Controlled burning decreases the possibility of uncontrolled brush fires, makes hunting easier, and encourages the growth of new savanna grasses, which is advantageous to grazing wildlife.

3.4.3 Relief and Drainage

This terrain in the study area is relatively flat and generally below 152 metres above sea level. A few hills, with modest slopes of less than 1% inclination, and composed of high resistance metamorphosed greenstone from the upper Birrimian Rock Series can be found there. The hill rise to a little over 140 metres above sea level (Ghana Statistical Service 2010). There are two major rivers that flow through the research area. They are the Nimpene and Masa Musu Rivers. They are joined by several small streams, especially in the wet season and are utilized for both domestic and irrigation purposes throughout the year. The indigenes of the area also exploit its aquatic resources, primarily mudfish (*Clarias anguillaris*), tilapia (*Oreochromis niloticus*) and a variety of crustaceans can also be found in them. During the wet season, the two rivers overflow their banks but reduce significantly in volume during the dry season.

3.4.4. Geology

Geologically, the research area is underlain with the Birimian Rock Series of West Africa which is known to hold abundant mineral resources, the most notable being gold. Another commercially viable resource in the area is iron (Kesse, 1985). This important geological zone in the Bono Region runs in a north-south direction and directly influences the three major economic activities undertaken in the region which are agriculture, gold mining and potting. The forest and savannah ochrosols are composed principally of quartzite, granite, and gneiss. These soils have a reddish-brown colour because of the many coarse particles and ironstone concretions they contain. The most significant soils in Ghana, from an agricultural standpoint, are ochrosols because they are less leached, better drained, productive, and have excellent drainage qualities (Salifu and Meyer, 1998: 92).

3.4.5. Demographic Structure/Population of Hani

Determining the current population of a community like Hani/Begho can be challenging and deceptive at times since there was often little distinction between houses/rooms/spaces intended for sleeping and those used for cooking (Lamprey, 2019). Oftentimes, the indigenes build on top of collapsed houses and utilize the old bases as foundations for the new houses. Rectangular buildings made with sun-dried mud bricks, plastered with mortar and roofed with aluminum roofing sheets define the Hani town today.

Despite the fact that the town's layout has altered significantly over time, there has also been a remarkable amount of consistency. For example, soils utilized for house construction are still taken from dug-out pits which are often located very close to the house. After the soil has been puddled and used for the walls, the pits are used as garbage dumps. The new mud walls are constructed using whatever is on the ground, including broken ceramic and wood fragments as well as daub

remnants of old walls of collapsed houses. The structure housing the kitchen walls are made with palm fronds overlain with thatch supported with wood planks and logs.

The current population of Hani is 2,800 to 3,000 people (Kumah, 2021). According to the Ghana Statistical Service 2010 population and housing census, the population was 1,853, comprising 925 men and 928 women. It comprised 408 households and 305 houses. Hani accounted for around 2.7 percent of the district's overall population of roughly 68,010. The annual growth rate also registered approximately 3%, which is close to the national average. The majority of family size are big, with 64% having three to eight surviving children (Posnansky, 2010).



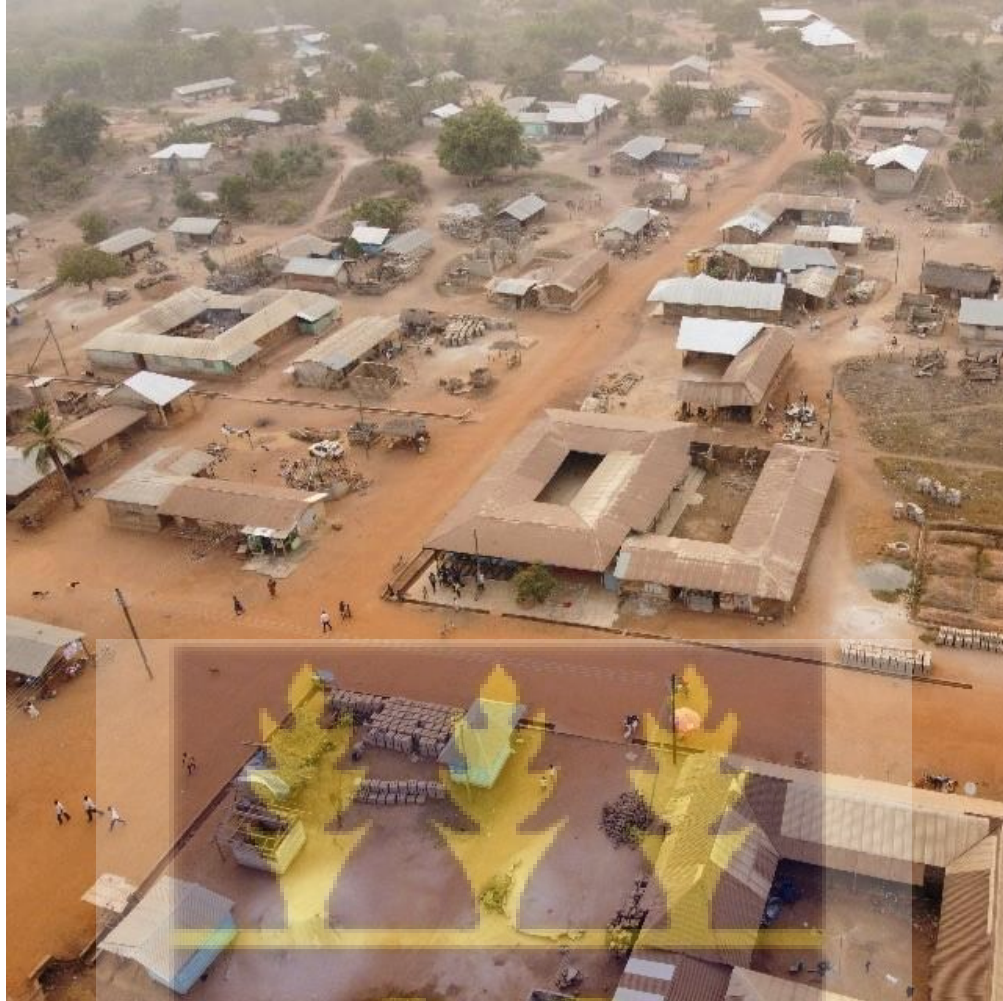


Figure 3. 2 Aerial view of Hani (Photo: Author)



Chapter Four

The Ethnographic Investigation at Hani

4.0. Introduction

This chapter presents results of an ethnographic study of the three subsistence vocations undertaken by the people of Hani: namely, their hunting, trapping and animal husbandry strategies. It became necessary to undertake this research because the main focus of the thesis was the zoo archaeological study of animal remains, mainly bones from the Nyarko Quarter. Identifying and documenting the various hunting strategies and tool kits used by the people, as well as the animals reared was thus, integral and central to answering some of the research questions and objectives stated in Chapter One. It also provided an opportunity to interrogate whether the oral narratives derived from the people of the area corroborate the archaeology data which can provide a basis for further inquiry into the historical past of the settlers of the research area.

Ethnography can be defined as the scientific study of aspects of the culture of contemporary societies. A one-page questionnaire incorporating nine questions was devised by the author to guide the ethnographic study (Appendix A). All the questions focused on the present and past hunting, trapping and animal husbandry practices and traditions associated with these vocations. The main purpose of the ethnographic study was to facilitate a comparative study of contemporary hunting/trapping tools with those that were recovered from the archaeological record. It was also to compare fracture marks on bones of freshly trapped animals with those recovered from archaeological contexts.

The study also involved the interviewing of a total of twenty-three (23) respondents aged between 20 and 70 years (Figure 4.1). All were males and professional hunters and animal trappers (Table 4.1). A total of ten persons were still practicing the trade while eight of them had retired. Some of

the hunters and trapper were also elders and family heads of some clans at Hani with knowledge about the hunting techniques and animal husbandry. All the respondents resided at Hani and the interviews were conducted at Hani from March – April, August, and December, 2021, and in June, 2022.

Interviews, direct observation and the use of photography were the primary methods used to derive information. Non-Probabilistic sampling technique was used to select the respondents. The study used the snowballing technique which is an element of non-probabilistic sampling technique where each participant was selected based on referrals. The snowball sample technique is entirely reliant on referrals which is how a researcher generates a sample.

Subsistence Strategy Type		Total Count of Respondents
1	Active hunters	10
2	Retired hunters	5
3	Animal Trappers	8
Total		23

Table 4. 1Table showing the number of active and retired hunters interviewed

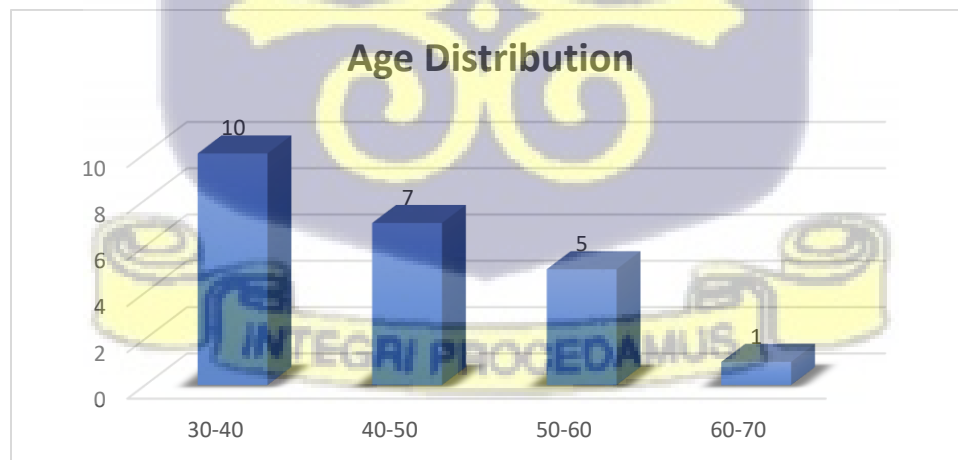


Figure 4. 1. Graphical representation showing the age distribution of respondents

The study revealed that, four main hunting techniques used by hunters at Hani to capture game. It also came to light that animals were hunted/trapped mainly for food. This was achieved by setting traps or by hunting using guns. The two most preferred animals hunted with guns included duikers (Cephalophinae) and antelopes (*Hippotragus equinus*). Small rodents like Giant rats (*Cricetomys gambianus*) and squirrels (Rodentia: Sciuridae) are mostly hunted using traps which are set on their farms. The main media used to make traps in the study area are wood and metal which are fabricated into cages with a spring-loaded door that is fastened to a bowl or plate containing food mostly nuts. The door of the cage slams shut as soon as the rodent enters the cage and presses against the bowl or plate, activating the spring and capturing it.

The second technique utilized to trap animals is the pitfall technique. It involves digging a hole in the ground, which usually ranges between 1.524 metres (5ft) to 3.04 metres (10ft) deep and about 1.2 metres (3.93ft) wide. Wooden spikes sharpened and pointed at one end are then affixed vertically inside the hole. The hole is then concealed with a cover of broad plantain leaves.

Hunters utilizing this method visit the trap every day to check if an animal had fallen into the hole and been trapped. Occasionally, animals seen in the neighbourhood are also chased towards the direction of the hole. The spikes penetrate/impale it, oftentimes killing it instantly.

The third technique involved the use of snare traps made with thin metal wires, cords and sticks. The snare traps are designed to catch the leg or neck of an animal and to suspend the trapped animal mid-air (Figure 4.2). The trap usually constricts the animal as it tries unsuccessfully to escape and they normally die from internal organ damage, suffocation or strangulation.



Figure 4. 2 Photo of a snare trap (Photo: Author)

Hunting of animals using guns is a common practice among the Hani people and usually involves several hunters (Figure 4.3). Traditionally called “*Kyeno Kyeno*” by the locals, group hunting is normally planned many days ahead of the execution date. Two groups make up the hunting expedition and each is tasked to undertake specific duties on the day. The duty of the first group which usually comprise very young but inexperienced hunters is specifically to frighten and chase the targeted animal in a particular direction. The other group composed of older and very experienced hunters lay in wait and shoot the animal when it appears in their view.



Figure 4. 3 A long Wendel-Holub Rifle, one of several gun types used in hunting at Hani (Photo: Author)

Aside hunting in groups, some hunters also hunt alone using a method called Still-hunting. It is a common technique used to kill big game like deer, duikers and antelopes. It involves silently sneaking into an animal's natural habitat and lying in wait for it to appear. The technique requires considerable experience and patience. A deep knowledge and expertise in animal tracking using their spoor (footprints, droppings and mating signs) are central to achieving a successful kill when using the still-kill technique.

The fourth technique ('call technique') is also commonly used during hunting expeditions at Hani. The term 'call technique' was coined by this researcher, because the local hunters did not have a

name for it. The techniques involve mimicking and replicating the sounds the targeted animal makes. According to the respondents, the technique was very effective, especially during the mating season. The common animals caught using this technique include duiker and antelope.

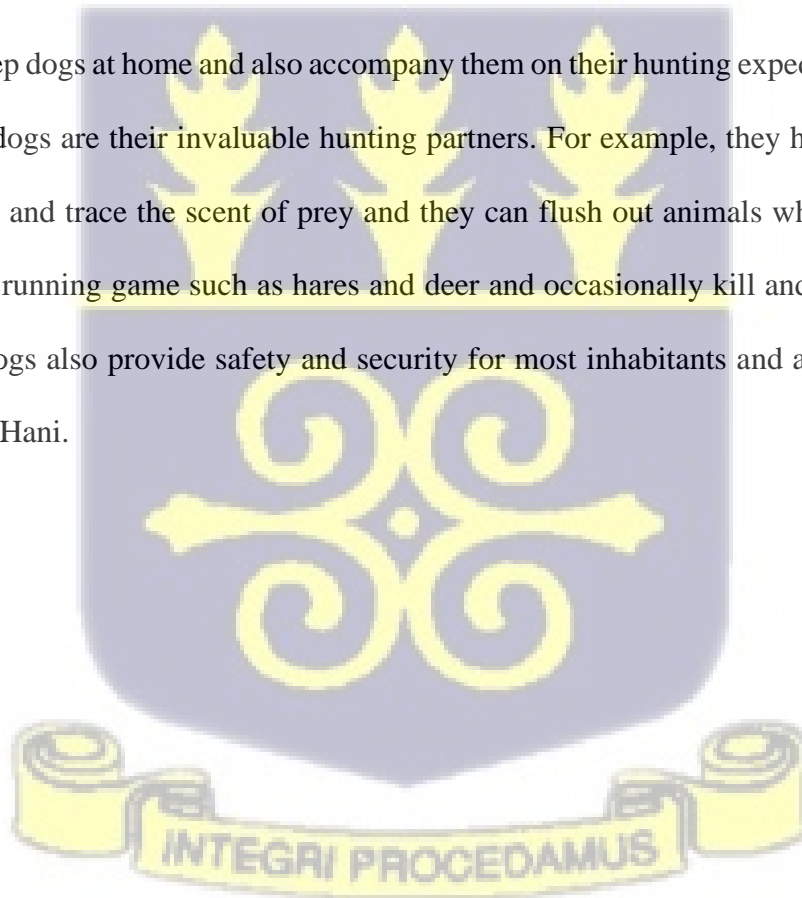
Snails, which are a delicacy in the research area, are commonly collected during the Wet Season when they become abundant. During this period, the people make a concerted effort to walk the forested neighbourhoods of Hani, purposely to collect them. The snail flesh is extracted from the shell, dried or smoked to enable their long storage. The excess not consumed by the hunter and his family are traded at nearby market centers.

Most hunting and trapping skills are passed down from generation to generation, oftentimes via apprenticeship under an experienced professional hunter with family ties or with clan affiliation. The training period is not specified and depends largely on the apprentice's diligence, tact, skills and how quickly he learns on the job. All 23 respondents intimated that hunting and trapping is a male dominated profession and no female had to-date volunteered to learn the vocation. Unlike the past when most hunting/trapping expeditions were successful, ending with a kill, the situation is different presently and attributed it to environmental degradation and climate change. Most the tool kits including the traps and some guns used by hunters in the community are locally made, and sourced from a practicing blacksmith.

Animal husbandry is currently an important subsistence vocation of the people. Sheep (*Ovis aries*), chicken (*Gallus gallus domesticus*), pigs (*Sus scrofa domesticus*) and guinea fowl (*Numida sp.*) constitute the main species presently reared by the people. A few families resort to ranching sheep and pigs but a significant number also allow their animals to roam and graze freely to fend for themselves.

Aside serving as a source of food, sheep are also sacrificed to appease the “gods”. They are also offered during rituals in the community and during the annual *Apoo* and *Kwafie* festivals. Sheep are occasionally sold for money or exchanged for other commodities. It is a taboo to rear goats in Hani because the town’s deity considers it a destructive animal. The consumption of goat meat however is allowed in the town. It is also permitted to purchase goat meat or chevon from nearby towns and transport them to the Hani community but it cannot be reared. Chickens and guinea fowls are kept in coops and reared mainly for their eggs and meat. A few however, are raised for trading and ritual purposes. Currently, chicken is an essential part of their diet, especially during festivities like Christmas and Easter.

Most hunters keep dogs at home and also accompany them on their hunting expeditions. According to respondents, dogs are their invaluable hunting partners. For example, they have keen sense of smell that detect and trace the scent of prey and they can flush out animals which hide in holes. They also chase running game such as hares and deer and occasionally kill and deliver the game to the hunter. Dogs also provide safety and security for most inhabitants and are widely kept by most families at Hani.



Chapter Five

The Archaeological Research

5.0. Introduction

The main focus of this chapter is the archaeological research undertaken at the Nyarko Quarter over the three seasons and is divided into two sections. The first discusses the two main methods used to derive data for the study namely; surface survey and excavations. It also outlines the advantages and disadvantages of these methods.

The archaeological research commenced with a total of six surface surveys, all undertaken on foot at all the six quarters of ancient Begho. This was after I had met with the paramount chief of Hani, clan elders, some important resource persons of the community, and some members of the traditional authorities to inform them of my mission and to seek their permission to begin the research. Libation was thereafter poured to the “gods or deities” seeking blessings from them and the ancestors and I was finally granted permission to conduct the study (Figure 5.1)

Surface survey, also called “pedestrian survey”, “field-walking”, or “walk-over survey” (David, 2006: 9), can be defined as a method of acquiring archaeological data from ground surface at an archaeological site (Sharer and Ashmore, 2010: 86). Surface survey as a method of deriving archaeological data has several advantages. Foremost among them is that it helps the researcher to guesstimate the geographical extent of the site to be investigated. It also allows the researcher to discover, collect, and note the spatial distribution and density of surface artifact scatters at the site. Surface survey makes it possible for the identification of cultural materials likely to be recovered during excavations. Last but not the least, it provides insights into the types/nature of the natural topography at the site, such as dried river beds, hills, valleys; as well as cultural mounds some of which may be collapsed house structures, and refuse middens, some of which may warrant further

investigation (Fagan & DeCorse, 2005:169). Compared to archaeological excavation, surface survey is less destructive. It does not involve the use of specialized tools and can be conducted quickly, compared to excavations (Sharer & Ashmore, 2010: 87).

Surface survey has three main limitations. The first is that it does not allow the investigator to recover cultural materials buried below ground surface. Secondly, it does not also allow the investigator to utilise the Law of Superposition to establish relative chronologies (dates) for the artifacts and ecofacts which will be found on the surface, and third, chances are that the finds may be disturbed due to bush fires, predator actions, water/ice erosion, and earth movements which can move them from one location to another.



Figure 5. 1 The *Okyeame* of Hani (chief Linquist) offering prayers to the ancestors and “gods” for successful research (Photo: Author)

The surface survey was conducted in March which corresponds to the Dry season in the Bono Region. During this period, much of the overlying vegetation is dried up, allowing for maximum visibility of the ground surface.

The surface survey team comprised eight persons, four of them were from the Department of Archaeology and Heritage Studies, University of Ghana, Legon and the other four was made up of indigenes from Hani Town. The team from the Department of Archaeology and Heritage Studies included Mr. Gideon Agyare (a Senior Technician), Mr. Daniel Kumah (an Assistant Lecturer), and final year University of Ghana archaeology students, all from the Department.

The team from Hani who assisted this researcher, included three persons who were part of Merrick Posnansky's team that investigated Begho in the 1970's. They are Messrs. Anderson Darko, Steven Gyamfi, and Barnabas Apaw. The indigenous people were included in the survey exercise purposely because they were more familiar with the general topography of the area as well as the cultural materials which they encountered during their farming activities. Engaging them as local guides for the exercise was thus, very important and helpful.

A Global Positioning System (GPS) was used to establish the geographical extent of the Nyarko Quarter which was estimated at 185,136 square metres. The borderlines were determined by using surface artifact scatter. The GPS coordinates of areas with dense surface artifact scatters, mounds and middens were also recorded in a field notebook to facilitate future referencing and archaeological investigations in the area. The team noted that except for a few locations which had been cultivated with food crops, much of the Nyarko Quarter was densely covered with elephant grass (*Napier grass*), varieties of climbers and creepers, two and three layered-canopied trees and shrubs. This was the main limitation encountered by the team during the surface survey.



Figure 5. 2 Fragments of locally made potsherds. (Photo: Author)



Figure 5. 3 Furnace remains at the Dwimfour Quarter (Photo: Author)



Figure 5. 4 Iron slag at *Atwetwebooso* (Photo: Author)

Fragments of local ceramics (pottery), furnace remains (Figure 5. 3) and iron slag (Figure 5. 4) constituted the main cultural materials found at all the six quarters of ancient Begho (Figure 5. 2). The surface survey also revealed that several large portions of the natural topography at the various quarters and cultural features such as mounds had been extensively disturbed or obliterated altogether, primarily due to farming and construction of new houses and pathways in the community.

5.1. Archaeological Research

Archaeological excavation can be defined as the use of systematic procedures through which material remains buried below the ground surface are retrieved for analysis, purposely for reconstructing past lifeways of ancient societies. It entails removing layers (strata) in the opposite direction of how they were laid down, eventually disclosing each stage in the site's history

(Joukowsky 1980:159). By placing the numerous artifacts, features, structures, and other objects in their proper provenance and context in time and space, excavations assist archaeologists to expose the "three-dimensional record of an archaeological site" (Fagan and DeCorse 2005: 209). It is worth noting that without excavation, only a small portion of human history will be discovered and studied (Champion, 1980:43). Additionally, excavation is the only data source that provide insights or proof when written documents are unavailable (Baker, 1993:13 - 14). In conclusion, excavation aids in the recovery of cultural artifacts which in turn aid in the reconstruction of a society's past way of life.

Excavation has several advantages. First and perhaps the most important is that it provides the three-dimensional location of archaeological data in the matrix. It can also provide valuable insights into the chronological sequence of material remains found in the strata. In spite of these advantages, archaeological excavation has some limitations. First, it can be very expensive to undertake, especially so when the site is large and the occupation levels extend deep into the stratigraphy. Second, it requires the use of specialized devices/tools and a large labour force which can be costly. Third, it can take several weeks, even months to complete excavations. fourth, it is destructive and once the soil profile/contexts is disturbed, it can never be put back naturally as prevailed before the excavation, and fifth, it can be dangerous to undertake depending on conditions prevailing at the site.

Unlike the surface survey which was conducted at all the six quarters of Begho, the archaeological excavations were undertaken only at the Nyarko Quarter which was the geographical focus of this study. A total of three trenches designated Trench 1, 2, and 3 were opened at different locations based on judgmental sampling. The total area excavated at the Nyarko Quarter was 6.5 square metres. All the excavations were carried out between late January and early June which

corresponds to the Dry Season in the research area. Much of the overlying vegetation during this period had withered exposing much of the ground surface and the cultural materials it held. The breakdown according to Trenches were:

Trench 1 measured 1metre by 1.5metre (Figure 5. 5)and lay approximately 40 metres north of the temporary benchmark (TBM) made by Mr. Leonard Crossland in 1975. The excavation of Trench 1 was conducted during Season One in January, 2021. The choice of excavating the area incorporating Trench 1 was informed by the presence of several scatters of cultural materials overlying the ground surface there.



Figure 5. 5 Picture showing Trench 1 (Photo: Author).

Trench 2 measured 1 metre by 3 metres (Figure 5. 6)and was located 20 metres north of Trench 1, near a baobab tree. The environs of Baobab trees (*Adansonia digitata*) are very important for

locating archaeological sites in the West Africa sub-region because they were oftentimes settled by people on account of the fact that all parts of the tree are useful/exploited (Sharer and Ashmore, 1993:115). The leaves and fruit for example, are edible, the roots have medicinal properties, and the trunk and branches are used as fuelwood. Another reason was that there was a dense presence of artifacts scatters overlying that area. The excavation was conducted in March, 2021.



Figure 5. 6 Picture showing Trench 2 (Photo: Author).

Trench 3 measured 1 by 2 metres (Figure 5. 7) and was excavated during Season Two in June, 2022. The Trench was located 45 metres north of Mr. Leonard Crosland's 1975 Temporary

Benchmark. Trench 3 was located on a mound which extended about 4 metres across its longest axis and 1.62 metres high. Like Trench 2, there was also a dense scatter of artifacts, mainly potsherds overlying its surface.



Figure 5. 7 Picture showing Trench 3. (Photo: Author).

An arbitrary level of 20 centimeters was used to control vertical provenience and soils were sieved using a 6.3-millimeter mesh. The Munsel Color Chart was used to identify the colours of the soil. Metal pegs, a compass, measuring tapes, rope/twine, and ranging poles comprised the main tools used by the researcher to establish the borderlines and the laying the three trenches excavated. The main digging tools used comprised trowels, pick axes and hand picks.

Buried cultural materials were exposed using hand brushes. The north and west walls of all three excavated trenches (stratigraphy profiles) were drawn. Soil from each trench was collected with dustpans and head pans and sieved allowing for the recovery of small cultural artifacts. All the

cultural materials retrieved from the excavations were sorted and bagged in zipped plastic storage bags according to their shared attributes/characteristics and stratigraphy levels. The main ones comprised several varieties of potsherds, lithics, worked ivory objects and bones and the bags were tagged with appropriate provenience information such as the site name, date of excavation, and the arbitrary levels.

5.2 Trench 1: Description of the Stratigraphy

The depth of Trench 1 from ground surface to the sterile level was 140 centimeters, and 5 stratigraphic layers were discerned, based on soil type and colouration. Layer 1 measured 16 centimeters at its thickest point, and was characterized by loose dark grayish brown (10 YR 2/5) soils which also had many rootlets of grasses and small shrubs. Several fragments of potsherds constituted the only cultural material retrieved. Organic remains retrieved comprised cowpeas and bones.

Layer 2 was characterized by black soil (7.5 YR 2/5) and contained several tap roots. The soil was fine-grained and smooth and contained specks of charcoal, fragments of potsherds, bones, cowpeas, and a tooth of an unidentified animal. It measured 51 centimeters thick at its most extended end, from top to bottom.

Layer 3 was characterized by dark brown soil (7.5 YR 3/2) with lot of unidentifiable lateritic stones of no veritable shape or size. Cultural materials found comprised fragments of potsherds, daub, bones and one teeth. This layer measured 23 centimeters at its thickest point vertically.

Layer 4 was composed of a mix of gravels and brown soil (7.5 YR 4/3). Finds from this layer included fragments of local pottery, bones, teeth and daub. This layer measured 105 centimeters below ground level and had a thickness of 38 centimeters.

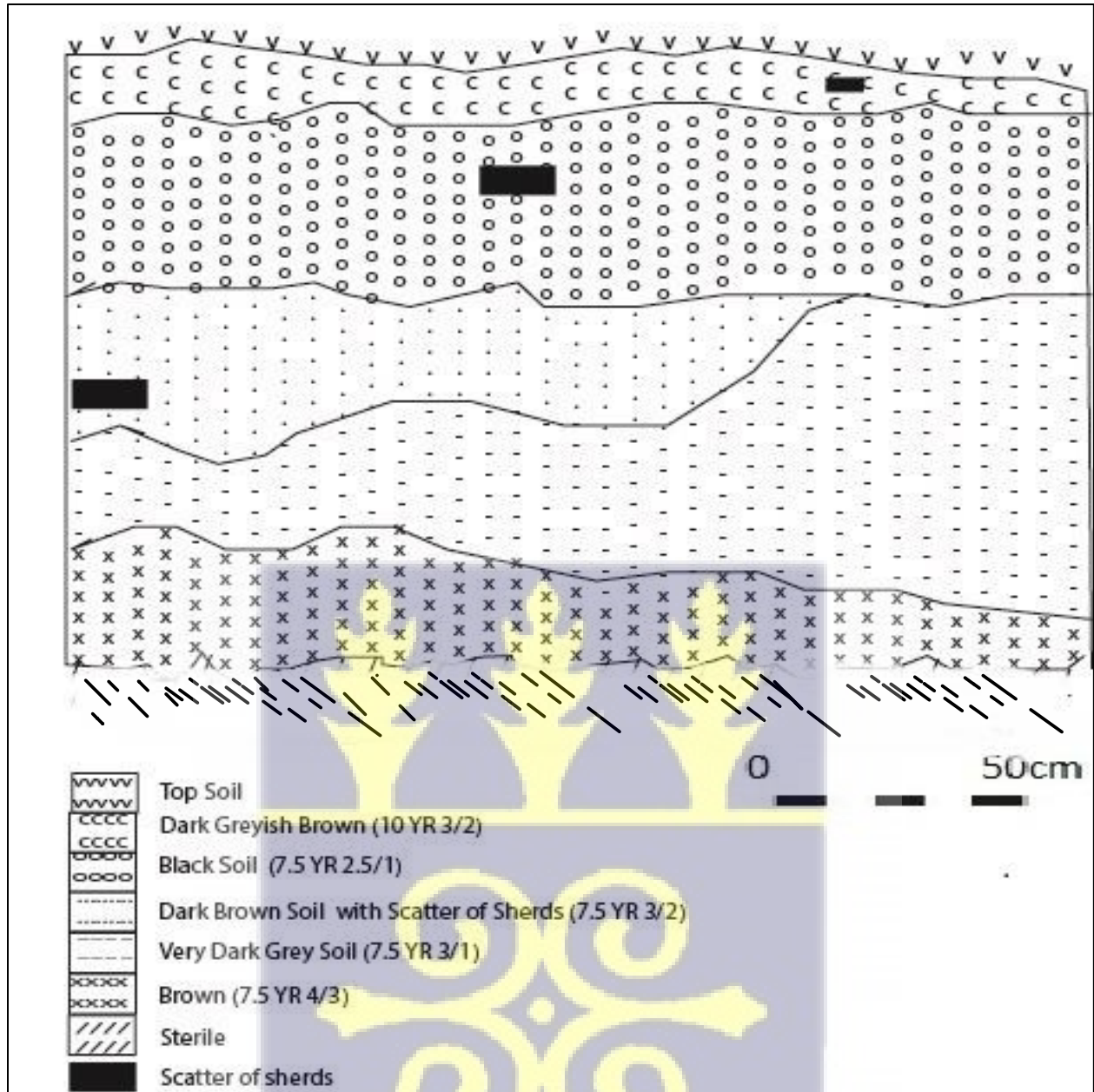


Figure 5. 8 Stratigraphy profile of the north wall of Trench 1



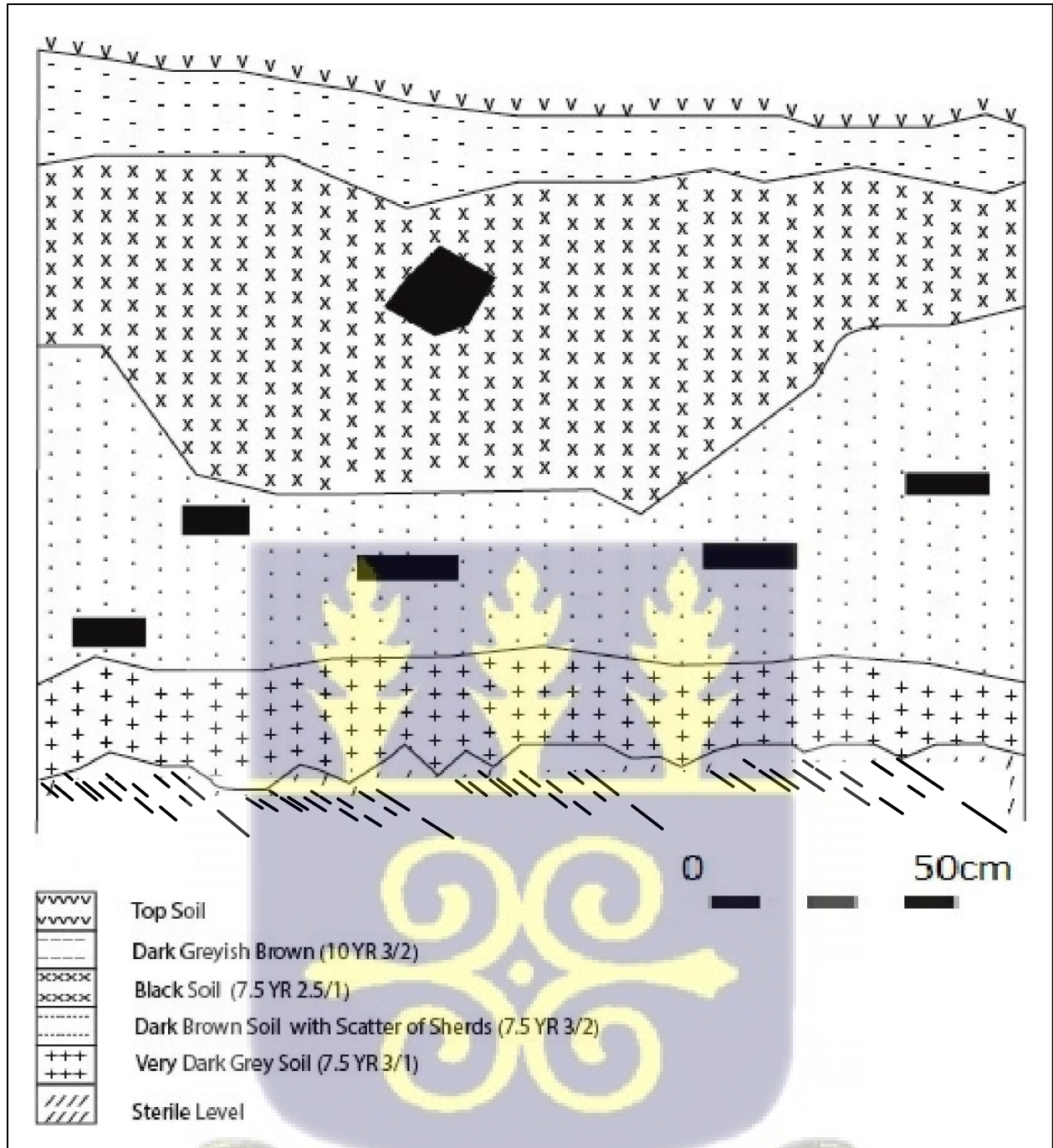


Figure 5. 9 Stratigraphy profile of the west wall of Trench 1

Layer 5 had very few finds which included lateritic stones similar to those from Layers 3 and 4, bones, teeth and daub. It was characterized by strong brown soil color (7.5 YR 4/6) and the thickest part of this layer was 12 centimeters.

5.3 Trench 2: Description of the Stratigraphy

Trench 2 measured 160 centimeters from ground surface to the sterile level. Five stratigraphy layers were identified. Layer 1 was characterized by loose black humus (10 YR 2/1) with several rootlets. Materials found there included one cowpea seed, fragments of local pottery, teeth and animal bones. This layer measured 10 centimeters thick at its most extensive vertical point.

Dark brown soil was the defining feature of layer 2 (7.5 YR 3/3). Like Layer 1, it had several rootlets of grasses but was more compacted. Finds retrieved included palm kernel shells, fragments of local pottery, bones and teeth. This layer measured 40 centimeters at its thickest point from the top.

Layer 3 was composed of light brown soil (7.5 YR 6/3). Fragments of local pottery, several lateritic stones of no identifiable shape or size, worked and unworked ivory objects. Daub and fragments of bone constituted the main materials recovered. It measured 35 centimeters at its most extensive point.

The soil in Layer 4 was dark brown (7.5 YR 3/3) in colour and contained small quantities of potsherds, animal bones, daub and lateritic stones similar to those from Layer 3. This layer measured 125 centimeters at its highest point from ground surface and 47 centimeters thick at its most extensive point.

Layer 5 was characterized by very dark brown (7.5 YR 2/5) hard and very compacted soil. The only material recovered consisted of few bone fragments. This layer measured 28 centimeters at its thickest point.

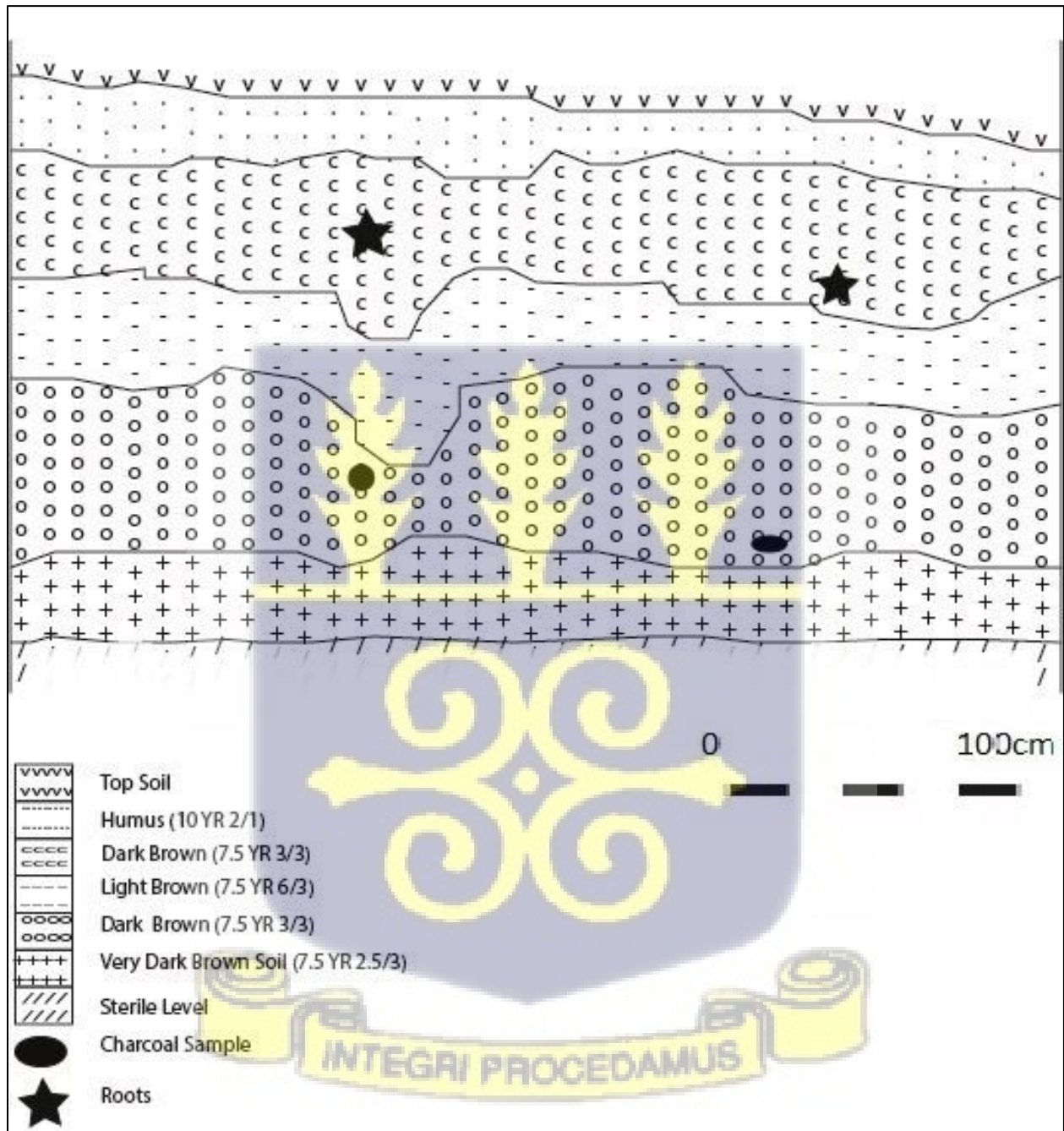


Figure 5. 10 Stratigraphy profile of the north wall of Trench 2

5.4. Trench 3: Description of the Stratigraphy

Five stratigraphic layers were identified at Trench 3. The sterile level reached 140 centimeters below ground surface. Loose Black humus soil (10 YR 2/1) with rootlets made up Layer 1. Finds discovered included mollusc shells, fragments of pottery and a few fragments of animal bones. This layer extended 16 centimeters from ground surface and measured 12 centimeters at its thickest point.

Dark greyish brown soil (10 YR 2/2) with rootlets made up Layer 2. Bones and pottery were among the materials retrieved from this layer. It extended by 26 centimeters beneath ground surface and measured 18 centimeters at its thickest point.

Layer 3 was composed of very dark brown soil (7.5 YR 2.5/3) with tap roots. It contained animal bones, lateritic stones similar to those found at Trench 2, daub, worked and unworked ivory objects and fragments of local pottery. It measured 24 centimeters at its thickest point and extended approximately 42 centimeters below from ground surface.

Dark reddish-brown soil (5 YR 3/3) defined Layer 4. It contained several lateritic stones similar to those found at Trench 2. Teeth, pieces of worked ivory fragments and daub. Layer 4 extended 62 centimeters deep from ground level. It measured 22 centimeters at its thickest point.

Layer 5 was coloured dark brown (7.5 YR 2/3) and contained fragment of animal bones and teeth. It also contained a large boulder at the base. The top of the boulder measured 80 centimeters to the ground surface. This layer measured 36 centimeters at its most extensive point.

Soil of very dark brown colouration defined Layer 6 (7.5 YR 2.5/3). Daub, bones and teeth constituted finds recovered from this layer. It measured 112 centimeters from ground surface and 28 centimeters at its most extensive point respectively.

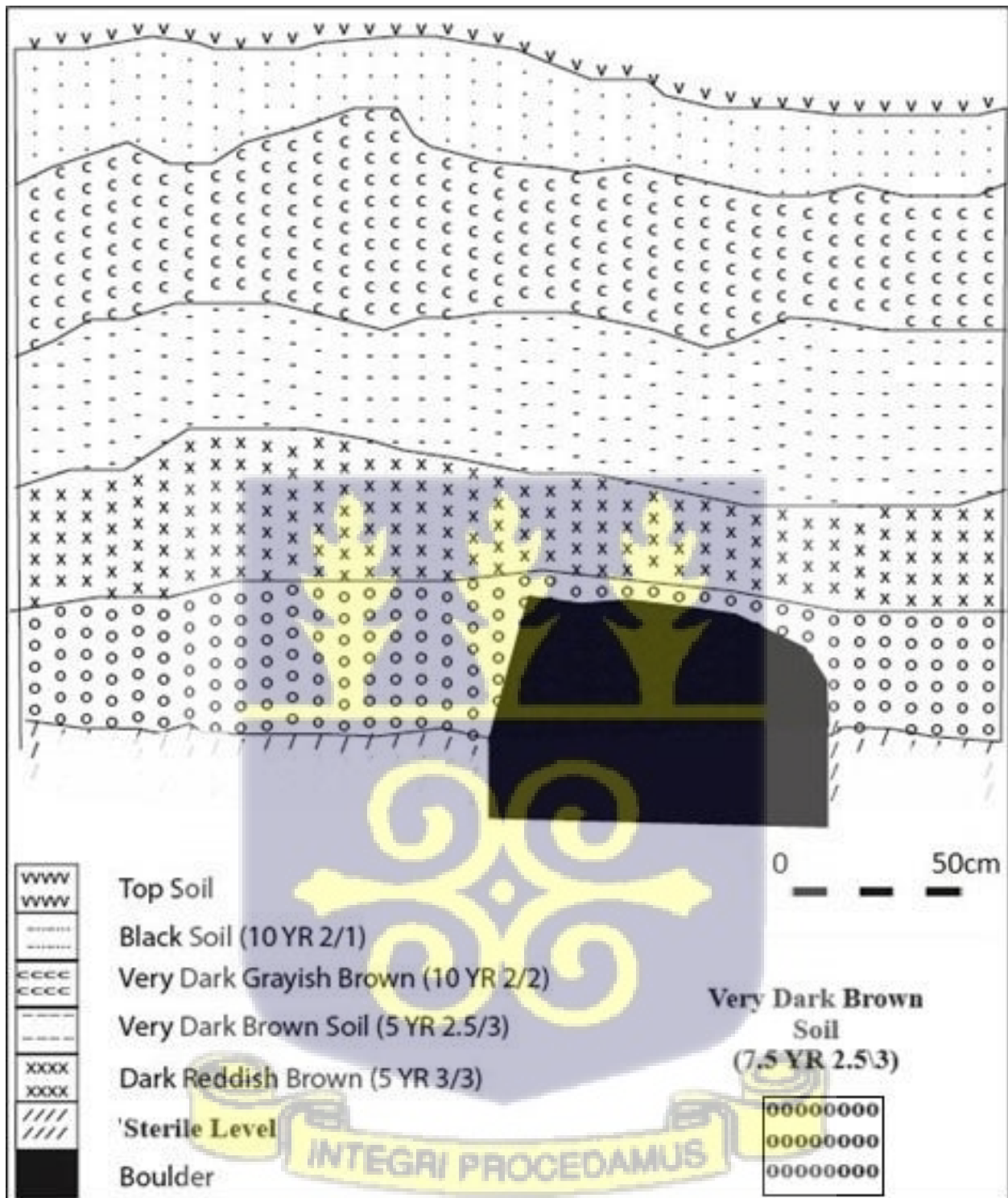


Figure 5. 11 Stratigraphy profile of north wall of Trench 3

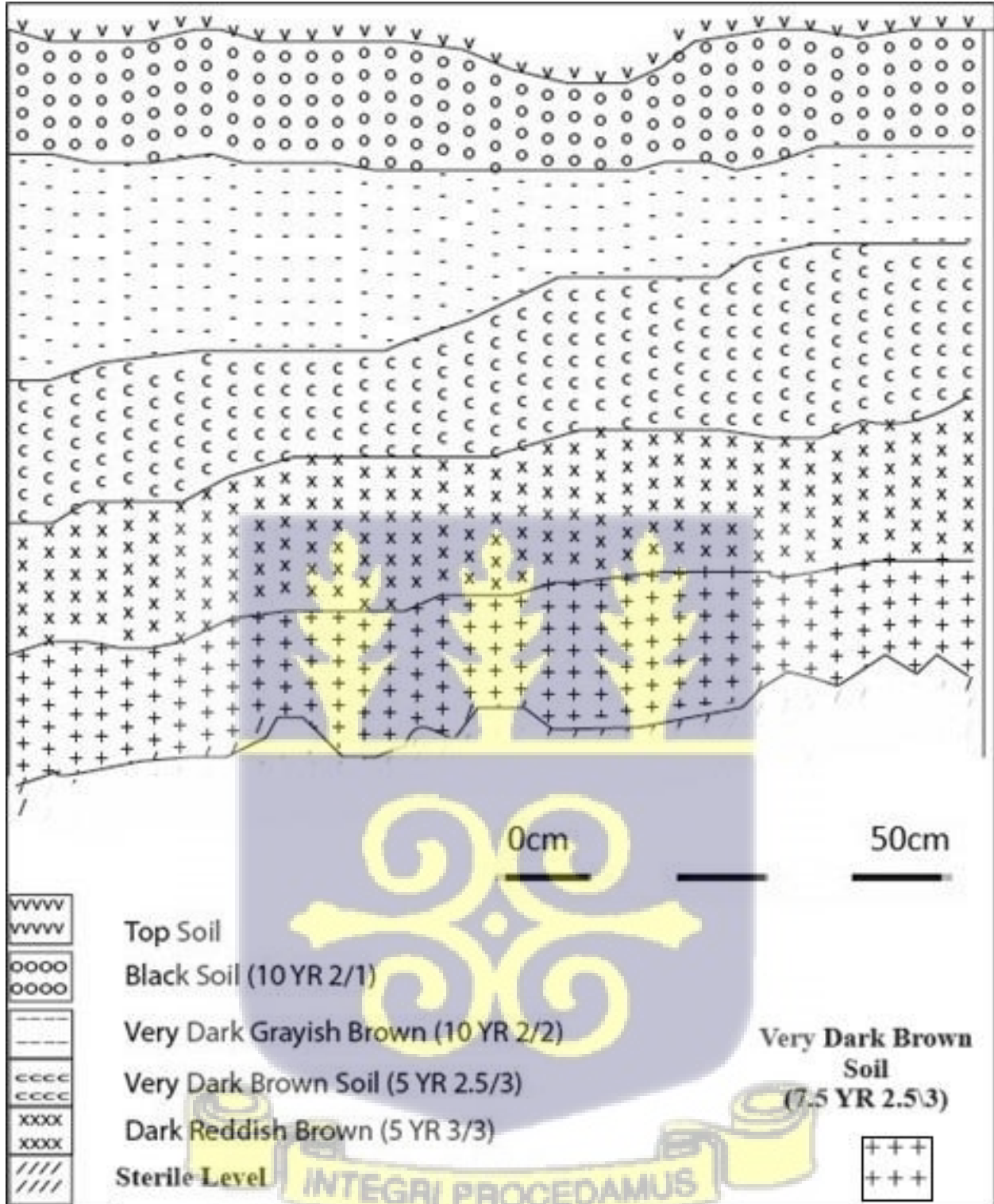


Figure 5. 12 Stratigraphy profile of west wall of Trench 3

5.5 Post Field Analysis

Post-field analysis followed the archaeological investigations and can be defined as all procedures and techniques used by a researcher to analyze archaeological data after it has been collected from the field. It enables the researcher to gather provenance and contextual information as well as other details about the data to facilitate interpretation and reconstruction of past socio-cultural and the economic exchange of the people who settled the area. It also guarantees the longevity and preservation of excavated cultural materials.

The main post-field procedures utilized after the archaeological investigations involved cleaning the artifacts in clean water. The main materials cleaned comprised potsherds which were the most veritable, bones, mollusc shells, and stone tools. The only exceptions were daub, fragile bones and seeds which were very fragile and could disintegrate if immersed in water.

Partly cracked pottery were also glued and mended to conserve them before washing. The cleaning was undertaken purposely to remove dirt and other attachments like mud to reveal decorations, shapes, true colours, paste characteristics and other physical attributes on surfaces. A soft brush was sometimes used to facilitate the removal of the dirt. It is worth noting that each type of cultural material was cleaned separately. For example, potsherds were cleaned separately in water and not mixed with other artifact types, and the procedure was repeated for each type of cultural material retrieved from the Nyarko Quarter. This was followed by drying them in the open to naturally dry.

Labelling the cultural materials and their attributes followed the cleaning exercise. This was done by assigning individual provenience information to each artifact for easy identification. The provenience information comprised the following: the site name, the excavation year, trench

number, stratigraphy level from where the find was found and name of the recorder. Labeling was done to prevent the loss of provenance information.

Taking inventory and classifying the cultural materials constituted the last phase of the post-field analysis. Counting and recording the number of artifacts in each industry is known as inventory (Sharer and Ashmore 1993: 116-117). Every artifact collected must be listed in great detail during this procedure. This was accomplished by gathering all of the cultural materials that were exhumed from the Nyarko Quarter and creating a comprehensive catalog of the collections based on the locations from where they were recovered. The researcher was able to estimate the overall number of materials found from the archaeological operation thanks to this knowledge. To facilitate analysis and interpretation, the materials collected were also classified based on their shared characteristics.

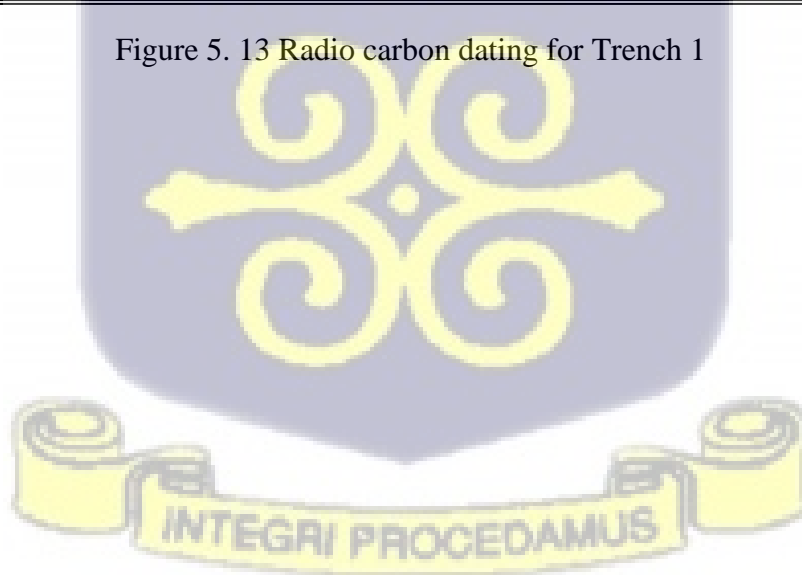
5.6 Dating the Nyarko Quarter of Begho

Leonard Crossland in 1975 derived two radiocarbon dates for the occupation period of the Nyarko Quarter of Begho. The dates were A.D. 1045 \pm 80 and A.D. 1120 \pm 80 (Crossland 1975: 19). To affirm the validity of Crossland's dates, the researcher collected two additional charcoal samples during Season One of his investigations at the site. A concerted effort was made during the recovery process that the samples were not touched physically with the fingers. This was retrieved using a brand new trowel to ensure the sample was not contaminated. They were then quickly placed in aluminum foils for preservation prior to being airlifted to the National Laboratory of Age Determination, at Trondheim, Norway. This institution is located inside the Norwegian University of Science and Technology Campus.

Charcoal Sample One was labeled **TRa-18349 (NQT1)**. It was recovered from Trench 1, from a depth of 117 centimeters below ground surface (Level 6, 100cm – 120cm). This sample yielded a radio carbon date of 1222 A.D to 1269 A.D (Figure 5.13). The results from the laboratory for sample 1 are illustratively shown below in figure 5.13.

TRa-18349					
NYARKO TRENCH 1 L6					
LEVEL= 100- 120CM; DPT=117cm, ww=0cm, Nw=58cm, Sw=242cm					
Fraction	14C content (pMC)	14C Age BP (rounded)	d13C (from AMS system)	Calibrated Age Ranges	14C Age (not rounded)
Charcoal,alkali residue	90.52 ± 0.16	800 ± 15	-25.2 ± 0.5 ‰	68.3% probability 1228AD (68.3%) 1262AD 95.4% probability 1222AD (95.4%) 1269AD	800 +15/-15 BP

Figure 5. 13 Radio carbon dating for Trench 1



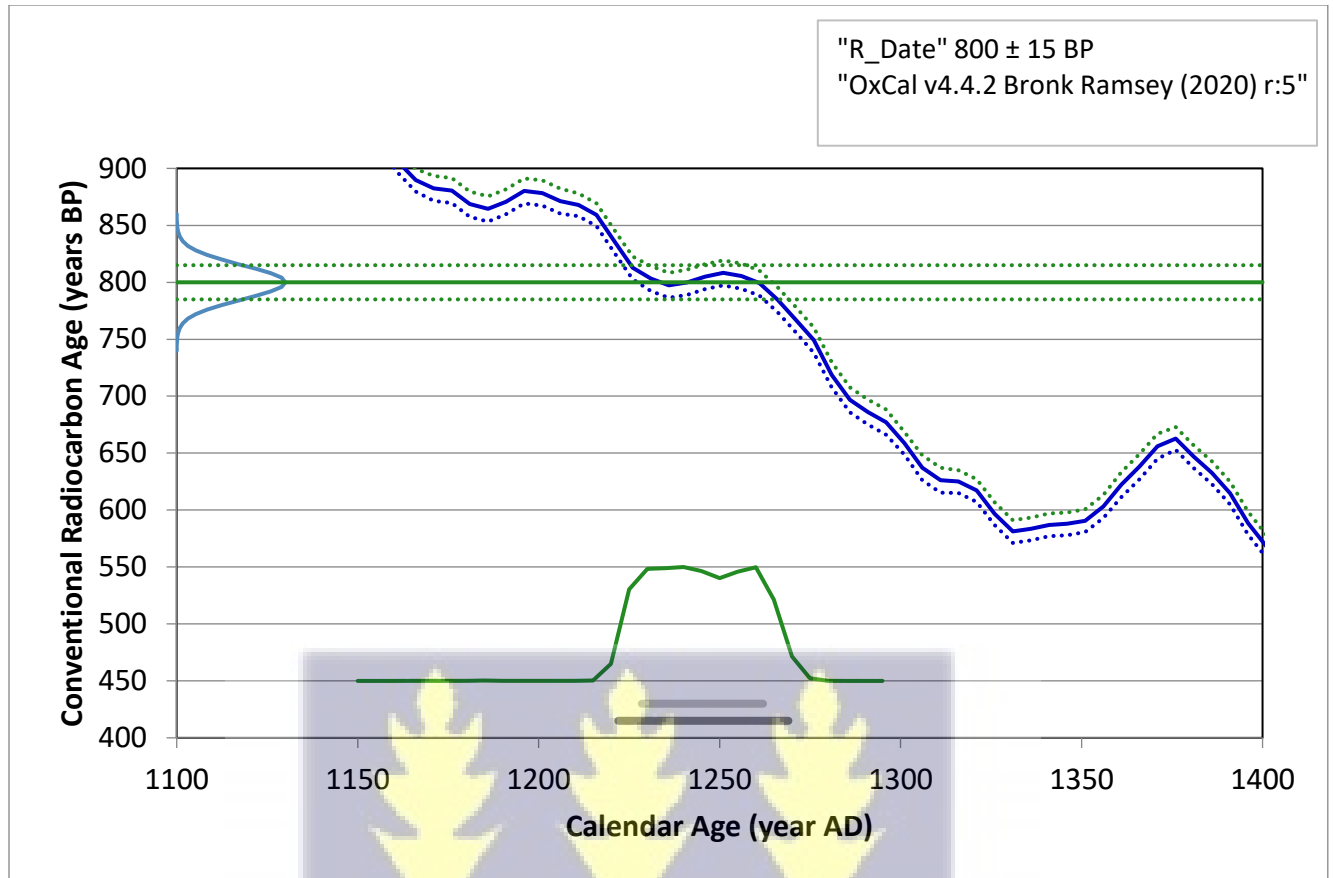
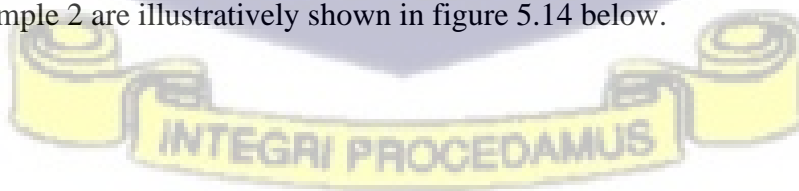


Figure 5. 14 conventional radiocarbon age (years in BP) for Trench 1

The second charcoal sample was labelled **TRa- 18350 (NQT2)**. It was retrieved from Trench 2, from a depth of 86 centimeters below ground surface (Level 5, 80cm – 100cm). Sample **TRa- 18350** yielded a radio carbon date of 1259 A.D to 1285 A.D (Figure 5.15). The results from the laboratory for sample 2 are illustratively shown in figure 5.14 below.



TRa-18350					
NYARKO TRENCH 2 L5					
LEVEL= 80- 100CM, DPH=86cm, Nw=192 cm, Sw=108cm, ww=0					
Fraction	¹⁴ C content (pMC)	¹⁴ C Age BP (rounded)	δ ¹³ C (from AMS system)	Calibrated Age Ranges	¹⁴ C Age (not rounded)
Charcoal, alkali residue	91.08 ± 0.16	750 ± 15	-29.0 ± 0.6 ‰	68.3% probability 1267AD (68.3%) 1279AD 95.4% probability 1232AD (3.0%) 1241AD 1259AD (92.4%) 1285AD	751 +15/-15 BP

Figure 5. 15 Radio carbon dating for Trench 2



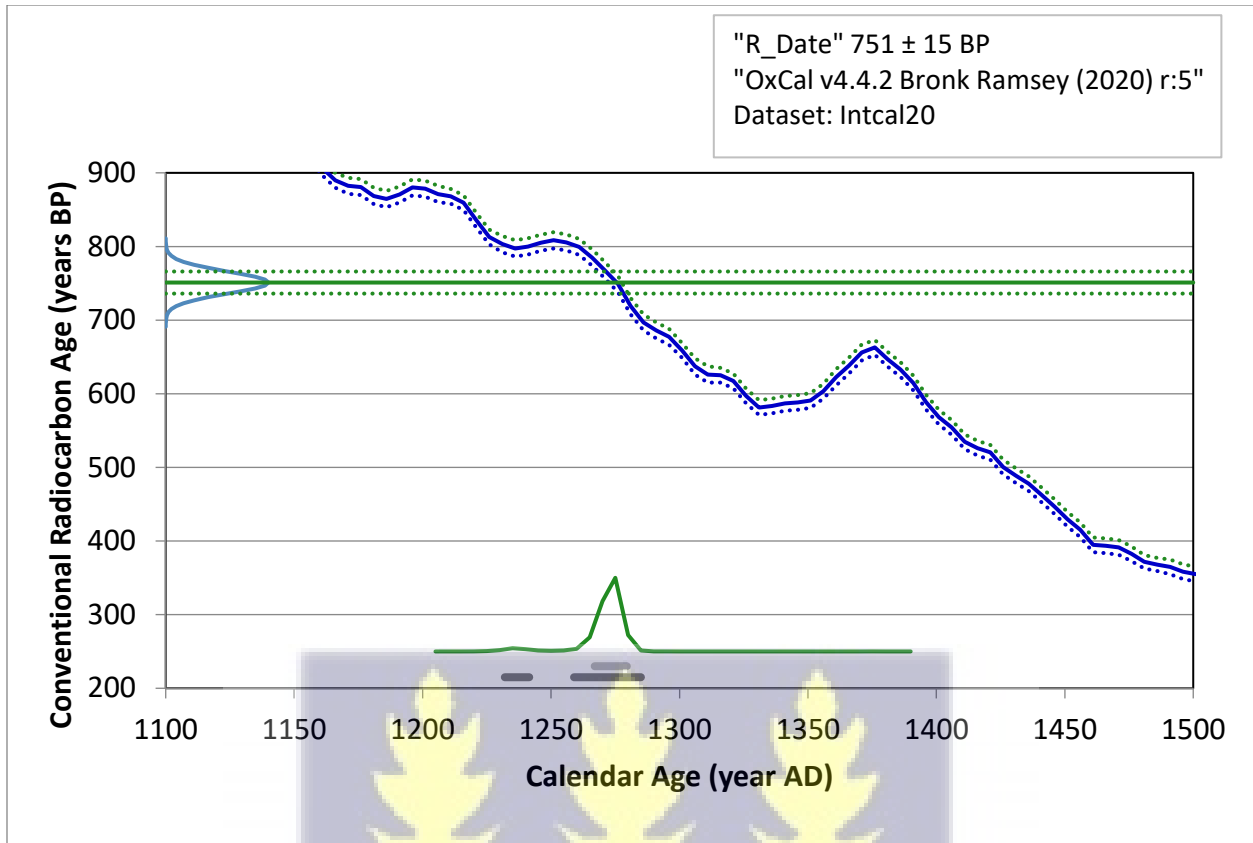


Figure 5. 16 conventional radiocarbon age (years in BP) for Trench 2

It is worth noting that the two radiocarbon dates obtained from the National Age Determination Laboratory at Trondheim tie closely with Crosland's dates. This affirms his assertion that the Nyarko Quarter was settled during the period circa, 1045 to 1285 A.D.



Chapter Six

Analysis and Description of the Material Inventory from the Nyarko Quarter

6.0 Introduction

This chapter presents detailed descriptions and analyses of all the finds retrieved during the archaeological investigation at the Nyarko Quarter. The scientific analysis of archaeological materials can shed light on the socio-economic and cultural past of societies as well as how artifacts and ecofacts were acquired, used, and discarded as well as their import and significance. All the finds analyzed were divided broadly into three categories/types: (i) faunal assemblage, (ii) non-faunal assemblages and (iii) botanical remains. The faunal assemblage comprised mainly animal bones, teeth, ivory, and mollusc shells, and their analysis was undertaken purposely to facilitate scientific identification and classification to species level, and body part. The non-faunal materials comprised artifacts such as pottery, daub and stone/lateritic boulders. Cowpea and oil palm seeds constituted the main botanical remains. The analysis was undertaken at two laboratories in Ghana and Norway; namely the Department of Archaeology and Heritage Studies Laboratory, University of Ghana, Legon, and the Department of Archaeology and Cultural History Laboratory, Norwegian University of Science and Technology (NTSU), Trondheim.

6.1 The Finds

A total of 7,382 cultural materials were recovered from the excavations and surface contexts. A total of 61 only materials of the overall total were collected during the surface survey and 7,321 were recovered from the trenches. Locally-made pottery constituted the most veritable and ubiquitous of the collections. The breakdown according to trenches and their percentage values

are presented in Tables 6.1, 6.2, and 6.3-, and 20-centimeters arbitrary levels were used to control vertical provenience.

Table 6. 1 Table showing types of cultural materials retrieved from Trench 1 according to stratigraphy levels and their percentage values

Cultural material Types	Surface finds	Level 1 0 - 20	Level 2 20 - 40	Level 3 40 - 60	Level 4 60 - 80	Level 5 80 - 100	Level 6 100 - 120	Level 7 120- 140	Total
Local pottery	28	320	450	529	301	190	-	-	1,818
Bones		39	31	73	61	62	50	-	316
Teeth		-	1	-	-	2	1	-	4
Cowpea seeds		1	1	-	-	-	-	-	2
Daub		-	-	-	26	13	7	-	46
Lateritic stones		-	-	-	4	2	2	-	8
Total	28	360	483	602	392	269	60	-	2,194
Percentage	1.276%	16.408%	22.014%	27.438%	17.866%	12.260%	2.734%	-	99.996%



Table 6. 2 Table showing types of cultural materials retrieved from Trench 2 according to stratigraphy levels and their percentage value

Cultural material Types	Surface find	Level 1 0 - 20	Level 2 20-40	Level 3 40-60	Level 4 60-80	Level 5 80-100	Level 6 100-120	Level 7 120-140	Level 8 140-160	Total
Local pottery	20	324	558	415	438	311	274	-	-	2,340
Bones		-	47	54	51	29	22	11	-	222
Cowpea Seeds		1	-	-	-	-	-	-	-	1
Teeth		-	4	2	6	-	-	-	-	12
Palm kernel		-	-	1	1	-	-	-	-	2
Ivory		-	-	-	2	2	-	-	-	4
Daub		-	-	-	-	3	4	-	-	7
Lateritic stones		-	-	-	-	3	2	-	-	5
Total	20	325	609	477	501	348	302	11	-	2,593
Percentage	0.771%	12.533%	23.486%	18.395%	19.321%	13.420%	11.646%	0.429%	-	99.996%

Table 6. 3 Table showing types of cultural materials retrieved from Trench 3 according to stratigraphy levels and their percentage value

Cultural material Types	Surface finds	Level 1 0-20	Level 2 20-40	Level 3 40-60	Level 4 60-80	Level 5 80-100	Level 6 100-120	Level 7 120-140	Total
Local pottery	13	359	472	584	357	231	-	-	2,016
Bones		33	59	72	226	61	20	-	471
Teeth		-	-	-	9	-	1	-	10
Ivory		-	-	-	24	-	-	-	24
Lateritic stones		-	-	1	1	-	-	-	2
Mollusc shells		2	1	-	-	-	-	-	3
Daub		-	-	-	2	6	-	-	8
Total	13	394	532	656	619	298	22	-	2,532
Percentage	0.513%	15.548%	20.994%	25.887%	24.427%	11.760%	0.868%	-	99.997%

Table 6. 4 Count of total cultural materials retrieved from all three trenches

Types of cultural Materials	Surface finds	Trench 1	Trench 2	Trench 3	Total	Percentage values
Local pottery	61	1,838	2,320	2,016	6,235	84.485%
Bones		316	222	471	1,009	13.644%
Teeth		4	12	10	26	0.352%
Ivory		-	4	24	28	0.379%
Daub		46	7	8	61	0.826%
Lateritic stones		8	5	2	15	0.203%
Cowpea seeds		2	1	-	3	0.040%
Palm kernel		-	2	-	2	0.027%
Molluscs shells		-	-	3	3	0.040%
Total	61	2,214	2,573	2,534	7,382	
Percentage values	0.826%	29.991%	34.855	34.326%		99.997%

6.2 Faunal Remains

The main constituents of the faunal assemblage were teeth, mollusc shells, horns, hoofs and bones belonging to a variety of animals. The total count of 1,066 were recovered from all levels of the three trenches. The breakdown according to trenches were 320, 238, and 508 for Trench 1, Trench 2, and Trench 3 respectively. Bones were the most abundant of the faunal inventory, registering a total count of 1,009. Ivory followed with a total count of 28, teeth with a total count of 26, and mollusc shells with a total count of only 3.

The bulk of the bones were identified to their individual body parts, and classified to species level, using the attributes of bone shape, bone size and bone colour. A total of 511 however, could not be scientifically identified because they were either too small and heavily fragmented or badly charred. A few of the larger bones also displayed cut marks on them.

Professor James Barrett of the Department of Archaeology and Cultural History, Norwegian University of Science and Technology (NTNU), and Mr. Bossman M. Murrey, a retired Chief

Technician of the Department of Archaeology and Heritage Studies, University of Ghana, assisted the author to comprehensively analyze all the faunal assemblage. The analysis involved quantifying, identification of the individual body parts and classification of the animals to species level. The most veritable and dominant animals were mammals (Mammalia), namely: cattle (*Bos* sp.) (259), sheep/goats/antelopes (Bovidae) (221), giant rat/grasscutter/squirrel (Rodentia) (8), wild pig (Suidae) (3), *hedgehogs* (6), and dog (*Canis lupus familiaris*) (1). The breakdown of bones according to count, body part, and species, genus/family for Trenches 1, 2 and 3 are presented in Tables 6.4, 6.5 and 6.6.

Table 6. 5 Table showing the bone types, count, the species/genus/family of bones retrieved from Trenches 1 and 2 at the Nyarko Quarter

TRENCH 2	LAYER	Element/ Description	count	gnaw marks	Mni	burnt	charred	butchery marks	whole	fragments	Total-	Family/Genus/Species
2	1	Skull	5								5	<i>Bos taurus</i> (cattle)
2	1	Phalange	5		1				5		5	Bovidae (goat/sheep/antelope)
“	“	Teeth - premolar	1						1		1	“ ” ” ”
“	“	Vertebra	9							1	9	“ ” ” ”
	1	Non-diagnostic	5							5	5	Unknown
	2	Vertebra	1							1	1	Bovidae (goat/sheep/antelope)
“	“	Ribs	12						6	6	12	“ ” ” ”
“	“	Lower jaw	3		2					3	3	“ ” ” ”
“	“	Skull	4							4	4	“ ” ” ”
“	“	Bone shaft	10				7	3		10	10	“ ” ” ”
“	“	Unciform	1						1		1	“ ” ” ”

“	“	Lunate	2						2		2	“	”	”	”
		Teeth - premolar	1						1		1				
“	“	Femur-distal	1							1	1	“	”	”	”
“	“	Humerus-distal	2							2	2	“	”	”	”
“	“	Scapula	1							1	1	“	”	”	”
2	3	Innominate	1					1		1	1	<i>Bos taurus</i> (cattle)			
“	“	Teeth-premolar	1							1	1	“	”	”	
2	3	Non-diagnostic	31							31	31	Unknown			
2	3	Distal phalange	1							1	1	<i>Canis lupus familiaris</i>			
“	“	Bone shaft	7		1					7	7	“	”	”	
“	“	Skull	2							2	2	“	”	”	
2	3	Non-diagnostic	41							41	41	Unknown			
	4	No diagnostic	39							39	39	unknown			
	5	Non-diagnostic	25							24	24				
		TOTAL										218			

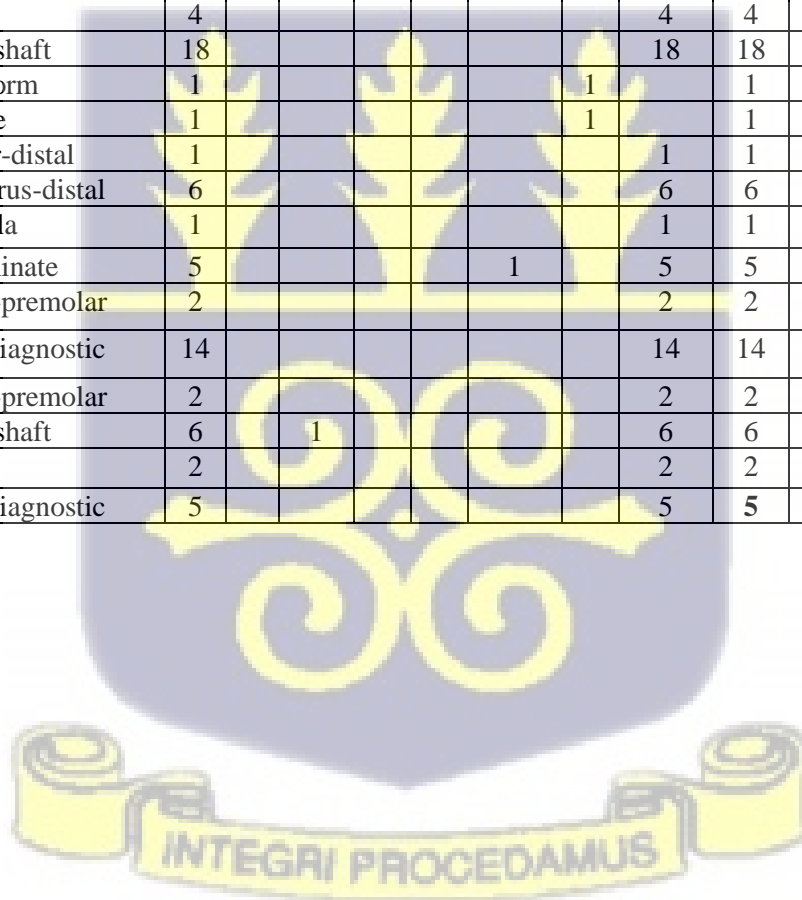
Table 6. 6 Table showing the body parts, count, species/genus/families/orders of bones retrieved from Trenches 1 and 2 at the Nyarko Quarter

TRENCH 1	LAYER	ELEMENT/ DESCRIPTION	COUNT	GNAW	MINI	BURNT	CHARRED	BUTCHERY MARKS	WHOLE	FRAGMENTS	TOTAL	ORDER/FAMILY/GENUS/SPECIES		
1	1	Teeth-premolar	2						2		2	Hedgehog		
“	“	Skull	1							1	1	“	”	”
1	2	Teeth-premolar	3						2	1	3	<i>Bos taurus</i> (cattle)		
“	“	Lower jaw	1							1	1	“	”	”
“	“	Skull	3		1					3	3	“	”	”
“	“	Vertebra	14							14	14	“	”	”

“	“	Scapula	1						1	1	“ ” ”
“	“	Bone shaft	25			4	1		20	25	“ ” ”
“	“	Phalange	16						1	16	“ ” ”
“	“	Ribs	1						1	1	“ ” ”
	3	Scapula	2						2	2	Bovidae (goat/sheep/antelope)
“	“	Teeth- premolar	1						1	1	“ ” ” ”
“	“	Bone shaft	34						34	34	“ ” ” ”
1	3	Non- diagnostic	107						107	107	Unknown
1	4	Mandible	8						8	8	Rodentia
1	4	Phalange	15					7	8	15	<i>Bos taurus</i> (cattle)
“	“	Teeth- premolar	5					1	4	5	“ ” ”
“	“	Bone shaft	19			1	1			19	“ ” ”
“	“	Vertebra	7							7	“ ” ”
“	“	Scapula	2		2					2	“ ” ”
“	“	Skull	4							4	“ ” ”
“	“	Innominate	2		1					2	“ ” ”
“	“	Metapodial- distal	1							1	“ ” ”
“	“	Ribs	3							3	“ ” ”
1	5	Non- diagnostic	37						37	37	Unknown
		TOTAL									316

Table 6. 7 Table showing the body parts, count, the species and genus of bones retrieved from Trenches 3 at the Nyarko Quarter

TRENCH 3	LAYER	ELEMENT/ DESCRIPTION	COUNT	GNAW	MNI	BURNT	CHARRED	BUTCHERY MARKS	WHOLE	FRAGMENTS	TOTAL	GENUS/SPECIES
3	1	Phalange	5		1					5	5	Bos taurus - cattle
3	1	Skull	2							2	2	Bovid-goat/sheep/antelope
"	"	Teeth - premolar	2						2		2	" " " "
"	"	Vertebra	1							1	1	" " " "
3	1	Non-diagnostic	5							5	5	Unknown
3	2	Vertebra	1							1	1	Bovid-goat/sheep/antelope
"	"	Ribs	6							6	6	" " " "
"	"	Lower jaw	2		2					2	2	" " " "
"	"	Skull	4							4	4	" " " "
"	"	Bone shaft	18							18	18	" " " "
"	"	Unciform	1						1		1	" " " "
"	"	Lunate	1						1		1	" " " "
"	"	Femur-distal	1							1	1	" " " "
"	"	Humerus-distal	6							6	6	" " " "
"	"	Scapula	1							1	1	" " " "
3	2	Innominate	5					1		5	5	Bos taurus - cattle
"	"	Teeth-premolar	2							2	2	" " " "
3	2	Non-diagnostic	14							14	14	Unknown
3	3	Teeth-premolar	2							2	2	Bos taurus - cattle
"	"	Bone shaft	6		1					6	6	" " " "
"	"	Skull	2							2	2	" " " "
3	3	Non-diagnostic	5							5	5	Unknown



TRENCH 3	LAYER	ELEMENT/ DESCRIPTION	COUNT	GNAW	MNI	BURNT	CHARRED	BUTCHERY MARKS	WHOLE	FRAGMENTS	TOTAL	GENUS/SPECIES
3	4	Teeth-premolar	3						2	1	3	Hedgehog
"	"	Skull	1							1	1	" " "
3	4	Teeth-premolar	5						2	3	5	Bos taurus - cattle
"	"	Lower jaw	1							1	1	" " "
"	"	Skull	3		1					3	3	" " "
"	"	Vertebra	4							4	4	" " "
"	"	Scapula	1							1	1	" " "
"	"	Bone shaft	26							26	26	" " "
"	"	Phalange	1							1	1	" " "
"	"	Ribs	1							1	1	" " "
3	4	Scapula	2							2	2	Bovid-goat/sheep/antelope
"	"	Teeth-premolar	1							1	1	" " " "
"	4	femur	3						3		3	Suidae
"	"	Bone shaft	34							34	34	Bovid,goat/sheep/antelope
3	4	Non-diagnostic	125							125	125	Unknown
3	5	Phalange	2						1	1	2	Bos taurus - cattle
"	"	Teeth-premolar	2						1	1	2	" " "
"	"	Bone shaft	19			1		1			19	" " "
"	"	Vertebra	12						11	1	12	" " "
"	"	Scapula	2		2						2	" " "
"	"	Skull	4								4	" " "
"	"	Innominate	10		1						10	" " "
"	"	Metapodial-distal	12								12	" " "
"	"	Ribs	3								3	" " "
3	5	Non-diagnostic	97							97	97	Unknown
3	6	Non-diagnostic	25							25	25	
3	"	premolar	3									
		Total									472	





Figure 6. 1 A few of the recovered bones with cut marks (Source: Author)



Figure 6. 2 Some animal bones retrieved from the Nyarko Quarter. (Source: Author)



Figure 6. 3 Part of a turtle shell recovered from Trench 3 (Source: Author)

6.2.1 Ivory

A total of 28 objects made out of ivory were retrieved from the excavations, specifically from Levels 4 and 5 of Trench 2, and from Level 4 of Trench 3. All were undecorated (Figure 6. 4) and fragmented except one which was decorated on one side with parallel vertical lines (Figure 6. 6). It is imperative to note that Posnansky (2013: 60) recovered significant quantities of ivory artifacts, notably bracelets, combs, and the ends of two highly decorated ivory side-blown trumpets at the Brong Quarter during his investigations there in the 1970's. Ivory objects are thus, not new to Begho.



Figure 6. 4 Picture of fragments of ivories. (Source: Author).



Figure 6. 5 Photo of unworked ivory from the study area (Source: Author).



Figure 6. 6 Picture of the decorated ivory object (Source: Author).

6.2.3 Mollusc Shells

Molluscs (Phylum Mollusca) are invertebrates with a protective shell into which they can withdraw if they sense danger. Only three mollusc shells were recovered during the excavations, from Levels 1 and 2, at Trench 3. They were identified as *Achatina achatina*, a tropical terrestrial snail belonging to the Class Gastropoda (Figure 6. 7). They are well-adapted to heavily forested and relatively wet environments. All three shells were relatively well-preserved, having retained much of their key defining physiological characteristics such as form, colour and exterior linear markings. *Achatina achatina* are edible and a highly-favoured delicacy of the people inhabiting the research area.



Figure 6. 7 Mollusc (snail) shells recovered from the Nyarko Quarter. (Source: Author)

6.2.4 Teeth

The excavations yielded a total of 26 teeth belonging to different animals (Figure 6.8). They were recovered from Levels 2, 5 and 6 of Trench 1, Levels 2, 3 and 6 Trench 2, and from Levels 4 and 6 of Trench 3. They were identified as premolars of the mammal Family Bovidae of the Order Artiodactyla (goat, sheep, and antelope), premolars of *Bos taurus* (cattle), and premolars of a hedgehog.

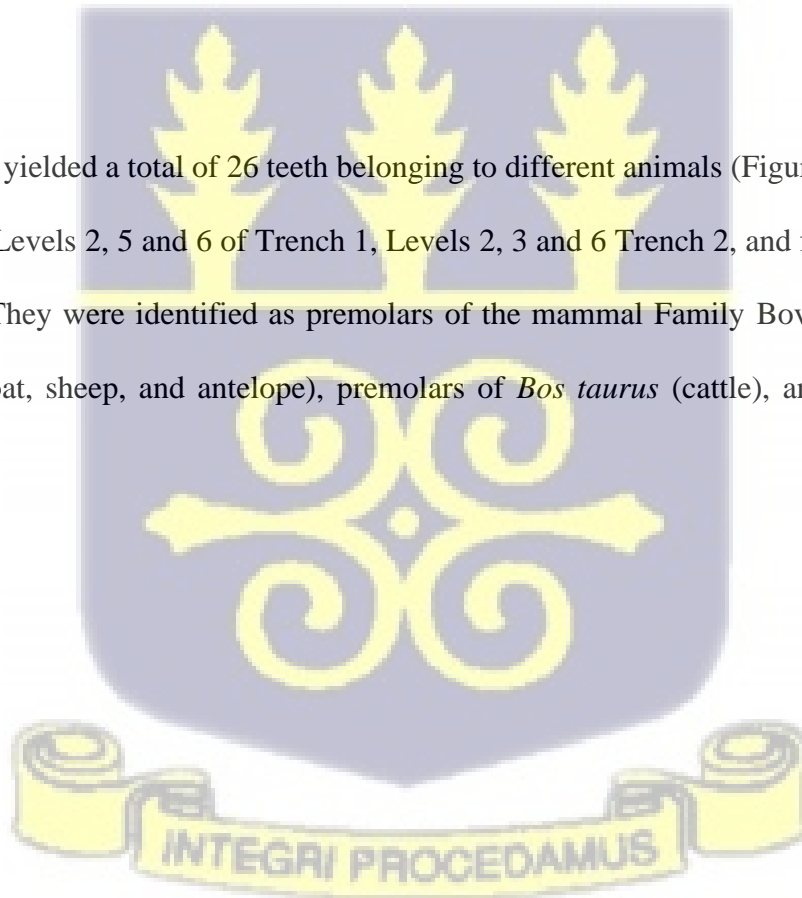




Figure 6. 8 Some animal teeth recovered during the excavations (Source: Author)

6.3 Analysis and Description of the Local Pottery

The term "local pottery" as used in this text is used to refer to all locally made baked clay containers and receptacles used by man for varieties of tasks such as cooking, food and medicinal processing, food and water storage. The scientific analysis of pottery is extremely important in archaeological research because it can provide valuable glimpses/information about the varieties of vessels used by past societies and how they processed and stored their foods and medicines. It also allows archaeologists to establish/retrace past exchange/trade networks by identifying their mineral constituents. The past dietary patterns can also be ascertained by identifying food residues and the type of lipids (vegetable or animal fat) embedded in vessels (Sharer and Ashmore, 1993: 3).

Despite the absence of food residues in the vessels, vessels can still be identified as a cooking container if its outside is charred and/or blackened. On the other hand, pottery with inner food residues/leftovers but no outside burning may be thought of as cooking utensils using heated stones as internal heat sources or as food storage or a serving bowl. Vessel function may not always be immediately obvious, but it may sometimes be deduced by using analogs of vessel structure and

function. For instance, studies have revealed that in many places without running water, large vessels were used as water storage and water dispensing vessels, while smaller jars were perceived as vessels for carrying water from water collecting sources. Research has also shown that among some ethnic groups, vessels constituted an integral burial/funerary item (Sharer and Ashmore, 1993: 364).

The bulk of the locally manufactured potsherds recovered during the excavations at the Nyarko Quarter were in relatively good condition. A total of 6,235 were retrieved from both surface and archaeological contexts. Of this number, sixty-one (61) were collected from surface context and six thousand one hundred and seventy-four (6,174) from the excavations. It is imperative to note that no complete vessel was found and that all comprised small fragments, averagely measuring 4 centimeters along their longest axis.

The under-listed criteria constituted the main attributes used to classify the pottery retrieved from the research area: vessel part, surface colour and treatment type, shape, form and decorative patterns. To enhance the observation and identification of surface features, potsherds were examined visually under a digital microscope.

6.3.1 Pottery Classification Based on Vessel Part

This stage of pottery classification involved sorting the various potsherds recovered into their respective vessel parts. The main parts identified comprised rims, necks, main body sherds, pedestals and strainers. Their total count and percentage values are presented below:

Rims – 5 (0.080%).

Pedestals - 2 (0.032%)

Strainers - 3 (0.048%)

Handle – 1 (0.016%)

Necks – 21 (0.336%)

Body sherds - 6,203 (99.486%)

6.3.2 Pottery Classification Based on Surface Treatment/Colouration

Surface Treatment refers to how a vessel's surface is treated, such as whether it is coated or glazed. Five surface treatment types were identified and comprised the following: plain, burnished, unburnished, red-slipped and smudged sherds. The bulk of sherds with plain surfaces were generally of light to dark brown colourations and the total number was 138 (representing 2.2%) of the total pottery assemblage. Their external surfaces were also relatively coarse, well fired and were found at all levels of the three trenches excavated.

The majority of the red-slipped sherds were characterized by a dull wine colour. A few however, displayed a bright red colour. They appeared to have been intentionally immersed/treated with red haematite/ochre solution. A total of 78 pieces (representing 1.251%) of total sherds were discovered. Their surfaces were also smooth and well burnished and all three trenches yielded significant quantities of red-slipped vessels. According to Crossland (1973: 29), red-slipped vessels have been discovered at Kintampo and Mumute sites in Ghana which date to the Neolithic period, aside being typical to Begho and some early Sudanic states. A total of 62 of the red-slipped vessels were decorated and 16 were undecorated.

Smudging is the process of darkening the exterior surfaces of vessels. Anquandah (1982: 119) has noted that the black colour is achieved by taking freshly fired vessels that are still fiery hot and immediately laying them on a bed of fresh leaves (Figure 6. 9). A total of 1,644 (representing 26.367% of the pottery assemblage) was discovered at the Nyarko Quarter. The majority were of

a dull black colour with burnished and smooth external surfaces. A count of 1,613 out of the total were decorated and 31 were undecorated.



Figure 6. 9 A fragment of a smudged vessel from the Nyarko Quarter (Source: Author)

Burnishing is the process of polishing and rubbing the surface of leather hard pots prior to firing with a smooth object. The resultant effect is that the surfaces become bright and smooth (Ellis 2011: 239, Joukowsky 1980: 380). Burnished vessels dominated the pottery assemblage at the Nyarko Quarter. A total of 3,132 (representing 50.232%) were discovered, of which 2,994 were decorated and 138 were undecorated. Two (2) sherds out of the total had specks of mica embedded in their body fabrics.

Unburnished vessels on the other hand did not have their surfaces polished. A total of 1,243 representing 19.935% were recovered from the research area. A count of 1,172 were decorated and 71 of them were undecorated.

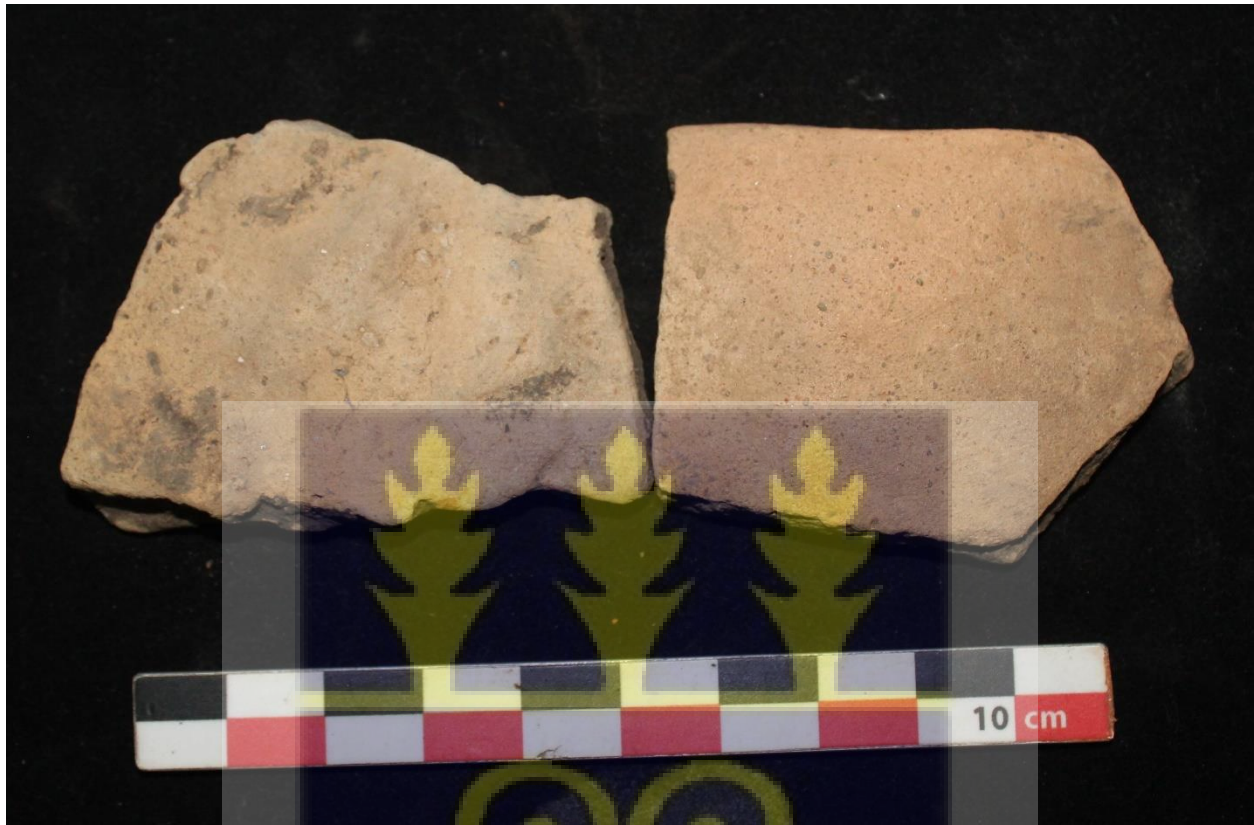


Figure 6. 10 Fragments of an unburnished vessel (Source: Author)

A total count of 5,841 sherds representing 93.681% was registered for potsherds with various decorations/motifs (Figures 6.11. and 6.12). The main decorative fields on the exterior surfaces of the sherds were as follows: rims – 6, main body - 5,752, necks - 20, pedestal, - 1, strainers - 3, and handle – 1. The main decorative patterns comprised grooves, incisions, comb stamps, dot stamps, roulettes and perforations and were generally aligned in horizontal, vertical, oblique, and curved directions.



Figure 6. 11 Some decorated sherds: (A) Carved roulette with groove, (B) wavy line with lugs and (C) groove on cord roulette.



Figure 6. 12 Multiple grooves with dot stamps (Source: Author)

A total count of 2,161 was registered for grooves patterns. This was 36.997% of the total. According to Boachie-Ansah (2014: 28), groove patterns are created by dragging or tugging a

blunt, round-edged tool or object across the surface of a leather hard vessel to form single or multiple lines on the surface. The groove patterns were generally located on the rim, the exterior parts of the neck, and the main bodies of the sherds. They were discovered at all stratigraphy levels in the three trenches.

Roulettes constituted the most predominant decorative motifs registered with a total of 3,229 (representing 55.281%). The decorative fields occurred on the exterior of the vessels along the rims, shoulders and main body of the sherds. Like the groove patterns, they were recovered from all stratigraphy levels at all three trenches excavated.

The third most occurring decorative pattern were incision marks. This pattern is achieved by dragging or pulling a sharp tool/object over the surface of a leather hard vessel. The incision marks discovered at the research area appeared in both single and multiple lines. The total registered was 192 representing 3.287% of the total decorative assemblage and the majority were aligned in horizontal and vertical directions. Other less common decorative patterns comprised Comb Stamps - 134, (2.294%), Dot Stamps - 62 (1.061%), Punctate – 60 (1.027%) and Perforated patterns – 3 (0.051%) respectively.

It is worth noting that some of the sherds displayed two and sometimes three decorative designs synonymously (Figure 6.14). The patterns comprised multiple grooves, dot stamps, perforations and cord roulette patterns. Crossland (1973: 129 - 262) termed these as Begho Ware (figure 6.13.) (Figure 6.14.).





Figure 6. 13 Sherd with perforations (Source: Author)



Figure 6. 14 A Perforated sherd with multiple decorations: comb stamping, grooves and wavy lines (Source: Author)

6.3.3 Pottery Classification Based on Form and Shape

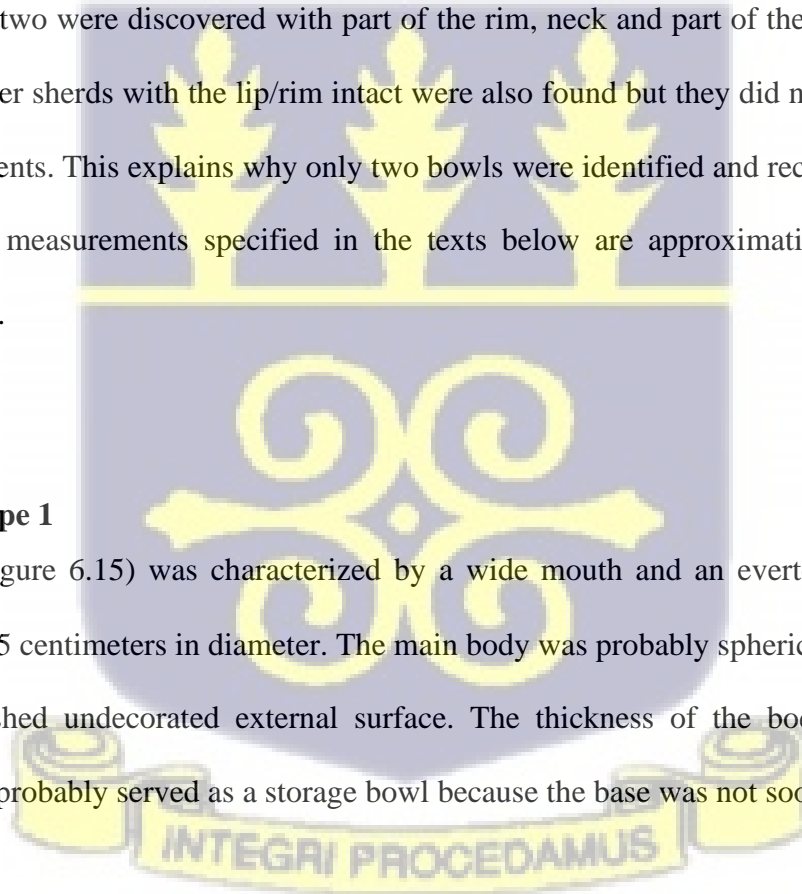
6.3.3.1 Vessel Form Type 1

Vessels retrieved from the Nyarko Quarter were also classified according to form and shape. Only one shape, namely bowl was identified. A bowl is a vessel whose diameter is greater than, or equal to its height (Biveridge, 2005:73). This classificatory scheme involved determining the general vessel curvature and measuring the diameter of the mouth of the vessel. It also involved measuring the thickness of the body fabric, rim size, necks and the bases.

It is noteworthy that the bulk of the pottery assemblage retrieved, totaling 6,235 comprised body sherds and only two were discovered with part of the rim, neck and part of the upper main body intact. Three other sherds with the lip/rim intact were also found but they did not have their neck or body attachments. This explains why only two bowls were identified and reconstructed among the lot. All the measurements specified in the texts below are approximations based on the fragments found.

6.3.3.2 Bowl Type 1

Bowl type 1 (Figure 6.15) was characterized by a wide mouth and an everted rim measuring approximately 15 centimeters in diameter. The main body was probably spherical in shape with a smoothly burnished undecorated external surface. The thickness of the body fabric was 10 millimeters and probably served as a storage bowl because the base was not soot covered.



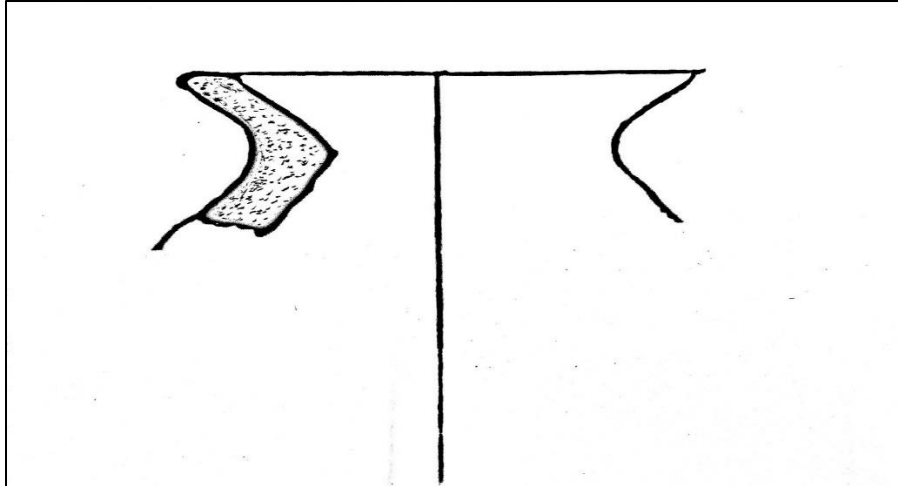
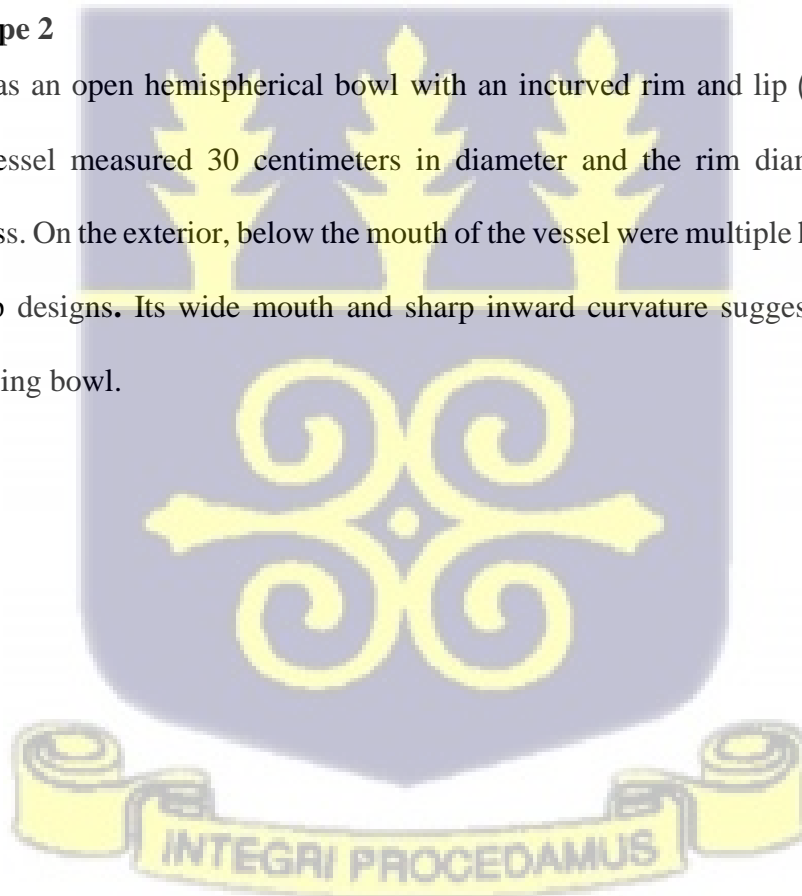


Figure 6. 15 Illustration of Bowl type 1

6.3.3.3 Bowl Type 2

Bowl Type 2 was an open hemispherical bowl with an incurved rim and lip (Figure 6.16). The mouth of the vessel measured 30 centimeters in diameter and the rim diameter measured 6 millimeters across. On the exterior, below the mouth of the vessel were multiple horizontal grooves and comb stamp designs. Its wide mouth and sharp inward curvature suggest it was probably utilized as a serving bowl.



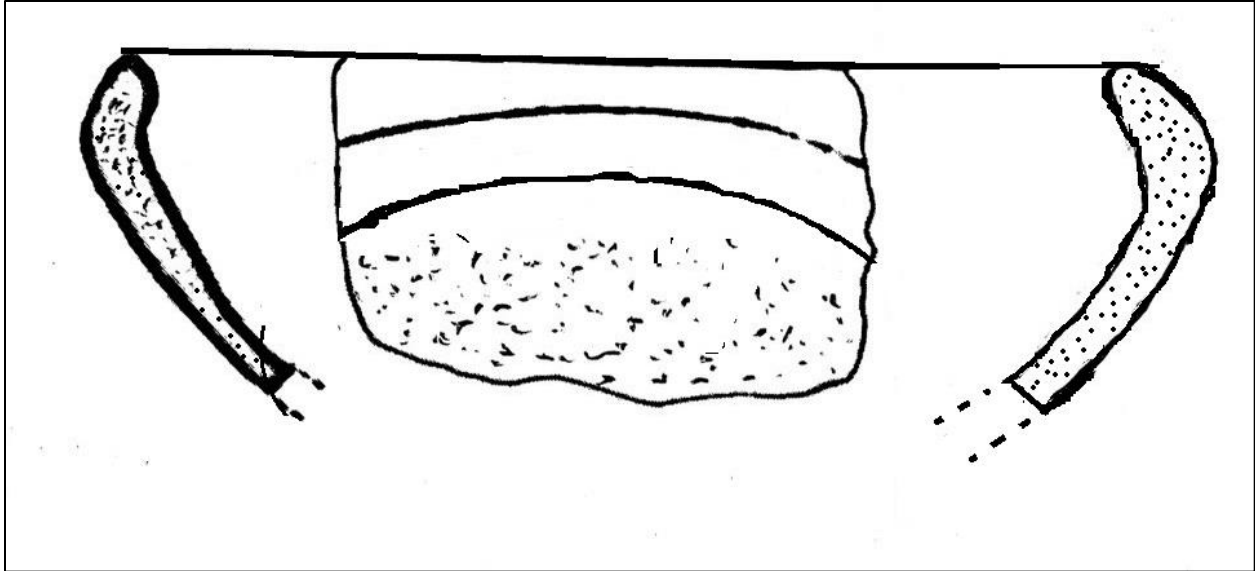


Figure 6. 16 Illustration of Bowl Type 2.

6.4 Daub

Daub is defined as "prepared mud or clay used to cover a construction of timber or wattle (poles intertwined with thin branches and reeds) as a finish to the surface" (Kipfer, 2000). A total of 61 pieces of daub were retrieved from the research area (figure 6.17). Averagely, they measured approximately 5 centimeters across their longest axis and 3 centimeters thick. The distribution according to trenches was as follows: Trench 1, 46, Trench 2, 7, and Trench 3, 8 pieces. Daub is applied to both sides of a super structure of house walls and furnaces, primarily to block airflow and provide to smooth surface finish. The wattle (the interlaced twigs) are rarely found with the daub during archaeological recoveries because they are organic and easily and quickly disintegrate in the archaeological record. However, traces in the shape and form of the interlaced twigs (striation) lines are oftentimes found along portions where the daub was applied. Posnansky (2014:74) also found veritable quantities of fragmented daub at the Brong Quarter of Begho during his several seasons of research there. Despite several advancements in structural engineering technologies and modernity, a significant number of the indigenes, especially those within the lower income bracket still build wattle-and-daub structures at Hani.



Figure 6. 17 Fragments of daub from the Nyarko Quarter (Source: Author)

6.5 Lateritic stones

A deposit of red rock or gravel is referred to as laterite. They are created when different rock types deteriorate under circumstances to produce aluminum and iron hydroxides (Swanson, 1923). Laterite can be both soil and rock and are rich in iron. A total of 15 lateritic stones were collected from the three trenches during the archaeological investigations (Figure 6.18). Specifically, eight were recovered from Trench 1, five from Trench 2, and two from Trench 3.

Ethnographic research by Compton (2014: 168) and Stahl (2004: 119) in the study area and its neighbourhoods have shown that laterite gravels are frequently used for construction of house floors. When the desired spread and thickness are achieved, it is then covered with a thin coating of slurry or plaster. It is thus probable that the laterite gravels retrieved during the excavations may have been used by the ancient people of the Nyarko Quarter of Begho for this purpose. It is noteworthy that the current population of Hani blend lateritic stones and cement as bonding agents to build house foundations. A small number also use big lateritic stones and boulders to construct hearths in their kitchens.



Figure 6. 18 Some lateritic stones recovered from the Nyarko Quarter. (Source: Author).

6.6 Palm Kernel Shells

Two palm kernel shells (*Elaeis guineensis*) were recovered from the study area from Level 3 of Trench 2 (Figure 6.19). Their recovery can be counted as evidence that oil palm was cultivated and probably constituted an integral part of their diet. Palm oil and palm kernel oil are notable derivatives of the oil palm tree. Other food derivative such as mushrooms which germinate on the trunk when cut may have been important dietary complements. Beverages like palm wine and local gin (*akpeteshie*), also derivatives, may have been an essential constituent beverage in their everyday religious and ceremonial life. According to Posnansky (2015: 39, 110), the Mo people who lived nearby and known to have manufactured varieties of pottery for export and may have supplied the ancient people of Begho with palm wine storage pots to store and serve palm wine.



Figure 6. 19 Remains of palm kernels from the Nyarko Quarter. (Source: Author).

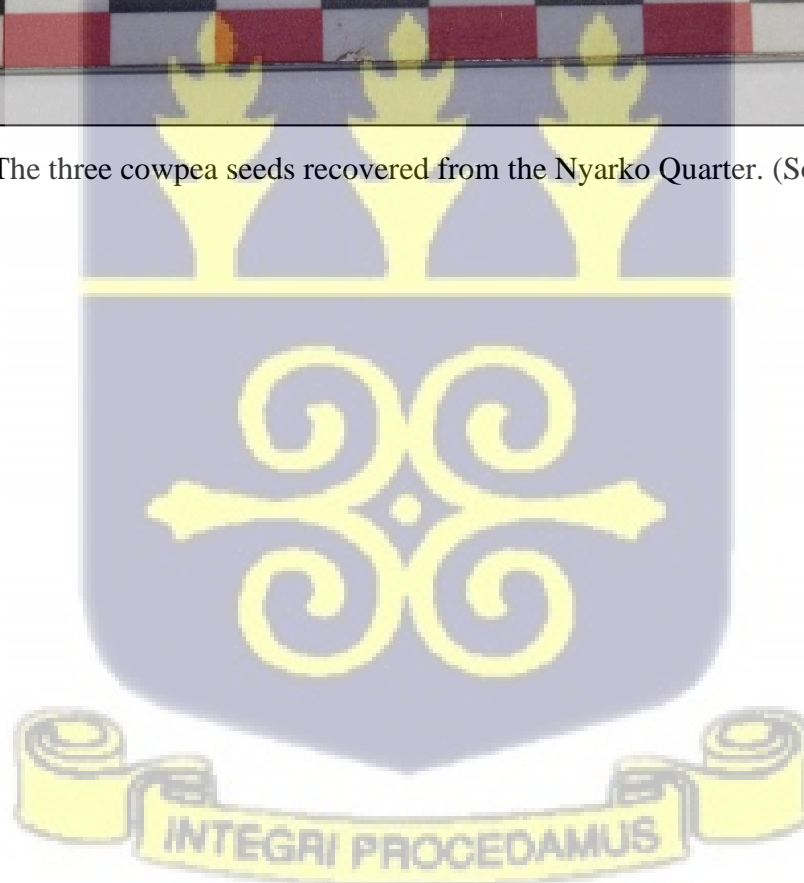
6.7 Cowpea Seeds

A total of three (3) partially fossilized cowpea seeds (*Vigna unguiculata*) were recovered during the excavations (figure.6.20). Each One was retrieved at Levels 1 and 2 of Trench 1, and the third from Level 1 of Trench 2. The plant is presently widely cultivated among indigenous farmers in the study area and constitutes an integral aspect of their everyday diet (Stahl 2004: 50).





Figure 6. 20 The three cowpea seeds recovered from the Nyarko Quarter. (Source: Author).



Chapter Seven

Discussion and Conclusion

7.0 Introduction

Discarded material remains by ancient societies play an integral role in facilitating the reconstruction of the past socio-economic and cultural lifeways of those societies. When scientifically analyzed, these remains can shed light on how they were used, how long they were used, and the purposes for which they were used. However, relying solely on archaeological data for reconstructing past lifeways can sometimes be problematic, and can be attributed to the fact that much of the data recovered from the archaeological record are oftentimes, veritably scanty and inadequate. In some instances, when significant recoveries have been made, they can be favourably skewed towards trade patterns and subsistence strategies, while being silent on issues relating to indigenous ideologies, settlement patterns, rituals and religion. This necessitated the utilization of an eclectic approach involving the use of historical, ethno-historical and ethnographic data, addition to the archaeological for this discussion; as well as the Object-Centered/Object-Driven Approaches to material culture studies. In conclusion, the various approaches employed in conducting this research proved extremely beneficial in answering the research objectives.

7.1 Research Findings and Discussion

Analysis of the faunal inventory (Tables 6.4, 6.5 and 6.6) retrieved from the excavations at the Nyarko Quarter indicated that the occupants of the quarter exploited a variety of animal types which were adapted to different habitats and ecosystems for food and other purposes. The Nyarko Quarter of Begho (currently Hani) was fortuitously located along the heavily forest-savanna transitional zone, and this enabled the people to exploit and procure for themselves a wide variety

of domesticated and undomesticated animal species from the above-named ecological zones. The recovery of inedible animal products such as ivory also shed light on past production and use of non-edible animal parts.

Scientifically analyzing the faunal assemblage recovered revealed that the various bone parts belonged to only two vertebrate Classes, namely Reptilia (reptiles) and Mammalia mammals). It also made possible the classification of the various constituent bones to genus or species levels. The total count of the assemblage was 1,009, and comprised mainly bones (94.6%) and teeth (5.4%).

The first stage of the analysis involved classifying the bones into **diagnostic** and **undiagnostic** categories. The former, which totaled 49.3% on one hand, comprised all bones which were scientifically identified. These bones were generally relatively larger, with their established reference marks such as shape and colour intact to facilitate positive identification. They included *femurs*, *metapodial distal*, *humerus-distal* and *lower mandible*. The latter on the other hand totaled 50.6%, and comprised heavily fragmented bones with no established reference marks to facilitate positive identification. These bones included *distal phalanges* and *lunates*.

Bos sp. (cattle- Bovidae) was the most exploited mammalian species at the Nyarko Quarter, and constituted approximately 25.6% of the total faunal inventory. This was followed by other bovids (21.9%), notably antelope, sheep (*Ovis aries*), goat (*Capra aegagrus hircus*) and duiker (*Cephalophus* sp.), Rodentia (rodents- 0.79%), notably *Thryonomys swinderianus* (grasscutter), Suidae (wild pig – 0.3%), and Carnivora dog (*Canis lupus familiaris*- 0.1%).

It is currently a taboo to rear goats at Hani and offenders are made to slaughter a sheep to appease the town's deity. Indeed, the punishment threshold is relative and may vary from person to person

depending on the situation such as whether the culprit was aware of the taboo or not. Other rites involved in the appeasement process included the exaction of significant monetary fines and in the case of continuous violators, outright banishment of the person/s involved. The recovery of veritable quanta of goat remains in the archaeological record at the Nyarko Quarter presupposes that this taboo may have been non-existent during the quarter's occupation period, date to the 11th century (1222 A.D and 1269 A.D.) which was generated by the author from two samples of charcoal dated at the laboratory of the National Laboratory of Age Determination, Norwegian University of Science and Technology. The two dated charcoal samples were retrieved from Level 5 at Trench 2, and Level 6 at Trench 1. It is imperative to note that the bases of the occupation levels of the two trenches named above were 160 centimeters and 140 centimeters respectively. It will thus be correct to posit that the early occupation period of the Nyarko Quarter may have preceded the 11th century date generated from dating the two samples by one or two centuries, and that the rearing of goats may not have been a taboo during that period.

A fragment of a land turtle shell was the only Reptilia recovered. The recovery of bones identified as belonging to wild/undomesticated animal species such as grasscutter (*Thryonomys swinderianus*), duiker (Cephalophinae), squirrel (Rodentia; Sciuridae) and antelope (Bovidae) is strong archaeological attestation that hunting may have been an important subsistence vocation of the people in the past. Meat derived from hunting using traps like snares and pitfalls may have been the commonly used practice to trap/capture these small rodents as presently pertains in the area. Guns may have been used although there was no evidence of the local production of this device in the community in the past. Such weapons may have been procured externally from neighbouring polities, probably via trade.

There was a clear absence of fish (Pisces) and bird (Aves) remains at the Nyarko Quarter. This can probably be attributed to the fact that the two commonest fish types: namely mudfish and tilapia in the Nimpene and Masa Musu Rivers are relatively small with fragile bones. This situation could have facilitated their easy and early disintegration in the archaeological record, hence, their non-recovery.

A few of the recovered bones displayed darkened charred marks indicating that smoking over open fires may have been an important food preparation method of the people occupying the Nyarko Quarter in the past. Prolonging the life of meat by smoking on open fires is a major meat processing method of contemporary market women engaged in the meat trade at Hani. This meat processing method may have been a major ancient meat storage technique used by residents of the Nyarko Quarter in the past. Sharp cut marks and saw marks identified on bones of some of the animal parts discovered indicated that sharp edged tools such as knives, cutlasses and saws may have been used to disintegrate the bones from the flesh during the processing of meat.

The sizes of the jaw bones, teeth, *scapulas*, *femur-distal* and *humerus-distal* recovered clearly indicated that most of the undomesticated species such as duikers and antelopes which were trapped, and domesticated species such as sheep and cattle were matured and all fully-grown. The former accounted for 92% of the total and juveniles accounted for only 8% of the total. This finding is backed by ethnographic information derived from all the skilled hunter respondents interviewed that generally, they let go juvenile game in favor of adults.

The recovery of mollusc shells identified as snail (*Achatina achatina*) is an indication that the inhabitants of the Nyarko Quarter exploited this resource. According to Posnansky (2004: 39), collecting molluscs in Begho was probably another important subsistence strategy of the people and was undertaken primarily to supplement their protein needs. The current population of Hani

comprising adults and children can be seen gathering snails during the wet season, especially after heavy downpours. To enhance its storage, the edible part of the flesh are removed from the shell, sun-dried and smoked over open fires before being stored in grass baskets for future consumption.

The evidential data (archaeological and ethnographic) clearly supported the notion that the people also exploited and subsisted on a variety of botanical resources for food. The recovery of palm kernel nuts is conclusive proof that the palm fruits were cultivated and that it complemented the diet of the locals during the period. The palm kernel recovered during the excavation also provides insights into the dietary pattern of the people. Palm wine and local gin (*akpeteshie*) is an important aspect of the leisure/ceremonial life of the modern people of Hani. Palm nut (*Elaeis guineensis*), mushrooms, oil, and palm kernel grubs are consumed during the wet season when other food sources are scarce and may have constituted an important element of the diet of the people of the quarter in the past. Posnansky (2015:110) claims that different population from the Northeast of Begho now Hani may have produced palm wine pots which were used to serve and store the palm wine.

The discovery of cowpea seeds (*Vigna unguiculata*) suggests that the plant is indigenous to the people. Ethnographic data collected from the current Hani people point out that they cultivate cowpeas (*Vigna unguiculata*), which are a regular part of their diet and is an essential ingredient in their daily meal. They probably supplemented the above-named foods with other botanical staples like millet and yellow yam which are indigenous to the area but were not found during the research.

The ethnographic study at Hani supports this assertion, evidenced by the fact that these foods constitute an integral part of their daily diet. The regular ingestion of different food types would have guaranteed balanced diets and may have promoted good health and physical wellbeing. This is because meals prepared from a wide array of food types would contain a greater variety of

minerals and vitamins which in turn would have ensured adequate supplies of essential nutrients necessary for good health and vitality, as opposed to preparing foods from a few foods types.

There was a clear absence of metal objects from the Nyarko Quarter excavations. However, this should not be misconstrued to mean the settlers did not use metal objects in their daily subsistence practices. The Dwinfour artisan quarter which lies only about half a kilometer north of the Nyarko Quarter had veritable recoveries of iron slag, remains of finished metal objects and over 500 copper crucibles (Crossland 1975: 17). Also recovered was substantial quantities of remains of furnaces and tuyeres which are integral for smelting iron. Anquandah (1982) and Posnansky (1980) noted in their post excavations preliminary reports that utilitarian metal implements such as knife blades, iron arrow points and luxury metallic beautification and body adornments materials like rings and anklets may have been manufactured there also.

The recovery of 28 fragmented ivory artifacts is very important and illuminates three aspects of the past cultural lifeways of the ancient people who settled the Nyarko Quarter. It must be emphatically stated that none was discovered whole and all were heavily fragmented with their most extensive axis measuring approximately 5 centimeters across. The first is that large herds of elephants may have commonly roamed the area in the past unlike now where only small herds of about five in number are occasionally spotted in a long while. The tusks of these animals provided the medium (ready raw material) from which ivory artifacts like combs and side trumpets some of which were found by Posnansky (1976, 1980) were made. The second is that their veritable recoveries are testimony that ivory artifacts constituted important body adornments and other utilitarian materials of affluent people who resided at the quarter in the past. The current population fashion them into anklets, bangles, rings, bracelets, combs and even needles for sewing. Third, ethno-historical narratives of the people intimate that ivory was an exceptionally rare commodity

in the past and that only the wealthy and a few people in the upper elitists class of the society bought and used them. This assertion presupposes that in the remote past, an upper echelon class may have resided at the Nyarko Quarter.

Posnansky in a paper presented at the **African Studies Fall Colloquium** at University of California, Los Angeles, titled “*Some Reflections of a Temporary Nature on Towns, in General and on Begho, Ghana*” argued that each of the six quarters of Begho may have had their own paramount chiefs. His assertion was based on the recovery of several chieftaincy regalia and paraphernalia associated with Akan elite status and Akan political power which included the ends of two decorated side-blown ivory trumpets and several pieces of worked and unworked ivory artifacts recovered at the Brong Quarter and the other quarters at Begho (Posnansky 2013:60).

It is noteworthy that among the regalia of the current paramount chief of Hani, Nana Ampofo Agyeman II, are two undecorated ivory side-blown trumpets said to have been made from the tusks of one of the last elephants (*Loxodonta africana*) found in the Hani area (Pers. Comm. Mr. Koomson Boamah, 12th June, 2022). Based on these discoveries, Posnansky (1975, 1979a) has postulated that Begho may have had a thriving ivory carving industry in the past.

Potsherds constituted the most veritable and ubiquitous artifact recovered during the excavations at the Nyarko Quarter. That they shared same attributes (colour, surface finish types, shape, size, and form) with those previously recovered by the Posnansky’s team from the other quarters is clear testament of possible vibrant socio-economic and cultural interactions of occupants of the six quarters of Begho. Other prominent shared traits included designs such as the cord roulette, carved roulette, grooves with dot stamps, wavy lines, and perforated sherds (Crossland 1973: 256, 1973: 257).

Effah-Gyamfi who conducted extensive archaeological investigations at Bono Manso in the early 1970's noted that locally manufactured vessels found there shared very close attributes with those from Begho. For example, both shared composite decorative motifs, very similar morphology, and vessel finishing techniques. Roulette motifs were also a common decorative motif associated with vessels from the two sites (Effah-Gyamfi 1979: 181). Further investigations in the mid-seventies by Leonard Crossland (1973: 29) also clearly showed that the similarities extended beyond Begho and Bono Manso potteries, to notable far distant settlements like Kumbi Saleh and the Neolithic site of Mumute, all of which lay further north of Bono Manso and Begho.

Kwame Arhin (1979: 27) has noted that there might have existed close social relations and interactions among the settlers of the Nyarko Quarter and some middle Niger peoples during the period when Begho was occupied. According to him, this was because pottery forms such as pedestal stands and pot-stands do not form part of the indigenous ceramic tradition of the region where Begho was located. He argue that this pottery type may have been procured from the middle Niger and that the adoption of stylistic attributes such as decorative techniques, shapes, and finishing techniques on locally produced vessels indicates a voluntary emulation of traits (Arhin 1979:27 -30).

Aside engaging socio-economically with their northern neighbours, the people of Begho (including those from the Nyarko Quarter) may have interacted with some southern polities during the period covered by the study. That perforated sherds which are very similar in shape, form, size and design have been found at Dawu, Akwapim is strong archaeological evidence supporting this assertion. Veritable quantities of these perforated sherds (figure 6.13) were recovered from archaeological context during Thurstan Shaw's excavations there in 1942. He was then curator of the Achimota College Anthropology Museum and he called these vessels "colanders". Crossland

(1973: 91) has also reported that the Mo people of Bondakile which lies about 17 kilometers north of Begho also used perforated pots, very identical to those from Begho; primarily in their funerary celebrations. Perforated pots are also used by the Ga-Adangbe who inhabit the Greater Accra Region of Ghana. Unlike the Mo people, they use it to steam corn which is the traditional meal served during their annual *Homowo* festival. Ethnographic data derived from the indigenous population of Hani indicates that they also use perforated pots, for honey separation and that the process involves placing honey comb in the perforated pot and applying low medium heat which allows the honey to sip through the holes (Pers. Comm. Anderson Darko, 12 June, 2022).

Potsherds totaling 6,235 constituted the most ubiquitous cultural material found at the research area. They were recovered from both excavation and surface contexts and their abundance suggest it was probably the most common and most popular food preparation accoutrement used by the people in the past.

Incidentally, jars usually used for the storage of liquids, especially water were not found. Their absence however, should not be misconstrued to mean the people of the Nyarko Quarter did not use jars because significant recoveries have been made at the other quarters (Posnansky (2004: 40). The low count of the upper sections of vessels recovered (neck, mouth, upper shoulder area, lip, and etc.) made it exceptionally difficult to establish and document the various types and forms of local potteries used by the indigenes of the Nyarko Quarter. The reconstruction of the only one found indicated it was a bowl. That its lower base was covered with soot is evidence that it was a cooking vessel that was used over an open fire.

Ethno-historical narratives of the people assert that they had no pottery manufacturing tradition in the past and that their forebears procured all their pottery from Bondakile located 20 kilometers north-west of Begho. Oral account derived from some natives of Bondakile attests to centuries of

manufacturing varieties of pots. It is pertinent to note that the current inhabitants of the town still manufacture varieties of bowls and jars, the bulk of which are exported and sold at neighbouring towns like Menji, Namasa, Hani, Debibi and Wenchi and Nsoko on their market days.

Significant recoveries of daub and lateritic stones, used for construction of wattle and daub house structures suggests the settlers of the Nyarko Quarter in the past were sedentary. Forty-six daub fragments and fifteen lateritic stones were recovered from all the three trenches. According to Posnansky (1976: 23), wattle-and-daub constructions were the earliest architectural forms associated with the peoples of the research area and its forest and savanna environs. The recovery of fragments of drain pipe at the Brong Quarter suggests that flat-roofed house structures which are synonymous with the peoples of Sudanic/Sahelian belt located north of Begho, may have been adopted at Begho Posnansky (1976). That there existed vibrant socio-cultural interactions and established regular commercial exchanges/trade with their northern neighbours may have facilitated the introduction and adoption of this unique architectural technology into ancient Begho society. Lateritic stones/blocks in particular have diverse uses at Hani aside being integral for house construction. For example, some locals use it for constructing hearths, goat and sheep pens and pavement blocks.

7.2 Conclusion

The combined evidence (archaeological, ethno-historical, historical and ethnographic data) clearly indicated that the Nyarko Quarter was an integral suburb of ancient Begho. The study revealed that the inhabitants of the Nyarko Quarter in the past exploited a wide variety of faunal resources, comprising both domesticated and undomesticated (wild) animals. The former included sheep, goats and cattle; while the latter comprised grasscutters, duikers, wild pigs, squirrels and antelopes. The majority of the above-named domesticated species were probably ranches as pertains

presently, and were slaughtered for food as and when their meat was required for food preparation. It is also possible that occasionally, they may have been allowed to randomly roam to fend for themselves.

The use of sharp objects such as knives to detach meat from bone, and to cut bone to reach the marrow was probably an important food processing technique employed by the settlers of the Nyarko Quarter and is evidenced by “V” shaped cut marks on bone, several of which were found.

That remains of the above-named animals were discovered at all levels of the stratigraphy suggests that they were regularly hunted all year round. Hunting and trapping using guns and locally manufactured metal entrapments and other devices were the main methods used by the people to capture undomesticated animals. Although elephant remains were not discovered, the recovery of fragments of ivory artifacts made out of elephant tusks presupposes that the ancient hunters of the Nyarko Quarter hunted these animals. The meat of these large animals were probably consumed and the tusks sold to established ivory carvers who fashioned them into decorated body ornamentations for the wealthy and elitist class. Hunting was thus, an important vocation of the people.

It is presently a taboo to keep a goat or rear them at Hani, and violators are punished by way of paying heavy fines. However, it is important to note that significant quantities of goat remains were recovered during the excavations. This indicates that this taboo is recent and may have been non-existent during the period when the Nyarko Quarter was occupied. It probably came into effect upon return of some of the people after the civil war/ransacking of Begho. This assertion should for now be considered tentative as further investigations are required to establish its veracity.

Veritable recoveries of cowpeas and palm kernel nuts is clear testament that farming like hunting was an important occupation of the people. The above-named plant resources and the seeds of others not found in the archaeological record probable complemented their daily diet. Regular consumption of the meat of these animals provided quality protein for the people, a situation which may have enhanced their health and general well-being.

Except for locally manufactured pottery believed to have been imported from Bondakile, the Nyarko Quarter excavations did not yield any other imported items. However, Posnansky (1976, 1980) recovered several veritable artifactual relics from the Brong, Kramo and the Dapaa Quarters of Begho during his excavations there in the 1970's. The very notable ones comprised a fragment of imported Chinese porcelain, carnelian glass beads, fragments of imported kaolin smoking pipes and several metal objects. He posited that the likely source of these imports were the northern Islamic Kingdoms of Mali and Songhai in the Sahel. Another very notable artifact recovered was the *humerus* of a horse which is known to be non-indigenous to the Begho area. These finds strongly support the practice of trade/exchange with some kingdoms in the north of West Africa. It is also worth noting that some early Arabic scholars, notably Abd al Rahman in his book "*Tarik al Sudan*" published in 1655, posited that aside the above books, horses together with Islamic books constituted notable imports to Begho during the period covered by the study.

The clear absence of metal tools and other metal remains from the Nyarko Quarter excavations should not be construed to mean the settlers did not use metal tools. Further investigations are required to ascertain the veracity or otherwise of this assertion because the Nyarko Quarter is large and only a small part of it was excavated.

7.3 Recommendations for Future Researchers

Population growth over the last decade has led to expansion of the Hani Township, culminating in indiscriminate destruction of archaeological materials, especially those on the ground surface. Other notable developments arising from this is the expansion of housing, infrastructural works and farms. To this end, there is the urgent need for future researchers to quickly undertake salvage archaeological investigations at locations within the Nyarko Quarter currently undisturbed and unaffected by the spate of construction works to recover artifacts for analysis before they are destroyed.

This will serve three purposes. The first is that it will raise awareness about the cultural significance of Nyarko Quarter and Begho as a whole. The second is that it will help educate the current population of Hani about the people who occupied the Nyarko Quarter in the past, and third, it will facilitate/boost historical tourism in the Bono region in the long term.

A small community museum created by Daniel Kumah after completing his investigative work at Begho is currently stocked with artifacts and faunal materials recovered by him during his excavations. New recoveries from the future investigations can be added to those currently showcased in the museum to shed more light on ancient Begho's rich cultural past and its relationship with the northern Sahelian polities.



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Appendix A.

List of Arabic texts which to some extent mentions Begho

S/N	Name of Manuscript	Date	Author	Reference
1.	<i>Isnad al-sudan</i>	Late 16 th century?	Unknown	Massing 2012; Wilks 1962
2.	<i>Wusul Bighu</i>	Early 17 th century?	Unknown	Wilks 1993; 1962; 1962; Massing 2012
3.	<i>Kano Chronicles</i>	Pre-1450 to 1930	Unknown	Adu-Boahene 1977; aminusumaila.org
4.	<i>Tarik al-sudan</i>	1655	Abd al-Rahman al-Sadi	Nobili 2019; Massing 2012; Wilks 1993; Houdas 1911
5.	<i>Umur Adajdina al Ghunjawiyyin</i>	Early 16 th century	Unknown	Wilks 1966; Wilks 1982; Anquandah <i>n.d.</i>
6.	<i>Kitab Ghunja</i>	Compiled around 1751	Unknown	Massing 2012; Wilks 1993; 1982; 1962; Wilks <i>et al</i> 1986; Goody 1954; Anquandah <i>n.d.</i>
7.	<i>Amr Ajadadina</i>	Unknown	Unknown	Wilks <i>et al</i> 1986
8.	<i>Tarik al-fattash</i>	1840s	Nuhb al-Tahir	Nobili 2019; 2020a; Wilks 1961

List of Arabic texts which to some extent mentions Begho

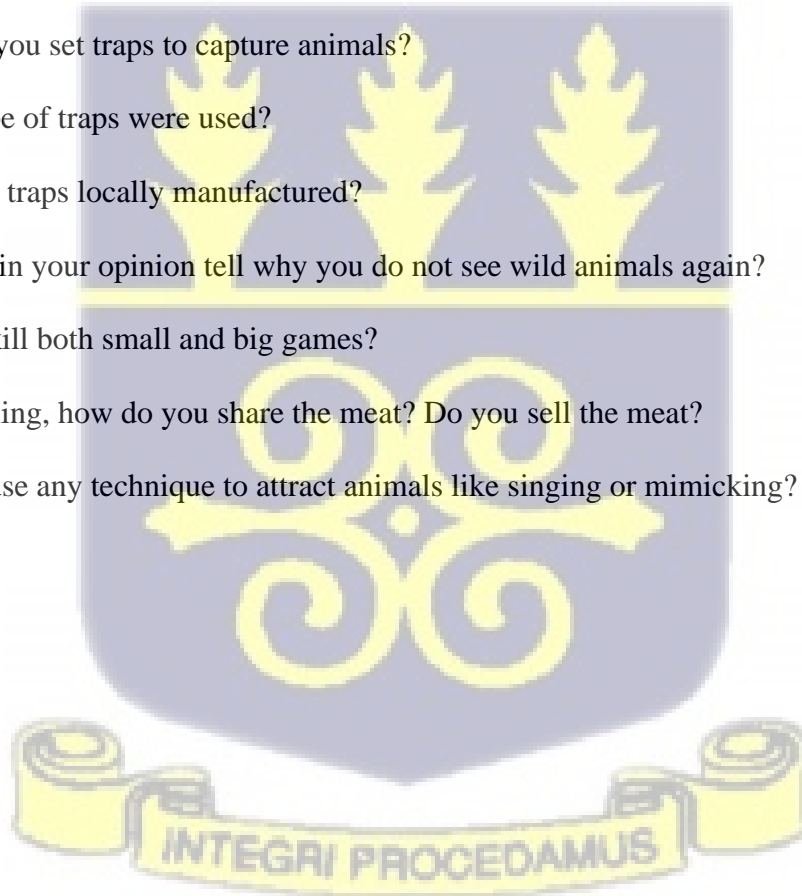
(Reproduce from Kumah, 2022)



Appendix B.

Interview Guide on Hunting and Trapping in the Hani Community

1. How did you become a hunter?
2. Can you narrate how you first killed an animal?
3. How many animals have you killed since you became a hunter?
4. Have you ever hunted at places other than the Hani areas?
5. What was the status of hunters in the past?
6. Do you have any occupation aside hunting?
7. Were guns used in hunting in the past and how were they obtained?
8. How do you set traps to capture animals?
9. What type of traps were used?
10. Were the traps locally manufactured?
11. Can you in your opinion tell why you do not see wild animals again?
12. Do you kill both small and big games?
13. After killing, how do you share the meat? Do you sell the meat?
14. Do you use any technique to attract animals like singing or mimicking?



Appendix C

Names, ages, and occupation of respondents

Name	Age	Occupation/status	Resident
Mr. Koomson Boamah	68years	Elder/ farming	Hani
Mr. Darko Anderson	71years	Retired teacher/farmer	Hani
Mr. Victor Gyamfi	49years	Farmer/ animal trapper	Hani
Mr. Barnabas Apaw	70years	Farmer/elder/	Hani
Opanyin Kwesi	70years	Retired hunter/farmer	Hani
Kwame Oppong	42years	Mason/hunter/farmer/ animal trapper	Hani
Appiah John	38years	hunter/farmer/ trapper/hunter	Hani
Kwame Darko	51years	Farmer/animal trapper/hunter	Hani
Kwabena Apau	44year	Farmer/carpenter/hunter	Hani
Solomon Agyemang	34years	Farmer/mason/hunter	Hani
Kwesi Sarkodie	52years	Hunter/farmer	Hani
Kwabena wusu	56years	Retired/Hunter/farmer/mason	Hani
Yaw Preko	51years	Hunter/farmer	Hani
Kofi Bona	55years	Hunter/farmer	Hani
Bright Owusu	37years	Hunter/mason/carpenter	Hani
Kwesi oppong	34years	Trader/hunter	Hani
Opoku Agyemang	39years	Mason/carpenter/hunter	Hani

Kwabena Dappa	34years	Hunter/mason	Hani
Kwame Gyamfi	35years	Trader/hunter	Hani
Yaw Nyarko	39years	Carpenter/hunter/mason	Hani
Kofi Aboagye	40years	Teacher/hunter	Hani
Yaw Ata	32years	Mason/hunter	Hani
Yaw Boadu	33years	Hunter/mason	Hani
Kyei Mensa	44years	Carpenter/hunter	Hani
Boachie Mathew	47years	Hunter/farmer	Hani
Kwabena Agyemang	41years	Mason/hunter/trader	Hani

