

**AN ARCHAEOLOGICAL INVESTIGATION OF MERNYANG HILL SETTLEMENTS
OF THE SOUTHERN JOS PLATEAU, NIGERIA**

BY

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NIGERIA.**

FEBRUARY, 2018

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BY

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P15ARAH8019**

**IN PARTIAL FULFULMENT OF THE REQUIREMENTS FOR THE AWARD OF A
MASTER DEGREE IN ARCHAEOLOGY**

**IN THE DEPARTMENT OF ARCHAEOLOGY, FACULTY OF ARTS,
AHMADU BELLO UNIVERSITY ZARIA**

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FEBRUARY, 2018

Declaration

I declare that the work in this project entitled ‘An Archaeological Investigation of Mernyang Hill Settlements of the southern Jos Plateau, Nigeria’ was conducted by me in the Department of Archaeology. The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this project was previously presented for another degree or diploma at this or any other institution.

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Certification

This dissertation entitled ‘**An Archaeological Investigation of Mernyang Hill Settlements of the southern Jos Plateau, Nigeria**’ meets the regulations governing the award of the degree of Master of Arts in Archaeology of the Ahmadu Bello University, and is approved for its contribution to knowledge and literary presentation.

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Acknowledgements

My appreciation ultimately goes to almighty God for being my light and strength. To my parents Mr and Mrs Emmanuel Yola Kwapnoe and my entire family, both nuclear and extended, this is the beginning of many good things awaiting you. I love you dearly. To my brother Tobias Dongjur, who supported me financially and morally, I love you and God bless you. To Prof. Joseph Mangut, I do not have enough words to thank you for your mentorship, encouragement and support. May God continue to bless you immensely for being a father and teacher to me. My heart is filled with profound appreciation to the family of Mr and Mrs Ibrahim Wayo who opened the doors of their home to me and created a home away from home for me in Zaria. May the love and kindness that fills your home go into the heavens for your sake. God bless you Mama, Baba, Tirnok, Rita, Tinam, Daddy and Tessa Wayo.

My sincere gratitude goes to my supervisors, Prof B.N. Mangut and Dr A.S. Sani who guided me through this dissertation with love, patience and support. I cannot forget your corrections and kindness; may God bless you. To my dear friend Macham Mangut who went with me to the field and helped out with the maps, your hard work, kindness and generosity will speak for you here and in the hereafter. Dr C.S. Bakinde, thank you for being a good adviser to me; your effort shall not go in vain and God bless you sir. To all the lecturers and staff of the department of Archaeology, ABU, Zaria, my immense gratitude goes out to you for your tutorship and patience. It is my desire to make you proud and your reward will begin here on earth.

This research would not have been possible without the help of the people of Kofyar, Lardang, Bong, Zuwakal and Mer who welcomed us warmly into their communities, provided us with shelter, food, information, and guidance throughout our two-week stay on the hills. Thank you and you have become family to me. Profound gratitude goes to my uncle James Daseer who opened the door of his home to us in Lardang; the chiefs of Kofyar and Lardang for their hospitality; the heads of Bong, Zuwakal and Mer for their kindness. Also, my gratitude goes to Chindong my little friend who let us share her room in Kofyar; our guides Dawang Logan and Manlat Dana'an who guided us to the hills and the abandoned areas of Kofyar. Mr Daruwang in Zuwakal, I appreciate your kindness. My aunt Nakogol Dapanmil and her family in Bong who accommodated us for three days in Bong and fed us with love, God bless you. I deeply appreciate all my informants and guides and the entire villagers whom this space cannot contain. You are beautiful people of love.

My appreciation goes to the authorities of the University of Jos for partly funding this research. I also want to thank all my colleagues in the department of Archaeology and heritage studies of the University of Jos for their support and patience. The 2015/2016 MA Class of the Department of Archaeology, thank you all and I wish you the very best in all your endeavours. To Joel Ibrahim, thank you for the editorial work, God bless you richly.

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Abstract

This work entails an archaeological study of five hill settlements occupied by the Mernyang ethnic group in the southern part of the Jos Plateau. The research area was chosen because the Jos Plateau region especially its northern part, presents evidence for a very long period of human antiquity, however for the Qua'anpan area in the south which had attracted the attention of anthropologists, not much archaeological research has been conducted. Therefore, the researcher saw the need to conduct an archaeological study of this area in order to provide a comprehensive picture of the history of the people of the Jos Plateau and to provide a reference material for subsequent cultural researches.

This research was carried out with the aim of understanding the cultural characteristics of the past inhabitants of the area. This was achieved by the review of literatures on the Jos Plateau and the site in particular, collection of oral histories, study of material cultures, archaeological survey and mapping of abandoned areas using the GIS of Kofyar, Lardang, Bong, Zuwakal and Mer hill settlements. The use of contextual archaeology was employed during the survey, collection of data and analysis of materials, while human adaptation theory of cultural ecology was applied in the interpretation of data.

Material evidence of past human activities revealed during the survey of five Mernyang hill settlements include house foundations, graves, farm terraces, ritual areas, lower grinding stones and hollowed rocks; monolith, partially buried pots and whetstones. Analysis of data reveal similarities in pattern of compounds, types of pottery based on form and decorative motifs, terrace farming and ritual system in all the five sites which suggest that the past occupants of the area may have belonged to the same cultural group.

Through this research, the distribution of past human activities on the landscape which was determined by land, labour, water and security were revealed. Other adaptive strategies such as the intensive agricultural system of the Mernyang people using terraces and crop rotation and the practice of African traditional religion were revealed.

CHAPTER ONE

GENERAL INTRODUCTION

1.1 Introduction

On the southern escarpment of the Jos Plateau of Nigeria are a number of hills located in parts of Mangu, Bokkos and Pankshin Local Government Areas. Some of these hills are home to the Mernyang speaking group who are referred to as the “*Mirriam*” by the Hausas or *Mirniyang* in some literatures, for example in Ames (1934). The Mernyang area, although located in Qua'anpan Local Government Area (L.G.A.), its northernmost end is linked up to the hills that stretch to the Ron-Kulere, Mangu and Pankshin areas. The people are usually classified with Angas, Sura, Berom and other Plateau peoples as “hill pagans” and further referred to as Kwaklak, Doemak and Mirriam in ethnographic notes (Netting, 1968) but it is worth noting that they are a distinct ethnic group.

The research area can be accessed by a road branching off the main Jos-Shendam road at Dokan Tofa and crossing the bridge over a tributary of the River Shemankar. This road joins the Mernyang area at Dokan Kasuwa and there connects with a north-south road along the foot of the hills linking Kwang, Kwa and Doemak towns. An alternative new road connecting to the Mernyang area branches off the Jos-Shendam road at Jibam junction in Chip which goes into Dokan-Kasuwa and joins the north-south road into the Mernyang hill settlements from Kwa town. From Kwa market, an untarred road links to all the hill settlements except Kofyar hill where only footpaths are used to access it. Lardang is the first hill village from Kwa, then Kwanoeng, Zuwakal and Bong.

Mernyang is one of many ethnic groups in Qua'anpan LGA of Plateau State who are sometimes classified as Kofyar or part of "Kofyar federated groups" (Netting 1968; Walu 1991). Others include Doemak, Kwaklak, Bwal, Goemai and Doka (see fig. 1). The Mernyang ethnic group is also found in Jepal district of Mangu LGA of Plateau State. They are famously known as hill settlers by other ethnic groups like the Goemai on the plains. The Mernyang area constitutes a range of hills separated by streams and valleys, all the settlements on these hills and some surrounding plains claim the Kofyar hill as their ancestral home and they speak a common language-Mernyang.

Linguistically, Mernyang belongs to the Chadic branch of the Afro-Asiatic family; it includes the dialects of plain villages of Kwa, Kwang and Miket and by extension the hill villages of Kofyar, Lardang, Bogolong and Zuwakal. Their Goemai neighbours refer to their dialect as *lifwo pang* (the hill speech) but the people themselves refer to their own dialect as *lifwo lu mu* (speech of our home). They are aware of variations in dialects which consist of vocabulary differences and slight changes in the quality of some vowels. For example, "the people of Bong have a small but perceptible difference in dialect from Kofyar village three miles to the east and a slightly larger difference from Latok three miles to the south" (Netting 1968; 36). Other minor but constant differences are found in the northern villages yet all these groups occupy a continuous hill tract and have a long history of intermarriage (Netting 1968).

It is of great importance therefore that all the fifteen hill settlements of the Mernyang area which have so far been identified as Kofyar, Longsel, Dung, Bong, Bongolong, Zuwakal, Koepal, Kofyar, Kopfuboem, Pangkrum, Male, Buumdagas, Wudai, Kook (see fig. 2) as well as Lardang be properly studied archaeologically in order to establish possible relationships between them.

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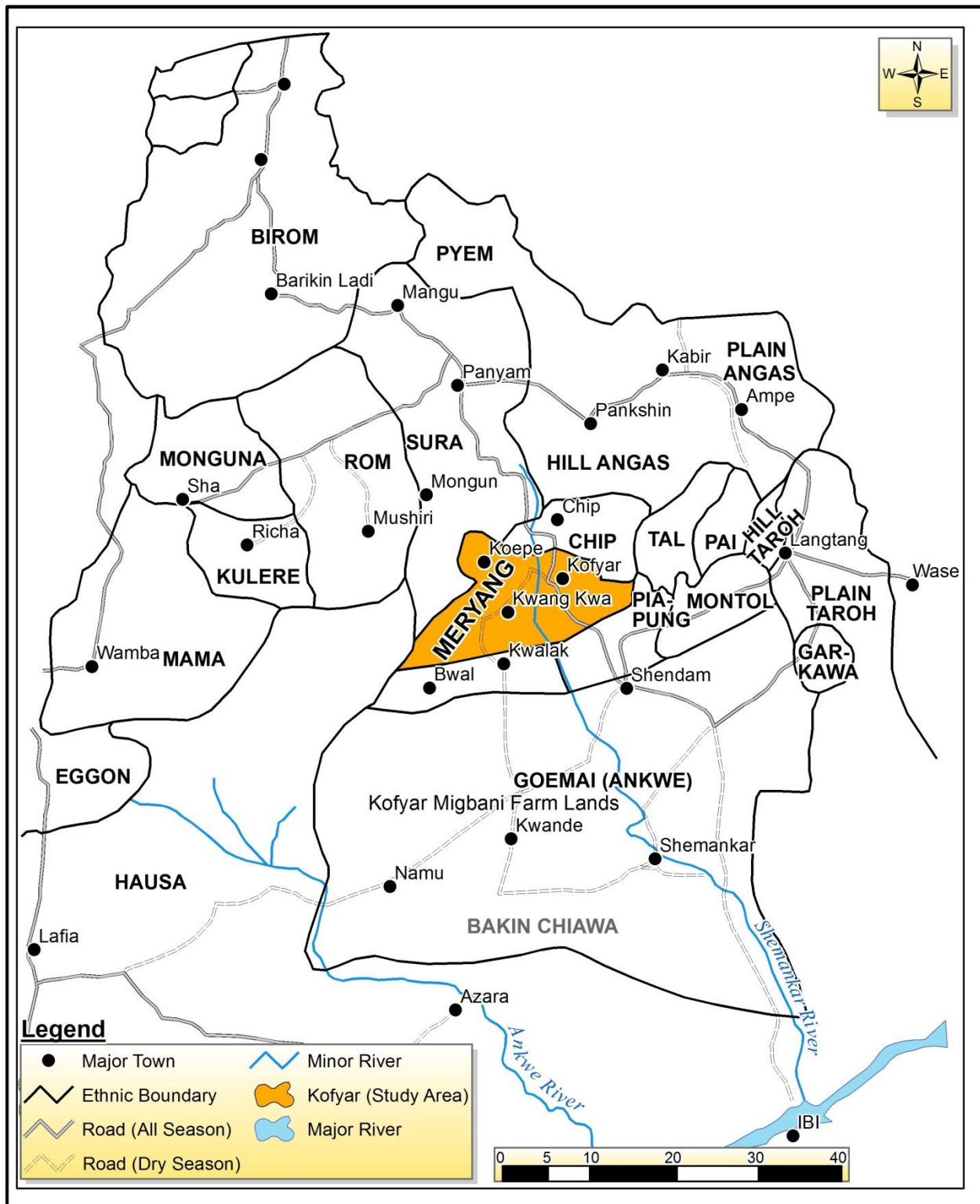


Figure 1: Map of Ethnic Groups in Plateau
Source: Netting (1968) and modified

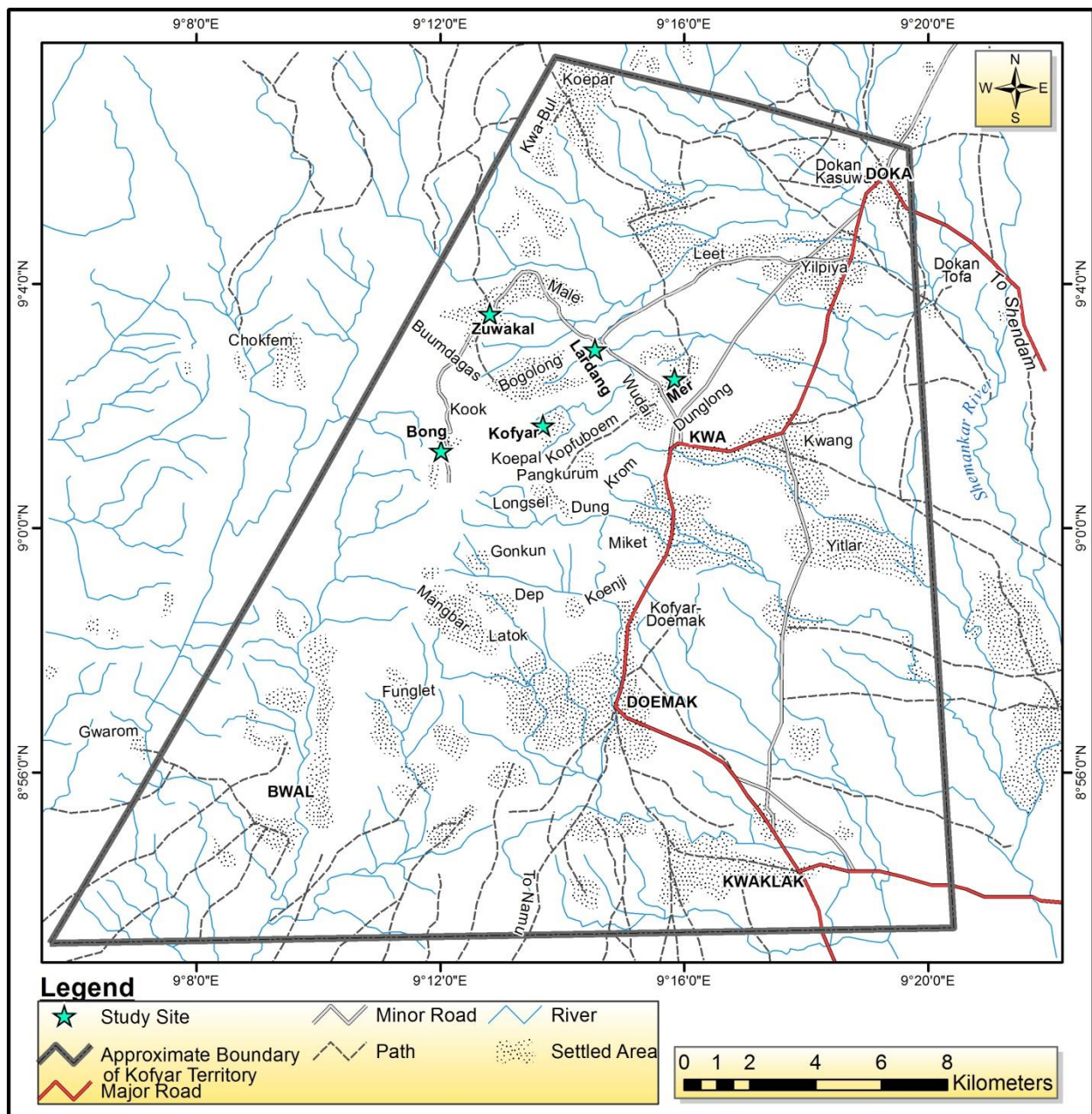


Figure 2: Map of Mernyang and Surrounding Settlements

Source: Netting (1968) and modified

1.2 Statement of Research Problem

The Jos Plateau has been documented as one of the areas of continuous human adaptation from the Stone Age periods to the present. The pre-historic distribution of early human settlements has been documented for sites such as Ropp rock shelter, dated to the Late Stone Age (LSA); Dutsen Kongba (LSA), Mai Idon Taro which revealed Acheulian – type stone tools clearly falls under the Early Stone Age and more recently the historical settlements of the Ron-Kulere area (Mangut J, 1986). The Jos Plateau region presents evidence for a very long period of human occupation, however for the Qua'anpan area, not much archaeological research has been conducted. The Qua'anpan area though located in the south has a geographical connection to the hill ranges of northern Jos Plateau with its northernmost hills forming the boundary. These hills are home to the Mernyang speaking group. Therefore, the researcher saw the need to explore these southern hills which have not until now been studied archaeologically. This is important in order to provide a comprehensive picture of the history of the Jos Plateau.

Early historical works on the Jos-Plateau like those of 19th century European travellers were filled with erroneous information about the history of the people of the Jos-Plateau including the Mernyang. This is because they did not have first-hand information but relied on Hausa traders which led to derogatory misinterpretations (Barth, 1865 cf Mangut J. 1986b) which leaves a gap to be filled. This work seeks to collect primary information directly from the inhabitants of Mernyang hills in order to provide a historical document which presents the past of the people of the Jos Plateau as best perceived by them. Archaeological data which will be corroborated with this will help to confirm oral information in order to provide substantive historical information.

In line with the above problem, this research attempts to answer the following research questions which are fundamental to understanding the cultural history of the people:

1. What is the distribution of past human activities on the landscape of the Mernyang area?
2. What is the nature of the economic system of the Mernyang hill settlements?
3. Is there a distinct settlement pattern in the area which can be traced from the archaeological record to the present day?
4. What are the socio-political and cultural characteristics that define the Mernyang hill settlers?

1.3 Scope of the Research

This research is exploratory and pioneering in nature and it is based on the surface study of cultural materials in the area. It focused on the hill settlements of the Mernyang group which falls within the southern fringes of the Jos Plateau. For the purpose of this research, settlements on the plains which are considered relatively young based on oral traditions compared to the hilly origins of the people were excluded (Kwapnoe, 2012). The Mernyang hill settlements comprise of living areas which provide ethnographic data and information about abandoned areas, sometimes identified by family names. These abandoned settlements consist of ruins of shelters in form of house foundations, dry stone walls and pottery remains.

About fifteen hill settlements have so far been identified in this area; however, only five hill settlements on the northernmost fringes that connect to the northern hills of the Jos-Plateau were researched (see fig. 2). These northernmost hills were chosen based on their geographical connection to the already studied northern Jos Plateau and the presence of Kofyar hill settlement which is the acclaimed ancestral home of the Mernyang people. The five hill settlements which

include Kofyar, Bong, Lardang, Zuwakal and Mer were studied archaeologically to draw possible cultural relationships between them.

As a result of the time frame for this research, only five out of the fifteen identified Mernyang settlements were sampled for investigation. This research was restricted to landscape survey that is limited in scope to the reconstruction of the distribution of socio-economic activities in the area.

1.4 Justification of the Research

As a rich cultural area that has received little archaeological attention, this research seeks to reconstruct aspects of the people's historical settlements and subsistence system from the archaeological investigation of Mernyang hill settlements. This research also seeks to do a documentation of tangible aspects of the cultural past of the Mernyang people. This will serve as a foundation for subsequent cultural researches which can focus on more archaeological sites in the area in order to answer specific questions on certain human choices made in the past. The focus of this research is on the Mernyang like other ethnic groups such as the Ron, Ngas and Mwaghavul on the Plateau who are hill settlers that have attracted the attention of anthropologists.

The Mernyang area has previously been studied by Netting (1968) and later Stone (1991, 1992) from an anthropological perspective. Netting focused on the agricultural system while Stone's work centered on settlement system. Other historical studies (like Walu 1991) have been done in this area, with some describing the diversity of languages and ethnic groups including Mernyang, that claim an origin from the Kofyar hill village as "the Kofyar Federation". These studies have helped in exposing the Mernyang area, its ethnographic style of farming and

settlement systems and its rich culture; nevertheless, this area has not been studied archaeologically.

Even though this area was located through oral tradition and field-walking, an undergraduate project on one of the Mernyang hill settlements, Lardang, was conducted (Kwapnoe 2012). This hill settlement identifies Kofyar hill settlement as its point of origin, sharing a common language and farming system. Therefore, there was the need to carry out further archaeological researches on Kofyar and other hill settlements in the area to understand the people and their cultural past. This area displays evidence of rich cultural heritage revealed by remains of human settlements such as outstanding house foundations, graves, pottery, livestock pen and agricultural practices among other economic activities.

The corroborative use of sources which include archaeological and ethnographic surveys, written sources as well as oral tradition used in this research will create an understanding of the Mernyang people which will be an added knowledge to what is known about the people of the Jos Plateau.

1.5 Significance of the Research

This research intends to bring to light the evidence of past settlements on these sites, as well as review evidence of cultural relationships and their environment.

An archaeological investigation of the Mernyang area exposed other aspects of the cultural past of the people of the Jos Plateau in addition to their trajectory of migration narratives. It is my hope that various aspects of the culture of this hill people exposed by this research shall become a reference material for future researches.

This work is also hoped to serve as an element of public enlightenment and awareness mechanism which public archaeology encourages for a better appreciation of the cultural

heritage of the Jos Plateau. Through this, its people can participate as stake holders in its preservation.

1.6 Aim and Objectives of the Research

This research is aimed at understanding the cultural characteristics of the Mernyang hill settlements by archaeologically investigating them. This was achieved through the following objectives:

- i. To search for the distribution of past human activities on the landscape of the Mernyang area.
- ii. To study the economic system of the Mernyang hill settlements.
- iii. To Study the settlement system of the area.
- iv. To study the socio-political characteristics of the area.

1.7 Methods of Research

In line with the above aim and objectives, research methods like oral tradition, written sources, archaeological and ethnographic surveys were employed in this research.

1.7.1 Oral tradition

Oral traditions are accounts of history or testimonies concerning the past of a society which are transmitted verbally from person to person and from one generation to another. (Fajana and Biggs 1977; Vansina, 1990). Information conveyed this way is either passed spontaneously without prior preparation or may be deliberately conducted with prior arrangement to convey messages to serve predetermined purposes, such as passing on knowledge of the heritage of communities. The collection of oral traditions during this research therefore

was strategized to obtain information about the past of the Mernyang people from various inhabitants of the area. This supplemented the existing written documents that have direct links to the area so as to have a reconstruction and a documentation of the history of the area as well.

The usefulness of oral tradition when corroborated with other archaeological methods has been expressed by many scholars especially in relation to location of archaeological sites and tracing the migrations of peoples. Ibeanu (2006) demonstrated the usefulness of oral traditions in tracing the cultural heritage of societies. In his view, oral tradition provides, among other things, an understanding of the meanings and uses of aspects of the material culture and people's traditions of origin.

Oral traditions were collected from the traditional heads, royals, hunters, handy men and women, traders, elders, learned individuals from each of these five hill settlements within the ages of 18-100. This variety of people were interviewed because it is believed that by virtue of their status, age or profession, their contact with a wider population of the community and its neighbours, they are better informed about their history and traditions.

As a result of low population on these hills, thirty people were interviewed using the one-on-one method of interview with the help of a question guide. The information collected includes the people's traditions of origin, economy, and other aspects of their culture. Oral tradition was used as a method of data collection in this archaeological investigation in order to corroborate the oral version of the people's history with archaeological data so as to have a better interpretation of their cultural past.

1.7.2 Written sources

These include all the consulted historical documents that were used in this research. These include European records, accounts of early European travellers and published historical

works. These literatures were consulted in various libraries like the Department of Archaeology Reference Library in ABU, Zaria, Library of Northern History Research Scheme ABU, the Kashim Ibrahim Library, ABU, Department of History Library, University of Jos, Plateau State Library, Jos, National Library, Jos and St. Augustine's Major Seminary Library, Jos. Some of the literatures used for the purpose of this research were reviewed to ascertain how much has been studied or is known about the area of study while others were used as references in the research.

1.7.3 Archaeological survey

Price (2007) makes a clear distinction between reconnaissance and survey as types of surveying in archaeology. To him, reconnaissance involves field-walking to locate artifacts and sites while survey involves a systematic search for artifacts and sites using instruments to create maps and site plans. In line with this, a preliminary archaeological reconnaissance was carried out on Lardang, Bogolong, and Kofyar hill settlements which resulted in the identification of cultural materials like potsherds, house foundations, remains of shrines, granary foundations and grinding stones, located at different areas of the sites.

Among the many field methods archaeologists employ in their investigations of the human past, archaeological survey is one of the most suitable for this research. Often used in the location of archaeological sites, application of the method has been in use since the days of antiquarianism. Although considered by many scholars as being very slow, it is considered to be thorough and it is mostly carried out on foot, mules, horses or motorized transport (Sharer and Ashmore 2003). With relatively recent technological development, land surveying has been revolutionized by the introduction of Electronic Distance Measurement (EDM) equipment and the Total Station, together with the satellite-based Global Positioning System (GPS).

Archaeological surveying uses all the techniques of land surveyors, but requires an archaeological input to interpret what is present and worth recording, this involves the identification of what is natural as opposed to humanly created objects (Drewett, 1999). Archaeological survey is the measurement and recording of the finds and features discovered through reconnaissance. It seeks to identify finds and features in relation to one another and their relationship with the environment (Renfrew and Bahn 2000).

Therefore in this research, an archaeological survey of some of the Mernyang hill settlements was conducted. This involved ground survey, an old method of archaeological exploration, by slowly traversing the sites doing visual inspection at ground level in search of cultural materials or other indications of past human activities. The ground survey involved the systematic search for cultural materials, walking on the ground at an interval of between 50-100m on the landscape of each hill settlement in order to cover large areas and recover as much materials as possible. This method was used in this research because it has been used for ages in archaeological investigations and it has proven to be an effective technique of recovering archaeological data for further analysis. During this archaeological survey, measurements and photographs of cultural materials were taken for documentation. Each of the five hill settlements was surveyed as an individual site; cultural finds were collected, recorded and analyzed as an entity.

The Geographic Information System (GIS) which is a computer program was used in this research to assist in mapping each of the five Mernyang hill settlements after ground data had been collected through survey and coordinates were taken with the Global Positioning System (GPS). The GIS can only work with the data recorded on the GPS which is a universal receiver. All data gathered through remote sensing can be separated, combined, and manipulated through

the activity of image processing, which forms one of the key elements of Geographic Information Systems (Drewett, 1999).

The GIS as a remote sensing tool (software) was used in this archaeological research to map out all the areas with evidence of past human habitation on the hill settlements using the coordinates recorded with the GPS. The GIS map of the Mernyang hill settlements, as a document was added to the known archaeological sites in Nigeria recorded on the GIS. This makes for easy identification and for further researches in the area.

1.7.4 Ethnographic survey

Ethnography is the analytical study of an extant society or ethnic group through an examination of their material, social and linguistic characteristics (Hodder 1982 cf Bakinde 2006). The concept is also concerned with the culture of contemporary people such as economy, political systems, religion, kinship relations, ideas, technology, science, art and crafts. Ethnography is learned from the people.

Ethnographic data has been a profitable source of interpreting archaeological data for ages by drawing analogies between extant and extinct cultures. The marriage between ethnography and archaeology bore a branch of archaeology called Ethnoarchaeology.

Based on the above, ethnographic data was used in this research to study and interpret various aspects of the material culture found in Mernyang hill settlements especially where it is claimed to be the people's first point of origin. In addition, attempts were made to show the relationship between the extinct and the extant societies thereby tracing the possible cultural continuity at both the abandoned settlement and the present settlement.

CHAPTER TWO

GEOGRAPHICAL AND HISTORICAL BACKGROUND

2.1 Geographical Background

2.1.1 Location

The Mernyang territory lies a little to the east of the geographical center of Nigeria, it has a section of over thirty kilometers in length by sixteen kilometers in width, intersected by latitude 9°N and longitude $9^{\circ}15'\text{E}$ (Netting, 1968); approximately between Longitudes $009^{\circ}12'$ and $009^{\circ}15'$ East and Latitudes $09^{\circ}01'$ and $09^{\circ}03'$ North. Mernyang hill settlements are located on a range of hills in Kwa district of Qua'anpan Local Government Area and Jepal district of Mangu Local Government Area of Plateau State, north central Nigeria. The five hill settlements covered in this research include Kofyar, Lardang, Bong, Zuwakal and Mer (see fig. 3).

Kofyar is a hilltop settlement in Kwa district of Qua'anpan LGA of Plateau State. It is located approximately on Longitudes $9^{\circ}13'$ and $9^{\circ}14'$ East and Latitude $9^{\circ}01'$ North. Lardang comprises of two parts: the hilltop settlement called Lardang Goe-toeng (meaning Lardang on a hill) and Lardang Goe-yil (Lardang on a plain). Nevertheless they are seen as one with the hilltop settlement being their home while the plain was initially their farm which later became an extension of their home. The area is located approximately on Longitude $9^{\circ}14'$ East and Latitudes $9^{\circ}02'$ and $9^{\circ}03'$ North. Coming from the Doka axis, this is the first hill settlement.

Just like the first two, Bong is also a hilltop settlement located approximately on Longitude $9^{\circ}12'$ East and Latitude $9^{\circ}01'$ North. Even though this settlement is located in Doemak district, it still falls under Qua'anpan LGA like the Kofyar and Lardang.

Zuwakal hill settlement is home to the Mernyang people but politically, it falls under Jepal district of Mangu LGA of Plateau State which was divided from other Mernyang hill settlements of Qua'anpan LGA by the colonial administration. It is located on Longitude $9^{\circ} 12'$ East and Latitude $9^{\circ} 01'$ North.

Mer is a settlement located on a plain about 1.5km from Kwa town in Kwa district of Qua'anpan LGA of Plateau State. Even though the present-day settlement is on a plain, the people first settled on hills around it which are today abandoned and it is these abandoned settlements that were studied. It is located on Longitude $9^{\circ} 15'$ East and Latitude $9^{\circ} 03'$ North.

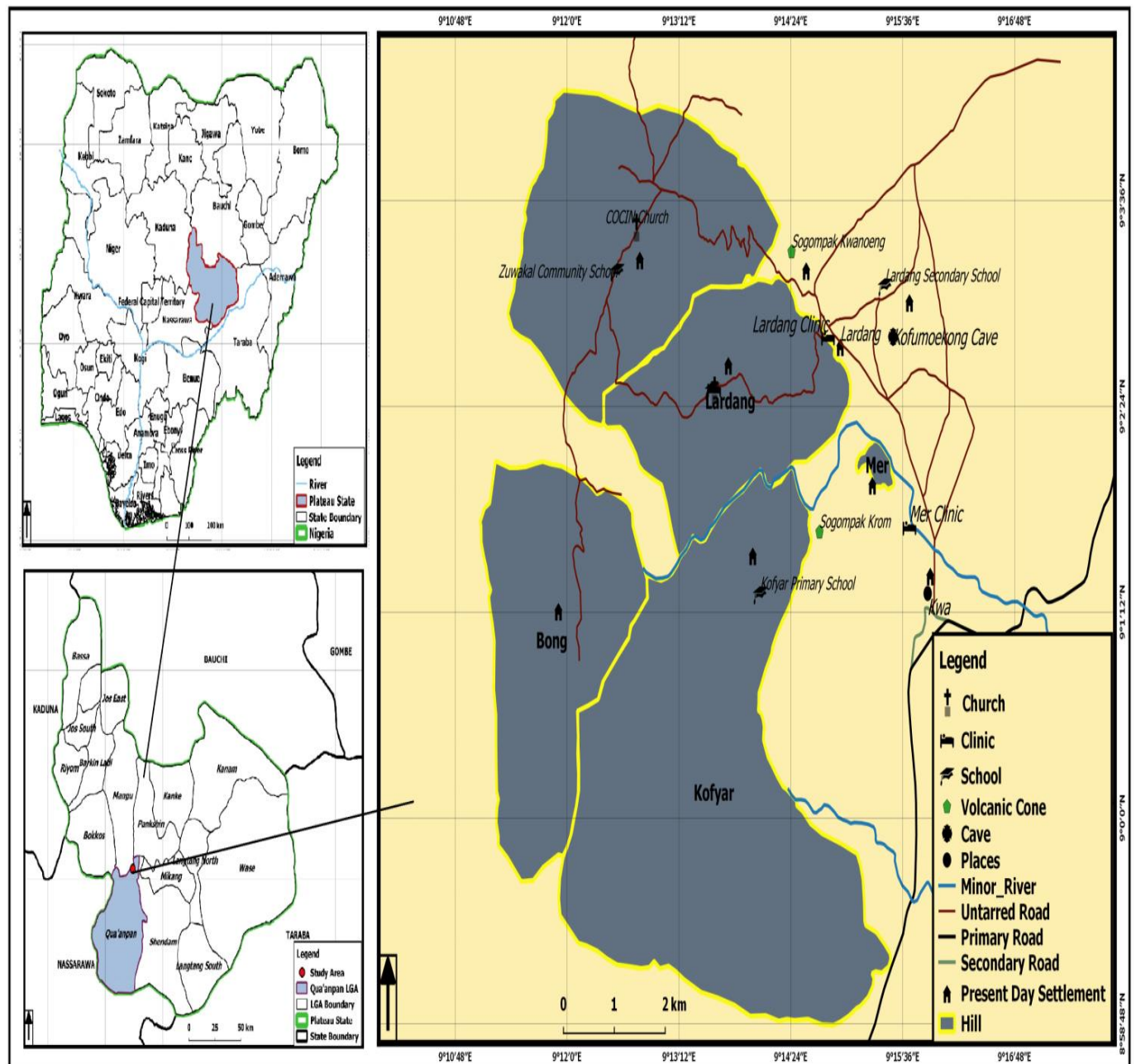


Figure 3: Map of the Study Area

Inset top left: Map of Plateau State

Inset bottom left: Map of Qua'anpan LGA

Source: Google Earth and Global Administrative Boundary

2.1.2 Climate

Typical of relief situations on the Jos Plateau, the Mernyang hill settlements have low temperatures especially during the harmattan between November and January. The harmattan blows northeast; it is strongest in December and January. The controlling climatic factor, the tropical continental air mass is very dry and from November to March, there is very little or no rainfall in this area. The wet southeast winds from the ocean blow across northern Nigeria in April with the northward movement of the Inter-tropical Front (Buchanan and Pugh 1955 cf. Netting 1968). There are observed clear climatic differences within the Mernyang area. The hills are generally colder than the plains and they receive a larger supply of rain than the plains which is as a result of warm moist air being forced suddenly to rise and cool as the south winds meet the plateau escarpment.

Like other parts of Nigeria, the Jos Plateau has two seasons: the dry and rainy seasons. The dry season lasts for five months between November and March while the rainy season lasts for seven months between April and October. The Mernyang area has its highest rainfall between July and August and the lowest between October and September.

The annual minimum temperature on the Jos Plateau between late December and early January taken at different times of the day is 12.3°C and the annual maximum temperature between late March and early April is 30.4°C and the minimum humidity ranges from between 30% in the dry season to 90% in the rainy season with a peak of 97% in July and August (Schoeneich 2005 cf. Mangut M, 2014).

2.1.3 Geology and soil

The Jos Plateau is geologically a representative of the Pre-Cambrian basement Complex, the ancient group of crystalline rocks which form part of the main African continental mass (Buchanan and Pugh: cf Netting 1968). The surface of the Plateau has been traced to be part of the Gondwana, as such; it may be regarded as a remnant of the oldest surface found in the continent. Certain theories exist on the formation of the Jos-Plateau. The King's theory erosion postulates that the Jos-Plateau is an erosional relic of the Jurassic Gondwana surface which results in its age of 150million years. This implies that the remains of ancestors of man are buried beneath this surface. The tectonic hypothesis on the other hand sees the formation of the Plateau from the perspective of accelerated erosion which implies that the evidence of human existence earlier than 1 million years have been washed away (Schoeneich 1992 cf Mangut M 2014). The Plateau is largely composed of younger granites which are resistant and Buchanan and Pugh (1955 cf Netting 1968) see the impressive surrounding scarps as evidence of erosion rather than faulting. The Jos Plateau comprises of Precambrian migmatite, gneiss; younger granites and volcanoes, mesas and inselbergs. The Mernyang hills comprise of volcanoes, mesas and gneiss; especially along river beds and the plains.

Soils in the Mernyang area are as a result of weathering of granites and quartzite which are immature but contain a high mineral nutrient because of the presence of decomposing rocks. The soils on the hills are richer than the more mature soils on the plains. The colour and the texture of soils in this area are indicative of both its origin and use (Netting 1968). The general colour of soils is yellowish-brown when dry, in moist or swampy areas with dense vegetation, the soil becomes darker in colour showing the presence of humus and soil that has undergone the process of composing. This dark brown humus containing soil is suitable for farming purposes.

Areas of old lava flows are reddish oxidized soils which are less productive than the yellowish brown soil. Yellow and dark grey clay in this area are used for pottery making.

2.1.4 Vegetation

The Jos-Plateau is classified under the Northern Guinea Savanna vegetation belt of Nigeria (Fig 4). The Mernyang area probably had climax vegetation consisting of continuous cover of broad-leaved species before human activities such as agriculture turned the area around villages into open grassland. Intensive farming with short fallow periods and continuous firewood collection are the major activities that prevent the regeneration of trees. Small sacred groves which have never been farmed have dense thickets with few tall trees (Netting 1968) this is indicative of the present vegetation of the area which is different from what might have been obtained in the past, as a result of human activities. Other trees include Craib and Stapf (*Isobertia doka*), black plum (*Vitex doniana*), *Lannea schimperi*, *Uapaca somon*. The vegetation on the hills in the study area is denser than on the hill villages around it.

The Mernyang area supports the growth of trees like oil palm (*Elaeis guineensis*) and fan palm (*Livistona chinensis*), the canarium (*Canarium schweinfurthii*), mango (*Mangifera indica*), silk cotton (*Bombax ceiba*), locust bean (*Parkia biglobosa*), papaya (*Carica papaya*) and trees of the fig genus (*Ficus sp.*) and a wide variety of wild fruits which are consumed by the people. These trees are all used for economic purposes by the people for example; trees of the fig genus (*figus sp.*) provide straight poles for building purposes and leafy branches for dry season fodder. Mahogany (*Khaya antonica*) serves various timber and medicinal needs. Bong village particularly has the densest vegetation of the four hill settlements with the highest concentration of oil palm (*Elaeis guineensis*) trees. Zuwakal has peculiar vegetation as the only settlement with

observed number of cacti plants (*Cactaceae spp.*) of the four hill settlements. Of the five settlements researched, Bong and Zuwakal particularly have guava (*Psidium guajava*) and citrus (*Citrus spp*) trees, even though only a few. These are attributed to the coming of European colonialists to the area in the twentieth century because the trees are not indigenous to the Mernyang area (Daruwang, Sogom: Pers. Comm. 2017).

2.1.5 Relief

The Jos Plateau has an average altitude of 1219m above sea level and it rises to 1341m on its southern margin. The northern part of the Plateau tails off into the high plains of Hausaland while the southern edge descends abruptly to the Benue Trough and contributes to the southern escarpments having an altitude between 426m to 609m above sea level.

The Qua'apan area consists of a series of short ranges stretching south from the main Plateau. They are separated from each other by wide valleys of Rivers Shemankar and Li and narrow V-shaped valleys of the tributaries of both rivers. The top of the ridges or ranges are a little lower than the Plateau surface but they do not fall gradually to the plain as such, they maintain the rugged contours of the ridge. Each major ridge system which projects in a finger-like form from the uplands consists of its own ethnic groups; the Tal-Montol, the Mernyang (Kofyar) and the Chokfem, Sura, each bounded by a stream bed and tending to expand southward rather than to the east or west (Netting 1968). The Mernyang area consists of both a hill and a plain. The hill is 24km long and 8km wide surrounded by east-ward flowing streams while its plain land extends 4-6km west and south from the base of the ridge. This ridge is peaked by 121m cone-shaped *Moelar*, the peak of Bong. Small twin craters are positioned on both sides of Lardang particularly at Krom and Kwanoeng villages (Netting 1968).

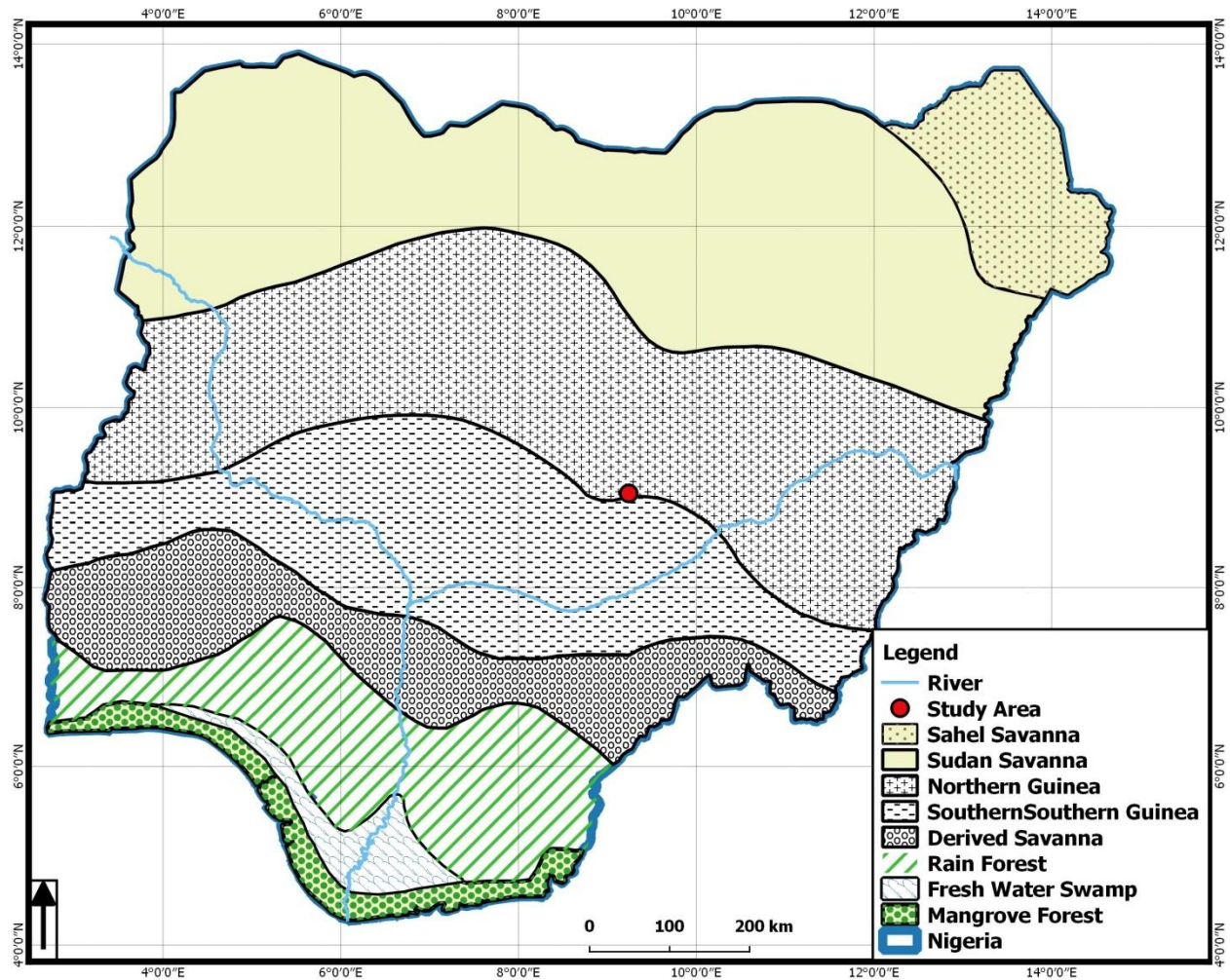


Figure 4: The Study area on the Vegetation Map of Nigeria

Source: Google Earth and Global Administrative Boundary

2.1.6 Drainage

As a result of its high altitude compared to its surrounding plains, the Jos Plateau is the source of many rivers in northern Nigeria. Plateau rivers flow into the Kaduna and Karami Rivers and into the Niger from its northwestern edge. From the northern edge of the Plateau, water flows into Kano and Delimi Rivers which flow further into the Lake Chad basin. From the

East, rivers flow into the Bagel and Lere Rivers which meet the Gongola River and flow into the Benue (Mangut 1998 cf. Mangut M 2014).

As a result of the rocky nature of its terrain, the Mernyang hill settlements have as their major source of water springs distributed in different parts of the area. These springs are called *dung* in the Mernyang language and they do not dry up even in the dry season (see plate I). Nevertheless, the Mernyang area is drained by some major and small rivers (see fig. 5).



Plate I: Boebuut Spring

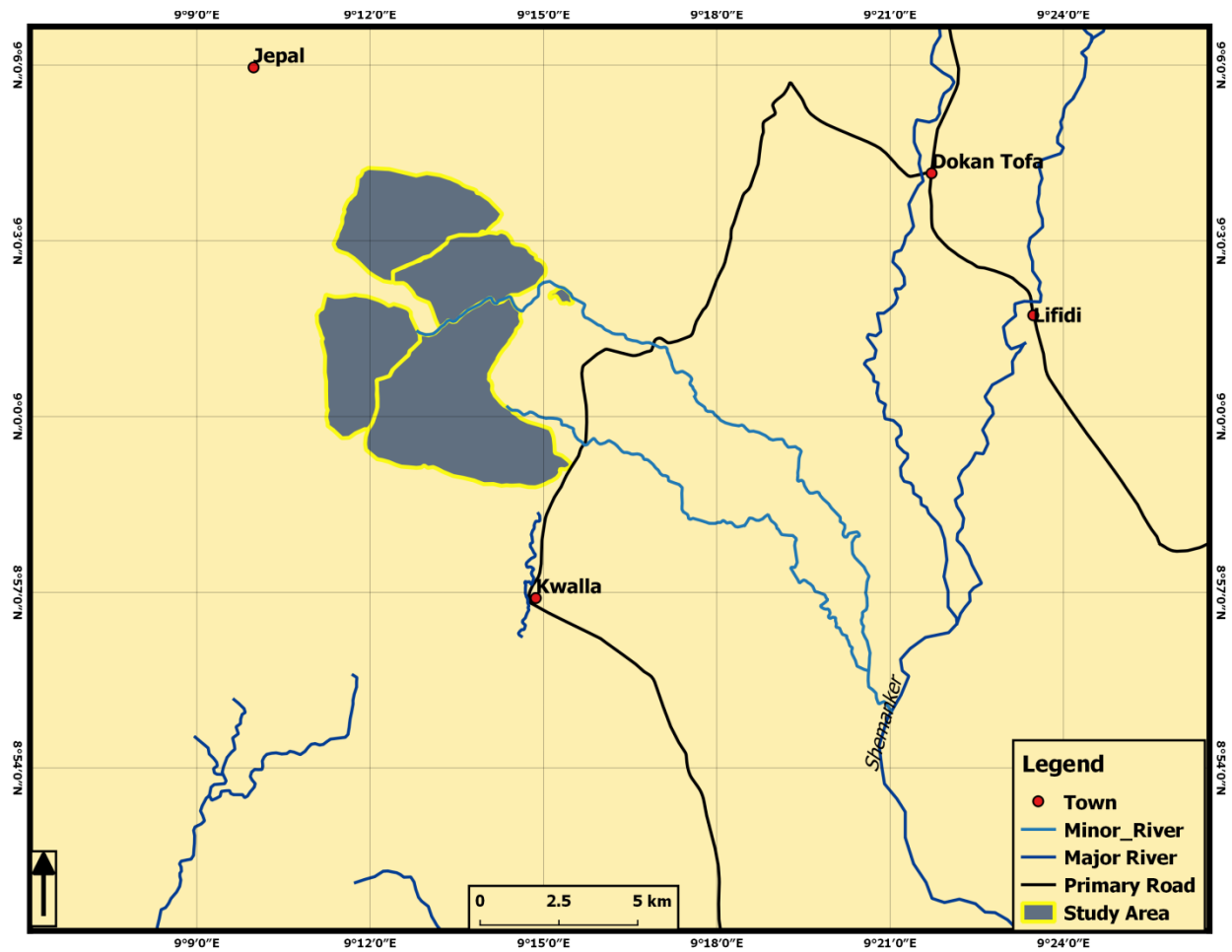


Figure 5: Drainage System of the Mernyang Area

Source: Google Earth and Global Administrative Boundary

2.1.7 Settlements

The Mernyang hill settlements generally have a dispersed pattern as a result of intensive exploitation of land for agricultural purposes. This pattern of settlement seems to have some significance on the adaptation of the people which is on their agricultural system and freedom from external attack (Netting, 1968). This area consists of homesteads separated by large farms with a network of footpaths connecting each household (usually an independent cluster of huts) which creates boundaries for each unfenced compound owned by a family. These farmlands on the hill settlements have terraces built in form of dry stone walls to protect crops and fertile soil from being washed off the steep slopes of the hills by erosion and to maximize the land that can be cultivated since the area is generally rocky. Since the Mernyang area consists of both hills and plains, the plains have more nucleated pattern of settlement which are attributed to recent developments like trade and western influence; as against the dispersed pattern of the hills.

Generally, the Mernyang area consists of circular huts built with stones as foundation, raised with mud blocks and roofed with thatch. There appears to be different types of granaries, some are outside while some inside the buildings. The external granaries are usually built in a similar manner as the huts but without doors and windows and they are mostly roofed completely with mud, while those inside kitchens or rooms are raised to the roof with a little opening at the top for the grains. Animal pens in this area are generally built in a particular form both on the hills and plains. Here a circular structure is built completely of dry stones of different sizes to an average diameter of 8-10m and a height of about 1m depending on the number of livestock owned by the household. Graves in this area are within the households but usually at the back of the houses or in some cases the entrances.

Having the farmlands around the households enables the Mernyang people to practice intensive agriculture which requires adequate attention for the crops that are of a wide variety with different levels of growth. Living close to the farmlands enables the farmers to mend broken terraces, apply manure obtained from animal droppings and homemade compost over short distances which does not require the use of beast of burden or carts. Farm produce can also be protected from domestic animals, birds and thieves while fodder from the farm can easily be fed to the animals.

Netting (1968) related the dispersed pattern of Mernyang hill settlements to intensive agricultural system and defensive requirements and asserts that factors such as increased population on limited land base, agricultural intensification and the absence of military reasons for consolidation have played influential roles in the choice of dispersed settlement among the Mernyang. He compared this to the dispersed Igbo settlements of Eastern Nigeria that were influenced by similar reasons as researched by Udo (1965).

2.2 Economic Activities

The Mernyang people are predominantly farmers who generally practice intensive/subsistence agriculture on a low commercial scale. They produce crops such as guinea corn (*Sorghum bicolor*), millet (*Pennisetum glaucum*), maize (*Zea mays*), beans (*Phaseolus vulgaris*), hungry rice (*acha; Digitaria exilis*), sweet potatoes (*Ipoma batata*) and more recently, yam (*Dioscorea rotundata/ cayenensis*). They rear domestic animals such as cattle (*Bos Taurus*), sheep (*Ovis aries*), goats (*Capra aegagrus hircus*), pigs (*Sus*), and chicken (*Gallus gallus domesticus*) which are mainly for commercial purpose but dogs (*Canis lupus familiaris*) serve a dual purpose which includes domestic security and hunting. Farming in this area is done using

traditional hoes bought from neighbouring villages such Chokfem whose long history of trade is common among the people. They use locally made manure to improve the nutrient of their soils with little application of modern fertilizers (Daruwang: Pers. Comm. 2017). Farming here is mainly done during the rainy season while during the dry season, they exploit their economic trees, feed from their stored grains and animals.

Other economic activities the Mernyang people engage in include hunting and crafts making. Hunting in this area is a common occupation practiced especially by young men and this has a historical and cultural significance to the people. They engage in making other crafts such as pottery, wood carving, building, basketry, weaving among others. The Mernyang people also practice oil production. They produce palm oil, canarium oil and oil from mahogany seeds (*Khaya antonica*) which are mainly for domestic consumption and commercial purposes. Mahogany and canarium oils are said to have some medicinal values.

2.3 Historical Background

The Mernyang people trace their origin to their first ancestors Dafyar and Nade who lived on Kofyar hill, their acclaimed origin of mankind. Once upon a time, there was a natural disaster which caused the collapse of the whole world, burying its surface and causing the deaths of everyone except Dafyar and his sister Nade who sought shelter in a chicken pen in the present-day chief's compound on Kofyar hill village (Datok: Pers. Comm., 2017). Kofyar hilltop village was named after its patriarchal ancestor Dafyar where he lived with Nade before moving to Chor village. Since they were the only two survivors and there was need to continue their own kind, they mated and gave birth to children who spread to other Mernyang settlements called Jepal, Lardang, Male, Zuwakal, Kaper, Bong, Kwanoeng, Bul, Pangkrum, Longsel, Kofwuboem, Mer,

Kwa, Kwang, Doemak, Namu among others (see fig. 2). They particularly gave birth to twins Dajin and Dajan who set out on a journey but on getting to present-day Doemak town (this is both territorial and linguistic), Dajin told his brother that he was tired (*Mak an* in the Mernyang language), as such, he settled there and planted a tree he called “*PangMatlong*” meaning *Matlong’s* home. Doemak settlement was named after his statement “*Mak an*”. His twin brother Dajan on the other hand continued his journey until he got to present-day Namu town before he settled and the place is called “*Jepjan*” in the Mernyang language to signify its patriarchal ancestor, Dajan.

Mernyang people believe that Kofyar hill village is their origin and indeed the origin of mankind. One view opines that after the natural disaster that ended the world, a group of people came from Kano and met the earlier population who fused to become one group (Datok Pers. Comm. 2017).

Dajep and Daduut are two different divisions of the Mernyang group. Dajep refers to the population on the hills while Daduut refers to those living on the plains like Kwa and other Mernyang plains. This categorization is as a result of the variations in the language spoken by both groups where certain words spoken by the hill population are not understood by those on the plains because the people on the plains are Mernyang hill emigrants who fused with other groups like the Goemai, Piapung and Doka who they met upon their descent. This emigration from the hills occurred because of inadequate farmland on the hills as a result of increase in population and trade. The hill settlements are divided into neighbourhoods for easy leadership. For example, the ridge that houses Kofyar hill is divided into Kofyar and Longsel, the Lardang hill is divided into Lardang and Bogolong villages while the Bong ridge is divided into Bong Zuwakal, Male and Kook.

Of the five investigated hill settlements, four of the settlements; Kofyar, Lardang, Zuwakal and Mer agree on a single point of origin which is Kofyar. The Lardang account agrees with Kofyar. Zuwakal attributes its formation to two groups of people who left Kofyar at different times to settle in Zuwakal (meaning standing firm). The first group called Yilnuang settled in a place called Machi then Dongpagan then Latoeng before settling in a place called Yilnuang in Zuwakal. The second group called Enkum left Kofyar to Bong, and then from Bong they settled in Tam before they came to Zuwakal arriving about the same time with the first group. That is why when a large kill is made in Bong today, the people of Bong bring the head of the animal to celebrate with their brothers in Zuwakal. It is believed that when the patriarch of Zuwakal, a son of Dafyar, who left Kofyar was given independence, the people no longer went back to Kofyar for any ritual (Tangurum: Pers. Comm., 2017).

Just like Zuwakal, Mer village which means “being surrounded” or “occupying a central position”, attributes its origin to Kofyar. Some views associate the origin of the “Mernyang” ethnic group to Mer village even though it is on a plain. They opine that Mernyang is a fusion of two words “*mer*” and “*nyang*” which means Mer has rejected. This view associates this “*mer nyang*” to the inability of one of Dafyar’s sons to reproduce when he settled in Mer. However, the people of Mer are unaware of this explaining that the language started from Kofyar where its ancestors lived and they have always known it as that. Before moving to the plains, their ancestors first settled in nearby Krom and kufwuboem villages. As a result of the dangerous wild animals that occupied the plains, they lived on the hill in Mer called Kop Dukmuut. One view clearly explained that before farming started among the Mernyang, their ancestors lived as hunters, living on wild animals and plants (Damulak, Pers. Comm. 2017). This version also

claims that Bong evolved from Kofyar since they belong to the Doemak ethnic group because Doemak evolved from Kofyar.

Bong village on the other hand claims an autochthonous origin different from the popular narrative of other Mernyang settlements. To them, the world started in Bong after a natural disaster which covered the whole earth but their ancestral patriarch Besang survived alone. He continued to live alone in Bong but often saw fire burning on Kofyar hill until one day Paya came down to him from Kofyar. They had a conversation during which Besang explained to Paya that he evolved from the ground while Paya told him that he was left in a chicken pen. Afterwards Paya took him to Kofyar where he lived, bore a son called Kyemtu, died and was buried. Till today, the people of Bong go to Kofyar to renovate the grave of their patriarch Besang which is located in the present-day chief's compound. This is after they have performed some rituals. Kyemtu returned to Bong with his son Jondogoet to live in his father's home. After Jondogoet, he gave birth to Dashe, Dashe birthed Tugunmaap, Tugunmaap birthed Dielpet, Dielpet gave birth to Doekwat and Doekwat birthed Pangpin and Wulnaan (Daseet, Pers. Comm. 2017).

There is no information on the origin or meaning of Bong but its people speak Doemak as spoken by their ancestors and it is traced to Kyemtu. Bong falls under Doemak district of Qua'anpan LGA, Doemak is both territorial and linguistic therefore the people of Bong and Doemak speak a common language "Doemak" not Mernyang. In contrast, the patriarch of the Doemak people is Dajin, one of the twin sons of Dafyar which is why till date; the chief of Doemak is coronated in Kofyar nevertheless, the people of Bong maintain an autochthonous origin. However, they maintain that they have a friendly and blood relations with Kofyar since Besang (their patriarch) lived and married in Kofyar.

Generally, the people, whether Mernyang or Doemak seem to have a common origin since they have similar accounts and cherish similar cultural practices like African traditional religion prior to the coming of Christianity to that area. They worshipped their ancestors in sacred groves called “*lighit*” or in shrines called “*lu mualak*”. These shrines sometimes have raised structures made of mud or stones and contain sacred pottery and ritual stones where mostly grains or beer sacrifices were offered. They were great hunters, farmers who started tilling the soil with sticks before the coming of metal hoes and they built terraces. They practiced traditional crafts such as basket weaving, wood carving, traditional architecture, even building storey buildings before the coming of the Europeans and pottery making which is gradually going into extinction because modern vessels made of metal and plastic are replacing them. Their cultural practices recognize the role of both sexes in the community and is sensitive to gender whereby certain roles are assigned to a particular gender and the other gender had some restriction by traditional laws.

CHAPTER THREE

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

3.1 Literature Review

The history of the people of the Jos Plateau has been documented in many literatures among which are the nineteenth century travellers' accounts, early twentieth century European sources as well as early published accounts and recent historical and archaeological works (Mangut J 1986). Most of these literatures have already been reviewed in the works related to the Jos Plateau; therefore, more emphasis will now be made on the literature on the Mernyang area. Nevertheless, since Mernyang is an ethnic group on the Jos Plateau, it is imperative to first review some literature generally on the Jos Plateau before narrowing scope on the Mernyang.

The accounts of 19th century European travellers is shrouded with misinformation about the people of the Jos Plateau since they did not have first-hand information or experience of the people but relied on mere narratives of Hausa traders. As such, common place interpretations of the inhabitants of the Jos Plateau were generally fierce and barbaric (Barth, 1865 cf Mangut J. 1986b). These kinds of descriptions which dominate European accounts were filled with negative themes of economic backwardness, hostility and primitivism.

The records of the Colonialists on the Jos Plateau in the 20th century mostly included the works of anthropologists who had first-hand experience of the Plateau. Official publications about the Jos Plateau during the colonial period were authored by people like C.G. Ames (1934): *Gazetteer of Plateau Province*, O.L. Temple (1922): *Notes on the Tribes, Provinces, Emirates and States of the Northern Provinces of Nigeria*, C.K. Meek (1925): *The Northern Tribes of Nigeria* (cf Mangut J 1986). These works were very wide in scope and centred on origins,

migrations, kinship relations, and material culture, which were obtained from oral information and government files in some cases. However, their conclusions were not very different from those of their “traveller-friends” from Europe which were stereotypical.

The twentieth century saw the rise of indigenous Plateau scholars like Agi (1975); Gonyok (1973); and Mangvwat (1976), who tried to change the overemphasis of the isolation theme of the Jos Plateau by studying their own societies through the collection of oral traditions. This led to critical reassessments of past works on the region which changed the hitherto stereotypical view of the Jos Plateau from a hill refuge, settled by small groups who lived in inaccessible reaches, who were economically self-sufficient and at best maintained minimal links with each other, to a home of groups of complex and vital people (Tambo 1978 cf Mangut, J 1986).

The history of archaeological work on the Jos Plateau is of considerable antiquity. This began with the accidental discovery in alluvial deposits of Stone Age implements and objects made of tin which birthed a small museum in Jos where these objects were kept (Fagg, 1946). Fagg’s first excavation of the Rop rock shelter which revealed the first discovery of a human skeleton in the Nigerian area dated 25 ± 120 BC. Robert Soper’s 1964 discovery of Acheulian tools at Mai Idon Toro, towards the eastern end of the Plateau and the discovery of the oldest pottery in Nigeria dating to the 6th century BC by Richard York in 1978 at Dutsen Kongba complex are other examples of archaeological researches on the Plateau. The Jos Plateau region therefore presents evidence for a very long period of human antiquity, stretching far beyond the Late Stone Age to the Early Stone Age. More recently, the Manguts have conducted archaeological researches in the Ron-Kulere area which has revealed several archaeological sites and seems promising for the archaeology of the Jos Plateau.

However, for the Mernyang area, the first reference to it was by Temple (1922) and Meek (1925) but the first publication it appeared in was in Ames (1934) *Gazetteers of Plateau Province* where it is referred to as Mirriam or Mirniyang. These works focused on origin, migrations, kinship relations and material culture of the Mernyang. Ames (1934) and Meek (1925) describe them as inhabitants of hill-tops and their principal village is “Koffya”. They inherited their traditions from their ancestor Kanzuan who evolved from a large rock in “Koffya” village which is now the sacrificial altar of the most significant rituals (tsafi in hausa) consisting of two rocks close together, one white and the other black, separated by a hollow. This is guarded by a selected chief priest (Ames 1972). They are said to have no history before they started living in “Koffya”.

Lar was known as an important Mernyang village due to the geographical position it occupies between the Mernyang and the Goemai and its inhabitants claim to be the first group of Mernyangs to leave the hills. They intermarried with the Goemai and Jorto groups. The customs and dialect of the Mernyang are similar to their neighbours, the Doemak, Kwaklak and Bwal and they may be from the same stock as the Angas, Goemai, Montola and Sura (Meek 1925). In the line of migration, the Mernyang along with other ethnic groups like the Chip, Jorto, Ankwe, Pia, Piapung and Kanam are seen as possible branches of the Garam stock of the Angas who are said to have migrated from Kanem-Borno to the Jos-Plateau. They are believed to have migrated to their current location circa, 1830-40AD to escape from Fulani pressure and they first came under British administration in 1909AD (Meek 1925).

Ames (1972) opines that cultural and linguistic resemblance between the Mernyang, Kwaklak, Doemak and Bwal originated from a place called “Pes” and their origin before they linked up with their neighbours is unclear. Even though there is a theory that proposes a root of

this group with the Hausas who were in Katsina in its pre-Islamic days. Whatever the case may be, they are known to be warlike ready to fight just like their neighbours but they never fought the Hausas and they were never cannibals like their neighbours. This earned them the name “*Mirriam Abakwa*” meaning Mirriam are Hausas (Ames 1972). They are popularly known among their neighbours as thieves and traders who travel almost as wide as the Igbos. Stealing was a part of the Mernyang social system especially among their men who were fond of stealing animals like cattle, horses and donkeys. This was seen as a moral weakness but to them, it signified strength of character and they were likeable (Ames 1972).

The Mernyang are known to ride barebacked and they worshipped the god Nan but they also believed in witchcraft. They built and lived in mud houses with thatch roofs and they practiced industries such as agriculture, iron smelting, basket making and weaving, wood carving, leather and pottery working. Their women wore bleached fan palm fronds round their waist and some round their ankles while men wore loin clothes or leather or sheep or goatskin round their waist. Young girls wear fronds of fan palm round their ankle, upper arms, chests and foreheads. They wore guinea corn stalk in their ears and flowers occasionally in their hair.

Recent historical works on the “Kofyar” area includes that of Walu (1991) who examined some aspects of native resistance to British colonial rule. Among the Kofyar groups that resisted the tax collection enforced by the colonialists according to Netting’s categorisation include the Bwal people of Latok hill village. They are described as neighbours with the Mernyang with whom they share great similarities in terms of language and other cultural attributes. After the British met some resistance because of tax imposition in Kwaklak (this is both territorial and linguistic) which was subdued because of the British superior weaponry, they moved to other settlements like Doemak before moving up hill to Latok, Fungleet and Bong (Walu 1991).

In contrast to other hill settlements that paid their taxes out of fear and obedience to the British, the people of Latok refused to pay the tax because of an increase from 3 Shillings (3s) to 3 Shillings and 3 Pence (3/3). This resistance was followed by a pacification which met further resistance in Latok but an uprising ensued between the British and the locals which led to the death of Captain Barlow in 1930. The consequence of this was a raid of Latok by British patrol team who recovered 1225 spears, 200 shields, 250 clubs, 74 knives, 125 spears and war horns. It also saw the evacuation of people from the hill villages of Mangbar, Goonkum, Latok Gortkugun, Fungket, Koenje, Fulong and part of Kofyar Baya. This changed the demography of the Kofyar area which saw the involuntary removal of 4,000 Bwal people from their hill settlements to Njak plains and other plains further away and the reorganisation of the whole Shendam division. This was an attempt to ensure effective control over the people who sought independence from British rule as personified in the *Long Duut* (Chief of Shendam) under whose leadership they were subordinated. According to Netting (1968), by 1931, all the people had submitted to government authority and paid their taxes fully without force for the first time (Walu 1991). The reorganisation of Shendam division saw the creation of a “Kofyar federated district” which comprised the Mernyang ethnic area and the Namu-Doemak district. The Namu-Doemak district was created in 1936 before the “Kofyar federated district started operating on the 1st April, 1937.

Anthropological researches in the Mernyang area, were conducted by Netting from 1960-1967 and Stone from 1991-1992. Netting lived among the people for eighteen months continuously from 1960-1962 and for another nine months from 1966-1967 which earned him the name *Nasara Bong* (White man of Bong). He participated in and studied their farming

systems and published a book *Hill Farmers of Nigeria* (1968). Stone (1991, 1992) focused on settlement systems.

Unlike previous accounts and interpretations on the people of the Jos Plateau, Netting was positive about the Kofyar where he reports that:

“In Kofyar country, I was impressed not only by the terraces, the cleverly designed ridges, the stone corrals for stall feeding domestic stock, and the luxuriance of homestead farms but also by the fit, sturdy aspect of the people and their statement that they did not have an annual period of food scarcity. Their mastery of their environment was such that hunger was rare and serious famine was known only in legend” (Netting, 1968:19).

The major interest of his research was the intensive agricultural system of the people categorically characterised some of the settlements and ethnic groups in present day Qua'anpan Local Government Area of Plateau State with a generic name “Kofyar”. This was based on shared cultural similarities and affiliation to their original home (the Kofyar hill). Some of these settlements he identified as Kofyar belong to different ethnic groups such as Mernyang, Kwolla, Doemak, Bwal and Goemai some of which claim other places as their ancestral homes. His work covered both the hill settlements and those on the plains. For this archaeological research however, only the hill settlements considered to be the first settled areas will be studied.

Glen David Stone undertook an anthropological research on the Mernyang area from 1984-1985 which centred on the appreciation of the dynamics of settlement geography among the Mernyang. Following Netting's categorization, he also describes this same group as the “Kofyar of Nigeria”. Stone built on Netting's 1968 work using both census and historical information to set a background on human geography of the area that archaeologists see as very relevant. He describes the “Kofyar” as a group confined by threats of raiding and slaving to the hilly southern edge of the Jos-Plateau, where they lived in densely populated settlements in

which compounds were surrounded by intensively worked farmlands. These people started occupying previously unoccupied plains north of the River Benue during the colonial regime from the 1930s (cf David and Kramer 2001) whereas Walu (1991) attributes this plain movement to a forceful removal of 4,000 people of Bwal from their hill villages to Njak, Kwaklak, Bwom and Fanjin plains because of an uprising between the British colonial administrators and the natives.

Stone (1992) conducted censuses of 800 households from air photographs taken in 1963, 1972 and 1978 to reconstruct the settlement history of each of the household. He produced maps that showed linear arrangements along paths of compounds grouped into *ungwa*, (neighbourhoods) of 20-50 farmsteads. Farmlands appeared as rugged strips with compounds spaced 100-150m apart in order to maximize proximity to neighbouring farmsteads and facilitate communication. He identified some factors that determined the settlement pattern of the Mernyang people as military alliance (*sar gwat*), cooperation in farming which is supported by strips of farms arranged perpendicular to communication routes to minimise ease of access to and from farms, ease of access to water, minimal labour costs, soil type and competition. Stone concludes that abandonment of settlements was determined by an imbalance of three critical factors of production, human labour, water and soils.

The first known archaeological research in the Mernyang area was an undergraduate research conducted by Kwapnoe in 2012 (Kwapnoe 2012). This undergraduate work was a preliminary archaeological reconnaissance of Lardang hill settlement, one of the Mernyang hill settlements. It identified house foundations, pottery remains, graves, animal pen, and dry stone structure. Even though this work identified the archaeological potentials of the Mernyang area, it

only studied an archaeological site in Lardang and used it as a model to interpret the past of the people.

This present research, just like the previous two anthropological researches in the Mernyang area, tried to study the settlement as well as agricultural systems of the Mernyang people but from an archaeological perspective. Therefore, it has built on the anthropological works of Netting (1968) and Stone (1992) to understand the cultural past of the people using analogies between the past and the present. This work has attempted to confirm Stone's findings that "social relationships can both affect and be affected by spatial organization" (Stone 1992:169 cf David and Kramer, 2001).

There is no doubt that the Jos-Plateau has quite a long history of human antiquity as far back as the early Stone Age sites which attracted the attention of both African and expatriate scholars. The focus of most of these researches is on the northern part of the Jos Plateau where tin mining activities abound and houses sites that have revealed evidence of early human antiquity. These researches also focus on the migration of people into the Jos Plateau which have given more attention to famous ethnic groups like the Jos-Plateau such as the Ngas, Mwaghavul, Sura and more recently the Ron-Kulere. It can be argued that a focus on certain areas by cultural experts does no justice to the history of the people of the Jos Plateau as a whole and creates gaps which need to be filled. Therefore, it is for this reason that the researcher saw the need to undertake an archaeological research in the Qua'anpan area of southern Plateau where little archaeological work has been done, to improve the state of cultural knowledge of the people of the Jos-Plateau.

Although cultural researches have been carried out in the southern part of the Jos-Plateau particularly ethnographic and historical researches, the Qua'anpan area saw some

anthropological works such as those of Netting in the 1960s and Stone in the 1980s. Colonial accounts and historical publications (Meek 1925 and Amez 1934) and Walu's 1991 paper touch on some aspects of their history. These works add to our knowledge of the people of lower Plateau (southern Jos Plateau) in some ways. Nevertheless, there are still gaps left by these researches which this research seeks to fill archaeologically.

The work of Netting on the study area in the 1960s which produced *Hill Farmers of Nigeria* focused on the ethnographic practice of intensive agriculture by these hill settlers (the Kofyar). This leaves a gap on the agricultural past of the Mernyang which may have some bearing on the present agricultural system and this archaeological research though preliminary seeks to fill this gap in the people's history. The researcher is of the opinion that the nature of the past agricultural system of the Mernyang can be better understood if the development of past human activities in the Mernyang area is established.

Stone's work in the Mernyang area in the 1980s needs a follow up excavation in order to understand the settlement history of the study area. This prompts more cultural researches on the Mernyang in order to establish if there is a distinct settlement pattern of the people which can be traced from the archaeological record and appreciable factors that determined this pattern of settlement.

3.2 Theoretical Framework

This research adopted the cultural ecological approach and contextual or interpretive archaeologies in order to better understand the cultural past of the Mernyang people and the role played by the environment in shaping their cultural past. The human adaptation to the environment theory of human ecology will be adopted because like Moran (1982), the researcher

does not see the environment alone as the determinant of human cultures but as a provider of resources used in the formation of human cultures. The cultural ecological approach seems suitable for the present research because it has been used successfully by Netting (1968) to undertake an anthropological research on the area of study. Also, as a result of the unique terrain of the Mernyang hill settlements, their cultural past will better be understood if it is viewed from the perspective of their relationship with the physical environment and their adaptive strategies. Therefore, cultural ecology as a paradigm will help to paint a clearer picture of the cultural past of these hill settlers.

Cultural ecology is one of the two major subdivisions of human ecology (Sutton and Anderson, 2010) first developed by Julian Steward in 1955 who emphasizes functionally related aspects of the environment, subsistence activities and culture (Netting, 1968). Steward developed a techno-environmental approach to cultural change to look at the adaptation of individual cultures to specific environmental circumstances. Cultural ecology is the study of the role of culture as a dynamic component of any ecosystem of which man is a part. Man carves his ecological niches primarily with cultural tools of his own invention rather than with biological specializations. This niche-carving activity of humans not only remolds existing biotic communities but also has a shaping effect on the tools. Additionally, man constantly devises new tools for carving out more effective places in the ecosystem (Frake, 1962).

Steward (1955) introduced the cultural ecological theory that became the dominant framework for explaining environment-culture relationship. The framework argued that culture was heavily influenced by the specific local environment and that regularities could thus be sought to explain culture change (Bahn, 2001 cf Marufu, 2011). Steward (1955) perceived environment as influencing rather than determining/limiting culture as implied by earlier

ecological frameworks. The underlying assumption of this theory is that variation or patterning of human cultures/ behaviour is caused by adaptation to different environments. Thus, Steward's (1955) cultural ecology theory shares the ideas of human adaptation and environmental 'influence' rather than 'determinism' with Moran's (1982) human adaptation to the environment theory.

There are several theories which explain the relationship between human culture and environment. Some argued in deterministic terms whereby physical environment was regarded as the major stimulus for change in human culture (Renfrew and Bahn, 1996). Others propose environmental possibilism which criticized environmental determinism by arguing that human actions are not automatic responses to simple stimuli as argued by deterministic thinking rather humans see certain possibilities on how best to exploit their environment and they are not just passive recipients of environmental conditions. Scholars like Moran (1982) propose human adaptation to the environment theory (Marufu, 2011). The human adaptability deals with the specific problems faced by inhabitants of various environments rather than with environment as a static 'given' that limits human possibilities. Although the role of environment may influence human behaviour, there are always strategic ways to overcome and control the adverse effects of environment upon human life.

Archaeology looks to the archaeological sites that house evidence of human past for the materials it uses in interpreting or reconstruction their past. The Mernyang area therefore is the scene that houses the materials for this research; its archaeological sites along with its ethnographic cultures were corroborated to achieve the aim of this research. The use of cultural ecology as a theory does not seek to understand the cultural past of this people in totality since this research uses only surface cultural finds that inform us on physical adaptations. Other

biological factors that influence man as a biological organism like genetical and physiological selective pressures (Netting 1968) will not be looked at as such, physical or cultural adaptations cannot completely be understood without paying attention to other biological factors.

Contextual archaeology which was adopted during the survey, collection and analysis of cultural samples was first propounded by Ian Hodder in the 1970, which falls under post-processual archaeology. The use of contextual or interpretive archaeologies (Hodder 1992) was adopted in this survey whereby each hill is surveyed as a site and is interpreted as such. This was chosen in order to have a clear interpretation of the cultural past of each hill settlement surveyed based on the collected data which enabled comparison of sites based on cultural evidence.

Like Moran (1982), the researcher does not see the environment alone as the determinant of human cultures but as a provider of resources used in the formation of human cultures. The researcher is also aware of the limitations of cultural ecology that is why the contextual or interpretive archaeologies were adopted during the survey of sites, collection and analyses of data. A combination of these two approaches will help us to better understand the crucial aspects of the environment that affect man's subsistence or threaten his wellbeing.

CHAPTER FOUR

ARCHAEOLOGICAL SURVEY

4.1 Archaeological Survey

This survey was carried out with the following objectives:

1. To determine the extent of the site
2. To document the spatial arrangement of cultural activities
3. To collect samples of material evidence for classification, analysis and interpretation.

The survey was conducted on Kofyar, Lardang, Bong, Zuwakal and Mer hill settlements. The use of contextual or interpretive archaeologies (Hodder 1992) was adopted in this survey where each hill was surveyed as a site and interpreted as such. The five sites were represented by letters A-E with each comprising living and abandoned areas. Each abandoned settlement was further divided into the number of abandoned compounds identified on it. These abandoned compounds were also studied within their individual contexts. This method was adopted to enable the researcher to have an objective interpretation of each site and better relate the sites based on their similarities and differences.

Ground survey approach was adopted utilizing GPS to localize finds and monuments. This involved walking around each of the sites between an approximate interval of 50-100m in order to identify, measure and document cultural materials. The survey succeeded in creating maps of Kofyar, Lardang, Bong, Zuwakal and Mer using the GIS. The archaeological survey of the settlements was carried out from 11 April, 2017 to 20 April, 2017 under my direction. A total of eight field guides helped in addition to an archaeologist in the survey team. As a result of the

sheer sizes of the hills, coordinates of important landmarks were taken. Features identified during this research include: house foundations, animal/livestock pens, buried pots, hollowed rocks, lower grinding stones, groves, ritual areas, sacred groves, standing stones or monoliths, sitting arrangement and graves.

4.1.1 Site A (Kofyar)

This is the first abandoned settlement surveyed and is said to be the original home of the Mernyang people which was first inhabited by Dafyar and Nade. This hill has the highest plateau peak in the Mernyang area which is visible from the plain settlements like Kwa town, as a result of its steep nature; it is difficult to be accessed by vehicles except by foot.

With the help of field guides, nine abandoned compounds were surveyed on this hill including: *Kop Dagarnaan*, *Kop Tupyil Paya*, *Kop Tupmang*, *Kop Gwa*, *Kop Datugus*, *Kop Dadu'ut*, *Kop Dafyel*, *Kop Dajak* and *Kop Dachil* (see fig.). These compounds were distributed unevenly around the hill with the majority at the northern end of Kofyar hill close to its boundary with Lardang at the Vertu River. The present day Kofyar settlement is concentrated on the hilltop.

4.1.1.1 *Kop Dagarnaan (Compound 1)*

This abandoned compound is located within the living areas of the hill and it is said to belong to one of the early inhabitants of Kofyar called Dagarnaan. It is surrounded by a large farmland, terraces with trees and boulders. Cultural finds found here were potsherds on the surface which were collected while features include cluster of house foundations, graves, sitting arrangement, hearth, animal pen and lower grinding stones (see fig. 6).

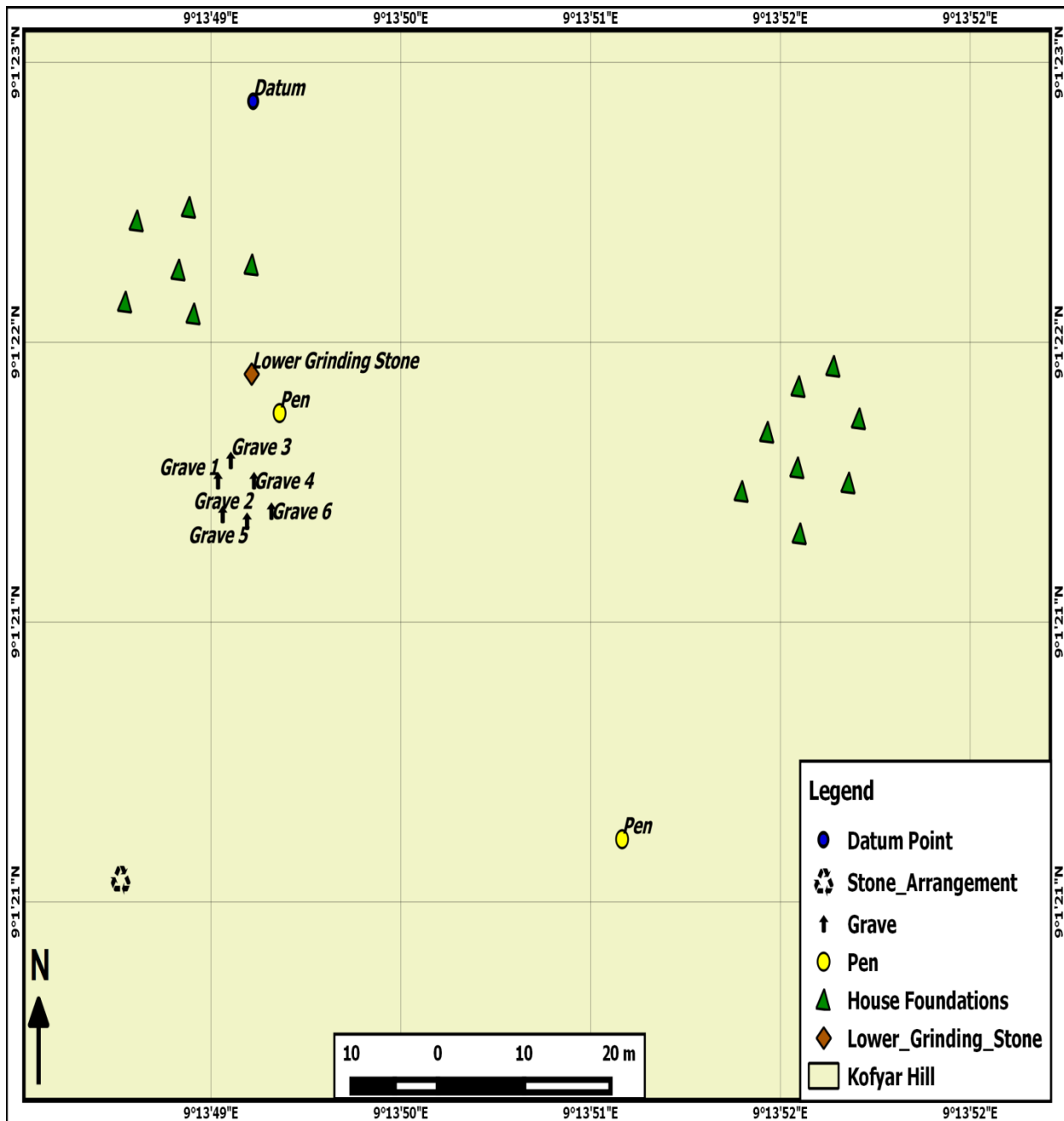


Figure 6: Map of Kop Dagarnaan

Source: Google Earth and Global Administrative Boundary

Cluster of house foundations

A cluster of circular house foundations consisting of eight circles was found. Each of the house foundations had a diameter of about 1.5m. A second cluster of house foundations consisting of about eight house foundations covering a length of about 20m with five fragmented grinding stones within the area was identified. These house foundations were partially destroyed.

Hearth

This is a fireplace marked by three medium sized granite stones with soot on them. Ten meters from the cluster of house foundations is this feature.



Plate II: Hearth

Animal pen

Two animal pens were found in this compound. The first is 10m southeast of the cluster of house foundations. It is a circular arrangement of dry stones of different sizes. It has a diameter of about 1.5m and the ruins stand at about 0.2m height. The second animal pen is visibly more erect and larger in size than the first. It has a diameter of 2m and a height of 0.4m.



Plate III: Animal Pen

Lower grinding stone

This is 3m northwest of the first animal pen. It is 0.05m deep, 0.47m long and 0.3m wide. It is a granite rock which was turned into an artifact by the use it served. It had an oval depression.



Plate IV: Lower Grinding Stone

Cluster of graves

Six clusters of raised platforms said to be graves were found clustered together on a 7.5m radius (15m diameter). These features were built with small stones in an oval shape but have no grave markers on them. One of these collapsed inwards but the stones built around it remain.

Sitting arrangement

This is an arrangement of stones around a large boulder. This seems like an artificial arrangement that was used as a sitting arrangement by the early inhabitants of the compound. Dry stones were erected around it which appears like a boundary round the compound connecting it to the farm terraces around the compound.



Plate V: Sitting arrangement

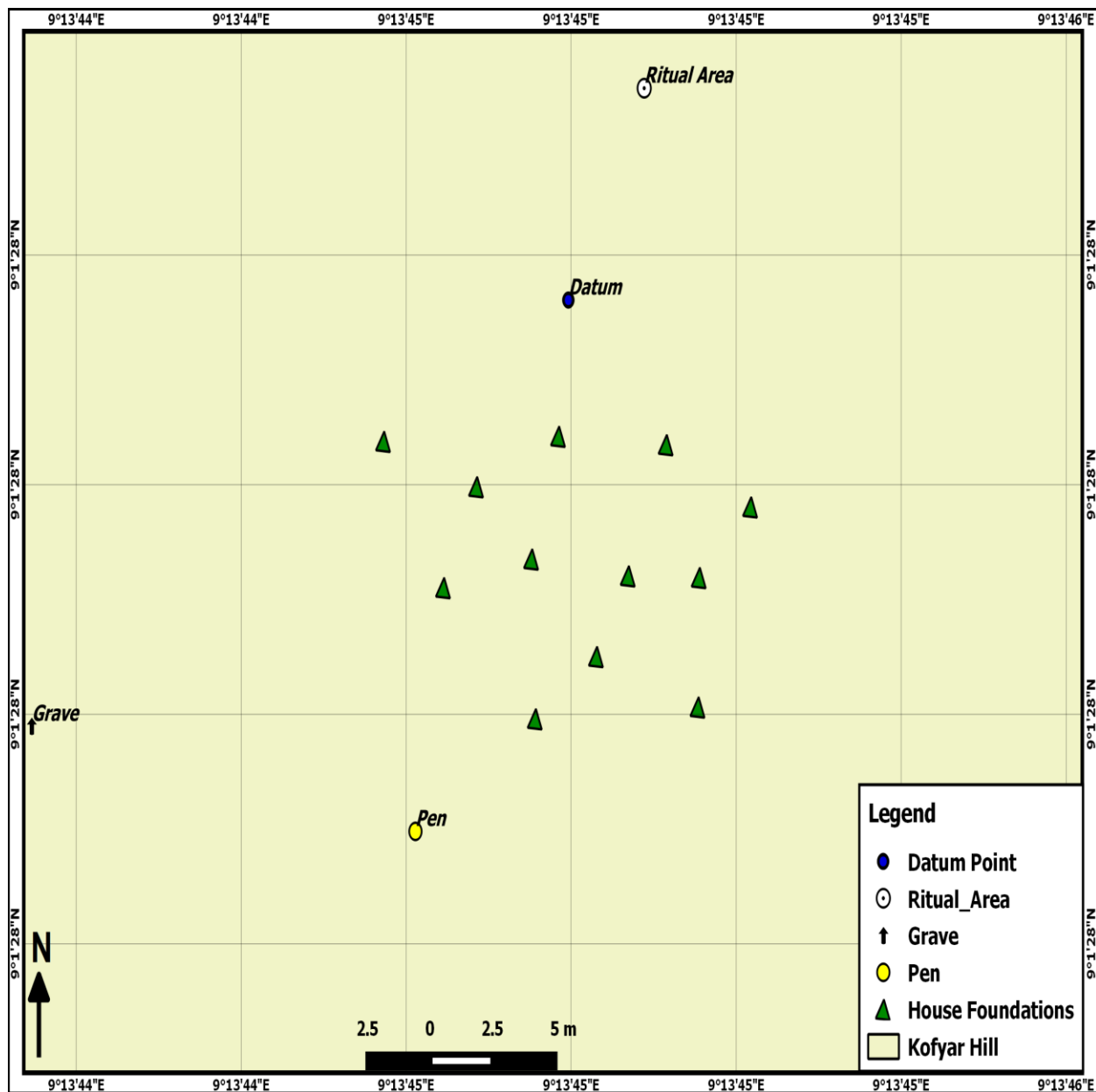


Figure 7: Map of Kop Tupyil Paya

Source: Google Earth and Global Administrative Boundary

4.1.1.2 Kop Tupyil Paya (Compound 2)

This abandoned compound is about 50m from the present-day chief's compound. It is said to belong to a relative of Dafyar (the patriarch of the Mernyang). It is surrounded by farm terraces, trees, shrubs and boulders. Potsherds were the only cultural materials found on the surface of this settlement while features include: cluster of house foundations, sacred grove/ritual area, graves, and animal pen (see fig. 7)

Cluster of house foundations

There were a total of two clusters of house foundations. The first cluster consists of twelve circular house foundations with three of these having standing stones in them. Even though some of these foundations are in a fragmentary form, they have a diameter of about 2m. One of the house foundations has three fragmented large clay pots partially buried in them close to the ritual area. The second cluster is about 8m northwest of the datum with very fragmented circular house foundations.

Sacred grove/ritual area

This is called *ligoet* in Mernyang dialect. It consists of partially dry trees clustered together to form a grove. This is located at what seems like the back of the compound. Within this grove are partially buried pots and a stone arrangement which is said to be where offerings were made by the former inhabitants of the compound. It is 7m north-east of the datum. As a result of the thickness of the trees, pictures of features especially the stone arrangements were unclear as the researcher was asked not to step into the ritual area.



Plate VI: Ritual Area

Animal pen

This is a circular stone structure made of large and small stones cemented together by mud. It has a diameter of 5m, height of about 0.5m and a thickness of about 0.6m in fragmented state of conservation.

Grave

This grave is built with stones in a conical shape with a round base and a standing stone on it as a grave marker. The grave in a poor state of conservation measures about 0.5m high with a diameter of 1.7m, while the standing stone measures 0.5m high and 0.05m thick.

4.1.1.3 Kop Tupmang (Compound 3)

This is said to be the ancestral home of the Doemak ethnic group. It still has a cultural significance to the Doemak people because it is the place where every chief of Doemak and Kofyar is coronated. This compound is located at the lower part of the Kofyar hill close to the Vertu River and it is surrounded by well-defined farm terraces. The following features were

identified: cluster of house foundations, graves, ritual area, whetstone, partially buried pots, animal pen (see fig 8).

Cluster of house foundations

A cluster consisting of eight circular house foundations with a diameter of about 2m was identified.



Plate VII: House Foundation with partially buried pots inside

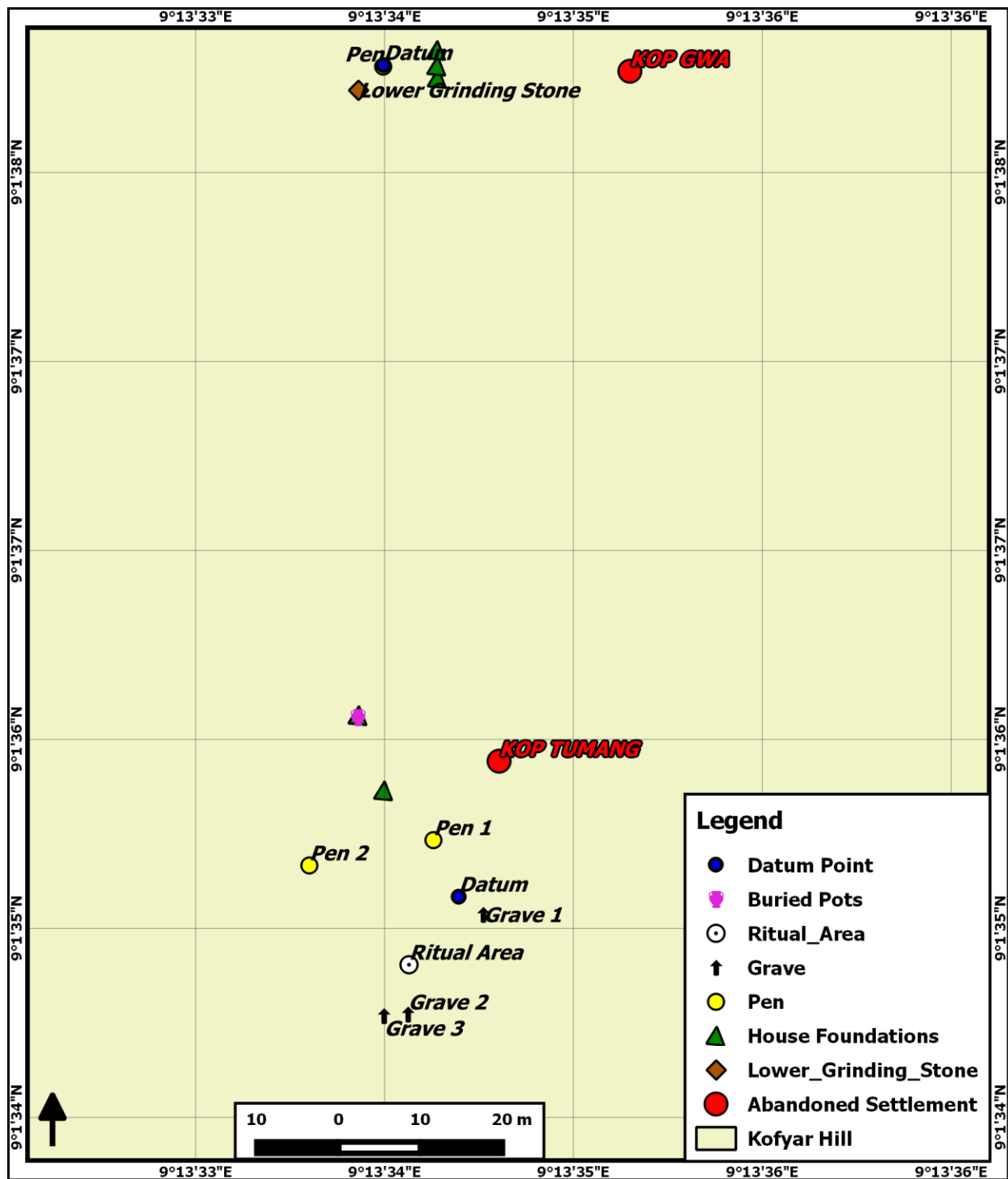


Figure 8: Map of Kop Tupmang and Kop Gwa

Source: Google Earth and Global Administrative Boundary

Animal pen

Two livestock pens were found in this compound. It was built in a similar manner with the other animal pens from the previous compounds. It measures 1.2m high, 0.3m thick, and 4m in diameter with a hollowed rock similar to the lower grinding stone at its entrance on the southern part of the pen. The second pen measures 1m high, 0.7m thick and 3.8m in diameter.



Plate VIII: Animal Pen

Seat of coronation/whetstone stone

This is called *laarsas* in Mernyang. It is a whetstone which measures 0.8m long, 0.4m wide and 0.15m thick (see plate IX). According to oral tradition, it was used for sharpening knives and other metal weapons by the occupants of the compound and it is presently the seat of coronation of Doemak chiefs.



Plate IX: Whetstone/Seat of Coronation

Graves

Three features classified as graves were found in *Kop Tupmang*. They were all built in a circular form with stones and mud. Grave I was raised in a circular form but narrow at the top like a cone but it had no grave marker (see plate X). It is 5m away from graves 2 and 3. Graves 2 and 3 are said to be of Tupmang and his wife. They are joined together but Grave 2 which has the monolith-like grave marker on top of it is on a higher elevation than the Grave 3 which has no marker even though they are built in a similar manner as Grave 1.



Plate X: Graves 2 and 3

Ritual area

This is a circular stone arrangement with a small pot buried within it and another placed in front of it. It is almost joined to graves 2 and 3. This is in a fragmentary state of preservation.

Partially buried pots

Two of these pots are said to be ritual pots appear partially buried in the ground. The first one has punctate decoration (see plate XI), while the second pot has a multiple decoration of grooves with double twisted cord roulette.



Plate XI: Ritual Pot with Punctate Decorative Motif

4.1.1.4 Kop Gwa (Compound 4)

This settlement appears to have been partially destroyed by farming activities. The stones used for the foundation of structures were rearranged on different sides of the abandoned settlement for clearer farming space. The testimony offered by the guide confirmed this. What is left of this settlement is an animal pen; three house foundations and a lower grinding stone (see fig. 8).

Animal pen

This animal pen in *Kop Gwa* also served as the datum for the survey because of the tree joined to it at the back. It has a diameter of 8m, a height of about 1.5m and a thickness of 0.5m. It is built with a combination of large between 0.30-0.50m and smaller stones but the larger stones are more at the entrance and the top of the pen. A large hollowed rock that looks like a lower grinding stone was found beside the wall of the pen which is assumed to have been used as a water trough for animals (see plate XII).



Plate XII: Animal Pen

House foundations

Three house foundations joined to each other on a line were found on the south-eastern part of the animal pen at about 1.5m away. A lower grinding stone was found inside the first house foundation from the livestock pen (see plate XIII). These house foundations all have a diameter of 1.5m.



Plate XIII: House foundation containing lower grinding stone

Lower grinding stone

This is found 15m south of the datum which is the animal pen. This lower grinding stone appears to be on its own (see plate XIV) unlike previously identified lower grinding stones which are located inside or in front of house foundations. The significance of this could not be ascertained because of the level of disturbance.



Plate XIV: Lower Grinding Stone

4.1.1.5 Kop Datugus (Compound 5)

This abandoned compound like the others is surrounded by farm terraces and is situated at the lower part of Kofyar hill (see fig 9). Features identified here include: animal pen, monolith, collapsed grave, animal pen and partially buried pots.

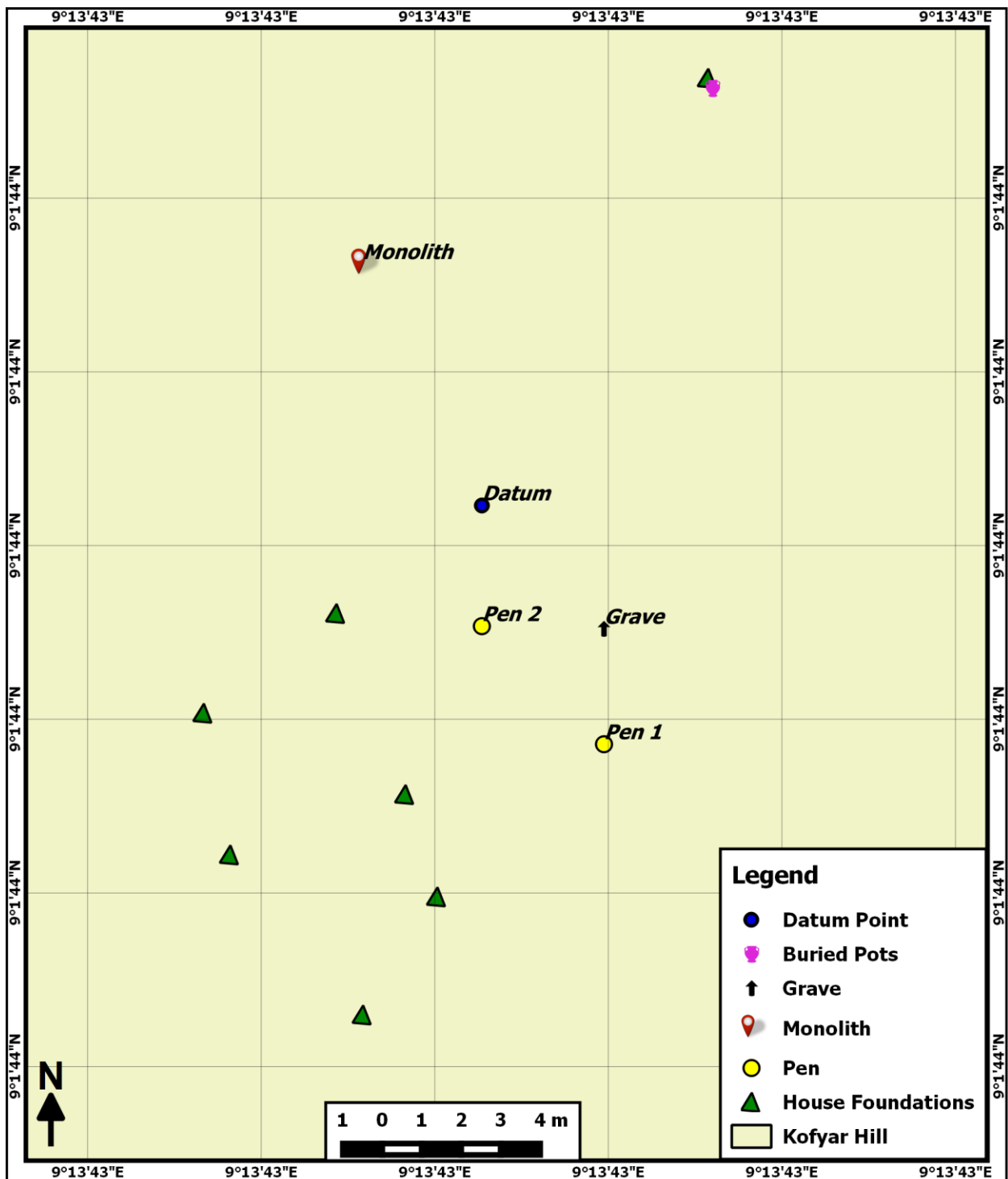


Figure 9: Map of Kop Datugus

Source: Google Earth and Global Administrative Boundary

Animal pen

Two animal pens were found on this abandoned settlement. Built just like the previous livestock pens in the other abandoned compounds. The first animal pen has a height of 1.3m, diameter of 7m and 0.6m. It has a hollowed rock at its southwestern entrance which may also have been used as a feeding trough like oral tradition says. The second animal pen which has an unidentified tree behind it has a diameter of 6m, height of 1m and thickness of 0.6m with a hollowed granitic rock inside it which is assumed to have fallen into it.

Monolith

This is a standing stone located behind animal pen 1. It is 0.6m high and 0.2m wide (see plate XV).



Plate XV: Monolith

House remains

A cluster of seven circular house foundations was found in this abandoned settlement. Three lower grinding stones were found in one of these circular house foundations made of

stone. Among these house foundations is one with the remains of mud and stones. It has a diameter of 2m.



Plate XVI: House Remains

Partially buried pot

This was found at the northern entrance of the abandoned settlement ushered by a pathway built with small stones. This is a small decorated pot with herringbone grooves.



Plate XVII: Partially Buried Pot

Collapsed grave

Unlike the other graves erected in a conical shape, this grave was built with stones round it. It is a sand mound which lies closer to the ground compared to the other type of graves. It lies directly behind pen 2 with a hole which shows that it collapsed inwards (see plate XVIII).



Plate XVIII: Collapsed Grave

4.1.1.6 Kop Daduut (Compound 6)

Finds identified on this abandoned compound include broken pieces of pottery while features include house foundations, buried pots and animal pen (see fig 10).

Cluster of house foundations

A total of seven circular house foundations were found clustered together. They each have a diameter of about 2m.

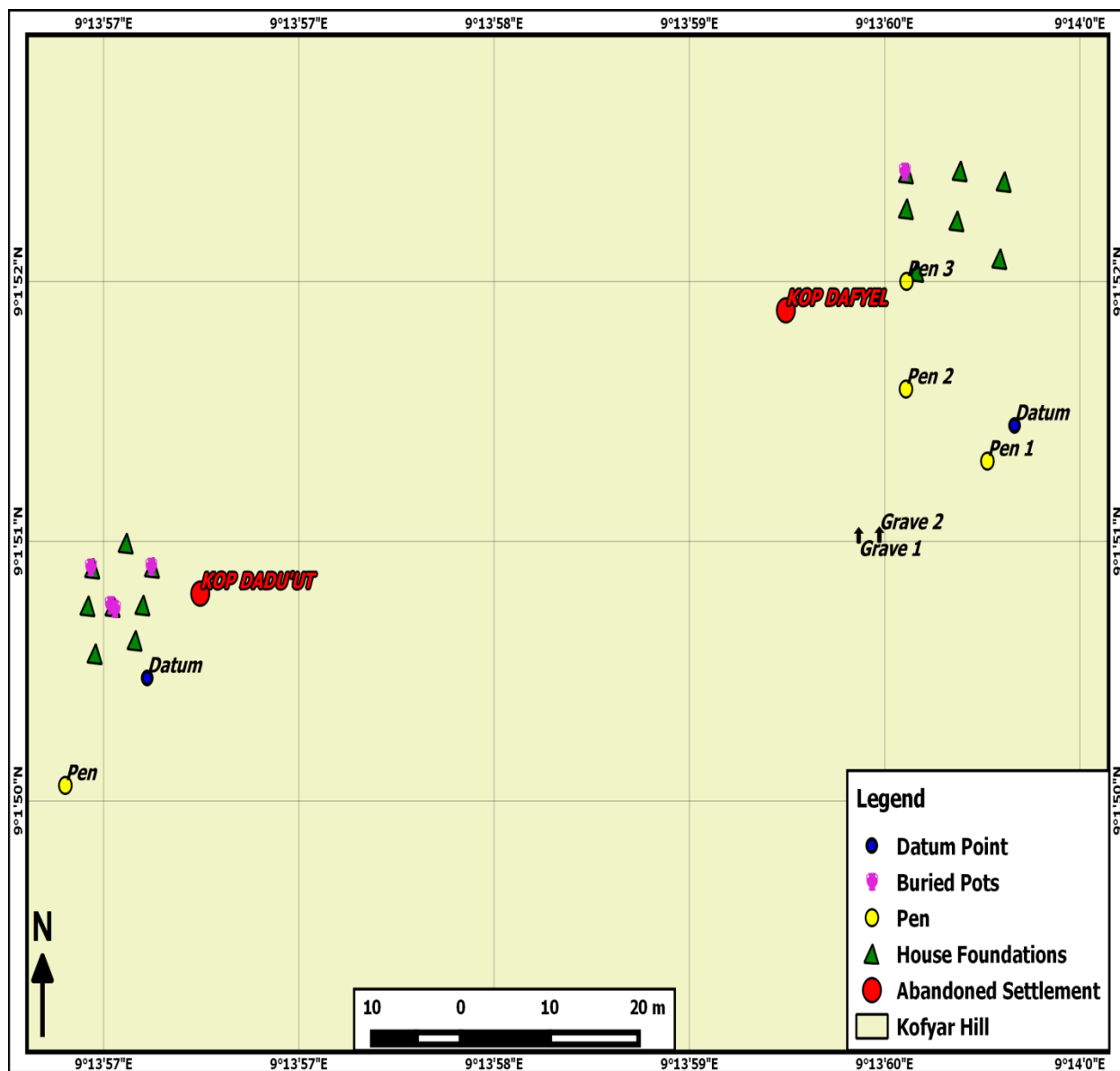


Figure 10: Map of Kop Daduut and Kop Dafyel
 Source: Google Earth and Global Administrative Boundary

Animal pen

This animal pen is built like the other pens in the previous abandoned compounds with a thickness of 0.4m, diameter of 7m and a height of 0.7m.

Partially buried pots

Four partially buried pots were found in this compound. Pots 1 and 2 were found in one of the fragmentary house foundations. The third pot is located outside a circular house foundation. Pot 4 is a large partially buried pot located at the north eastern end of the cluster of house foundations.

4.1.1.8 Kop Dafyel (Compound 7)

Three animal pens, two graves, a cluster of house foundations and two partially buried pots were found here (see fig 10).

Animal pen

Three animal pens were found clustered together. Pen 1 has a height of 1.6m, diameter of 6m and a thickness of 0.5m (see plate XIX). Pen 2 is located 10m northwest of pen 1 with a height of 1.2m, diameter of 6m and thickness of 0.8m. Pen 3 is 6m north of pen; it is 2.5m in diameter, 1.6m high and 0.5m thick.



Plate XIX: Animal Pen

Cluster of house foundations

North-east of Pen 3 is a cluster of five circular house foundations. In one of these is a partially buried pot.

Graves

Two graves were identified in *Kop Dafyel*. Grave 1 was built in form of a pyramid but very low with a grave marker on top of it. It is 20m southwest of Pen 1. Grave 2 is also built in a pyramidal form but it is higher than grave 1 and appears to be in its complete form with a grave marker.



Plate XX: Graves 1 and 2

4.1.1.7 *Kop Dajak* (Compound 8)

Surrounded by farm terraces like the other compounds, *Kop Dajak* is located at the lower part of Kofyar hill consisting of potsherds and features such as house foundations, animal pen, lower grinding stones and partially buried pots (see fig 11).



Plate XXI: Farm Terrace

Cluster of house foundations

Seven circular house foundations were identified clustered together. Two of these foundations appear more like house remains with stones cemented with mud. One of these house remain has a diameter of about 3m has about four partially buried pots within it. This may have been a hut for storing and brewing beer. In house foundation 3, a large partially buried pot was found and a lower grinding stone measuring 0.5m long and 0.2m wide in front of it. This could have been a kitchen.



Plate XXII: House Foundation with Partially Buried pot and Lower Grinding Stone

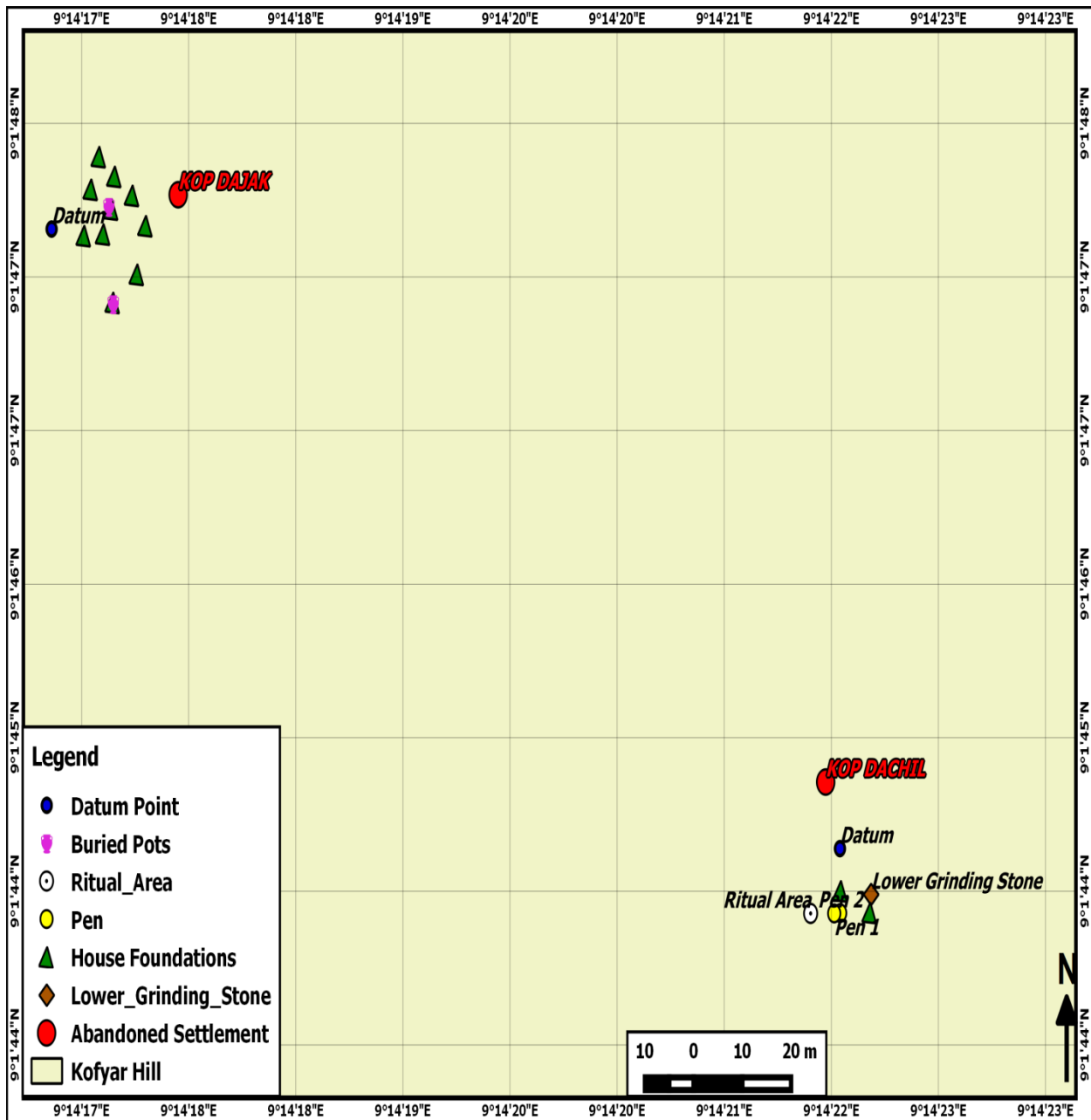


Figure 11: Map of Kop Dajak and Kop Dachil
Source: Google Earth and Global Administrative Boundary

4.1.1.9 *Kop Dachil (Compound 9)*

Features identified here include animal pens, house foundations, lower grinding stone and whetstone (see fig. 11).

Animal pens

Two animal pens clustered together were identified. Pen 1 has a diameter of 5m, height of 1.3m and thickness of 0.5m. Pen 2 has a diameter of 2m, height of 0.5m and thickness of 0.5m.

Cluster of house foundations

Two house remains were also identified on this settlement. The first is that of a circular hut typical of the. The second house remain has a rectangular pattern similar to that of modern architecture even though built with mud

Lower grinding stone and whetstone

A lower grinding stone was found within a stone arrangement with a rather irregular pattern. A Whetstone similar to that of *Kop Tupmang* was found on this settlement and it is. It is said to have been used by the inhabitants of the compound for sharpening of knives and for ritual purposes.

4.1.2 Site B (Lardang)

This settlement is bounded by Kofyar hill to the south, Bong hill to west, Zuwakal to the south and the plain villages of Kwanoeng and Lardang-Goeyil to the east (see fig 19). Lardang is the first Mernyang hill settlement to be accessed via the untarred road from Kwa market and it can be accessed either on foot or by vehicles. Lardang hill is characterized by a rocky terrain with Plateau top and sloppy terrains in some places as a result of river valleys formed by erosion.

Five abandoned compounds; *Kop Dafuwup*, *Kop Damulak*, *Kop Dajin*, *Kop Dabok* and *Kop Dachian* were surveyed on the hill (see fig 19).

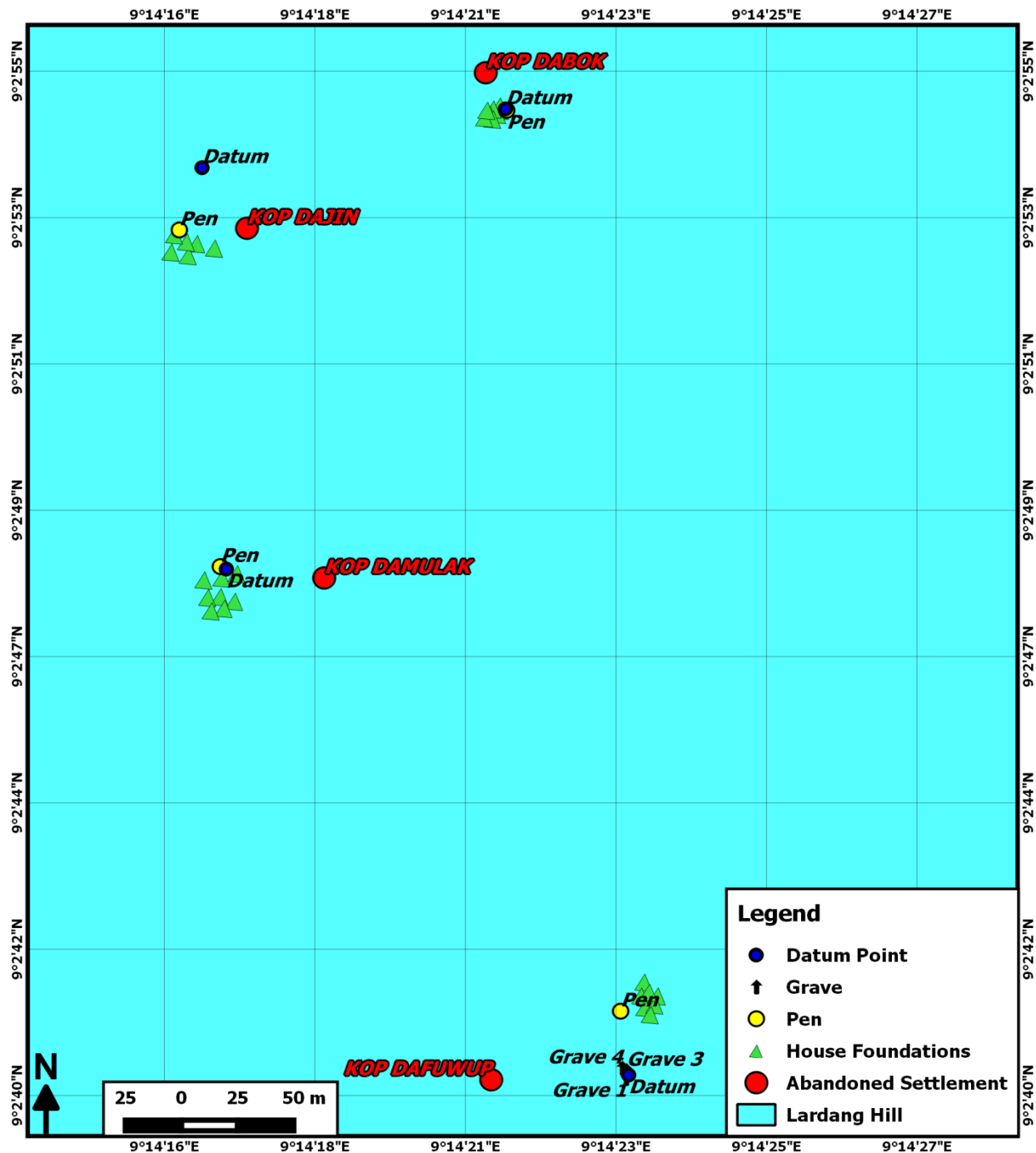


Figure 12: Kop Dafuwup, Kop Damulak and Kop Dabok
Source: Google Earth and Global Administrative Boundary

4.1.2.1 Kop Dafuwup (Compound 1b)

This is a highly disturbed abandoned settlement as a result of the quest for farmland by the present inhabitants. A group of four graves were identified as well as what appears to be a cluster of house foundations; three lower grinding stones and one animal pen as shown on the map (see fig. 12). Finds collected on this site include potsherds and a metal object.

Graves

The group of four graves is an arrangement of graves on a line (see plate XXIII). These graves are all built with large and small stones arranged in a conical shape with a grave marker on top of each of them. Grave 1 is about 1m southwest of the datum. Grave 2 is about 0.5m north of Grave 1. Graves 1 and 2 were too close to the datum. Grave 3 is 0.5m north of Grave 2 and its grave marker fell off the cone but still lies on top of the grave. Grave 4 is 2m north-west of Grave 3 with a terrace in between them.



Plate XXIII: Cluster of Graves

Animal pen

The animal pen found in Kop Dafuwup is also built with large and small stones in a circular form. It is 1.2m high and 0.5m thick; with a diameter of 7m (see plate XXIV).



Plate XXIV: Animal Pen

Cluster of house foundations

Seven circular house foundations were identified in a cluster 2m away from the animal pen but they appear to be disturbed which made their identification difficult.

Lower grinding stones

Three lower grinding stones were identified outside the cluster of house foundations towards the northern end of the cluster. One upper grinding stone was seen on a lower grinding stone. It measured about 0.18m long and 0.08m wide while the lower grinding stone measured about 0.5m long and 0.2m wide.

4.1.2.2 *Kop Damulak (Compound 2b)*

This abandoned compound is surrounded by farm terraces, trees and shrubs. It consists of a cluster of circular house foundations, some of which still have stone and mud remains of the building; an animal pen, partially buried pots and lower grinding stones (see fig. 12). Potsherds are the only finds collected from this site.

Cluster of house foundations

The cluster of circular house foundations on *Kop Damulak* consists of ten circular house foundations. Some of these house foundations have partially buried pots within them but a house foundation on the southern end of the boundary has a partially buried pot inside it with a lower grinding stone in front of it which suggests that it may have been a kitchen. Two of these still have remains of the building made of stones and mud, one of the house remains at the eastern side of the boundary of the compound has a lower grinding stone in front of it (see plate XXV).



Plate XXV: House Remain

Animal pen

An animal pen was identified 2m northwest of the datum at the northern end of the compound boundary. It has a diameter of 7m, height of 1.2m, and thickness of 0.6m.

4.1.2.3 *Kop Dajin (Compound 3b)*

Just like the other abandoned compounds in Lardang, this compound is surrounded by farm terraces, a rocky terrain, trees and shrubs. A cluster of house foundations and an animal pen were identified here (see fig 13). Finds collected here include a jar without its rim and potsherds.

Animal pen/Cluster of house foundations

The animal pen in this compound is positioned on the northeastern end of the boundary. It has a diameter of 4m, height of 0.8m and thickness of 0.6m.

The cluster of house foundations consists of six circles on the northern end of the boundary. One of the house foundations has about three fragmented buried pots closely buried together (see plate XXVI).



Plate XXVI: Partially Buried Pots in a House Foundation

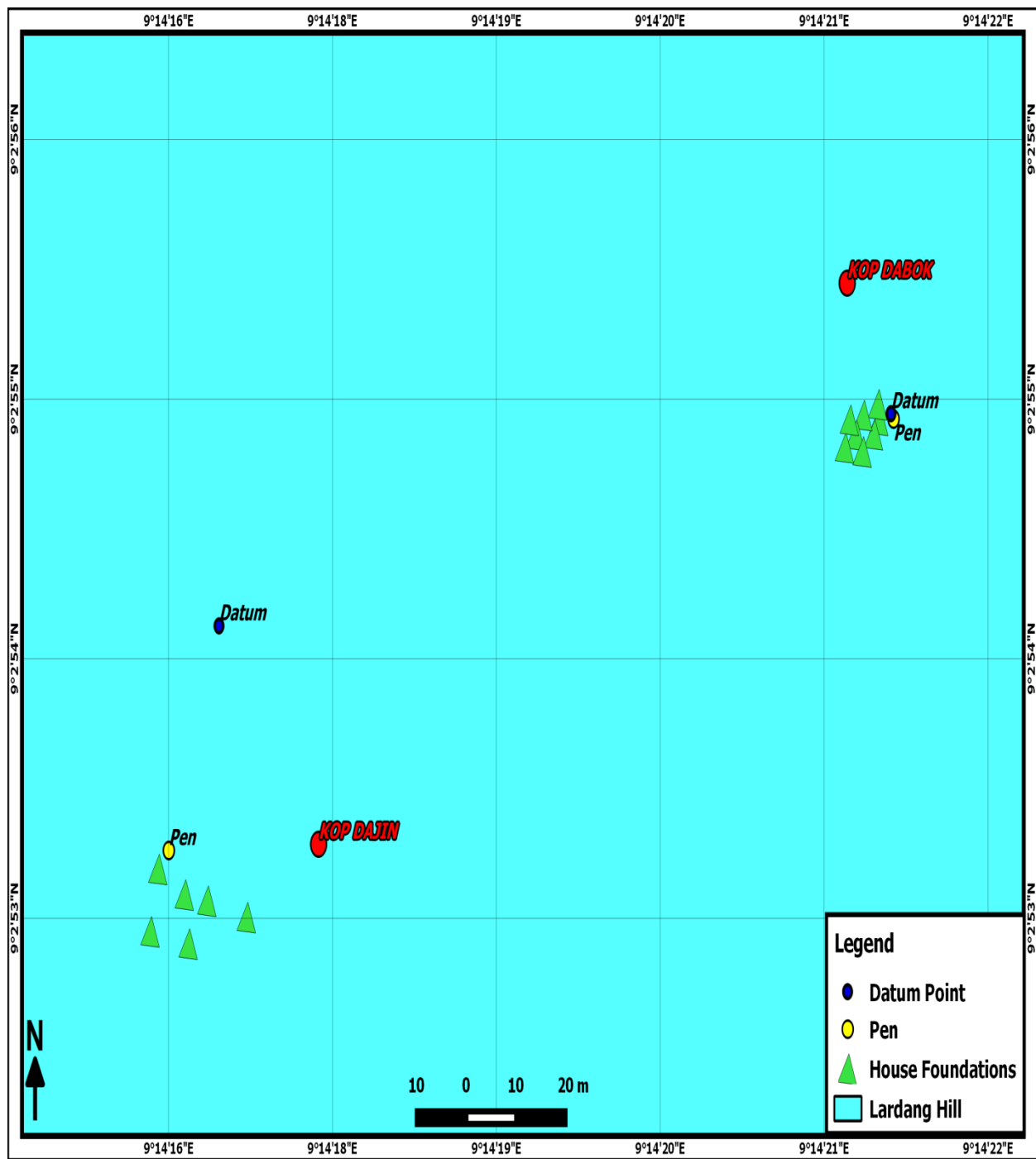


Figure 13: Map of Kop Dajin and Kop Dabok
Source: Google Earth and Global Administrative Boundary

4.1.2.4 Kop Dabok (Compound 4b)

This abandoned compound is positioned in a rocky terrain and surrounded by farm terraces, trees and shrubs. Finds collected here include potsherds and a whole neck of a pot while features include cluster of house foundations, house remains and foundations as well as animal pen (see fig. 12 and 13).

Cluster of house foundations

A cluster of eight circular house foundations made of small stones were identified. Two different types of house remains about 2m apart were observed in this cluster. The first type of house remain (house remain 1) is built with small stones held together by sand (see plate XXVII). It has a small rectangular entrance made of larger stones and a window made of circular pottery remains, particularly the neck and rim of the pot. The second type of house remain (house remain 2) consists of mostly mud with stones in between but more stones concentrate at its base. It also has a pottery remain as the window. On the inner part of house remain 2 is a wall that appears like a demarcation of the hut into two parts.



Plate XXVII: House Remain 1

Animal pen

A circular animal pen made of large and small stones was identified at Kop Dabok. It has a diameter of 5m height of 1.5m and thickness of 0.5m.

4.1.2.5 Kop Dachian (Compound 5b)

This is the last abandoned compound surveyed by the researcher on Lardang hill. Three animal pens, lower grinding stones and house foundations were identified (see fig. 14).

Animal pens

Animal pen 1 is similar to the animals pens identified previously. It has a diameter of 3m, height of about 1m and an unclear thickness since it collapsed inwards. Pen 2 is attached to a large rock on the eastern side and it has the same measurements as Pen 1. Pen 3 is attached to Pen 2 on the east. Pen 4 is 3m east of Pen 3. It has a diameter of 2.5m, height of 0.7m and thickness of 0.5m.

Cluster of house foundations

A cluster of eight circular house foundations were identified. One of them has two lower grinding stones in it while another one has fragments of a partially buried pot in it. A total of 6 lower grinding stones were identified in Kop Dachian.

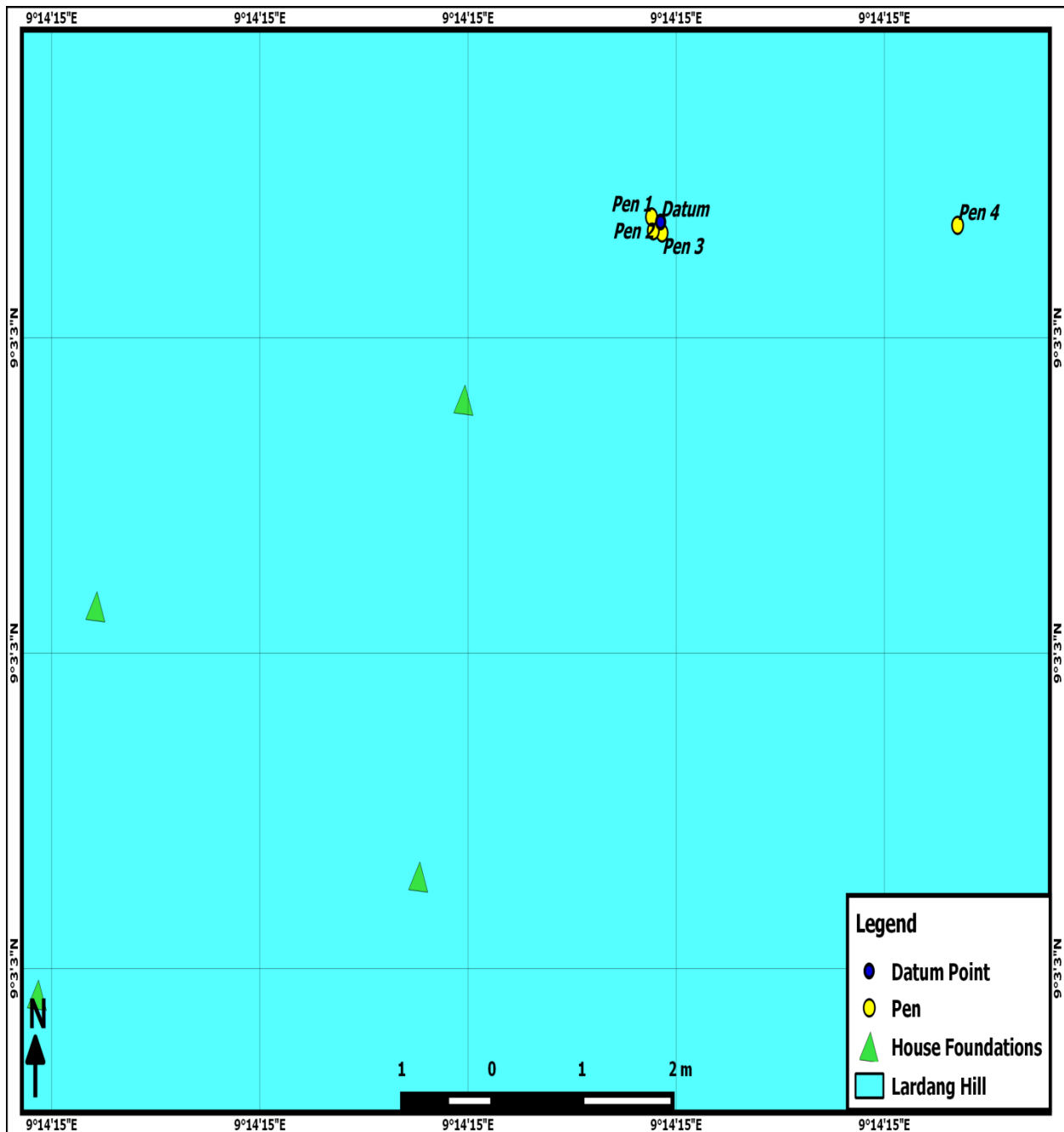


Figure 14: Map of *Kop Dachian*

Source: Google Earth and Global Administrative Boundary

4.1.3 Site C (Bong)

This is one of the northernmost hills of the Mernyang area (see figs 2 and 19); it falls under Doemak district of Qua'anpan LGA. This is the home of the *Moelar*, a cone-shaped hill with the highest peak in the area. Characterized by a rocky terrain and the most luxuriant vegetation of the five hill settlements researched, palm trees appear to be the most dominant tree in Bong. Its ethnographic settlements are surrounded by farm terraces with palm, mango, canarium and other trees. Houses here are located about 50-150m apart, separated by farmlands and sometimes river valleys. Four archaeological sites were identified here with the help of field guides. Only one of these is an abandoned settlement while the other three are still inhabited today but oral tradition holds that they are ancestral homes with historical significance to the people of Bong.

4.1.3.1 Kop Kyemtu (Compound 1c)

This is the only abandoned compound identified by the researcher during the survey in Bong. It is said to be the first home of their patriarch Besang who left for Kofyar but his son Kyemtu returned to it and started the village proper. Therefore, this abandoned compound is named after his son Kyemtu. The extent of the site could not be clearly defined because it is in a disturbed state. Nevertheless, four features including a cluster of circular house foundations, one animal pen and five graves were identified here (see fig. 15).

Feature 1 is a cluster of three circular house foundations built with stones. One animal pen built in a circular form with large and small stones was identified as feature 2 on Kop Kyemtu (see plate XXVIII). It has a diameter of 1.6m, height of 0.6m, and height of 0.4m.



Plate XXVIII: Animal Pen

Five graves were identified on this site. Grave 1 is 15m north east of the datum. Grave 2 is 3m north-west of Grave 1. Grave 3 is south west of the datum. Grave 4 is built in a conical shape with small stones and a grave marker. Grave 5 is 1m south west of grave 4 with no grave marker on it but a tree that grew out of it just like grave 4. All the graves on this site are marked with stones without grave markers on top of them except for Grave 4. In the Bong burial tradition, female graves do not have grave markers (standing stones) on them unlike those of men.

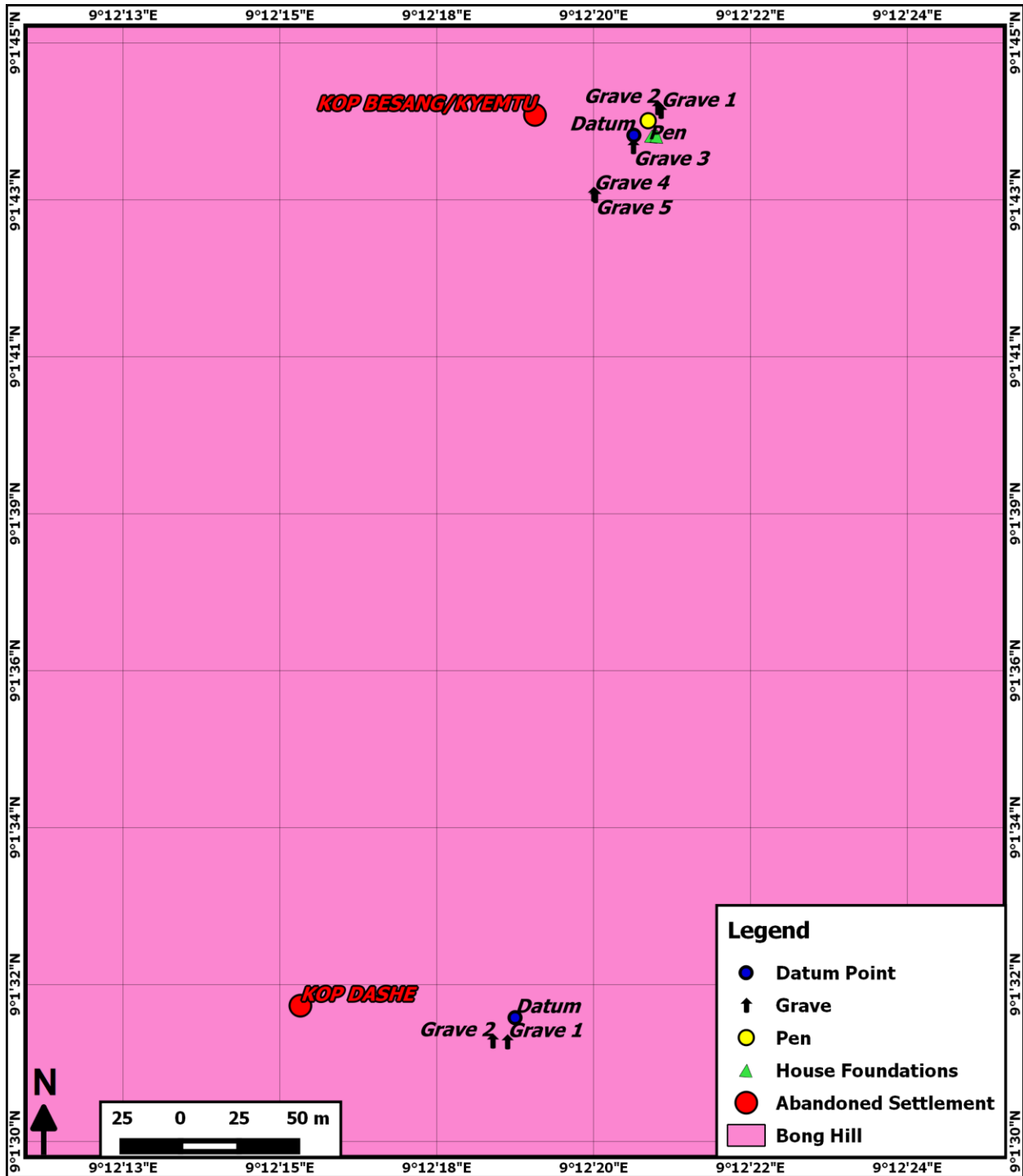


Figure 15: Kop Kyemtu and Kop Dashe

Source: Google Earth and Global Administrative Boundary

4.1.3.2 *Kop Dashe (Compound 2c)*

This is an ethnographic compound that is said to belong to Dashe, Kyemtu's son (see plate XXIX). It consists of four circular huts clustered together, two animal pens, two small chicken barns; two conical graves with standing stones atop, one granary and a sitting arrangement under a mango tree (see fig. 15). This compound is surrounded by farm terraces and trees.



Plate XXIX: *Kop Dashe*

4.1.3.3 *Kop Long (Compound 3c)*

This is also an ethnographic compound with an archaeological significance and *Kop Long* means King's court. First inhabited by Tugunma'ap, son of Dashe, *Kop Long* consists of round huts; three graves with standing stones on them and a place of meeting (see fig. 16). It is said to be the ancestral home of the chief where meetings were held, judgments were made and celebrations of large kills were made (see plate XXX).

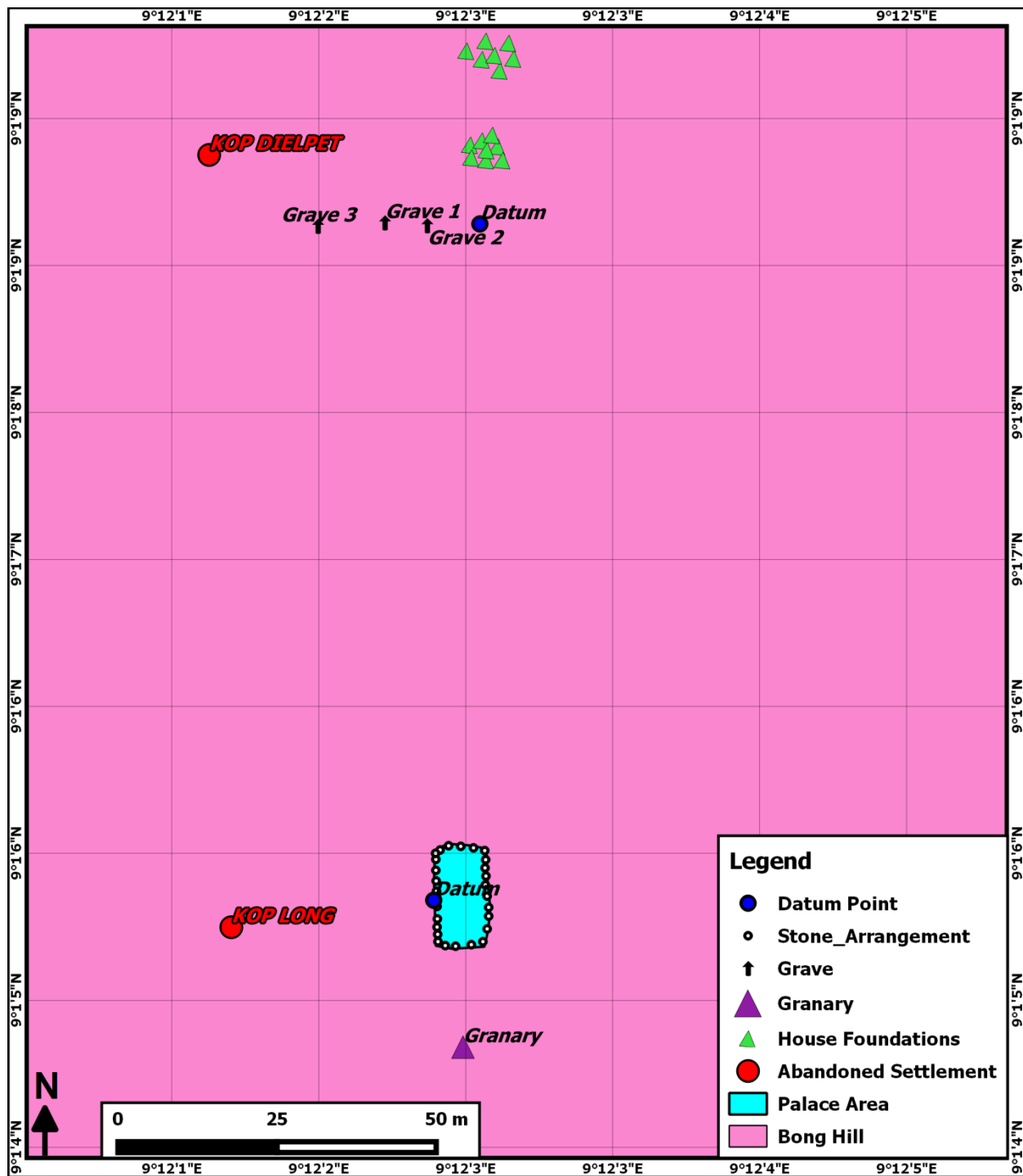


Figure 16: Map of Kop Long and Kop Dielpet

Source: Google Earth and Global Administrative Boundary

The King's court covers an area of about 15m from north to south and 8m from east to west (see plate XXXIII). To the east is a fig tree (*Ficus thonningii*). Present in the area are stone seats where people sat for meetings in the past and even till today (see plate XXII). A structure built with a pile of stones and a stone slab with hollows at the top (see XXX) is said to be where the head of a large rare animal killed in a hunting expedition was placed and the entire village celebrates the victory of their brave hunters by dancing. This structure occupies a central position.



Plate XXX: Meeting Arena

A stone seat 5m north of the fig tree (*Ficus thonningii*) is where the chief sits during discussions while others present at the meeting seat on other stone chairs round the court. A pile of smooth stones kept on a big stone slab on the western side of the court directly behind the chief's seat signify the number of stones dropped at the end of meetings where matters are left to God's hand of judgment (see plate XXXII).

A granary built with mud in a cylindrical shape with a conical roof and covered with thatch (see plate XXXII). This has never been opened and even when the thatch roof is blown

away by wind and it is not replaced by evening, a masquerade comes out of the granary making women hide in their houses while the roof is replaced by men (Dakwang, Pers. Comm. 2017).



Plate XXXI: Ritual Granary



Plate XXXII: Chief's Court



Plate XXXIII: Meeting Arena

4.1.3.4 Kop Dielpet (Compound 4c)

Also an ethnographic compound, *Kop Dielpet* has remains of circular house foundations and graves (see fig. 16). Three graves were identified here (see plate XXXIV). Grave 1 is 1.2m high. It is a conical stone structure with a grave marker on top of it said to be Dielpet's grave. This grave still has a cultural significance till date. When grasses grow over this grave, the ones at its sides are removed but the ones on top are not removed until a large wild animal is killed and its head is kept at the King's court. After this, it is brought to this grave then it is taken round all the ancestral settlements (i.e. the aforementioned compounds) before it is finally returned to the King's court while the meat is cooked and eaten at the court. This celebration is done in honour of Dielpet who was chief Tugunmaap's aid. If this is not done, the grasses are left to dry up.

Grave 2 is said to belong to Doekwat, Pangpin's son. It is similar to grave 1 and it is 8m west of datum. Grave 3 belongs to an unknown person.



Plate XXXIV: Grave

Two clusters of house foundations were identified here. Cluster 1 has a part of it covered by a modern rectangular building. There are several circular house foundations in this cluster but their number is unclear because of the obstruction. Some of these house foundations are built inside others. This may indicate an occupation of the site by several generations of people. Cluster 2 consists of several house foundations having unclear patterns because of the generations of occupations as inferred by the researcher.

4.1.4 Site D (Zuwakal)

This hill settlement falls under Jepal district of Mangu LGA and the northernmost Mernyang hill settlement sharing a boundary with Chokfem hills and other Mangu LGA settlements. It is characterized by a less rocky terrain than the other three hill settlements surveyed earlier. Its vegetation is like that of Bong but less luxuriant. Houses in this settlement are also surrounded by farm terraces in rocky and sloppy terrains while plain farmlands surround other houses in this plateau environment. In Zuwakal, modern houses abound more and only two

abandoned settlements (*Kop Noegon* and *Yilnuang*) and ritual groves were identified here (see fig. 17). Graves, animal pen, house foundations, ritual stones and sacred groves were also identified.

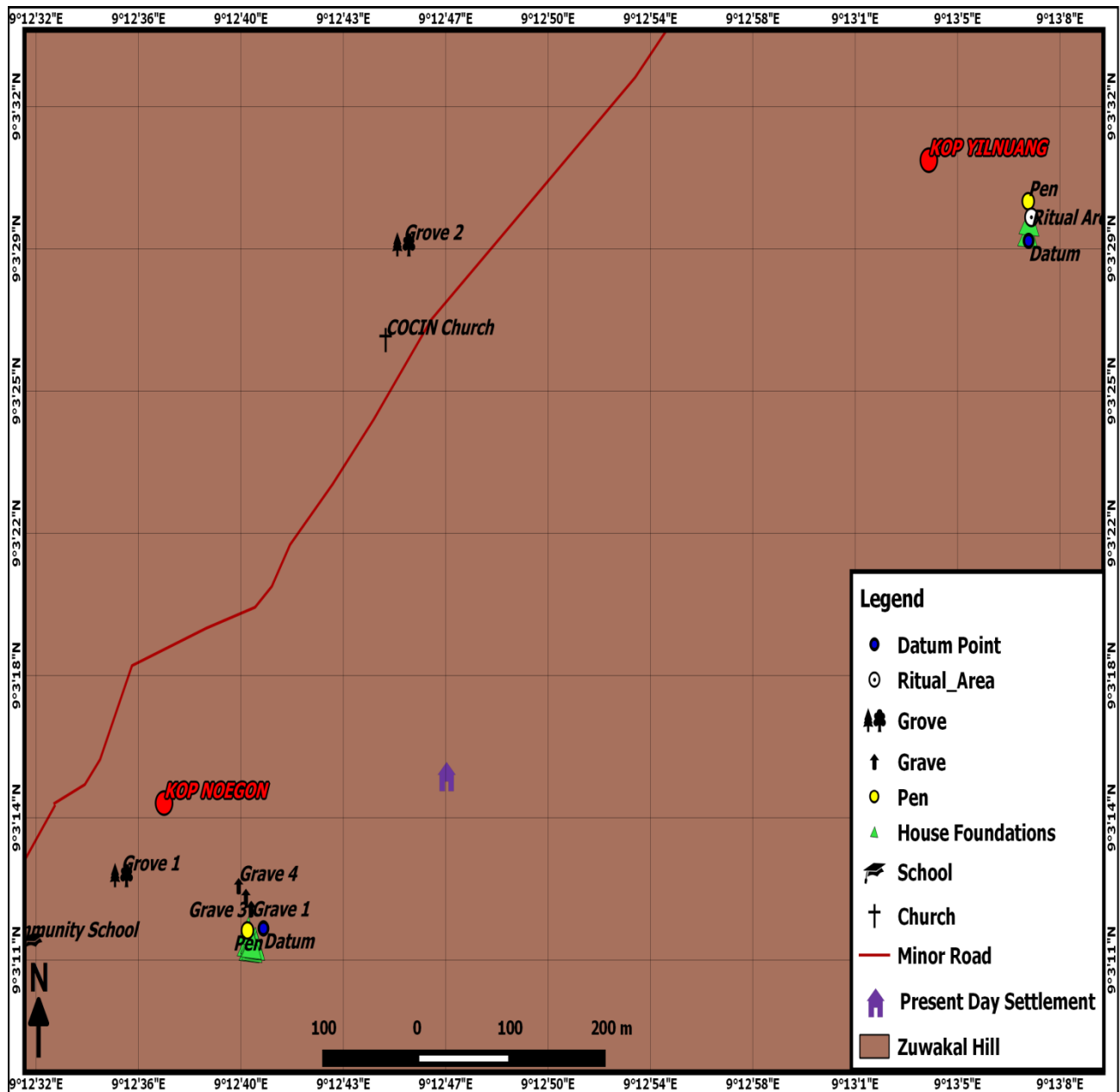


Figure 17: Site Map of Zuwakal

Source: Google Earth and Global Administrative Boundary

4.1.4.1 Kop Noegon (Compound 1d)

This abandoned compound is located within the living areas of Zuwakal. It consists of a cluster of house foundation; graves and animal pen (see fig. 17). Finds collected here include only potsherds.

Cluster of house foundations

A cluster consisting of seven circular house foundations is positioned south west of the datum. In front of one of these house foundations are remains of a pillar-like structure built with stones and mud appearing like a mound (see plate XXXV). Six meters west of the animal pen is another circular house foundation away from the cluster with a diameter of 2.5m.



Plate XXXV: House Remains

Animal pen

One collapsed animal pen was identified (see plate XXXVI). This is built in a similar manner as the previous pens.



Plate XXXVI: Animal pen

Graves

Four graves were identified here. They are both built in a conical form with small stones. 10m northwest of grave 2 is grave 3, built in the same form as 1 and 2 but with a grave marker on top of it. Grave 4 is 12m northwest of grave 3. This is also built in a conical form with a standing stone on it but collapsed on one side.



Plate XXXVII: Grave 1

4.1.4.2 Kop Yilnuang (Compound 2d)

This is said to be the first place settled by the first group from Kofyar called the Yilnuang. This abandoned compound appears very disturbed nevertheless; ruins of cultural materials were identified on it (see fig 17).

House foundation and pen

A circular house foundation which is said to have been used as a kitchen for storing beer called *Luu Nen* is located 10m from the datum. A ruin of an animal pen was identified 30m north of the datum.

Ritual area

Two stone slabs placed opposite each other were identified (see plate XXXVIII). This is a ritual setting called *pangtok* is 0.4m south-east of the pen. This was where sacrifices of beer and other food items were made by the former inhabitants of the compound (Lakhit: Pers. Comm., 2017).



Plate XXXVIII: Ritual Stone (Pangtok)

A terrace-like feature built with small stones at the base and bigger stones on top (see plate XXXIX) is said to have served a ritual purpose. In the past, this feature had a tree above it that hindered visitors from entering the house without the permission of the members of the household. It was the final point of ritual to its past inhabitants. It was also used as a sitting place during their leisure hours.



Plate XXXIX: Ritual Area

Sacred groves

Sacred groves are called *lighit* in the native language and they are identified by names just like abandoned settlements. Zuwakal had a number of sacred groves but only one was identified as the most significant to its past. *Lighit Naan* (God's grove) in the past served as the main place of ritual in Zuwakal (see plate XL). The chief and his men met here to discuss serious issues especially disagreements of judgments. In difficult situations, the final judgment is left to God and the parties involved say in Mernyang "*De Naan, de yil e*" meaning "it is left in God's hands". This was where communal disputes were settled (Lakhit: Pers. Comm., 2017).



Plate XL: Sacred Grove

4.1.5 Site E (Mer)

This is a plain settlement about a kilometer from Kwa town. It was discovered by the researcher through oral tradition. This settlement is surrounded by inselbergs with continuous plain-land towards the south. Two abandoned settlements were found on a hilltop which is no longer inhabited in Mer (see fig 18).

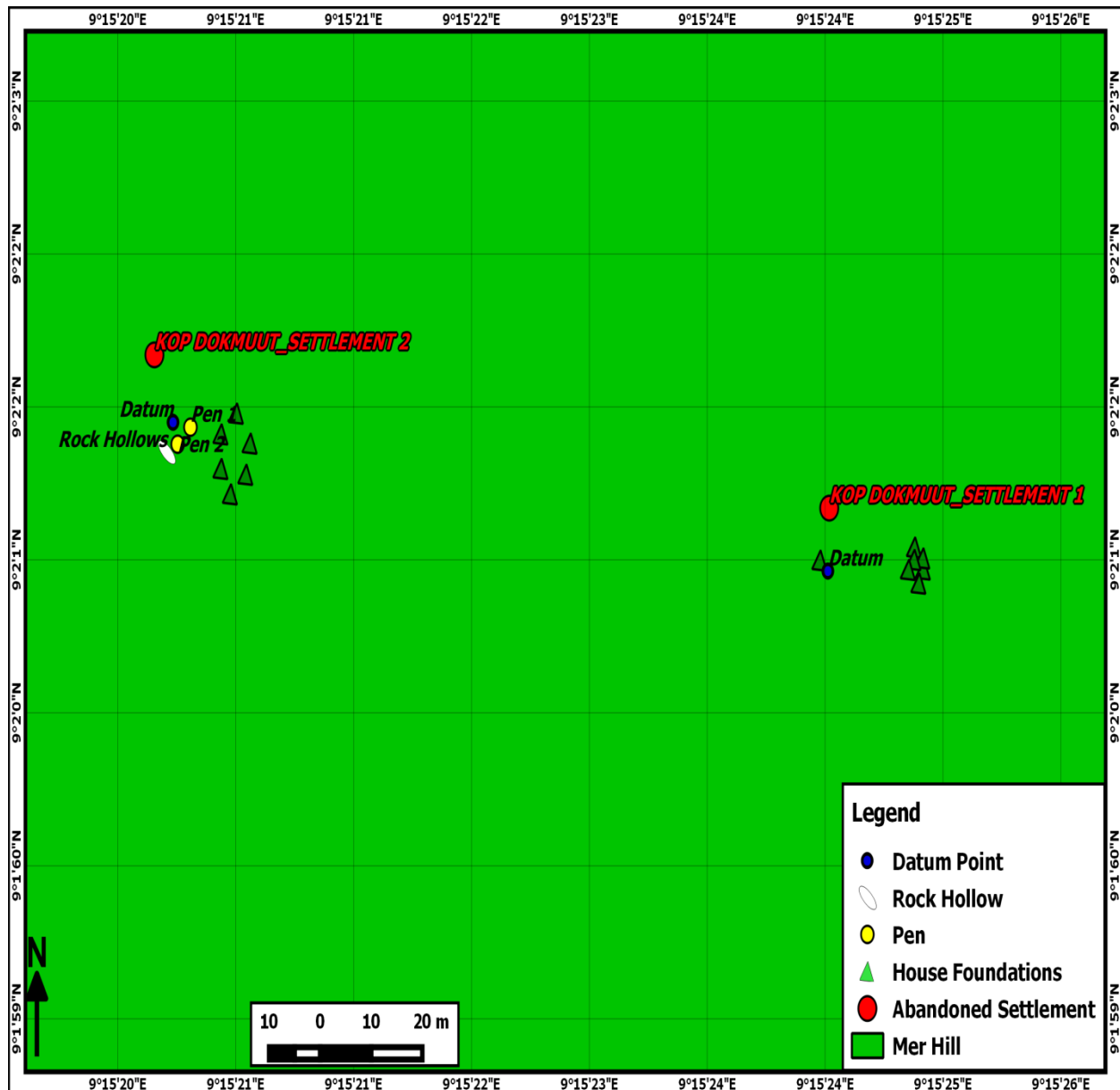


Figure 18: Site Map of Mer

Source: Google Earth and Global Administrative Boundary

4.1.5.1 *Kop Dokmuut*

This is the name of the inselberg that houses the abandoned settlements in Mer. Two abandoned areas were found on this hill were tagged compound 1 and 2 because it is unclear if they were settled by the same family because there is a 50m distance between them (see fig. 18). They were therefore studied as separate compounds.

Compound 1e

Here farm terraces are the most conspicuous features with potsherds scattered on the surface. Two stone arrangements that appear like circular house foundations were identified. The first has a diameter of 1.5m. This abandoned area is very disturbed with little ruins left of past human activities.

Compound 2e

This settlement has more outstanding features than the first. A cluster of four circular house foundations were identified here and they each have a diameter of 1.5m. One has small partially buried pots in it while another has a standing stone behind it.

Two animal pens were identified on settlement two. Pen 1 is built in a circular form with dry stones of different sizes as in the other hill settlements. It has a diameter of 3m, height of 0.4m and thickness of 0.5m. Pen 2 is similar to Pen 1 but it collapsed inwards. It has a diameter of 1.5m, height of 0.5m and thickness of 0.4m. It is joined to pen 1 on the southeastern part. A hollowed rock that appears like a lower grinding stone but with a round hole was identified 1m southwest of pen 2. It is 0.5m long and 0.2m wide (see plate XLI).



Plate XLI: Hollowed Rock

4.2 Ethnographic Survey

This was conducted in order to:

1. Understand the present cultural activities of the area through the study of the material culture of the five surveyed hills
2. To interpret the cultural materials identified in the abandoned areas through archaeological survey
3. To draw comparisons between the extant and extinct cultures of the study area

Ethnography's importance to archaeological interpretation cannot be overstated here. As a method, it is corroborated with oral tradition, written record and archaeological survey to understand the cultural past of the Mernyang people. Aspects of the material culture of the Mernyang people which include pottery making, farming system and traditional architecture were studied. Participant observation and key informant interview as methods of conducting ethnographic research were used in studying the present pottery making technique of the people

while observations and oral interviews were applied in studying both their farming system and traditional architecture.

4.2.1 Pottery making

Pottery is the most dominant cultural material found during the survey of the five hill settlements. Therefore, the researcher saw the need to further investigate pottery among living Mernyang settlements. Ethnographic survey of the role of pottery among the Mernyang makes it possible for comparisons between pottery samples collected from the archaeological record and those in the ethnographic setting. Pottery as a trade is going into extinction in the Mernyang area. In Kofyar, pottery is no longer made rather pottery vessels are bought from the neighboring Longsel village. In Lardang however, only one potter is still practicing the trade. Ladi Dabooer makes pottery wares for the entire upper and lower Lardang villages.

Acquisition of clay, preparation and formation of the vessel

The clay used in making pottery in Lardang is acquired from a farm in the neighbouring Kwanoeng village. It is dug out from marshy places or swamps. If the land where the clay is located belongs to an individual, it is negotiated and paid for. After the clay is obtained, it is ground with stone in hollowed rocks or on sacks in order to remove impurities like stones and sticks. The clay is then soaked for three days before it is placed in a mortar and pounded with a pestle until it is soft and plastic.

The formation of pottery wares after it has been prepared involves different stages depending on the ware to be produced. For the sake of this ethnographic survey, a beer jar was made using the coil method of production by a female potter (see plate XLIII). This was done for demonstrative purpose and due to inadequate time for larger wares. To make a beer jar of about

30cm high, Mama Ladi forms a ring or coil from the already prepared plastic clay by rolling the plastic clay with both hands and then she makes another and places over the first ring. She then plasters them together using her thumb with a little water. For the round base, she fetches some clay and forms it into a round form and puts it into the ring, again she plasters it to form a round bowl-like object. To make a whole beer jar, the potter makes about 12 rings of clay and plasters with her hands. She used a broken piece of calabash to smoothen the body of the vessel.



Plate XLII: The Potter Forming the Vessel

After adding about four rings of clay to form the body of the vessel, the object is placed on a hole made in the ground with a sharp object like a hoe. This gives the vessel with a round base support to further form the body; more rings are added and smoothened with the thumb (see plate XLIII) until the desired height is achieved.



Plate XLIII: Potter Forming the Vessel

Decoration

To achieve the desired decoration which in this case is two layers of thumb impression on the rim, the potter adds another ring of plastic clay to the rim of the vessel where the decoration is to be done. Using her thumb, she slightly presses the ring of mud round the rim to achieve the impressions (see plate XLIV). She adds another layer and repeats the process.



Plate XLIV: Potter Achieving the Thumb Impression on the Vessel

To finish the rim, she uses a leaf to smoothen the mouth of the vessel to give it a tapered lip (see plate XLV). Then a thin piece of a guinea corn stalk is used on the lip to achieve the flat finish (see plate XLVI).



Plate XLV: First Stage of Rim Formation using a Leaf



Plate XLVI: Final stage of Rim Formation

Drying and firing

After the vessel has been formed, it is left to dry for two days before it is fired using the open air technique. To do this, the potter takes the already dry vessels to the back of the house and heaps them on a spot. Guinea corn roots are heaped round them to form a base for the fire before thatch is used to cover them (see XLVII). This is lit and left to burn overnight. When fired, the vessels turn red from the original grey colour it had at the point of acquisition of clay, formation and drying; with black patches in some cases. No artificial colours are added to the clays at any stage by the potter in Lardang. When wet, the clay is grey and when fired, it turns red (see plate XLVIII). This is because the type of clay used in making pottery in the area is of good quality and high strength. It is durable but this also depends on how careful one is because Mama Ladi has pots that were made decades ago.



Plate XLVII: Vessel Prepared for Firing



Plate XLVIII: Finished Vessels

Problems encountered by the potter

Ladi Daboer learned pottery making from her mother who probably learned it from her mother too. Her sister also makes pottery in Namu town and they learned the craft as children. In spite of the good sales the potter makes being the only potter in all of Lardang, the major

problem she faces is the fear of the extinction of the craft in the area as a result of lack of interest by the younger generation. Another threat to pottery making is the replacement of pottery wares by modern domestic wares made of plastic or metal. Another problem is ill-health due to age and stress of the craft.



Plate XLIX: Pottery Wares and Modern Vessels in a Lardang Kitchen

The use of pottery in the Mernyang hill settlements are till date widespread but the use of modern vessels is fast replacing them because of their durability and light weight.



Plate L: Beer jar positioned in a Rock Hollow

4.2.2 Architecture

Like other African hills such as the Angas hills in northern Jos-Plateau and those of Ethiopian hills in East Africa, the Mernyang hill settlements also have round huts arranged in enclosed compounds. These compounds usually consist of round huts some of which are living huts, kitchens barns, granaries and animal pens. Granaries of different styles are built in a circular form with mud and roofed with thatch but they are completely enclosed with openings only at the top which serve as entrance and exit for stored grains. Some are also built in kitchens and attached to the roof of the kitchen. Households here are surrounded by farmlands with pathways built with stones creating a road network connecting households on the hill settlements.



Plate LI: Mernyang Hill Compound



Plate LII: Round hut built with Stones and Mud



Plate LIII: Mernyang Granary 1



Plate LIV: Mernyang Granary 2

4.2.3 Burial system

Prior to the advent of Christianity in the Mernyang area, their burial system involved marking graves to represent certain gender and age. Graves of men were built with dry stones without mortar in a conical form with a round base and a standing stone (monolith) on top of it

(see plate LV). Those of women were built in the same way but without the standing stone on it. Graves of children were marked by stones in a round or cylindrical form but smaller than those of adults. Today, in the Mernyang area graves are hardly built in this way.



Plate LV: Mernyang Burial System

4.2.4 Farming system

The system of farming in the Mernyang hill settlements is the terrace farming whereby terraces are built with dry stones held together by mud (see plate LVI). As a result of the rocky nature of the hills, farmlands are inadequate for the hill population therefore this technique is used to create farmlands for cultivation by clearing the stones to form terraces and to protect the soil and crops from being washed off the hills by erosion. Crops grown on the Mernyang hill settlements include guinea corn (*Sorghum bicolor*), millet (*Pennisetum glaucum*), maize (*Zea mays*), beans (*Phaseolus vulgaris*), bene-seed (*Sesamum indicum*), hungry rice (*Digitaria exilis*), sweet potatoes (*Ipomoea batata*) and more recently yams (*Dioscorea rotundata/cayenensis*). In all the five hill settlements, these farm terraces are present in both the abandoned areas and

ethnographic setting. On hills, farm terraces surround households within an area of 50-150m. These farmlands belong to the households they surround including the commercial trees on them like oil palm (*Elaeis guineensis*), canarium (*Canarium schweinfurthii*) and mango trees (*Mangifera indica*).

The Mernyang are also livestock farmers who keep animals like cattle (*Bos Taurus*), sheep (*Ovis aries*), goats (*Capra aegagrus hircus*), pigs (*Sus*), chicken (*Gallus gallus domesticus*), dogs (*Canis lupus familiaris*) and in the past horses (*Equus caballus*) and donkeys (*Equus asinum*). These animals are kept in pens built within compounds. Animal pens here are constructed differently and according to the sizes of animals kept in them. They are built in a circular form with large and small stones without mortar and roofed with corn stalk or sticks in some cases and thatch (see plate LVII). However, chicken barns are built differently; they are round barns built with mud with small entrances. These barns are sometimes confused for granaries but they are much smaller and have openings unlike granaries (see plate LX).

In this area, it was also observed that hollowed rocks are used as feeding troughs for all animals. These rocks are kept in front of animal pens and in some cases within the compound where liquid food is kept for animals (see plate LVIII). These hollowed rocks appear like lower grinding stones but the Mernyang people see them differently based on their nature and use. The hollowed rocks are deeper than lower grinding stones (see plate LIX). Lower grinding stones are located inside or in front of kitchens and are used for grinding food items or medicines while hollowed rocks are kept in front of animal pens or within the compound for feeding animals, especially liquid food and water.



Plate LVI: Mernyang Farm Terrace in Lardang



Plate LVII: Mernyang Animal Pen



Plate LVIII: Hollowed Rock used as Animal trough in the Mernyang Area



Plate LIX: Hollowed Rocks used as Feeding Troughs



Plate LX: Mernyang Poultry Barn

3.2.5 Ritual system

Apart from the use of sacred groves for ritual purposes by the Mernyang, ritual areas are also built with mud and more commonly stones (see plate LXI). As a result of the historical significance of these ritual stone arrangements, they are used for both political and religious purposes. Village meetings are held around these stone arrangements and they are usually situated in the chief's compound. Certain rituals are offered at these spots to gods for reasons such as communal disputes, theft and hunting victories.



Plate LXI: Ritual Stone Arrangement

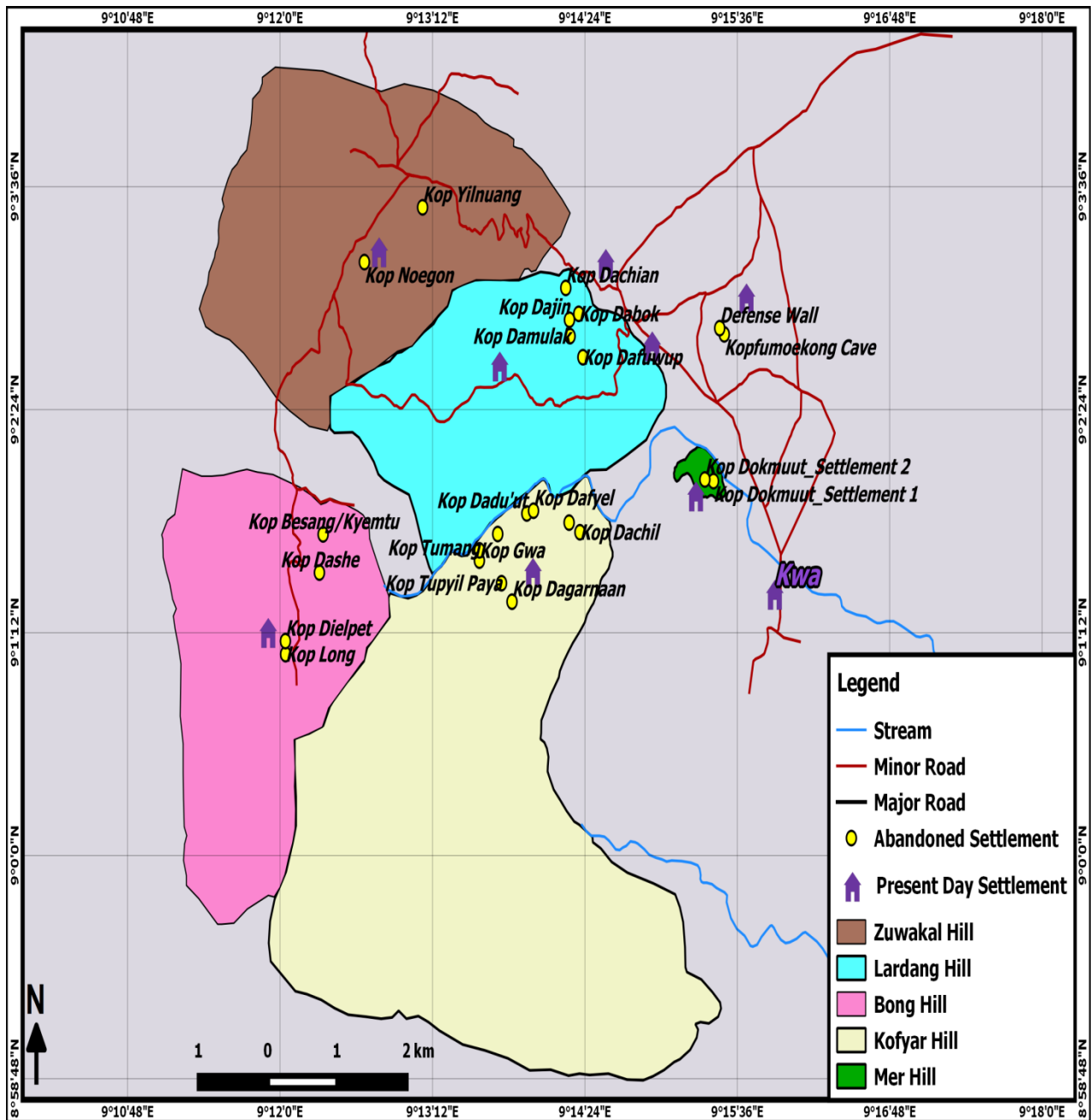


Figure 19: Map representing the Summary of Surveyed Areas
Source: Google Earth and Global Administrative Boundary

CHAPTER FIVE

CLASSIFICATION, ANALYSIS AND INTERPRETATION OF FINDS AND FEATURES

Finds recovered during the survey of five Mernyang hill settlements include potsherds, a stone tool and a metal implement. These were collected from the surfaces of abandoned settlements surveyed. These finds were collected using the simple random method of sampling. This involved dividing each abandoned compound into boxes and potsherds were picked from each of them. This method ensures that samples from all the corners of the abandoned settlement are properly represented. The analysis of finds collected and features recorded is important in order to draw possible similarities and differences between all the sites which will help our interpretation of the cultural past of the Mernyang people.

Table 1: The Surface Collections

Finds collected	Kofyar	Lardang	Bong	Zuwakal	Mer	Total
Pottery	67	49	22	27	33	198
Stone Object	0	1	0	0	0	1
Metal Object	0	1	0	0	0	1

This table presents a summary of all finds collected from the survey of five settlement sites. There were a total of 198 potsherds collected from all the sites, 1 stone object and 1 metal object came from Lardang hill.

5.1 Classification and Analysis of Pottery

In pottery analysis, the three key elements are fabric, form and decoration through which the archaeologist obtains information about some decisions made by the makers in order to achieve different vessels (Drewett 1999). Grouping the potsherds into similar categories for analysis makes analysis and interpretation of data from these sites easy for the researcher.

The 198 potsherds collected from the Mernyang area were classified based on the three major elements of pottery analysis according to Drewett (1999). These include form, fabric and decoration.

5.1.1 Pottery analysis based on vessel forms

Pottery wares consist of several parts which include the body, neck, rim, base, handle and lid. Other ceramic items include smoking pipes. Rims are the most diagnostic sherds which can be used to reconstruct pottery forms. Other parts of the vessel like body and neck sherds are often difficult to give forms to. However, complete vessels are likely to give a form description based on geometry (Shepard 1956 cf Drewett 1999). This research classified the 198 potsherds collected from all the sites surveyed based on the vessel parts collected (table 2).

Table 2: Summary of Vessel Parts

Vessel Part	Kofyar	Lardang	Bong	Zuwakal	Mer	Total	Percentage (%)
Body	43	38	18	27	13	138	70.2
Neck	8	8	0	0	0	16	8.0
Rim	8	1	3	0	7	19	10.1
Base	8	2	0	0	11	22	10.1
Lid Knob	0	0	1	0	2	3	1.5
Total	67	49	22	27	33	198	100

In the Mernyang area, the diagnostic vessel parts here are the rims and bases.

5.1.1.1 Classification based on base form

Bases are the second most diagnostic parts of vessels after rims which can be given forms to. They can be round, flat, concave, disk, pointed, and a variety of other regional forms (Joukowsky 1980 cf Drewett 1999). In the Mernyang area, 22 bases were collected consisting of three base forms: flat, round and spherical bases (see table 3). Of these bases, two whole vessels were found; one was a complete vessel that looked like a dish (see plate LXIII) while the other is a fairly preserved jar (see plate LXIV).

Table 3: Summary of Base Form

Vessel Part	Kofyar	Lardang	Bong	Zuwakal	Mer	Total	Percentage (%)
Flat base	0	1	0	1	8	10	45.4
Round base	2	1	0	0	0	3	13.6
Spherical base	2	0	0	0	7	9	41
Total	4	2	0	1	15	22	100

Base 1

This consists of flat bases and 10 bases (see plate LXII) fall under this category, with a thickness of about 1cm. It constitutes 45.4% of the total base forms (see table 3). A complete vessel was found under this category which appeared like a plate (see plate LXIII).

Base 2

In this category, bases are round and there were three of them. They have a thickness of 0.6cm and they form 13.6% of the total bases collected. Under this category, a partially broken jar was found in Lardang (see plate LXIV).

Base 3

Spherical bases make up this category (see plate LXV). Total of nine of these bases were collected from the Mernyang area. They have a thickness of about 0.5cm and constitute 41% of the total base forms (see table 3).

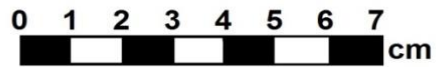


Plate LXII: Base 1 (Flat Base)



Plate LXIII: Base 1 (complete vessel)



Plate LXIV: Base 2 (Round Base)



Plate LXV: Base 3 (Spherical Base)

5.1.1.2 Classification based on rim form

Two types of vessels were identified based on their rim forms; they are bowls and pots. This was achieved with the rim diameter chart. Vessels with rim diameter larger than their projected height are termed bowls, while those with rim diameter lesser than their projected height are regarded as pots (Bakinde 2016: Pers. Comm). Pots are used for domestic purposes such as cooking, storage, brewing beer and for ritual purposes in some cases. Bowls are used for serving dishes or some other domestic purposes. Five pot forms and one bowl form were identified from the 19 rims collected during this research.

Pots

Form 1

These are everted rims with flat lips with a rim diameter of 17cm (see fig. 20). Thirteen rims fall under this category and they have a thickness of between 0.9-1.5cm. One rim in this category has a tapered lip. Of the 13 rims that form this rim category, 6 came from Kofyar, 1 each from Lardang and Bong, 3 from Mer and none from Zuwakal (see table 4).

Form 2

Only two rim falls under this form. They are everted with flat lips and with a slight angle of curvature (see fig. 21). It has a diameter of 15cm and thickness of between 0.8-1cm. Samples of this pot form came from Kofyar and Mer only (see table 4).

Form 3

These are everted rims with round lips and a deep curvature (see fig. 22). One rim makes up this category which came from Mer only (see table 4). They have a diameter of 10cm and a thickness of 1cm.

Form 4

Two inverted rims with round lips collected from Mer make up this category (see fig. 23). They have a diameter of 4cm and thickness of 2.3cm.

Bowls

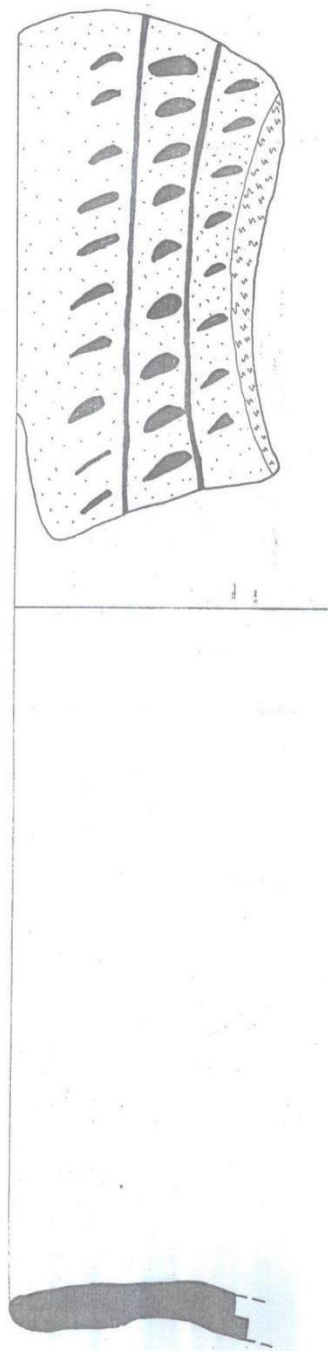
Form 1

Only one rim collected during the survey from Kofyar falls under the bowl form. It is an everted rim with round lip and a slight curvature (see fig. 24). It has a diameter of 7cm and thickness of 1cm.

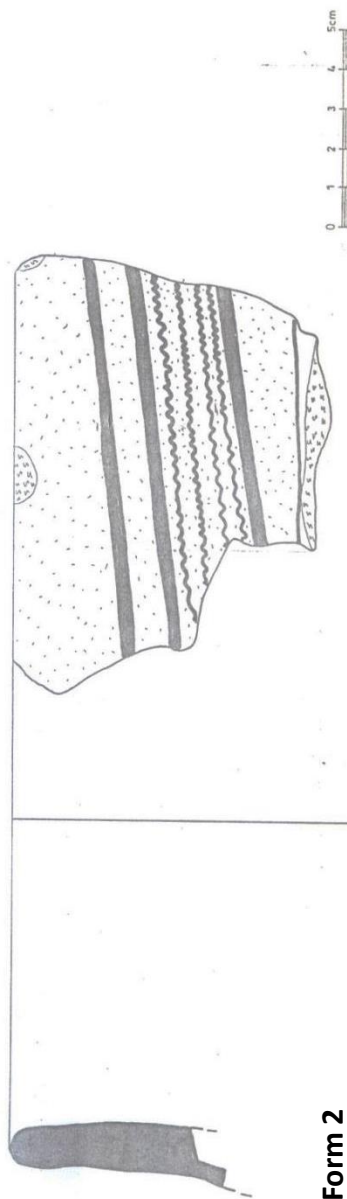
Table 4: Summary of Rim Form

Vessel Part	Kofyar	Lardang	Bong	Zuwakal	Mer	Total	Percentage (%)
Pots Form 1	6	1	3	0	3	13	68.4
Form 2	1	0	0	0	1	2	10.5
Form 3	0	0	0	0	1	1	5.3
Form 4	0	0	0	0	2	2	10.5
Bowl Form 1	1	0	0	0	0	1	5.3
Total	8	1	3	0	7	19	100

MERNYANG POTTERY

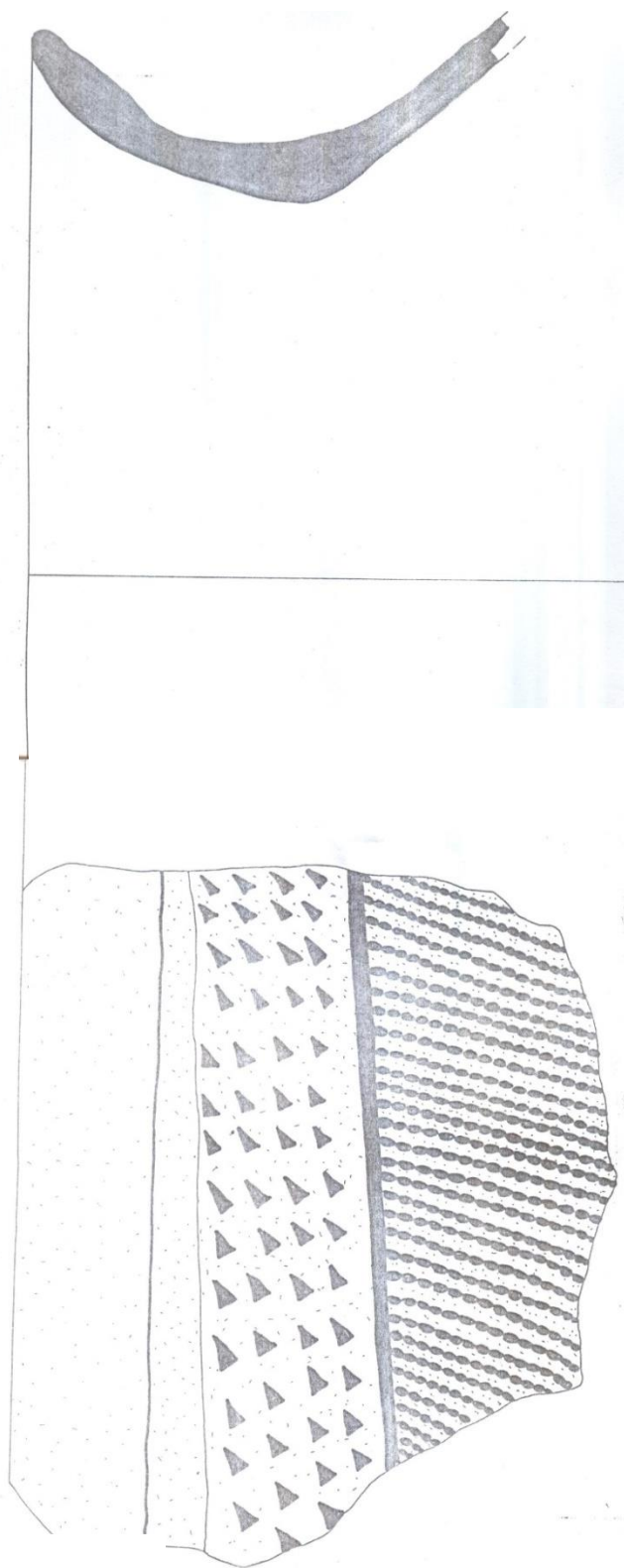


Form 1
Fig. 20



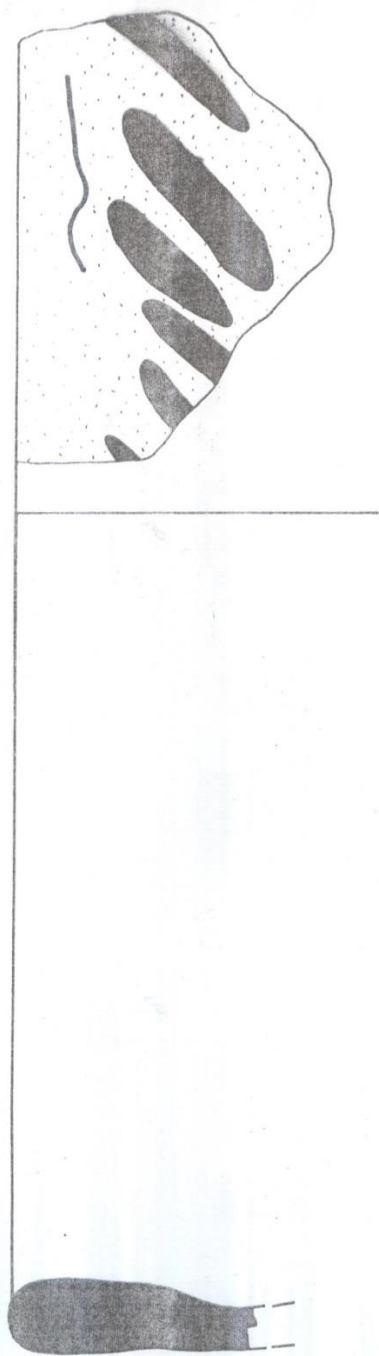
Form 2
Fig. 21

MERNYANG POTTERY

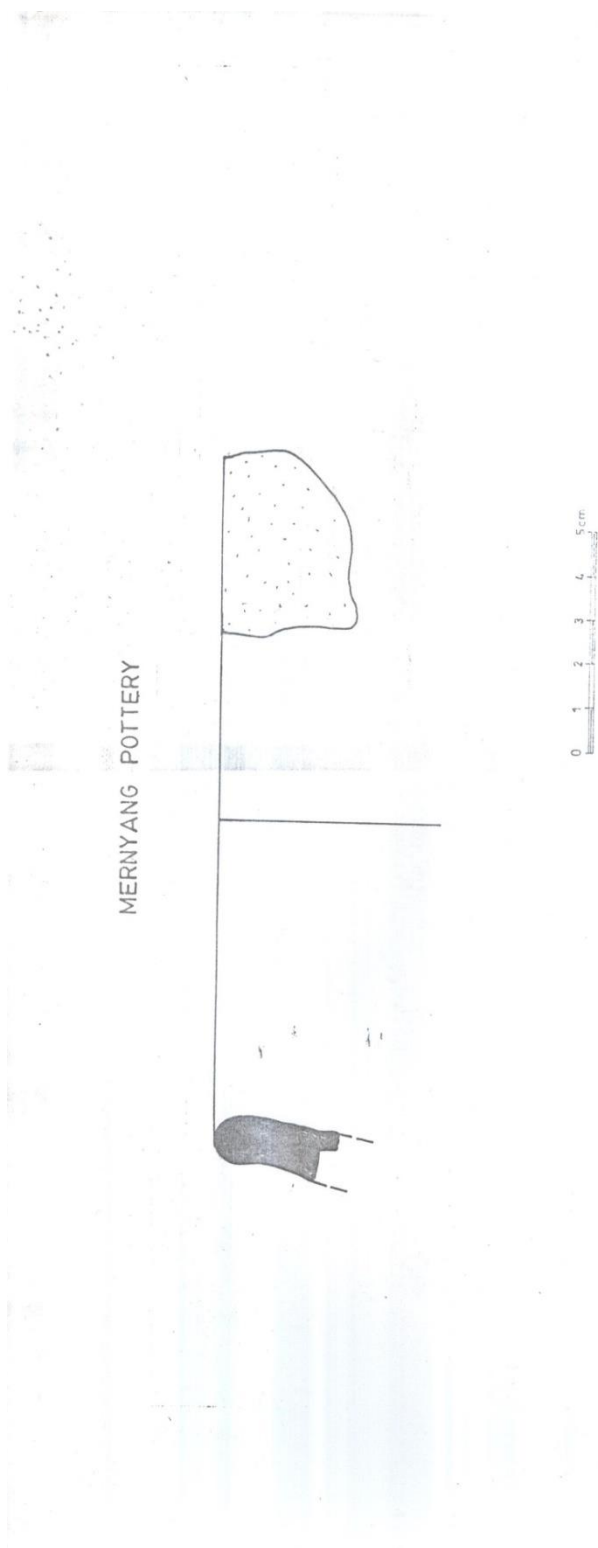


Form 3
Fig. 22

MERNYANG POTTERY



Form 4
Fig. 23



Form B1
Fig. 24

5.1.2 Pottery analysis based on fabric

The fabric of a pottery vessel is sometimes known as its paste, although this term has a more restricted use among potters (Rhodes 1989 cf Drewett 1999). The fabric consists of the clay matrix and inclusions, tempering or filler. Inclusions, tempering or filler are used to describe materials of little or no plasticity, added to clay to control its shrinkage during drying and firing. This involves the constituent materials that were used in making the clay vessels. In making pottery vessels, natural deposits of clay are rarely suitable for making pottery wares except for some types of clay produced by some environmental conditions. Inclusions such as straw, seeds, shells and other materials are in some instances added to the clay sometimes deliberately or accidentally during preparation.

This research used the American Munsel colour chart in which each colour is considered to have three variables: hue, intensity and saturation. The hues are the basic colours of the spectrum. Each colour varies in saturation from black or grey to a clear, pure colour. It also varies in intensity from dark to light (Drewett 1999).

The fabric analysis of potsherds collected during this research was done to determine only colour using the Munsel colour chart because this helps to determine the use which the pottery served and the technology used in its production such as its firing process and the addition of colour for decoration.

Table 5: Summary of Paste Characteristics

Colour (Munsel)	Kofyar		Lardang		Bong		Zuwakal		Mer		Total	Percentage
	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%		%
Red (2.5YR 4/8)	32	47.8	23	47.0	7	31.8	15	55.5	18	55.0	95	48.0
Light Reddish Brown (5YR 6/4)	19	28.3	16	32.6	8	36.4	7	26.0	7	21.0	57	28.8
Reddish Black (2.5/YR 2.5/1)	16	23.9	10	20.4	7	31.8	5	18.5	8	24.0	46	23.2
Total	67	100	49	100	22	100	27	100	33	100	198	100

The pottery samples collected from the five sites categorized the sherds into three based on colour. The 95 potsherds analyzed were red (47.9%), 57 were light reddish brown (28.9%) while 46 (23.2%) were reddish black (see table 5). This makes red the dominant colour of pottery in the area followed by reddish black and light reddish brown.

5.1.3 Pottery analysis based on decorative motif

Out of the 198 potsherds collected during this research, 111 were observed to have decorative motifs on them which were further classified into single and multiple decorative motifs.

5.1.3.1 Single decorative motif

Motifs in this group are potsherds with one type of decoration on them. Seventy one potsherds were identified under this category (see table 6). The following techniques of decoration were observed:

Motif 1: Groove

This is a thick or broad line drawn on the body of the vessel made with blunt instruments. Grooves can be achieved vertically, horizontally or in an oblique form sometimes viewed as broad lines with “U” shape when seen through the profile of the pot and they are usually wider than incised lines. Fifty six potsherds were classified in this category which accounted for 65.1%

of the single decorative motif and therefore considered a popular tradition among the makers of the vessels.

Three patterns of grooves were observed among the collected pottery samples. They are horizontal grooves (see plate LXVI), wavy line grooves (see plate LXVII) and herringbone grooves (see plate LXVIII) which were categorized as type A, B and C respectively.



Plate LXVI: Type A (Horizontal Grooves)

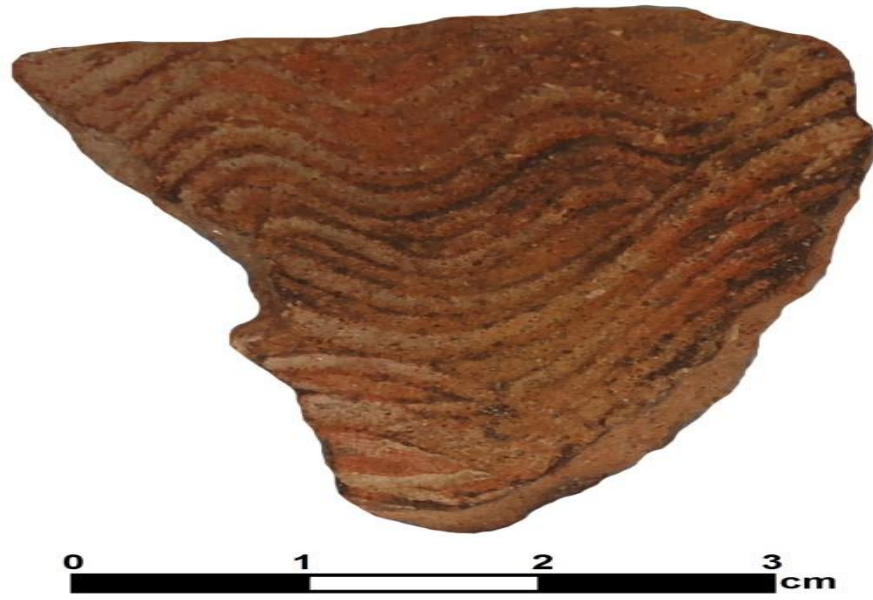


Plate LXVII: Type B (Wavy line Groove)



Plate LXVIII: Type C (Herringbone Groove)

Motif 2: Roulette

These are patterns or impressions achieved by rolling an object over the surface of the pot at the leather hard stage using objects like twisted rope, corn cob, corn husk and carved wood (see plate LXIX). Seventeen potsherds were classified in this category which account for 19.8%

of the potsherds with single decoration. Cord roulette is the only type of roulette observed among the pottery samples collected in the area.

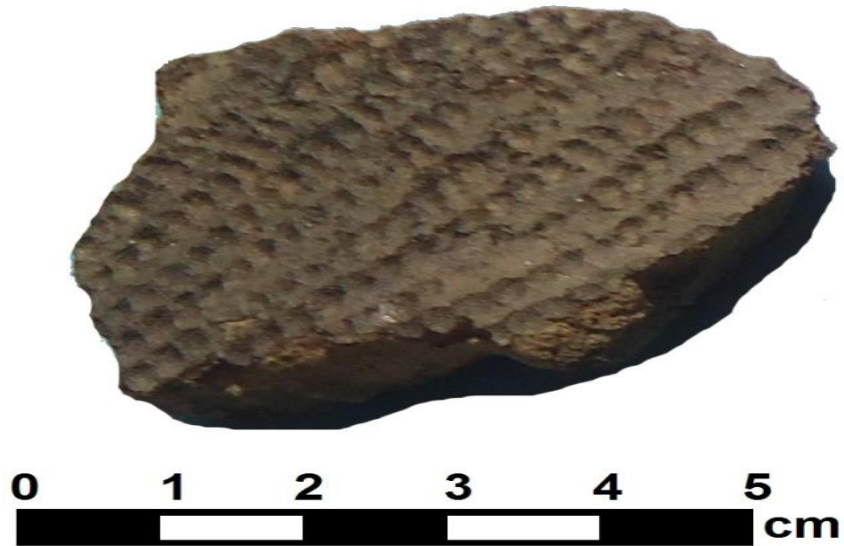


Plate LXIX: Cord Roulette

Motif 3: Thumb Impression

This type of decoration is achieved on pottery wares by impressing the thumb round the vessel at the point of formation of vessels not until it is leather hard. Thumb impression is made by adding an extra ring of wet clay to the vessel to make the impression possible (see section on ethnography for more). Thumb impression in the area is mostly done on the rims (see plate LXIX). Thirteen potsherds fell in this category making 15.1 % of the single decorative class.



Plate LXX: Thumb Impression

Table 6: Summary of Single Decoration

Single Motifs	Kofyar Site A	Lardang Site B	Bong Site C	Zuwakal Site D	Mer Site E	Total	Percentage (%)
Groove	15	12	2	1	11	56	65.1
Cord roulette	6	7	2	2	0	17	19.8
Thumb Impression	5	3	0	2	3	13	15.1
Total	26	22	4	5	14	86	100

5.1.3.2 Multiple decorative motif

Twenty five potsherds had multiple decorations on them and five samples representing the five different motifs identified were selected (see table 7).

Motif 1: Thumb impression and cord roulette

Three potsherds consisting 12% of the multiple decorative class made up this category. The thumb impressions were on the rims while the cord roulettes were on the lips of all the three potsherds with this type of decorative motif which made it difficult for pictorial representation (see plate LXX).

Motif 2: Cord roulette and grooves

Eighteen potsherds that made up 72% of the multiple decorative motifs were observed to have the grooves and cord roulette on them (see plate LXXI).



Plate LXXI: Cord roulette with Grooves

Motif 3: Cord roulette/ groove/ thumb impression/cuneiform stamping

Only one potsherd from Kofyar (Site A) made up this category forming 4% of the decorative class (plate LXXII).



Plate LXXII: Cord roulette/ groove/ thumb impression/cuneiform stamping

Motif 4: Notching and grooves

Only one potsherd had this type of decorative motif on it. It made up 4% of the multiple decorative motifs (plate LXXIII).



Plate LXXIII: Notchings and Grooves

Motif 5: Thumb impression and seriation

Two potsherds constituting 8% of the multiple decorative motifs had this decoration .



Plate LXXIV: Thumb Impression and Seriation

Table 7: Summary of Multiple Decorations

Multiple Motifs	Kofyar Site A	Lardang Site B	Bong Site C	Zuwakal Site D	Mer Site E	Total	Percentage (%)
Thumb Impression/ Cord roulette	1	0	2	0	0	3	12.0
Cord roulette/ Groove	6	8	1	1	1	18	72.0
Cord roulette/ Groove/ impression/ cuneiform stamping	1	0	0	0	0	1	4.0
Notching/ Groove	0	1	0	0	0	1	4.0
Thumb Impression/Serration	0	0	2	0	0	2	8.0
Total	19	12	5	1	3	25	100

5.2 Classification and Analysis of Stone Objects

Only one stone tool came from *Kop Dajin* in Lardang hill settlement. It is a ground stone axe measuring about 11cm by 6cm and it is made of the granite rock in a well preserved state (see plate LXXV).



Plate LXXV: Ground Stone Axe

5.3 Classification and Analysis of Metal Objects

A metal tool was found at *Kop Dafuwup* in Lardang hill settlement. It appears like a twisted piece of metal item with three strings and sharp horn-like ends (see plate LXXVI).

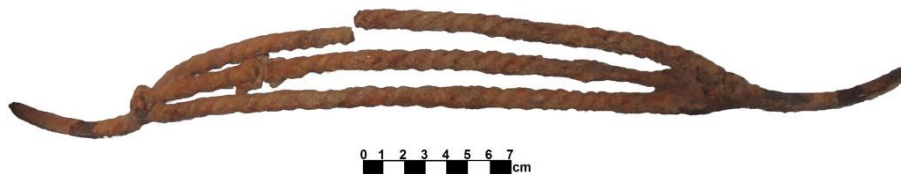


Plate LXXVI: Metal Object

5.4 Interpretation of Data

The interpretation provided in this work was achieved from the data obtained from written sources, oral tradition, archaeological and ethnographic surveys of the five Mernyang hill settlements revealed features including a hearth, house foundations, animal pens, lower grinding stones, hollowed rocks/stones, and graves, sitting arrangement, farm terraces, ritual area /sacred groves, partially buried pots, monolith and stone whetstones.

The traditions and origins of the Mernyang people as contained in the historical background of Temple (1922), Meek (1925) and Ames (1934) differ from the oral testimonies of the people collected from Kofyar, Lardang, Bong, Zuwakal and Mer. Meek (1925) described them as a people who inherited their traditions from their ancestor “Kanzuan” who evolved from a large rock in their principal village “Koffyar” (see page 32). Oral tradition collected from all five hills surveyed contradicts this view. Even though they all except Bong admit Kofyar as their original home, they do not identify “Kanzuan” but “Dafyar” as their ancestor (Datok, Damulak, Daseet: Pers. Comm. 2017).

Meek (1925) mentioned “Lar” as an important Mernyang village that lies between the Mernyang and Goemai (see p.32). To the Mernyang people today, this settlement is not popular to them because of its location on the plain rather “Lardang” is the only Mernyang village with a similar name to “Lar”. Ames (1934) opines that cultural and linguistic resemblance between the Mernyang, Kwaklak, Doemak and Bwal groups originated from a place called “Pes” but from the oral testimonies of the people, “Pes” is the present-day Chokfem. To them, some of Dafyar’s children from Kofyar moved to Chokfem and settled there (Dawakal: Pers. Comm., 2017). Therefore, Kofyar is identified as the origin of their language and culture. Their Hausa root from

pre-Islamic Katsina is unpopular among the Mernyang as Kofyar is the only root recognized by the Mernyang.

5.4.1 Hearth

This was identified on one abandoned compound in Kofyar (*Kop Dagarnaan*). This fireplace was made up of three medium-sized stones which were used for cooking or roasting. According to oral information, the hearth it is still used by farmers who use the site as a grazing land or farmland. Therefore, the antiquity of this hearth is in doubtful and was probably set up by present-day people. It can be seen as a disturbance.

5.4.2 House foundations

Two types of house foundations were identified in the Mernyang area, a majority of which are circular house foundations with only one rectangular house foundation found. In all the sites surveyed, circular house foundations were found. They are made with stones and mortar and have a diameter of between 1.5m to 4m. Complete standing structures were not found in any of the sites but remains of circular buildings above the foundations were observed in parts of Kofyar and Lardang which reveal part of the architectural makeup of the buildings. In both cases, the buildings are made with stones and cemented with mud.

In *Kop Dabok*, in Lardang, two types of structures were observed from the remains of circular structures; one was built with stones and cemented with mortar while the other seemed to be built with mostly mud with small stones in between especially at the base (see plate XXVII). Circular house foundations identified on all sites surveyed occur in clusters of 5-12 foundations indicating enclosed compounds that could have housed residential structures, kitchens and granaries just as it was observed in the ethnographic setting. Abandoned

compounds in all five sites are demarcated by farm terraces and contain connecting footpaths reinforced with stones.

Ethnographic examples from living settlements in all the hills also support the archaeological evidence for circular residential structures. Exceptionally, some of the circular structures are granaries and kitchens which indicate that some of the circular house foundations in the archaeological sites were also granaries and kitchens. The foundations for granaries in the ethnographic setting are notably smaller than those of other circular structures of the compounds and are completely covered without visible openings. As a result of the clustered and fragmentary nature of house foundations in the abandoned areas, granaries, kitchens and rooms could not be differentiated. Residential structures in the ethnographic record have circular house foundations built with stones and mud and roofed with sticks and thatch. More recent structures are rectangular, built with mud bricks and roofed with either thatch or corrugated iron sheets as in modern day houses in many parts of Africa.

In Zuwakal (Site D), traditional Mernyang compounds are called *moeleng* as a result of the dominance of modern structures over traditional ones. In an ethnographic compound here, a fusion of pottery into architecture was observed. Here, broken pots are used as windows or doors of animal houses just as in *Kop Dabok* in Lardang (see plate XXVII).

5.4.3 Animal pens

Animal pens were identified in all the abandoned compounds surveyed. These are in fact the most outstanding features in all the surveyed areas. They are circular structures built with stones of different sizes. They have a diameter of between 2m to 10m, height of between 1m to 1.8m and thickness of 0.3m to 0.8m. In the ethnographic setting, they are used for keeping livestock such as sheep, goats, cattle, dogs, pigs and chicken. They are built completely with

stones and roofed with sticks and thatch and they are located within the compound for management and security. Other animals also serve as meals but they are mostly kept as commercial items signifying wealth and their droppings are used as farm manure. Oral tradition provides information on the rearing of horses and donkeys but they have gone into extinction within the last two decades.

5.4.4 Graves

Three types of graves were observed from the survey of the five sites. The most outstanding type of grave here is that erected in a conical form with stones of various sizes held together by mud with a grave marker on top of it. This was present in all the sites except Mer. From information obtained from ethnographic observations and oral information, this type of grave is said to belong to men or represent the male gender. The second type of grave observed in Kofyar, Lardang, Bong and Zuwakal is also built in a similar manner but possesses no stone marker. This represents graves of the female gender. The third type of grave here is marked by stones in circular or cylindrical forms. This represents burial for children and women. Graves identified in all the four sites are located within the compounds, sometimes at the entrance or behind living areas. This can be an indication of the sacred connection the Mernyang people hold with their dead whereby they have their remains buried where they live and can easily care for the graves for generations.

5.4.5 Farm terraces

These features are present in every Mernyang hill settlement which is a defining factor for their intensive agricultural system. Terraces are built with small stones held together with soil. They are usually built around the sloppy parts of the hills and around living areas on the

hills and farm ridges are made in the opposite direction against the flow of water. Terraces are built for farming purposes on Mernyang hill settlements. As a result of the sloppy nature of the Mernyang hills, the sites are prone to erosion caused by the high amount of rainfall. Terraces are built to protect crops and fertile top soil from run-offs. The use of terraces for farming on Mernyang hill settlements represents effective land use in areas where farmlands are scarce and cannot support the increasing populations, non-rocky areas are adequately managed to feed the hill populations. This also represents the intensive agricultural system practiced by the Mernyang hill settlers who have adopted ways of surviving a unique terrain such as theirs. This system involves terraces usually built around homes since households are surrounded by farmlands for easy maintenance of broken terraces. Oral information also reveals the antiquity of farm terraces in the Mernyang area which have been used by several generations (Dakwat Dapya, Dakogol Bagatta: Pers. Comm., 2017). This indicates the strength of farm terraces which only need to be repaired when a part falls off.

Apart from terraces, another land use system on Mernyang hills is the crop rotation and mixed farming where crops like beans (*phaseolus vulgaris*) are planted in between maize (*Zea mays*) or guinea corn (*Sorgum bicolor*) to improve soil fertility. The use of animal droppings is the most popular form of improving soil fertility on the hills whereby animal waste are taken from the pens and distributed on farms. In other cases, while animals graze on farms before the farming season, their droppings also improve soil fertility and prepare it for farming.

5.4.6 Monolith

Standing stones or monoliths were observed in all the sites surveyed. This is a single rectangular granite stone planted upright in the ground. This occurs in two ways; the most common occurrence of monoliths in the Mernyang area is on top of conical graves. The second

occurrence was observed in one abandoned compound which is Kop Gwa in Kofyar (Site A). This monolith was planted upright in the ground to indicate a ritual area. Generally in the Mernyang area, monoliths signify graves and ritual areas.

5.4.7 Ritual areas

Several types of ritual areas were observed in the five Mernyang hill settlements. These include sacred groves, ritual stone arrangements, stone slabs (whetstones) and erected stone structures. Sacred groves were natural areas with thick vegetation which were converted into cultural sites by man. In the Mernyang area, they are called *lighit* which are used as shrines. These were identified in Zuwakal (see plate XL). They sometimes contain other ritual items like pottery and stones (see plates VI and VII) which were identified in abandoned areas. Other ritual areas are constructed mainly for that purpose. These are seen in form of unique stone arrangements such as in plates (LI and LXXI). Whetstones which are rectangular granite stones signify ritual areas and hunting in the past (see plates IX). In these ritual areas, sacrifices of grains and beer are made to deities of the African traditional religion.

5.4.8 Sitting arrangements

These were observed in both the archaeological and ethnographic setting. In *Kop Dagarnaan* on Kofyar hill, what appears like a sitting arrangement was observed. This is made of boulders with terraces around them (see plate V). This indicates some communal or family recreation where people came together to rest or hold meetings. In *Kop Yilnuang* on Zuwakal hill, a second type of sitting arrangement was observed. It was raised like a short terrace made of small stones and in the past, it had a tree over it; even though it served also as a ritual area (see plate XXXIX). Its use was revealed by oral tradition and ethnographic observation (Lakhit: Pers.

Comm., 2017). In all the living hill settlements, this terrace-like sitting arrangement under large trees like the canarium (*Canarium schweinfurthii*) and mango (*Mangifera indica*) were observed. In Kofyar, this type of sitting arrangement in the chief's compound is used both as a resting place and point of meeting for the entire community. In Bong (*Kop Long*) this sitting arrangement is the largest found among all the five sites and it serves as a meeting place (see plate XXXIII).

5.4.9 Partially buried pots

These features were present in all the surveyed sites. Most of these were located within circular house foundations. Some of these buried clay pots are located in front of house foundations. This indicates the use of some huts as kitchens where water for cooking and drinking could have been kept. Some other rooms as shown by house foundations could have served as storages where brewed beer was kept. Data obtained from ethnographic observation shows that some round huts within the compounds are kitchens while other are stores. The vast presence of buried pots in abandoned hill settlements shows some of the uses of pottery vessels in the Mernyang area have a long history. Buried pots in or around house foundations also signify ritual huts or shrines. Buried pots that signify ritual areas are usually located in house foundations which indicate shrines not rooms (see plate XI). They can also be identified by their forms which are small pots with punctate, herringbone, grooves and roulette decorative motifs on them (see plates XVII).

5.4.10 Lower grinding stones

These are granitic rocks that have been modified by human activity such as grinding of grains and vegetables for cooking or medicinal purposes. These stones usually have an oval depression in them as a result of the grinding process. Lower grinding stones were observed in

all surveyed sites. They are usually located within the vicinity circular house foundations in partially state.

5.4.11 Hollowed rocks

These granitic rocks were transformed from their natural to cultural forms as a result of continuous grinding and pounding by the past inhabitants of the sites which formed the deep depressions as shown by ethnographic information (Daruwang Dawakal: Pers. Comm., 2017). Two types of rock hollows were found in the surveyed areas. The first were found on large immovable granite rocks or inselbergs where present-day people use as a relaxation spot and use the hollows as wedges or bases for beer jars (see plates L). These types of hollows occur as multiple holes on boulders and they are also found in ritual areas such in Kofyar and Bong (see plates LXI and XXX). The second type of rock hollow is similar in appearance to the lower grinding stones but in contrast to the lower grinding stones which have oval holes, hollowed rocks found on the hills were observed to have round holes (see plate XLI) which are deeper and are not presently used for grinding purposes. They occur as single holes on small rocks. They are used as feeding troughs for animals and are usually kept in front of animal pens or in the middle of the compounds (see plate VIII and LVIII).

5.4.3 Surface collections

The survey of the five sites revealed finds which include pottery remains, stone tools and metal tools. Samples of these were collected and analyzed. Pottery appears to be an imperative aspect of the Mernyang culture because pottery remains were observed to dominate all five sites surveyed. Its antiquity is observed in its dominant occurrence in abandoned areas which are seen as ancestral to the Mernyang even though no dates are available to support this. From the analysis of collected samples, two forms of vessels were identified which include pots and

bowls. These different vessel types served functions ranging from cooking, storage, serving dishes to ritual purposes. Based on decoration, seven motifs were identified in the study area. They are: groove, incision, string roulette, thumb impression, cuneiform stamping, notching and serration. The fabric analysis to determine colour of pottery revealed three different colours of pottery in the Mernyang area; Red, light reddish brown and reddish black.

From the data obtained from archaeological and ethnographic surveys of the area, there appears to be a cultural continuity of pottery tradition among the Mernyang. The vessel forms, decorative motifs and colour of pottery obtained from the analysis of samples collected from the survey were also observed in the ethnographic setting. Vessel forms still in use in living settlements are pots and bowls which serve purposes such as cooking, storage and ritual purposes. Decorative motifs such as grooves, string roulette and thumb stamping were observed on ethnographic pottery used in Lardang. An ethnographic survey on pottery making in Lardang revealed how thumb impression is achieved, the principal tool being the potter's thumb on a mass of wet clay usually on the rims of vessel (see plate XLIV). The red colour of potsherds which appears to be the dominant colour among a majority of sherds is determined by the firing process because the wet clay used in making pottery in Lardang is grey. The firing temperature and material constituents are hoped to be determined by petrological analysis of potsherds in more advanced future researches. Nonetheless, it was observed that the clay used in making pottery in present-day Lardang had no inclusions in it. This suggests that the clay in that area in its natural form is suitable for pottery making.

Trade in pottery appears to have a long history among Mernyang villages. Today, the people of Kofyar buy their pots from neighbouring Longsel village because the tradition has gone extinct in Kofyar. Lardang is presently the only village that supplies pottery to Zuwakal and

other neighbouring villages. Mama Ladi, the potter in Lardang informed the researcher that she learned the craft from her mother alongside her sister who now lives in Namu town. It is inferred from her sister's presence in Namu town that the Mernyang people migrate to other places with knowledge of their craft. This tells us about the presence of similar pottery types or other cultural items in other areas which may not necessarily have been as a result of trade but cultural diffusion and intermarriage.

The ground stone axe found in Lardang was the only stone tool recovered from the area (see plate LXXV). It is granite that was transformed into a cultural article by human activities such as grinding. It is usually used with a lower grinding stone. This shows the use of stone for domestic purposes by people alongside other materials like pottery.

The rusted twisted metal object found in Lardang shows the use of variety of metal objects aside from hoes. Since oral traditions holds that the Mernyang people never worked iron, it can be asserted that the metal object came into the area through trade which they admitted.

5.5 Comparative analysis

The interpretation of archaeological data as contained in this chapter is based on oral tradition, ethnography and the human adaptation theory of cultural ecology. As a result, it can be understood that the past inhabitants of the Mernyang hills were humans who had an organized way of life.

Based on the cultural materials identified, collected and analyzed from the surface, it can be said that these people lived in clearly defined settlements or settings. From the identification of clusters of circular house foundations, arranged in circular patterns of compound within an interval of between 50-200m in all the abandoned areas of Kofyar, Lardang, Bong, Zuwakal and

Mer. The former occupants of all five hills clearly lived in similar settings of dispersed compounds connected by footpaths, surrounded by farmlands. It is important to understand the use of stone in the erection of huts, footpaths, and farm terraces. This is a reflection of human adaption to the environment where environmental resources are used to create culture. Ethnographic studies also suggest that some of the circular foundations may have been granaries, shrines or kitchens which further supports the organization of the past hill settlers.

It can also be said that the former inhabitants of the hills were agriculturalists from the vast presence of farm terraces around all the abandoned compounds identified in all the five hill settlements. The presence of animal pens also confirms that the people were agriculturalists who not only practiced crop farming but mixed farming. These unique structures informs the archaeologist about the important role stones/rocks played in the agricultural system of the Meryang hill settlers not soil, water or other organic materials as popularly known.

Other cultural material evidence found on Kofyar, Bong, Lardang and Zuwakal are shrines. These were marked by built ritual areas made of mostly stones or mud. Remains of pottery within sacred groves were observed on Kop Tupyil paya and Tupmang in Kofyar while actual groves were found in Zuwakal was found at Kofyar. It can be deducted that the inhabitants of the four hills practiced the Africa traditional religion as supported by archaeological evidence, ethnography and oral tradition.

Indicators of social activities practiced among the past inhabitants of the area apart from religion are sitting arrangements where communal meetings were held. These were identified in Kofyar, Bong and Zuwakal. Oral tradition and ethnography also support these social relations such as festivals, settlement of disputes or marriage ceremonies. It can be inferred also from

these communal meetings held at arenas like those of Kofyar and Bong erected by stones that there was some form of central leadership practiced by the former inhabitants of the area. This may have been the reason for the success of their societal organization. The presence of outstanding graves structured with stones is also an indication of social relations among the past inhabitants that transcends the living to dead. The research also sees the social relations transcending to man and the environment where stones are seen as valuable items used in the expression of human relationships and culture. The outstanding graves are other social indicators that reflect the value of life, expression of love and reverence to others even the dead. Other social issues such as gender are expressed by the inhabitants of abounded areas of the four hills where graves are marked according to gender. This shows the role and value placed on certain gender in their society.

Features like lower grinding stones and hollowed rocks found in all the abandoned compounds of all the five sites surveyed indicate a further organization among the past humans who settled these hills. This reflects domestic activities such as pounding and grinding of vegetative plants and seeds, for either domestic or medical purposes. The secondary use of hollowed rocks as feeding troughs for animal shows the intelligence of the people in identifying reuse rather than waste. These hollowed rocks were found in front of abandoned compounds in Kofyar and one was found in Mer but it is found in ethnographic settlements of all the hills of Kofyar, Mer, Zuwakal, Bong and Lardang. This is a cultural similarity.

The preponderance of pottery over other finds in all the surveyed sites is further indication of organization. Two categories of vessels were observed from the sites including bowls and pots which served different purposes. These vessels had flat, spherical or round bases.

Bong for example had no base collected but 2 bases, 2 spherical bases and no flat base came from Kofyar. 1 flat base and 1 round base came from Lardang. While only 1 flat base was collected from Zuwakal. Mer having the highest number of bases collected (15 out of 22) had 8 flat bases and 7 spherical bases. These bases may have indicated the function of pots in this area served purpose such as cooking, storage, serving ritual and medicinal purposes. Four pot forms were observed from the area, form 1 was found in Kofyar, Lardang, Bong and Mer. Form 2 was found in Kofyar and Mer, form 3 was found only in Mer, form 4 came from Mer only. Only one bowl form was found in this area which came from Kofyar but a small dish-like bowl was found in Lardang. These could have served domestic purposes such as cooking, serving and processing of other food of commercial items.

An observable aspect of the pottery tradition in the Mernyang area is the application of decorative motifs to vessels. Out of the 198 potsherds collected, 111 were decorated, which is an indication of the importance of decoration in pottery production. This can be as a result of origin, aesthetic, ritual, trademark or creativity of the makers of the vessels. Nevertheless, five different types of decorative motifs were identified from these sites which include: grooves, cord roulette, thumb impression, stamping, notching and serration (see table 8).

Table 8: Summary of Decorative Motif

S/no	Decorative Motif	Site Kofyar		Site Lardang		Site Bong		Site Zuwakal		Site Mer	
		Qty	%	Qty	%	Qty	%	Qty	%	Qty	%
1	Groove	15		12		2		1		11	
2	Roulette	6		7		2		2		0	
3	Thump Impression	5		3		0		2		3	
4	Notching	0		0		0		0		0	
5	Serration	0		0		0		0		0	
6	Multiple	19		12		5		1		3	
	Total	45		34		9		6		14	

Note: Notching and serration occurred in multiple decorations in Lardarg (1) and Bong (1) alone. See table or multiple decorations).

5.6 Interrelationship between the settlements

This section focuses on finding the solid connection between surveyed sites based on the presence of features identified in them. This will provide us information about the cultural relationship between all settlements.

From the chart below, the results of the archaeological survey were presented as numbers from 1-12. Features found on each site were connected to it with blue lines denoting possible cultural relationships which were summarized on the chart. Kofyar is seen as the only site whose abandoned settlements have a hearth, sitting arrangement, monolith and stone slabs which are labeled 1, 7, 11 and 12 on the chart whereas the other four hills do not have. Nevertheless, it (Kofyar) has in common with other sites house foundations, animal pens, lower grinding stones, hollowed rocks/stones, graves, farm terraces, ritual area /sacred groves and partially buried pots.

Table 9: Summary of Surveyed Features

Discovery	Site A (Kofyar)	Site B (Lardang)	Site C (Bong)	Site D (Zuwakal)	Site E (Mer)
Abandoned Compounds	✓	✓	✓	✓	✓
Hearth	✓	—	—	—	—
House foundation	✓	✓	✓	✓	✓
Lower grinding stone	✓	✓	✓	✓	✓
Hollowed rocks	✓	—	—	—	✓
Graves	✓	✓	✓	✓	—
Sitting arrangement	✓	—	—	—	—
Farm terraces	✓	✓	✓	✓	✓
Ritual areas	✓	✓	✓	✓	✓
Groves	—	—	—	✓	—
Buried pots	✓	✓	✓	✓	✓
Monolith	✓	—	—	—	—
Stone slabs	✓	—	—	—	—
Animal pen	✓	✓	✓	✓	✓

The choice of symbols such as the tick (✓) to represent the presence of cultural materials and the dash (-) to indicate absence in the table above is as a result of the fragmentary nature of some of the features identified in all the sites such as house foundations, buried pots and farm terraces which are not numerically defined. The symbols were also chosen over numbers for uniformity and clarity of expression.

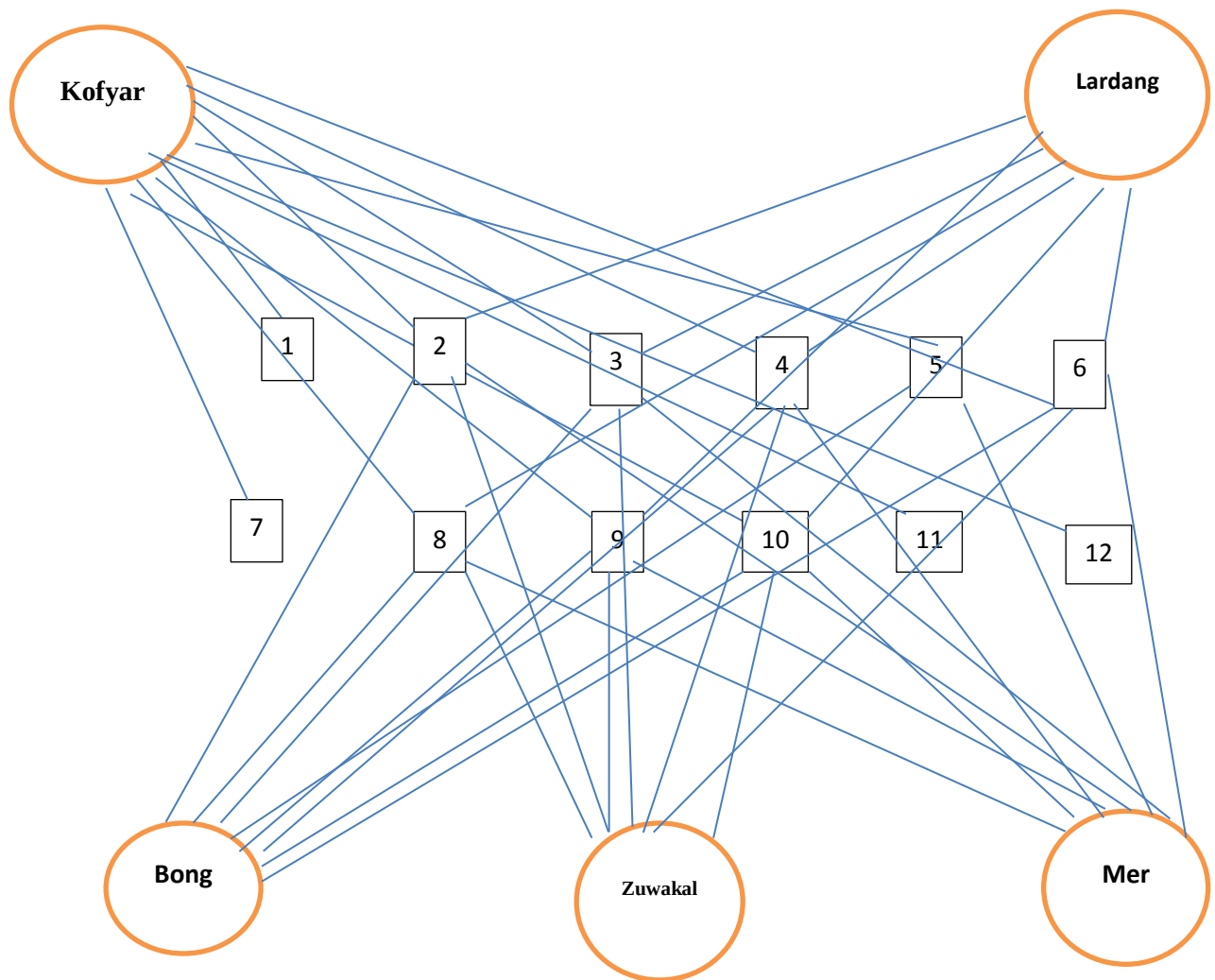


Figure 25: Interrelationship of Features from Surveyed Sites

KEY

1. Hearth
2. House foundations
3. Animal pens
4. Lower grinding stones
5. Hollowed rocks/stones
6. Graves
7. Sitting arrangement
8. Farm terraces
9. Ritual area /sacred groves
10. Partially buried pots
11. Monolith
12. Stone slabs

5.6 Discussion

This research which is focused on understanding the cultural past of the Mernyang people through archaeology has unveiled certain themes. These themes hover around human adaptation on hills, nature of the distribution of human activities, agricultural and settlement systems and socio-politics and hypothesis about settlement origins. According to oral tradition collected from Kofyar, Lardang, Zuwakal and Mer, the Mernyang people believe in an autochthonous view of origin whereby the world started on the Kofyar hill, with their ancestors Dafyar and Nade whose children spread to other parts of the world to start settlements there. Contrary to this, Bong also believes in its autochthonic origin whereby the world started in Bong with its ancestor Besang. These strong views can only be confirmed by dating excavated samples from both sites to ascertain the older settlements between the two hills. This autochthonous view of the origin of the Mernyang people held by these settlers could be as a result of their long stay on the hills which caused a memory loss about their origin. Nevertheless, based on the data provided by ethnographic and archaeological surveys and the analysis of surface finds, the people living on both hills have very similar cultural characteristics and are likely to belong to the same cultural group.

Past human activities on all the hills as seen in the concentration of abandoned compounds appear to be distributed around the hilly escarpments close to the river valleys with a few on top of the hills where present human activities are concentrated. This in the researcher's view is as a result of some factors such as land, water, labour, security and inheritance as observed from ethnographic survey which are necessary for human survival. As a result of increase in human population, need for land for cultivation on the hills became increasingly scarce which forced people to descend from the hills in search of greener pastures which seem to

be on the plains. This is one of the reasons for the abandonment of compounds that today make up the archaeological record.

Sources of water on the hills are also scarce and it was observed that abandoned compounds are located around the river valleys which are today dry. The researcher is of the view that past inhabitants of these compounds moved as a result of the drying up of the small rivers in search of other water sources such as springs which seem to be more on the hilltops where extant settlements are concentrated. Labour required to farm and access water increased which forced people to permanently move to the plains. Another possible factor identified by the people on the hill tops is inheritance which is associated with the male gender. In the Mernyang area, abandoned areas sometimes belong to families without male children who are entitled to landed properties whereas female children are not entitled to inheritance in form of landed properties. Stone (1992) confirms the above where he posited that the migration of human populations from the hills to the plains to factors such as soil, labour and water influenced the migration of human populations from the hills to the plains (see chapter 3). These factors may have also affected the hill populations in the past and the result is the large numbers of abandoned settlements. The Latok war as reported by Walu (1991) could have been another reason for the large numbers of abandoned areas on the Mernynag hills whereby 4,000 hill people were moved out of their homes to other neighbouring plains by the British administration (as discussed in Chapter 3).

The settlement system of the Mernyang hill settlements consists of clustered huts arranged in form of compounds surrounded by farmlands built with terraces. Each compound is usually owned by a household and named after its patriarch and archaeological and ethnographic evidence support this. Compounds on hill settlements in the study area are usually separated by

farmlands of between 50-200m connected by footpaths built with small stones. Also found in Mernyang compounds are animal pens which have hollowed rocks kept in front of them to serve as feeding troughs for animals. These hollowed rocks look like lower grinding stones but they are deeper and no longer used for grinding purposes in this area. These rocks are usually found in abandoned areas and are said to have been used for continuous grinding over a long period by their ancestors.

This pattern of settlement which is observed in the archaeological record is also observed in extant settlements which show that there are possibilities of cultural continuity in this aspect. An example of this is seen in Kofyar where the first place settled by Dafyar (their patriarch) is still used as the Chief's compound. Also in Bong, cultural continuity is more dominant because most of their ancestral compounds are still in use today and that is why only one abandoned compound was identified during this survey. On agricultural practices, the dominant system on all the abandoned hill settlements is the terrace farming. This is a very outstanding aspect of these hill settlements which was easily observed by the researcher. Another type of land use system is the crop rotation and mixed farming. This shows mastery of man to his environment and is explained by the human adaptation theory of cultural ecology.

Aspects of the socio-politics of the Mernyang people were also revealed by this research. First of which is religion. The Mernyang people in the past practiced the African traditional religion marked by ritual areas such as sacred groves, stone arrangements, ritual granaries and shrines containing buried pots. The form of leadership practiced by the past inhabitants of the hills was also revealed by the meeting arenas headed by the community heads. Archaeological evidence supporting communal relations among the past inhabitants of each hill settlement were seen in the presence of sitting arrangements in Kofyar and Bong (see plate see plates V and

XXXIII). These stone arrangements signify probable venues for communal meetings such as social gatherings and settlement of disputes. In the cultural past of the Mernyang, social differences were also observed, this is revealed in the differences in gender where male and female graves are marked differently. Male graves carry grave markers (see plate XX and XXXIV); while female graves do not have grave markers on them (see plate XL).

As a result of the cultural similarities among the different groups, the researcher agrees with Netting (1968) on the need to treat the people as a single cultural group based on observations and the archaeological data as revealed by this research. Therefore the present researcher sees a possible cultural landscape housing a group of people who became divided into subgroups as a result of factors like competition for resources like land, water and easier terrains over time. Netting (1968) along this line described: “*The Kofyar as the inhabitants of a socio-geographic region of relative cultural uniformity which is recognized by the actors, though not directly by means of a tribal name*” (Netting 1968:36).

A major challenge faced by the researcher is however the failure to find a generic name to describe the research area other than by the name of the ethnic group. This same challenge was faced by Netting (1968) that resorted to categorizing them as the “Kofyar”. Therefore the researcher is suggesting the use of a generic name to describe the cultural area (which supersedes the territory of the Mernyang ethnic group).

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATION

6.1 Summary

This research contains a documentation of Mernyang hill settlements of Qua'anpan and Mangu Local Government Areas of Plateau State through an archaeological investigation. This was done with the aim of understanding their cultural past and to add to our knowledge of the history of the Jos Plateau which has a long antiquity. This was achieved through the collaboration of sources including the consultation of early historical and anthropological works in the area, oral histories as well archaeological and ethnographic surveys.

This work was divided into six chapters. Chapter one contains a general introduction of the area, the nature of the research including the research problems, aim and objectives, scope of the work, and methods adopted for achieving the aim and objectives of the research. Chapter two focused on the environmental and historical background of the area which describes the nature of the present environment and what is known about their history collected from oral tradition. Chapter three reviews several literatures on early researches on the Jos-Plateau with a major focus on the study area, and suitable theoretical frameworks suitable for data analysis and interpretation.

Report of archaeological and ethnographic surveys of five sampled Mernyang hill settlements including Kofyar, Lardang, Bong, Zuwakal and Mer are presented in Chapter four. This revealed evidence of past human activities and habitation in form of features including a hearth, house foundations, animal pens, lower grinding stones, hollowed rocks, and graves, sitting arrangement, farm terraces, ritual area, sacred groves, partially buried pots, monolith and

whetstones. Finds recovered during the survey include pottery, stone and metal tools. The analysis of samples of data retrieved from the site, interpretation and discussion of data collected during the research was contained in chapter five. The last chapter (six) provides a summary, conclusion and recommendations based on the data collected. This research provides the archaeological community with new knowledge of the cultural past of a people called the Mernyang. Defining aspects of their cultural past were uncovered including the nature of the distribution of past human activities on the hills, farming and settlement systems, socio-political activities among other cultural characteristic of the people.

6.2 CONCLUSION

This research has to some extent documented the material evidence on the Mernyang area. This is imperative as a way of contributing to the cumulative knowledge of the cultural past of the Jos Plateau. An archaeological investigation of the Myernang area has exposed other aspects of the cultural past of the people of the Jos Plateau in addition to what was previously known about them such as their trajectory of migration narratives.

The survey of the five hill settlements and the analysis of pottery samples especially reveal similarity in functions of finds and features and confirmed by oral tradition and ethnography. The surveyed compounds in each settlement also show a similarity in distribution on the landscape. The nature of the Mernyang settlements even in the archaeological record are arranged along the hilly slopes within an interval of 50-200m, surrounded by farmlands mostly marked by built terraces and connected by footpaths built with small stones. This is an indication of their pattern of settlement which is designed to adapt to their hilly environment. These compounds especially the abandoned ones are located close to river valleys or springs which provide easy access to drinking water and water for other domestic purposes. This is also an

indication of space management among the Mernyangs. Due to the rocky nature of hills which provide limited land for cultivation, it is evident that the hill settlers devised a means of clearing the rocks to have more farmland and still utilized the rocks to build terraces to control erosion. This shows a high level of organization among the people born out of adaptation to their environment. The vast use of rocks on the hill settlements to form several aspects of their culture ranging from architecture to agriculture and religion displays human adaptation to the environment as described by cultural ecology. From the analysis of data from the study area, the following can be said about them: they widely used pottery in the past which served purposes ranging from ritual, domestic to aesthetic purposes.

This researcher has attempted also to improve the state of cultural knowledge of the people of the Jos Plateau, particularly the Mernyang who were hitherto known from an anthropological and historical perspective. This archaeological work has added the Mernyang area to the known map of archaeological sites in Nigeria and therefore laid a general foundation for future archaeological researches in the region. Other aspects of human cultural past beside the migration narratives of the Mernyang people such as their socio-politics, farming and settlement systems have also been brought to light. All these have helped in our understanding of the cultural past of the Mernyang people.

6.3 RECOMMENDATIONS

It is hoped that various aspects of the culture of this hill people exposed by this research shall become a reference material for future archaeological researches. This work is also hoped to serve as an element of public enlightenment and awareness mechanism which public archaeology encourages for a better appreciation of cultural heritage of the Jos Plateau. Through this, people can participate as stake holders in its preservation.

Since this work is only a preliminary survey which relied mostly on surface collections, more advanced researches in the future are recommended in order to have an in-depth understanding of the cultural past of the Qua'anPan area generally. These future researches should involve wider survey of the landscape possibly involving the use of drones, excavation, advanced scientific methods of data analysis such as XRF and XRD (X-ray Fluorescence and X-ray Diffraction) spectroscopy and dating. These will reveal dates, the extent of the people on the landscape occupied by them and to establish the possibility of a cultural landscape in the area as observed by this researcher. The researcher also recommends linguistic studies in the Qua'anPan area to clearly establish the linguistic differences and main linguistic stalk the Mernyang people and their neighbours who they are very similar to, belong to.

The Mernyang area provides a blend of archaeology and ethnographic resources for study. Its position on a range of hills with its settlements on hilltops also provides a potential for tourism. Bong village for example has a concentration of palm trees in sloppy hills and valleys and its cone-shaped *moelar* makes an amazing tourism spot. Further cultural studies in this area to exploit both its tourism and cultural potentials will open up the area for such purposes which will enrich both the locales and the government at different levels. In an era where other resources are sort after to further enrich the country, the researcher is suggesting a collaborative effort of the local, state perhaps the federal governments to look into encouraging archaeological and other cultural researches for the aforementioned reasons. This can be done by an increase in funding cultural researches.

For the sake of posterity, public enlightenment on the importance of cultural resources is advised for the people in this area. One way of achieving this is through increased archaeological researches in this area which will draw the attention of the local population to the importance of

their past and present culture. Clearly, archaeological sites in the study area are under threat of destruction by human activities such as farming. Archaeological sites surveyed during this research survived as a result of two factors observed by the researcher. First is the cultural significance attached to some of the abandoned compounds such as *Kop Tupyil Paya* and *Kop Tupmang* in Kofyar (see Chapter 4). The second factor is the distance of some of the sites from the living areas which makes it too far for inhabitants to cultivate. As a result of this distance, the intensive agriculture practiced on the hills, where the Mernyang farmer is surrounded by his farmland and he can easily secure his farms against wild, becomes difficult to practice.

One threat to cultural researches in this area is the superstitious political and religious views over traditional beliefs and customary ritual practices. For example, the people in Bong prefer to be identified by their current political location rather than their cultural origin which poses a threat to cultural researches because people are forced to shy away from their past especially the aspect of African traditional religion. The dominance of modern architecture is also a threat to archaeological sites which are usually destroyed to provide more space for modern construction. The use of indigenous materials such as pottery, stone tools and other materials that depict some inherited cultural practices such are endangered because they are continuously being replaced by modern articles such as plastic and metal. For example, the use of pottery wares which was used for brewing beer and marriage in the past is now being replaced by plastic and metal objects. In no distant time just as in the cities, cultural materials which depict some African traditions may disappear completely from rural areas which will be a hindrance to cultural studies.

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APPENDIX A
LIST OF INFORMANTS

S/N	Name	Age(years)	Occupation	Residence
1	John Datok	60	Farmer	Kofyar
2	Dakwat Dapya	80	Traditional Doctor	Kofyar
3	Dablep Datoer	79	Farmer	Kofyar
4	Dakogol Bagatta	80	Farmer	Kofyar
5	Manlat Dana'an	31	Student/Trader	Kofyar
6	Dawang Dawurum (Logan)	30	Farmer	Lardang
7	Vincent Daboer Dajok (Den-gun)	45	Civil servant/Hunter/Farmr	Lardang
8	Emmanuel Damulak	75	Farmer	Lardang
9	Dakogol Damulak	35	Farmer	Lardang
10	Ladi Daboer	65	Potter	Lardang
11	Dangtoegoem Daboer	45	Farmer	Lardang
12	Dariang Daseet	100	Farmer	Bong
13	Jan Dakup	85	Farmer	Bong
14	Danjuma Daboer	55	Farmer	Bong
15	Dawar Dayong	36	Farmer	Bong
16	Baklighit Alex Panmil	28	Entrepreneur	Bong
17	Dashe Nanyong	24	Student	Bong
18	Dayim Cyril Dawah	40	Farmer	Bong
19	Danjuma Danyam	30	Student	Bong
20	Nakogol Panmil	75	Farmer	Bong
21	Dape Lakhit	90	Farmer	Zuwakal
22	Dalang Daniel Tangurum	90	Farmer	Zuwakal
23	Jonathan Dabal	70	Farmer	Zuwakal
24	Michael Dabal	41	Civil Servant	Zuwakal
25	Lepyong Dabal	27	Student	Zuwakal
26	Daruwang Dawakal	47	Farmer/Builder	Zuwakal
27	Sogotwat Dawam	43	Farmer/Blacksmith	Mer
28	Damar Pius Damulak	89	Farmer	Mer
29	Emmanuel Sogom	38	Politician/Farmer	Lardang
30	Calistus Habu	48	Civil Servant/Farmer	Lardang

APPENDIX B

LIST OF GPS COORDINATES

KOFYAR (SITE A)

S/No	X	Y	Settlement	Details
1	9.230444	9.022972	Kop Dagarnaan	Bok Tree (Datum)
2	9.230389	9.022889	Kop Dagarnaan	House Cluster_Bound A
3	9.230389	9.023028	Kop Dagarnaan	House Cluster_Bound B
4	9.230472	9.022806	Kop Dagarnaan	House Cluster_Bound C
5	9.230472	9.022806	Kop Dagarnaan	House Cluster_Bound D
6	9.230472	9.02275	Kop Dagarnaan	Pen
7	9.230444	9.022778	Kop Dagarnaan	Lower Grinding stone
8	9.230417	9.022694	Kop Dagarnaan	Grave (6 in number)
9	9.230306	9.022417	Kop Dagarnaan	Sitting Stones
10	9.230833	9.022444	Kop Dagarnaan	Pen
11	9.231	9.022722	Kop Dagarnaan	House Cluster
12	9.229139	9.024528	Kop Tupyil Paya	Datum (An Unidentified Tree)
13	9.229111	9.024417	Kop Tupyil Paya	House Cluster_Bound A
14	9.229056	9.0245	Kop Tupyil Paya	House Cluster_Bound B
15	9.229111	9.0245	Kop Tupyil Paya	House Cluster_Bound C
16	9.229222	9.0245	Kop Tupyil Paya	House Cluster_Bound D
17	9.229194	9.024417	Kop Tupyil Paya	House Cluster_Bound E
18	9.22925	9.024472	Kop Tupyil Paya	Terrace (Eastern Boundary)
19	9.229167	9.024583	Kop Tupyil Paya	Ritual Area (Ligoet)
20	9.229083	9.024389	Kop Tupyil Paya	Pen
21	9.228861	9.024472	Kop Tupyil Paya	House Cluster_Bound A
22	9.228917	9.024444	Kop Tupyil Paya	House Cluster_Bound B
23	9.228944	9.024361	Kop Tupyil Paya	House Cluster_Bound C
24	9.228889	9.024361	Kop Tupyil Paya	House Cluster_Bound D
25	9.228944	9.024417	Kop Tupyil Paya	Grave
26	9.226139	9.026694	Kop Tupmang	Terrace (Settlement Boundary)_A
27	9.226333	9.026667	Kop Tupmang	Terrace (Settlement Boundary)_B
28	9.226417	9.026611	Kop Tupmang	Terrace (Settlement Boundary)_C
29	9.226361	9.026528	Kop Tupmang	Terrace (Settlement Boundary)_D
30	9.226389	9.026444	Kop Tupmang	Terrace (Settlement Boundary)_E
31	9.226389	9.026333	Kop Tupmang	Terrace (Settlement Boundary)_F
32	9.226333	9.02625	Kop Tupmang	Terrace (Settlement Boundary)_G
33	9.226222	9.026278	Kop Tupmang	Terrace (Settlement Boundary)_H
34	9.226028	9.026278	Kop Tupmang	Terrace (Settlement Boundary)_I

35	9.225944	9.026417	Kop Tupmang	Terrace (Settlement Boundary)_J
36	9.225944	9.026528	Kop Tupmang	Terrace (Settlement Boundary)_K
37	9.226056	9.026639	Kop Tupmang	Terrace (Settlement Boundary)_L
38	9.226111	9.026667	Kop Tupmang	House Remains/Foundation (with partially buried pots)
39	9.226139	9.026583	Kop Tupmang	House Remains/Foundation
40	9.226194	9.026528	Kop Tupmang	Pen 1
41	9.226056	9.0265	Kop Tupmang	Pen 2
42	9.22625	9.026528	Kop Tupmang	House Remains/Foundation (with partially buried pots)
43	9.22625	9.026444	Kop Tupmang	Grave 1
44	9.226167	9.026333	Kop Tupmang	Grave 2
45	9.226139	9.026333	Kop Tupmang	Grave 3
46	9.226167	9.026389	Kop Tupmang	Ritual Place
47	9.226139	9.027389	Kop Gwa	Pen (Datum)
48	9.226111	9.027361	Kop Gwa	Lower Grinding stone
49	9.226194	9.027417	Kop Gwa	House Remains/Foundation
50	9.228611	9.028917	Kop Datugus	Terrace (Settlement Boundary)_A
51	9.228583	9.028972	Kop Datugus	Terrace (Settlement Boundary)_B
52	9.2285	9.028917	Kop Datugus	Terrace (Settlement Boundary)_C
53	9.228472	9.028806	Kop Datugus	Terrace (Settlement Boundary)_D
54	9.228528	9.028694	Kop Datugus	Terrace (Settlement Boundary)_E
55	9.228583	9.02875	Kop Datugus	Terrace (Settlement Boundary)_F
56	9.228361	9.028778	Kop Datugus	Terrace (Settlement Boundary)_G
57	9.228667	9.028833	Kop Datugus	Terrace (Settlement Boundary)_H
58	9.228611	9.028889	Kop Datugus	Datum (An Unidentified Tree)
59	9.228639	9.028833	Kop Datugus	Pen 1
60	9.228611	9.028861	Kop Datugus	Pen 2
61	9.228583	9.028944	Kop Datugus	Monolith
62	9.228583	9.028861	Kop Datugus	House Cluster_Bound A
63	9.228583	9.028889	Kop Datugus	House Cluster_Bound B
64	9.228528	9.028833	Kop Datugus	House Cluster_Bound C
65	9.228583	9.02875	Kop Datugus	House Cluster_Bound D
66	9.228583	9.028778	Kop Datugus	House Cluster_Bound E
67	9.228611	9.028833	Kop Datugus	House Cluster_Bound F
68	9.228667	9.029	Kop Datugus	House Remains/Foundation (with partially buried pots)
69	9.228639	9.028861	Kop Datugus	Grave
70	9.232361	9.030528	Kop Dadu'ut	Terrace (Settlement Boundary)_A
71	9.2325	9.030639	Kop Dadu'ut	Terrace (Settlement Boundary)_B
72	9.2325	9.030722	Kop Dadu'ut	Terrace (Settlement Boundary)_C
73	9.232444	9.030806	Kop Dadu'ut	Terrace (Settlement Boundary)_D

74	9.232417	9.030833	Kop Dadu'ut	Terrace (Settlement Boundary)_E
75	9.232222	9.030694	Kop Dadu'ut	Terrace (Settlement Boundary)_F
76	9.232444	9.030694	Kop Dadu'ut	Datum (Mango Tree)
77	9.232472	9.030722	Kop Dadu'ut	House Cluster_Bound A
78	9.232444	9.030806	Kop Dadu'ut	House Cluster_Bound B
79	9.232389	9.030806	Kop Dadu'ut	House Cluster_Bound C
80	9.232361	9.03075	Kop Dadu'ut	House Cluster_Bound D
81	9.232389	9.030694	Kop Dadu'ut	House Cluster_Bound E
82	9.232361	9.030611	Kop Dadu'ut	Pen 1
83	9.232389	9.030778	Kop Dadu'ut	House Remains/Foundation (with partially buried pots)
84	9.233333	9.030889	Kop Dafyel	Datum (Mango Tree)
85	9.233306	9.030861	Kop Dafyel	Pen 1
86	9.233222	9.030917	Kop Dafyel	Pen 2
87	9.233222	9.031	Kop Dafyel	Pen 3
88	9.23325	9.031	Kop Dafyel	House Cluster_Bound A
89	9.233306	9.031	Kop Dafyel	House Cluster_Bound B
90	9.233278	9.031083	Kop Dafyel	House Cluster_Bound C
91	9.233222	9.031083	Kop Dafyel	House Cluster_Bound D
92	9.233222	9.031028	Kop Dafyel	House Cluster_Bound E
93	9.23325	9.031083	Kop Dafyel	House Remains/Foundation (with partially buried pots)
94	9.233194	9.030806	Kop Dafyel	Grave 1
95	9.233194	9.030806	Kop Dafyel	Grave 2
96	9.237944	9.029861	Kop Dajak	Datum (A Palm Tree)
97	9.237639	9.029889	Kop Dajak	Terrace (Settlement Boundary)_A
98	9.238	9.029778	Kop Dajak	Terrace (Settlement Boundary)_B
99	9.238167	9.029861	Kop Dajak	Terrace (Settlement Boundary)_C
100	9.238111	9.029972	Kop Dajak	Terrace (Settlement Boundary)_D
101	9.237722	9.029972	Kop Dajak	Terrace (Settlement Boundary)_E
102	9.238	9.029889	Kop Dajak	House Cluster_Bound A
103	9.238028	9.029972	Kop Dajak	House Cluster_Bound B
104	9.238111	9.029944	Kop Dajak	House Cluster_Bound C
105	9.238111	9.029917	Kop Dajak	House Cluster_Bound D
106	9.238056	9.029833	Kop Dajak	House Cluster_Bound E
107	9.238056	9.029722	Kop Dajak	House Remains/Foundation (with partially buried pots)
108	9.238056	9.029889	Kop Dajak	House Remains/Foundation (with partially buried pots)
109	9.239417	9.029056	Kop Dachil	Datum (A Palm Tree)
110	9.239417	9.029056	Kop Dachil	Terrace (Settlement Boundary)_A
111	9.239306	9.029111	Kop Dachil	Terrace (Settlement Boundary)_B

112	9.239222	9.029028	Kop Dachil	Tarrace (Settlement Boundary)_C
113	9.239333	9.028917	Kop Dachil	Terrace (Settlement Boundary)_D
114	9.239444	9.028889	Kop Dachil	Terrace (Settlement Boundary)_E
115	9.2395	9.028944	Kop Dachil	Terrace (Settlement Boundary)_F
116	9.239361	9.028972	Kop Dachil	Pen 1
117	9.239417	9.028972	Kop Dachil	Pen 2
118	9.239472	9.028972	Kop Dachil	House Remains/Foundation 1
119	9.239417	9.029	Kop Dachil	House Remains/Foundation 2
120	9.239361	9.028972	Kop Dachil	Ritual Place (Stone Slab)

LARDANG

S/No	X	Y	Settlement	Details
1	9.239722	9.044556	Kop Dafuwup	Datum (Mahogany Tree)
2	9.23975	9.044556	Kop Dafuwup	Grave 3
3	9.23975	9.044611	Kop Dafuwup	Grave 4
	9.239694	9.044694	Kop Dafuwup	Pen
4	9.23975	9.044889	Kop Dafuwup	House Cluster_Bound A
5	9.239722	9.044806	Kop Dafuwup	House Cluster_Bound B
6	9.23975	9.04475	Kop Dafuwup	House Cluster_Bound C
7	9.239806	9.044833	Kop Dafuwup	House Cluster_Bound D
8	9.239778	9.044917	Kop Dafuwup	House Cluster_Bound E
9	9.239722	9.044944	Kop Dafuwup	House Cluster_Bound F
10	9.238028	9.046472	Kop Damulak	Terrace (Settlement Boundary)_A
11	9.238111	9.046472	Kop Damulak	Terrace (Settlement Boundary)_B
12	9.238167	9.046583	Kop Damulak	Terrace (Settlement Boundary)_C
13	9.238139	9.046694	Kop Damulak	Terrace (Settlement Boundary)_D
14	9.238	9.046667	Kop Damulak	Terrace (Settlement Boundary)_E
15	9.238056	9.046583	Kop Damulak	Datum (Malena Tree)
16	9.237972	9.046583	Kop Damulak	Pen
17	9.238	9.04825	Kop Dajin	Datum (Rock)
18	9.238	9.048028	Kop Dajin	House Cluster_Bound A
19	9.237889	9.048083	Kop Dajin	House Cluster_Bound B
20	9.237833	9.047972	Kop Dajin	House Cluster_Bound C
21	9.238083	9.048	Kop Dajin	House Cluster_Bound D
22	9.238	9.047889	Kop Dajin	House Cluster_Bound E
23	9.237917	9.048083	Kop Dajin	Pen

24	9.239222	9.048583	Kop Dabok	Datum (A Rock)
25	9.239306	9.048556	Kop Dabok	Terrace (Settlement Boundary)_A
26	9.239083	9.048611	Kop Dabok	Terrace (Settlement Boundary)_B
27	9.23925	9.048694	Kop Dabok	Terrace (Settlement Boundary)_C
28	9.239083	9.048528	Kop Dabok	Terrace (Settlement Boundary)_D
29	9.23925	9.048611	Kop Dabok	Pen
30	9.239194	9.048556	Kop Dabok	House Cluster_Bound A
31	9.239194	9.048611	Kop Dabok	House Cluster_Bound B
32	9.239111	9.048583	Kop Dabok	House Cluster_Bound C
33	9.239111	9.0485	Kop Dabok	House Cluster_Bound D
34	9.2375	9.034278	Kop Dachian	Datum (A Rock)
35	9.23775	9.034222	Kop Dachian	Pen 1
36	9.2375	9.034222	Kop Dachian	Pen 2
37	9.237556	9.034222	Kop Dachian	Pen 3
38	9.237861	9.034194	Kop Dachian	Pen 4
39	9.237694	9.03425	Kop Dachian	House Cluster_Bound A
40	9.237667	9.034194	Kop Dachian	House Cluster_Bound B
41	9.237722	9.034167	Kop Dachian	House Cluster_Bound C
42	9.237778	9.034194	Kop Dachian	House Cluster_Bound D

BONG

S/No	X	Y	Settlement	Details
1	9.205667	9.028861	Kop Besang/Kyemtu	Datum (An unidentified Tree)
2	9.205722	9.028861	Kop Besang/Kyemtu	House Cluster_Bound
3	9.205722	9.028917	Kop Besang/Kyemtu	Pen
4	9.20575	9.028889	Kop Besang/Kyemtu	Grave 1
5	9.20575	9.028944	Kop Besang/Kyemtu	Grave 2
6	9.205694	9.028806	Kop Besang/Kyemtu	Grave 3
7	9.205583	9.028722	Kop Besang/Kyemtu	Grave 4
8	9.205556	9.028722	Kop Besang/Kyemtu	Grave 5
9	9.205222	9.025417	Kop Dashe	Kop Dashe
10	9.200667	9.018167	Kop Long	King's Court
11	9.200667	9.018139	Kop Long	Datum (Cediya)
12	9.200667	9.018194	Kop Long	Granary
13	9.20075	9.019139	Kop Dielpet	Datum (Mango Tree)
14	9.200667	9.019167	Kop Dielpet	Grave 1
15	9.200667	9.019111	Kop Dielpet	Grave 2
16	9.200611	9.019139	Kop Dielpet	Grave 3
17	9.200694	9.019194	Kop Dielpet	House Cluster 1
18	9.200694	9.019333	Kop Dielpet	House Cluster 2

ZUWAKAL

S/No	X	Y	Settlement	Details
1	9.211222	9.053222	Kop Noegon	Datum (Mango Tree)
2	9.211056	9.053194	Kop Noegon	Pen
3	9.211083	9.053167	Kop Noegon	House Cluster_Bound A
4	9.211083	9.053056	Kop Noegon	House Cluster_Bound B
5	9.211194	9.053056	Kop Noegon	House Cluster_Bound C
6	9.211222	9.053111	Kop Noegon	House Cluster_Bound D
7	9.211167	9.053167	Kop Noegon	House Cluster_Bound E
8	9.211	9.053139	Kop Noegon	House Remains/Foundation
9	9.211111	9.05325	Kop Noegon	Grave 1 and 2
10	9.211056	9.053306	Kop Noegon	Grave 3
11	9.211	9.053389	Kop Noegon	Grave 4
12	9.209833	9.053583	Kop Noegon	Grove 1
13	9.212583	9.058056	Kop Noegon	Grove 2
14	9.218694	9.058056	Kop Yilnuang	Datum (A Palm Tree)
15	9.218694	9.058111	Kop Yilnuang	House Remains/Foundation
16	9.218667	9.058222	Kop Yilnuang	Pen
17	9.21875	9.05825	Kop Yilnuang	House Remains/Foundation
18	9.218722	9.058222	Kop Yilnuang	Ritual Area (Pangtok)

MER

S/No	X	Y	Settlement	Details
1	9.256806	9.03358	Kop Dokmuut_Settlement 1	Datum (A Rock)
2	9.257056	9.0335	Kop Dokmuut_Settlement 1	Terrace (Settlement Boundary)
3	9.255889	9.03389	Kop Dokmuut_Settlement 2	Terrace (Settlement Boundary)
4	9.255639	9.03378	Kop Dokmuut_Settlement 2	Datum (A Rock)
5	9.255722	9.03375	Kop Dokmuut_Settlement 2	House Cluster_Bound
6	9.255667	9.03378	Kop Dokmuut_Settlement 2	Pen 1
7	9.255667	9.03375	Kop Dokmuut_Settlement 2	Pen 2
8	9.255806	9.03361	Kop Dokmuut_Settlement 2	Rock Hollow

APPENDIX C

QUESTIONS GUIDE FOR TRADITION OF ORIGIN AND DEVELOPMENT

1. What is your name?
2. How old are you?
3. Are you an indigene of this place?
4. What do you do for a living?
5. What is the meaning of Mernyang?
6. What does Kofyar mean? Why was the name given to the settlement?
7. How was the name derived?
8. What is the name of the first settler of Kofyar?
9. When was the area first occupied?
10. Where did your ancestors live before coming?
11. What are their names?
12. Did they have a leader?
13. If yes what is the name of he or she?
14. Was the land occupied by people when you came in?
15. Did they practice any craft? What kinds?
16. Did other group come down to stay here after your group came?
17. If yes, did they have a separate settlement?
18. Who were your neighbours?
19. Was there any kind of relationship between the settlements?
20. How many settlements were under the kingdom?
21. Were all the settlements around the area of the Mernyang ethnic group?

22. What family ruled Kofyar first?
23. How long did the people live in the abandoned settlement?
24. What was their religious belief?
25. Are they still ruling?
26. Do you have villages elsewhere?
27. If yes, do you have anything in common with them like language or cultural practices?
28. Do you have taboos?
29. If yes, what are they?
30. Are these cultural practices different from what you have in the past?

QUESTION GUIDE ON EARLY CRAFTS AND INDUSTRIES

1. What is your name?
2. How old are you?
3. What do you do pottery for?
4. How did you learn the art of making pottery?
5. Do you think there is any similarity in your production process?
6. Are you aware if your neighbours produce pottery?
7. Do you think they copied from you or your ancestors?
8. Do you exchange pottery with your neighbours?