



**FORMATION AND SPREAD OF AO NAGA ANCESTRAL SITES:
ORAL TRADITION AND ARCHAEOLOGY**

THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENT FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

**BY
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**FORMATION AND SPREAD OF AO NAGA ANCESTRAL SITES:
ORAL TRADITION AND ARCHAEOLOGY**

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Submitted
In partial fulfillment of the requirements for the Degree of
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NAGALAND UNIVERSITY

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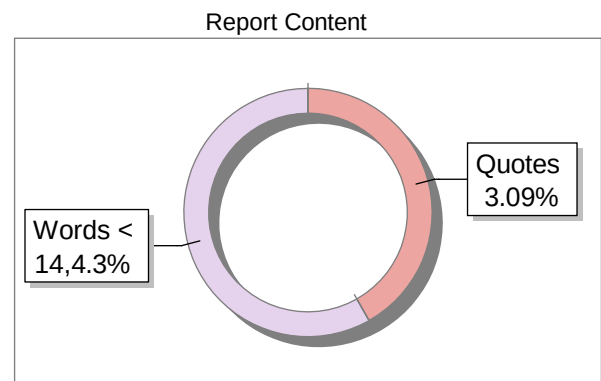
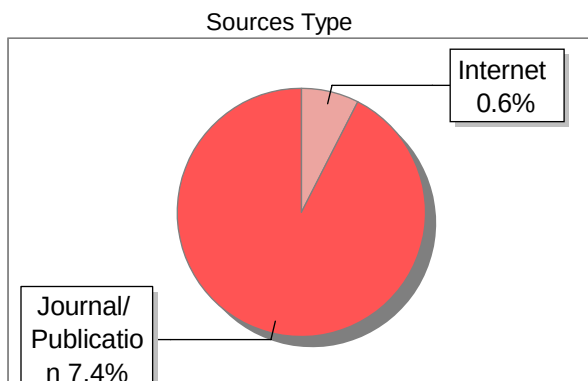
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This is to certify that the research data presented in this accompanying dissertation titled, *Formation and Spread of Ao Naga Ancestral Sites: Oral Tradition and Archaeology* has been carried out by Mr. Chubatoshi bearing Regd. No. PhD/ HAR/ 00061 under my guidance and supervision.

The present work is original in its content, and has not been submitted in the part or full for any other degree or diploma in any other university/ institute.

It is further certified that the candidate had fulfilled all the conditions necessary for the award of the Degree of Philosophy under Nagaland University.

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CONTENTS

<i>Certificate</i>	<i>i</i>
<i>Declaration</i>	<i>ii</i>
<i>Acknowledgement</i>	<i>iii-iv</i>
<i>List of tables</i>	<i>viii</i>
<i>List of figures</i>	<i>ix-x</i>
<i>List of plates</i>	<i>xi-xiii</i>
Chapter 1: Introduction	1-23
1.1. Background of the study	
1.2. Oral tradition and Archaeology	
1.3. Archaeology of Northeast India: An Overview of prehistoric research	
1.4. The Ao Nagas: Origin Myth and Migration	
1.5. The Ao inhabited Region	
1.6. Area of Study	
1.7. Statement of the Problem	
1.8. Significance of the Study	
1.9. Objective of the study	
1.10. Hypotheses	
1.11. Methodology	
1.12. Review of Literature	
1.13. Theoretical Framework	
Chapter 2: Physiographic and Environment	24-41
2.1.Introduction	
2.2.Physiography	
2.2.1. Ongpangkong Range	
2.2.2.Asetkong Range	
2.2.3.Langpangkong	
2.2.4.Jangpetkong	

- 2.2.5.Japukong Range
- 2.2.6.Tsürangkong Range
- 2.3. Major Drainage System
 - 2.3.1.Milak
 - 2.3.2.Dikhu
 - 2.3.3.Tsürang
 - 2.3.4.Menung
- 2.4. Geology
- 2.5. Soil and Vegetation
- 2.6. Climate
- 2.7. Ecological setting

Chapter 3: **Oral Tradition of Ao Naga Ancestral Sites** **42-76**

- 3.1 Introduction
- 3.2. Ongpangkong, Langpangkong and Asetkong Range
 - 3.2.1. Koridang and Aonglenden Ancestral Sites
 - 3.2.2 Rito
 - 3.2.3 Settsü
 - 3.2.4 Sangpuyimti
 - 3.2.5 Jangjang Kimong
 - 3.2.6 Kupok
 - 3.2.7 Nichung Site
 - 3.2.8 Tsüha
 - 3.2.9 Kupza long (Koki Menden)
- 3.3. Jangpetkong, Japukong and Tsürangkong Range
 - 3.3.1. Molunger: Migration routes and Associated Sites
 - 3.3.2. Marok
 - 3.3.2. Nathosü
 - 3.3.3 Nokrang Site
 - 3.3.4 Japu Migration and Maipang Ancestral Site
- 3.4. Dispersal Pattern

Chapter 4:	The Archaeology of Ao Naga Ancestral Sites	77-123
	4.1. Introduction	
	4.2. Methodology	
	4.3. Sangpuyimti (SYT)	
	4.3.1. Summary of Finds	
	4.4. Jangjang Kimong (JJK)	
	4.4.1. Summary of Finds	
	4.5. Koridang (KOR)	
	4.5.1. Summary of Finds	
	4.6. Nichung (NIC)	
	4.6.1. Summary of Finds	
	4.7. Rito (RTU)	
	4.7.1. Summary of Finds	
	4.8. Longzükyimjok (LGZ)	
	4.8.1. Summary of Finds	
	4.9. Tsüha (TSH)	
	4.9.1. Summary of Finds	
	4.10. Maipang (MAI)	
	4.10.1. Summary of Finds	
	4.11. Potsherds and Artifacts analysis with 3D Models	
	4.12. Site chronology: Radiocarbon and AMS dates	
Chapter 5:	Discussion and Conclusion	124-152
	5.1. Research Overview	
	5.2. Oral Tradition of Migration and Archaeology	
	5.2.1. Archaeological Finds and Features	
	5.3. Ao Language and Migration	
	5.4. Conclusion	
References		153-163
Oral Sources		164
Appendix		165-178

List of tables

Table 1: Provenience and other key characterizing attributes of excavated slags, TR-1, Maipang

Table 2: List of radiocarbon dates of excavated sites.

Table 3: Showing the distance travelled by each group.

List of Figures

Figure 1: Locational map of study area

Figure. 2. Physiographic map of Mokokchung District, Nagaland

Figure. 3. Distribution map of six prominent ranges along with elevation differences, Mokokchung District, Nagaland

Figure 4. Drainage map and elevation of Mokokchung District, Nagaland

Figure 5: Geological map of Mokokchung District, Nagaland

Figure 6: Land Use and Land Cover map of Mokokchung District, Nagaland

Figure 7: Location map of Ao ancestral Sites of the Upper ranges, Mokokchung District.

Figure 8: Locational map of ancestral Sites of the Lower Ranges, Mokokchung District

Figure 9: Map of Mokokchung District and adjoining Districts showing the Migratory routes of the Aos

Figure 10: Location map of excavated sites, Mokokchung District, Nagaland.

Figure 11: Graph representation of pottery colour types from TR-1 and TR-2, Sangpuyimti

Figure 12: Graph representation of design types from TR-1 and TR-2, Sangpuyimti

Figure 13: Graph representation of pottery colour types, Jangjang Kimong

Figure 14: Graph representation of design types from Jangjang Kimong

Figure 15: Graph representation of pottery colour types, Koridang

Figure 16: Graph representation of design types from Koridang

Figure 17: Graph representation of pottery colour types, Nichung

Figure 18: Graph representation of design types from Nichung

Figure 19: Graph representation of pottery colour types , Rito

Figure 20: Graph representation of design types from Rito

Figure 21: Graph representation of pottery colour types, Longzükyimjok, TR-1 and TR-2

Figure 22: Graph representation of design types from Longzükyimjok, TR-1 and TR-2

Figure 23: Graph representation of pottery colour types , Tsüha

Figure 24: Graph representation of design types from Tsüha

Figure 25: Graph representation of pottery colour types from Maipang

Figure 26: Graph representation of design types from Maipang

Figure 27: Calibration curve of site Sangpuyimti (SYT)

Figure 28: Calibration curve of site Koridang (KOR)

Figure 29: Calibration curve of site Longzükyimjok (LGZ)

Figure 30: Calibration curve of site Nichung (NIC)

Figure 31: Calibration curve of site Rito (RTO)

Figure 32: Calibration curve of site Tsüha (TSH)

Figure 33: Map of drainage density within proximity of study sites, Mokokchung District.

Figure 34: Steep slope terrain map of ancestral sites, Mokokchung District

Figure 35: Map showing the concentration of villages within respective geological formations, Mokokchung District

Figure 36: Soil types map of Mokokchung District, Nagaland

Figure 37: Soil texture map of Mokokchung District, Nagaland

Figure 38: Map showing the density of settlements in the six ranges of Mokokchung District

Figure 39: Bar graph showing the overall percentage of designs

List of Plates

1. Plate 1: Aerial view of Koridang
2. Plate 2: Aerial of Aonglenden (Ungma)
3. Plate 3: Aerial view of Settsü village
4. Plate 4: Aerial view of Sangpuyimti
5. Plate 5: View of Koralong- The mystical stone that crows.
6. Plate 6: A view of Awatsü, the spring that cursed by the Sangpu inhabitants
7. Plate 7: View of Jangjang Kimong
8. Plate 8: View of Nichung
9. Plate 9: *Lepmalong* - The stone whose spirit told Marok villagers to established their new settlement.
10. Plate 10: Aerial view of Jarang Tenem/ Nathosü.
11. Plate 11: An audio- visual interview in progress at Aonokpu.
12. Plate 12: Longkhum Heroic Memorial Hall in the background (Foreground: The researcher with a local elder and the Chairman of Aonokpu village).
13. Plate 13: The engraved plate installed inside the Longkhum Heroic Hall in memory of the Nokrang battle, Aonokpu.
14. Plate 14: Atoba Tsübo (the spring well named after Nokrang Chief Atoba)
15. Plate 15: Aerial view of Japu village.
16. Plate 16: Aerial view of Maipang.
17. Plate 17: A view of the Rest House located atop Maipang Site's hill.
18. Plate 18: Photo session of the researcher with the elders of Japu village.
19. Plate 19: Longchem (rock outcrop with a hollow depression at Maipang site)
20. Plate 20: TR-1 with exposed posthole features, SYT-20
21. Plate 21: TR-1 showing the exposed pit feature, SYT-20
22. Plate 22: Stratigraphic profile of TR-1 (section facing Southwest)
23. Plate 23: Stratigraphic profile of TR-2 (section facing South)
24. Plate 24: a, b: a) Paddle impressed ware and Plain ware; b) Paddle impressed ware with vertical bands and basket-like paddle impressions from SYT-20.

25. Plate 25: a-f: a). Spindle whorl; b).River cobble; c). Fragment of sharpening stone; d). A modified phyllite stone fragment, e). a Spilite adze; f). Squarish shell bead spacer from SYT-20.
26. Plate 26: Ground plan of TR-1, JJK-20
27. Plate 27: Stratigraphic profile of TR-1(section facing East).
28. Plate 28: a, b, c: Paddle impressed and plain ware of brownish yellow and cord impressed grey ware from Jangjang Kimong.
29. Plate 29: Profile section of Tr.1/ Kor-21.
30. Plate 30: Stratigraphic profile of Tr. 1(section facing Southeast)
31. Plate 31: Paddle impressed ware from KOR-21.
32. Plate 32: a, b: a) Fragment of spindle whorl with incised mark; b). Sharpening stone from KOR-21.
33. Plate 33: View of ground plan TR-1, NIC-22
34. Plate 34: Stratigraphic profile of Tr.1(section facing East)
35. Plate 35: a,b: a) Paddle impressed ware and buff wheel made ware; b) Paddle impressed and plain ware from NIC-22.
36. Plate 36: Rim profile of paddle impressed ware and body sherds from Nichung site.
37. Plate 37. a, b, c: a) A corroded iron hoe (); b) Fetish stone; c) River cobble from NIC-22.
38. Plate 38: View of the TR-1/L-2, showing the posthole feature, RTU-22
39. Plate 39: Stratigraphic profile of TR-1 (section facing East)
40. Plate 40.a.b: a)Paddle checkered (mat) impressed, horizontal bands and plain ware; b) Buff, red and brownish ware from RTU-22.
41. Plate 41: a). Fragment of sharpening stone; b) Fragment of smoking pipe; c) Fragment of sharpening stone from RTU-22.
42. Plate 42: Profile section of TR-1/ L-2, LGZ-22
43. Plate 43: Profile section of Tr-2/ L-2, LGZ-22
44. Plate 44: Stratigraphic profile of TR-1 (section facing Northeast)
45. Plate 45: Stratigraphic profile of TR-2 (section facing Northwest).
46. Plate 46. a, b: a). paddle, plain handmade ware and buff wheel made ware from Tr.1/ LGZ; b). Plain buff ware and paddle impressed ware from Tr. 2/ LGZ -22.

47. Plate 47: Rim profile of a plain ware (right) and herring bone paddle impression and plain ware (left) from LGZ-22.
48. Plate 48: View of ground plan of TR-1/ L-2, TSH-22
49. Plate 49: Stratigraphic profile of TR-1/TSH (section facing North).
50. Plate 50: Handmade paddle impressed with herring bone design pattern, plain ware, and wheel made buff ware from TSH.
51. Plate 51: a, b) Fragment of sharpening stone; c) River cobble with battering marks possibly used as stone hammer TSH-22
52. Plate 52: Body sherds with paddle impression with profile of paddle impressed ware from TSH-22.
53. Plate 53: View of TR-1/ L-2 and profile section
54. Plate 54: Stratigraphic profile of TR-1 (section facing South).
55. Plate 55 a, b: a) Paddle impression, plain and buff wares; b) Paddle impressed and plain wares (weathered) from MAI-22.
56. Plate 56: Fragment of iron slag from Maipang.
57. Plate 57 (a-f): a. paddle impressed, b. Cord- impressed ware from JJK-20; c & d. paddle impressed ware from KOR-21 ; e & f. Paddle impressed from LGZ-22.
58. Plate 58 (a-d): a). Plain ware; b). Horizontal paddle impressed ware from SYT-20 c). Herringbone paddle impressed ware; d). Horizontal paddle impressed ware TSH-22.
59. Plate 59 (a-d): a & b. 3D scanning of a modified phyllite stone fragment; c & d. 3D scanning of a sharpening stone with traces of use-wear marks from SYT-20.
60. Plate 60: Maipang Tsübo (meaning ‘Maipang well’) at Chungliyimsen, Mokokchung District

Chapter – 1

Introduction

1.1. Background of the study

In the present study, archaeological data and oral tradition are utilized to examine the migration patterns of the Ao Nagas of Nagaland based on their ancestral sites of the Ao Nagas. The earliest writings on the Ao Nagas extend to the early twentieth century when the colonial administrators and ethnographers such as James Philip Mills (1926) and the American sociologist W.C Smith (1925) visited several Ao Naga villages and gathered ethnographic accounts that were later published in few monographs. In such accounts, there are mentions of several ancestral sites and migration stories of the Ao Nagas. While their accounts require closer scrutiny in certain areas; nevertheless, it has become an important reference source for Naga researchers even today. The oral tradition of Chungliyimti, the first Ao Naga ancestral site is widely discussed by local scholars from oral narratives, and several Ao Naga authors and researchers have referenced to the sites in their writings (see Bendangangshi, 2008; Aier and Jamir, 2009; Aier, 2018). Also an extensive archaeological excavation report already exists that brings out the chronology and other aspects of the site (see Jamir *et al.* 2014a). Oral sources draw reference to ancestral sites that the Aos abandoned in the course of their migration post- Chungliyimti, however, these sites failed to draw scholarly attention except for a few sites- Rito (Walling, 2008), Kupok (Jamir *et.al.* 2014a) and Nokpu (Walling, 2016).

Since archaeology's understanding of material culture and past civilizations has been framed by cultural history, migration has been a prominent concern. It has been perceived as the foundation of (pre)history. “Prehistoric Migration of Europe” by Gordon Childe (1950) is a seminal work that is also a defining standard of that time period and viewpoint (Dommelen, 2014). However, as Processual and Post-Processual approaches gained popularity, migration as a research topic quickly diminished among modern archaeologists. But since migration has always been a vital aspect of human culture, hence it is not surprising to witness that the subject is making resurgence in archaeological research.

As remarked by Anthony (1990), “Migration is a structured and well studied aspect of human behavior. Archaeologists, however, generally treat migration as chaotic and poorly understood” (Anthony, 1990, pp. 895). Migration has been widely disregarded, not because it is seen to be unimportant, but rather because archaeologists lack the theory and methods that may allow them to incorporate migration into the account of cultural change. Rather than developing the required approaches, archaeologists have avoided the subject. The models developed by sociologists, geographers, biological anthropologists and applied anthropologists already provide many of the required approaches. In the recent past, it appeared in the field of paleo-biology whereby these sophisticated models of migration been applied to the archaeological record (Anthony 1990).

The manner in which migration is being thought about and approached has unavoidably changed because archaeology as a discipline has become much more theoretically diverse and sophisticated. This is true regardless of whether migration was recovered as a matter of interest or had remained a going concern all along. To name a few works, such as Cabana and Clark (2011a), Echardt (2010) and Dommelen (2014) who depicts this "revival".

This present study is one such work where an attempt is made to investigate and examine the Ao Naga migration history utilizing oral tradition and archaeology and employing theoretical models that best explains the migration pattern of the Ao Nagas.

1.2. Oral tradition and Archaeology

Archaeology and oral traditions are two fields that study the human past. While archaeology uses material culture to study human history, oral traditions are messages transmitted orally from one generation to the next. The history of ethnic tribal communities is typically recorded orally through poetry, songs, epics, stories, proverbs, and other texts rather than in written form. Vansina (1985) rightly puts this by remarking, “The expression ‘oral tradition’ applies to a process and to its products. The products are oral messages based on previous oral messages, at least a generation old. The process is the transmission of such messages by word of mouth over time until the disappearance of the message” (Vansina, 1985, p.3).

The oral traditions reveal that the Naga Script was inscribed on animal skin that was consumed by a dog. As a result, the Nagas adopted the practice of preserving their history through oral tradition, which has been passed down through the generations (Ao, 1999). However, like every other tribal community, we are in a race against time because the old and

wise that are living libraries will eventually burn out, and we cannot rebuild our past without such traditional oral sources. Even still, it is frequently questioned for its veracity because people are selective, biased, and occasionally lack accurate chronology, while some are simply dismissed as myths. The final form of oral traditions is never achieved; instead, they are maintained and passed down orally. They cannot, therefore, be regarded as a reliable source until they are carefully collected and examined. Oral tradition, in spite of its flaws, contributes to the understanding of oral societies' previous lifestyles. This is the area at which archaeology can be of great value. Thus, the use of oral tradition and archaeology in historical writing as a means of understanding the past of communities with rich oral traditions and narratives has become widespread. Undoubtedly, both fields have shortcomings, but integrating them will result in a more comprehensive knowledge of the history of oral societies. By far, the greatest amount of work integrating both oral tradition and archaeology has been undertaken in America and Australia (see Hawk, 2000; Anyon et al, 1997). There has also been similar work in Africa (see Juwayeyi, 2020).

Northeast India comprising of eight states under the Indian Union with nearly 150 ethnic communities and their rich repository of oral traditions have been passed on for generations. Several attempts have been made by scholars to reconstruct the history of the pre-literate community of the region using oral tradition as alternative methodologies. Deka (2006), Thakur (2012), Showren (2014), Aier (2014) and Ao (1999) to name a few, have lamented the importance of oral tradition in studying and interpreting the societies of Northeast India. Archaeologists in Northeast India have made several attempts in identifying the ancestral sites for archaeological excavation using oral sources as a vital tool. Mitri *et al* (2015) excavation at Law Nongthroh in Sohpetbneng Hill, a Neolithic site in the Khasi Hills is one such work.

Even in the case of Nagaland, keeping the importance of engaging inter-disciplinary studies to study the Naga communities, oral tradition and archaeology have served as one of the vital approaches in the study of Naga ancestral sites and their pre-colonial history (see Jamir et al. 2014a, 2014b).

1.3. Archaeology of Northeast India: An Overview of prehistoric research

On the archaeological situation in the region, Rao (1976) writes, “Archaeologically, Northeastern India is considered *terra incognita*, as little systematic work have been done so far on a scale comparable to that of other parts of India in particular and the outside world in general”

(Rao,1976, p.191). Nevertheless, the extensive presence of the Neolithic phase in the area has been highlighted by the groundbreaking work of Godwin-Austin (1875) and Cockburn (1879) in the previous century and Mills and Hutton (1929), Fürer-Haimendorf (1937) in the current century. The first attempt to study the prehistoric cultures of Northeast India was made by John Henry Hutton. Although Hutton has no formal training in anthropology, his keen interest in prehistory is evident from one of his early papers, “Prehistory of Assam” which is the first publication that provides a general background on the nature of the prehistoric record of the region (Jamir, 2022, p.3).

Unlike the other parts of the country’s archaeology, explorations and excavations in the region did not receive much attention until the 1920s. As Jamir (2022), rightly notes, “Beginning from the 1920s, a steady growth in archaeological explorations and excavations began as a result of new institutional involvement such as the archaeology, and Arts and Culture Department of respective States dedicated to cultural and historical studies. In essence, the attempts to promote archaeological research in recent times signal steps further ahead from the foundational initiatives of the Kamarupa Anusandhan Samiti and the Department of Historical and Antiquarian Studies in the early 1920s and 1930” (Jamir,2022,p.3)

The excavation of Daojali-Hading in North Cachar Hills Assam by M.C.Goswami and T.C. Sharma between 1961-1963 (as cited in Jamir, 2022) was the first pioneering archaeological excavation initiated in North-East India. This early work put Northeast India in the global archaeological map. The excavation at Daojali-Hading gave impetus to further excavate other archaeological sites in Assam and other Northeastern states. The work of S.N.Rao (1976) where he undertook excavation at the Neolithic site of Sarutaru and Marokdola in Kamrup District, Assam is one such notable work.

In Meghalaya, few Neolithic sites were initially reported from the Khasi-Jaintia Hills and Barapani area by Marco Mitri (2009) and Z.Hussain (1996) respectively. In the recent past, excavations were initiated at Law Nongthroh and Myrkhan, Neolithic sites in the East Khasi Hills District of Meghalaya initiated under Marco Mitri between 2013-14 reported the presence of megaliths, standing stones associated with dolmens and a number of burial cists (Mitri et al, 2015). The excavation at Myrkhan site, situated East-Khasi Hills of Meghalaya by Mitri and Neog (2016) is another recent excavation in Meghalaya. Tilok Thakuria (2017) also undertook a recent survey at Misimagre, West Garo Hills district of Meghalaya where he identified nine localities and excavated two localities out of the nine.

The work of N.R Ramesh (1986), at Khowai and Haora valleys sites was a notable work done in Tripura. His efforts have resulted in the finding of multiple layered Stone Age and pottery sites in the terrace deposits of the Upper Pleistocene and Holocene in west Tripura. In 2017, another systematic survey and test excavation was conducted by Biswajit Deb Barma at Sonai site and drew conclusion that the fossil-wood and quartzite stone artifacts retrieved from Sonai are stratigraphically associated with handmade pottery and polished stone tools that bear affinity with a Neolithic assemblage.

In Manipur, the pioneering works were undertaken by O.K. Singh who worked on few sites such as Nongpok Keithelmanbi (Senapati District), Tharon Caves (Tamenglong District) and Khangkhui Cave (Ukhrul Town) respectively. Haobinhian tools are said to have been reported from Tharon caves and Khangkhui cave, which were discovered in the year 1969. His work assembled a good number of material remains, and excavations on one of the caves reported artifacts from the Upper Paleolithic period based on typological criteria. Additionally, the site's faunal assemblage is thought to date from the Late Pleistocene. However, since this groundbreaking effort, no additional prehistoric archaeological research has been carried out in Manipur (singh, 1993,1997,2014).

Archaeological investigation was also initiated at Parsi Parlo, a site in Arunachal Pradesh by A.A. Ashraf between 1982-1983. The site revealed a single culture deposit (about 50-100 cm) divisible into three phases: (a) Aceramic Neolithic, (b) Ceramic Neolithic, and (c) Ferro-lithic. Tools from the basal lower layer bear Hoabinhian traits along with tools of chipped (alternate flaking) round scraper made on flat rounded and large cutting tools (chopper). Pecked and ground tools, waisted axes, and handcrafted pottery (stamped/cord-impressed ware) are characteristics of the assemblage from Phase-II. During this phase, a few fire spots have also been found with ash and charcoal deposits. The iron tool-related phase III is an extension of the previous phase (Ashraf, 1990).

Thus far, only Neolithic implements have been reported in Sikkim. The majority of the tools are composed of shale, jasper, schist, dolerite, or basalt as reported by K.D. Banerjee (1987). The Prehistory Branch of ASI also conducted an investigation in North and the East of Sikkim from 2002 to 2004. The primary items found there are harvesters, adzes, celts, chisels, and perforated axes (Mishra 2008; Lama 2014).

Over the past few decades, archaeology in Nagaland has gradually accelerated in comparison to other Northeast Indian states. Nienu (1983) carried out the first groundbreaking

archeological excavation in early and late 1970s. Out of the 13 sites he reported from Meluri, Tuensang, and Dimapur, Neinu carried out a thorough investigation and dug a few number of them. The following sites were excavated: Phor, Purakha, Rajbari, Stuzu, Tobu, Changsang, Hutsu, Laruri, Longe, Maksha, Mimi cave, and Washelo. On Naga stone monuments studies, it was T.C. Sharma (1988) who for the first time pointed out the ethno-archaeological relevance of the Naga stone monuments. In his work "Prehistoric and Archaeological Sources of the History of Nagaland" in the volume *Sources of the History of India* (1988), Sharma lamented, "The present practices among the Nagas give us an idea fo the beliefs and customs connected with the erection of megaliths during prehistoric times" (Sharma 1988:337). His contributions gave impetus for more research work in Naga stone monuments. Some notable works related to the study of Naga stone monuments include S.N. Rao (1991), W. Jamir (1997, 1998), Z. Venuh (2000, 2005), and T. Jamir (2004, 2005, 2006).

Researchers like Ngullie (2006, 2008, 2014), who had conducted ethnographic research on the potting villages of Wokha and Oinam also developed possible ethnographic models with connections to the Neolithic of Northeast India which in turn made significant contribution to the archaeological studies on pottery assemblage. Other research on ceramic technology, embellishments, and other symbolic elements related to the vessels can also be found in the works of Vasa and Aier (2008), Vasa (2011, 2014), and Jamir and Vasa (2008). Changkiri (2023) recent work on pottery from excavated sites in Nagaland involving scientific analysis and ethnographic observations of traditional potting communities in Nagaland is another notable contribution to the archaeological studies on pottery. Their contributions to ceramic ethnographic research in Nagaland are noteworthy.

Several research works were also initiated on Naga ancestral sites. According to Jamir (2021), "...the series of archaeological sites identified as "Naga ancestral" may be attributed to the present Naga communities considering the present groups who historically link their ancestral past to these sites of memory" (Jamir, 2021, p.171). Jamir (2021) in his work on *Locating the Practice of Ethnography and Archaeology in Nagaland: Early Collections and Recent Trends*, notes that the following features are required for a site to be designated as 'ancestral site':

- i). "Sites of memory within the landscape associated with the collective memory of descent group(s) and the oral tradition linked to population migration from prominent site of dispersal; sites associated with both a historical and a mythological past and continues to play an integral role both culturally and politically to decent communities. Such sites of memories are anchored in

traditional songs, ancient settlements, monuments, and toponyms that persist in the collective memory of the people connecting the present and the past with the land and their ancestors; sites referred in the oral tradition as place of origin, or the beginning of village institutions.

ii). Sites of indigenous occupation in the Naga Hills spanning from 900 BCE (as evident from the sites like Purakha: 2580 ± 200 BP and Wui 2550 ± 30) or considerably even older as well as deserted sites of later historical times associated with oral historical accounts (100-1800AD). Few ancestral sites of early antiquity might as well appear co-terminus with early domestication process in the region.

iii). Sites that narrates of shared memory of the past-memories made up of experiences of interface with nature, landscape etc., shared memory of the past that lends credence to the cultural practices in the present; memories that functions as the underpinning in the people's sense of who they are and shed a sense of historicity to their ancestral roots; unlike communicative memory, it is a cultural memory that connect their collective present with the shared past; sites associated with the cultural memories of past lives as set in local legends and mythologies from origin of the first man to origin of the customary practices and institutions; ritual performance to festival; discovery of important food crops' development of culture specific artistic designs and motifs; dance, songs, thus evoking a sense of 'belongingness' among its members and expressing the relationship between people and place/land of the ancestor (see Aier 2018, p.80-83)" (Jamir 2021, p.171).

Jamir and Vasa (2001) first started work on Naga ancestral sites at the Jotsoma burial site (Jamir and Vasa 2008). This was followed by the region's ancestral burial sites, such as Jotsoma, Leshemi, Cheithu, Kikruma, and Kalozi (Jamir, 2005). In order to analyze and better comprehend the Nagas' megalithic traditions, including their customary funeral rites and rituals, from a processual perspective, he looked at the site's context in relation to oral histories during these excavations. The sole major excavation in the area that took place across two seasons, from 2007 to 2008, was Jamir and team's revisit to Chungliyimti and the adjoining sites. The implication of oral histories as a guide to identify and interpret the finds was amply demonstrated through this excavation. A finished sandstone adze and a piece of a ground adze of spilite, carnelian beads, stone pestle, spindle whorls, perforated terracotta discs, querns and mullers were among the many noteworthy discoveries finds (Jamir et al. 2014a).

The above work demonstrated that oral traditions have proven to be a reliable method for identifying archaeological sites and interpreting the cultures of the material excavated. Accordingly, throughout the past few decades, a number of sites have been located and

excavated such as sites like Khezhakeno, Movolomi, Khusomi, Phor, and Lüradavü (Jamir et al., 2014b). Among the other noteworthy archaeological research carried out on ancestral sites in Nagaland are the commendable works of Walling (2014, 2016, and 2020). Kithan's (2022) recent archaeological research on few sites in Wokha district- Chumpho (Morung) Site (Wokha Village), Mhenkiton (Wokha Village), Longsio, Mhenkiton (Koro village) is a notable research work on ancestral sites in Nagaland. Another significant contribution involving scientific analyses, ethnographic, archaeological, and anthropological perspectives conducted on Naga ancestral sites is Yhome's (2020) PhD research on human dental micro-wear studies from a few Naga ancestral sites and cave sites.

In contrast to the rest of the country, Nagaland's archaeological research took a late start; until recently, where a good numbers of sites had been explored and excavated. In a matter of two decades, there has been significant progress in archaeological research. Nevertheless, the archaeology of most districts of Nagaland is still less known. Therefore, in order to better comprehend the state's cultural complex, further archaeological research work should be initiated in aligned with the previous works by combining both archaeology and oral traditions. Ethnographic methodologies, new scientific approaches, fresh questions and other interdisciplinary studies should be incorporated in order to develop a broad perspective of the region's prehistory. As Jamir (2021) has lamented: "Archaeology in Nagaland is still largely concerned with establishing regional sequences and our knowledge of the archaeology of various part of Nagaland is variable and in many areas still non-existent" (Jamir, 2021, p.181)

1.4. The Ao Nagas: Origin Myth and Migration

In general, the Nagas have extensive oral traditions about their migration, origins and oral tradition relating to a number of significant socio-cultural occasions. The Nagas preserve their oral legacy through a number of fundamental characteristics, including the use of songs, poetry, myths, legends, folktales and storytelling. The elderly and older members of the community are considered as the custodians of oral traditions, tasked with transferring information to the next generation. As Hallowell (1947) opines, "What people choose to talk about is always important for our understanding of them" (Hallowell, 1947, p.548). Thus, understanding the oral tradition of the Naga people is crucial for gaining a deeper understanding of their varied pre-colonial past. While discussing any aspects of the Naga oral traditions, it should be noted that every tribe possess a unique oral tradition that discusses their social structures, customs, and belief systems.

The Nagas make a clear distinction between the oral traditions relating to origin, migration and other types of tales by the significant way in which they lay emphasis upon each genre of folklore. It is perhaps for these reasons that the oral traditions of origin and migrations are well preserved among the Nagas. These stories of migration are narrated from one generation to another unlike the other stories such as folktales, legend and songs. Another distinctive aspect of Naga oral tradition is how every terminology and nomenclature of Naga cultures and traditions has a deep meaning and also about how a story is associated with it. Their ancestors named the rivers, mountains and places associated with some historic events, or other, which in fact acts as the foot prints in tracing their migration routes, respective lineages between groups and their association with certain historical events. For instance, the Ao Nagas were known as 'Ao' or 'Aor' meaning- 'those who went away'. As Aier and Jamir (2009) explains, "The Ao migration story goes on to say that after they crossed to the other side of the river Tsüla, the suspension bridge was cut down to prevent others from crossing over. So those remaining members on the other side of the river had to take a detour which in Ao dialect is "Mürä," this analysis of the narrative is normally cited to validate why the Aos refer to the tribes living across the Tzüla as Mürir, meaning "those who went taking a detour". Conversely, the Aos were given the name "Ao-er" which means 'those who went' (Aier and Jamir, 2009, p.7).

On the myth of the Aos, Aier (2018) further notes, "The term 'myth' is used to mean these particular experiences that serve as the ideological charter for common identity and provide the members with a sense of belonging and of being different from the others. As the ideological charter of common identity, mythologies of common origin play a central role not only in the construction of the group identity but also in maintaining the group identity that draws its sustenance from the myth and related oral tradition".(Aier, 2018, p.19). It is here the origin myth of the Aos informs that its ancestors emerged from *Longtrok* or 'six stones' located at Chungliyimti (currently under Tuensang district) on the north bank of the river Dikhu. The myth of Longtrok contains different narratives of origin according to the Mongsen and the Chungli linguistic group. While the Mongsen group ascribes the 'six stones' to six male progenitors - Tongpok, Longpok, Longjakrep (Chungli), Tsungremchang, Longchenti and Longmetong (Mongsen) (Imchen 1990), the Chungli ascribes it to its three male ancestors - Tongpok, Longpok and Longjakrep with their sisters - Lendina, Yongmenala and Elongshe (Jamir & Lanunungsang, 2005). Each clan of the Aos thus traces its origins to one of these stones. The Ao oral tradition also describes Chungliyimti as the first settlement of the Ao Nagas. It talks about the exclusive

marriage rules, village polity, customs, and other social practices of Chungliyimti. The oral tradition furthermore suggests that the Aos lived at Chungliyimti for several centuries and later migrated to Aonglenden (located in present Ungma village, Mokokchung district). It was during their stay at Aonglenden that tragedy struck which further led the people to desert Aonglenden in search of a new settlement. Thus a new settlement known as Koridang (located few kilometers from Ungma village) was established. With the passage of time, the populations of Koridang increased to a great extent leading to water scarcity further forcing the populace to disperse in pursuit of better settlements. The Kupza group were the first to leave Koridang, followed by Settsü, and Longkhum respectively. These three settlements which are now established a few kilometers from Koridang, continue to play a significant place in the history of the Aos. This was followed by other groups leaving Koridang one after the other until it was completely abandoned. Detailed descriptions of their migration and settlement locations may be found in these villages' oral traditions, which are recognized as reliable sources for examining the history of each village.

In contrast, the migration history of the Mongsen Ao group is, however, presented in a distinct way. It is said that the Mongsen Aos initially resided in Kubok, Chuchu, Mongsenyimti, and Mulongkong. Later, they united with the Chungli in Chungliyimti (Walling, 2016). But, according to Mills (1926), the Mongsen group narrates that they emerged out of the soil first and established themselves at Kubok, which is close to the modern-day Mokokchung settlement on the way to the Dikhu. There is still a general disagreement over these two narratives with no clear resolution. The Aos, nevertheless, assimilated as a single cultural group with two distinct languages- Chungli and Mongsen.

1.5. The Ao inhabited Region

The Nagas of Nagaland live in the current State of Nagaland, the 16th state that was created under the Union of India on December 1, 1963, with Kohima as its capital. Assam borders the state in the west, Manipur to the south, Arunachal Pradesh to the north, and Myanmar to the east. Nagaland is home to eighteen recognized tribes, each having a unique cultural identity and a wealth of ethnic and cultural diversity. Each of the 17 districts is home to one or two significant Naga tribes.

Mokokchung district of Nagaland is inhabited by the Aos, one of the major Naga tribes. Mokokchung district is located within the geo-coordinates of 26°19'25.40"N Latitude and

94°31'11.39 E Longitude, at an elevation of 1100 meters AMSL and has borders with Assam, Wokha, and Zunheboto. The entire Ao region is separated into six ranges, named after the ranges that run along the entire Mokokchung district: the Ongpangkong Range, the Langpangkong Range, the Asetkong Range, the Jangpetkong Range, the Japukong Range, and the Tsurangkong Range. With its rich flora and wildlife protected by extensive sub-tropical evergreen and deciduous forest, the District experiences mild summers and comfortable winters. The primary agricultural foundation of the Aos is swidden or shifting agriculture. The Aos celebrate two significant festival related to the harvest and agricultural jhum cycles- Moatsü and Tsüngremmong, which are annually observed in the first week of May and August, respectively.

1.6. Area of Study

The present study covers the entire Mokokchung district comprising of six ranges- Ongpangkong, Langpangkong, Asetkong, Jangpetkong, Japukong, and Tsurangkong. The main emphasis is given to Ongpangkong Range since the first settlements of the Aos, post Chungliyimti dispersal is situated at this range, followed by Langpangkong and other subsequent ranges right down to the plains of Tsürang valley bordering the State of Assam.

Fieldwork was conducted in the entire six ranges; however, emphasis was given more on the upper ranges considering the migration routes originating from these ranges. Given the vastness of the region, all the villages were not taken into consideration, however, few villages were sampled from each range, and important ancestral sites were identified. Altogether, fifteen (15) ancestral sites were identified during fieldwork from the six ranges and test excavations were conducted on eight (8) sites in the present study (Fig.1). The archaeological record from these sites yielded some significant insights into the material culture, migration story, and ecological setting of the sites under study.

1.7. Statement of Problem

While several works existing on the Ao migration history in the Ao vernacular language, there is lack of methodological and theoretical orientation to the study of Naga ancestral sites from the perspectives of oral tradition and archaeology. There is also very little work undertaken that examines the emergence and spread of Ao village settlements using oral tradition and archaeology. The changing social dimension in Naga society, in general, impacted in the lack of

awareness and further loss of traditional knowledge systems. Thus, the need to urgently document the oral history of the Aos has become a necessity.

Most archaeological sites are under threat due to extensive slash and burn cultivation, and rapid developmental work, whereby, there is a need for a detailed documentation of archaeological sites in the district of Mokokchung and the necessity to develop a database of all Ao ancestral sites reported in the district for future planning and management of such historical sites under study.

1.8. Significance of Study

Studies on the oral tradition of Chungliymti are one of the most widely documented researches. However, studies carried out on the oral tradition and archaeology on settlement sites of the Aos post-migration from Chungliymti is very sporadic. The present research will therefore contribute to the following areas:

- i. Systematic understanding of the beginning and dispersal of early Ao Naga village settlements which were previously unrecorded.
- ii. Dating of potential sites will offer chronological framework on the migration route and time frame of the Ao Nagas post-Chngliymti.
- iii. Engage local communities in the preservation of the ancestral sites and help address the vulnerability of the sites to various factors.
- iv. Recovery of the ancestral material culture of respective communities will add value and credence to the community's traditional knowledge of migration.

1.9. Objective of study

- i. Trace the emergence and growth of early Ao settlements and the factors responsible for the origin and spread of contacts based on oral tradition and archaeology.
- ii. Examine the nature and distribution of sites in relation to their ecological settings.
- iii. Undertake a systematic documentation of all archaeological sites in the region and develop a database for the future management of Ao ancestral sites.

1.10. Hypotheses

- i. That a unilinear pattern of migration and growth of Ao settlements beginning from Chungliyimti, Aonglenden and Koridang will not be exhibited based on the oral history of clans.
- ii. That the popular use of Mongsen language in contrast to Chungli in the Ao folk narratives suggests the Mongsen group emerging as a more dominant cultural group during the early stages of growth and spread of village settlements.

1.11. Methodology

The study involves data collections from both primary and secondary sources. For gathering primary datas, extensive field work was undertaken in all the six (6) ranges of Mokokchung District. Ongpangkong range- Ungma, Kupza, Settsü, Longkhum, Longsa, Mokokchung village, Chuchuyimpang and Longmisa; Asetkong range- Sungratsu, Mopungchuket and Longjang; Langpangkong- Merangkong, Chuchuyimlang, Mongsenyimti, Kelingmen and Unger; Jangpetkong- Changki, Waromung, Dibua; Japukong- Aonokpu, Japu and Longchemdang; Tsurangkong range- Chungtiayimsen, Moayimti, Longphayimsen and Watiyim. Methods adopted for the collection of primary data involved unstructured interview methods where in both individuals/groups were interviewed using DSLR camera and digital voice recorder devices. This method was relevant in the research in order to collect open- ended data and to gain insight into participant's perspectives and their knowledge on oral narratives of the sites.

Field work was conducted to document the oral sources on the village migration and identify ancestral sites within the study sites. Geo-coordinates of all identified sites were recorded using hand held Garmin GPS. Some preliminary pilot survey was undertaken before the actual fieldwork. All research preceded by a joint meeting with the village council to obtain clearance for the study. This was supported by a formal permission citing details of the type of research to be initiated within their respective village jurisdiction.

Because oral tradition of the Nagas and Aos in particular is often considered sensitive, such preliminary initiatives are necessary to avoid imposition of hefty fines emerging from the misrepresentation of a community's history. During the course of the entire field work, the present research was also not short of challenges which every researcher should be prepared before actual research commences. In few villages, the village council declined to narrate accounts of the village migration history even after the acceptance of the researcher's visits,

while in some, the researcher's desires to visit their village was declined citing internal reasons such as- conflicting narratives of village history, ignoring telephones calls, directives not to publish the dating results without prior knowledge of the village council to cite a few. In other instances, there were also directives to the researcher by the village council to bring the dating results to the knowledge of the community prior to their publications. The dilapidated condition of the village roads in most areas also hampered the progress of fieldwork, while in others, foot - trekking was the only possible means to reach to the sites.

Community history articles in local print media (English/vernacular), research papers, and various Jubilee souvenirs were utilized. In addition, accounts from personal diaries of local elders, thesis, governmental official reports and village community booklets further formed the basis of the secondary sources.

For sample dating, conventional and AMS (Accelerator Mass Spectrometry) dating techniques were applied for dating the charcoal samples from the excavated sites to obtain the site chronology. For the purpose of producing 3D scans for inconspicuous pottery designs and other important artifacts, the EinScan SE V2 was used in order to capture 3D images with colored textures of the objects's morphological details which were missed during physical examination.

Also the study integrated advanced geospatial technologies, including remote sensing, drones and Geographic Information Systems (GIS) to analyze the spatial and ecological contexts of ancestral sites of the study area. Remote sensing data were sourced from Google Earth for high-resolution imagery to identify site locations, Cartosat (2.5-meter resolution) for topographic mapping, and LISS-IV (5.8-meter resolution) for vegetation and land use analysis. GIS tools (e.g., ArcGIS, QGIS) integrated fieldwork data, GPS coordinates, and remote sensing outputs by comparing historical and current imagery, and visualize results with reference to various thematic outputs.

The computation of drainage density was deployed by incorporating the data source from Survey of India Toposheet in 1:50,000 scale. From this georeferenced topographic raster layer the drainage information were visually digitized and for calculation of the drainage density 1000x1000m (1sq km), grid area was utilized. The results were subjected to interpolation surface preparation for creation of continuous data surfaces enabling enhanced visualization and analysis. For preparation of slope data, Digital elevation model from ALOS PALSAR Radiometric Terrain Correction (RTC) products, specifically the high-resolution (12.5m) DEMs

available from the Alaska Satellite Facility (ASF) was used. The generation of slope data evolves performing the computation of maximum rate of change in value from a cell to its immediate neighbors on a projected flat plane using a 2D Cartesian coordinate system also known as planner method. All operations were performed on ArcGIS Pro 3.0.0 software package.

1.12. Review of Literature

J.P. Mills', *The Ao Nagas* (1926), a monograph on the first account of the Ao Nagas not only provides comprehensive accounts of the social and cultural ways of life of the Aos but also provide useful information on the origin, migration routes and settlement sites of the Aos. Mention of sites such as Koridang, Aonglenden, Noksenkini, Molungkong, Nokrangermangotürong, Natusü, Longzakyimchuk presently in Ongpangkong, Langpangkong, Asetkong, Jangpetkong are evident in these accounts that are important lead for archaeological investigations.

M. Alemchiba's book *A Brief Historical Account of Nagaland* (1970), gives significant details on the migration of Nagas. Although his work is of immense value in understanding the pattern of migration and dispersal of the Nagas, no conceptual models of the migration patterns are seen to be proposed and discussed in this volume.

The first archaeological survey undertaken at Chungliyimti by Neinu (1974) published in *Highlander* under the title *Recent Prehistoric Discoveries In Nagaland- A Survey* and later in his Ph.D thesis *The Prehistoric Archaeology and Human Ecology of Nagaland* (1983) gives a brief account of the Neolithic tools reported from Chungliyimti. His thesis gives useful description of the types of methodologies to be utilized while investigating archaeological sites in the Naga Hills.

Temsula Ao's book *The Ao- Naga Oral Tradition*(1999), gives valuable information of the society, polity, belief system, myths and tales that are constituent features in the oral traditions of the Ao Nagas. The richness and value of the Ao Naga oral tradition are widely discussed in this book.

In the volume *Historical Development of the Ao Nagas in Nagaland* (2002), besides an introduction to the polity, changes in Ao Naga society and the religious faith before the advent of Christianity, Purtongzuk Longchar's emphasis on Ao migration history, the nature of clan division and the formation of villages are important published sources aiding the present research.

Oral History in Northeast India Studies, by Meeta Deka (2006) published in the proceedings of NEIHA highlights on the importance of oral history in reconstructing the Northeastern tribal societies. It also gives valuable inputs on the usage of oral history and its methodology.

The paper *Archaeology of Local cultures: New findings and interpretations in Nagaland* by Jamir and Vasa (2008) in the book *Naga Identities* (Oppitz *et.al.* eds.) contains valuable discussion of few archaeological sites in Nagaland particularly Jotsoma, Kalozie and Chungliymti. This chapter also draws attention to a discussion on archaeology, material culture and the construction of ethnic identity and local community participations in archaeological excavations in the region.

Stories at Hand: Dynamics of Oral tradition in Archaeological Sites, a paper by Walling (2008) in Nagaland University Research Journal *NURJ Vol.5* is an account of an archaeological survey conducted at Rito that provides accounts on the importance of incorporating oral tradition in archaeological research.

The paper *Role of Myth in the Reconstruction of Technological Past of Northeast India* by Thakur (2012) in the proceedings of North- East India History Association (NEIHA) Vol. 33 presents a critical lens of the historical past and activities to construct the technological history of Northeast India, which will help provide a critical rethinking on the oral sources while reconstructing the Ao history.

The works of Jamir et al (2014a) in the *Archaeology of Naga Ancestral Sites; Recent Archaeological Investigation at Chungliymti and Adjoining sites*, discusses on the first settlement of the Aos centering around Chungliymti and other adjoining sites in the region. Their work is significant because it was the first detailed excavation conducted on a Naga ancestral site involving a multidisciplinary study. Furthermore, for the first time it draws the chronology of Chungliymti providing several radiocarbon dates. Their work is, however, limited to Chungliymti and the few adjoining sites alone. So also is the work of Ngullie's *Oral Tradition in North East India with special reference to the Nagas* (2017), in *Crafting History* (Ruby Maloni, Anagha Kamle eds.) that highlights on the importance of undertaking collaborative interdisciplinary studies with disciplines such as archaeology and linguistics to evaluate the reliability of oral sources.

The paper *Archaeology and Oral Tradition of Northeast India: The Need of a Dialogue in Interpreting the Past* by Aier (2014), in the volume *50 Years after Daojali-Hading Emerging*

Perspectives in the Archaeology of North East India (Tiatoshi Jamir, Manjil Hazarika Eds.) throws light on the importance of oral tradition in the reconstruction of history of northeast Indian tribes. With the potential of exploring research in the areas of oral tradition in the North-East India, her work points out the importance of oral sources in exploring new areas of inquiry.

The Ao vernacular book *Aor Temzung Ozung* (2016) published by Mokokchung District Dobashi, provides a detailed description of the various customary laws and regulations of Ao society and polity although there is a moderated description on the history of the Aos.

Jeffrey's, paper on *Oaxacan Migration and Remittances as they relate to Mexican Migration Patterns* (2010) published in the *Journal of Ethnic and Migration Studies*, gives important insights into understanding the migration pattern of human movement from one settlement to new area and the reason behind such migration.

The volume *Oral Tradition As History* by Jan Vansina (1985), further highlights on the set of rules of historical evidence to be applied to oral traditions which are historical sources of a special nature that rely on the powers of human memory. Although the book is mainly situated in Africa theoretical tools and methodology on oral tradition discussed in this work offers a wider relevance to other parts of the world among communities with an oral culture. Also his work *Oral Tradition: A study in Historical Methodology* (1965) outlines the methodology of analyzing oral tradition and how to validate such unwritten information as sources of historical data.

Dongoske et al. (1997) paper on *Archaeological Cultures and Cultural Affiliation: Hopi and Zuni Perspectives in the American Southwest* published in *American Antiquity* Vol.64 discusses on the Native American Hopi and Zuni people highlighting the importance of adopting anthropological perspective of culture into archaeological theory by integrating oral tradition in archaeological research.

Mason's (2000) paper *Archaeology and Native North American Oral History* published in *American Antiquity* gives an overview of the theoretical issues involved in oral tradition and archaeology. He offers interesting arguments on the validity and usage of oral tradition in archaeology and their critical application in archaeology. These arguments are utilized as a tool in the present research.

Whiteley (2002) paper *Archaeology and Oral Tradition: The Scientific Importance of Dialogue* published in *American Antiquity* explores the significance of objective archaeology by treating oral tradition as a primary source of evidence and interpretation of past social

formations, which helps in understanding the oral sources in archaeological studies from various perspectives.

Richardson's *Reconstructing a community with Oral History* (2002) published in *Oral History Review* offers an exhaustive account of African- American communities located at Glade town whose historical records are rooted in oral traditions and the methodological procedures to be utilized in oral historical research which is vital to the proposed research on the AOs. Also is the book *The Oral History Reader* edited by Perks and Thomson (1998), that outlines insightful details of the various theories and methods involved in the study of oral historical research that are relevant in the analysis of AO oral traditions.

Moshenska's (2007), *Oral History in Historical Archaeology: Excavating sites of Memory* a paper published in *Oral History* Vol.35, advocates a site-based approach to this interdisciplinary work, combining archaeological, historical and memory on specific locations to create and foster public discourse of memory. This paper serves as an important reference to the fundamental premise of the present study.

Jamir's paper on *Locating the Practice of Ethnography and Archaeology in Nagaland: Early Collections and Recent Trends* (2021) published in *Puratattva* Vol. 51, throws a detailed comprehensive background on the development of archaeological research undertaken in Nagaland since colonial times to the present. His work is instrumental in understanding Naga ancestral sites and methods adopted for site explorations and excavations.

The book *Oral Traditions, Continuities and Transformations in Northeast India and Beyond* (Sarkar and Modwel eds. 2021) explores the shared cultural heritage among the highland and river valley communities of Northeast India and mainland South East Asia, including South China, through oral traditions. The various chapters in the volume offer interesting parallels on how oral traditions behave in different socio-economic contexts, and also examine how oral traditions and memory interact with the digital world's penetration in the remote areas of Northeast India.

The Voice of the Past by Thompson (1988) is a book that emphasize on how oral sources have reshaped our understanding of the past, ethical aspects of the interviewers, scholarly interviewing and professional preservation of recordings. His work serves as an important tool in analyzing and recording of oral sources in this present research.

Tonkin's book *Narrating our Pasts: The Social Construction of Oral History* (1992) presents how oral history should be constructed and interpreted. She also highlights wide range

of examples on memory, narration and oral tradition. Her work is instrumental in understanding and documenting the oral narratives in present research.

1.13. Theoretical Framework

The study on prehistoric migration started when the culture-historical archaeologist V. Gordon Childe defined 'archaeological cultures' as a set of artifacts which was found in several areas, which he termed as expression of people (Childe, 1950). However, it was the German linguist and archaeologist Kossinna who first shaped the concept which was coherent since the early nineteenth - century into a theoretical framework (Trigger 1996). Childe, who was a Marxist, took Kossinna's archaeological concept using it in the systematic study of prehistory and concluded to a notion that civilization first had their origins in the Near East and spread to northern and Western Europe. He also emphasized on the diffusion of ideas over migration that causes the cultural change (Trigger 1996). Thus, the cultural- historical archaeology dominated archaeological research for the early part of the 20th century until 1960 when New Archaeology or Processual archaeology challenged its theoretical and methodological framework.

The present research is guided by Everett Spurgeon Lee's (1966) 'Push and Pull' or 'Lee's Theory' theoretical and methodological framework. 'Push and Pull' theory evolved from Ravenstein's (1885) theory 'Law of Migration'. Ravenstein first delivered his ground - breaking migration theory in the *Journal of the Statistical Society* in England in 1885. In his seminal work, Ravenstein outlined a series of law of migration and attempted to explain the pattern of migration within the country and between nations. His work continues to serve as the starting point of the entire migration pattern for over a century. Corbett (2003) in his work, *Ernest George Ravenstein. The Law of Migration, 1885*, highlighted the seven (7) 'Laws of Migration' formulated by Ravenstein. The seven laws are:

- 1) Most migrants only proceed a short distance, and toward centers of absorption.
- 2) As migrants move toward absorption centers, they leave "gaps" that are filled up by migrants from more remote districts, creating migration flows that reach to "the most remote corner of the kingdom".
- 3) The process of dispersion is inverse to that of absorption.
- 4) Each main current of migration produces a compensating countercurrent.
- 5) Migrants proceeding long distances generally go by preference to one of the great centers of commerce or industry.
- 6) The natives of towns are less migratory than those of the rural parts of the country.

7) Females are more migratory than males (Corbett,2003,p.3).

Ravenstein's 'Law of Migration' (1885) led to a series of studies on the factors leading to the migration. E.S. Lee (1966), a Professor of Sociology at the University of Georgia, analyzed the factors and propounded the 'Push and Pull' theory or the 'Lee Theory' of Migration. He made four striking observations concerning why people migrate: i) factors concerning the area of destination, ii) factors linked with the origin, iii) factors between the obstacles, and iv) factors pertaining to personal motives. Lee further explains that the 'Push' factors exits at the point of origin and motivates the migrant to move out (absence of economic opportunities, living condition, rivalry etc), while the 'Pull' factors are present in the destination that attracts the migrants to migrate from their origin (economic opportunities, religious or political freedom etc.). Lee offers a clear picture why people migrate ('push') to new areas when they are confident on the solution ('pull') at the destination. Cameron (2013) also observed that "Push and Pull models tend to assume that migration made considered decisions about whether to migrate and where to migrate" (Cameron, 2013, p.219).

Whilst migration theory and research were showing momentum in other social sciences, however, migration in archaeology was facing an opposite decline. The absence of 'migration' as a research topic in archaeology and highlights on the traditional archaeological approach lacking the adequate methodological and theoretical basis, which prompted the proponents of 'New Archaeology' to exclude migration as a subject of research and banish from archaeology (Burmeister, 2000).

The development of migration into archaeological research began with Anthony's (1990) observation on the migration problem in archaeology. He made a ground - breaking observation and pointed out the lack of theory and methods among the archaeologists which restrict them from incorporating migration in archaeological research. He rightly notes, "Migration is a structured and well studied aspect of human behaviour" (Anthony 1990, p. 895). Thus, Anthony (1990) pointed three main reasons for the failure: i) a bias toward methodological approaches to the problem, ii) rejection of a century of migration studies by demographers and geographers, and iii) a paralyzing fascination with the cause of migration, which in most archaeological cases is a hopeless quagmire. His approach to migration was different from traditional culture-historical approach, as he rightly states, "Normative 'cultures' corresponded to 'people', and migrations were seen as the activities by which they played out their destinies on the world

stage” (Anthony, 1990, p.908). His approach gave a clear view on migration as patterned processes which can be applied through general principles.

Since the contribution made by Anthony on the study of migration, there was a leap in archaeological migration research. In the US, it became a major research theme from discredited remnant of culture history. Cameron (2013) points out an interesting observation and discusses on certain areas that archaeologist focuses while neglecting certain factors leading to migration post Anthony’s (1990) ‘Push and Pull’ theory. He put his attention on the “...unplanned, coerced, or involuntary movement of individuals and groups across social and environment boundaries” (Cameron, 2013, p.218). Cameron deviates his attention on the non-state societies and broadens the models of movement bringing examples from ethnographic and ethno-historic records. Factors such as warfare and captive - taking, process of fission and fusion and increase in population were emphasized to study the motives behind human migration (Cameron, 2013).

In recent times, scholars like Schachner (2010) focus on movements occurring within the regions which former scholars failed to address in their work. He incorporated the ‘population circulation’ concept and addressed the social factors prompting the migration of a whole village to a new region due to matrimonial alliance, constant warfare, or in some cases people migrating through the advice of certain influential individuals and elderly people (Schachner 2010). The culture - historical theory on migration which was elided by archaeologist has now advanced into consideration with DNA (Deoxyribonucleic Acid) research on human migration. The theoretical approaches on DNA interpretation are mostly inherit from cultural - history because data generated through DNA research are familiar to cultural - historical approach. Both DNA specialist and culture- historical approach underlie identity as fixed from birth and remains the same throughout their life span, individual identities cannot be found in two different cultures and the change in cultures often happen through diffusion or migration (Crellin et.al, 2020). These recent DNA studies on migration gave researchers to rethink past approaches to understand human migration in broader perspectives.

As highlighted in the aforementioned, migration has been an important area of research for archaeologists and other social sciences since the late nineteenth century. The contributions of early cultural- historical archaeologists on pre-historic migrations were useful in understanding the culture and diffusion of ideas from one region to another. However, with the coming of New Archaeology in the 1950’s, it rejected the cultural - historical study of migration citing the lack of a sound theoretical and methodological framework, with the exception of Lee’s

(1966) 'Push and Pull' migration theory and Anthony's (1990) ground - breaking work which contributed to generation of new ideas in the archaeological research on migration. These theoretical developments in migration studies not only contribute to the field of archaeology but also in the study of other disciplines of social sciences and scientific research.

Taking in to consideration these theoretical frameworks, the present study situates Lee's (1966) 'Push and Pull' migration theory as the fundamental basis to examine the patterns of Ao migration. From the series of factor, economic factors as the prime-movers are given due importance. In addition, Camerons's view on the factors of migration- 'fission and fusion', warfare, epidemic and non-state study are also taken to consideration along with the traditional cultural-historical archaeology views of diffusion of ideas and migration.

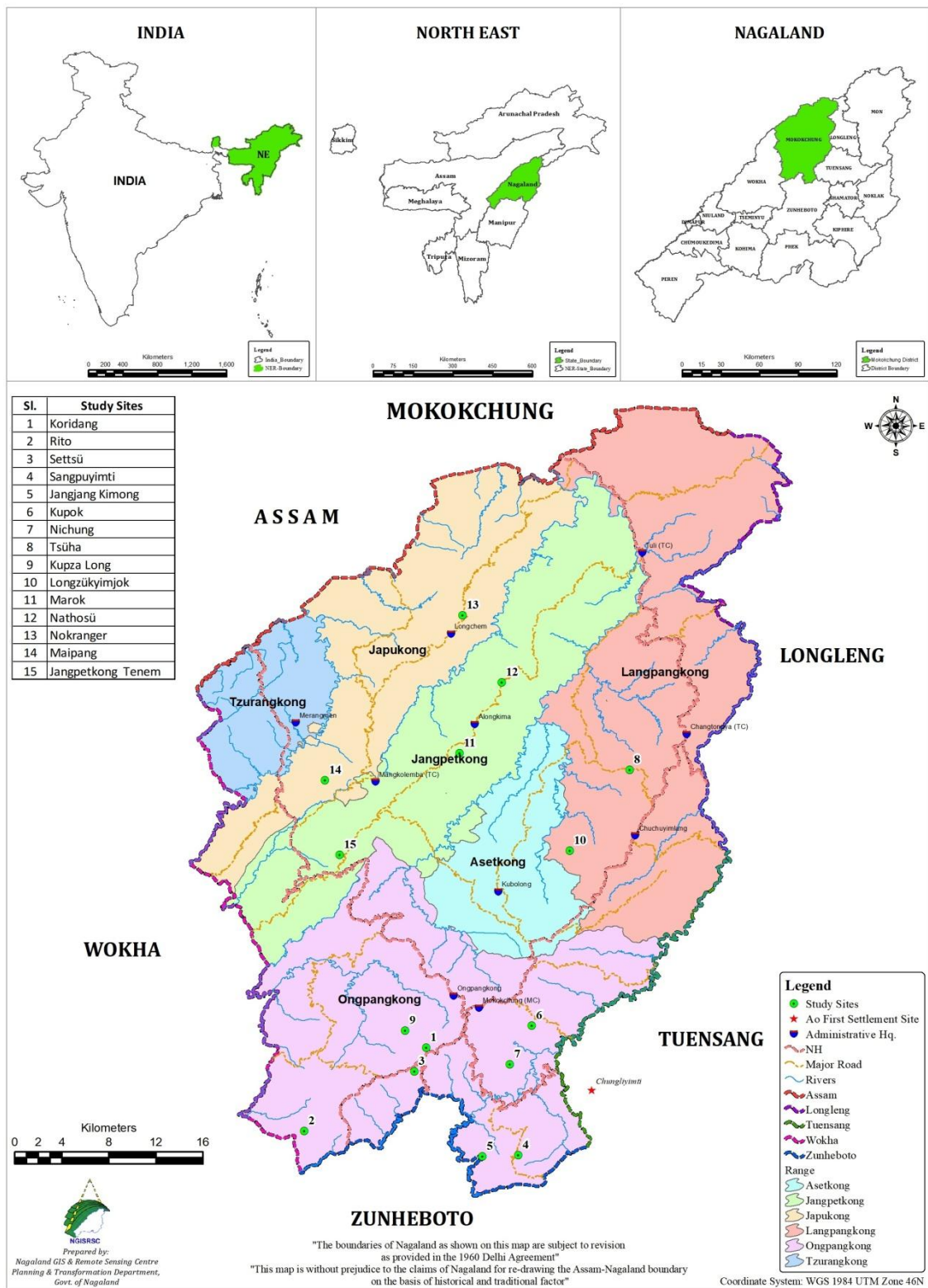


Figure 1: Locational map of study area

Chapter - 2

Physiographic Settings and Environment

2.1. Introduction

Nagaland is a state situated in the far northeastern India with Kohima as its capital and Dimapur the commercial hub of the state. Dimapur is also the only district which is connected with railway and air. The state has common boundaries with Myanmar in the East, Assam in the west, Arunachal Pradesh and portions of Assam in the North and Manipur in the South. It lies between 25°54'45" N Latitude and 93°44'30" E Longitude. Although the State has a geographical area of only 16,579 sq.kms, the land is lush with luxuriant forests, rolling mountains, enchanting valleys and swift flowing streams and rivers, making the landscape beautiful. The altitude varies from 100 metres in the plains to 1,976 metres in the hills.

The inhabitants of Nagaland are tribal having distinctive dialect and culture. The State's population is predominantly rural with about 71% of its population living in villages. The State comprises of 17 districts and each district is inhabited by one or two tribes thereby imparting to it a distinct linguistic, cultural, traditional and socio-political characteristics. The climate of the state varies from sub-tropical to tropical to temperate. The terrain is predominantly hilly covered by a richly varied floral and faunal assemblage forming it as a part of the 25 biodiversity hot spots of the world (Nagaland Annual Administrative Report 2020-21).

Mokokchung district is one the 17 districts of Nagaland and is also considered one of the oldest districts of Nagaland. The district is the cultural nerve of Ao tribe although other Naga tribes and people from other Indian states also reside in different areas of the district. Mokokchung town consists of 18 wards that serve as the district headquarters. The district also serves as the cultural center of the Ao people and is the most important urban center in Northern Nagaland both economically and politically.

According to the 2011 Census, Mokokchung district has a population of 194,622 and a sex ratio of 925 females for every 1000 males. The district enjoys a high literacy rate of 91.6%. Total working population of the district is 59%, out of which 71% are main workers and 29% are

marginal workers. Of the main workers, 52% are cultivators, 6% are agricultural labour, 2% are household worker and the rest 40% are other workers. Agriculture is the main source of livelihood in the district with a total cultivable area of 18433 Ha. Rice, Tuber, Maize, Soybean and Mustard the main crops while Tea and Orange are the main cash crops. Total number of registered Industrial units in the district is 95, while number of medium and large industrial units is 6. Changki Valley, Tsurang Valley, Lower Milak-Tuli Region, and Dikhu-Chichung Valleys are district economic area and industrial regions.

2.2. Physiography

Mokokchung is bounded by the state of Assam in the north, Tuensang District in the east, Zunheboto in the south and by Wokha District and the state of Assam in the west. Apart from the lower ranges, most portions of the districts are hilly. The district average elevation is 1500 meters, with the hills ranging in elevation between 1000 and 1500 metres, where majority of the inhabitants reside. There are multiple ranges that run almost parallel to one another and extend from northeast to south west and the hill streams flow through glens and gorges that are located in between the hills. Changki and Tuli are two noteworthy valleys that gather huge economic benefits from farming and agriculture. They are located on the western half of the district, which borders the Sibsagar district in the plains of Assam (Ghosh, 1979).

Mokokchung's physiography (Fig.2) is varied, with valleys, plains, high hilly terrain and lowlands along with major and minor rivers. In her thesis, Tiakumla (2014) had also provided a comprehensive overview of the Mokokchung district.

The physiography of the district of Mokokchung shows six distinct hill ranges. The ranges are more or less parallel to each other and run in North-East or South-West direction. The ranges are higher on the East than in the west where it has adjoined the plains of Assam. The southern portion of the district is comparatively more rugged than the Northern parts. About 60% of the total area of the district is having elevations which were formed cutting through soft and loose geological strata by heavy rainfall resulting into numerous gorges like valleys have resulted.

Within the district Doyang and the Milak Rivers with their tributaries flowing downstream have lead to the formation of fertile flood plains known as Changki valley. Tuli valley and Bhaghty valley having an average width varying from one to two miles at an average, all of these valleys are locating on the western side of the district adjoining the plains of Sibsagar district of Assam.

The river valleys of Tsurang, Milak and Dikhu on the South- Eastern sides are also more steep compared towards the North-Western sides, where the average slope in the entire region varies from 30 degree to 70 degree.

Geographically, Mokokchung district is divided into six parallel ranges on the basis of terrain, climate, soil and the type of vegetation where all the six ranges display some slight variation in all these geographical factors thereby influencing the present status of Biodiversity (Tiakumla, 2014, p.38-39).

Therein, the six (6) ranges of Mokokchung district are as follows (Fig. 3):

- a) Ongpangkong Range
- b) Asetkong Range
- c) Langpangkong Range
- d) Jangpetkong Range (formerly known as Changkikong Range)
- e) Japukong Range
- f) Tsurangkong Range

2.2.1. Ongpangkong Range

Ongpangkong range lies in the southernmost range of the district forming an irregular boundary of Ao area with other tribes of the Nagas such as- Lothas and Semas in the south and with Sangtams in the east. This particular range ‘Ongpangkong’ is named after “Ongpang” which means a “cold place”, comparatively, because of its colder upland area than the other ranges (Ghosh, 1979). The average elevation of the range is around 384 to 2041 meters above sea level. According to the Ao migration history, the Aos migrated from Chungliymti and first settled at the Ongpangkong Range, further migrating to the other ranges of the district. Therefore, Ongpangkong Range serves as an important toponym for the Aos. The administrative headquarter Mokokchung town is also located in this range which serves as an important economic, political and administrative center of the district.

According to the Census data of 2011 information, the area has a population of 83,797 people, out of which urban population is 35,913 and rural population is 47,884. Its population density is 196.3 inhabitants per sq kilometre with a total area of 427 Km² including 422.33 km² rural area and 4.50km² urban area. The Range comprises of 18 villages which is listed below:

1. Aliba
2. Chubayimkum

3. Chuchuyimpang
4. Chungtia
5. Khensa
6. Kinunger
7. Kupza
8. Longkhum
9. Longmisa
10. Longsa
11. Mangmetong
12. Mekuli
13. Moalenden
14. Mokokchung Village
15. Meyilong
16. Settsü
17. Ungma

2.2.2. Asetkong Range

Asetkong range is located in the central part of the district which runs from east to west direction and comparatively the shortest one. Milak and Menung rivers flow parallel along the range resembling it to an island. In Ao dialect, 'Aset' means 'Island' and 'Kong' means 'range', thus the range was named after the physical feature of the range located between the important rivers of the district (Ghosh, 1979). The range comprised of 9 recognised villages with a population of about 15,365 (2011 Census).

The range's rugged topography, soil condition, significant rainfall, and warm humid climate all contribute to its average elevation between 214 to 1592 meters above sea level. Asetkong range has a wide variety of life forms, particularly in Sangratsu village (1500 hectares), Longjang village (420 hectares) and Mopungchuket village (245 hectare) due to the presence of natural vegetation that is found in a relatively pristine state (Tiakumla, 2014).

The lists of villages in Asetkong Range are listed below:

1. Mopungchuket
2. Longjang
3. Sungratsu

4. Longpa
5. Kobulong
6. Chami
7. Khamimu
8. Yimchalu
9. Yisemyong

2.2.3. **Langpangkong**

The eastern most range along the Dikhu Rivers is the Langpangkong Range. The range is known as ‘Langpangkong’ (‘Langpang’- ‘Bed’; ‘Kong’-‘Range’) because it spreads out like a bed (Ghosh, 1979). The range stands at an average elevation between 130 to 1495 meters above sea level. There are 18 villages in the range, with a population size of 22,444 according to 2011 census. The section of the range which links Amguri (Assam) is where the NH 02 runs. There is an abundance of diversified flora and fauna due to the dense vegetation. The range’s lower elevation contributes to its warm climate. In this range, coal mining is widely practiced which contributes to the economy of the range but at the same time it adversely affects the rich biodiversity of its environment. Below are the lists of villages that fall under Langpangkong:

1. Longkong
2. Chakpa
3. Mongsenyimti
4. Chuchuyimlang
5. Salulemang
6. Unger
7. Akhoya
8. Changtongya
9. Yaongyimsen
10. Nukshiyim
11. Merangkong
12. Wamaken
13. Kangtsung
14. Anaki
15. Anakiyimsen

16. Anaki C
17. Kelingmen
18. Asangma

2.2.4. Jangpetkong

The Jangpetkong range comprises of nine villages and it runs parallel to the Japukong Range. The range average elevation lies between 134 to 1314 meters above sea level. It is situated between the two rivers, namely Milak in the east and Tsurang in the west. Its vast conserved forest area makes it one of Mokokchung District's major hotspots biodiversity zone. According to the 2011 census approximately 7,316 populate the range. Rich coal reserves can be found in the range's mixed deciduous and evergreen forests. However, due to local environmental concerns, coal mining is now banned after many decades of operation.

The 9 villages of the Jangpetkong range include:

1. Changki
2. Chungliyimsen
3. Khar
4. Mongchen
5. Dibuaia
6. Waromung
7. Yimchenkimong
8. Molungkimong
9. Molungyimsen

2.2.5. Japukong Range

Japukong Range stretches from north-east to south-west bordering Assam. The nomenclature Japukong was named after a certain man was found drying cooked rice in the sun probably for preparing rice beer or preserving it as food. The word 'Japu' in Mongsen dialect means 'drying rice'. Thus the village was named Japu, and the range stretched along the mountain range came to be known as 'Japukong' meaning 'Japu range' (kong = range) (Ghosh, 1979). The range stretches 70 km approximately in length, with altitudes ranging from 128 to 874 metres above mean sea level (AMSL).

Japukong Range has warm-humid subtropical type of climate which provides thick and dense forest suitable for rich flora and fauna. The villages of Japukong Range are listed below:

1. Japu
2. Longjemdang
3. Lakhuni
4. Changdang
5. Aonokpu
6. Nokpu
7. Lirmen
8. Satsukba
9. Tsüremmen
10. Akumen
11. Saringyim
12. Yajang A
13. Yajang B
14. Yajang C
15. Longchem

2.2.6. Tsürangkong Range

Tsürangkong Range consists of 9 villages and is the youngest of all the village range. It derives its name from the river Tsurang which flows along the range before draining into the Assam floodplains. The range is located on a low lying area with warm and humid summer and pleasant winter. The average elevation of the range lies between 141 to 319 meters above sea level. It borders Assam in the North, Japukong in the East and South, and Wokha district in the West. The range has rich mineral deposits, large reserve forest providing rich flora and fauna and because of its adjoining borders with Assam, animals and birds migrate to these forests to take shelter during floods.

Majority of the population of Tsurangkong Range go for agar, beetle nut and sandal wood plantation on large scale which is being exported to different parts of India and overseas. The lists of the 9 villages are as follows:

1. Chungtiayimsen
2. Watiyim
3. Medemyim
4. Moayimti

5. Longpayimsen
6. Aokum
7. Aosendenyim
8. Aosungkum
9. Merangmen

2.3. Major Drainage System

Mokokchung district is the home of a number of rivers which contribute towards the economy and region's ecosystems. There are numerous streams but listed below are some of the major rivers (Fig.4):

2.3.1. *Milak*

The Milak River is a significant watercourse in Nagaland that originates from the heart of Mokokchung town and flows down the lower ranges before joining Brahmaputra River. The river supports in agriculture, fishing, livestock and safe drinking water to the communities. During monsoon, it gives serious threat to the communities due to flooding and soil erosion, as such several govt. watershed programs, afforestation, initiatives and community-led projects are being initiated along the river banks.

2.3.2. *Dikhu*

The Dikhu River originally originates in Zunheboto Districts and flows through the Mokokchung district and joins Brahmaputra River in Assam. It plays a pivotal role in agriculture, fishing and tourism of the district. A Hydro project is in progress, which is expected to solve the current electricity shortage in the region. Golden Mahseer and Indian Major Carp are the common fish species found in this river.

2.3.3. *Tsürang*

It is an important tributary of Doyang River and rises from the west of Chungliyimsen village. It flows southward cutting through the hills of Ao territory and northern part of Lotha area, then instantaneously it bends westward and thence northward assuming a crescentic bend. It flows further northward until it leaves the hills for the plains i.e., the west of Changtang village

(Ghosh, 1979). The river plays as a lifeline for the Tsürangkong range because it provides suitable resources for agriculture and fishing for the community's sustenance.

2.3.4. *Menung*

This river originates from Mingkong forest and flows through the Asetkong range entering into the Langpangkong Range to finally join the Milak River. The river does not contribute much to the agricultural sector because it flows down the ridges; however, it helps in the maintenance of biodiversity in the region (Ghosh, 1979).

The rivers are perennial in nature but during the winter, the volume of water reduces significantly and goes almost dry. Nevertheless, these rivers play a socio-economic role to the region and at the same time they change the settlement pattern as river often attracts human settlements, fostering growth and stability. For instance, the plains of Tuli and Tsürang valleys attracted people as the rivers gave ample opportunity for agriculture and economic prosperity.

2.4. *Geology*

The Indian Plate and Eurasian Plate colliding about 70 million years ago produced the current topography of the Himalaya, which is represented by tall mountains and their corresponding valleys (Valdiya, 1998; Yin & Harrison, 2000). On the eastern region of this tectonic collision, the subduction of the Indian Plate below the Burma Microplate occurred thereby affecting the Indo-Myanmar Ranges (IMR) on its western sector. This tectonic belt extends from Andaman and Nicobar Island (southern limit of the IMR) and links Arunachal Himalaya to the north. Here, Nagaland forms the northern reach of this IMR.

The complex litho-tectonic units and geodynamics of Nagaland are typically described in terms of NE-SW linear ranges with narrow to broad intermontane valleys and high peaks. Additionally, the landscape has been sculpted by the interaction of tectonic forces, creating a diverse range of topography to host habitats that are home to a wide range of flora and fauna. These features contribute to the region's unique biodiversity and geological formations, making it a significant area for multidisciplinary research.

Geologically, Mokokchung district of Nagaland is endowed with sedimentary rocks comprising of the Disang, Barail, Surma, Tipam, Dupi Tila and Dihing group of rocks (Fig. 5.). The Disang Group consists of dark grey splintery shale in thick repetitive sequences (Mallet, 1876). Flysch deposits from the Upper Cretaceous to Eocene age make up this category (DGM,

1978). The Disang Group's lower portion is primarily argillaceous, with thin, fine-grained, flaggy sandstones interbedded with well-bedded, black, grey, and khaki-grey splintery shales. The arenaceous content gets thicker as it moves upward and progressively enters the Barail Group. The Disang Group is conformably overlain by the Barail Group's Upper Eocene-Oligocene rocks. This group has shale intercalation and is primarily arenaceous. The Barail is unconformably covered by Lower Miocene molasse layers known as the Surma Group. They have a distinctive basal conglomerate and are made up of mudstone, sandy shale, shaly sandstone, and well-bedded sandstone that alternate in sequence.

The Surma group is conformably covered by the Upper Miocene Tipam Group of rocks. This group consists of two types of rock; a lower layer consisting of massive ferruginous sandstones (Tipam Sandstone Formation) that range in color from blue grey to light grey and show minimal lithological variation. Here, shale and siltstone frequently interbed together. The upper layer contrastingly has an argillaceous sequence (Girujan Clay Formation) with buff to bluish-gray, mottled clay and sandy clay with presence of interbedded channel sandstone. The Mio-Pliocene Dupi Tila Group unconformably atop the Tipam Group. They are characterized by thick conglomerate bed with interbedded beds of sand and silt (Namsang Formation). The Dihing Group refers to the Pleistocene pebble beds that unconformably cover the Namsang Beds (Chakradhar & Gaur, 1985). Thick beds of loose Barail boulders, cobbles, and pebbles set within a matrix of clay, silt, and sand make up this group.

The recent alluviums are deposited along the narrow valleys and the broad intermontane valleys. On the NW portion of Mokokchung district, this deposit widely occupies the intermontane basins formed within NE-SW trending hill ranges.

2.5. Soil and Vegetation

The soils of Nagaland consist of four orders, 7 sub-orders, 10 great groups, 14 sub-groups and 72 soil families. The four orders of soil found in Nagaland are- (i). Alfisols- This type of soil are formed in semi- arid to humid areas, typically under a hardwood forest cover, (ii). Entisols- This type of soil are the second most abundant soil which provide cropland and habitat for millions of people worldwide, (iii). Inceptisols- Inceptisols soils are widely distributed across ecological settings which are often found in steep slopes, geomorphic surfaces and they are the resistant parent of materials. The state of Nagaland is covered by this soil which has loamy, fine clay, clay loam etc., (iv). Ultisols- This type soil are strongly, leached, acid forest soils with low

native family. They are usually associated with humid temperature and tropical areas. Thus, the variations of soil compositions of Nagaland are Inceptisols (66%), Ultisol (3.8%), Entisols (7.3%) and Alfisols (2.9%) (Humtsoe, 2013).

Mokokchung district is covered mostly by Inceptisols soil order. Three types of soil are found in the district - Alluvial soil, Forest soil, and Non- Laterite soils. Alluvial soil is found in the foothills of the district, mostly the Tuli valleys and plains along the Milak river banks. Forest soils are found in the upper ranges which have higher altitude. This type of soil is fertile and helps in the cultivation of varieties of crops. The non-laterite soil is tropical sandy or clay soils. It is mostly concentrated on the hill top and slopes (Tiakumla, 2014).

Land use and land cover (Fig.6) is crucial in understanding the human interactions with the environment. The district's unique and diverse soil and vegetation supports its wide range of agricultural practices and forest ecosystem. Forest constituted the highest area in Mokokchung District with 1435 km² (89%) followed by settlement/built-up, agriculture, water bodies, and barren land comprising of 76.51 km², 39.47 km², 39.47 km², 16.81 km² respectively (Pongen *et.al*, 2025). The high rate of rainfall is also generating a lot of soil erosion because most of the areas in the district are hilly and the rain washes down the top soil during monsoon. Therefore, several measures are initiated both by the Government and the people, such as tree plantation, farm, ponds, etc. to control soil erosions. The entire district also has access to sub-tropical, montane, and tropical evergreen forests. Thus, trees such as hollock, bhelu, *Pinus Khasia*, *Schima*, *Castanopsis*, cane, shrubs, and bamboo species are commonly found in the district.

2.6. Climate

The climate of Nagaland has a wet climate with high humidity levels. Annual rainfall varies from 175 cm to 250 cm with maximum rainfall occurring during months of June to September. Summer temperature varies from 16°C to 31°C, while the winter temperature varies from 4°C to 24°C. Strong North West winds blow through the state during the months of February and March.

Mokokchung has a humid subtropical, dry winter climate (Classification: Cwa). The district's yearly temperature is 25.69°C (78.24°F) and it is -0.28% lower than India's averages. Mokokchung typically receives about 320.71 millimeters (12.63 inches) of precipitation and has 234.92 rainy days (64.36% of the time) annually. Mokokchung is under the influence of the monsoon type of climate (<https://weatherandclimate.com/india/nagaland/mokokchung>).

The district receives rainfall ranging from 1600 mm to 2500 mm with the amount of precipitation varying greatly from year to year. The district receives heavy rainfall between May to August which gradually recedes from September. The dry seasons normally starts from December which continuous till the month of April. The district also experiences strong winds from February to March, during this season the wind generally blows from the South-West and at times the velocity rises up to 100 km/hr, the wind dies out gradually during the month of April. The district summer temperature ranges from 28⁰ celsius to 30⁰ celsius and winter temperature ranges 10⁰ to 15⁰ Celsius. Due to the difference of elevation of the region the lower ranges experiences warmer and humid temperature during the summer season. The district also experience the coldest months from December till February (Tiakumla, 2014). The frost fall in also common during the winter especially in the higher altitude of the region and its fall is recorded at Longkhum village of Ongpangkong range which is also the village situated at the highest altitude of the district (Tiakumla, 2014).

The district overall enjoys a pleasant and moderate climate throughout the year and this favourable condition in the region has made the region the home for various animal and plant species.

2.7. Ecological setting

Despite variations in elevation, the biological environment of Mokokchung district's three upper range is essentially the same. The highest elevation is found in the Ongpangkong range, where Longkhum, one of the first Ao villages stands at 846 meters above sea level. Ongpangkong is a vast region that even shares its boundary with other Naga tribes such as Sema, Lotha and Eastern Naga tribes. Menung and Milak rivers that runs parallel on opposite sides, contributes to the Asetkong range's abundant greenery despite having smaller sized and fewer villages. The Langpangkong range on the other hand, runs along the Dikhu River, which provides a natural boundary with neighboring tribes contributing to the region's economy and biodiversity.

Warm summers and chilly winters characterize typically a pleasant climate. However, the Langpangkong range with its low altitude experiences harsher summer temperatures, whereas the Ongpangkong and Asetkong ranges have year-round pleasant weather. Numerous animals and birds find refuge in the area's deciduous and subtropical forests. The common animal species in the area are the Himalayan black bear, tiger, slot, mongoose, wolf, fox,

elephant, barking deer, wild cat, and wild pig. Among the local birds are fowls, pigeons, bulbuls, pheasants, barbets, woodpeckers, cuckoos, and others (Tiakumla, 2014).

Rainfall in the region ranges from 1600 mm to 2500 mm annually. Thus, numerous seasonal rivers are created by this copious amount of rainfall, and the area's vegetation grows quickly. These ranges are traversed by three significant rivers: Menung, Milak, and Dikhu and these rivers are significant to the region's agriculture, and to the abundance of flora and fauna.

The ecology of the lower ranges is also diverse, which inevitably contributes to the economy of the region. The lower altitude of the region gives a warmer climate with an abundance of rich flora and fauna. Also, the fertility of the soils contributes to extensive agriculture practices in the region with number of crops cultivated throughout the year. Tsürangkong range especially has a thick and large forest reserve that hosts a number of animals. In summer, numerous animals take shelter in this range from the neighboring state of Assam during floods at Kaziranga National Park (Tiakumla, 2014).

Rivers such as Milak, Tsürong, Tsürang, Tsüyong and a number of seasonal rivers flowing across these ranges adds a harmonious balance in the ecology. Animals such as leopards, elephants, barking deer, wild cats, and flying squirrels are some common animals found in the region. Birds like fowl, pigeons, ducks, barbet, and migratory birds like Amur falcon, etc., are very widely found in the region.

The area is rich in mineral deposits with green, lush forest. However, the coal mining in the region for decades has had a huge impact on the ecology. The forests have drastically declined, and rivers are polluted. Therefore, the coal mining has also been made illegal in the region in order to control the degradation of the region's eco system. So, the people have taken up conservation policy through farming on betel nut, agarwood, sandalwood, and other plantation policies.

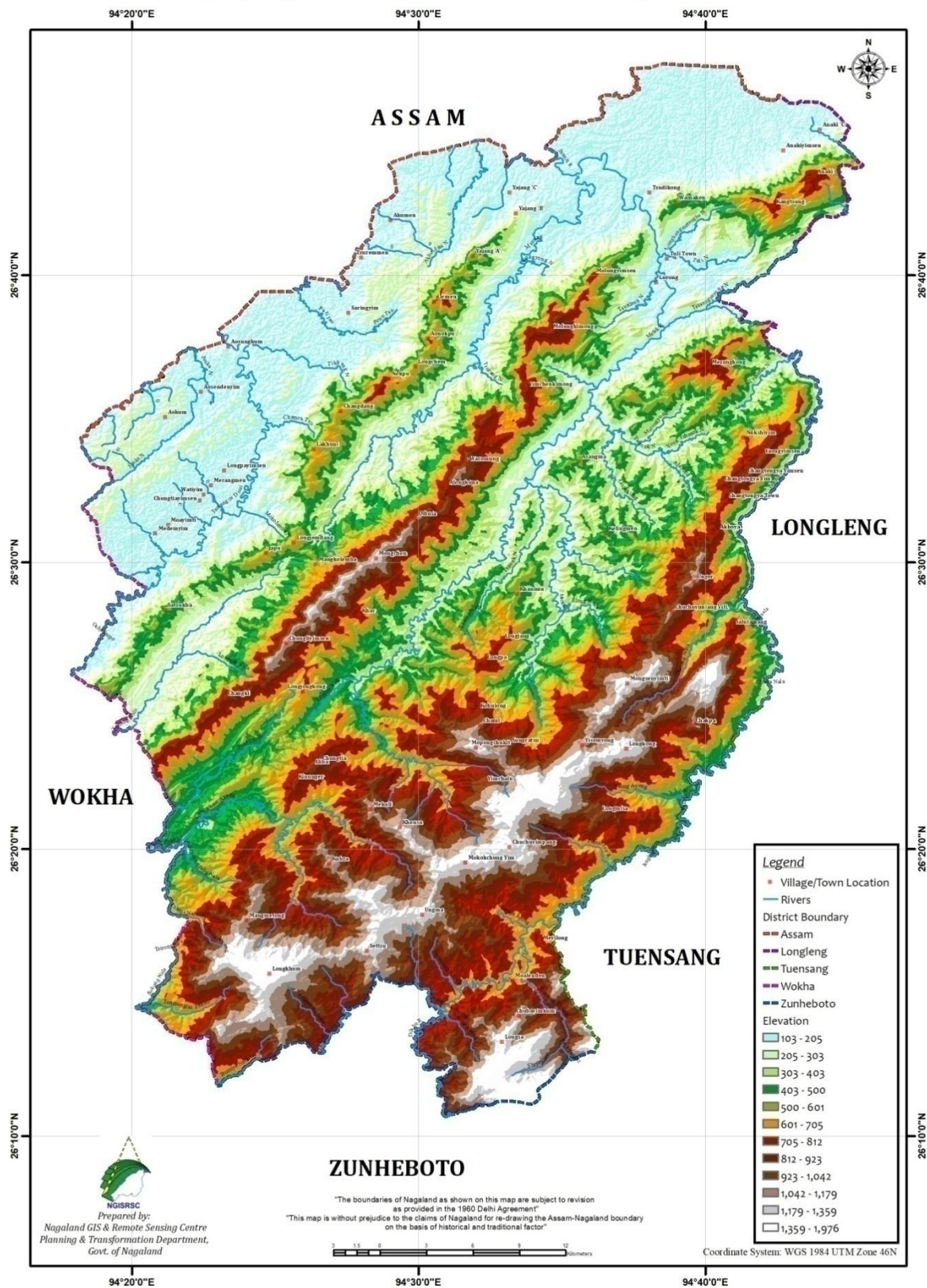


Figure. 2. Physiographic map of Mokokchung District, Nagaland

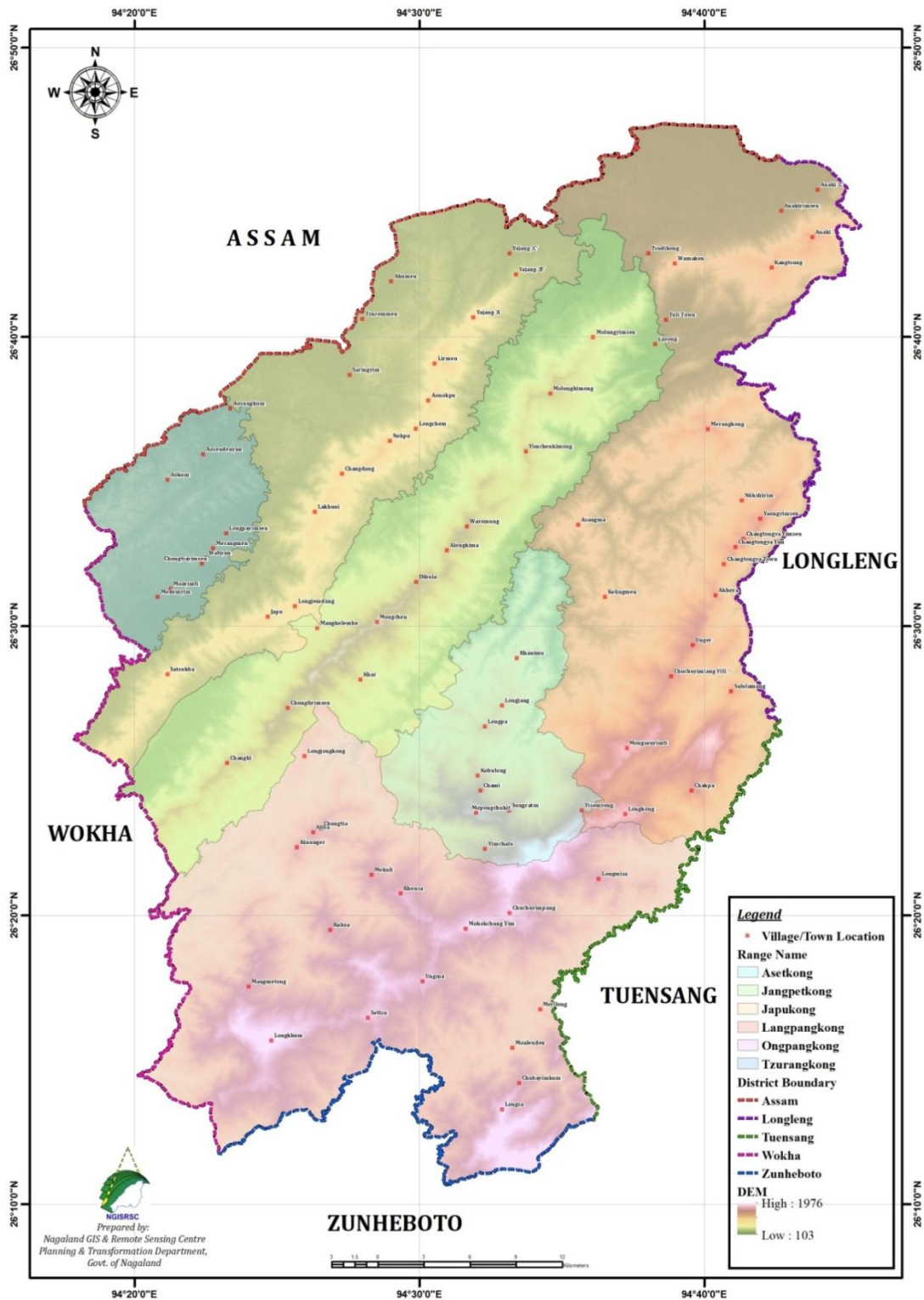


Figure. 3. Distribution map of six prominent ranges along with elevation differences, Mokokchung District, Nagaland

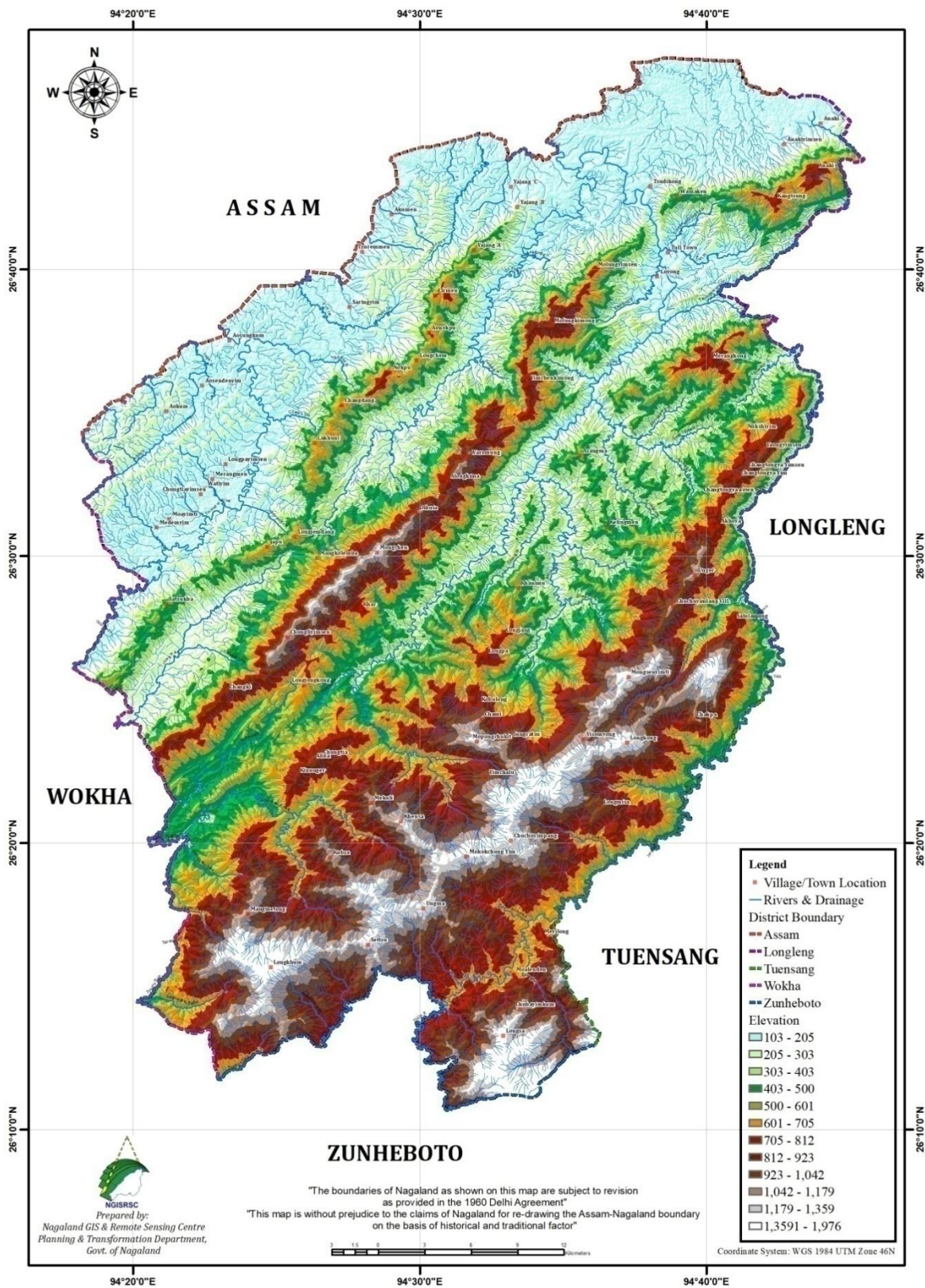


Figure 4. Drainage map and elevation of Mokokchung District, Nagaland

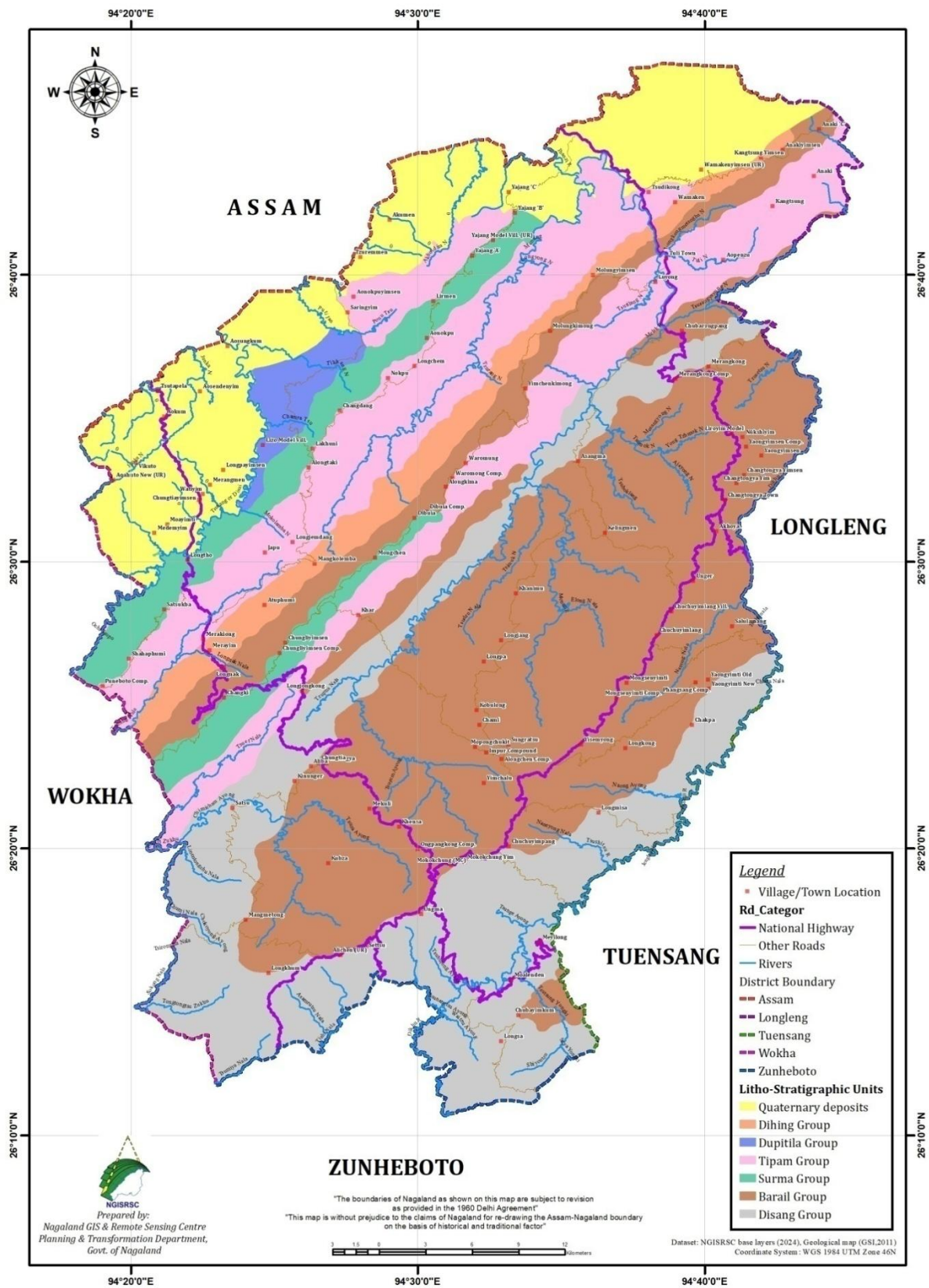


Figure 5: Geological map of Mokokchung District, Nagaland

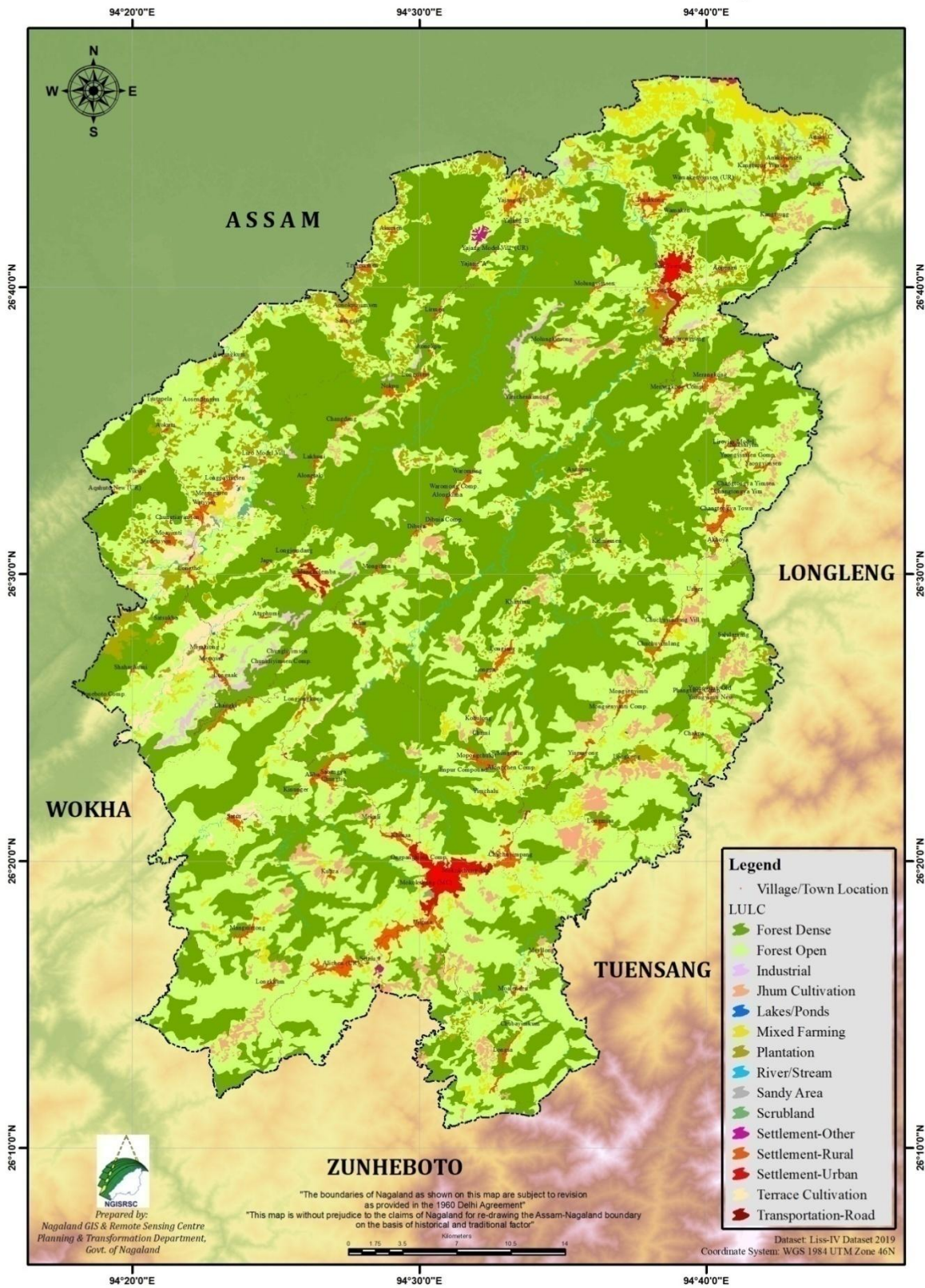


Figure 6: Land Use and Land Cover map of Mokokchung District, Nagaland

CHAPTER - 3

Oral Tradition of Ao Naga Ancestral Sites

3.1 Introduction

One common feature among all Naga communities is the use of orality to transmit historical knowledge across generations, much like any other tribal communities in the northeastern region of India. As Aier (2014) states, it was only in the 19th century, with the annexation of the region under colonial rule that the local languages of the Nagas began to be transcribed using the Roman script (Aier, 2014, p.227). As discussed in the preceding chapter, several sites were abandoned during migration but the oral narratives of these sites are well preserved in the memories of individuals because it holds an important place in their origination, migration, and structure of their social and ritual practices of their village history (Aier, 2018).

The chronology of the Nagas' migration to their present location remains unestablished. This holds true for the Aos as well, as no oral traditions trace their history beyond Chungliymti. In fact, the Aos have refrained from narrating or researching events predating their migration to Chungliymti. Attempts by individuals to explore this earlier history have sometimes been viewed as efforts to undermine the Ao tradition of Longtrok. One such incident was between Lt. Rev. Ajanto Aonok and the 'Defenders of the Longtrok tradition':

The Ao Students' Conference in its General Convention at Molungyimsen village from 30 Dec, 1938 to 1st January, 1939 deliberated on the origin of the Ao tribe. It was opined that the Ao history could not start at the tradition of their first ancestors coming out of a stone at Longtrok but a broader research was necessary. They constituted a Research Committee to conduct a detail study and to publish their findings and suggestions. Late Rev. Ajanto Aonok was one of the members. He sincerely did some research work and published his paper titled, "KECHIBA LUNGTEROK?" meaning, 'Why Lungterok?' in the 1939 March issue of AO MILEN.

The article evoked angry reaction from the defenders of the Longtrok tradition, particularly some villages of the Ongpangkong Range. They summoned Researcher Ajanto Aonok to the Dobashe's Court at Mokokchung on 5-6 April, 1939.... Ajanto stood alone in trial. After that they imposed a heavy fine of Rs.50/- on him for trying to destroy Ao tradition of Longtrok (Aonok 2003, p.33-34).

According to the Ao oral tradition everything began at Chungliymti and so, 'Longtrok' or 'Six stones' is regarded as a symbolic reference to their origin. This rich oral tradition associated with the Ao origin and the development of the social, cultural and political system of the Ao's was

later passed on from generation to generation. It was only after the colonial occupation of the Ao area that the writing and documentation of the Ao socio-cultural life began from early 20th century. In this context, J.P Mills, *The Ao Nagas* (1926) was a notable pioneering work on the Ao Nagas. Purtongzuk (2002), Imchen (1990), Ao (1999), and Aier (2018) are few indigenous writers who documented the Ao's oral tradition and other aspects of their social, cultural and traditional village polity. The present study therefore examines the Ao migration and ancestral sites post-Chungliyiimti dispersal utilizing the oral tradition and archaeological sources.

The oral tradition of Ao migration after their origin from Longtrok and further dispersal from Chungliyiimti commences from the Upper Ranges and further proceeds down to the Lower Ranges as a result of various factors triggering these early migrations. Several ancestral sites were identified during field work in the Ongpangkong, Asetkong, Langpangkong, Jangpetkong, Japukong and Tsürangkong ranges. What emerged from the oral tradition of the ancestral sites was the idea that these ancestral sites not only held their cultural and migration ties but were also regarded as significant places where several groups dispersed from these sites and have now established separate villages. Interestingly, some of such ancestral sites continue to be inhabited till present times, while some are abandoned. However, farming and jhum cultivation continue in these ancestral lands thus retaining the memories of their ancestors that once inhabited the land. The present chapter thus examines the memories associated with such ancestral sites, their migration, and the factors responsible for the site abandonment, and the historical dynamics associated with their dispersal and settlement in new territories.

3.2. Ongpangkong, Langpangkong and Asetkong Range (Fig. 7)

3.2.1. *Koridang and Aonglenden Ancestral Sites*

Koridang¹, located at Lat. 26°17.576' N; Long. 95°28.758'E, is currently part of Ungma village and lies further north of Mokokchung town. At an elevation of 1371 meters, it falls within the Ongpangkong range, where NH 02 runs. Koridang is the second settlement of the Aos since their migration from Chungliyiimti. Koridang is an important ancestral site because there was a major dispersal of the Aos at this site and many Ao villages point to Koridang as their place of settlement and migration. (Plate 1)

Following their migration from Chungliyiimti, the Ao originally moved to Aonglenden (Plate 2); however, at Aonglenden, two significant incidents took place. First, on a single night, ten women gave birth to ten sons so they called the place 'Soyim' signifying the birth of ten sons as blessings. Secondly, not long before their settlement their chief (Ong) Ngarensang was killed

by a tiger. The Aos chose to relocate from Aonglenden further westward because they believed that such unnatural deaths were a bad omen to the village. However, while they were still at Aonglenden, they moved to Koridang to establish a new settlement, a location they regarded as “Anüdokkong” (‘the hill where the sun rays are first seen’). While at Koridang, they were not short of inconveniences - water was scarce in Koridang since it was perched on a hill; therefore, residents used to collect them in bamboo tubes. The bamboo tubes were carried in bamboo baskets with a plant called "kor," fastened to their bamboo basket, which they carried on their heads to support the load. By coincidence, the "kor" broke under the weight of the load, thus the area was subsequently named "Koridang" (also called Kortang).

Over time, the population grew significantly, but due to scarcity of water, people gradually began to abandon the area and migrate to different directions in search of better places for settlement. It was Kupza that the first group from Koridang migrated to and established a village, followed by Settsü and Longkhum respectively. This was followed by other groups who dispersed to different directions. What remained of the population chose to relocate to their first site, ‘Aonglenden’ following the mass migration from Koridang, thus christening it as "Ungma" (‘Ung’ meaning ‘chief’ and ‘ma’ meaning ‘Lost’), meaning "the place where they lost their chief". According to the elders, there was further dispersal at Ungma, and several groups migrated to various directions in search of better settlement and established their villages of their own. The current Ungma village was established by a group that chose to stay behind.

Considering the third Ao settlement since the beginning of their migration from Chungliyimti, Koridang still serves as a significant settlement for the Aos. However, except for the oral tradition that has been passed down through the generations and gathering of oral sources by a few interested indigenous authors and other accounts in government records, no archeological excavation was conducted at the site. Therefore, a test excavation was conducted on the site as part of the present study. Koridang was under human habitation at the time when this study was initiated. A major portion of the site was under the jurisdiction of Clark Theological College, where buildings were already constructed. Few artifacts salvaged during the construction of the college buildings were preserved in the college museum. However, most artifacts were lost except for some potsherds and a sharpening stone that were in the personal possession of the locals. A field survey was conducted behind the college where the plots were privately owned. While the area was also partially disturbed due to extensive farming and kitchen gardening, house platforms and ancient footpaths are observed. A trial excavation was

conducted after a careful survey of the site to examine the nature of the site deposit, its associated archaeological assemblage, and to establish the date for this site.

3.2.2 *Rito*

About 8 kilometers from Longkhum village is located the ancestral site Rito. There is no precise period for the site's occupation or abandonment of this village, based on oral accounts. The location is on a low hill facing the Layasupo hill and the Doyang dam, respectively. Presently, the site falls within the land jurisdiction of Longkhum village. The locals of Longkhum frequently practice slash-and-burn agriculture as part of their jhum cultivation cycle. During this process, farmers often uncover artifacts and remnants of house platforms, providing clear evidence of past settlements. Found within the proximity of the site are a cluster of particular river pebbles known as *Rito Long* (meaning 'Rito Stone') believed to possess some magical properties since the number of stones appears to increase or decrease depending on the person who sees it. The Longkhum villagers are of the view that some spirits continue to dwell at the Rito site and the shifting of *Rito Long* is the handy work of those spirits. According to oral traditions, the people of Rito and Longkhum co-existed since there is a mention of the Rito inhabitants in the oral tradition of Longkhum village.

As it occurred, the Rito² people had years of prosperity and wealth, which led to timeless celebrations and festivities. They were also fortunate to have capable leaders who could handle a variety of duties and maintain the seamless operation of the village government. Unfortunately, the leaders were so overcome by the blessings that they were oblivious to the time ahead and instead concentrated on merry making. As a result, the village began to deteriorate as its residents' riches were accumulated, and their people were forced to pay the price. As a result, Rito was deserted during Aremjang's leadership, and residents began to migrate elsewhere.

Additionally, the leaders distributed boiled seeds to the people before the distribution of seeds for sowing which led to poor harvests and increased hardship for the common people. Their unrestrained revelry even extended past the planting season, which caused hunger and famine in the village. Aremjang's daughter, Yasanaro, died in the middle of the village's unrest, just when the residents were searching for a way out. Taking advantage of the situation, the entire community left as they were grieving for the daughter. Seeing the villagers leaving the village, Aremchang with no other option carried his daughter's corpse and followed his villagers. Thus, Rito was permanently abandoned and the people dispersed to different directions and assimilated themselves in different villages. A prior archaeological investigation was carried out

at the location, highlighting the potential for archaeological excavation (Walling, 2008). To examine the cultural assemblage and assess the dating for the site, a test excavation was conducted at the Rito site as part of the present study.

3.2.3 *Settsü*

Settsü is another important ancestral site of the Aos. The site holds an important place in the oral traditions of the Aos because of two reasons. Firstly, it is one of the earliest villages that the Aos occupied after their dispersal from Koridang. Secondly, it is also one of the sites where there was a major dispersal of the populations. The Settsü settlers are today settled in numerous Ao villages with majority of them at Ungma while others spread to the lower ranges (Plate 3).

According to oral tradition³, the Aos after migrating from Chungliyimti, first settled at Aonglenden before relocating to Koridang. At Koridang, there was a significant dispersal, with Kupza migrating first, followed by Settsü and Longkhum respectively. Subsequently, the remaining group progressively moved in different directions in pursuit of better land and established their respective settlements. When the ‘Settsü’ group initially arrived at Settsü, there were 700 households inclusive of both the Mongsen and Chungli group with the village area divided into 6 khels because of its large size. According to oral tradition, Settsü was a thriving village filled with great warriors, along with affluent and intelligent individuals. However, although the village was endowed with everything, there were uncontrollable disputes, rivalries, and envy among the residents, which eventually made it hard to live any longer.

Residents eventually had to leave the village because they were unable to stay any longer due to frequent misunderstandings that developed over time. Thus, the Mongka⁴ group was the first to depart from Settsü; they migrated eastward and settled permanently in Longsa village under Mokokchung District. Most population returned to Ungma and Settsü was completely abandoned. Oral tradition holds that their stay in the region lasted for approximately three hundred years. It is interesting to note that after a few years, some 60 households returned and reoccupied the site for a second time; however, they encountered some issues with the nearby Sumi tribe which proved to be a blunder. Following Longkhum and Ungma's counsel, they decided to leave the area once more and returned to Ungma, since they were too few in number to use force and manpower to oppose the powerful Sumi tribe. Also, they were settled far away from other Ao villages which made them vulnerable thus making them vulnerable to the Sumis to attack them as they were deprived of the support of the Aos. Since then, the once flourishing and thriving village was abandoned and never occupied.

Following the British occupation of the Ao region, the Settsü village was reoccupied for the third time in 1886⁵. To facilitate travel in the Ao regions, the British colonial officer enquired about any village between Longkhum and Ungma village. Upon hearing that Settsü was once inhabited, they instructed the locals to permit the settlers of Settsü villagers to reoccupy the site because of the great distance between Longkhum and Ungma. It was a time when there were no motorable roads, so the colonial officials were often carried by the locals in their bamboo baskets during their routine inspection of their administrative areas, thus re-establishing Settsü was considered important. As a result, 40 households returned from Ungma village; however, some of them returned back to Ungma, reducing the number of families to just 15. The current Settsü village was founded by these 15 families, and today there are more than 100 families living there.

3.2.4 *Sangpuyimti*

Sangpuyimti is the old settlement of the Sangpu Khel of Longsa village of Mokokchung District. It is situated two kilometers away from Longsa village (Plate 4). At present, the area is an important tourist spot in the village. While most of the settlement area is under cultivation, the presence of a particular stone called ‘Koralong’ (Plate 5) makes the area significant. A myth is associated with the stone. According to the myth, the stone used to crow ‘Kora long oooooo’ signaling the Sangpu settlers of the dangers ahead of them by keeping them safe from several adversities. The site was visited in 2020, conducted reconnaissance around the site, and conducted two trail excavations. Interviews were thereafter conducted with the village elders to better understand the oral tradition of the site.

The oral traditions⁶ informs us that, after disagreements arose within the community at Chungliyimti, the ‘Sangpu group’ of Ao left Chungliyimti before the Aos' mass migration. Two clans - Lemtor and Jamir clan members reached a decision to migrate and leave their ancestral village and further take the southern route in search of better land and to establish their own village. In course of their migration, out of exhaustion, Merang's (Jamir's sub-clan) mithun (*Bos frontalis*) refused to walk halfway through their journey, thus they had to stay the night and resume their trek the next day. The Sangpu people still refer to the location as “Jongmongshisa Kong” (meaning ‘the spot where Mithun became enraged’). They learned the next day that a group had infiltrated their intended hill before sunrise and taken control of the place after noticing smoke arising from their intended hilltop. They thereafter changed course and chose another hill, occupied it, and called it "Sangpuyimti". According to oral sources, when the village

was first founded, there were about 840 households. However, following threats from their neighboring tribe, the displaced group who occupied the targeted hill later returned, bringing the total number of Sangpuyimti households to 900 (see Chubatoshi, 2022).

The abandonment of Sangpuyimti was not due to war, natural calamities or increase in population; rather it was an incident the occupants encountered with a spirit. After they settled at Sangpuyimti, their children kept disappearing once the villagers left for their fields. However, one day a witty mother once wrapped a thread around her infant's waist before heading out to her field in an attempt to unravel the mystery behind. When she returned, her baby was gone, so she followed the thread she had tied on her infant and discovered that it led to their local spring (Plate 6). Despite the fact that the spring was their only source of drinking water, the villagers chose to curse the spirit of the spring. In order to curse the demon, the entire village gathered ashes from each home, mixed them with chilies, and poured them into the spring. According to the oral tradition, the spirit fled from the pond. However, because the people continued to further utilize the water from this curse pond, the people of Sangpuyimti experienced a major epidemic outbreak following the occurrence. The residents were thereafter compelled to leave the village due to the gravity of the situation. As a result, they moved westward and made Songtsen (now in Zunheboto district) their new home. Due to their antagonistic relations with their neighboring tribes, the Sangpu people were unable to remain for long in their newly founded settlement. As a result, they were compelled to leave their village once more, which caused the population to disperse even further. While the rest left in pursuit of better land, a group arrived in what is now Longsa village (Mokokchung district) and established a distinct *khel* of their own. While few Ao villages comprise of the Sangpu group, and some of them make their way to Nagaland's eastern regions. According to oral traditions, Sangpuyimti was inhabited for approximately 200 years and even had its own distinct language, though the Sangpu group no longer speaks it (Chubatoshi, 2022). References to the distinct linguistic groups of the Aos can be found in Mills' (1926), where he identifies the Ao group as speakers of Chongli, Mongsen, Changki, and Sangpu. Mills also notes that 'Khel-1' of Longsa once spoke Sangpu, though the language is now practically extinct (Mills, 1926, p. 2).

3.2.5 *Jangjang Kimong*

According to the oral traditions⁷ of Ao migration, after the Aos initial migration from Chungliyimti, a major exodus took place at Koridang. Primary causes for their general dispersal were either due to lack of water, population growth, the desire for fertile land, or, in certain rare

instances, the inability to defend their village from invading enemies from nearby villages or tribes due to headhunting practices that prevailed at that point of time.

The mass migration from Koridang also included the Jangjang group. According to oral sources, the group moved from Chungliyimti via Dikhu, settled at Aonglenden, and then moved to Koridang. The Jangjang group traveled southeast from Koridang and settled in what is now known as the “Jangjang Kimong” or “Jangjang settlement” (Plate 7), which is currently under the Longsa village jurisdiction of Mokokchung district. Although there are conflicting oral narratives regarding the duration of their occupation, it is possible that they settled for about 60 years. Additionally, it is unclear why they left the site, although one possible explanation is that their small population may have placed them in a vulnerable position.

In former times, headhunting was also very common, and their neighbors, particularly the Sumis and Eastern Naga tribes, were hostile and continuously threatened to attack their village. As a result, they left Jangjang Kimong and joined the other Ao group at Chuchuyimpang. They then founded a new settlement which is today known as Longmisa village in Mokokchung district and formed a separate *khel* known as ‘Jangjang Khel’.

3.2.6 **Kupok**

Kupok was a significant ancestral site location for the Ao Mongsen clan and is now within the jurisdiction of Mokokchung village. The Kupok site was previously excavated and dated to 700±30 BP (Beta-409503) or cal AD 1267-1388 (Calibration using OxCal 4.4 (Jamir, 2021, p.182; on details of excavation, also see Jamir et al., 2014a). As the oral tradition goes, at Chungliyimti, both the Chungli and Mongsen groups lived together.

According to oral tradition of Chungliyimti⁸, it was never easy to survive and thrive in the harsh hills, so crops and animals were defended at all costs, even if it meant battling tigers and swarms of roving wild boars. A wall of warriors would encircle the area where the beasts were believed to be, gradually tightening the circle to trap the animals and kill them at close range. By defending the patch assigned to their clan, each man represented his lineage. If a beast managed to break free from the circle, the group responsible for that section would face the village’s collective anger and suffer significant humiliation. This type of hunting is known as “Keyi/Pogzü sapang” (‘tiger/boar trapping and killing’).

During one of these hunts, the Chungli and Mongsen groups would share the hunting area, and the two groups would be further separated into *khels* and clans. The Mongsen group killed the tiger while the Chungli group was resting and eating during a group tiger hunt that was

planned while they were in Chungliyihti. This led to a serious miscommunication between the two groups, which finally prompted them to split off. The Mongsen group moved to Kupok as a result of this incident. These local sources seem to contradict J.P. Mills' (1926) ethnographic accounts of the Aos who writes that the Mongsen came out of the earth first and settled at Kupok.

After the Mongsen group left Chungliyihti, many women and children were beheaded during this period. Initially, the residents of Chungliyihti believed that these attacks were carried out by other tribes. For a long time, there was no clue regarding the missing heads until one day, Shiluti, a decorated warrior from Chungliyihti, discovered the truth. He saw the people of Kupok-who had once lived among them-chanting and dancing in victory over the severed heads of the Chungliyihti. At first, Shiluti kept this discovery all to himself. However, the people of Chungliyihti, suspecting that he would eventually uncover the truth due to his warrior instincts, had been keeping a close watch on him.

The spies overheard Shiluti recounting his discovery to his wife and reported it to the village elders. Eventually, he was summoned by the elders to share what he had seen. Aware of the gravity of the situation, Shiluti was prepared to defend himself if the villagers turned against him, as concealing information from the community was considered a serious offense that could lead to severe consequences. However, instead of harming him for his initial silence, the villagers allowed him to speak. As demanded by the elders, Shiluti provided a detailed account of what he had witnessed at Kupok.

After confirming that the people of Kupok were responsible for the massacres, the people of Chungliyihti resolved to take revenge by launching an attack on Kupok. To prepare for the assault, Shiluti proposed a test of courage - he had his pig slaughtered and challenged each man to bite off the roasting meat straight from the blazing fire. This challenge was designed to assess the bravery and resilience of the warriors. Only a few courageous and powerful men who passed the test were selected to join him in the attack. Leading a combined force, Shiluti launched a fierce assault on Kupok, killing as many as they could and capturing the remaining survivors, whom they brought back to Chungliyihti. The attack was so intense that the people of Kupok, unable to withstand the onslaught, were ultimately forced to abandon their settlement permanently.

3.2.7 *Nichung Site*

Since Nichung (Plate 8) appears to have been inhabited by two groups at different times, it is another significant Aos ancestral site. The oral tradition of the first group describes Nichung inhabited by a sizable community with a large population. However, the oral narratives concerning their migration to Nichung and their further migration from Nichung are observed to be vague. The only available oral source gathered suggest that the first settlers who settled at Nichung were the Changki group who abandoned the site due to natural calamities that struck their settlement, thus forcing them to abandon the village and migrate to some other settlements⁹.

There are also additional oral historical accounts that talks about Nichung being temporarily occupied by another group after its desertion by the first group. On this, the oral account goes on to say that following an incident in Ungma village, a few clans from the village reoccupied Nichung. It is said that few Kupza warriors once hunted down the heads of certain Ungma clan members. However, as Kupza was their neighboring village, the elders of Ungma village ordered the aggrieved clans not to seek revenge while they were at Ungma. Thus, these clans temporarily left Ungma and occupied Nichung until they avenged the death of their clansmen from the Kupza warriors. Once avenged, they returned to Ungma village¹⁰.

According to oral tradition, Nichung was an extensive settlement area covering a huge territory. At present the ancestral site is under the Ungma village land and while cultivating their jhum fields, the residents of Ungma still continue to recover artifacts from the site. In order to determine the nature of the site material culture assemblage and to recover necessary samples for the site dating, a trial excavation was carried out in 2022.

3.2.8 *Tsüha*

Tsüha is another ancestral site situated in Langpangkong range. This settlement was previously occupied by Kelingmen village. At present, the site is under Unger village. The settlement is situated a few kilometers away from the village and with due permission from the village council, survey was initiated and a trial excavation was conducted.

According to oral tradition¹¹, the Tsüha group migrated from Jami village (Asetkong Range) and founded the “Tsüha” settlement during the Rionsanger era¹². But before settling in Jami village, this group migrated from Koridang to Aodang and further towards the Lotha areas at Sangsodang, which is now occupied by Sumi tribe and they named it "Sastami". However, they were unable to withstand the powerful Lothas, so they were thereafter forced to leave the area and relocate to Jami village, which is located in the Asetkong range. Oral sources state that

this group arrived at the “Tsüha” at night, and the entire group was confused by a roaring noise that they heard all night long. Curious, they moved out the following day to see what was causing the noise they had been hearing the night before. To their surprise, they discovered that it was simply the sound of a river rushing over a massive block of rock. The term "Tsüha" (tsü-‘water’, ha-‘to produce noise’) refers to "the sound of the water" emanating from the nearby river. Oral sources narrate that they lived there for three hundred years until leaving to create a new settlement and named it ‘Kelingmen’ at the end of the Mejensanger era. Five rivers-Tsü, Milak, Meneng, Tsümok, and Tsüneng- surrounded Tsüha, which was located in a quite desolate area.

When the village was first founded, there were about 9,000 people. The village was located at a higher elevation, and all of the villagers' farming was done in the lower distant regions. The distance they had to travel daily to their fields and back home was a major annoyance because, at the time, agriculture was the only occupation. Thus, for economic reasons, the inhabitants decided to relocate to the lower lands and abandon Tsüha. According to the village oral traditions, they settled at Tsüha around 1527 A.D and settled at Kelingmen, their new settlement, around 1617 A.D. It was only at Kilingmen that some people migrated to the lower regions and established new villages, Asangma is one such village.

3.2.9 *Kupza long (Koki Menden)*

Kupza long (also called as Koki menden) is an ancestral site of present Kupza village. The site is located between Koridang and Kupza village which falls under the village jurisdiction of Ungma village. The nomenclature 'Kupza' came into being as a result of the migration of 'Longti mepu', the first cluster of bi-lingual groups 'Chungli and Mongsen' to leave Koridang. Nine hundred (900) families are recounted to have left Koridang and the group was later divided into three *khels*. The first group settled at a spot called ‘Kupza long’ which was later abandoned because of its close vicinage with Koridang which led to a shortage of drinking water. Oral traditions¹³ accounts that they lived there for two hundred (200) years. The other two groups moved further down and settled where the present Kupza village is located. They were later joined by the Kupza long group.

Like many folktales of the Nagas, stones are ever involved in Ao history as a mystical object and believed to carry a symbolic image of 'timelessness and immortality'. As such, the nomenclature 'Kupza Long' was given by the people of Ungma village referring to a particular stone at the site where the Kupza villagers worshipped. The oral narrative goes on to narrate that

at the ancestral Koki menden site, a Seer by the name Jatiba used to walk past a big stone daily on his way to the field. One day he tripped on the stone and fell. Aggravated, he decided to dig the stone and dug the whole day but found out to his utter disappointment that it was impossible. That night, a spirit visited him to let him know it was futile to dig the stone further as its legs stretched as far as ‘Jangalong’ (mystical stone) at Alongkima and the other at ‘Kipo long’(mystical stone). The spirit told him to worship the stone. So he decided to worship it instead of digging further.

At present, there are around 140 households at Kupza village and as per Census 2011, Kupza village has a total population of 912 people, with a male population of 471 and 441 females. The village is located in Ongpangkong circle of Mokokchung district, Nagaland. It is situated 16 km away from the district headquarters, Mokokchung.

3.3. Jangpetkong, Japukong and Tsürangkong Range (Fig. 8)

3.3.1. *Molunger: Migration routes and Associated Sites*

During the mass dispersal from Chungliymti, the Aos took several migration routes. The Molunger group took a separate migration route instead of the popular Chungliymti-Aonglenden-Koridang migration route. They proceeded to the south-west direction from Chungliymti but later abandoned the site and migrated back to the present area after the mass migration of the Aos from Chugliymti took place. The oral traditions mention Molunger initiating a long migration and in course of their migration, abandoning several sites due to several reasons. The following is an excerpt of the migration of Molunger and their ancestral sites from the volume *Molunger Otsu Hongsu Ka* (2007)¹⁴:

During the third generation, after the origin of the Aos from Longtrok (six stones) at Chungliymti, the Molunger group comprising of Molunglongkum, Nokdir, Ajumer (Longkhum Clan) and Sanglir (Jamir clan) migrated from Chungliymti to Tsütsüngpangkong. They were so called ‘Molunger’ because they left the area on mutual understanding and willingly without any grudges or issues, thus the people of Chungliymti called them ‘Molunger’ meaning ‘people who went away whole heartedly’. They settled at Tsütsüngpangkong for two (2) era/*Putu*, where Madangliba of Ajumer clan was the richest and respectable man. They abandoned the site in search of new settlements and migrated to Mongoya (an area few kilometres away from Mokokchung town). However, their new settlement was unsuitable for human settlement despite the strategic landscape because water sources were limited to fulfil the needs of the entire village population, also due to lack of proper sunlight for the rice beer to ferment in three days. Considering the inconvenience, they abandoned the site and moved to ‘Molungkong’ which at

present the site that lies between Mopungchuket and Khensa village of Mokokchung district. At Molungkong, sometimes around the sixth generation, an incident occurred to Kimatsüng-II who was rich, respectable, and also someone who possessed supernatural power in the village. His wife fell seriously ill but despite all his efforts, he failed to save his ailing wife, and she eventually passed away. In the aftermath of his wife's demise, he informed the village elders and the villagers that the village spirit no longer has favours towards them and suggested moving to another settlement. Taking his advice, they moved to Shir Kimong and settled there for a few years where Kimatsüng-II, their leader breathed his last. According to oral tradition, after Kimatsüng-II's demise, the Molunger moved to Tsüdenkong and they had a prosperous period where Sumerenti Nokdir was a rich and respectable person. An incident occurred which compelled the Molunger to abandon Tsüdenkong. The stone that they worshipped fell off the ground and considering this phenomenon a bad omen, they migrated to another settlement.

From Tsüdenkong the Molunger further migrated to Nungshiyimkong. This site was spotted by Nungshijong Sanglir during one of his hunting expeditions while they were still settled at Tzüdenkong. Since the site was spotted by Nungshijong hence the village was named 'Nungshiyimkong'. The oral narratives recounts that there was a huge stone that the villagers worshipped as their god and often the spirit of the stone protected the villagers from various calamities and misfortunes. Unfortunately, the stone rolled down, which the villagers considered as a bad omen, and decided to move to another settlement yet again. Therefore, the Molunger once again shifted to a new settlement known as 'Tsüngnensüba Imkong', but misfortune struck again where an epidemic- '*Ayak Wara*' (small pox) hit the whole village. During this time, they sought the guidance of the village Seer who advised them to change their settlement to save them from the epidemic. Taking his advice, the majority of the villagers settled at Narongjongmangkong, while another group settled at Tsungkonukong who further went to Resong and did not return to their former village.

Interestingly, the Molunger has a long history of mutual and friendly relationships with the Ahoms while they were at Narongjongmangkong. But their relationship deteriorated when they offered assistance to fellow Ao village – Longkhum villagers especially in fighting against the Nokranger and the Ahoms, for which they fought some fierce battles with the Ahoms. The Molunger while returning to their village (Narongjongmang) from such expeditions decided to re-occupy 'Tsüngnensüba', their abandoned settlement. As such they established a new settlement which at present is Molungkimong.

After Christianity came to Molungkimong, Dr. E.W. Clark an American Missionary, along with some of the converts and animist from their village and formed a new village in 1876 and named it Molungyimsen. Today, the Molunger are settled in these two villages – Molungkimong and Molungyimsen, while some migrated to other Ao villages.

3.3.2. *Marok*

Marok is another Ao Naga ancestral site located in Jangpetkong range of Mokokchung district. Today, it lies abandoned, not very far from Dibua village. The Marok site is the original ancestral site of Dibua village. Oral accounts suggest that before they permanently established their present village, they first settled at Marok after their migration from Koridang.

According to oral traditions¹⁵, the Marok group did not migrate from Chungliyimti as a separate group but was a part of the mass migration of the Aos that reached Aonglenden, and then moved to Koridang along with the rest of the Aos. It was only during the dispersal at Koridang, the Marok group undertook a separate migration route and established a village at Marok. Marok village was established by two groups and interestingly, different migration paths were followed by these groups. The first group left Koridang and traveled to Ungma before migrating to Mongoya. However, due to scarcity of water at Mongoya, they left the area and proceeded towards the lower ranges, eventually reaching Marok. Since Marok was the leader of the first group to arrive at the site, the settlement was therefore named ‘Marok’. From Koridang, the second group migrated to Longkhum village, and from there they further migrated to Mopungchuket (a village in Asetkong range). Oral tradition asserts that they did not remain at Mopungchuket for long; instead, they spent only a night there before continuing their journey until they reached Marok.

According to oral sources, there were up to 600 households in the populated village of Marok. But after about 20 to 30 years of existence, the villagers were forced to leave the area due to shortage of water and the continuously increasing population. The Marok settlers began looking for a new place for habitation. They identified a site not very far from the Marok. At that site, there was a particular stone that the people called the ‘Mystical stone’ or ‘Lepmalong’ (Plate 9). Whenever the people of Marok crossed the area, they were often told by the spirit of the stone to establish their village at that very site. The repeated reminder of the spirit of Lepmalong convinced the Marok settlers to believe that the site would be suitable for them to establish their new village. Therefore, they finally moved to this place and named the site "Dibua," which still holds the name to this day. Dibua is a thriving village today, with almost 200 households. Oral

tradition informs that when Marok was abandoned, there was dispersal amongst them and some of the Marok settlers migrated to the nearby plains of Assam, while others traveled farther towards the lowlands. The rest migrated to the new settlement and established the new village Dibuia.

3.3.2. *Nathosü*

Within Waromung village, 65 kilometers away from the district headquarters of Mokokchung sits Nathosü- a significant Nokrang ancestral place. The people known as 'Nokranger' typically migrated from the Phom area and settled at Nathosü (Waromung Yimten, 1993) and they did not belong to the Ao ethnic tribe (Longkumer, 2003). The oral tradition of the Aos is scarce on the Nokranger migration except on the oral traditions of numerous battles fought between Longkhum village and Nokranger. Published accounts by Waromung Yimten (1993), and Longkumer (2003) in Ao vernacular and English respectively are some of the few sources on the numerous battles fought between the two. There are also references to Nokranger sites mentioned in the ethnographic accounts of the Aos by *The Ao Nagas* (Mills, 1926). However, these sites lacked any detailed study because of the lack of oral sources to substantiate the published accounts.

According to oral tradition¹⁶, the Nokranger migrated from Orangkong (which is now in Nagaland's Longleng district) after they experienced some internal strife. They migrated to the Ao area after abandoning their original settlement. In the course of their migration, they halted at "Morokong," which is in Merangkong village, Mokokchung district; but they realized their inability to stay there for very long. Therefore, the following day, they decided that they would need to travel to the location where the first sunbeam touches upon the hilltops. They noticed the sunbeam at Jarang Tenem, which at present is in Warumung village. Thus, they eventually made Jarang Tenem (Plate 10) their permanent home and continued to settle there for about 700 years.

Among many other events that took place while at Jarang Tenem, two significant occurrences prompted their eventual evacuation from the location. Firstly, one day three young women were sent to collect a specific leaf known as "Am", (botanical name *Canna spp.*) which is used to wrap food and other objects. However, while foraging, they vanished into a ditch and never returned home. Secondly, during one of their feasts, Ongpangjang, the village chief instructed his in-laws to kill a pig he had been raising for the feast. His in-laws unfortunately failed to get hold of the pig in spite of their repeated attempts. Since the in-laws were unable to capture and kill the pig, Natu, the chief's son resolved to do it in the morning while the pig was

sleeping. Unfortunately, while Natu was attempting to kill the pig, the two fell off the cliff, and Natu met a terrible death. For this reason, the hill was renamed to “Nathosü Tenem”, meaning “the hill where Natho died”. Prior to the incidental event, it was known as Jarang tenem.

Since they had already lost the chief's son and the three young women, they interpreted this to be a bad omen. Therefore, they relocated to Atu Tenem, which is now known as Aonokpu which is located in Japukong range. They remained there for a while and engaged in numerous conflicts with Longkhum, and were ultimately driven from the Ao area down to the valleys of Assam.

3.3.3 *Nokrang Site*

In the mid 9th century A.D. there was a flourishing and powerful village called Nokrang in Japukong Range adjacent to Assam (Longkumer, 2003, p.vii). The Nokranger site is situated at the modern village of Aonokpu located between Nokpu and Lirmen village in Japukong Range, Mokokchung District, Nagaland. Before it was wiped out by the Aos, this village was a thriving village known for its craft in blacksmithing and pottery making. The site is strategically situated on the hill top with natural rocky steep cliff on one side and on the other, the Tsurang river flowing with strong currents making it impossible to cross during summer. In addition to this, the village was fortified with dogs as a line of defense and strong walls being erected fortifying the village from any kinds of enemy (Ibid.). A rivalry between Nokrang and Longkhum started which lasted for eight (8) centuries (Op cit). After the prolonged fight, the Longkhum villagers came out victorious against the Nokranger that forced them to flee till the Brahmaputra valley. The legends of Longkhum and Nokrang rivalry are one of the important war feuds in the annals of Ao oral traditions.

The Nokranger site was visited in March 2022, in order to document the oral tradition of the site. When the elders of the Aonokpu narrated the oral tradition of the site (Plate 11), their introductory note always began with a phrase “*Obala nungeri-Jembia aroba ostü*”, which translates to “This is the story being told by our forefathers”. According to oral sources¹⁷, the series of events leading to rivalry with Longkhum village and the subsequent abandonment of the site started with Atoba (a Nokrang chief). Chief Atoba once had a beautiful daughter whose beauty got the attention of the Ahom king. When the Ahom king saw how beautiful she was, he plotted to have her as his wife. Eventually, she was forcefully taken to the Ahom kingdom to be the Ahom king’s bride. Atoba protested the marriage and asked to have her returned. The Ahom monarch, however, said he would provide anything he wanted, but not his daughter. The

daughter gave Atoba the idea to demand the monarch for a live hornbill bird with certain extraordinary characteristics. The bird should contain two black stripes or bands on the tail feather, even though hornbills possess only a single stripe by nature. This proposal was impossible to carry out from human perspective; however, the Ahom king was able to fulfill this demand. He duped the Nokrang chief by painting an additional black band on a hornbill in order to satisfy the demand, forcing Atoba to give up on his daughter and let the Ahom king wed her.

As it occurred, the hornbill bird with the two stripes travelled far and wide over the Ao mountain ranges, specifically to Longkhum village, to feed on a particular fruit. At Longkhum village, the bird was caught and killed by a hunter. When they noticed the unusual two stripes on the tail feather, they dispatched two women to sell the feather to several Ao villages which was tagged at a high price because hornbill feathers were used on the headgears of Ao men's cultural attires. Unfortunately, they stepped upon Nokrang village, upon discovering that the two women were selling the feathers that belong to their lost hornbill, the Nokrang warriors slayed the two female captives. When the two women did not return to their village, the Longkhum villagers started enquiring and looking for them. When they learned it was Nokranger who murdered the two women, Longkhum made the decision to attack Nokrang village. According to oral tradition, the Longkhum villagers lost a good number of lives during their conflict with the Nokranger and their victory over the Nokranger was contingent upon the assistance of Waromung village. There were numerous casualties on the Nokranger due to Longkhum's intense attack, and those who survived were compelled to leave the area and run to various directions. According to oral traditions, a large number of them traveled to Assam. After Nokranger deserted their settlement, some clans from Waromung village took over and formed the current Aonokpu village.

In 1994, the then Longkhum village council erected a building memorial known as 'Longkhum Heroic Memorial Hall' (Plate 12) at this ancestral site with an engraved plate (Plate 13) placed inside the hall commemorating the life of those individuals who sacrificed their lives fighting against the Nokranger. There is also a booklet published titled 'Longkhum Heroic Memorial Hall Aonokpu' (1994), that narrates the events of this feud and also the background story for erecting the Hall.

At Aonokpu, there are also surviving remnants of Nokranger still evident in the village such as 'Atoba Tenem' or 'Atoba Hill'. Oral tradition notes that this was the hilltop where the chief of Nokranger Atoba used to bask in the sun. There is also a spring named 'Atuba Tsübo' ('Atoba well') (Plate 14). The Nokrang site at Aonokpu was previously excavated by Nagaland University and dated to 270 ± 30 BP (Beta-409504) (cal AD 1510-1798) (Calibrated using OxCal

4.4) (Jamir, 2021). In the early 20th century, Mills notes that, “two Daflas actually found their way to Nokpoyimchen to see place where their forefathers had lived” (Mills, 1926, p.9).

3.3.4 *Japu Migration and Maipang Ancestral Site*

Japu village (Plate 15) is established on the ancestral site of Maipang. The village is located 5 kms away from the sub-district headquarter Mangolemba and 70 kms away from district headquarter Mokokchung. There are accounts that Japu village which borders with Assam served as an important trading route not only for the Aos but other Naga eastern Naga tribes back in the days of the ancestors. The eventual settlement of Japu village is thus narrated as follows:¹⁸

As told by our ancestors, joining the Ao mass migration from Chungliymti (the Ao Nagas original ancestral site), the Japu group traveled the same path across the Dikhu River, across the cane bridge, and reached Aonglenden. They moved to Koridang with the rest of the Aos and made their home there. But the Aos went back to their old settlement ‘Aonglenden’ which they named it ‘Ungma’, after having widely dispersed at Koridang. Oral tradition states that there was further dispersal from Ungma. During this dispersal, the Japu group moved southwards and settled at Yimpang (now in Lotha area of Wokha district) after being estranged from the larger group. However, because of hostile neighbouring tribes, the Japu group was unable to stay in Yimpang for long. In pursuit of a better place to live, they moved towards the Northern direction where the other Ao groups were settled. Eventually, they arrived at the current Japukong range and established their village permanently. The village's original name was ‘Yimsen’, which was then changed to ‘Japu’. But it was Longkhum villagers who gave the village its present name "Japu" after observing the profusion of cooked rice that affluent families had dried in the aftermath of their feast of merit. ‘Japu’- meaning ‘the location where rice is dried’ derives from the fact that "rice" is "Acha" and "drying" is "Puba" in the Ao Mongsen dialect. Villages of this range are established along the portion of this mountain range. Hence, Japukong Range is named after their village, ‘Japu’. There are currently more than 80 households in Japu village. Japukong Senso Senden's jubilee souvenir, "Diamond Jubilee Nungo" (2000), also discusses the nomenclature of the Japu and Japukong range.

Japu village, which has jurisdiction over the Maipang site (Plate 16), is situated to the north of the settlement. No archeological study was previously undertaken; however, there were reports of potsherds and other cultural artifacts retrieved from the site by the locals. The recent construction of a road by the villagers to the hill, the construction of a rest house (Plate 17), and cultivation on the site caused significant disturbance to the site. Additionally, the oral tradition of the site was so limited, which made it impossible to record specifics about how the place was

occupied, how long they occupied it, and why they deserted the site. Upon inquiry with the elders of the Japu¹⁹ villagers (Plate 18), it is known that the lack of adequate preservation of the traditional accounts concerning the Maipang group throughout generations was the reason for the scarcity of oral tradition of Maipang. The village elders also opined that their forefathers did not mention much about the Maipang group, however, they acknowledged that the area had previously been inhabited by a group known as the "Maipang" before they moved to the nearby state of Assam.

Oral tradition of the Maipang group and their migration before settling at Maipang and the reasons for further dispersal was observed to be limited. An interesting feature about the group is that the Ao oral traditions describe trade relations between the upper ranges of Aos and the Maipang people, particularly with regard to traditional attires such as beads, Maipang brass bell etc. However, because of the limited oral sources on the trade relations and also the fact that no beads were retrieved during the test excavation, nothing conclusive can be drawn at the moment. For the people of Japu, the Maipang site is simply known to them as "Longchem"(Plate 19) named after a stone slab at the site which has a hollow depression similar to the rice pounding log. To ascertain the nature of archaeological deposits and for a better understanding of the site, on April 19th, 2023, a test excavation was carried out at the Maipang site as part of the present research which was initiated after the approval of the Japu Village Council.

3.4. Dispersal Patterns

A detailed examination of the Ao migration reveals that multiple groups followed distinct migration pathways. Five primary routes of migration are identified - a) Chungliymti — to Aongleden-Koridang via the Dikhu b). Chungliymti-Jongpongshisa Kong-Sangpuyimti-Songjen-Longsa, c). Chungliymti-Tsütsünpang- Mongoya- Lower Ranges d). Chungliymti-Jongpongshisa Kong-Amang Kimong – Sangpuyimti, and e). Koridang- multiple directions across six ranges of Mokokchung. This migration dispersal pattern suggests a migration pattern of ‘fission and fusion’ and ‘fissioning’ from Chungliymti. Fission and Fusion is a kin-based group that frequently breaks away from a bigger group before reuniting (Kopytoff, 1987). This pattern of human spread is best explained using Moore's (1994) river metaphor: “The channels of a river separate and recombine in a complex fashion, just as the component populations of the human species separate and recombine” (Moore, 1994, p. 930). Two kinds of migration exist: 1) larger group migration, 2. Lesser group migration, despite the fact that both the migrations shared the same dispersal migratory pattern.

Four smaller group migrations occurred, with the Chungliyimti via Dikhu to Aonglenden group being the only larger group migration. Oral tradition states that two smaller tribes left Chungliyimti and traveled southward in quest of better settlement prior to the larger group of Ao dispersal at Chungliyimti. At Jongpongshisakong, the Sangpu group, who had left Chungliyimti first, was divided into two. Sangpuyimti was occupied by one group, while Amang Kimong was occupied by another. Before long, the Amang group abandoned their settlement, some families moved to the lower ranges, while others joined the Sangpu group. The Sangpu people dispersed from Sangpuyimti, with the majority of them moving southwest while a small portion heading east. For the party that proceeded towards an easterly direction, their oral tradition is comparatively vague; the other group dispersed further at 'Shongjen' and moved to different directions. According to the oral tradition, the Sangpu group merged with other Ao villages; however, no Ao village has a significant *Khel* or is acknowledged as a Sangpu group, with the exception of the Sangpu of Longsa village in Mokokchung district, who have their own *Khel*²⁰.

Oral tradition states that the Molunger groups also moved southward after Chungliyimti and established themselves at Tsütsüngpang Kong. According to oral tradition, Molunger and the Sangpu group were neighbours and interactions between them can be found orally. Molunger group abandoned Tsütsüngpang Kong, migrated north in pursuit of new settlement²¹.

The most popular oral tradition of the Ao Naga is the mass migration from Chungliyimti, thereafter crossing the river Dikhu to reach Aonglenden before moving to Koridang. Oral tradition suggests that until the mass dispersal at Koridang, the majority of the Aos traveled along this migration route. The Kupza inhabitants were the first to migrate from Koridang, followed by Settsü and Longkhum, in that order. These three villages also served as the dispersal epicenter for several Ao villages. The Aos migrated to various directions and established their own permanent settlement post Koridang dispersal. It was at Koridang where there were several lesser group migrations who eventually occupied the present six ranges of Mokokchung. Post-Koridang dispersal we witness more of 'fissioning' migration pattern where the group abandon their parent settlement and migrate to a different location to established their villages.

As it is evident from the oral traditions, the Aos historically occupied a large territory; in fact, they originally occupied the Lotha area in southwest and the current Sema area in the south (Mills, 1926). The people who moved south and southwest, however, eventually left the area, returned to the Ao regions, joined the rest of the group, and built permanent villages, while some assimilated with existing villages (Fig 9).

Endnotes

1. Oral sources of Koridang site were gathered from an audio-visual interview with Mr. Alemtoshi Imsong, Ungma village; Dated: 27th January, 2021.
2. Excerpts of story translated from the Ao vernacular volume *Rito Yimtok Longrar* (2005), pp1.2, published by Mr. W. Chubanungba Ao.
3. On the oral tradition of Settsü, oral accounts were gathered from an audio-visual interview with Mr. Imli Longkumer Settsü village; Dated: 27th March, 2019.
4. Mongka were a group who migrated from Settsü and now settled in Longsa village, Mokokchung. The oral source of Mongka was obtained from an audio-visual interview with Mr. Imli Longkumer, Settsu village; Dated: 27th March, 2019.
5. The account was gathered from an audio-visual interview with Mr. Imli Longkumer, Settsü village; Dated 27th March, 2019.
6. All oral accounts on Sangpuyimti were gathered from an audio-visual interview with Mr. Lanutemshi Dobashi, Mokokchung town; Dated: 6th January 2019 and Mr. K.Y. Meren, Longsa village; Dated: 26th August, 2022.
7. All oral sources of Jangjang Kimong were obtained during an audio-visual interview with Mr. T.Akum Jamir, Ex. MLA, Mokokchung; Dated: 18th November, 2021.
8. All oral sources of Kupok were gathered during an audio-visual interview with Guru T. Bendangwati Pongener, Ex. Tatar, Mokokchung village; Dated: 30th March, 2021.
9. Oral narratives of Nichung were obtained during an audio-visual interview with Mr. I. Temjen Jamir of Ungma village and a resident of Mokokchung Town; Dated: 25th March 2019 before his demise.
10. Oral accounts of the feud between some clans of Ungma and Kupza and the subsequent temporary settlement at Nichung by some clans of Ungma were narrated by Mr. Supongangtet Longkumer, Ungma village; Dated: 3rd April, 2021.
11. Oral sources of Tsüha site were gathered during an audio-visual interview with Mr. O. Alem Jamir, Age-64 yrs, Kelingmen village; Dated: 7th April, 2021.
12. In Ao tradition, there are five (5) cycle of Putu Menden, Rionsanger era is the last cycle. (see Bendangkokba, 2019, pp. 20-22).
13. All oral accounts on Kupza long were obtained during an audio-visual interview with Mr. Tongpangluba Longkumer, Age-76, Kupza village; Date:d 27th May 2019.

14. Excerpts of story translated from the Ao vernacular volume *Molunger Otsu Hongsu Ka* (2007), pp. 3-27, published by Molunger Chir Telungjem.
15. All oral sources of Marok were obtained during an audio-visual interview with Mr. Senlikaba Wallinger, Dibua village; Dated: 18th Jan 2023.
16. On the oral tradition of Nathosü, sources were gathered during an audio-visual interview with Mr. Alijang Ozukum, Age-94 yrs, Waromung village; Date: 30th Jan 2021.
17. Oral sources of Nokranger site at present Aonokpu were gathered during an audio-visual interview with Mr. T. Luin Longchar, Aonokpu village; Date: 30th March, 2022.
18. Oral source of Japu migration were gathered during an audio-visual interview jointly with Japu village elders and Japu Village Council Members; Dated: 17th April, 2023.
19. On the oral tradition of Maipang, oral accounts were gathered from an audio-visual interview jointly with Japu village elders and Japu Village Council Members; Dated: 17th April, 2023.
20. All oral accounts on Sangpu group migration were gathered from an audio-visual interview with Mr. Lanutemshi Dobashi, Mokokchung town; Dated: 6th January 2019 and Mr. K.Y. Meren, Longsa village; Dated: 26th August, 2022.
21. All oral accounts on Molunger group migration were gathered from an audio-visual interview with Mr. K.Y. Meren, Longsa village; Dated: 26th August, 2022.

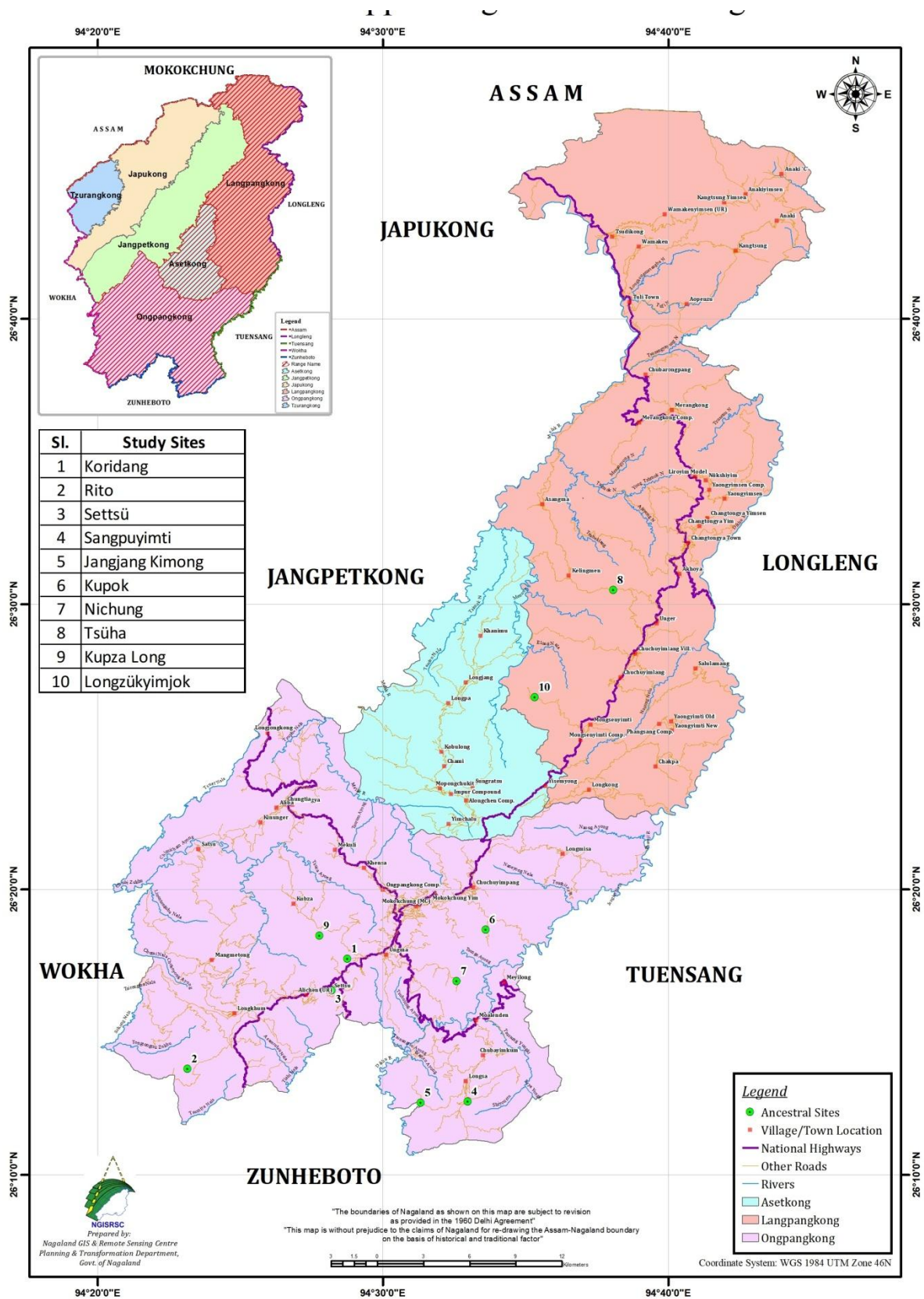


Figure 7: Location map of Ao ancestral sites of the Upper Ranges, Mokokchung District

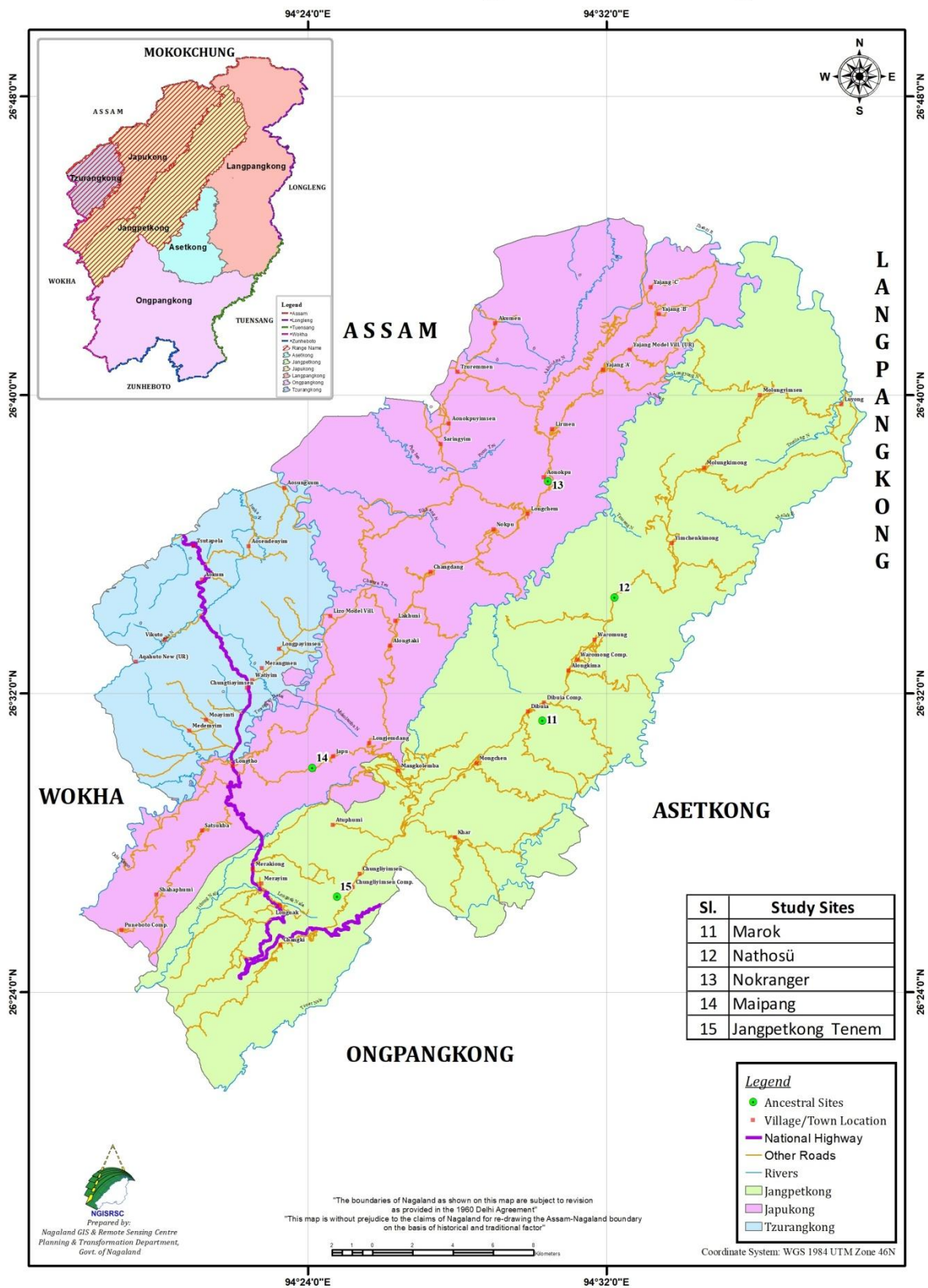


Figure 8: Locational map of ancestral sites of the Lower Ranges, Mokochung District

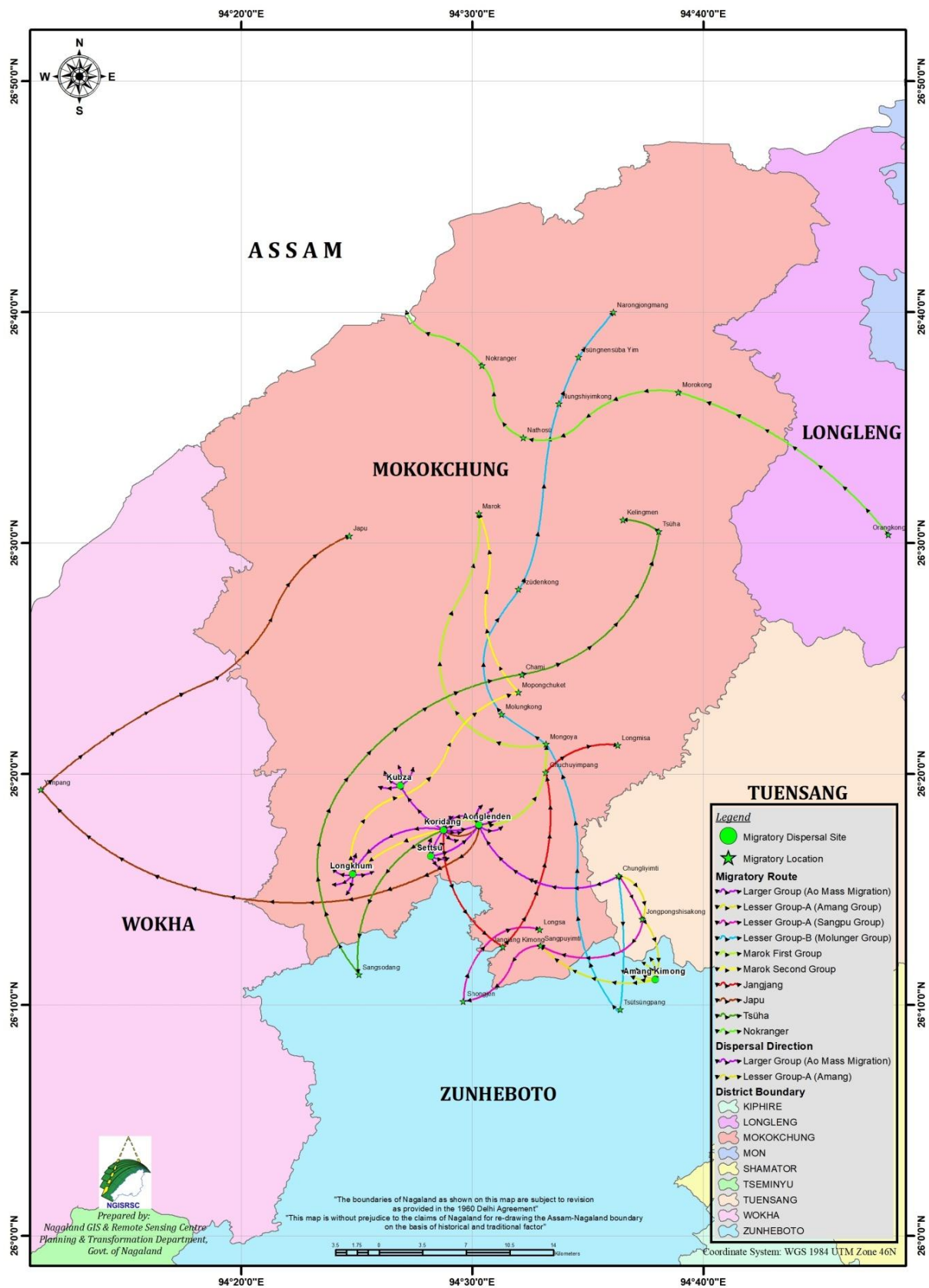


Figure 9: Map of Mokokchung District and adjoining Districts showing the migratory routes of the Aos



Plate 1: Aerial view of Koridang



Plate 2: Aerial of Aonglenden (Ungma)



Plate 3: Aerial view of Settsü village

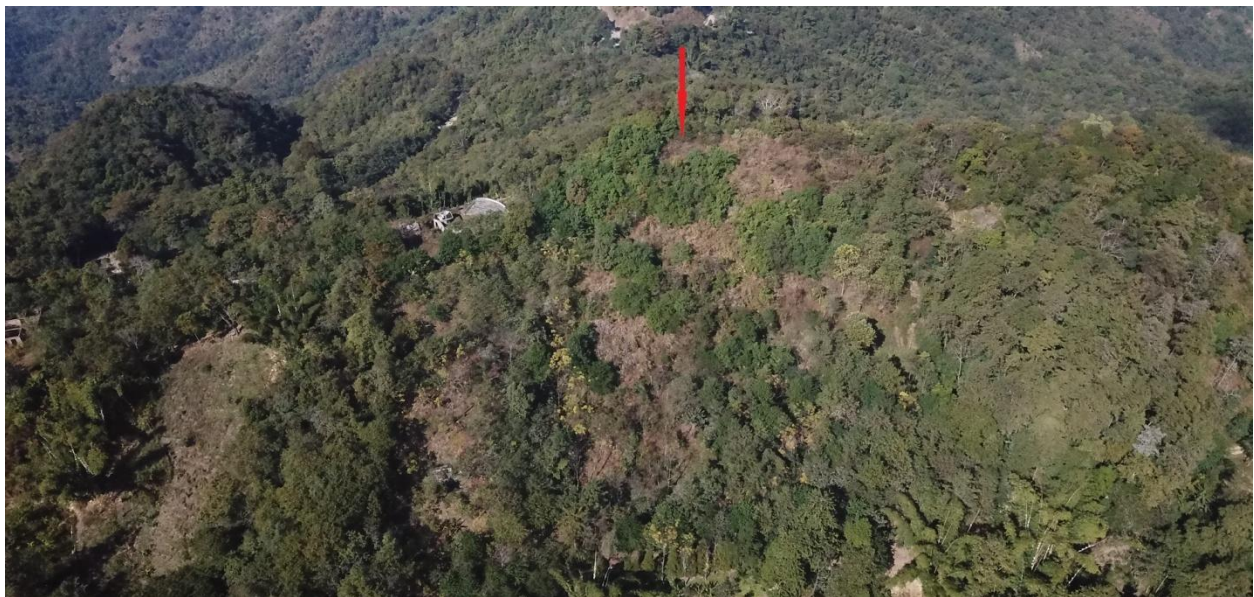


Plate 4: Aerial view of Sangpuyimti



Plate 5: View of Koralong- The mystical stone that crows



Plate 6: A view of Awatsü, the spring that cursed by the Sangpu inhabitants



Plate 7: View of Jangjang Kimong



Plate 8: View of Nichung



Plate 9: *Lepmalong* - The stone whose spirit told Marok villagers to established their new settlement



Plate 10: Aerial view of Jarang Tenem/ Nathosü



Plate 11: An audio- visual interview in progress at Aonokpu



Plate 12: Longkhum Heroic Memorial Hall in the background (Foreground: The researcher with a local elder and the Chairman of Aonokpu village)

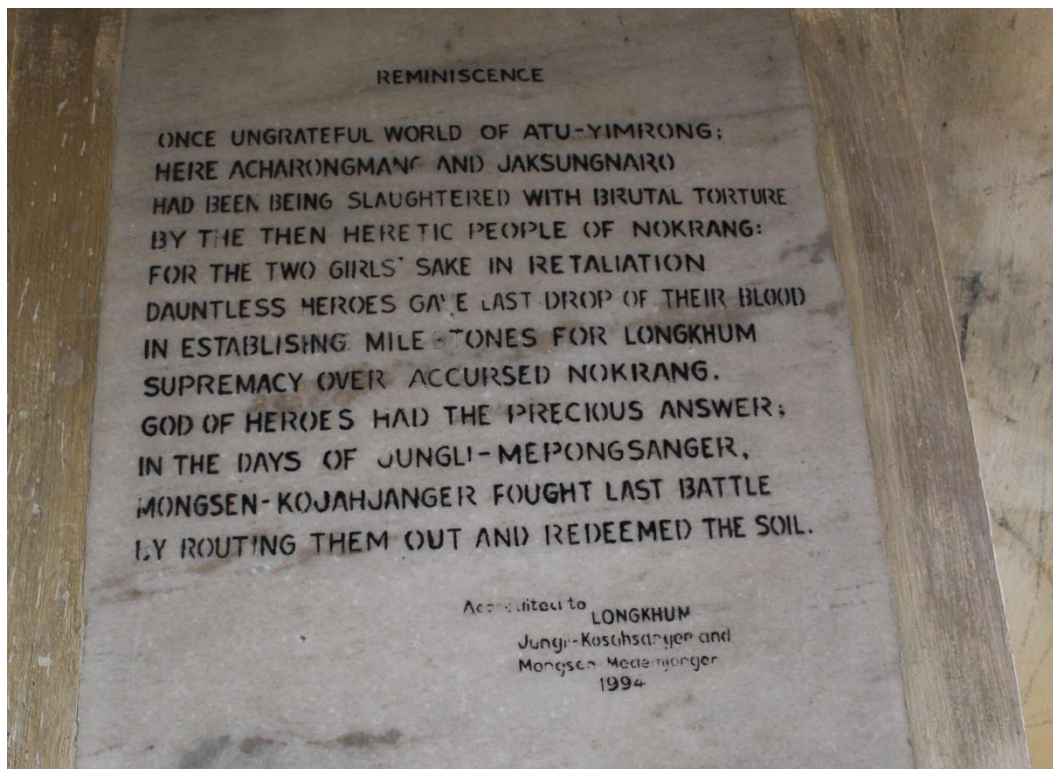


Plate 13: The engraved plate installed inside the Longkhum Heroic Hall in memory of the Nokrang battle, Aonokpu



Plate 14: Atoba Tsübo (the spring well named after Nokrang Chief Atoba)



Plate 15: Aerial view of Japu village

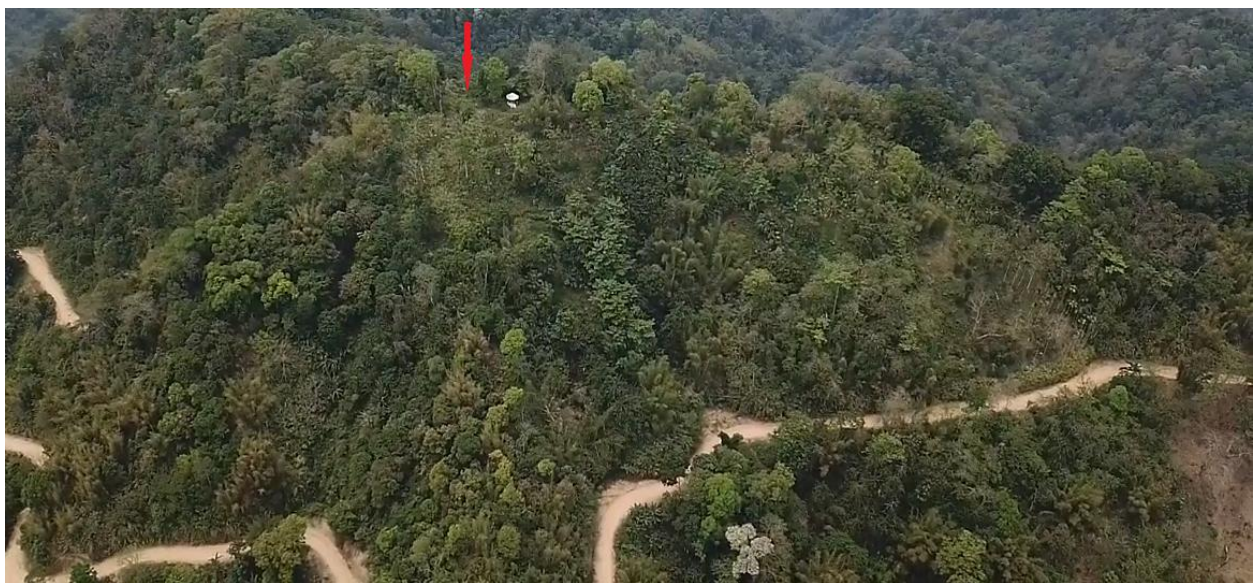


Plate 16: Aerial view of Maipang



Plate 17: A view of the Rest House located atop Maipang Site's hill



Plate 18: Photo session of the researcher with the elders of Japu village



Plate 19: Longchem (rock outcrop with a hollow depression at Maipang site)

CHAPTER - 4

The Archaeology of Ao Naga Ancestral Sites

4.1. Introduction

Mokokchung District is home to a several number of ancestral sites. Each Ao village has strong oral traditions regarding their migration from a particular location and the settlement they deserted. The very foundation of these settlements among the Aos is attested to by such places and the associated oral stories. The surrounding landscapes have been marked in unique ways by the Aos' migration stories beginning from Chungliyimti and their subsequent dispersals throughout the six (6) Ranges of Mokokchung District. In addition to contemporary farming, jhum cultivation, and the spread of modern settlements, several of these settlement locations still lie densely forested. These locations are significant, however, since they demonstrate how closely humans are linked to their surroundings landscapes, their significant toponymic features embedded with deep social memory of their ancestral past. Even to this day, artifacts are frequently recovered from these locations by the local population.

From the six (six) ranges of Mokokchung District, 15 (fifteen) ancestral sites were identified. However, because the oral traditions of two sites - Longzukyimjok and Maipang were unclear, only thirteen (13) sites had their oral traditions recorded. Eight (08) possible locations were subjected to archaeological survey, exploration, and test excavations, namely - Sangpuyimti, JangjangKimong, Koridang, Nichung, Ritu, Longzükyimjok, Tsüha, and Maipang. The five (05) sites from the Ongpangkong Range - Sangpuyimti, JangjangKimong, Koridang, Nichung, and Ritu; two (02) sites from the Langpangkong Range - Tsüha and Longzükyimjok; and one (01) from the Japukong Range - Maipang (Fig.10).

4.2. Methodology

The nature and condition of almost all the sites was disturbed due to jhum cultivation, modern development works, farming, and erosion due to heavy rainfall during the monsoon season in the

region. The topography of the region, especially in the Ongpangkong ranges, are steep; while there is thick vegetation in other regions, thus making the survey and exploration a tedious and challenging effort. In order to execute the test excavation on the eight sampled sites, the following methodology is adopted:

- A formal consent is first made to the concerned village councils and landowners of the sites to obtain approval to undertake the survey and test excavations. Formal consent is also obtained from traditional knowledge keepers for any audio-visual interviews associated with the oral accounts of the ancestral sites.
- A DSLR camera and digital voice recorder for all the audio-visual recording of the site's oral traditions.
- Integration of oral traditions as a tool to identify site locations. Detailed pedestrian surveys on sites identified by traditional accounts.
- Test pits are utilized to examine the nature of deposits and potential areas for future excavation.
- GPS (Global Positioning System) and ArcGIS are used to obtain site geo-coordinates and nature of site location pattern.
- DJI drone imageries are utilized to collect high resolution site photography, to understand the extent of sites and the surrounding landscape setting of sites.
- Conventional ^{14}C and AMS (Accelerator Mass Spectrometry) dating were employed to determine the chronology of sites under investigation.

4.3. Sangpuyimti (SYT)

The Sangpuyimti site is situated in Longsa village under Mokokchung district. It is situated between latitude 26°12.56N and longitude 94°32.970E at an elevation of 1525 m (AMSL). The site was disturbed because of modern developmental activities at the site and jhum cultivation. There were two buildings and one mini amphitheater for the village already constructed at the site. Two (2) trenches were laid on the eastern slopes of the hill. Trench 1 measuring 1x2m and trench 2 measuring 1x3m. The following are the nature of deposits from both trenches (Plate 20, 21, 22 & 23):

Trench 1:

Spit 1: It is composed of loosely humus light brown soil. At a depth of 0-16 cm, only few pieces of potsherds were recovered from the first layer.

Spit 2: Loose light brown soil further continued from 17-23 cm. There is more concentration of moderate sub-angular stones and few findings of potsherds. No other findings were encountered from this spit.

Spit 3: 24-33 cm depth, layer 2 with loose dark brown soil and a small quantity of potsherds.

Spit 4: 33-44 cm depth, further loose dark brown soil was encountered in this spit. Three posthole features were exposed from the bedrock, along with a few pieces of potsherds.

Trench 2:

Spit 1: 0-21 cm depth. The soil is loose and dark brown in colour. It was roughly hand sorted. Only pottery sherds were encountered.

Spit 2: 21-31 cm depth, loose and dark brown in colour mixed with stones. Potteries of paddle-impressed and plain ware were retrieved.

Spit 3: 31-37 cm in depth, loose and light brown colour soil. Potsherds of paddle and cord impressed ware were retrieved. Charcoal samples from this spit were collected for dating.

Spit 4: 37-45 cm in depth, loose and light brown color soil. Sherds of paddle-impressed and plain ware and a modified stone were retrieved. Another charcoal sample was collected for dating.

Spit 5: 45-54 cm in depth, loose and light brown soil mixed with stones. In this spit, the natural bedrock was reached on the NW direction of the trench and layer 2 continued. Sherds and a modified phyllite stone fragment were retrieved. Charcoal samples were also collected from this spit for dating.

Spit 6: 54-65cm in depth. Layer 2 continued with loose and light brown colour soil mixed with stones. Potteries with paddle and cord impressed possessing mat-like patterns and horizontal design patterns were retrieved. Further digs continued in the SE corner of the trench. A fragment of a sharpening stone was reported, and charcoal samples were also collected.

Spit 7: 65-84 cm in depth, light brown loose soil mixed with stones. At this spit, the bedrock was exposed. On the southern corner of the trench, a pit feature measuring 54 cm in diameter and 60 cm in depth was exposed. Potteries and fragments of sharpening stone

were retrieved from the pit. Charcoal samples were collected from this spit for carbon dating.

4.3.1. Summary of Finds

The site yielded only handmade pottery. From the two trenches, 241 sherds were retrieved. In comparison, Trench 2 yielded a larger number of sherds. The colour of the sherds consists of red, reddish yellow, brown, reddish brown, and gray with plain, cord, and paddle-impressed designs of mat patterns (checkered), herringbone, and horizontal lines (Plate 24). The thickness of the sherds ranges from 3.6 mm to 8.7 mm, and weight ranges from 3 g to 35 g. The distribution of the vessels consists of body (62.89%), neck (2.48%), and rim (7.88%). The textures of the sherds were medium coarse, sandy, and gritty granules. Some of the sherds were heavily weathered. The plain sherds could likely be due to the weathering of the sherds (Fig. 11 & 12).

Other findings include three posthole features from Trench 1 and a pit from Trench 2. A fragment of a sharpening stone was retrieved from the pit (TR-2). In addition, anvil, a spilite adze, spindle whorl, and sharpening stones were some of the artifacts collected from surface. Beads and an iron machete were other personal collections of the locals which were also documented (Plate 25).

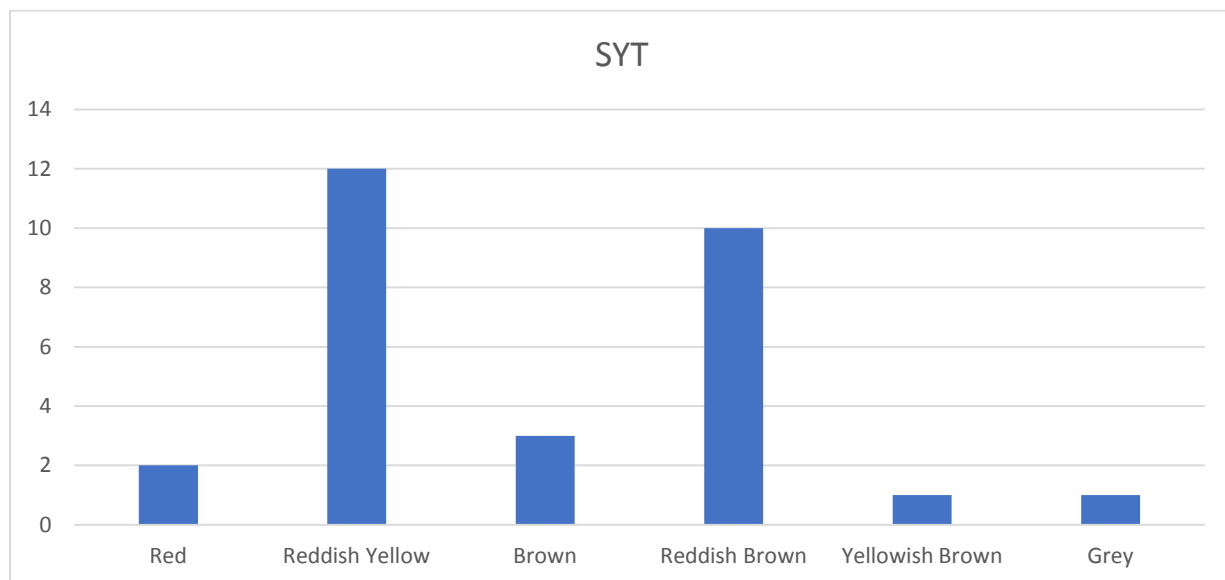


Figure 11: Graph representation of pottery colour types from TR-1 and TR-2, Sangpuyimti

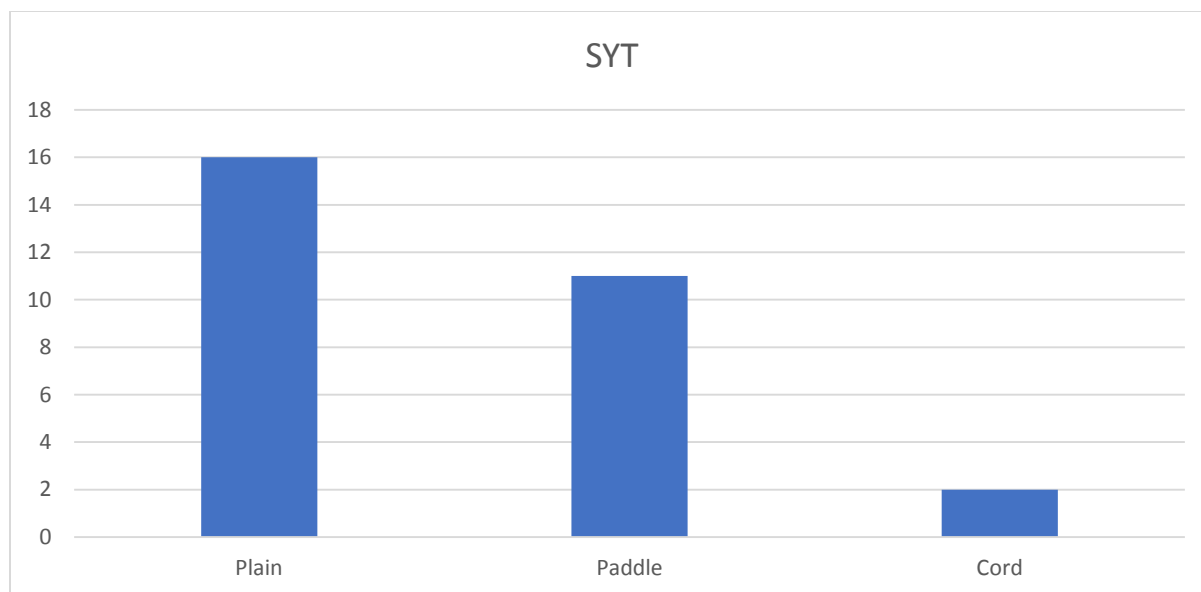


Figure 12: Graph representation of design types from TR-1 and TR-2, Sangpuyimti

4.4. Jangjang Kimong (JJK)

Jangjang Kimong site is located 3 km southwest of Longsa village in the Ongpangkong Range, Mokokchung district. It is situated between 26°12.520'N latitude and 90°31.333'E longitude at an elevation of 1070 m (AMSL) (Plate 26). A test trench measuring 1x2 m was laid on the slopes of the site, and a datum point established from the western point of the trench. The following are the extent and nature of deposits from the excavation (Plate 27):

Spit 1: 0-75 cm in depth from datum, loose and dark brown soil. A small quantity of potsherds was collected from this spit.

Spit 2: 75-114 cm in depth from datum, light brown loose soil mixed with small size stones. Potsherds were the only findings from this dig.

Spit 3: 114- 133cm in depth, the natural soil was reached. More small size stones were mixed with semi-compact light brown soil. A posthole was exposed, and a few potsherds were retrieved from this layer.

4.4.1. Summary of Finds

The site reported potsherds of only handmade paddle-impressed and plain wares. No wheel-made pottery was reported from this site. Altogether, 53 potsherds were retrieved. The percentage of paddle impressed wares were more in number than the plain pottery in the

assemblage. The texture of sherds was of medium coarse, and with soot stains, sandy particles, and quartz in the interior of the sherds. The ceramic assemblage consists of reddish yellow, dark brown, puffed, grey, and grayish brown wares. Distribution of the vessel's parts consists mostly of rim (7.55%), body (84.90%), and neck (7.55%). The thickness of the sherds ranges from 3 mm to 10 mm, and the weight ranges from 5 g to 39 g (Fig. 13,14), (Plate. 28).

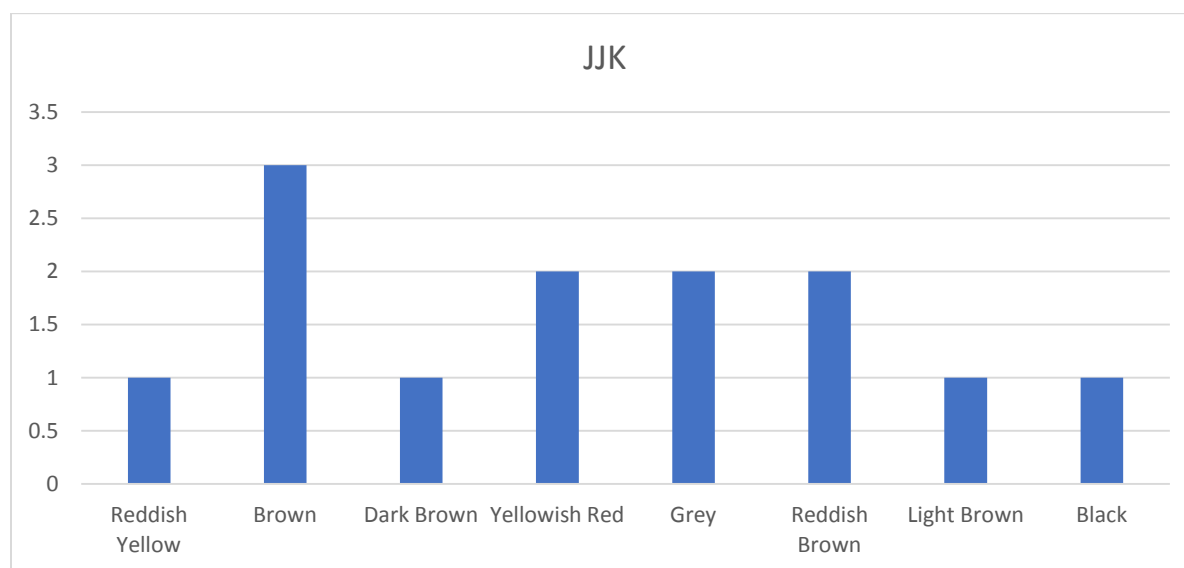


Figure 13: Graph representation of pottery colour types, Jangjang Kimong

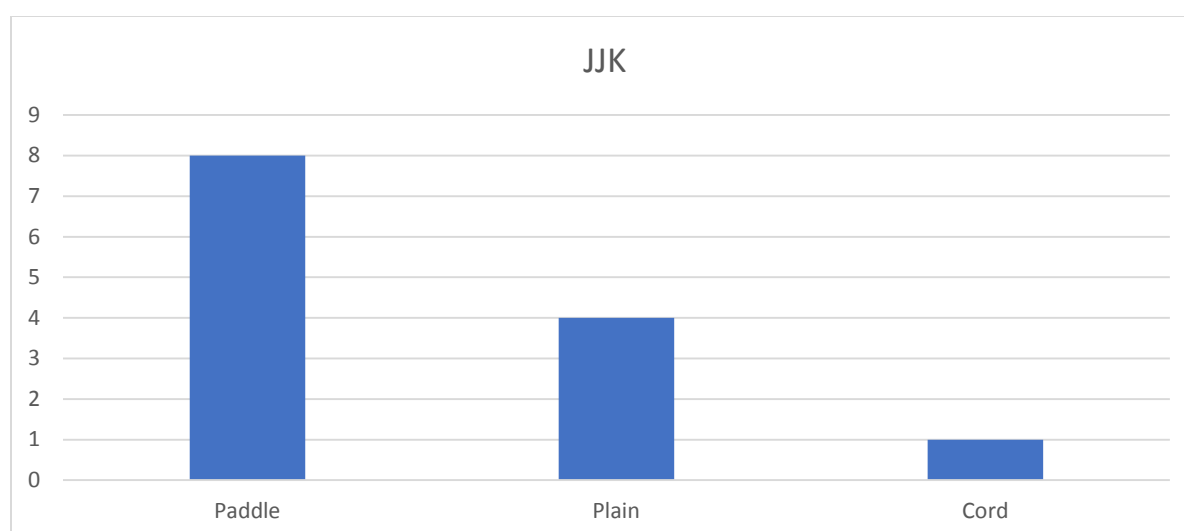


Figure 14: Graph representation of design types from Jangjang Kimong

4.5. Koridang (KOR)

Koridang an important Ao Naga ancestral site is situated in Aolijen, Ungma village under Mokokchung district. This site is the third early settlement of the Aos and also the settlement where mass dispersal took place post - Chungliyimti migration. It lies between 26°17.576'N latitude and 94°28.758' E longitude at an elevation of 1371 m. A trench measuring 1x2 m was laid on the eastern slope of the site. The deposit consisted of two habitation layers, and excavation concluded by the end of 6 spits. . The datum was taken from the SW point of the trench. The following spits were excavated from the test trench (Plate 29 & 30):

Spit 1: 0-49 cm in depth, the soil is loose and brown in colour. Potsherds in small quantities were retrieved along with fragment of a spindle whorl.

Spit 2: 49cm-92cm depth, the colour of the soil is brown and loose. The soil was roughly sorted, and only small quantities of potsherds were recovered.

Spit 3: 92-108 cm depth, charcoal samples were collected. The soil is loose, and brown in color. Potsherds were the only finds within this spit.

Spit 4: 108 cm-123 cm depth, the number of potsherds increased. The soil is brown in colour and loose, mixed with small size stones. Another charcoal sample was collected from this spit.

Spit 5: 123 cm-168 cm depth from datum. Potsherds were retrieved from this spit. The soil changes its colour to light brown and is loosely packed, leading to the next layer (layer 2).

Spit 6: Layer 2 formed part of this spit ranging from depth 168 cm to 180 cm. The soil colour is light brown and more compact. At 180 cm, natural soil was encountered. The quantity of potsherds is greatly reduced in the present spit. However, a good number of charcoal samples were collected for dating.

4.5.1. Summary of Finds

Pottery dominated the excavated artifacts. Altogether, 134 sherds are reported consisting of handmade pottery bearing paddle impressed designs and plain wares. The colour of the pottery assemblage includes reddish yellow, reddish brown, brown, and yellowish brown. The thickness of the sherds ranges from 3.9 mm to 25.3 mm, and the weight ranges from 3 g to 96 g. The distribution of the vessels consists of body (87.31%), neck (4.47%), and rim (8.21%). The textures of the sherds are coarse and medium coarse, sandy and gritty granules, along with soot

stains, and weathered. Almost all the pottery from this site was heavily weathered and fragile. It is possible that the presence of plain sherds could be due to the weathering condition of the sherds (Fig. 15 &16) (Plate 31).

Other findings include a fragment of a spindle whorl and a few other artifacts documented from the private collection of the locals (Plate 32).

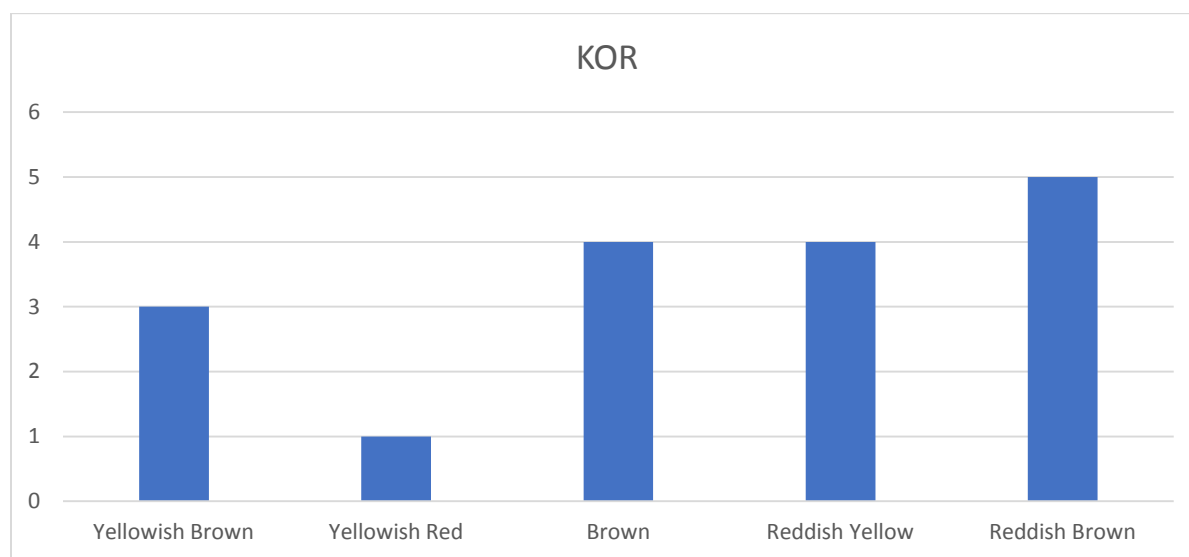


Figure 15: Graph representation of pottery colour types, Koridang

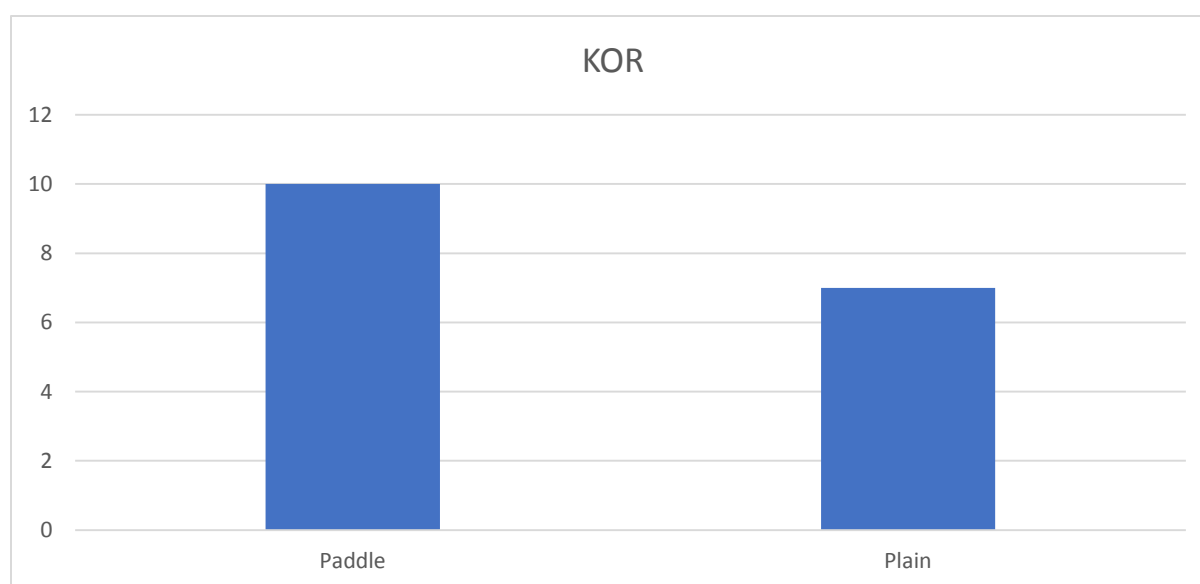


Figure 16: Graph representation of design types from Koridang

4.6. Nichung (NIC)

The site of Nichung is located 7 km (approx.) from Mokokchung town. The area is under the jurisdiction of Ungma village. It is located between 26°16.792' N latitude and 94°32.590' E longitude at an elevation of 984 m (AMSL). The excavation at Nichung was conducted on February 09, 2022. A test trench measuring 2x2 m was taken with the site code labelled as NIC-22. The habitation deposits were confined to a 77 cm thick deposit comprising of two layers that extended to five spits. The datum point was established at the southwest peg of the trench, which has a higher elevation. The following are the cultural deposits (Plate 33 & 34):

Spit 1: It was mostly humus soil, which extended to a depth of 50 cm. Finds from the first dig comprised paddle-impressed sherds. Finds were limited from this spit.

Spit 2: At this spit, change in the soil colour was observed, the layer now identified as layer 2 extended from 50 to 55 cm. Paddle-impressed sherds dominate the material findings.

Spit 3: Layer 2 continued in spit 3. The soil was observed to be loose with some quantity of small and medium size stones. The number of potsherds increased, comprising of paddle impressed and plain sherds. The first charcoal sample was collected from this spit at a depth of 64 cm from the datum.

Spit 4: Extending to a depth of 64-69 cm, spit 4 produced potsherds, pebbles, and a fetish stone. The soil was more compact towards the datum, and findings were more concentrated towards the eastern half of the trench. The second charcoal sample was collected from this layer.

Spit 5: Layer 2 continued till spit 5 with a depth of 69-77 cm from the datum. The excavation reached to a final depth as the findings reduced with mostly potsherds. An iron hoe was retrieved from this spit. Eventually, the natural soil was reached. The third charcoal sample was collected from the base of layer 2.

4.6.1. Summary of Finds

Nichung site yielded a good number of potsherds comprising of paddle impressed herringbone, cord impressed horizontal and criss-cross patterns, and plain wares. Altogether, 553 sherds were retrieved. The colour of the sherds includes reddish yellow, buff, dark brown, reddish brown and brown of both hand-made and wheel-made. The thickness of the sherds ranges from 2.3 mm to 8.6 mm, and the weight ranges from 3 g to 52 g. The type of vessel parts consists of rim (8.14%),

neck (8.50%) and body (82.10%). The textures of the sherds are sandy, with almost all the sherds containing granules and gritty texture along with soot stains. Some of the sherds are heavily weathered (Fig. 17 & 18) (Plate 35 & 36).

Other finds include an iron hoe, a fetish stone, and a river pebble. Three charcoal samples were collected from spits 3-5 for dating. An unidentified stone artifact was documented which was held in the possession of the locals (Plate 37).

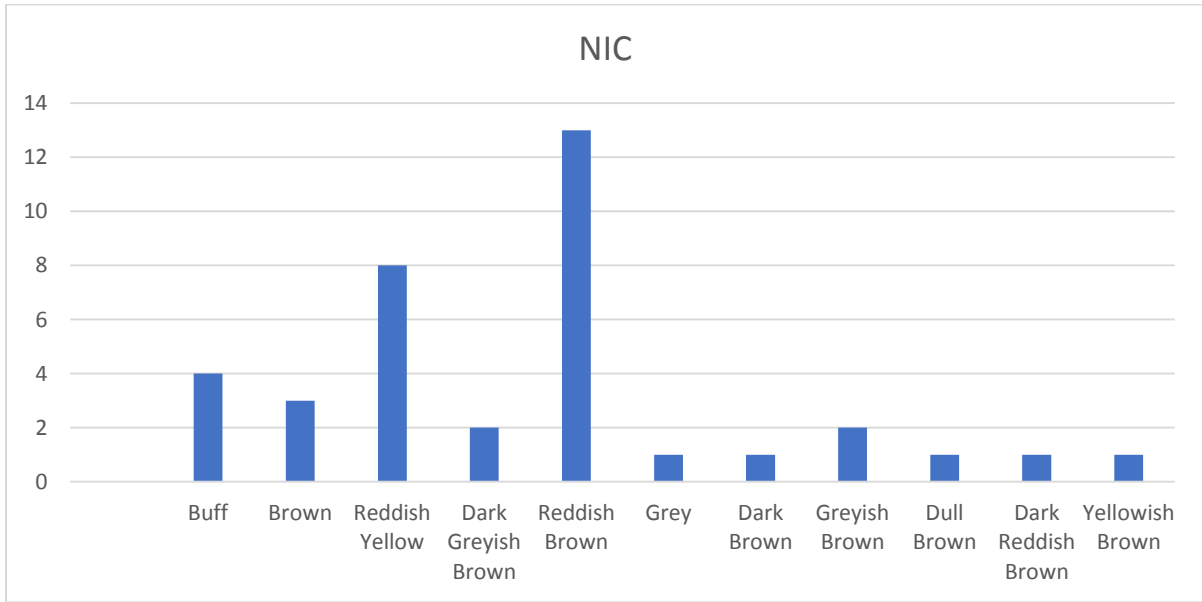


Figure 17: Graph representation of pottery colour types, Nichung

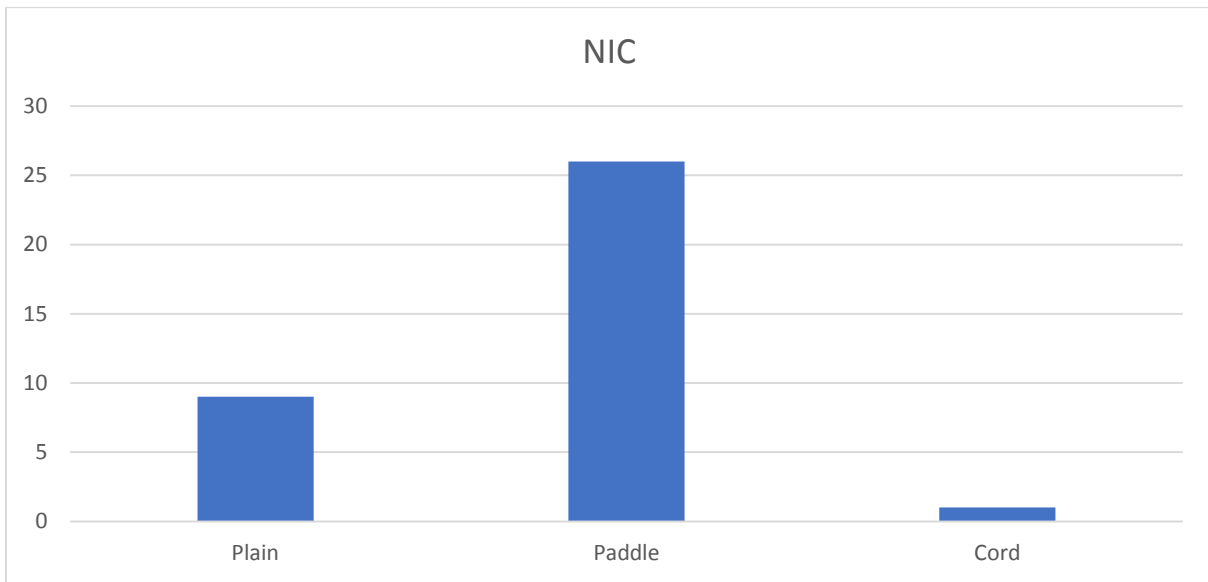


Figure 18: Graph representation of design types from Nichung

4.7. Rito (RTU)

Rito is situated south of Mokokchung town, a few kilometers away from Longkhum village between 26°13.707' N latitude and 94°23.152' E longitude at elevation of 1205 m (AMSL). Due to periodic *jhum* cultivation, the site was in a disturbed state. During every Jhum cycle, there were reports of potsherds, beads, and other antiquities that were often salvaged by the locals.

A test trench of size 2x2 m was laid on the slopes where the deposits were expected to be the thickest. The datum point for the trench was taken on the southwest peg of the trench where the slope elevation was the highest. The excavation was completed within 3 spits comprising of 2 layers (Plate 38 & 39):

Spit 1: It comprises layer 1, consisting of thick humus and loose black soil measuring 40 cm from the datum. The findings were very limited from this layer with only a few potsherds and pebbles.

Spit 2: The soil continues to be loosely packed. At 53 cm, layer 2 begins with a brownish soil consisting of a thick deposit. The number of potsherds increased to a good number in this spit. A fragment of a sharpening stone, a pebble, and a fragment of smoking pipe were the major finds.

Spit 3: Layer 2 continued up to spit 3. Apart from a few potsherds, there were no additional finds reported. At depth 66 cm, the bedrock was reached.

4.7.1. Summary of Finds

Potteries retrieved from this site are handmade, consisting of paddle-impressed herring bone, horizontal and vertical designs, and plain ware. The type on the basis of colour includes buff, reddish brown, reddish yellow, and brown. The thickness of the sherds ranges from 2.5 mm to 9.8 mm, while the weight ranges from 4 g to 30 g. The ceramic assemblages are characterized by body (83.78%), neck (3.47%), and rim (12.74%). The sherds were medium coarse and sandy in texture with soot stains on a few sherds. (Fig. 19 & 20) (Plate 40).

Other findings include fragment of a sharpening stone, a pebble, and a fragment of a smoking pipe from spit 2 and three posthole features from spit 3 at depth 66 cm from the datum point (Plate 41).

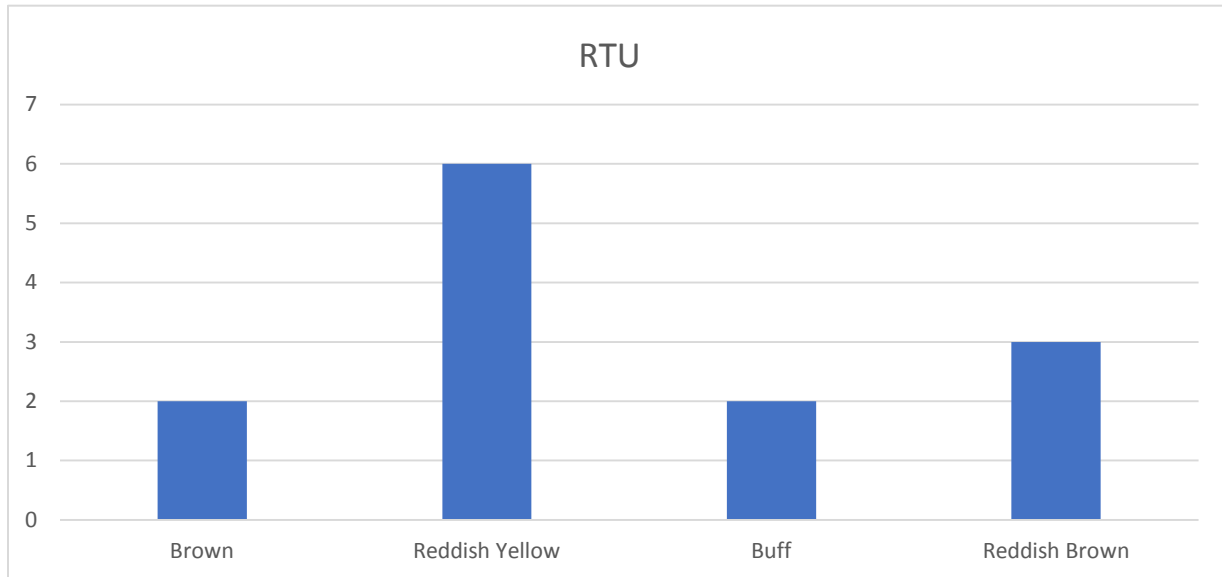


Figure 19: Graph representation of pottery colour types, Rito

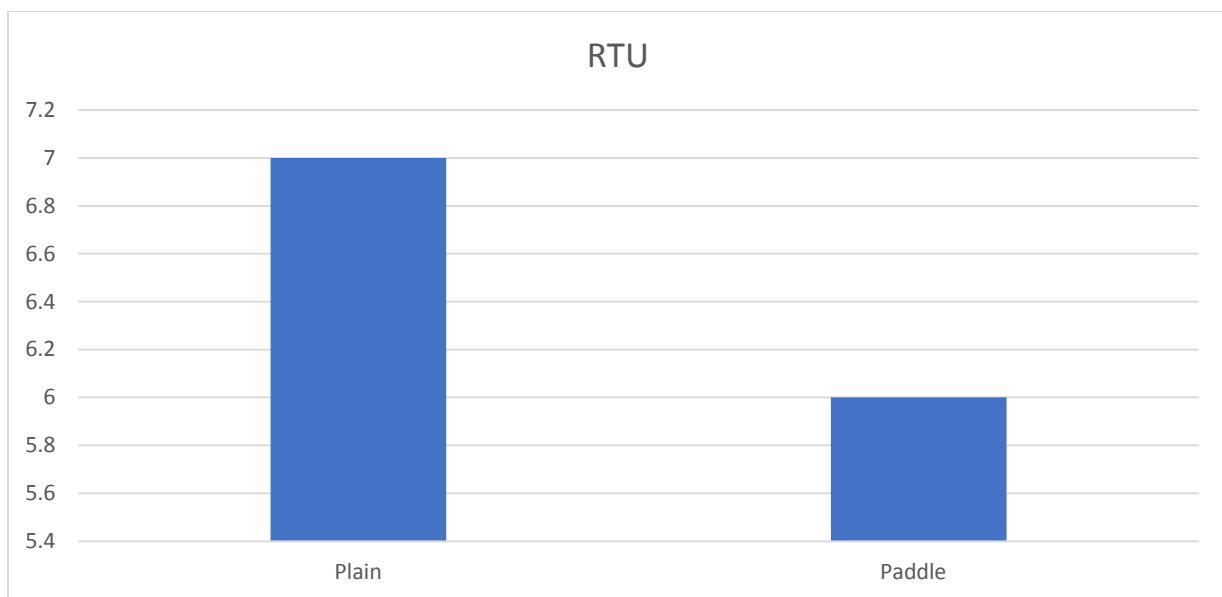


Figure 20: Graph representation of design types from Rito

4.8. Longzükyimjok (LGZ)

The site is situated in Mongsenyimti village under the Langpangkong range, Mokokchung district. It lies between 26°26.747' N latitude and 94°35.055' E longitude at an elevation of 674 m (AMSL). The area was under farming during the time of test excavation. Two trenches were laid at this site, one at the beginning of the habitation area and the other at the center of the habitation area (Plate 42, 43, 44 & 45):

Trench 1

A trench size of 2x2m was laid, which extended to a depth of 61cm from the datum till it reached the natural soil. The following layers were revealed:

Spit 1: The colour of the soil is light brown and loose. The first spit at the depth of 0-48 cm covers layer 1 and contain mostly of humus. Except for a small quantity of potsherds, there were no other finds.

Spit 2: 48-56 cm depth/ layer 2 loose dark brown soil with a good quantity of potsherds. The sherds were of paddle impressed designs and plain ware.

Spit 3: 56-61 cm thick deposit of loose, sandy, dark brown color mixed with charcoal. Potsherd dominated the findings, and natural soil was reached.

Trench 2

The trench was laid by the shallow slopes in the middle of the habitation area. It was a 2-layered trench measuring 2x2 m. The excavation was completed in four spits.

Spits 1: 0-31 cm depth, loose humus layer, light brown soil colour. Few pieces of potsherds were retrieved.

Spit 2: 31-43 cm semi-compact light brown soil and a few sherds.

Spit 3: 43-58 cm, comprises of layer 2, more compact dark brown soil mixed with charcoal. A few pieces of potsherds and natural soil were reached.

4.8.1. Summary of Finds

Pottery assemblages from the two trenches were quite promising. Altogether, 256 sherds were retrieved. Paddle impressed and reddish yellow ware were more from both the trench. There were few cord-impressed and plain sherds; however, these plain sherds could be because of the weathering of the sherds due to its sandy nature. The potsherds were of buff, reddish brown, reddish yellow, red, and grey in color, which both were of handmade and wheel-made. The thickness ranges from 3 mm to 7.9 mm, and weight ranges from 8 g to 75 g. The distribution of vessel parts consists of body (80.855), neck (5.46%), and rim (13.67%). The texture of the sherds was sandy and gritty granules inclusion on its section. Some sherds were weathered, and the presence of soot stains was found on a few sherds. Apart from potsherds, no other findings were reported from both trenches (Fig. 21 & 22) (Plate 46 & 47).

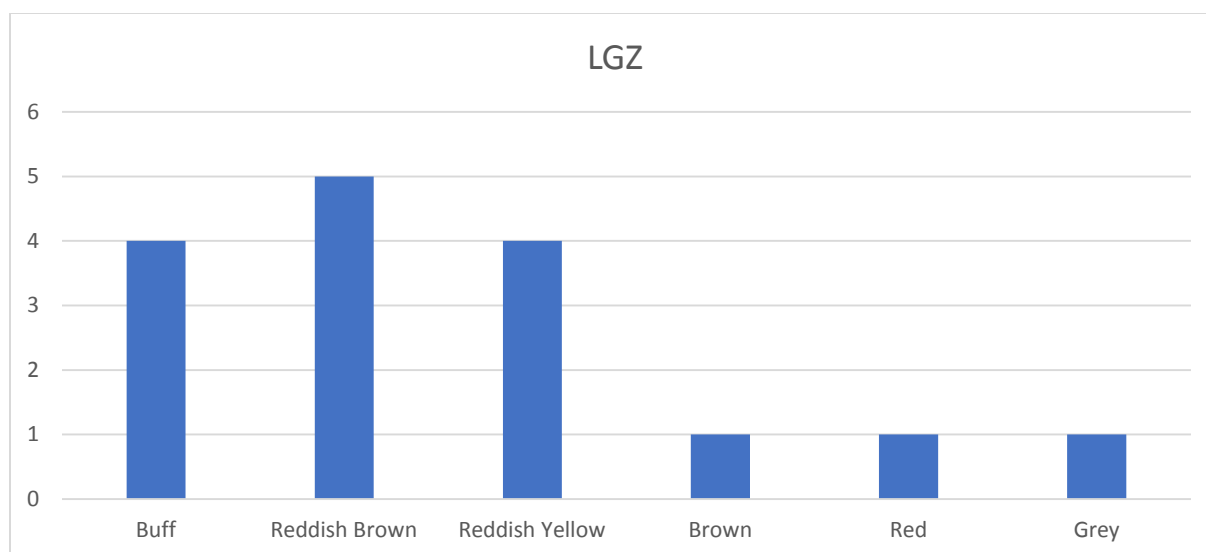


Figure 21: Graph representation of pottery colour types, Longzükyimjok, TR-1 and TR-2

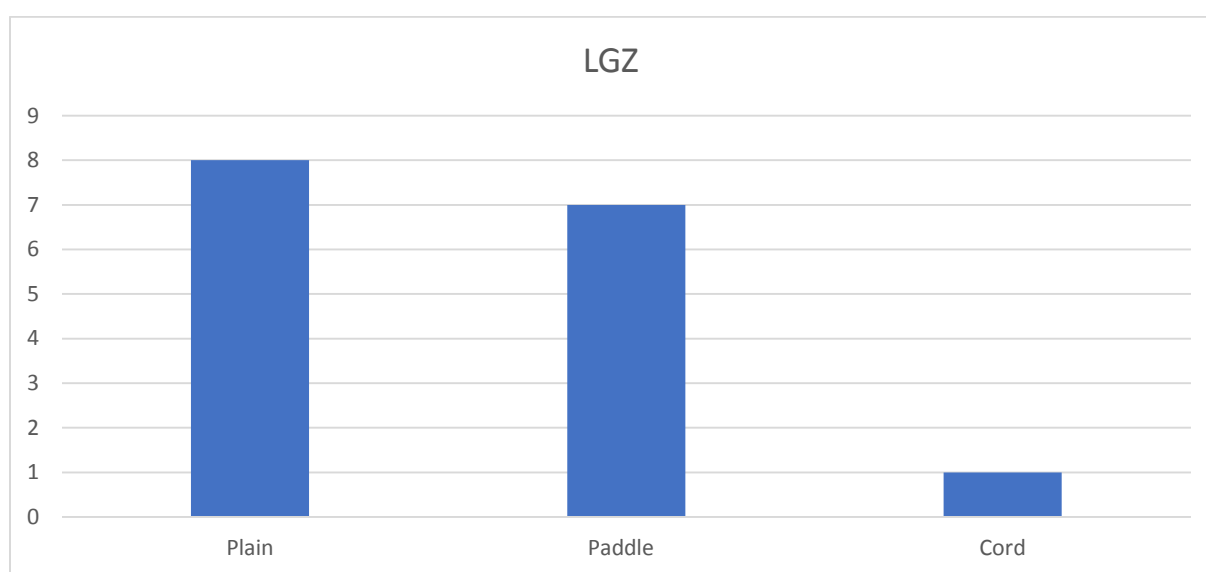


Figure 22: Graph representation of design types from Longzükyimjok, TR-1 and TR-2

4.9. Tsüha (TSH)

Tsuha site is located approx. 2km away from Kelingmen village under Langpangkong range, Mokokchung district. It is situated between 26°30.507' N latitude and 94°38.085' E longitude at an elevation of 610 m (AMSL). Due to regular *jhum* cultivation, the area was partially vegetated with bushes and trees. A test trench measuring 2x2 m was laid on the western slopes of the hill. A good number of potsherds were reported from this site. The datum point was maintained on

the west peg of the trench, which has the highest elevation. Two cultural layers were observed that was excavated in 3 spits going up to a depth of 67 cm from the datum point (Plate 48 & 49):

Spit 1: This spit consists of layer 1. It was mostly humus with loose sandy soil that was light brown in colour. A few potsherds of paddle-impressed ware, handmade and an iron fragment were among the findings.

Spit 2: 44cm-57cm depth from datum, brown and loose soil. The soil was more compact towards the corner of datum, and the potsherds increased to a good number. A sharpening stone and a fragment of terracotta smoking pipe were the list of finds.

Spit 3: At depth 57- 67 cm, the soil was semi- compact with loose brown soil, stray finds of small sandstones and potsherds dominated the findings. At depth 67cm, natural soil was reached. A carnelian bead was also one of the important finds from this spit along with charcoal samples gathered for dating.

4.9.1. Summary of Finds

This site revealed a good number of handmade potteries along with a few wheel-made potsherds. From spit 1, a rim and a few sherds were collected, but from spits 2 and 3, a good number of sherds were recovered. Altogether, there were 428 sherds characterized by reddish yellow, buff, grayish brown and dark brown colour. The sherds were handmade with paddle impressed designs. There were also wheel-made of the plain and buff-colored wares (Fig. 23 & 24). The thickness of the sherds ranges from 3 mm to 10 mm, and weight ranges from 5 g to 39 g. The distribution of the vessels consists of rim (13.56%), neck (6.31%), and body (81.55%) (Plate 50 & 52).

Other artifacts found from the site include a sharpening stone, a fragment of a smoking pipe, and also a carnelian bead (Plate 51).

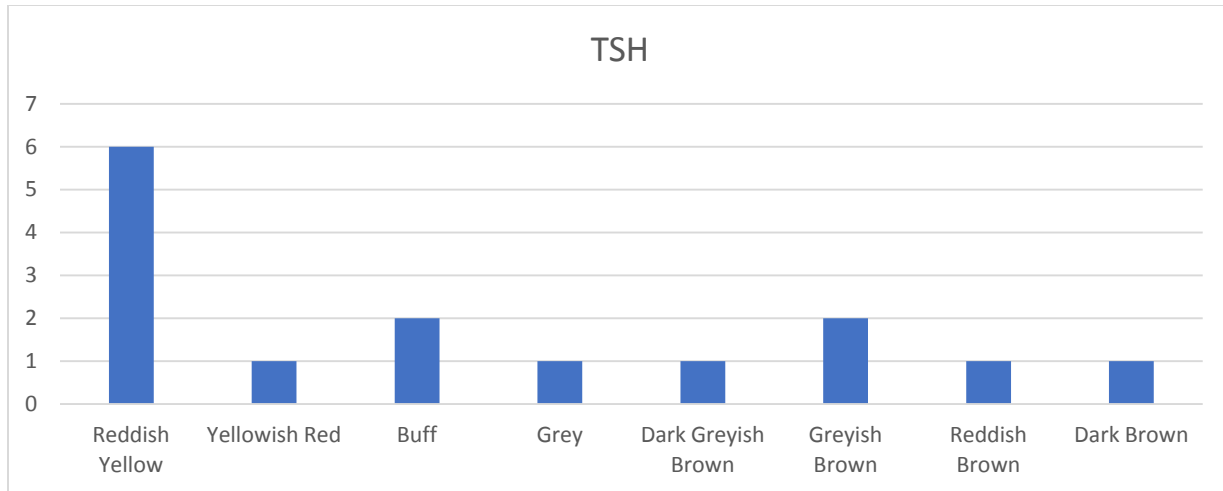


Figure 23: Graph representation of pottery colour types, Tsüha

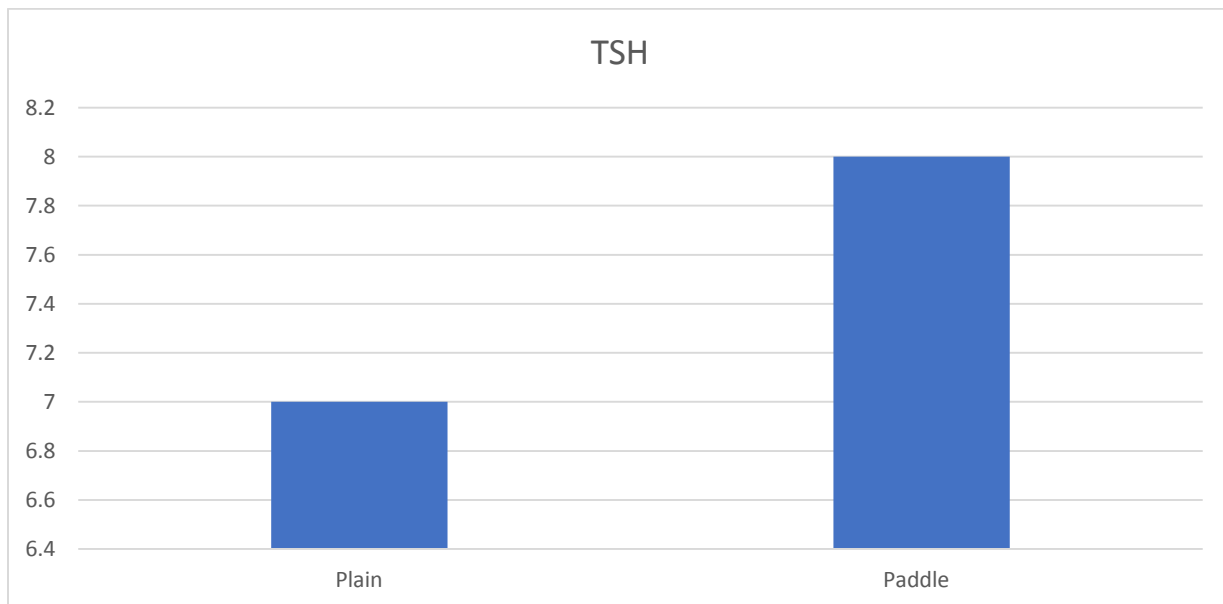


Figure 24: Graph representation of design types from Tsüha

4.10. Maipang (MAI)

The site Maipang (MAI) is located at 26°30.007' N latitude and 94°24.112' E longitude at an elevation of 651 m (AMSL) within the jurisdiction of Japu village under the Japukong Range of Mokokchung district. A trial trench measuring 2x1.5 m was laid on the SW slopes of the hill. The site is highly disturbed. The area was under extensive farming, while some portion of the site dug for road construction. A rest house is also constructed on the hilltop. The trench under

excavation comprises of two layers excavated within 5 spits (Plate 53 & 54). Three charcoal samples were collected for dating:

Spit 1: This spit consists of the humus and the topsoil. At depth of 0-40 cm, the soil was loose and sandy. The number of potsherds was few in number from this spit. Iron slags were retrieved from this spit.

Spit 2: The spit was excavated to a depth of 40-53 cm with layer 1 continuing to this depth. The soil is more compact. Pottery finds are very few, and almost all the sherds are weathered.

Spit 3: Layer 2. Soil of this spit is light brown in color and excavated to a depth of 53 - 80 cm. The potsherds are few in number and weathered. More iron slag was retrieved, and charcoal samples were collected from this spit.

Spit 4: This spit continued till a depth of 90 cm. The soil is compact and sandy. Findings are very few, with a few weathered sherds. Further charcoal sample was collected from this spit for dating.

Spit 5: The soil is compact, and the potsherds decrease in number. At the depth of 110 cm from the datum, the natural soil was encountered. Excavation stopped after collecting another charcoal sample at the lower base of the natural soil.

4.10.1. Summary of Finds

Potteries from this site were fewer compared to other sites. Altogether, 168 potsherds were retrieved, consisting of reddish yellow, brown, buff, red, grey, yellowish red, and reddish brown colours of cord- impressed, wheel-made, plain and paddle impressed wares. The thickness of sherds ranges from 1.5 mm to 5.9 mm, and weight ranges from 2 g to 15 g. Distribution of vessels consists of rim (2.39%), neck (4.17%), and body (86.31%). Texture of ware is sandy with granules and soot stains. Some sherds are weathered and fragile (Fig. 25 & 26) (Plate 55).

Other findings include a good amount of iron slags (Plate 56) that were retrieved from the trench (Table 1).

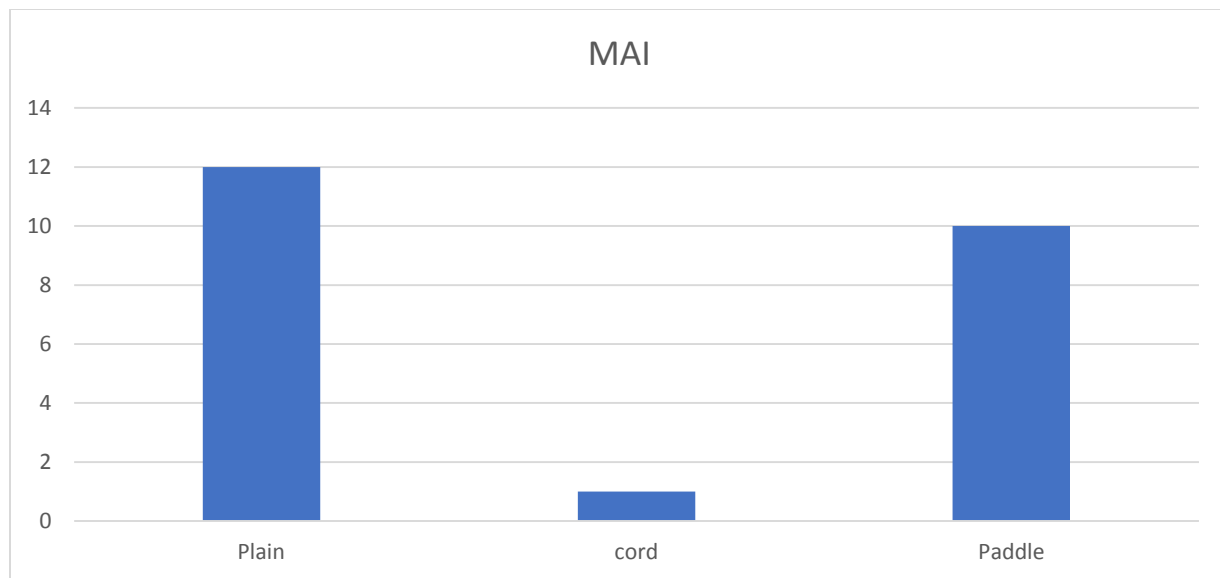


Figure 25: Graph representation of pottery colour types from Maipang

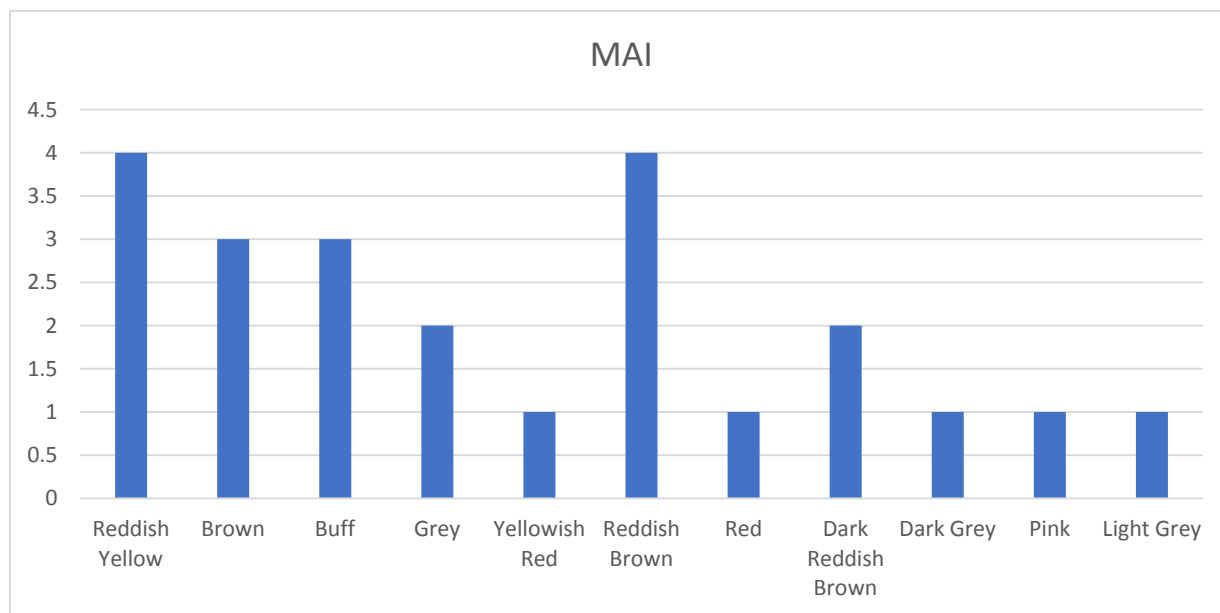


Figure 26: Graph representation of design types from Maipang

4.11. Potsherds and Artifacts analysis with 3D Models

Creating three-dimensional (3D) models by scanning pottery fragments from archaeological excavations is one of the newest approaches to analyzing potsherds in archaeology (Rangel and Badillo, 2015). This application in archaeology is a time consuming task, as it involves the scanning of the sherds several times from different viewpoint before obtaining the 3D model. However, in the present work Rangel approach on single view 3D surfaces was applied to get the

information on the designs and patterns from few weathered sherds from Jangjang Kimong (JJK), Koridang (KOR), Longzükyimjok (LGZ), Sangpuyimti (SYT) and Tsüha (TSH) (Plate 57 & 58). Two artifacts were also scanned and similar approach was applied to ascertain the details which are missed out during physical examination (Plate 59).

The scans revealed the weathered sherds consists of one cord mark designs from Jangjang Kimong while the rest of the sherds comprised of plain, herringbone pattern and horizontal paddle impressed ware. The scans of the artifacts revealed the touching on phyllite stone fragment and concave depressions on the sharpening stone.

SL. No	TR/Layer/Depth	Colour	Quantity	Condition	Total Weight	Porosity/Density	Flow-marks	Magnetism	Clay stain/stone inclusions	Remarks
1.	Tr-1 Layer-1 Depth:0-40cm	Black Brown to Reddish brown	Slag (1) Slag (2): Slag-stained sandy stones	Corroded	Slag (1): 75gm Slagstained stones (2): 175gm	Pores: Tiny, medium, Dense	Yes	Magnetic to partially magnetic	Brown- Reddish brown clay soil	Slag (1): Medium size, nodular smelted slag Slag (2): Light weight, broken, porous, sandy stones stained with iron slags
2.	Tr-1 Layer-2/Spit-3 Depth: 53-80cm	Brown to reddish brown to black to shiny	11	Corroded to partially corroded	1.89kg	Tiny pores Largely dense to Medium dense	Yes, to partiall y yes	Magnetic to partially magnetic to non-magnetic	Brown to reddish brown	Large size, nodular,smelte d iron slag cake followed by tapping slags
3.	Tr-1 Layer-2/Spit-4 Depth:80-90cm	Black, Brown to Reddish	05	Corroded to partially corroded	250gm	Pores: small to tiny pores	Yes	01 nodular shaped slag weighing 20 g found to be	Clay- brown to reddish brown	04 tapping slags + 01 nodular shaped slag

		brown						magnetic + 04 tapping slags are non- magnetic		
5.	Tr-1 Layer-2/Spit-5 Depth:90- 110cm	Black	01	Partially corroded	20gm	Large to small pores	Yes	Non- magnetic	Partial clay stains of brown to reddish brown soil	Small, nodular tapping iron slag

Table 1: Provenience and other key characterizing attributes of excavated slags, TR-1, Maipang

4.12. Site chronology: Radiocarbon and AMS dates

Out of the eight excavated sites, charcoal samples for dating were obtained from seven (07) sites. Charcoal samples could not be recovered from JangjangKimong site, while due to fund constraint the Maipang sample could not be dated. Samples from the six (06) sites viz. - Sangpuyimti, Rito, Koridang, Nichung, Longzükyimjok and Tsüha were analyzed at Birbal Sahni Institute of Palaeosciences, Lucknow, India (Table 2).

Charcoal sample from Sangpuyimti was dated using conventional radiocarbon dating method, while the rest of the five sites were dated using Accelerator Mass Spectrometry (AMS) technique. All radiocarbon dates were calibrated using the University of Oxford calibration software Ox Cal 4.4 (<https://c14.arch.ox.ac.uk/oxcal.html>) (Fig. 27 - 32).

Lab Code	Sample ID	Site	Measured Age (BP)	Calibrated Age
BS-5120	SYT:20(1)	Sangpuyimti	1306 $\pm$ 90	cal AD 580-955
DeA-48568	CT_KOR-21	Koridang	361 $\pm$ 21	cal AD1458-1632
DeA-48569	CT_LGZ-22	Longzükyimjok	936 $\pm$ 27	cal AD 1031-1172
DeA-48570	CT_NIC-22	Nichung	499 $\pm$ 30	cal AD 1400-1450
DeA-48571	CT_RTO-22	Rito	364 $\pm$ 36	cal AD 1453-1635
DeA-48572	CT_TSH-22	Tsüha	91 $\pm$ 28	cal AD 1688-1924

Table 2: List of radiocarbon dates of excavated sites

BS-5120 SYT:20(1)

TR- 2

Layer - 2

Depth: 65-84 cm from the datum

Sample type: Charcoal

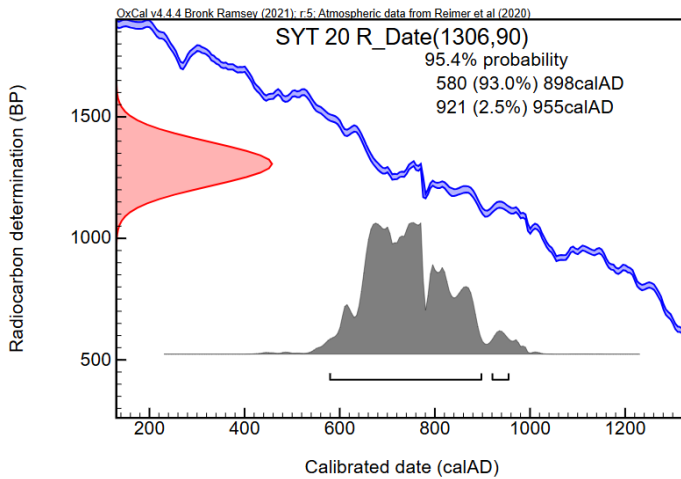


Figure 27: Calibration curve of site Sangpuyimti (SYT)

DeA-48568, CT_KOR-21

TR-1

Layer -2

Depth: 168-180cm from datum

Sample type: Charcoal

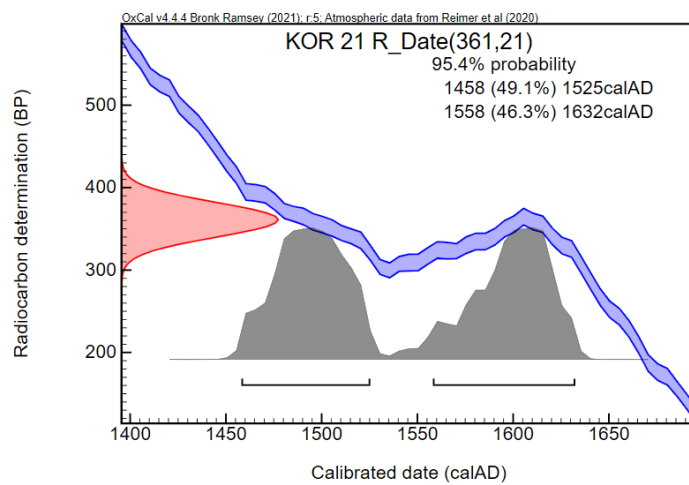


Figure 28: Calibration curve of site Koridang (KOR)

DeA-48569, CT_LGZ-22

TR- 2

Layer - 2

Depth: 53-58cm from datum

Sample type: Charcoal

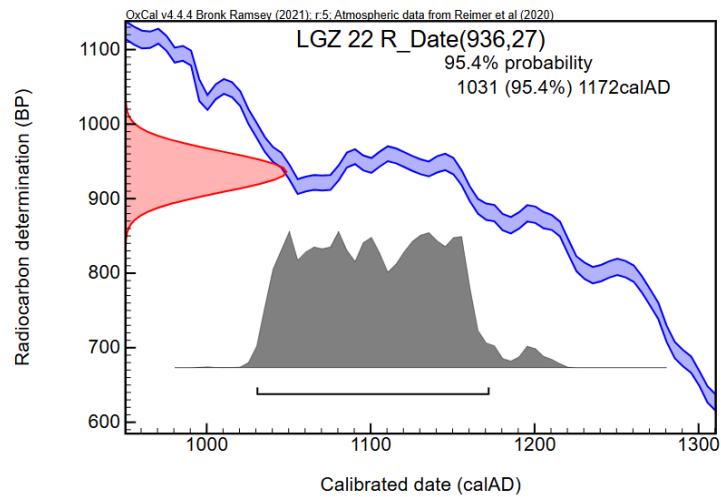


Figure 29: Calibration curve of site Longzükyimjok (LGZ)

DeA-48570, CT_NIC-22

TR- 1

Layer - 2

Depth: 69-77cm from datum

Sample type: Charcoal

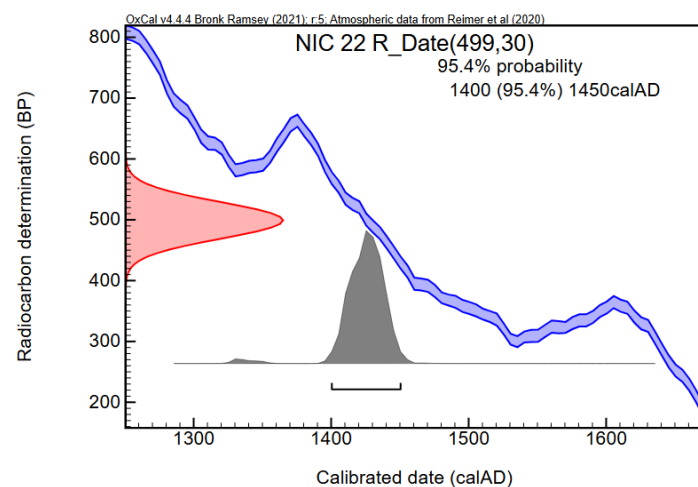


Figure 30: Calibration curve of site NIchung (NIC)

DeA-48571, CT_RTO-21

TR- 1

Layer - 2

Depth: 53- 66cm from datum

Sample type: Charcoal

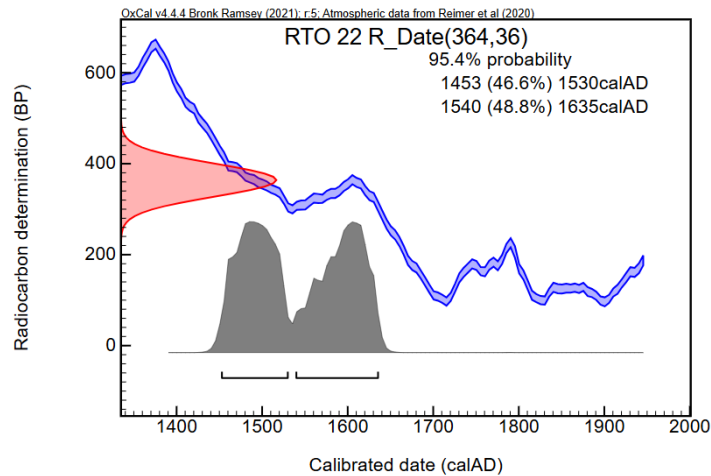


Figure 31: Calibration curve of site Rito (RTO)

DeA-48572, CT_TSH-21

TR- 1

Layer - 2

Depth: 57-67 cm from datum

Sample type: Charcoal

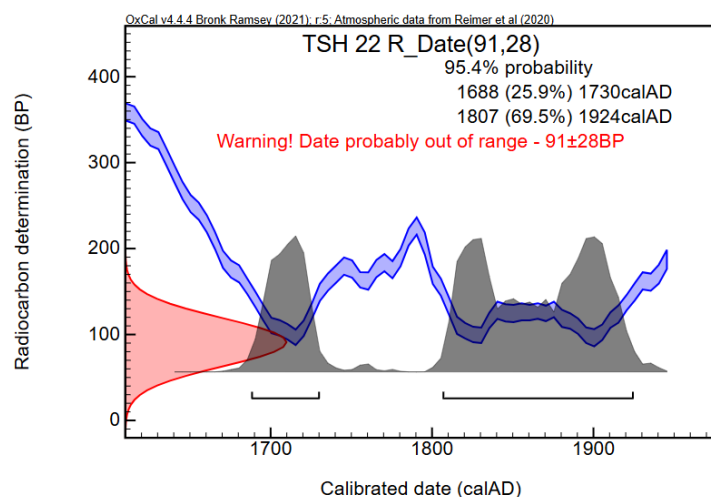


Figure 32: Calibration curve of site Tsüha (TSH)



Plate 20: TR-1 with exposed posthole features, SYT-20



Plate 21: TR-1 showing the exposed pit feature, SYT-20

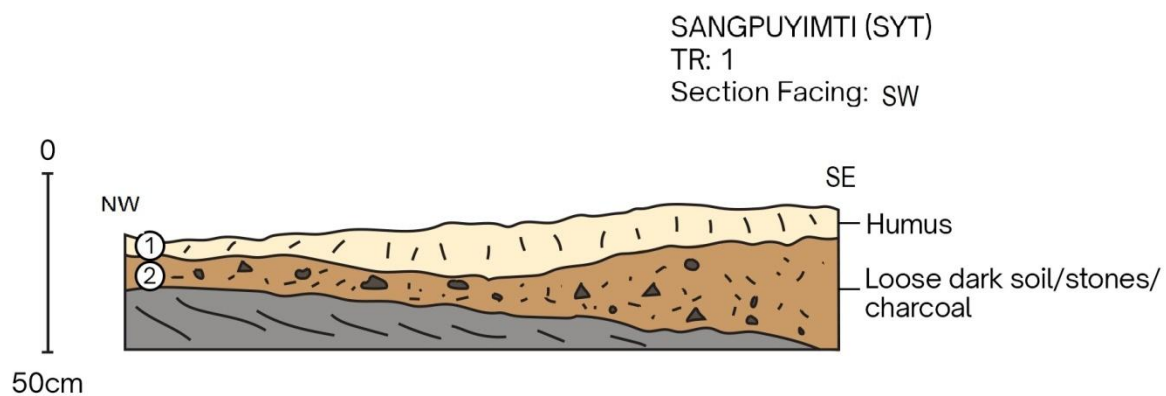


Plate 22: Stratigraphic profile of TR-1, SYT-20 (section facing Southwest)

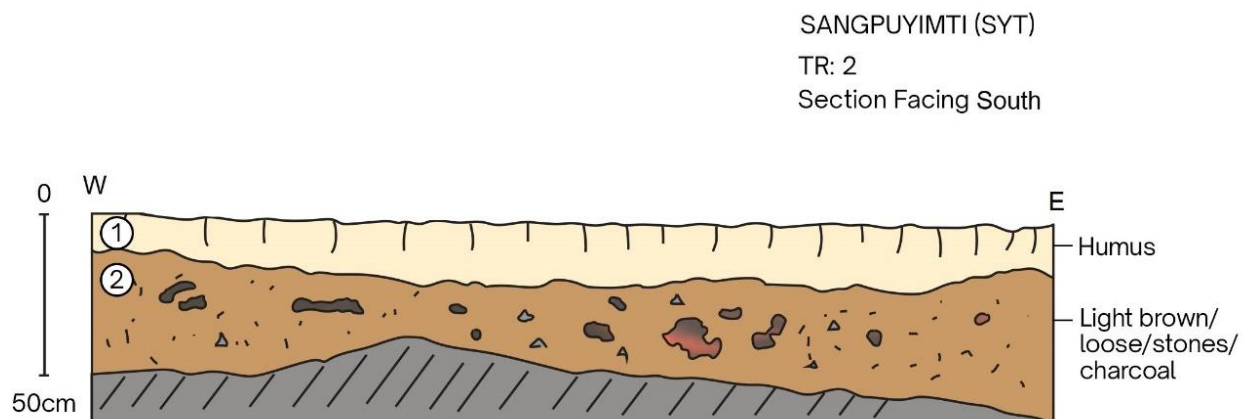


Plate 23: Stratigraphic profile of TR-2/ SYT-20 (section facing South)



(a)



(b)

Plate 24: a, b: a) Paddle impressed ware and Plain ware; b) Paddle impressed ware with vertical bands and basket-like paddle impressions from SYT-20



(a)



(b)



(c)



(d)



(e)



(f)

Plate 25: a-f: a). Spindle whorl; b).River cobble; c). Fragment of sharpening stone; d). A modified phyllite stone fragment, e). a Spilite adze; f). Squarish shell bead spacer from SYT-20



Plate 26: Ground plan of TR-1, JJK-20

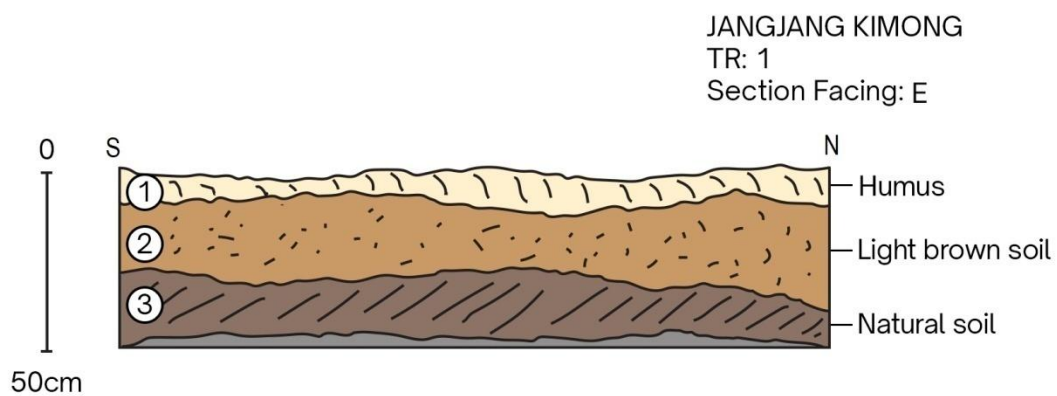


Plate 27: Stratigraphic profile of TR-1/ JJK-20 (section facing East)

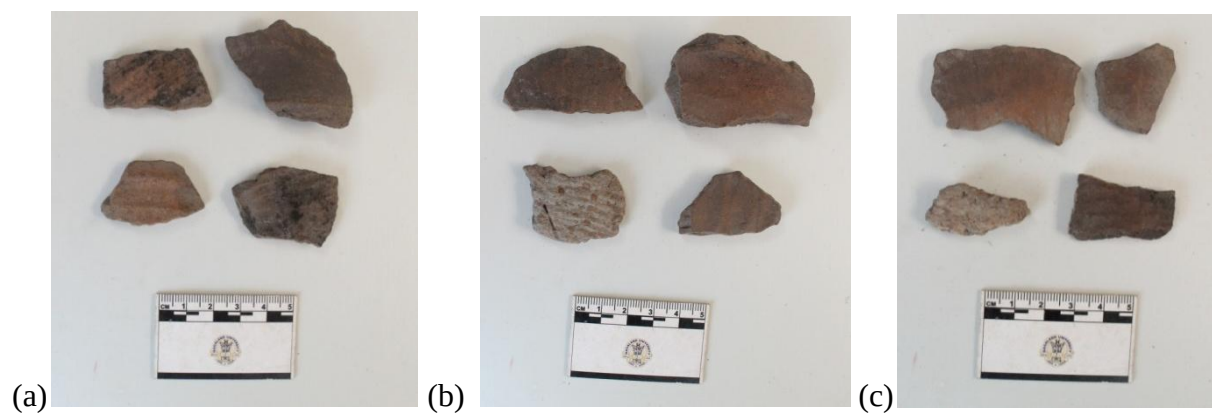


Plate 28: a, b, c: Paddle impressed and plain ware of brownish yellow and cord impressed grey ware from Jangjang Kimong



Plate 29: Profile section of Tr.1/ KOR-21.

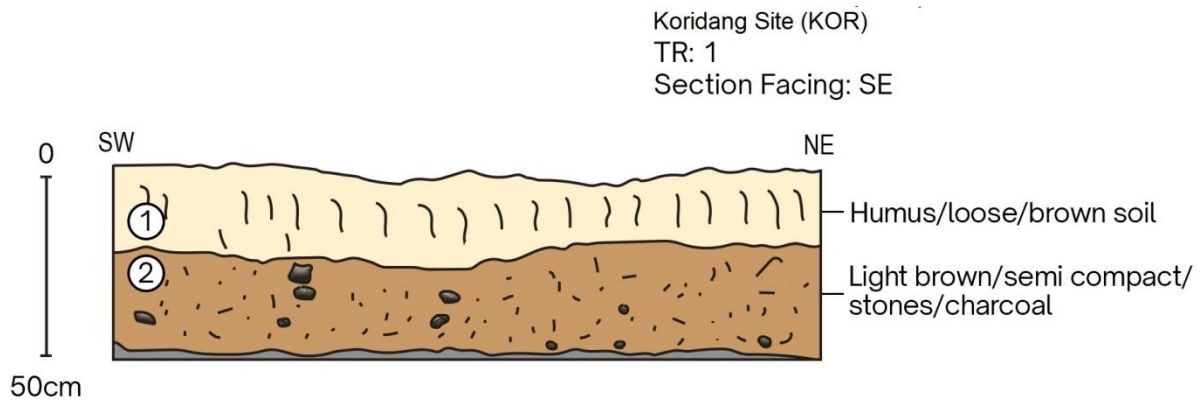


Plate 30: Stratigraphic profile of Tr. 1/ KOR-21 (section facing southeast)



Plate 31: Paddle impressed ware from KOR-21

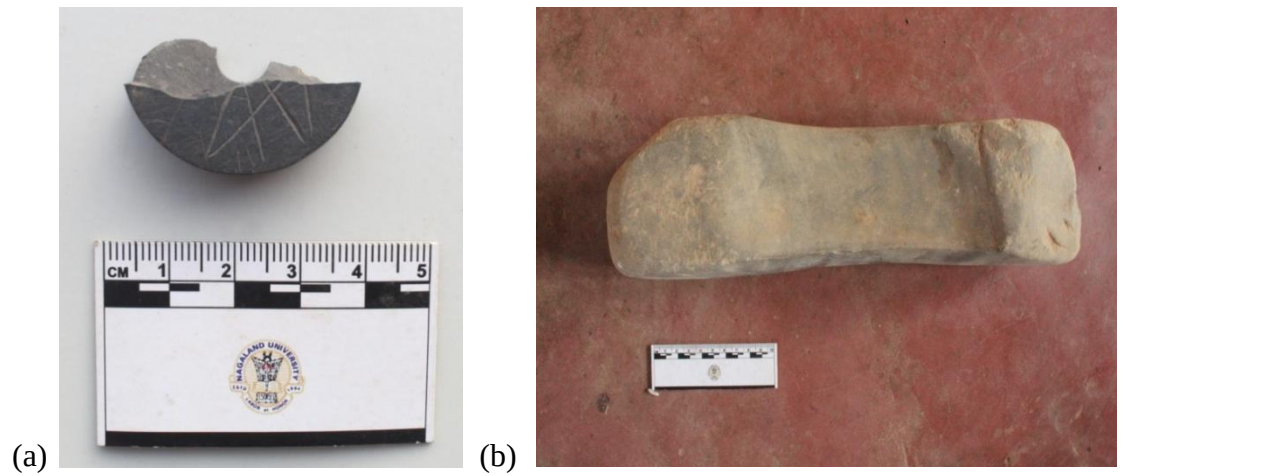


Plate 32: a, b: a) Fragment of spindle whorl with incised mark; b). Sharpening stone from KOR-21

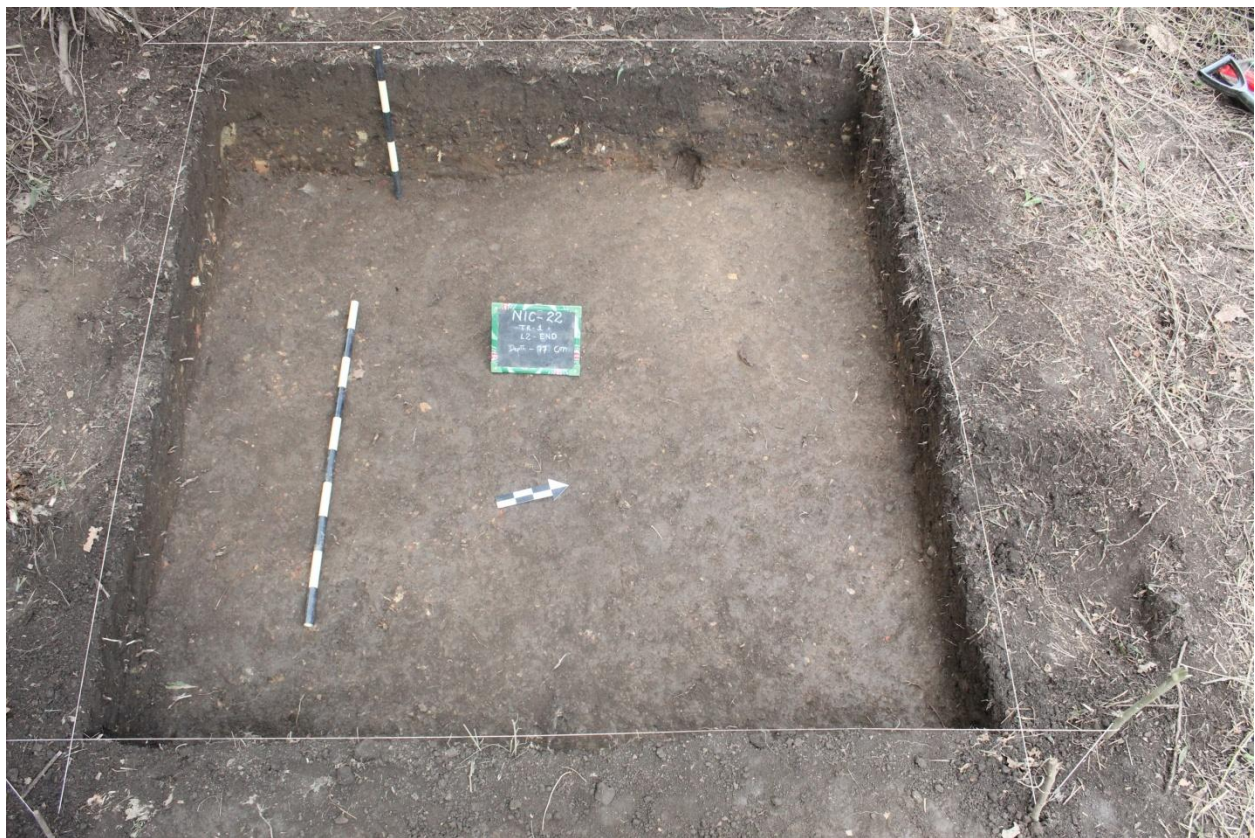


Plate 33: View of ground plan TR-1, NIC-22

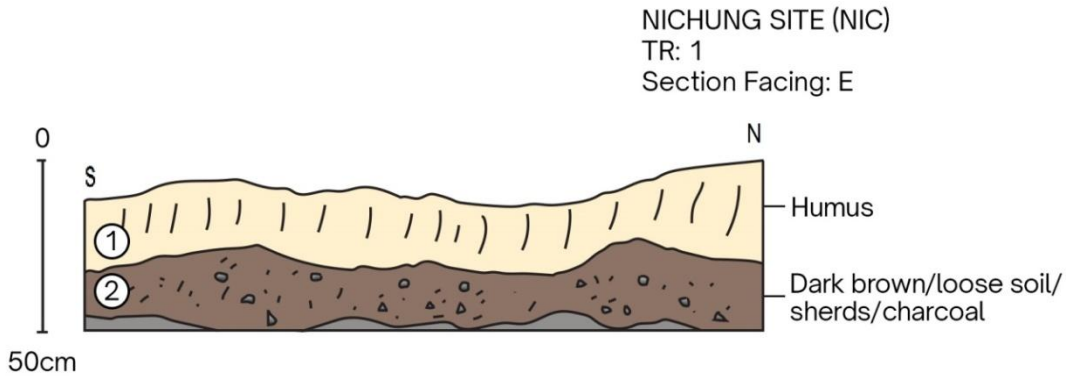


Plate 34: Stratigraphic profile of Tr.1/ NIC-22 (section facing east)

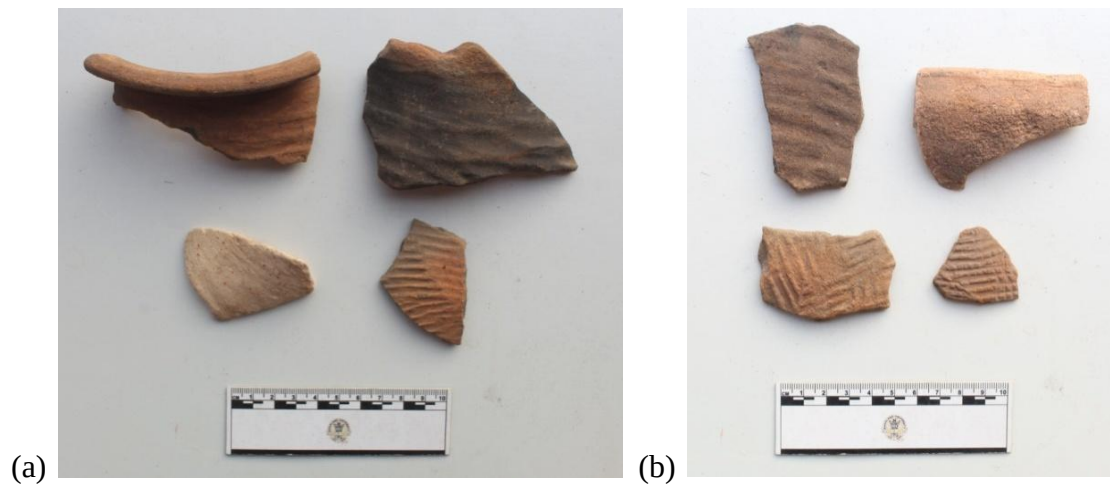


Plate 35: a,b: a) Paddle impressed ware and buff wheel made ware; b) Paddle impressed and plain ware from NIC-22

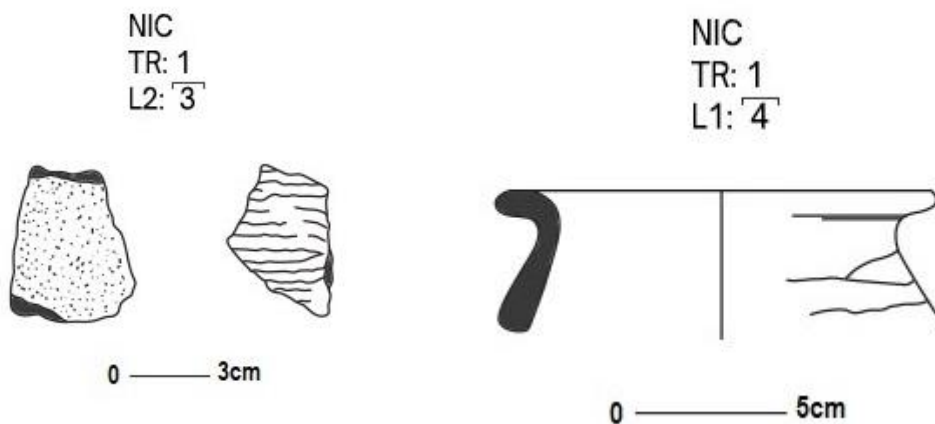


Plate 36: Rim profile of paddle impressed ware and body sherds from Nichung site

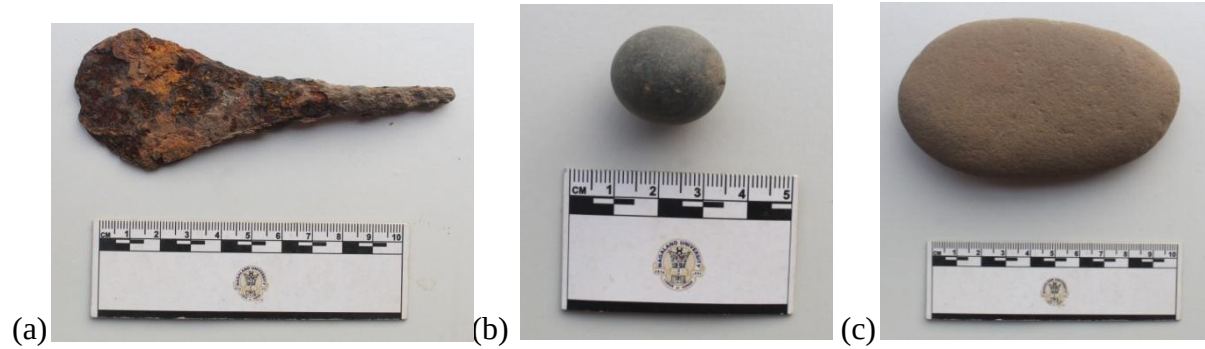


Plate 37. a, b, c: a) A corroded iron hoe; b) Fetish stone; c) River cobble from NIC-22



Plate 38: View of the TR-1/L-2, showing the posthole feature, RTU-22

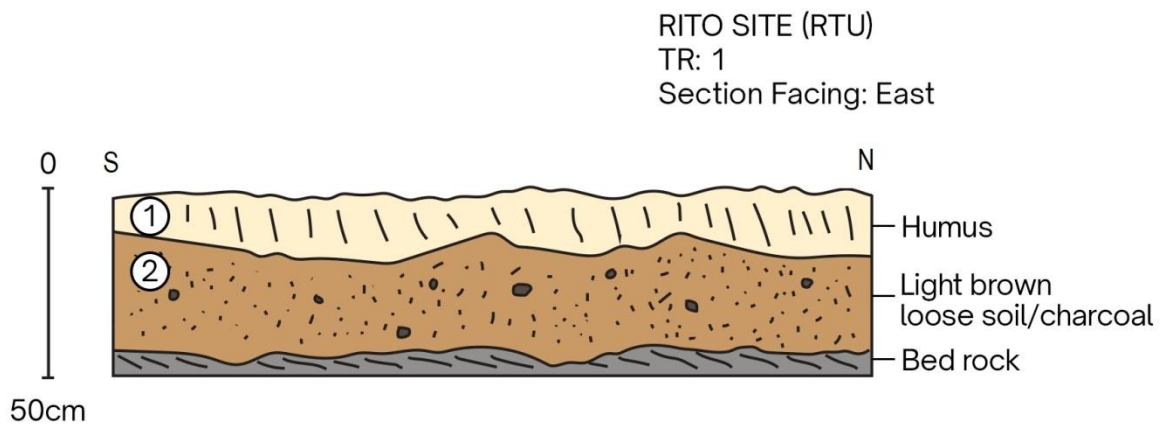


Plate 39: Stratigraphic profile of TR-1/ RTU-22 (section facing east)



Plate 40.a.b: a)Paddle checked (mat) impressed, horizontal bands and plain ware; b) Buff, red and brownish ware from RTU-22



Plate 41: a). Fragment of sharpening stone; b) Fragment of smoking pipe; c) Fragment of sharpening stone from RTU-22

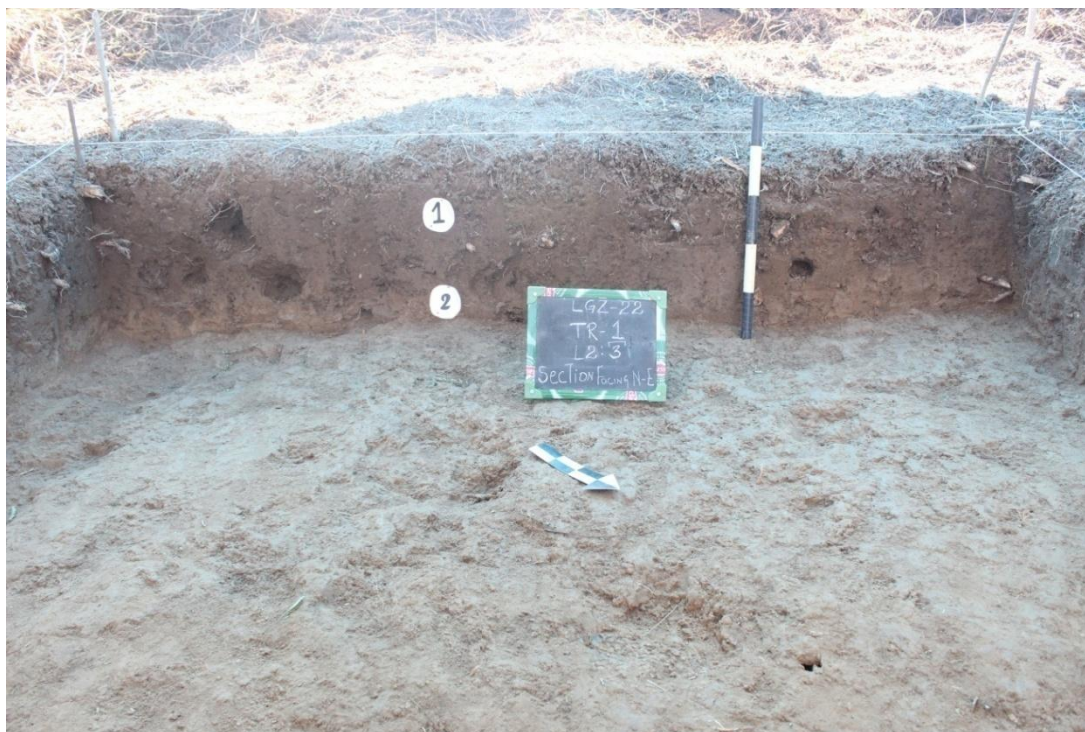


Plate 42: Profile section of TR-1/ L-2, LGZ-22



Plate 43: Profile section of Tr-2/ L-2, LGZ-22

LONGZUKYIMJOK (LGZ)
TR: 1
Section Facing: NE

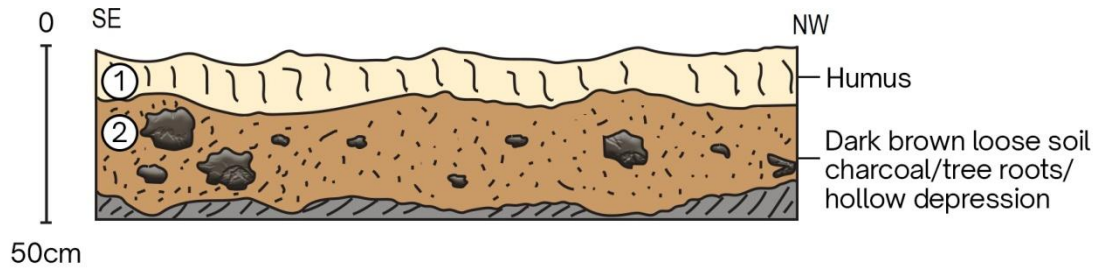


Plate 44: Stratigraphic profile of TR-1/ LGZ-22 (section facing northeast)

LONGZUKYIMJOK (LGZ)
TR: 2
Section Facing: NW

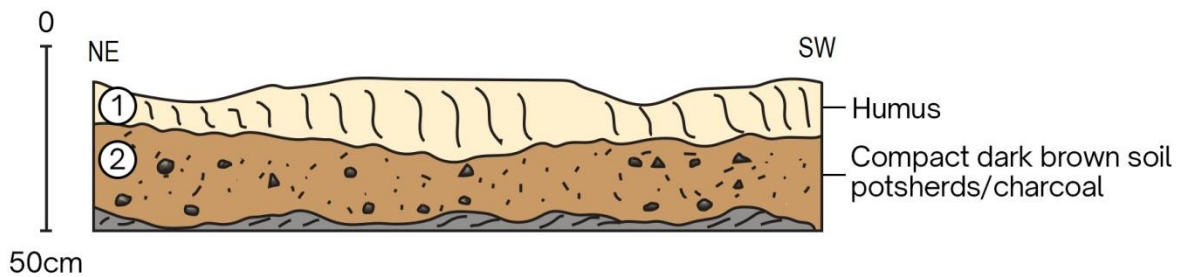


Plate 45: Stratigraphic profile of TR-2/ LGZ-22 (section facing northwest)

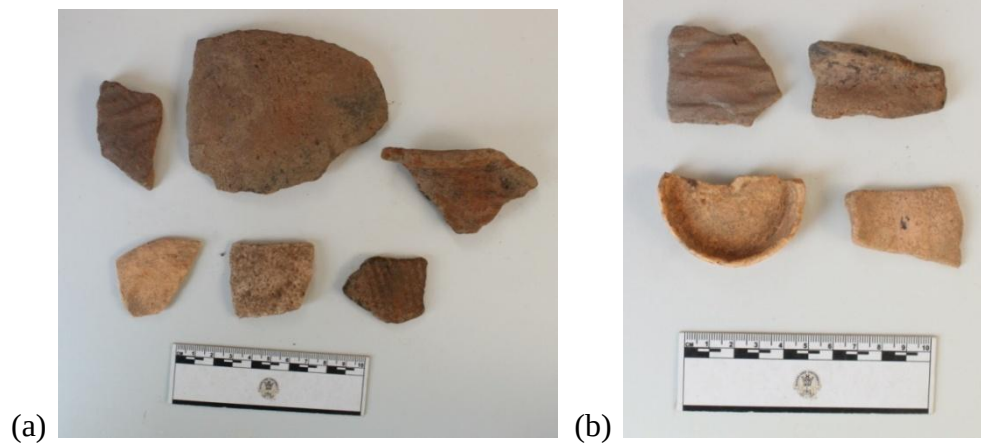


Plate 46. a, b: a). paddle, plain handmade ware and buff wheel made ware from Tr.1/ LGZ;
b). Plain buff ware and paddle impressed ware from Tr. 2/ LGZ -22

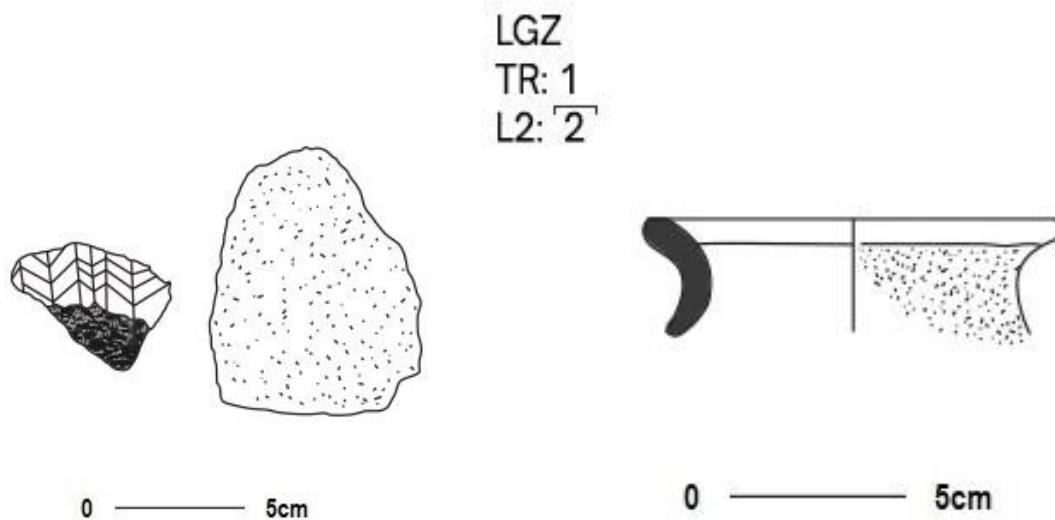


Plate 47: Rim profile of a plain ware (right) and herring bone paddle impression and plain ware (left) from LGZ-22



Plate 48: View of ground plan of TR-1/ L-2, TSH-22

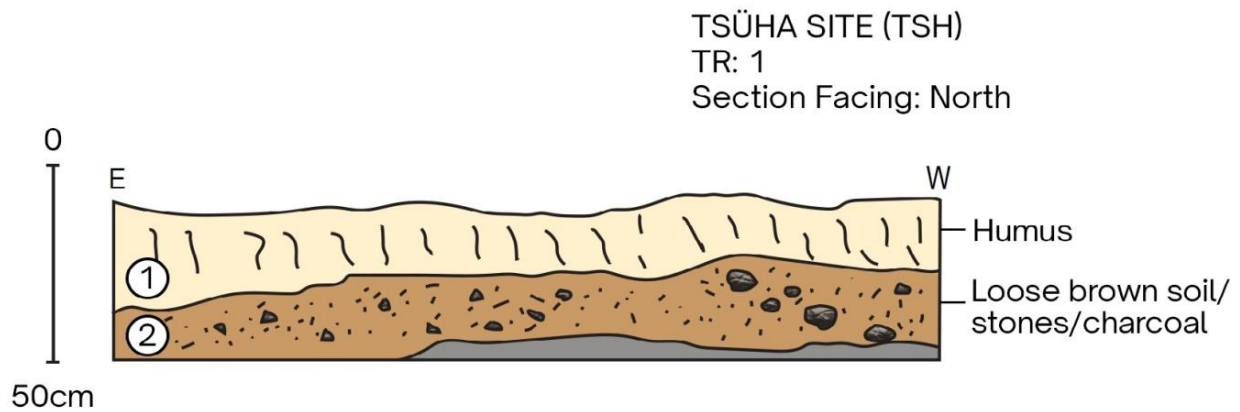


Plate 49: Stratigraphic profile of TR-1/TSH (section facing north)



Plate 50: Handmade paddle impressed with herring bone design pattern, plain ware, and wheel made buff ware from TSH

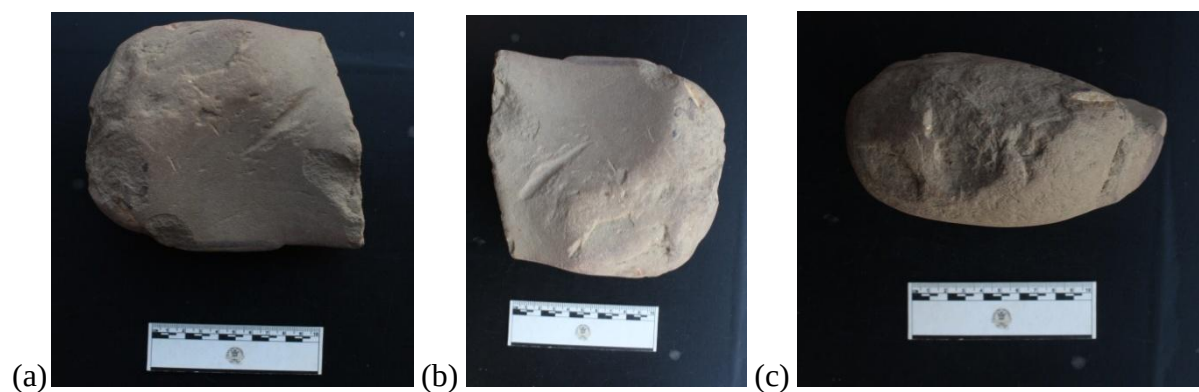


Plate 51: a, b) Fragment of sharpening stone; c) River cobble with battering marks possibly used as stone hammer TSH-22

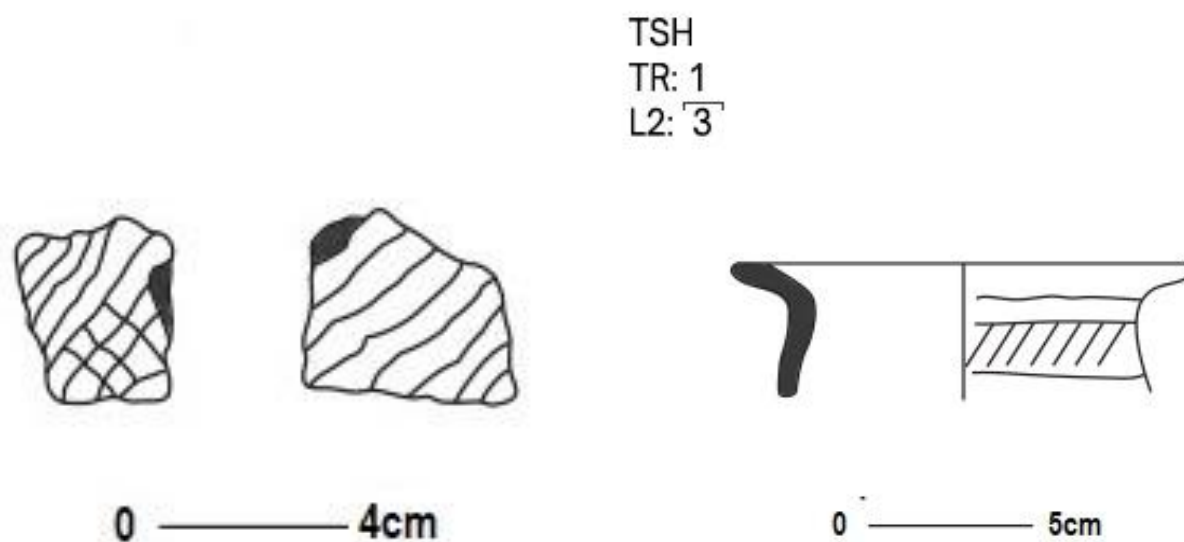


Plate 52: Body sherds with paddle impression with profile of paddle impressed ware from TSH-22



Plate 53: View of TR-1/ L-2 and profile section, MAI- 23

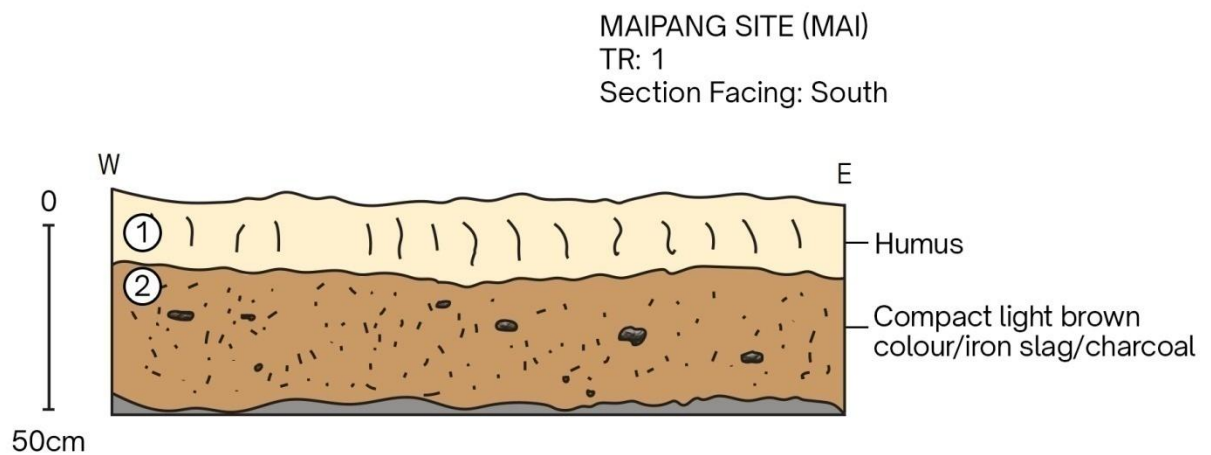


Plate 54: Stratigraphic profile of TR-1/ MAI- 23 (section facing south)



(a)



(b)

Plate 55 a, b: a) Paddle impression, plain and buff wares; b) Paddle impressed and plain wares (weathered) from MAI-23



Plate 56: Fragment of iron slag from Maipang

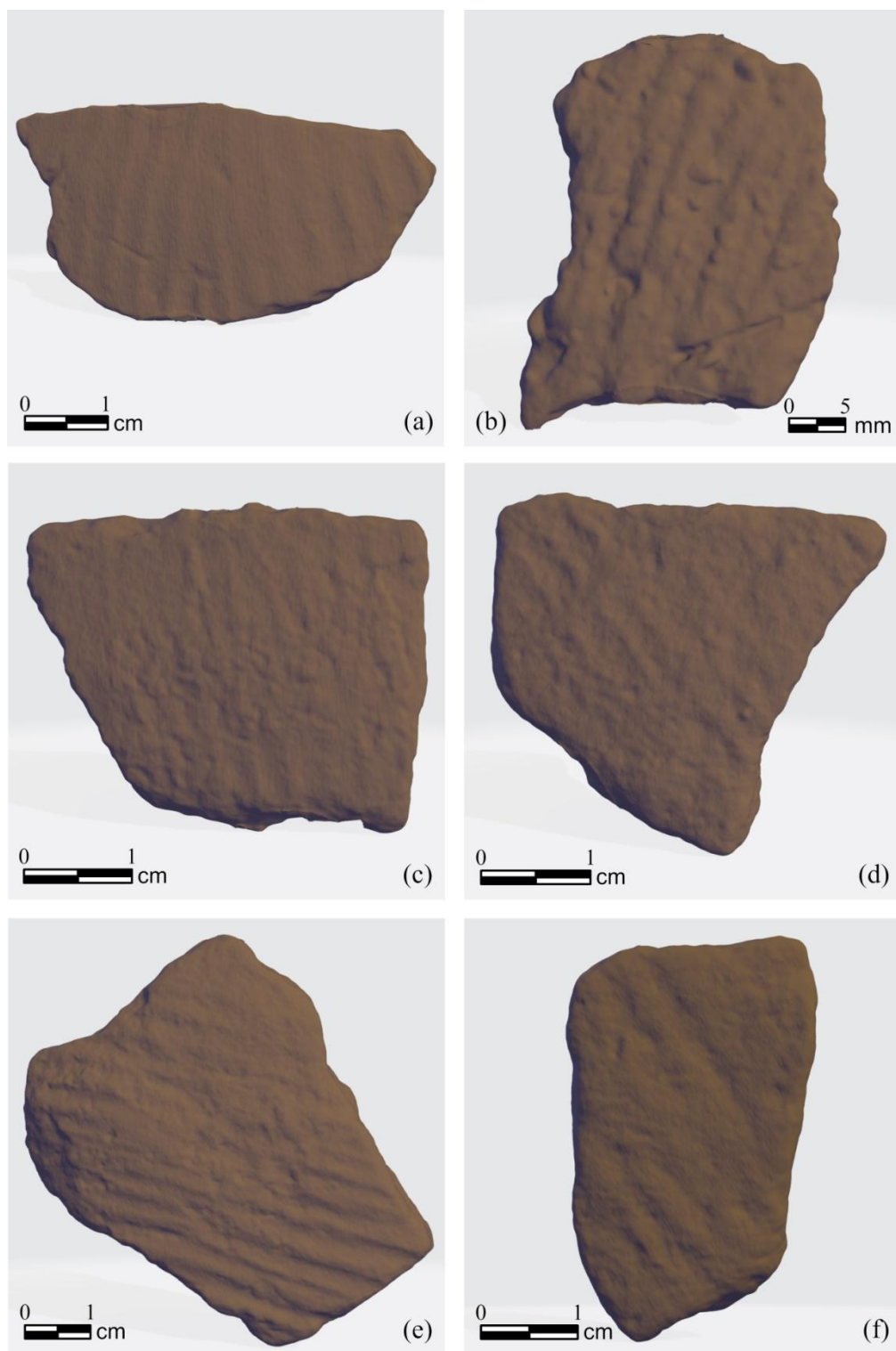


Plate 57 (a-f): a. paddle impressed, b; Cord- impressed ware from JJK-20;
c & d. paddle impressed ware from KOR-2; e & f. Paddle impressed from LGZ-22

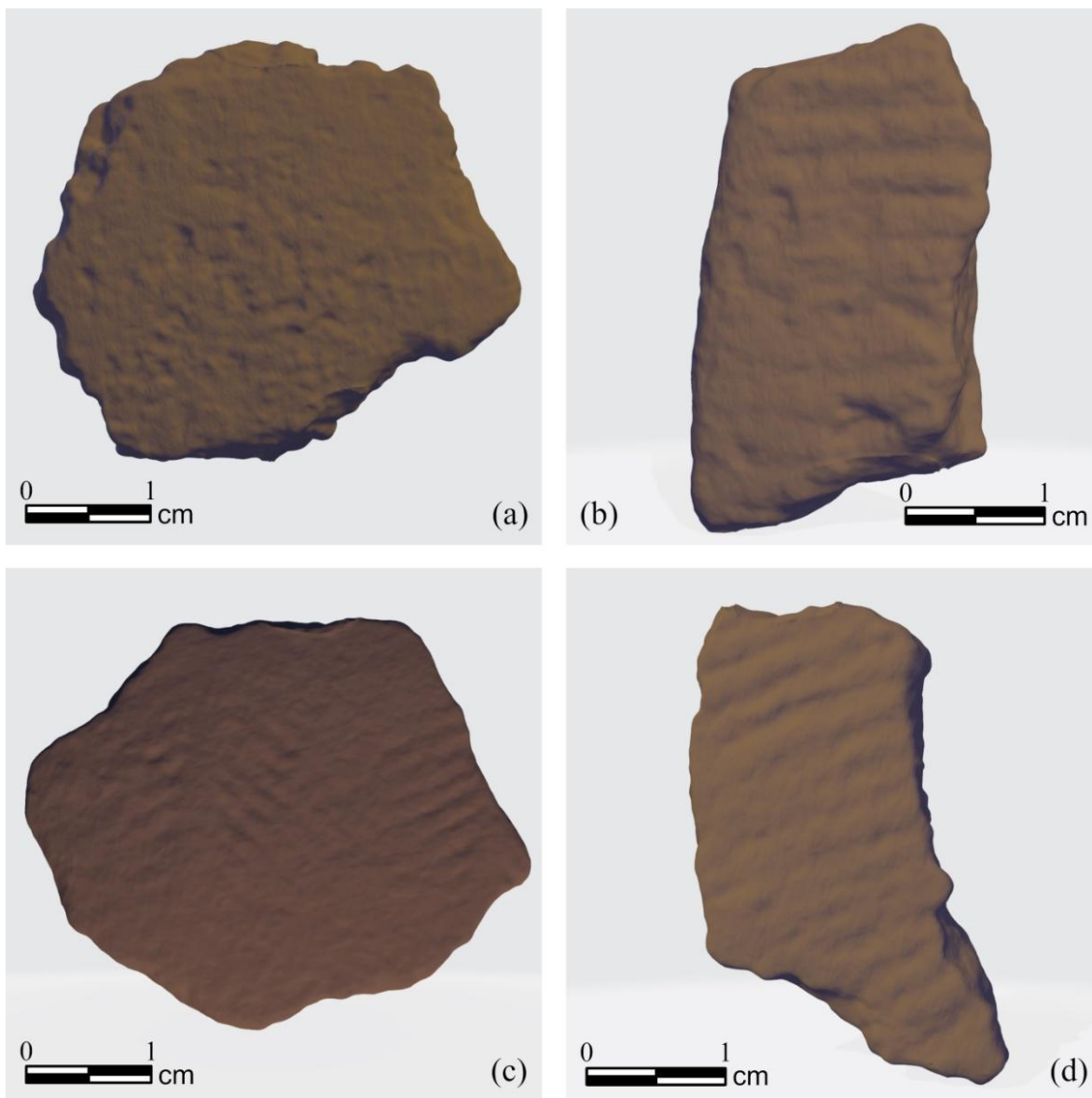


Plate 58 (a-d): a). Plain ware; b). Horizontal paddle impressed ware from SYT-20; c). Herringbone paddle impressed ware; d). Horizontal paddle impressed ware TSH-22

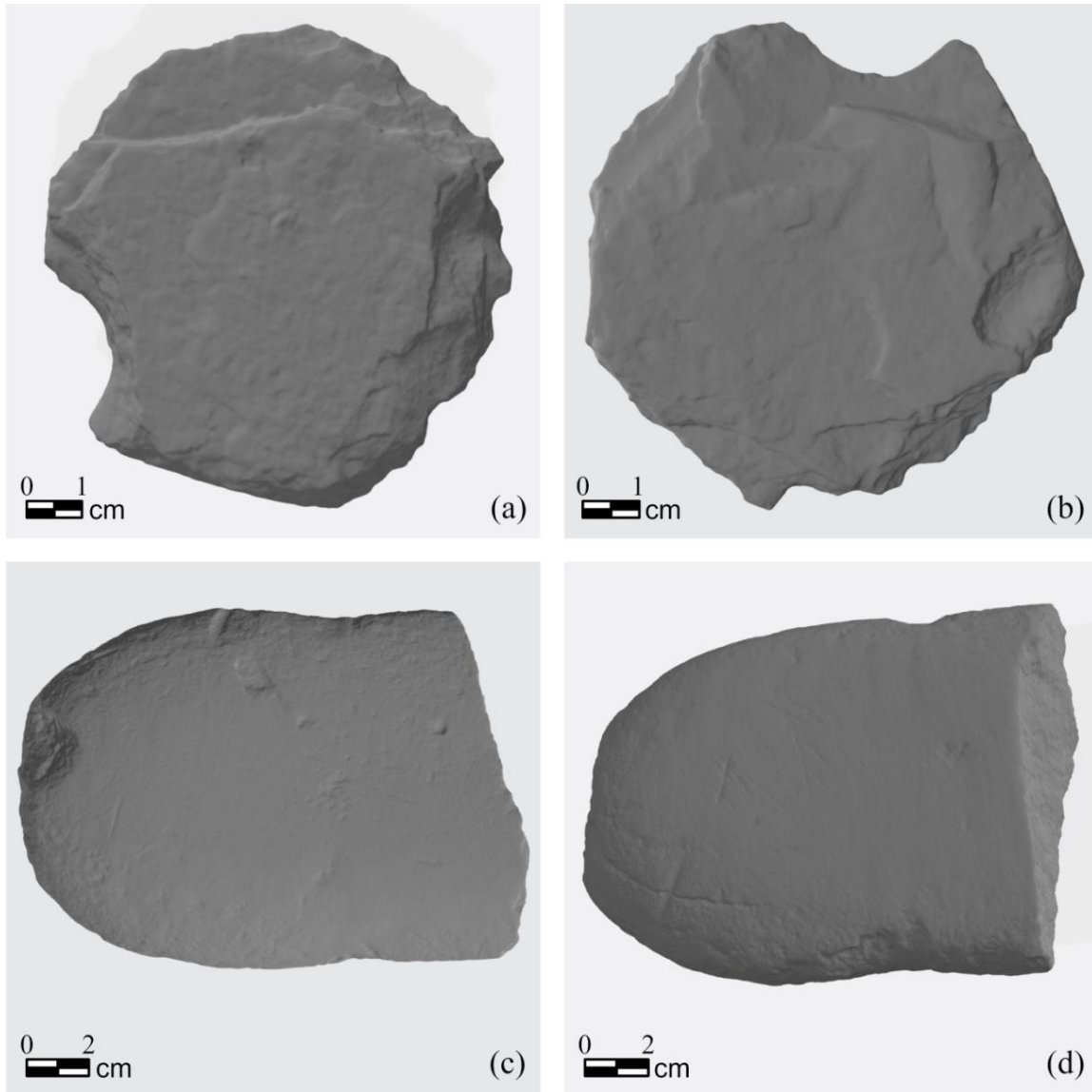


Plate 59 (a-d): a & b. 3D scanning of a modified phyllite stone fragment; c & d. 3D scanning of a sharpening stone with traces of use-wear marks from SYT-20

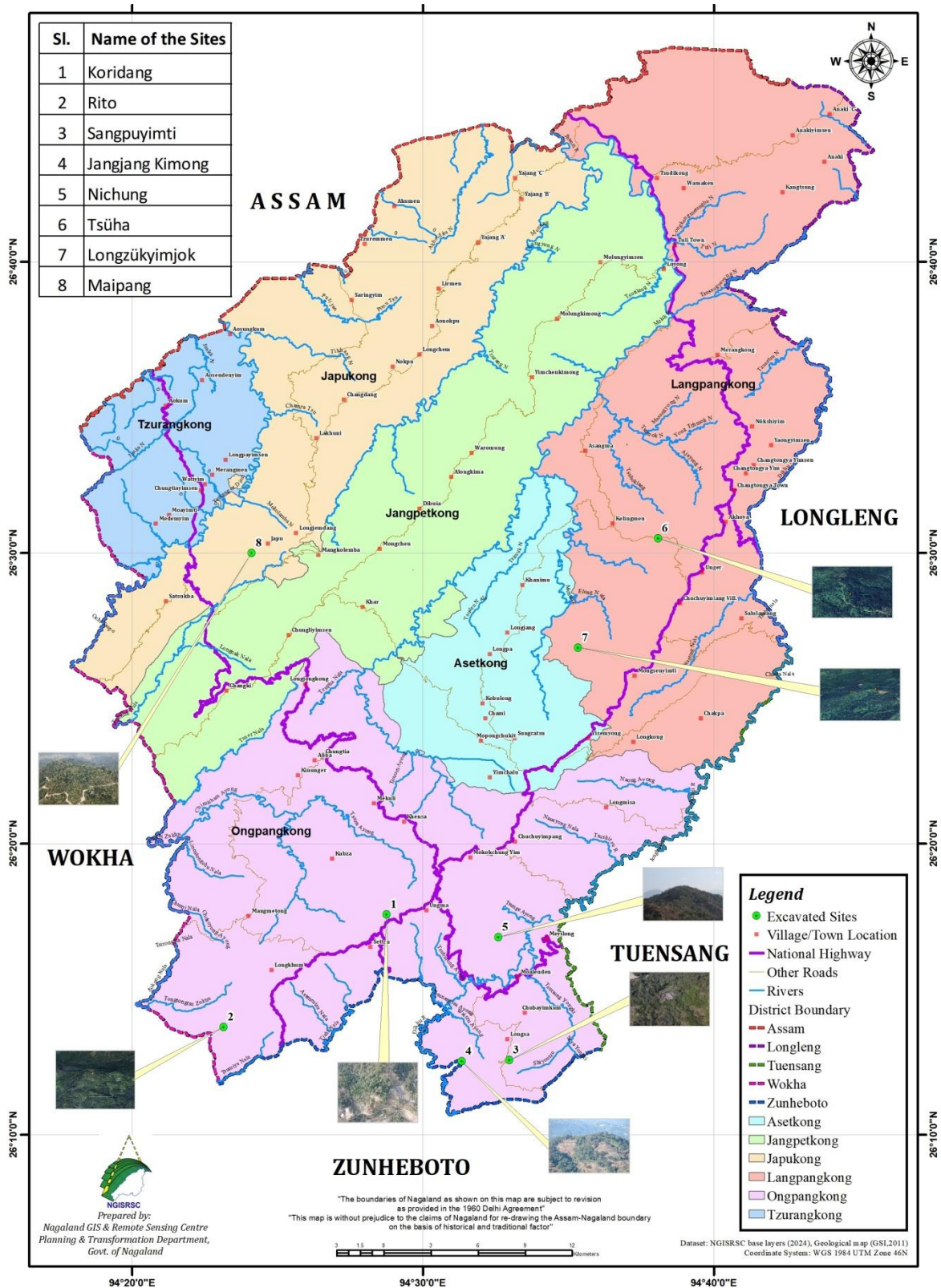


Figure 10: Location map of excavated sites, Mokokchung District, Nagaland

CHAPTER – 5

Discussion and Conclusion

5.1. Research Overview

The present research seeks to understand the spread and formation of early Ao Naga settlement sites and the various factors responsible for their spread. To understand these complex processes, oral tradition, and archaeology are integrated into the present study to obtain a better understanding of the population expansion, the chronology of such migration events, and the nature of material culture assemblage and society around this time. The coverage of the study thus attempts to examine the post-Chungliymti *en mass* dispersal events and expansions of the Ao Nagas to their modern-day settlements. Six prominent ranges of Mokokchung District are the focus of the study, examining the various routes of migration to these ranges after the Aos initial dispersal from Chungliymti. Furthermore, the nature of site distribution in relation to the ecological settings of six ranges and the influence of ecology on human settlements are investigated by further collating these observations from the oral history of site selections for human settlements. Because archaeological research in the District under study is limited, another important component of the present research is to identify archaeological sites around Mokokchung District. The present study, therefore, has identified several sites for a further intensive study in future and also helped generate a database for future management and mitigation of such significant archaeological sites associated with the Ao oral tradition.

In order to understand the aforementioned key areas of investigation, the present research proceeds guided by a theoretical framework of migration with emphasis on the factors that prompted the mobility of past populations, the various reasons for site desertion, and the nature and structure of population migration. Hence, what the present study contributes is an understanding of past population mobility and social change that widely dominates discourse in areas such as prehistoric archaeology, archaeo-genetics, history, sociology, and anthropology. In archaeology, in recent years, there has been a resurgence of older conceptual models long

deemed outdated such as human migration, diffusion, admixture and social change as a result of advances in molecular biological studies such as ancient DNA or aDNA research (e.g. Furholt 2021; Shennan 2024).

5.2. Oral Tradition of Migration and Archaeology

The origin myth of the Aos points to the six stones or ‘Longterok’ at Chungliyimti. This oral tradition of their origin myth holds a special place in the history of Ao origin. So central is this myth of origin apparent in the worldview of the Aos that the reference to their folklore, songs, and other customary practices are all traced to Longterok and their ancestral village known as Chungliyimti. Therefore, ‘Longterok’ or ‘Six Stones’, for the Aos is a place of “cultural and social enlightenment and innate sense of civic responsibilities” (Aier, 1969). The Ao Naga myth of origin goes on to narrate that their ancestors “sprang up or originated” (*Poktet*) from six stones at a place called Longterok which is located in Chungliyimti village, Tuensang District, presently inhabited by the Sangtams. In the beginning there were three ancestors by the name of Tongpok (Pongen clan), Longpok (Longkumer clan) and Longjakrep (Jamir clan) originated from Longterok. They emerged from the stones along with their sisters whose names were Longkupokla/Lendina, Yongmenala and Elongshe, who belonged to these major clans respectively. It is further claimed that Tongpok married Elongshe, Longpok married Longkupokla/Lendina and Longjakrup married Yongmenzala, thus establishing the practice of clan exogamy which is followed till today. The descendants of these three couples came to be known as the Aos (Excerpt of an interview with Imkongakum-76 yrs; Temjenzungba-82 yrs Tatar, Jongpongwati-79 yrs, Village Council Chairman, Ungma village, Oct 2007, cited in Aier and Jamir, 2009, p. 6). While the myth of origin from Longterok is deeply entrenched in the folklore of the Ao, it is also seen confined to sections of the Sangtams, Phoms and Changs (see Aier and Jamir, 2009). For the Ao Mongsen group, the oral tradition narrates that in the village of Chungliyimti were six ancestors –Chongli ancestors: Tongpok, Longpok, and Longjakrüp and the Mongsen ancestors –Tsüngremchang, Longchenti, and Longmetang (Imchen, 1990, p.35).

A more logical and critical assessment of this popular origin myth of Longterok may be further drawn from the work of Aier and Jamir (2009):

The narration of Ao tradition typically follows “having originated at Longterok.” Consequently, the term ‘*poktet*’ (origin) is interpreted in a literal manner, and for generations, the Aos claimed that they originated from these stones. Nevertheless, following the concept of myth as a symbolic representation of the past, a

reinterpretation of the term ‘origin/poktet’ as given in the myth of Longterok needs to be subjected to a logical analysis. Another Ao tradition says that after living in Chungliyimti for many generations, they crossed the river Tzüla by making a cane suspension bridge over it.

The Ao migration story goes on to say that after they crossed to the other side of the river Tsüla, the suspension bridge was cut down to prevent others from crossing over. So those remaining members on the other side of the river had to take a detour which in Ao dialect is “Mürra.” This explanation of the narrative is normally cited to validate why the Aos call the tribes living across the Tzüla as Mürir, meaning “those who went taking a detour”. Conversely, the Aos were given the name “Ao-er” which means “those who went”. This narrative is found among the Aos and also among those tribes living across the river Tzüla(Dikhu).

The origin myth of Longterok which says that the Aos emerged from these stones, when viewed in association with this narrative about the origin of the name ‘Ao’, the myth of originating from the stones makes a symbolic sense as the distinct identity of the Aos appears to have emerged only in association with the event of crossing the river Tzüla. The myth of origin (*poktetba*) from Longterok when considered from the standpoint of a separate Ao identity formation distinct from those they had left behind, maybe re-interpreted as symbolizing their new identity as ‘Ao’ and not necessarily in its literal sense (Aier and Jamir, 2009, p. 7-8).

What is also to be noted is that until recent times, no systematic scholarly work has been conducted on the migration of the Aos prior to Chungliyimti. As observed by Walunir (2003), “Many Aos, especially the older folks, still believe that they emerged out of the said six stones. It is ethical for them to hold on to the tradition” (Walunir, 2003, p.10). This deep attachment of the Aos to Chungliyimti and Longterok often put local researchers in legal customary penalties when they tried to question the validity of the oral sources. With no intensive research initiated to date, nor the survival of any oral tradition on the migration history of the Aos prior to their settlement at Chungliyimti, the Ao migration routes remain murky and unestablished. There are references to mythical account of *Mütitangkong*, generally thought to be a primeval time when Man, Spirits, Beast and other creatures lived together and communicated freely through a speech medium (Jamir et al. 2014a, p. 433). However, it is unclear whether this myth is situated within the ancestral village of Chungliyimti or somewhere in a far distant land. For some scholars, before their migration to Chungliyimti, “...they may have been primitive nomads of the Mongoloid race of the South East Asia” (Walunir, 2003, p.10). Similar to other Southeast Asian mainland

encompassing the Zomia origin hypothesis (Scott, 2009), perhaps the Aos were a part of the cultural group that evaded state formations and migrated from a more northwardly direction. For now, such claims remain entirely conjectural left to future trans-disciplinary research covering a wider geographical area of the Zomia massif.

While this is the macro-scale understanding of Ao migration for the moment, the oral traditions of the Aos post-Chungliymti dispersal and their migration to various directions are rich and hold an important place in their history of village establishment. This is so because there are several social positions and statuses associated with the group who first arrived and established the village. In the Ao village administration, along with other privileges that come, the first settlers are ascribed a responsible and higher office in the village administration. Therefore, the village migration history is held with great significance.

According to the Ao oral tradition, Chungliymti became densely populated, and the availability of cultivable land diminished, prompting people to migrate in search of suitable land. This led to *en masse* migration from Chungliymti. While the most commonly held view of the migration route in the Ao collective memory follows the pathway from Chungliymti via Dikhu to Aonglenden, thence to Koridang, and further subsequent dispersal at Koridang, the present study revealed several other migration routes chosen by different groups. The prominence of the Chungliymti → Dikhu → Aonglenden → Koridang route in oral traditions is attributed to the fact that the majority of the Aos followed this course (Fig. 9). At Koridang, the Aos experienced a second major dispersal event, leading to establishment of numerous villages across the six ranges of Mokokchung District. The preceding chapter (Chapter 3) examines this dispersal, revealing that several Ao villages consider Koridang and the first villages established after the eventful Koridang dispersal such as Kupza, Settsü, Longkhum, and Ungma—to be significant in their migration history, although Chungliymti is featured as their ancestral settlement of origin.

In the present study, additional migration routes of the Aos beyond the generally recognized Chungliymti → Dikhu → Aonglenden → Koridang route are identified (Fig. 9). One such route is the southwestern migration route, traveled by a fewer Ao group. According to Ao oral traditions, these groups migrated prior to an *en masse* migration from Chungliymti. The primary groups that followed this route are the Sangpu and Molunger, who appear to have been contemporary since their settlements are identified in adjoining areas.

The present study reveals that the Sangpu group migrated from Chungliyimti long before the larger Ao dispersal. During their journey, they split into two groups at Jongpongshisakong, with one group moving to Amang Kimong and the other settling at Sangpuyimti. Later, some from the Amang Kimong group rejoined the Sangpu, while the rest continued toward present-day Ao territory. The Sangpu eventually migrated further west, settling briefly at Shongjen before finally relocating to Longsa village in Mokokchung District. Similarly, the Molunger group followed the southwestern migration course and initially settled at Tsütsüngpangkong. However, they later abandoned the site and proceeded towards the present Ao inhabited areas. They first settled in the Mongoya area before migrating further down to the lower ranges, where they later migrated to establish permanent settlements at Molungkimong and Molungyimsen. This study highlights the significance of the southwestern migration route in providing a broader perspective on Ao migration history. However, further intensive research is needed to comprehensively understand the complexities surrounding the Ao Naga migration pattern.

The study also reveals that Rito and Nichung were occupied by two thriving groups but oral narratives are scanty on their migration routes to these sites. The site of Rito was abandoned owing to poor leadership, thus forcing the people to disperse in various directions. Interestingly, there also exists published oral historical accounts of encounters between Changki and Rito where to this day mention of specific physiographic features such as the Nangatzü and Ritozaing streams that relate to these encounters are recounted in the oral history of Changki (CAASM, 2007, p. 30). At the same time, this also suggests the contemporaneity between the two groups.

Two oral sources refer to the Changki group. The first source talks about Nichung¹ occupied by a Changki group, but due to natural calamities, the population was compelled to abandon the site. There are, however, no accounts that further narrate their migration from Nichung. The oral narrative from the second source mentions the ‘Changkilukum’² group settling at Nichung but no further details are known except for the Nichung women, who are addressed by the name “Lukumlar”. Oral narratives associated with the Changki group are also recounted in the oral tradition of Sangpu group³, who established contact with a Changki group while they were settled at Tsütsüngpangkong. According to the oral narratives, this particular Changki group abandoned Tsütsüngpangkong and migrated towards the northern direction. Similarly, there are also corroborating published accounts that mention some Changki groups migrating from Tsütsüng near present Longsa village (CAASM,

2007, p. 29). Reference to the site of Longzakumjok and their further settlement at Jangpetkong summit is also evident in these accounts (see CAASM, 2007). Colonial ethnographic accounts also refer to the Changki group settling at Lungyakinjuk near Mongsenyimti (Mills, 1926, p.11). Such oral and published accounts thus suggest that the Changki group was also part of the lesser Ao migration group. However, due to limited oral sources available, detailed accounts of the migration of Rito and Changki group remain wanting. The available sources, however, highlight some significant oral historical data, especially on the Changki group migration, which requires further research.

While the oral tradition regarding Ao migration from Chungliyimti and thereafter, is rich both in Ao vernacular and English published sources, such studies lack the absence of a conceptual framework to understand such pattern and nature of migration. Adopting the ‘Push and Pull’ (Lee, 1966) theory of migration to the present study, what is observed among the Ao Nagas is a general pattern that drives people to migrate. In the course of population migration, social groups generally abandon a site due to factors that ‘push’ them from a settlement and thence migrate to a new destination due to certain ‘pull’ factors that attract them to settle in a new settlement. For instance, populations migrate due to economic reasons, security, the spread of uncontrolled diseases such as epidemics, and also disputes amongst rival clan groups.

Lee (1966) provides a clear picture of why people migrate from one point to another. Certain forces push people from one point and further draw them to a new place. Cameron (2013) in her example of the Chaco Canyon and the Hopi area also highlights certain factors such as warfare and captive-taking, the process of fission and fusion, and the increase in population that drive people to migrate. Likewise, what is observed is that the Aos did not simply abandon a certain place nor choose a place to settle but certain factors forced the movement of people to migrate and settle at a given place. Burling (2012) in his study of the Garos of Meghalaya also maintains, “...people migrate all the time and in every direction—back and forth and up and down” (Burling, 2012, p.50). In so far as the Ao migration and their establishment of permanent settlements are concerned, there were episodes of small-scale periodic migration, taking several routes until the mass migrations of the Aos from Chungliyimti.

The present study thus reveals that a series of events and factors drove the Aos to abandon their ancestral settlements and disperse in various directions. The primary reasons for these migrations are:

- i) Population Pressure – Continuous increase in population made it difficult to sustain the settlements.
- ii) Internal Conflicts – Frequent disputes and misunderstandings among the people contributed to their decision to leave.
- iii) Epidemics and Resource Scarcity – Outbreak of diseases and shortage of water forced communities to abandon and seek more habitable areas.
- iv) Security Concerns – Constant threats from neighboring tribes and such occurrences perceived as ‘unnatural’ also played a role in their migration.

Traditional accounts provide valuable insights into some of the key factors leading to population dispersals. For instance, the *en masse* dispersals from Chungliyimti and Koridang are primarily driven by population growth and water scarcity. Sangpuyimti was abandoned due to an epidemic, while Aonglenden was deserted following the death of their chief, which was considered unnatural. Settsü, on the other hand, was abandoned due to internal conflicts and security concerns, although it was later reoccupied during the colonial period in 1886. These accounts confirm that the Aos left their ancestral settlements and migrated to several directions for various reasons, including resource scarcity, epidemics, power dynamics such as leadership crises between individuals, internal disputes, and other social conflicts and security threats.

As pointed out by Trigger (1968), “Within any region, people will tend to establish their settlements in places that are close to drinking water, sources of food, and as far as possible, in places that are safe and pleasant” (Trigger, 1968, p.177). It was also evident from the Ao oral narratives that the Aos were exhaustive in choosing their sites for settlement. Several key factors influenced site selections: i) Security – Villages were typically established on hilltops for defensive purposes, a pattern evident in most Ao settlements, ii) Ecology and Economy – The availability of natural resources and economic opportunities played a crucial role in migration decisions, iii) Water Availability – Access to reliable water source was another essential factor influencing settlement choices. These factors significantly influenced the Ao migration patterns.

Historically, the Aos migrated from the upper ranges to lower areas, primarily due to ecological and economic advantages. As Robbins (2004) asserts “....adaptation is not simply a response to a single and isolated environment, since the spread and diffusion of adaptations is a hallmark of human practices” (Robbins, 2004, p.184). Fertile soil, the presence of major river

systems, and a general deficiency of natural resources other than good agricultural land are certain geographical conditions that attract human settlements (Sandars, 1962).

To examine the drainage density within the study sites, a quantitative analysis was utilized to measure how well or badly stream channels drain a drainage basin. Using the geomorphological concept used by Horton (1945), such analysis is computed by dividing the total length of all the rivers and streams in a drainage basin by the basin's total area, which is expressed as:

$$\text{Drainage density} = \text{Total length of streams} / \text{Area of the drainage basin}$$

Therefore, it is typically expressed as km/km² or m/m². For a given watershed/area, a high drainage density value indicates copious presence of streams and rivers channels compared to lower drainage density values. Thus, the variation in the value of this parameter shows the quantitative distribution of drainage spread over an area. One important factor for determining the availability of drainage within a given area depends upon the geology, soil, topography (nature of slope), climate, vegetation etc.

Drainage density within the study sites shows the lowest value of 1.1 to maximum of 12.4 (Fig.33). The ancestral sites are located in regions of low drainage density implying minimal dependency on surface runoff such as rivers or streams unlike the high - density zones where there is ample drainage system as water source. The drainage patterns also indicate the sites to be located atop higher elevation where it is mostly characterized by presence of ephemeral and intermittent streams.

For some of the sampled sites as reference, such as Molunger site, Nokranger site, Marok, Maipang, Settsü, and Sangpuyimti, the available location data of ancestral water sources, such as springs, waterfalls, streams, etc., shows that they are associated with close proximity, even though they are situated on high hilltops with low drainage density.

In terms of slope analysis, the degree of inclination or steepness of a surface was taken into consideration. Here, the slope displays the elevation change over a certain horizontal distance, typically expressed as a percentage or degree. This topographic feature has a direct impact on how people use the terrain, particularly when it comes to land usage and settlement development. It influences human interactions with the terrain, particularly, due to its influence

on the risk of natural disasters, defense factors, agriculture, water availability, accessibility and construction feasibility etc.

The ancestral sites within the study area are all located on hill tops, the positioning of the settlements are strategically surrounded or restricted on at least one side by a steep slope terrain (Fig.34). For sampled sites for slope analysis, such as Molunger site, Nokranger site, Nathosü, Marok, Maipang, the steep sloping nature of the terrain is confined to its NW sector where it geographically extends for kilometers in NE-SW trend. However, for Tsüha, Longzükyimjok, Kupok and Settsü villages the high sloping nature of the terrain around its periphery is less significant than the rest.

Although the main paradigm for the study of Ao migration is laid forth by Lee's (1966) 'Push and Pull' theory, Anthony's (1990) migration structure pattern is also evident throughout the Ao Naga migration in the present study. Because each group chooses a number of migration routes and settlements based on 'pull' factors, a mixed combination of migration structures is observed among the Aos. As a result, 'leapfrogging', short and long-distance migration, migration stream, return migration, migration frequency, and migration demography (see Anthony 1990) seem to be evident in various degrees in the present research on Ao migration.

Several groups travelled long distances before establishing themselves in a new community. For example, the lesser group - Sangpu and Molunger groups moved to Sangpuyimti and Tsütsünpangkong respectively, while the larger Ao group moved to Aonglenden. One notable characteristic of the Aos is that they scout the area before settling in a particular location. As a result, the Aos were constantly looking for new places for settlement during their migrations. Because of the constant threat of raids by head-hunting parties in the past, all Ao villages were also by necessity strategically located in commanding positions on the tops of hills, so that they could be easily stockaded and defended (Coupe, 2007, p. 9).

As a consequence, the Aos migration stories demonstrated more frequent group mobility during their first migration, which allowed for the high frequency of movement brought on by the many 'push' factors. The actions and circumstances that caused populations to split into smaller groups are elaborately discussed in the preceding Chapters.

It is also observed that Kupza, Settsü, and Longkhum were the first villages to be established following the dispersal at Koridang. These villages are only a few kilometers away from Koridang, indicating that there was short-distance migration following the dispersal.

However, a number of groups made long-distance migrations in the migration stream that followed.

In the present study, the majority of the group moved northwards because people were drawn to relocate downstream by the region's physiography, availability of perennial water source, and fertile soil, which offered more security. According to oral traditions, the Aos appear to have followed a similar migratory path because "Mongoya tenem" appears multiple times in their migration oral narrative. This hilltop is a useful toponym indicator of people migrating in the same direction because, for example, the Marok and Molunger groups traversed this summit on their way to the lower ranges⁴. The documented oral sources indicate that the Aos followed the well-known migratory path traveled by the first group, even though the study did not cover or thoroughly examine all of the migration accounts of the villages in lower ranges.

Oral sources also provide insights into a return migration pattern within some groups. According to Ao oral tradition, the Aos migrated southward following the dispersal of Koridang and established some villages which they later abandoned. These settlements are currently inhabited by the Lotha and Sumi Nagas (also see Mills, 1926 and Coupe, 2007). After encountering conflicts with the Sumis and Lothas, some of these groups made a return migration taking a northern direction thereby establishing their villages, while others returned to their former land and assimilated with the population of the existing settlements. The oral traditions also speak of the Amang and Sangpu groups that also underwent kin-based migration and similar return migrations⁵. One significant finding in the present study on the Ao migration is the idea that when people began to settle down permanently, the rate of migration progressively decreased.

From a physiographic and geomorphic standpoint, the upper ranges comprising the Ongpangkong Range are characterized by high mountain ranges (ranging from 1359-1976m) that form a large part of the Disang rocks and outliers of the Barail geological settings under the Inner Fold Belt (see Fig.35). Part of the District of Mokokchung also falls within the Belt of Schuppen that runs along the northwestern margin of Nagaland following the boundary of the Assam Valley alluvium. Soil types of Mokokchung District are generally classified into: i) Entisols, ii) Ultisols, iii) Mollisols (Fig. 36). Of these three soil categories, the entisols and ultisols are widespread in the lower ranges comprising the younger alluvium and the lateritic soils, and composed of loamy, sandy textured soils that are ideal for farming, while the mollisols

or the mountain meadow soil types with mainly clay soil textures are concentrated within the upper ranges (<https://geoportal.natmo.gov.in/image-preview?nid=1343>) (also see Fig. 37). In terms of their geomorphological features, the upper ranges are marked by moderately dissected hills and valleys, while the lower ranges (approx. 800-300m and 200-100m) beginning from Jangpetkong, Japukong, Langpangkong down to Tzurangkong and falling within the Belt of Schuppen geological formation are marked by piedmont slope, pediment, and pediplain along the major river courses marked by alluvial plains (see NGISRSC, 2014).

Besides the influence of the region's biosphere (flora/fauna), it can be inferred that variations in elevations, temperatures, soil types, and other geomorphological features equally influenced the direction of population dispersals. Significantly, the lower regions offered a warmer climate, abundant natural resources, good drainage system, and fertile soil, making them more suitable for agriculture. This economic potential and improved safety and living conditions, attracted populations to settle in the lower ranges. For instance, the Langpangkong Range, known for its warmer climate and major river drainage, has a higher concentration of villages, highlighting the impact of environmental factors on settlement patterns.

Therefore, from a diachronic standpoint, it is interesting to observe a degree of higher level of settlement density through time right from the uplands to the lowlands with a gradual spike in the lower ranges (69%) with the highest density observed in Langpangkong Range (26%) in comparison to the Middle Range comprising of Asetkong Range (10%) and the Upper Range or Ongpangkong Range (21%) (see Fig. 38). While this shift in the settlement system and pattern is attributed to human-environment adaptations, one must also not lose sight of this gradual shift as a result of the new social changes in the Ao Naga traditional society. Inter-village feuds and head-hunting practices came to a halt as a result of the colonial administration in the Ao area from late 1880s, and the Baptist mission activities beginning from the 1870s, with priorities now shifting to education, employment, trade and commerce with the Assam valley, stability in village economies and better means of livelihood. This is evident from the emergence of new village settlements in the Tzurangkong Range from the 1950s onwards.

What is observed from the present study is the view that the Ao Naga migration occurred in various phases with several factors affecting their dispersal and started out in several directions. This gradual expansion took the form of small social groups that migrated to distant areas. Some groups travelled long distances with stopovers in certain locations. Such stopovers

were at times for a longer time, while in some, they were for a few days. In the course of their migration, there was often further dispersal of the group into smaller groups and taking different migration routes. A significant observation was made in the migration of the Aos, where the dispersed groups often joined again, a migration structure known as ‘Return Migration’ (see Anthony, 1990) and established permanent villages. For instance, the Sangpu group took a long-distance migration before merging with Longsa village of Mokokchung District after their migration ahead of the massive migration at Chungliyimti. In the course of their migration, the Sangpu group dispersed into several groups reducing the vast population to just 30-40 households when they permanently settled at Longsa village. Few groups also undertook short-distance migration and established their villages. The Kupza, Settsü, and Longkhum groups, for instance, bifurcated from the larger group at Koridang and eventually became a focal point of dispersal. Thus, based on the ethnohistorical account of Ao migration, it is observed that the ‘Fission and Fusion’ (Carneiro, 1987; Kopytoff, 1987) model best explain the Ao Naga nature of migration.

Fission and fusion refer to a movement of a larger group of people (Carneiro, 1987). Based on his work in Africa tribal societies, Igor Kopytoff observed that kin-based groups frequently break apart from larger groups and reform in new configurations (Kopytoff, 1987). Likewise, Moore’s (1994) riverine metaphor, “the channel of river separates and recombine in a complex fashion, just as the component populations of the human species separate and recombine” (Moore, 1994, p.930) perfectly explains the Ao migration pattern. This is similar to the fission and fusion dispersal pattern observed in the Amazon where settlements frequently fragment when population rises above a few hundred people, due to disputes and competition among social groups (see Carneiro 1987). What is therefore observed is the Ao migration that followed a distinct dispersal pattern after the Chungliyimti mass dispersal event. This migration was influenced by factors such as security, ecological conditions, economic opportunities, and resource availability, shaping their movement and settlement choices across different regions.

To establish a record on distance travelled by the Aos during the course of their migration, estimation based on oral resources deduces that the Aos travelled a distance of approximately 450.48 kms (see Table 3).

Sl.	Group Name	Route Travel	Length (in Km)
1	Jangjang	Koridang-Jangjang Kimong-Chuchuyimpang-Longmisa	31.41
2	Japu	Koridang-Aonglenden-Yimpang-Japu	70.70
3	Larger Group (Ao Mass Migration)	Koridang-Settsü-Aonglenden	6.72
4	Larger Group (Ao Mass Migration)	Koridang-Longkhum	8.11
5	Larger Group (Ao Mass Migration)	Aonglenden-Koridang-Ungma	5.94
6	Larger Group (Ao Mass Migration)	Chungliyiimti-Aonglenden	12.58
7	Larger Group (Ao Mass Migration)	Koridang-Kubza	4.78
8	Lesser Group-A (Amang)	Amang Kimong-Sangpuyimti	9.20
9	Lesser Group-A (Amang)	Chungliyiimti-Jongpongshisakong-Amang Kimong	9.46
10	Lesser Group-A (Sangpu Group)	Sangpuyimti-Songjen-Longsa	16.77
11	Lesser Group-A (Sangpu Group)	Chungliyiimti-Jongpongshisakong-Sangpuyimti	13.08
12	Lesser Group-C	Chungliyiimti-Tsütsünpang-Mongoya-Molungkong-Tsüdenkong-Nungshiyimkong (Yimchenkimong)-Tsügnensüba Yim (Molungkimong)-Narongjongmang (Molungyimsen)	71.86
13	Marok First Group	Koridang-Aonglenden-Mongoya-Marok	36.29
14	Marok Second Group	Koridang-Longkhum-Kubza-Mopongchuket-Marok	42.78
15	Nokranger	Orangkong-Morokong Nathosü Nokranger-Assam	45.73
16	Tsüha	Koridang-Sangsodang-Chami-Tsüha-Kelingmen	65.07
Total			450.48

Table 3: Approximate estimate of distance travelled by the Aos during the course of migration drawn from oral tradition.

Drawing the importance of the nature of knowledge in oral tradition and archaeology, concerning the Native American situation, Anyon *et al.* (1997) recognize at length that, “Oral traditions contain cultural information about the past, carefully preserved and handed down from

generation to generation within a tribe. The archaeological record contains material remains of past human behavior that provide physical evidence for many of the same events and processes referred to in oral traditions. Oral traditions and archaeology both have inherent but different limitations, which is why combining them in research can create knowledge that goes beyond what is possible using either source by itself” (Anyon *et al.*, 1997, p. 78). Even in the Naga case, the relevance of archaeology to corroborate and substantiate the ethnohistorical sources becomes crucial to understand the nature of past human activity at a site and shed light on specific periods of human occupation. This is best demonstrated by previous work by Jamir *et al.* (2014a, b) and Jamir (2021). This study therefore underscores the importance of oral tradition as a valuable tool in archaeological research, particularly whilst studying the pre-colonial migration of the Ao Nagas.

Due to the limited nature of secondary sources on migration and the associated ancestral sites of the Aos, the present study primarily relies on oral tradition to identify sites to gain a deeper understanding of Ao migration. In all, fifteen (15) ancestral sites were investigated in the present study, of which eight (8) sites were subjected to small-scale test excavations, while the other was explored. The Jangpetkong Tenem, which was explored, presents significant potential for future archaeological excavation, as a small shovel test pit revealed few pottery and visible remnants of what could be residential sites on the hill slopes were observed to remain well preserved. Archaeological deposits recorded from their respective datum points suggest their thickest from the site of Koridang, followed by Jangjang Kimong, Maipang and Sangpuyimti respectively. These deposits consist of two stratigraphic units, the top layer (Layer 1) comprising the humus while the subsequent unit (Layer 2) comprises the main archaeological deposit of the settlement. However, the actual depth of these deposits as ascertained from the deposit is at best within an average depth of 50-80cm (inclusive of the humus). The nature of its thickness thus suggests the duration of the site occupation. However, a multi-proxy fine-grained and high-resolution data sampled at intervals (from bottom-up) from the profiles of trenches for phytolith, soil micro-morphology (for site formation processes), and AMS dating should be able to reveal much more details of the site occupational history.

Charcoal samples from six (06) sites were sent to the Birbal Sahni Institute of Palaeosciences, Lucknow for radiocarbon dating. All ^{14}C dates were calibrated using the University of Oxford calibration software OxCal 4.4 (<https://c14.arch.ox.ac.uk/oxcal.html>). The

oldest calibrated date ranged from calAD 580-955, while the most recent date extended from calAD 1688-1924 (see Table 2). The dating results from the sites investigated reveal some interesting insights into the chronology of Ao migration history. Chungliyimti the first settlement of the Aos has the earliest dating result dated to 1020±80 BP (cal AD 776-1217) (see Jamir *et.al.*, 2014a). According to Ao oral tradition, the Aos migrated from Chungliyimti and found their way to the present settlements. However, test excavations at Sangpuyimti from the present study obtained a date of 1306±90 BP (calAD 580-955) which appears to be earlier than Chungliyimti by almost 200 yrs. Similarly, Longzükyimjok site is dated to calAD 1031-1172, which appears to be later but also contemporary considering the vast temporality of Chungliyimti. The Tsüha site exhibits the most recent dating result dated to calAD1688-1924, whereas the other three sites – Koridang, Nichung, and Rito seem to be later than the site of Chungliyimti.

The present study also demonstrates the reliability of oral traditions in correlating specific events with sites and locations. For instance, at Longzükyimjok, oral narratives identified a particular area as the site of a *morung* (an Ao boy's dormitory). In this area, a large stone boulder with grinding marks was found, possibly used by *morung* members to sharpen their *daos* (machetes). Similarly, the site of Sangpuyimti site also known as 'Koralong' is due to a unique stone associated with legendary tales. According to oral tradition, this stone crows like a rooster, warning the Sangpu settlers of approaching enemies and dangers. The stone still exists at the site and bears the resemblance to a living creature. Furthermore, oral tradition aided in the relative dating of sites that were later observed to corroborate with the radiocarbon dates. The Tsüha site, based on oral accounts, was estimated to date back to around 1527 AD. Radiocarbon dating of charcoal samples from test excavations places this site between AD 1688-1924 thus demonstrating the reliability of traditional knowledge associated with the establishment of Ao villages. In addition, while the oral tradition narrates accounts of a mass population migration from Chungliyimti, the radiocarbon dates from various localities of Chungliyimti suggest that the site continued to be occupied from as early as 776 calAD to as late as 1698 cal AD (Chungliyimti dates recalibrated using OxCal 4.4 software) (on the dating results, see Jamir *et al.* 2014a; Jamir 2014).

5.2.1. *Archaeological Finds and Features*

Pottery was the dominant artifact type recovered from all the test excavations of sites. Handmade paddle-impressed, and plain wares are the most common with few quantities of cord-impressed ware. The pottery exhibits a variety of decorative patterns – herringbone, mat-like impressions (checkered), basket patterns, and vertical/horizontal band designs. In some cases, the designs had weathered over time, making it difficult to determine whether the plain sherds originally were impressed by a carved paddle or a cord-wrapped paddle. Evidence from Chungliymti suggests that the most common pottery types are the paddle-impressed wares comprising of mainly vertical and oblique band types, and thick horizontal impression types which were very likely manufactured at Chungliymti (see Jamir *et al.* 2014a). Recent scientific studies involving petrographic and XRD analysis of pottery were undertaken on a few samples from Chungliymti. Petrographic Thin sections reveal that the main mineral composition of Paddle impressed Ware with vertical and herringbone impression samples contains feldspar, quartz, and mica fabric. Moreover, the XRD analysis also reveals similar mineral composition consisting of Microcline Orthoclase (Feldspar), Potassium Sulphate, Silicon Oxide (Quartz), Taenite (Iron Nickel), Albite (Plagioclase- Feldspar) and Silicon Oxide (Quartz). Thus, it conforms to the provenance analyzed by petrographic Thin-Section and XRD of the archaeological ceramic with the geology of Chungliymti (see Changkiri 2023).

Pottery from the adjoining sites under the present research also exhibits similar pottery designs, particularly those of the vertical and oblique band types, thick horizontal impression band, checkered, and basket impression types. Nonetheless, the cord-mark pottery is rare in occurrence (see Fig. 39). Hence, either a demic diffusion of potters from Chungliymti and their migration to the new settlements along with their associated cultural practices can be postulated, or processes involving a cultural diffusion of ideas between populations living in close proximity could be exchanging knowledge of pottery-making or a barter-like trade network is possible between the potters of Chungliymti and the adjoining settlements.

Today the herringbone pattern, the linear bands, and diamond-shaped design patterns are confined only to Changki potters (see Changkiri 2023). However, in the past, there could perhaps be potting groups living amongst these settlements as the archaeological evidence suggests. This brings to question Mills' (1926) account that the Molunger and the Changki group were the only groups that engaged in pot-making (see Mills, 1926, p. 10, 94). Adjoining the region of the study

sites, the use of cord-marked pottery with appliqué decorations and in some cases perforated pottery are reported to be common among the Konyak, Phom, and Khiamnuingan Naga groups suggesting a widespread inter-regional pottery trading networks (see Vasa 2017, 2021,2023; Changkiri 2023).

Oral sources indicate that Aos frequently traveled to the plains of Assam to barter (Walling, 2016). The presence of a few buff-coloured wheel-made potteries made from kaolin clay retrieved from the excavation sites suggests some sort of barter exchange with the adjoining areas of Assam. Walling (2016) documented similar interactions at Nokpu, where pottery from the plains of Assam fulfilled certain functional needs of the hill communities such as carrying molasses (a byproduct of production of sugar), storage of dry vegetables, grains, dry fish, storage of drinking water, and also used for carrying grains and other food items by the newly wedded bride while proceeding to the groom's house (Walling, 2016, p. 246). (for details on pottery assemblage, see Appendix 1)

Excavation at Chungliyimti revealed posthole and pit features dug into the bedrock (Jamir *et al.*, 2014a). Such evidence is also reported from Sangpuyimti and Rito sites. This indicates a long-standing tradition of erecting timber and bamboo posts using permanent postholes, which continued among the Aos. Additionally, a pit feature was uncovered at Sangpuyimti, resembling those reported from Chungliyimti. The function of these pits remains uncertain, as oral traditions provide limited accounts of their use. However, the elders of Longsa village narrate that such pits were used for the storage of seeds and personal belongings, as fire accidents were common in the past. Oral accounts from Chungliyimti, on the other hand, suggest that similar pits were used for fermenting rice liquor (Jamir *et al.*, 2014a). Given the limited nature of the excavation in the present study, no definite conclusions can be drawn. However, the presence of postholes and pits strongly suggests that these were residential areas.

Besides ceramics, a variety of artifacts were retrieved, including river cobbles used for ginning cotton, and pottery anvils, and also evidence of sharpening stones, spindle whorls suggesting some rudimentary form of textile production, and beads (indicating use of personal adornment). Among the notable artifacts reported were a spilite adze from Sangpuyimti, a fetish stone, and an iron hoe from Nichung.

Evidence of iron slags was reported from the Maipang site indicating iron smelting activities by the early occupants of Maipang. Morphological analysis of the overall structures of

the excavated slags suggests the prevalence of an early iron smelting tradition in the region. As iron smelting was not widely practiced among the Nagas, except for Konyak and Khamnuingan (see Tzudir *et al.*, 2019; Tzudir, 2021), the discovery of iron slags from Maipang is particularly significant. Blacksmithing using single piston bellows is reported by Mills (1926) in the Ao areas. However, no oral tradition exists regarding iron working at Maipang, making it difficult to contextualize this particular slag finds. The discovery of iron slags at Maipang raises new questions about the extent of iron-working in the Ao region, necessitating further archaeological investigation to better understand their technological advancements in pre-colonial times.

Colonial accounts also make passing references to a polished crystal known as ‘Maibong naru,’ ‘the highly prized bell *Tsongtsong* (Chungli), *Changtong* (Mongsen) thought to have come from the mysterious Maibong’ and the ‘groove pattern armlets of some kind of brass alloy’ (see Mills, 1926, p. 52, 54, 57). While there are slight differences in the spellings, the two place names sound homophonic in their pronunciation which leads one to assume that perhaps the above site of Maipang could be linked to this reference to ‘Maibong’ found in early ethnographic accounts. There are oral historical references to accounts of assault between Changki and Maipang which finally led them to abandon their settlement from present Chungliyimsen area and migrate further down to the Japukong range. There are also traces of Maipang’s presence in Chungliyimsen where there is an ancient well known as ‘Maipang Tsübo’ (meaning ‘Maipang well’) (Plate 60). Additionally, there is also a reference to a Maipang Nok (Maipang machete) held in the possession of Changki which is said to have been a gift from the people of Maipang⁶.

Archaeological evidence combined with oral traditions, therefore, provide crucial insights into the Ao Naga migration history, their settlement patterns, trade relations, and the nature of their material culture. Sedentary village life, agricultural systems, and animal husbandry (evident from the oral tradition of Chungliyimti on the use of *Bos frontalis*, see Jamir *et al.* 2014a) further spread to the Ao region as populations expanded to the lower ranges of the Ao territory. Clearly, these expanding groups were societies using iron tools and engaged in agriculture such as rice, millet, and Job’s as evidence from Chungliyimti suggests (Jamir *et al.*, 2014a; Pokharia *et al.*, 2013). Similarities in ceramic designs across different Naga tribes also suggest a shared pottery tradition and the prevalence of inter-community trade networks. The presence of wheel-made pottery of the kaolin type also points to historical trade relations with the Ahoms, while the

excavation of postholes and pits offers a glimpse into the traditional Ao architecture and household practices.

5.3. Ao Language and Migration

It is both intriguing and unusual that the Nagas do not share a common language, as each tribe speaks a distinct language that is generally unintelligible to the other group. As a result, the primary means of communication among the Naga cultural groups are either English or Nagamese, a creole spoken as a *lingua franca* in Nagaland arising out of Assamese. Like other Naga tribes, the Aos also have their own distinct language, known as ‘Ao Oshi’ (meaning “Ao language”), which falls within the Tibeto-Burman language family. Early colonial accounts lists the Ao language into four dialects which includes Chungli, Mongsen, Changki and Sangpur where ‘Sangpur’ used to be spoken in Longsa but is now practically obsolete (Mills, 1926, p. 2; also see Smith, 1925). The Changki form of dialect is today spoken in four villages – Changki, Longjemdang, Japu, and Satsukba which is very close to Mongsen and mutually intelligible (Coupe, 2007, p. 10). Preliminary investigation suggests their close affinity with Mongsen (Coupe, 2007, p. 16). But by far, in general, the two most important are the Chungli and Mongsen. According to Alexander Coupe (2007), a linguist and an authority on Mongsen grammar, maintains, “The Ao tribe is divided into the Chungli and Mongsen moieties, respectively. This is the major cleavage in terms of both the social and linguistic organization of the people who identify themselves as Ao” (Coupe, 2007, p.10).

Ao villages are generally organized based on these linguistic divisions, with separate Chungli-speaking and Mongsen-speaking villages. While the Langpangkong ranges are predominantly Chungli-speaking populations, the Ongpangkong range has equal number of both Chungli-Mongsen language speaking villages. Asetkong, Jangpetkong (previously Changkikong), Japukong, and Tsurangkong ranges are mainly Mongsen–Changki speaking villages. However, there are some villages such as Longkhum in the Ongpangkong range and Sungratsu in the Asetkong range, that are observed comprising of both language groups, which is referred to as bidialectalism (see Coupe, 2007). This present-day distribution suggests a historical westerly infiltration of the Ao across the ranges of the Indo-Burmese Arc, with Changki- and Mongsen-speaking groups probably forming the vanguard of this migration (Coupe, 2017, p. 278).

There are distinct variations between the Chungli and Mongsen language groups, which have had significant implications for Ao society. Differences can be observed in cultural attire, festival celebrations, rites, and customary laws related to marriage, divorce, and other social practices (Aier, 2018). Historically, the Aos did not have a common language and coexisted without one until the arrival of Christianity. The American missionary Dr. E.W. Clark first worked in a Chungli-speaking village, which led to Chungli becoming the common official language among the Aos (*ibid*; also see Coupe, 2003). However, an interesting linguistic phenomenon exists—Mongsen vocabulary is frequently used in Ao folk songs (*Opcit.*). To obtain a better perspective, the study proposed a hypothesis postulating if the Mongsen linguistic group was once a dominant group at Chungliymti. The oral history provided no definitive conclusion, but a shared response from the traditional knowledge held by Ao elders suggests that both Chungli and Mongsen speakers coexisted in Chungliymti and spoke the language of the original settlers. This suggests that there was no dominant group; rather, the frequent use of Mongsen in Ao folk songs is perhaps due to its linguistic characteristics. According to Imchen (1990) “At Chungliymti, both Chungli and Mongsen-speaking groups lived together; Mongsen was a literary language, while Chungli was a language used in normal conversations” (Imchen, 1990, p.15). While his observation is inconclusive and requires further investigation from a linguistic standpoint, it is possible that the Mongsen’s richer vocabulary made it more suitable for its useage in Ao folksongs, poetry, and other forms of oral tradition.

5.4. Conclusion

This research highlights key findings on the migration, settlement, and material culture of the Aos, providing valuable insights while also identifying areas that require further investigation. Integration of archaeology and oral tradition has proven to be complimentary in nature in reconstructing the Ao Naga migration history, though challenges such as declining loss of oral traditions with the demise of elders who held such traditional knowledge, lack of awareness on the importance of archaeological site preservation thus leading to the destruction and vandalism of important ancestral sites and the available limited secondary sources. What is evident from the migration accounts is a complex and dynamic migration structure embedded in the ethno-history of Ao migration whose understanding is further enhanced by the archaeology of such ancestral sites.

Of the eight (08) sites excavated, six (06) sites were dated, helping to establish a chronological framework for Ao migration. This can serve as a foundation for future chronological studies on other ancestral sites. The chronology of Sangpuyimti suggests its older antiquity to Chungliyimti, challenging the previously accepted stages of migration. However, since folksongs and oral tradition talk of the Sangpu group migrating from Chungliyimti, further targeted and well-planned excavation at various localities in both sites could provide new insights into their early settlement history.

The rapid advancement of technology, literacy, modern education, mass media, and globalization leading to a rapid decline in traditional knowledge embedded in the oral tradition of the Ao Nagas, the lack of interest in one's local language and associated traditional knowledge systems, and the loss of cultural heritage among the younger population of the Aos. The situation is even more alarming with the passing of the older generations. The demise of countless elders in numerous Ao villages has already led to a loss in acquiring oral historical knowledge, thus resulting in inaccuracies and alterations of village migration histories. On the other hand, the younger generation's diminishing interest in preserving the oral tradition makes documentation of one's village cultural heritage an urgent priority before further historical knowledge is lost. Due to limited time and resources, this study failed to document all ancestral sites or conduct excavations at most important locations. However, a database is developed of all documented sites in the present study to serve as a basis for future research.

This research reinforces the importance of archaeology in understanding Ao migration and settlement patterns. However, the lack of awareness in the region remains a major challenge. The general Ao public has very little knowledge of archaeology and ancestral sites face constant threats from developmental activities undertaken in village lands. Hence, increasing archaeological research and public awareness is essential for preserving the archaeological heritage of Mokokchung District of Nagaland.

Oral tradition, though often criticized as incomplete or unreliable, remains an invaluable tool in archaeological research of the indigenous communities of Northeast India. Wickler (2002) notes, "While oral traditions have limitations, they provide thought-provoking models that can guide archaeological inquiry" (Wickler, 2002, p. 45). For the Aos, it is imperative to integrate oral tradition and archaeology to form a more holistic historical narrative. While the ethno-history of the region should not be accepted uncritically, it nevertheless serves as a starting

point for identifying ancestral sites for excavation and analysis, leading to a better understanding of the Ao pre-colonial history. The richness and tenacity of Ao oral tradition are well demonstrated in the course of this research as it was fascinating to observe and experience how communities vividly recount migration stories and their associated ancestral sites with great accuracy. Such living traditions were significant and valuable in identifying several ancestral sites that substantiate the oral tradition of Ao Naga migration history.

This research is not without its limitations; nonetheless, the study for the first time investigates the migration histories of Ao villages across the six ranges and lays down the groundwork for future research on Ao migration so that a more nuanced understanding of their settlement history can be gained. Instead of viewing both areas in isolation, by combining archaeology with oral tradition, a richer, and more nuanced history of the Ao migration history can be gained as attempted in the present study. However, there is a need for an urgent effort to document oral tradition, expand archaeological research to the numerous sites linked to the ethno-history of the Aos, and raise awareness to preserve the Ao Naga heritage for future generations. While this is so, consideration of such forms of population movement in prehistory will greatly enhance our understanding of migration among non-state societies of the region.

Endnotes

1. All oral narratives of Nichung were gathered from an audio-visual interview with Mr. I. Temjen Jamir, Mongsenbai ward, Mokokchung; Dated: 5th March, 2019.
2. The oral source of Changkilukum was obtained from an audio-visual interview with Mr. Supongantet, Ungma village; Dated: 3rd April, 2021.
3. The Sangpu group oral account was gathered from an audio-visual interview with Mr. K. Y. Meren, Longsa village; Dated: 6th January, 2019.
4. The oral narrative on 'Mongoya Tenem' is mentioned on the oral source of Marok and Molunger in Chapter 3.
5. The oral narratives of Amang group merging with Sangpu group are mentioned in the oral narratives of Sangpu group in Chapter 3.
6. All oral narratives of Maipang were gathered from an audio-visual interview with Mr. Aodangti Amer, Changki village, Age-68 yrs, Kohima; Dated: 12th March, 2025.

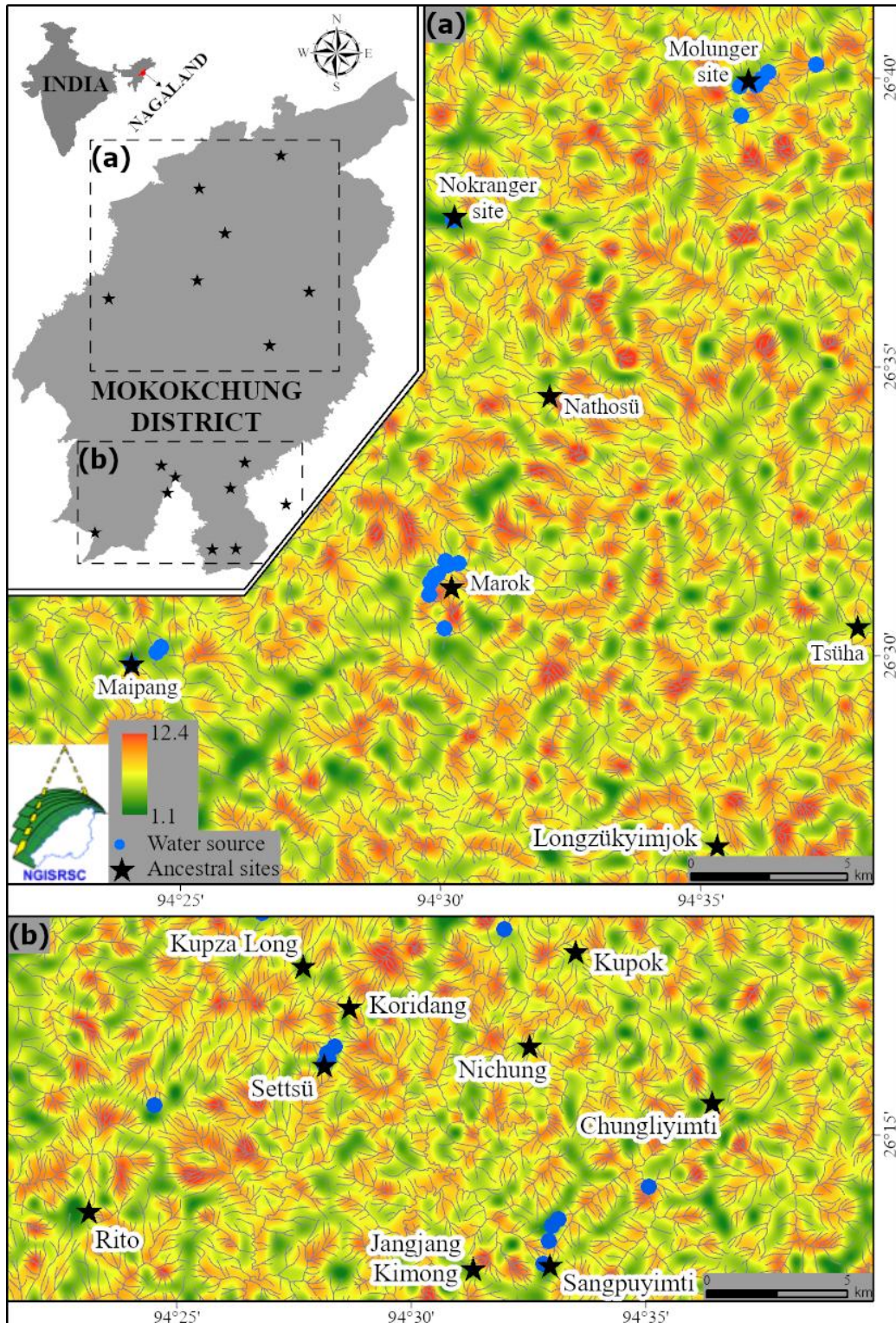


Figure 33: Map of drainage density within proximity of study sites, Mokokchung District

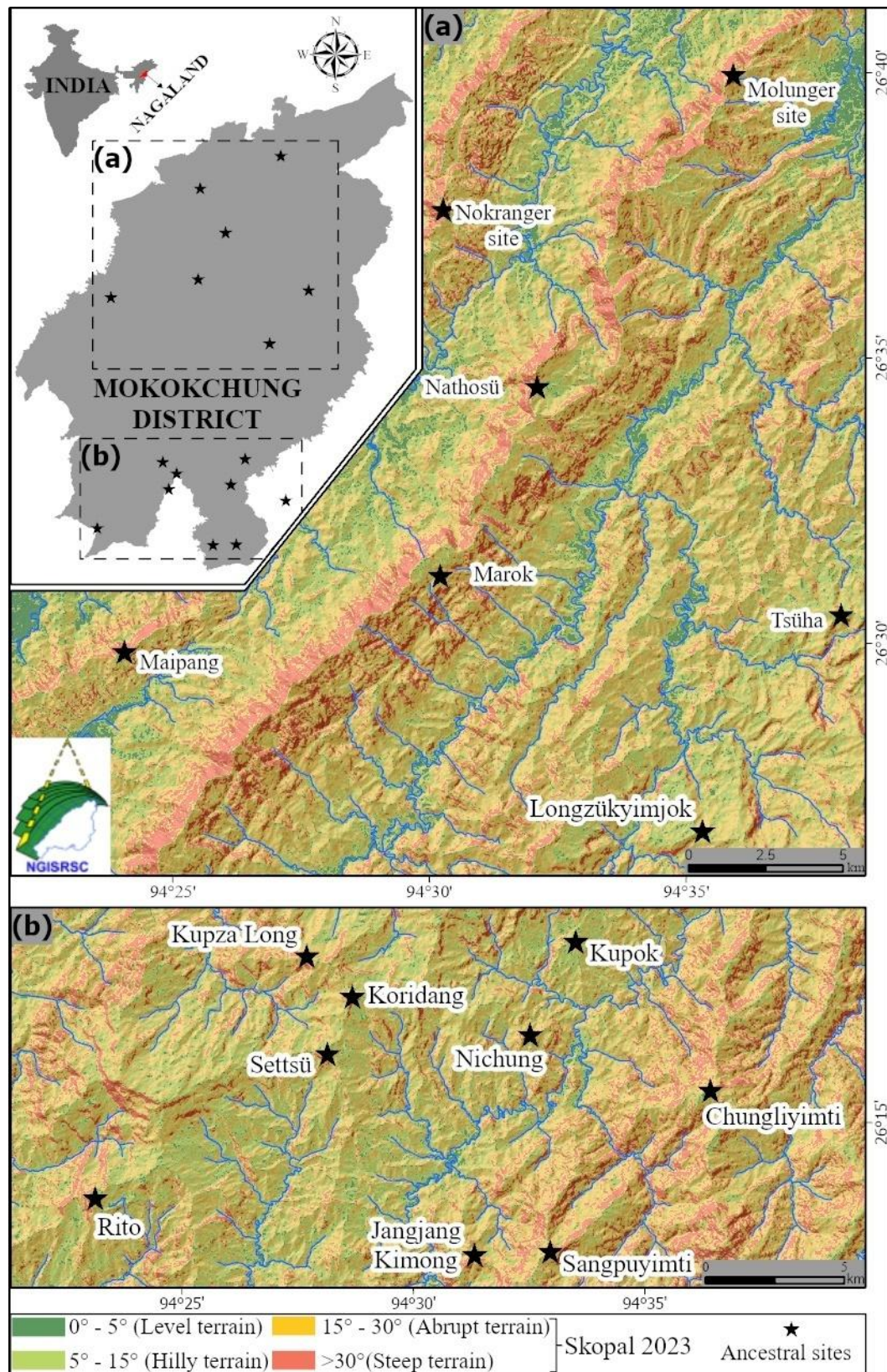


Figure 34: Steep slope terrain map of ancestral sites, Mokokchung District

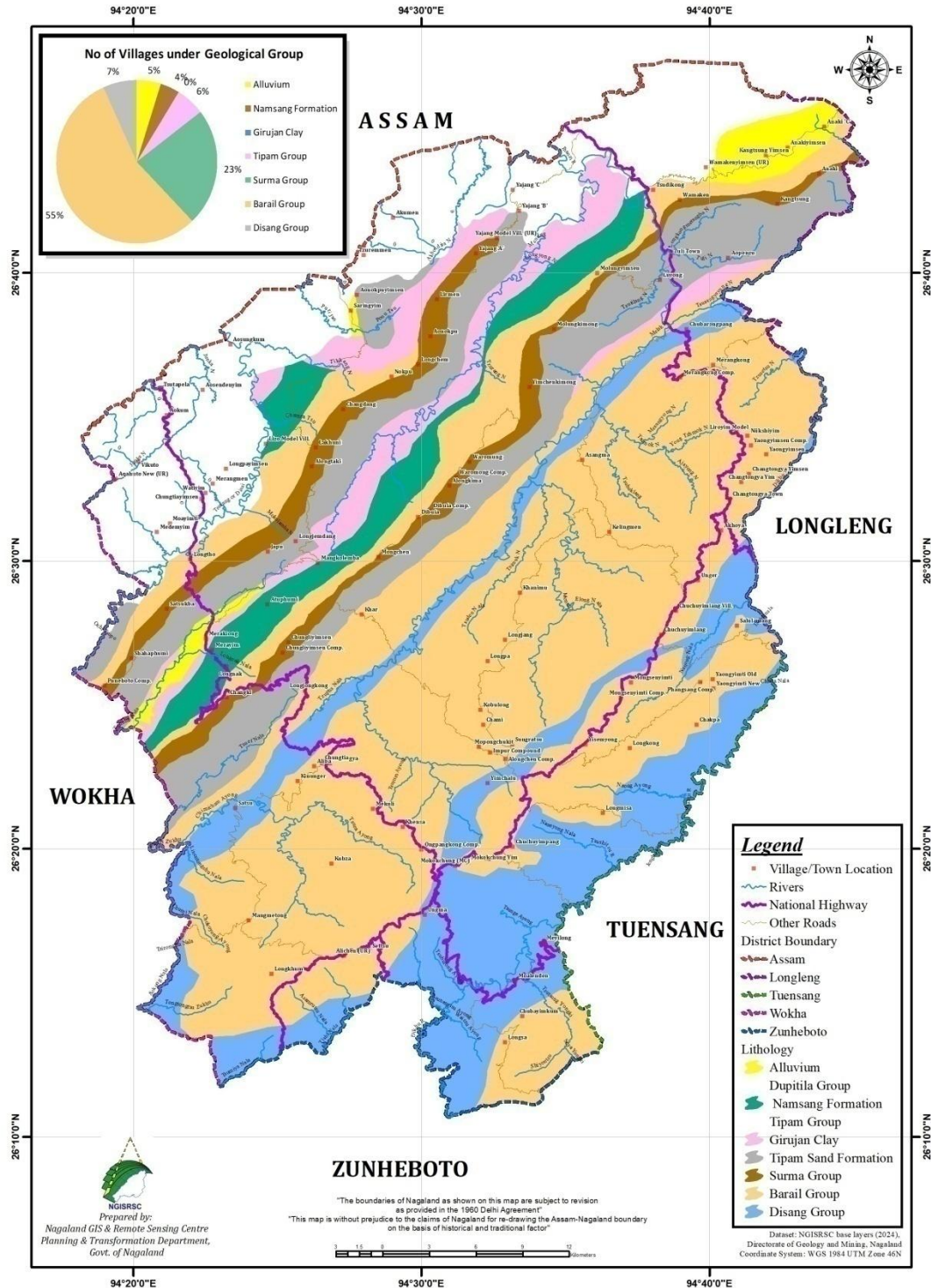


Figure 35: Map showing the concentration of villages within respective geological formations, Mokochung District

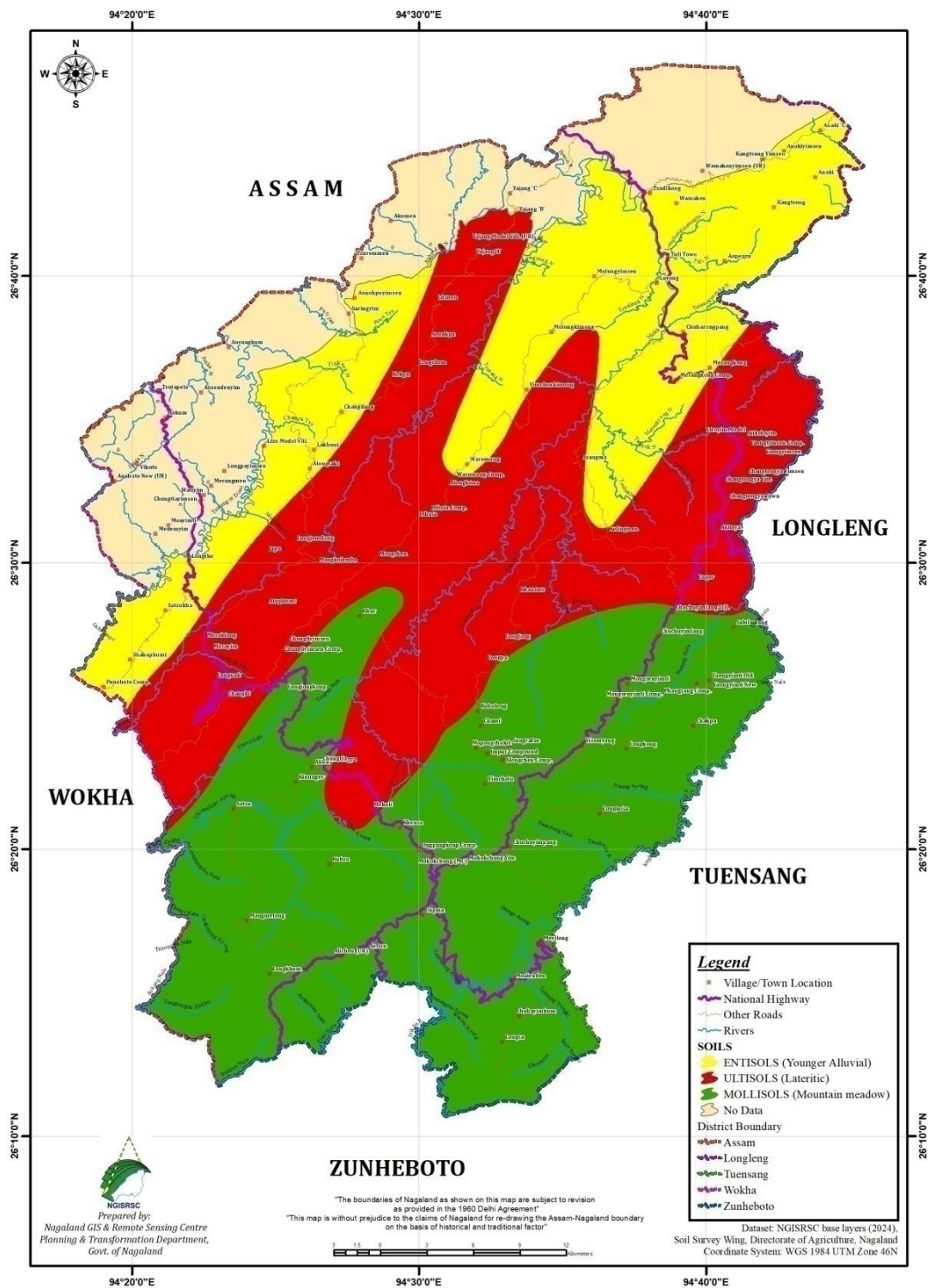


Figure 36: Soil types map of Mokokchung District, Nagaland

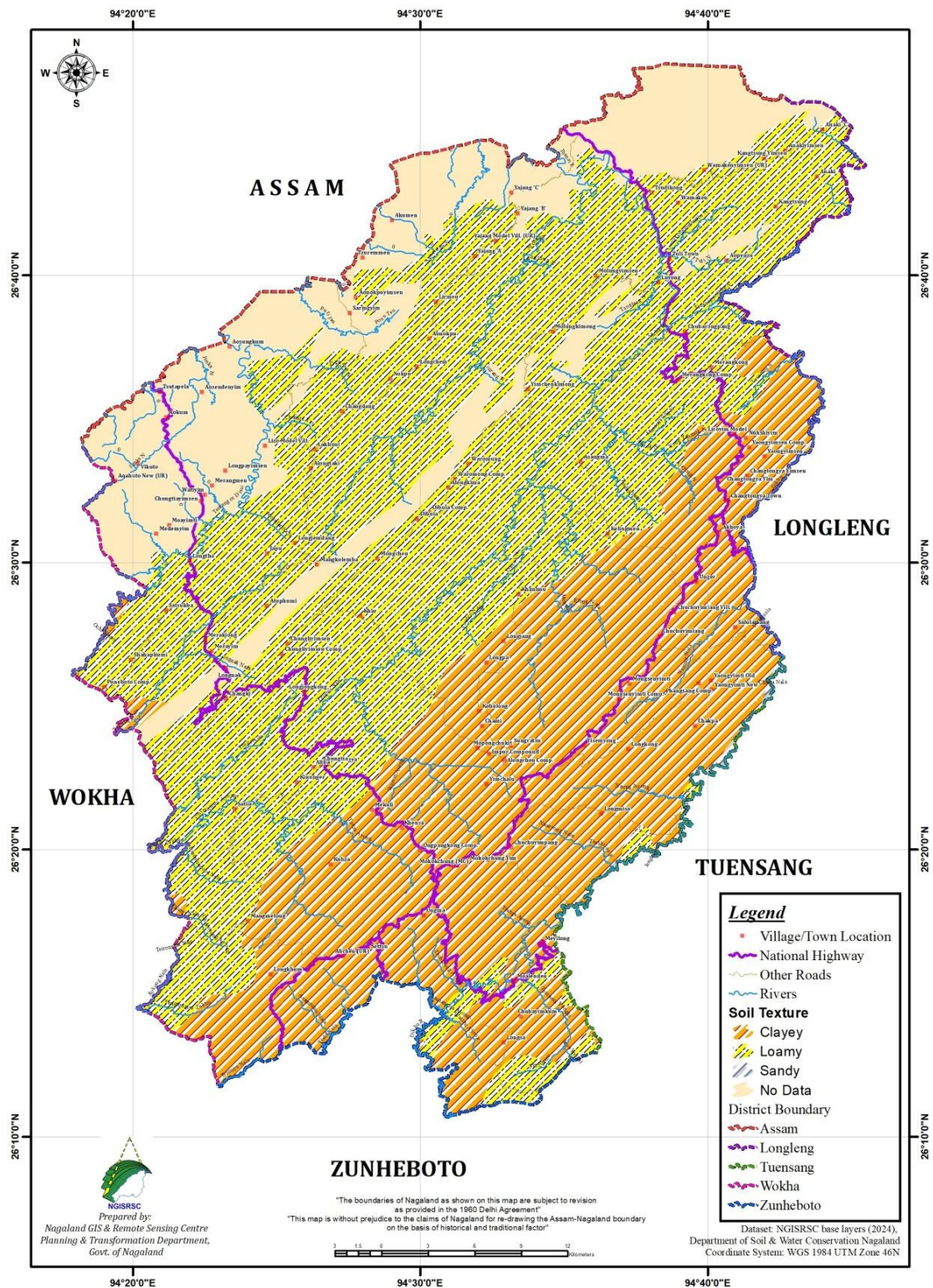


Figure 37: Soil texture map of Mokokchung District, Nagaland

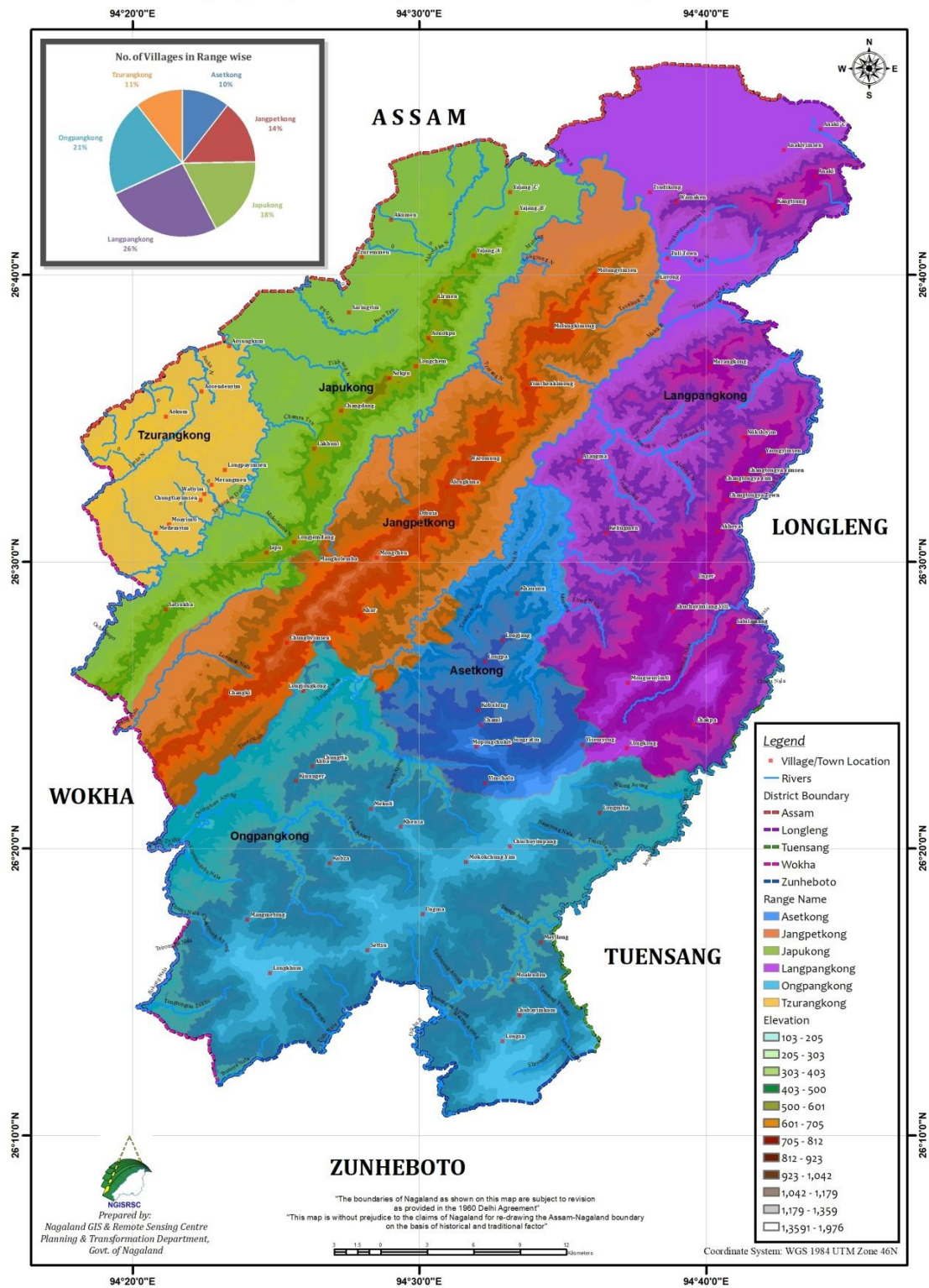


Figure 38: Map showing the density of settlements in the six ranges of Mokokchung District

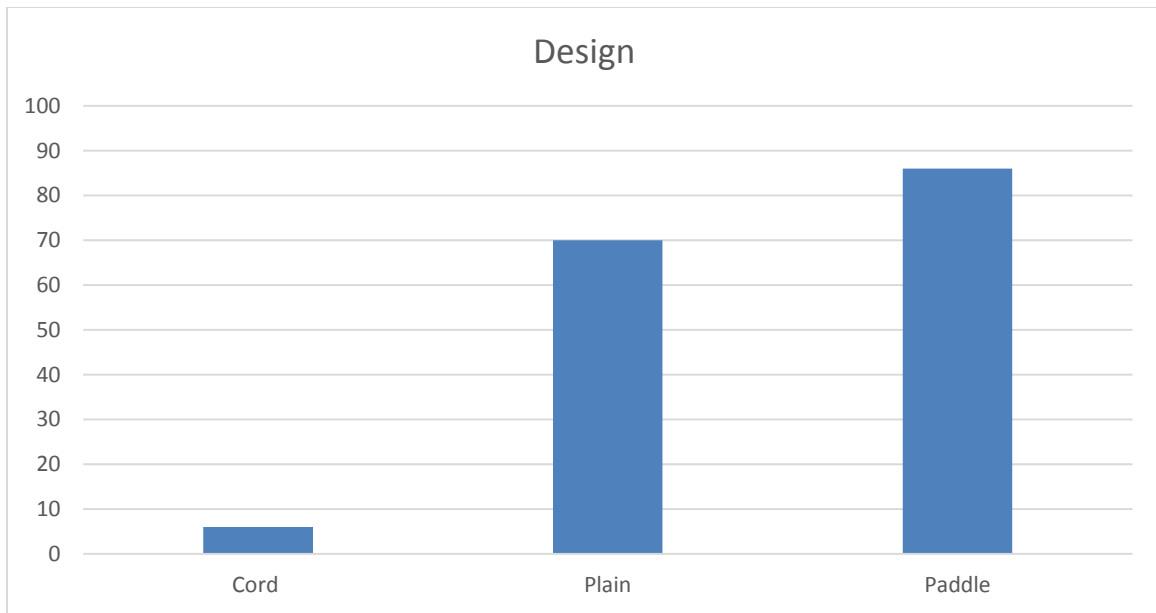


Figure 39: Bar graph showing the overall percentage of designs



Plate 60: Maipang Tsübo (meaning ‘Maipang well’) at Chungliyimsen, Mokokchung District

References

- Aier, A, Jamir, T. (2009). Re-interpreting the Myth of Longterok. *Indian Folklife*. 33. 5-6.
- Aier, A. (2014). Archaeology and Oral Traditions of Northeast India; The Need of a Dialogue in Interpreting the Past. In T. Jamir and M. Hazarika (Eds.), *50 Years After Daojali-Hading; Emerging perspectives in the Archaeology of North-east India*, (pp.227-235). New Delhi: Research India Press.
- Aier, A. (2018). Studies on Naga Oral Tradition: Memories and Telling of Origin Myth and Migration. I. Dimapur: Heritage Publishing House.
- Aier, I. (1969). *Ao Naga Social and Customary Genealogy*. Annanda Printing House.
- Alemchiba, M. (1970). *A Brief Historical Account of Nagaland*. Jorhat: The Janambhumi Press.
- Anthony, D. W.(1990). Migration in Archaeology: The Baby and the Bathwater. *American Anthropologist*. 92:895–914.
- Anthony, D.W. (1990). Migration in Archaeology: The Baby and the Bathwater. *American Anthropologist* .92. 895–914.
- Anyon, R., Ferguson, T.J., Jackson, L., Lane, L and Vicent, P. (1997). Native American Oral Tradition and Archaeology: Issues of Structures, Relevance, and Respect. In Swidler, N, Dongoske, K.E, Anyon, R and Downer, A.S. (Eds) 1997. *Native Americans and Archaeologists, Stepping Stones to Common Ground*. pp. 77-87, Altamira Press, walnut Creek, California.
- Ao, T. (1999). *The Ao-Naga Oral Tradition*. Baroda: Bhasha Publications.
- Aonok, S. (2003). *As Thy Day: A Biography of Rev. Ajanto Aonok*. Dimapur: Love Outreach Mission.
- Ashraf, A.A. (1990). *Prehistoric Arunachal: A study on Prehistory and Ethnoarchaeology of Kamla Valley*. Directorate of Research: Itanagar.
- Asia. New Haven: Yale University Press.
- Banerjee,K.D. (1987). Stone Age Migrations in India. In B.M. Pande and B.D. Chattopadhyaya (Eds.), *Archaeology and History (Essays in Memory of Shri A. Gosh)*. 1. (pp 41-46). New Delhi: Agam Kala Prakashan.

- Barma, B, D. (2017). *Quartzite Stone and Fossil Wood Tools at Sonai in the Saidra Valley in Tripura: Production and Typology*. Unpublished Phd thesis. New Delhi. Jawaharlal Nehru University.
- Bendangangshi, I (2008). *Glimpses of Naga History*, Volume II, Kohima. N.V press.
- Burling, R. (2012). Where Did The Question ‘Where Did My Tribe Come From?’ Come From? In Toni Huber and Stuart Blackburn (Eds.), *Origins and Migrations in the Extended Eastern Himalayas*, 16 (4) (pp 51-62). Boston: Brill NV.
- Burmeister, S. (2000). Archaeology and Migration: Approaches to an Archaeological Proof of Migration. *Current Anthropology*, 41(4), 539-566.
- Cabana, Graciela and Clark J. J (Eds) (2011a). *Rethinking Anthropological Perspectives on Migration*. Gainesville: University Press of Florida.
- Cameron, C.M. (2013). How People Moved among Ancient Societies: Broadening the View. *American Anthropologist*, 115 (2), 218-231.
- Carneiro, R. L. (1987). Village Splitting as a Function of Population Size. In L. Donald (Ed.), *Themes In Ethnology and Culture History: Essays In Honor Of David F. Aberle*. (pp. 94-124). Meerut, India: Archana Publications.
- Chakradhar, M., Gaur M.P. (1985). *Geological mapping around Jaluke, Kohima, District. Nagaland*. Unpublished Geological Survey of India, Field Season 1984-1985 Progress Report.
- Changki Ayim Asem Senso Mundang (2007). *The Triumph of The Rule of Customary Law*. Kohima: NV Press.
- Changkiri, Y. (2023). *Pottery Assemblage from Archaeological Sites in Nagaland*. Unpublished Ph.D thesis. Kohima: Nagaland University.
- Childe, Gordon, V. (1950). *Prehistoric Migration of Europe*. Forelesninger 20. Oslo: Instituttet for Sammenlignende Kulturforskning.
- Chubatoshi. (2022). Oral Tradition in Archaeology: Test Excavation at Sangpuyimti, An Ao Naga Ancestral Site. *History Today*. 23. 1-7.
- Cockburn, J. (1879). Stone implements from the Khasi Hills. *Journal of the Asiatic Society of Bengal*. 48. 133-137.
- Cohen, J. H. (2010). Oaxacan Migration and Remittances as they Relate to Mexican Migration Patterns. *Journal of Ethnic and Migration Studies*, 36 (1), 149-161.

- Corbett, J. (2003). Ernest George Ravenstein. The Law of Migration, 1885.
<https://escholarship.org/uc/item/3018p230>
- Coupe, A.R. (2003). The Mongsen Dialect of Ao : A Language of Nagaland. Phd Thesis. Australia: La Trobe University.
- Coupe, A.R. (2007). A Grammar of Mongsen Ao. Germany: Walter de Gruyter GmbH & Co. KG.
- Crellin, R.J., Harris, O.J.T. (2020). Beyond Binaries. Interrogating Ancient DNA. *Archaeological Dialogues*, 27 (1), 37-56. <https://doi.org/10.1017/S1380203820000082>
- Deka, M. (2006). Oral History in Northeast India Studies. *Proceedings of North East India History Association*, 27th Session, 37-45. Mizoram University: Aizawl.
- Directorate of Geology and Mining (1978). *Government of Nagaland*. 1. Miscellaneous Publication.
- Dommelen, Van, P (2014). Moving on: Archaeological Perspectives on Mobility and Migration, *World Archaeology*, 46(4), 477-483.
- Donoske, E. K., Yeatts, M., Anyon, R., Ferguson, J.T. (1997). Archaeological Cultures and Cultural Affiliation: Hopi and Zuni Perspectives in the American Southwest. *American Antiquity*, 62 (4), 600-608.
- Dupak, E. (2012). Oral Tradition of the Adis; As a Source of History. *Proceedings of North East India History Association*, 33rd Session, 46-50. Rajiv Gandhi University: Itanagar.
- Echo-Hawk, C.R. (2000). Ancient History in the New World: Integrating Oral Tradition and the Archaeological Record in Deep Time. *American Antiquity*, 65(2), p 267-290.
- Eckardt, K. (Eds) (2010). *Roman Diaspora: Archaeological Approaches to Mobility and Diversity in the Roman empire*. JRA supplementary Series 78. Portsmouth, RI: Journal of Roman Archaeology.
- Fürer-Haimendorf, C. V. (1937). Among the Naga Hills: A Primitive Landscape. *Geographical Magazine*, 5, 117-126.
- Furholt, M. (2021). Mobility and Social Change: Understanding the European Neolithic Period after the Archaeogenetic Revolution. *Journal of Archaeological Research*. 29, 481–535. <https://doi.org/10.1007/s10814-020-09153-x>
- Ghosh. B. B. (1979). *Nagaland District Gazetteers Mokokchung District*. Dimapur: Sethi Printers.

- Godwin-Austen, H.H. (1875). On The Rude Stone Monuments Of Certain Naga Tribes, With Some Remarks on Their Customs, etc. *Journal of the Anthropological Institute of Great Britain and Ireland*. 4. p.144-147.
- Hakenbeck, S. (2013). Potentials and Limitations of Isotope Analysis in Early Medieval Archaeology. *European Journal of Post- Classical Archaeologies*. 3. 95-111.
- Hallowell, A.I. (1947). Myth, Culture and Personality. *American Anthropologist*. 49(4). 544-556.
<https://doi.org/10.1093/acrefore/9780190277727.013.646>
- Horton, R.E. (1945). Erosional Development of Streams and Their Drainage Basins: Hydrophysical Approach to Quantitative Morphology. *Geological Society of America Bulletin*. 56. 275-370.
- Humtsoe, J. (2013, March 20). *Soils of Nagaland*.
<https://nagalandjournal.wordpress.com/2013/03/20/soils-of-nagaland/>.
- Hussian, Z,. (1996). Significance Characteristics of a Neolithic Site at Barapani (Khasi Hills). *Proceedings of North East India History Association*, 17th Session, 111-118. Aizwal.
- Hutton, J.H. (1926a). A Naga Celt. *Journal of Asiatic Society of Bengal*. 22. 133.
- Imchen, P. (1990). *Ao Mongsen Lipok*. Guwahati: Saraighat Offset Press.
- Jamir, N. T, Lanunungsang, A. (2005). *Naga Society and Culture: A Case Study of the Ao Naga Society and Culture*. Nagaland: Nagaland University Tribal Research Centre.
- Jamir, T. (2004). Megaliths of Nagaland: Reflection of Material Milieu and Social Values. In M. Momin and C. Mawlong (Eds), *Society and Economy in North-East India*, I, (pp.105-117). New Delhi: Regency Publications.
- Jamir, T. (2005). *Megaliths Burial Tradition of the Nagas (with special reference to the Angami and the Chakhesang Nagas): An Ethnoarchaeological Perspective*. Unpublished PhD thesis. Pune. Deccan College Post- Graduate & Research Institute, Deemed University.
- Jamir, T. (2006). A Burial site at Jotsoma and the Mortuary Customs of the Angami Nagas: An Ethnoarchaeological Approach. In G. Sengupta, S. Roychoudhury and S. Som (Eds), *Past and Present: Ethnoarchaeology in India*, (pp. 449-463). New Delhi: Pragati Publications.
- Jamir, T. (2021). Locating the Practice of Ethnography and Archaeology in Nagaland: Early Collections and Recent Trends. *Puratattva*. 51. 166-188
- Jamir, T. (2022, March 23). *Archaeology of Northeast India*.
<https://doi.org/10.1093/acrefore/9780190277727.013.646>

- Jamir, T. 2014. Ancestral Sites, Local Communities and Archaeology in Nagaland: A Community Archaeology Approach at Chungliymti. In T. Jamir and M. Hazarika (Eds), *50 years After Daojali- Hading: Emerging perspectives in the Archaeology of Northeast India*, (pp 473-487), New Delhi: Research India Press.
- Jamir, T., & Vasa, D. (2008). Archaeology of Local Cultures: New Findings and Interpretations in Nagaland. In M. Oppitz *et al.* (Eds.), *Naga Identities: Changing Local Cultures in the North East of India*, (pp.323-340). Universitat Zurich: Snoeck Publishers.
- Jamir, T., Vasa, D., & Tetso, D. (2014a). *Archaeology of Naga Ancestral Sites; Recent Archaeological Investigation at Chungliymti and Adjoining sites*. I. Dimapur: Heritage Publishing House.
- Jamir, T., Tetso, D., Venuh, Z., Tripathy, V. M., Pokharia, A.K. (2014b). *Archaeology of Naga Ancestral Sites: Recent Archaeological Investigations in Phek and Kiphire Districts of Nagaland*, II. Dimapur: Heritage Publishing House.
- Jamir, W. (1997). *Megalithic Tradition in Nagaland: An Ethno- Archaeological Study*. Unpublished Phd Thesis. Assam. Guwahati University.
- Jamir, W. (1998). Megaliths in Nagaland. *Puratattva*. 28. 104-110.
- Japukong Senso Senden. (2000). *Diamond Jubilee Nungo*. Dimapur: Print House.
- Juwayeyi, Yusuf M. (2020). Archaeology and Oral Tradition in Malawi: Origins and Early History of the Chew. South Africa. UCT press.
- Kithan, L. (2022). *Dynamics In Village Formation Among The Lotha Nagas With Reference To Wokha Village*. Unpublished PhD Thesis. Kohima: Nagaland University.
- Kopytoff, I. (1987). The Internal African Frontier: The Making of African Political Culture. In Igor Kopytoff (Ed.), *The African Frontier: The Reproduction of Traditional African Societies*, (pp. 3-86). Bloomington: Indiana University Press.
- Lama, G.K. (2014). Archaeology of Sikkim: A Recent Perspective. In T. Jamir and M. Hazarika (Eds), *50 years After Daojali- Hading: Emerging perspectives in the Archaeology of Northeast India*, (pp 152-166), New Delhi: Research India Press.
- Lee, E.S. (1966). A Theory of Migration, *Demography*, 3(1): 47-57.
- Longchar, P. (2002). *Historical Development of the Ao Nagas in Nagaland*. Dimapur: Print Home.
- Longchar, P. (2002). *Historical Development of the Nagas in Nagaland*. Dimapur: Print Home.

- Longkhum Pudo Menden.(1994). *Longkhum Heroic Memorial Hall Aonokpo*. Mokokchung: Nagaland P. Press.
- Longkumer, D. (2003). *Longkhum's Struggle Against Nokrang*. Guwahati: Avishek Printers.
- Mallet, F.R., (1876). On the coalfields of Naga Hills bordering Lakhimpur and Sibsagar districts, Assam. *Memoirs of the Geological Survey of India*. V. 12.
- Mason, J, R. (2000). Archaeology and Native North American Oral Traditions. *American Antiquity*, 65, 239-266.
- Mills, J, P., Hutton, J, H., (1929). Ancient Monoliths of North Cachar. *Journal and Proceedings of the Asiatic Society of Bengal*, New Series, 1, 285-300.
- Mills, J.P. (1926). *The Ao Nagas*. London: Macmillan and Co. Ltd.
- Mishra, P.K. (2008). *Archaeological Exploration in Sikkim*. New Delhi: Sandeep Prakashan.
- Mitri, M, Kharmawphlang, D, Syiemlieh, H. (2015). A Preliminary Report on the Excavation of the Neolithic Site at Law Nongthroh (Sohpetbneng Hill), Khasi Hills, Meghalaya. *Man and Environment*, 40 (1), 33-42.
- Mitri, M, Neog, D. (2016). Preliminary Report on the Excavations of Neolithic Sites From Khasi Hills Meghalaya. *Ancient Asia*, 7 (7), 1-17. <http://dx.doi.org/10.5334/aa.119>
- Mitri, M,. (2009). An Outline of the Neolithic Culture of the Khasi-Jaintia Hills of Meghalaya, India: An Archaeological Investigation. *Oxford: British Archaeological Report*.
- Mitri, M., Kharmawphlang, D., & Syiemlieh, H. (2015). A Preliminary Report on the excavation of the Neolithic Site at Law Nongtroh (Sohlpetbneng Hill), Khasi Hills, Meghalaya. *Man and Environment* , XL (10), 33-44.
- Mokokchung District Dobashi. (2016). *Aor Temzung Ozung*. Mokokchung, Nagaland: Longpok Offset Press.
- Molunger Chir Telongjem. (2007). *Molunger Otsü Hongsu Ka*. Mokokchung: Walling Printers.
- Moore, J, H., (1994). Putting Anthropology Back Together Again: The Ethno-genetic Critique of Cladistic Theory. *American Anthropologist*, 96 (4), 925-948.
- Moshenska, G. (2007). Oral History in Historical Archaeology: Excavation Sites of Memory. *Oral History*, 35 (1), 91-97.
- Nagaland Forest Department. Government of Nagaland (2020-21). *Annual Administrative Report*.

- NGISRSC. 2014. *Geomorphology and Lineament Mapping: Nagaland*. Kohima: Published by Nagaland GIS & Remote Sensing Centre.
- Ngullie, C. (2017). Oral Tradition in North East Indian with Special Reference to the Nagas. In Ruby Meloni and Anagha Kamte (Eds.), *Crafting History: Methods and Content*, (pp.207-215). Mumbai: Himalaya Publishing House.
- Ngullie, C.R. (2006). Pottery Tradition of the Lotha Tribe, Nagaland: An Ethnographic study. In G.Sengupta, S. Roychoudhury and S. Som (Eds), *Past and Present: Ethnoarchaeology in India*, (pp. 303-315). New Delhi: Pragati Publications.
- Ngullie, C.R. (2008). *Neolithic Pottery Tradition of North East India: An Ethnoarchaeological Perspective*. Unpublished PhD thesis. Pune: Deccan College Post- Graduate & Research Institute, Deemed University.
- Ngullie, C.R. (2014). Ceramic Ethnoarchaeology in Northeast India. In T.Jamir and M. Hazarika (Eds.), *50 Years After Daojali- Hading: Emerging perspectives in the Archaeology of North-east India*, (pp. 199-205). New Delhi: Research India Press.
- Nienu, V. (1974). Prehistoric Discoveries in Nagaland-A Survey. *Highlander*, II (1), 5-7.
- Nienu, V. (1983). The Prehistoric Archaeology and Human Ecology of Nagaland (Unpublished PhD Dissertation). University of California: Berkeley.
- Perks, R., Thompson, A. (Eds) (1998). *The Oral History Reader*. London: Routledge.
- Pokharia, A.K., Jamir, T., Tetso, D., Venuh, Z. (2013). Late First Millennium BC to Second Millennium AD Agriculture in Nagaland: A Reconstruction based on Archaeobotanical Evidence and Radiocarbon Dates. *Current Science*, 104 (10), 1341-1353.
- Pongen, L., Jamir, S., Rawat, M, S., Yaden, Sangyu. (2025). Analyzing Land Use and Land Cover Changes and its Dynamics in Mokokchung District, Nagaland. *International Journal of Scientific Research in Science, Engineering and Technology*, 12 (1), 214-220.
- Ramesh, N, R. (1986). Discovery of Stone Age Tools From Tripura and Its Relevance to the Prehistory of Southeast Asia. *Geological Society of Southeast Asia Proceedings, Geological Society Malaysia, Bulletin* (20), V (II), ,pp. 289-310.
- Rangel, E.R., Badillo, D.J., (2015). Similarity analysis of archaeological potsherds. Conference paper in *Lecture Notes in computer science*. DOI: 10.1007/978-3-319-19264-2_13

- Rao, S.N.(1991). Megalithic Practices among Khasis and Nagas of North- Eastern India. In J.P. Singh and G. Sengupta (Eds.), *Archaeology of Northern Eastern India*, (pp 106-123). New Delhi: Har- Anand Publications.
- Rao, S.N.(1976). Continuity and Survival of Neolithic Traditions in Northeastern India. *Asian Perspectives*. 20. p.191-205.
- Ravenstein, E. G. (1885). The Law of Migration. *Journal of the Royal Statistical Society*. 48, 167-235.
- Reid,S.P. (1982). Documentation of Historic Structures. *Bulletin of the Association for Preservation Technology*, 14(4), 21.
- Richardson, D. (2002). Reconstructing a Community with Oral History. *Oral History Review*, 29(2), 97-102.
- Robbins, P. (2004). Cultural Ecology. In James S. D, Nuala C. J, Richard H. S (Eds), *A Companion to Cultural Geography*, (pp 180-193). USA: Blackwell Publishing Ltd.
- Sanders, W.T. (1962). Cultural Ecology of Nuclear America. *American Anthropologist*, 64, 34-44.
- Sarkar, S., Modwel, N, Y (Eds.). (2021). *Oral Traditions, Continuities and Transformations in Northeast India and Beyond*. Abingdon: Routledge
- Schachner, G. (2010). *Population Circulation and the Transformation of Ancient Zuni Communities*. Tucson: University of Arizona Press.
- Scott, James. (2009). *The Art of Not Being Governed: An Anarchist History of Upland Southeast*
- Sharma, T.C. (1988). Prehistoric and Archaeological Sources of the History of Nagaland. In S.P. sen (Ed), *Sources of the History of India*. VI, (319-344). Calcutta: Institute of Historical Studies.
- Shennan, S. (2024). Population, Culture History, and The Dynamics of Change in European Pre-history. *Journal of the Royal Anthropological Institute (N.S.)* . 30 (4). 847-1181
- Showren, T. (2014). Oral Traditions: Methods to Adaptation of Construction of the History of Non-Literate Tribes. *International Journal of Social Science and Humanity*, 4 (6), 478-481.
- Singh, O. K. (1993). *Stone Age Cultures of Manipur*. PhD Dissertation. Imphal: Manipur University.

- Singh, O.K. (1997). *Stone Age Archaeology of Manipur*. Manipur: Amusana Institute of Antiquarian Studies.
- Singh, O.K. (2014). Hoabinhian in Manipur. In T.Jamir and M. Hazarika (Eds.), *50 Years After Daojali- Hading: Emerging perspectives in the Archaeology of North-east India*, (pp. 126-133). New Delhi: Research India Press.
- Smith, W.C (1925). *The Ao Naga Tribe of Assam*. London. MacMillan & Co. Limited St. Martins Street,
- Thakur, A. Kr. (2012). Role of Myth in the Reconstruction of Technological Past of Northeast India. *Proceedings of the North East India History Association*, 33rd Session, 13-24. Rajiv Gandhi University: Itanagar.
- Thakuria, T. 2017. Report on Archaeological Excavation at Misimagre, West Garo Hills. A Report submitted to the Archaeological Survey of India (ASI), Department of History & Archaeology, NEHU, Tura.
- Thompson, P. (1988). *The Voice of the Past: Oral History*. New York: Oxford University Press.
- Tiakumla. (2014). *Dynamics of Biodiversity and Its' Impact on Environment In Mokokchung District, Nagaland*. Unpublished PhD thesis. Nagaland : Nagaland University.
- Tonkin, E. (1992). *Narrating our Pasts: The Social Construction of Oral History*. New York. Cambridge University Press.
- Trigger, B. G. (1968). The Determinants of Settlement Patterns. In Chang, K, C (Ed.), *Settlement Archaeology*, (pp. 167-193). Palo Alto, Calif: National Press Books.
- Trigger, B. G.(1996) *A history of archaeological thought*. NewYork. Cambridge University Press,
- Tzudir, T. (2021). *Early Metal Technology of the Konyak and Khamniungan*. Unpublished PhD Thesis. Kohima: Nagaland University.
- Tzudir, T., Jamir, T., Sharm, S. (2019). Analysis Of Iron Ore, Iron Slag And Soil Of Termite Nest From Wui Village, Nagaland, India. *Current Science*, 116 (2), 311-319. Doi:10.18520/Cs/Vll6/I2/, 311-319.
- Valdiya, K, S. (1998). *Dynamic Himalaya*. Hyderabad: Universities Press.
- Vansina, J. (1985). *Oral Tradition as History*. Wisconsin: The University of Wisconsin Press.
- Vansina,J. (1965). *Tradition: A study in Historical Methodology*. Chicago: Aldine Pub.co.

- Vasa, D., Aier, A. (2008). *Pottery Tradition among the Chakhesang and Pochury Tribes*. North East Zone Cultural Centre, Ministry of Culture. Dimapur.
- Vasa, D. (2011). *Traditoinal Ceramics among the Nagas: An Ethnoarchaeological Perspective*. Unpublished PhD thesis. Pune: Deccan College Post- Graduate & Research Institute, Deemed University.
- Vasa, D. (2014). Experimenting with the non-material aspect of pottery of Nagaland: Some Theoretical and Historical Consideration. In T.Jamir and M. Hazarika (Eds.), *50 Years After Daojali- Hading: Emerging perspectives in the Archaeology of North-east India*, (pp. 206-217). New Delhi: Research India Press.
- Vasa, D. (2017). Indigenous Pottery Making Techniques of Nagaland. *Nagaland University Research Journal*, 10, 91-98.
- Vasa, D. (2021). Pottery Manufacturing Technique of Wui Village, Tuensang District Nagaland. In P. Shirvalkar and E. Prasad (Eds.), *Pratnamani Felicitation Volume of Prof. Vasant Shinde*. New Delhi: B.R. Publishing House.
- Vasa, D. (2023). Pottery Production among the Phom of Nagaland. *Ethnographisch-Archaeologische Zeitschrift*, 57, 1-17.
- Venuh, Z. (2000). *Megalithic Traditions of the Chakhesang Nagas*. Unpublished M.Phil Thesis. Assam: Dibrugarh University.
- Venuh, Z. (2005). *Megaliths and Megalithic Traditions of the Chakhesang Nagas: Myths, Facts and Interpretations*. Unpublished PhD thesis. Assam: Dibrugarh University.
- Walling, A. (2008). Stories at Hand: Dynamics of Oral Traditions in Archaeological Sites. *Nagaland University Research Journal*, 5, 269-278.
- Walling, A. (2014). The Past in Oral Tradition and Text: A case of Reconstructing Naga- Ahom Historical Relations from corroborating Sources. In T.Jamir and M. Hazarika (Eds.), *50 Years After Daojali- Hading: Emerging perspectives in the Archaeology of North-east India*, (pp. 236-242). New Delhi: Research India Press.
- Walling, A. (2020). Excavation at Nokpu: A Naga- Ahom Perspective. *Man and Environment*. XLV (2). 43-57.
- Walling, Aokumla. (2016). Oral Traditions and Archaeology: Reconstructing the Pre-Colonial History of Ao Nagas with Special reference to the Naga Ahom Relationship.

- (Unpublished PhD Dissertation). Deccan College, Post Graduate and Research Institute (Deemed University): Pune.
- Walunir.(2003). *Narrative Responses Of The Ao Community: A Semiotic And Interpretative Study Of Tarnunger Otsu*. Unpublished M. Phil thesis. New Delhi: Jawaharlal Nehru University.
- Waromung Yimten. (1993). *Nokranger Aser Nokrang*. Calcutta: Rakesh Saraf & Associates.
- Whitely, M, P. (2002). Archaeology and Oral Tradition: The Scientific Importance of Dialogue. *American Antiquity*, 67(3), 405-415.
- Wickler, S. (2002). Oral Traditions and Archaeology: Modeling Village Settlement in Palau, Micronesia. *Micronesian Journal of the Humanities and Social Sciences*, 1 , 39-47.
- Yhome, R, R. (2020). *Mircowear Analysis of Human Dentition recovered from Jotsoma, Leshemi, Ranyak Khen and Rikhelüwong sites, Nagaland*. Unpublished PhD thesis. Pune: Deccan College Post- Graduate & Research Institute, Deemed University.
- Yin,A, Harrison. M. (2000). Geological evolution of the Himalayan-Tibetan orogen. *Annual Review of Earth and Planetary Sciences*, V (28), 211-280.

Oral sources

Mr. Alemtoshi Imsong, Ungma village; Dated 27th January, 2021.

Mr. Imli Longkumer Settsu village; Dated 27th March, 2019

Mr. Lanutemshi Dobashi, Mokokchung town; Dated 6th January 2019

Mr. K.Y. Meren, Longsa village; Dated 26th August, 2022.

Mr. T.Akum Jamir, Ex. MLA, Mokokchung; Dated 18th November, 2021.

Guru T. Bendangwati Pongener Ex. Tatar, Mokokchung village; Dated 30th March, 2021.

Mr. I. Temjen Jamir of Ungma village and a resident of Mokokchung Town; Dated 25th March 2019.

Mr. Supongangtet Longkumer, Ungma village; Dated 3rd April, 2021.

Mr. O. Alem Jamir, Age-64 years, Kelingmen village; Dated 7th April, 2021.

Mr. Tongpangluba Longkumer, Age-76, Kupza village; Dated 27th May 2019

Mr. Senlikaba Wallinger, Dibua village; Date: 18th Jan 2023.

Japu village elders and Japu Village Council Members; Dated: 17th April, 2023

Mr. T. Luin Longchar, Aonokpu village; Date 30th March, 2022.

Mr. Alijang Ozukum, Age-94 yrs, Waromung village; Date: 30th Jan 2021.

Mr. Aodangti Amer, Changki, Age-68, Kohima; Date: 12th March, 2025.

Appendix 1

Reg No	Tr	Site	Spit	Layer	Depth (cm)	Colour	Decoration	Thickness (mm)	Weight (gm)	Texture	No. of Sherds	Vessel Part			Remarks
												Neck	Body	Rim	
1	1	NIC	4	1	69	Buff	Plain	4	12	Medium Coarse	5	2	3		Almost all sherds have sandy texture with small granules and gritty on the section
2	1	NIC	4	1	69	Brown	Plain	5.1	13	Medium Coarse	6	2	4		Sandy, soot stain, granules, gretty anvil marks
3	1	NIC	4	1	65	Reddish Yellow	Paddle/ Horizontal	4.9	21	Medium Coarse	25	5	13	7	Sandy, soot stain, granules
4	1	NIC	4	1	65	Dark Greyish Brown	Paddle/ Horizontal	6.4	52	Medium Coarse	50	8	39	3	Sandy, soot stain, anvil marks, granules
5	1	NIC	4	1	65	Reddish Brown	HerringBone/ Paddle	5.7	6	Medium Coarse	15		15		Sandy, soot stain, granules
6	1	NIC	4	1	65	Reddish Brown	HerringBone/ Paddle	3	7	Medium Coarse	5		5		Sandy, soot stain, granules
7	1	NIC	4	1	65	Grey	Paddle	7.3	8	Coarse	2		1	1	Granules, gritty
8	7	NIC	4	1	65	Dark Brown	Paddle	4.9	12	Medium Coarse	9		9		Sandy
9	7	NIC	4	1	65	Reddish Brown	Paddle	3.9	8	Medium Coarse	12	3	9		Sandy, soot stains, granules
10	7	NIC	4	1	65	Dark Greyish	Cord Horizontal	5.8	13	Medium Coarse	16		16		Sandy, soot stain,

Reg No	Tr	Site	Spit	Layer	Depth (cm)	Colour	Decoration	Thickness (mm)	Weight (gm)	Texture	No. of Sherds	Vessel Part			Remarks
												Neck	Body	Rim	
						Brown									granules, anvil mark
11	1	NIC	1	1	77	Reddish Yellow	Paddle	7.5	15	Medium Coarse	10	2	6	2	Sandy, granules
12	1	NIC	1	1	77	Buff	Plain	3.6	4	Medium Coarse	1		1		Sandy, granules
13	1	NIC	1	1	77	Reddish Brown	HerringBone/ Paddle	3.8	3	Medium Coarse	3		3		Sandy, soot stain, Anvil marks
14	1	NIC	1	1	77	Brown	Plain	2.3	3	Smooth	3		11		Soot stain
15	1	NIC	1	1	77	Reddish Brown	Paddle Horizontal	5.6	8	Medium Coarse	17	2	14	1	Sandy, soot stain, granules
16	1	NIC	1	1	77	Greyish Brown	Paddle	3.4	7	Medium Coarse	29		29		Sandy, soot stain
17	1	NIC	1	1	77	Reddish Brown	Paddle	3.2	3	Medium Coarse	8		8		Sandy, soot stain
18	1	NIC	2	1	55	Buff	Plain	6.2	11	Medium Coarse	2		2		Sandy granules
19	1	NIC	2	1	55	Reddish Brown	HerringBone/ Paddle	5.7	6	Medium Coarse	3		3		Sandy, soot stain
20	1	NIC	2	1	55	Brown	Paddle	4.4	15	Medium Coarse	16		16		Sandy, soot stains, granules
21	1	NIC	2	1	55	Greyish Brown	Paddle Horizontal	4.3	22	Medium Coarse	67	3	61	3	Sandy, soot stain
22	1	NIC	2	1	55	Reddish Yellow	Paddle	3	10	Medium Coarse	38	2	28	8	Sandy, anvil marks, granules
23	1	NIC	3	1	64	Reddish Yellow	Paddle	5.6	16	Medium Coarse	44	1	43		Sandy, anvil marks, soot stain

Reg No	Tr	Site	Spit	Layer	Depth (cm)	Colour	Decoration	Thickness (mm)	Weight (gm)	Texture	No. of Sherds	Vessel Part			Remarks
												Neck	Body	Rim	
24	1	NIC	3	1	64	Reddish Yellow	Paddle	6.5	14	Medium Coarse	53	7	36	10	Sandy, anvil marks, soot stain
25	1	NIC	3	1	64	Puff	Plain	8.6	26	Medium Coarse	8		6	2	Sandy granules
26	1	NIC	3	1	64	Reddish Brown	Paddle	5.5	10	Medium Coarse	29	4	21	4	Sandy, soot stain
27	1	NIC	3	1	64	Reddish Yellow	Plain	4.7	20	Medium Coarse	17	3	12	2	Sandy, soot stain
28	1	NIC	3	1	64	Reddish Brown	HerringBone/ Paddle	5.9	20	Medium Coarse	19		19		Sandy, soot stain
29	1	NIC	5	1	77	Reddish Brown	Plain	6.3	13	Medium Coarse	2		1	1	Sandy, soot stain
30	1	NIC	5	1	77	Yellowish Brown	Paddle/Checkered	3.8	3	Medium Coarse	1		2		Sandy, soot stain
31	1	NIC	5	1	77	Dull Brown	HerringBone/ Paddle	7.7	12	Medium Coarse	2		2		Sandy granules
32	1	NIC	5	1	77	Reddish Brown	Paddle Horizontal	8.3	14	Medium Coarse	10	3	7		Sandy granules
33	1	NIC	5	1	77	Reddish Yellow	Plain	4.4	5	Medium Coarse	7		6	1	Sandy, soot stain
34	1	NIC	5	1	77	Reddish Brown	Paddle Vertical	3.7	4	Medium Coarse	4				Sandy, soot stain
35	1	NIC	5	1	77	Reddish Yellow	Paddle Horizontal	6.1	13	Medium Coarse	1		1		Sandy, withered, granules
36	1	NIC	5	1	77	Dark Reddish Brown	Paddle Horizontal	6.3	11	Medium Coarse	4		4		Sandy, soot stain

Reg. No	Tr	Site	Spit	Layer	Depth (cm)	Colour	Decoration	Thickness (mm)	Weight (gm)	Texture	No. of Sherds	Vessel Part			Remarks
												Neck	Body	Rim	
37	1	JJK	1	1	28	Reddish Yellow	Paddle	2.9	4	Medium Coarse	4	1	3		Sandy, granules
38	1	JJK	1	1	28	Brown	Paddle	6.8	7	Medium Coarse	6	2	4		Sandy, soot stain
39	1	JJK	1	1	28	Dark Brown	Paddle, Herring Bone	2.1	3	Medium Coarse	4		4		Sandy, soot stain
40	1	JJK	2	2	75	Yellowish Red	Plain	7.9	22	Medium Coarse	3		1	2	Sandy, granules, soot stain
41	1	JJK	2	2	75	Grey	Cord	4.6	7	Weathered Coarse	1		1		Sandy, granules
42	1	JJK	2	2	75	Reddish Brown	Paddle	4.9	7	Medium Coarse	8		8		Sandy
43	1	JJK	2	2	75	Reddish Brown	Plain	4.5	11	Medium Coarse	6		6		Sandy, granules, soot stain

Reg. No	Tr	Site	Spit	Layer	Depth (cm)	Colour	Decoration	Thickness (mm)	Weight (gm)	Texture	No. of Sherds	Vessel Part			Remarks
												Neck	Body	Rim	
44	1	JJK	2	2	97	Light Brown	Paddle	6.8	18	Medium Coarse	4	1	3		Sandy, granules, gritty
45	1	JJK	2	2	97	Black	Paddle	2.9	4	Medium Coarse	6		5	1	Sandy, granules
46	1	JJK	2	2	97	Grey	Plain	5.2	11	Withered Coarse	1		1		Sandy, withered granules
47	1	JJK	4	3	114	Yellowish Red	Paddle Impressed	3.5	9	Medium Coarse	6		5	1	Sandy, soot stain
48	1	JJK	4	3	114	Brown	Plain	4.2	4	Coarse	1		1		Withered, quartz, granules
49	1	JJK	4	3	114	Brown	Paddle	2.6	4	Medium Coarse	3		3		Sandy, soot stain

Reg. No	Tr	Site	Sp it	Layer	Depth (cm)	Colour	Decoration	Thickness (mm)	Weight (gm)	Texture	No. of Sherds	Vessel Part			Remarks
												Neck	Body	Rim	
50	1	MAI	1	1	0.4	Reddish Yellow	Plain	3.6	4	Coarse	2		2		Sandy, withered, quartz
51	1	MAI	2	1	53	Brown	Plain	5.1	15	Medium Coarse	8	1	7		Sandy, granules, quartz
52	1	MAI	2	1	53	Buff	Plain wheelmade	4.3	4	Medium Coarse	2		2		Sandy
53	1	MAI	2	1	53	Reddish Yellow	Plain	4	4	Medium Coarse	6		6		Sandy, soot stain, quartz
54	1	MAI	2	1	53	Grey	cord	5.9	5	Medium Coarse	1		1		Sandy
55	1	MAI	3	2	80	Yellowish Red	Paddle	5.5	15	Medium Coarse	16	4	12		Weathered, sandy, granules, quartz
56	1	MAI	3	2	80	Buff	Plain	5.3	13	Medium Coarse	4		2	2	Sandy, gretty, quartz
57	1	MAI	4	1	90	Reddish Brown	Paddle	5.5	21	Medium Coarse	13		3		Sandy, soot stains
58	1	MAI	4	1	90	Brown	Paddle	5.4	16	Medium Coarse	18		17	1	Sandy, soot stains
59	1	MAI	4	1	90	Red	Plain	4.3	5	Medium Coarse	27		27		Weathered, sandy, soot stain
60	1	MAI	4	2	90	Buff	Plain wheelmade	1.5	3	Medium Coarse	8		8		Weathered, sandy
61	1	MAI	4	2	90	Dark Reddish Brown	Plain hot impression	4.3	6	Medium Coarse	1		1		Sandy, soot stain

Reg. No	Tr	Site	Spi t	Layer	Depth (cm)	Colour	Decoration	Thickness (mm)	Weight (gm)	Texture	No. of Sherds	Vessel Part			Remarks
												Neck	Body	Rim	
62	1	MAI	5	2	110	Reddish Yellow	Plain	2.5	9	Medium Coarse	4		4		Sandy, quartz, granules
63	1	MAI	5	2	110	Brown	Plain	3.3	7	Medium Coarse	13		13		Sandy, granules
64	1	MAI	5	2	110	Dark Reddish Brown	Paddle	3.8	9	Medium Coarse	21		21		Sandy, soot stain
65	1	MAI	5	2	110	Reddish Yellow	Plain	3.3	6	Medium Coarse	4	1	3		Sandy, withered
66	1	MAI	5	2	110	Reddish Brown	Paddle	5.5	12	Medium Coarse	4		4		Sandy,soot stain
67	1	MAI	5	2	110	Dark Grey	Plain	3.8	11	Medium Coarse	5		3	2	Sandy,soot stain
68	1	MAI	5	2	110	Pink	Paddle	4.2	3	Medium Coarse	3	1	2		Sandy, granules
69	1	MAI	5	2	110	Grey	Paddle	3.1	2	Medium Coarse	5		4	1	Sandy
70	1	MAI	5	2	110	Reddish Brown	Paddle Checkered	4.6	5	Medium Coarse	1		1		Sandy, quartz
71	1	MAI	5	2	110	Reddish Brown	Paddle	5.2	6	Medium Coarse	1		1		Sandy, quartz
72	1	MAI	5	2	110	Light Grey	Paddle	3.9	8	Medium Coarse	1		1		Sandy, granules

Reg. No	Tr	Site	Spit	Layer	Depth (cm)	Colour	Decoration	Thickness (mm)	Weight (gm)	Texture	No. of Sherds	Vessel Part			Remarks
												Neck	Body	Rim	
73	1	TSH	2	2	57	Reddish Yellow	Plain H/m	4	33	Medium Coarse	31		29	2	Soot stain, sandy texture
74	1	TSH	2	2	57	Reddish Yellow	Paddle H/m	3	5	Medium Coarse	34		34		Sandy texture, soot stain
75	1	TSH	2	2	57	Yellowish Red	Plain W/m	3	4	Medium Coarse	19	1	13	5	Sandy texture
76	1	TSH	2	2	57	Buff	Plain W/m	10	21	Medium Coarse	32	2	22	8	Sandy texture, granules
77	1	TSH	2	2	57	Reddish Yellow	Paddle	11	8	Medium Coarse	10	1	7	2	Sandy
78	1	TSH	2	2	57	Grey	Plain	10	45	Medium Coarse	16	2	11	3	Sandy
79	1	TSH	2	2	57	Reddish Yellow	Paddle	9	5	Medium Coarse	12	3	4	5	Sandy Texture
80	1	TSH	2	2	57	Dark Greyish Brown	Plain H/m	5	15	Medium Coarse	30	4	23	3	Sandy, soot stain
81	1	TSH	2	2	57	Greyish Brown	Paddle	4.1	15	Medium Coarse	58	1	57		Sandy, soot stain
82	2	TSH	3	2	67	Greyish Brown	Plain H/m	3	14	Medium Coarse	55	2	50	3	Sandy, soot stain
83	2	TSH	3	2	67	Buff	Plain	4	8	Smooth	30	3	19	8	Sandy
84	2	TSH	3	2	67	Reddish Brown	Paddle	4.1	9	Medium Coarse	43	1	40	2	Sandy
85	2	TSH	3	2	67	Reddish Yellow	Paddle	5	11	Medium Coarse	16		14	2	Sandy, soot stain
86	2	TSH	3	2	67	Dark Brown	Paddle	8.5	39	Medium Coarse	28	4	19	5	Sandy, soot stain
87	2	TSH	3	2	67	Reddish Yellow	Paddle	10	26	Medium Coarse	14	2	7	5	Sandy

Reg. No	Tr	Site	Spit	Layer	Depth (cm)	Colour	Decoration	Thickness (mm)	Weight (gm)	Texture	No. of Sherds	Vessel Part			Remarks
												Neck	Body	Rim	
88	1	LGZ	1	1	48	Buff	Plain	3	9	Smooth	5		3	2	Sandy/ wheel made
89	1	LGZ	1	1	48	Reddish Brown	Paddle impressed	5	11	Medium Coarse	28		28		Sandy, withered, soot stain
90	1	LGZ	2	2	56	Buff	Plain	5	15	Medium Coarse	2		2		Sandy/ wheel made
91	1	LGZ	2	2	56	Reddish Brown	Plain	7	75	Coarse	30		26	4	Sandy/ withered
92	1	LGZ	2	2	56	Reddish Yellow	Paddle	5	17	Coarse	21		16	5	Sandy, withered, soot stain
93	1	LGZ	2	2	56	Reddish Brown	Plain	4.4	14	Coarse	55	2	40	8	Sandy, withered
94	1	LGZ	2	2	56	Brown	Paddle	10.2	19	Medium Coarse	20	4	16		Sandy, granules
95	1	LGZ	3	2	61	Red	Cord	9.6	20	Coarse	9	1	7	1	Sandy, withered
96	1	LGZ	3	2	61	Reddish Yellow	Paddle	4.3	10	Coarse	24	5	19		Sandy, withered
97	1	LGZ	3	2	61	Reddish Yellow	Plain	6	18	Coarse	9		2	7	Sandy, withered
98	1	LGZ	3	2	61	Reddish Brown	Paddle	6.1	18	Medium Coarse	33		31	2	Sandy, soot stain
99	1	LGZ	3	2	61	Grey	Paddle	3.7	8	Coarse	1		1		Sandy
100	2	LGZ	3	2	61	Buff	Plain	4	36	Coarse	2		2		Sandy, granules
101	2	LGZ	2	1	41	Reddish Yellow	Paddle	5	12	Medium Coarse	8		7	1	Sandy
102	2	LGZ	4	1	58	Reddish Brown	Plain	7.9	48	Medium Coarse	2	2			sandy
103	2	LGZ	4	1	58	Reddish Brown	Plain	3.4	8	Smooth	7		7		Wheelmade, sandy

Reg. No	Tr	Site	Spit	Layer	Depth (cm)	Colour	Decoration	Thickness (mm)	Weight (gm)	Texture	No. of Sherds	Vessel Part			Remarks
												Neck	Body	Rim	
104	1	RTU	1	1	40	Brown	Plain	6.5	11	Medium coarse	65	3	60	2	Sandy
105	1	RTU	1	1	40	Reddish Yellow	Plain	6.1	12	Medium coarse	27	1	19	7	Sandy, gritty granules
106	1	RTU	1	1	40	Reddish Yellow	Paddle checkered/ herringbone	5.1	5	Medium coarse	7	1	6		Sandy
107	1	RTU	1	1	40	Brown	Paddle	4.2	11	Medium coarse	19		19		Sandy, soot stains
108	1	RTU	1	1	40	Buff	Plain	2.5	4	Medium coarse	3		3		Sandy granules
109	1	RTU	2	1	53	Reddish Yellow	Plain	4.7	14	Medium coarse	17		10	7	Sandy
110	1	RTU	2	1	53	Reddish Yellow	Paddle	11.5	41	Medium coarse	13	4	4	5	Sandy
111	1	RTU	2	1	53	Reddish Brown	Plain	3.8	19	Medium coarse	14		14		Sandy, soot stains
112	1	RTU	2	1	53	Reddish Brown	Paddle, herringbone, horizontal	5.2	30	Medium coarse	19		18	1	Sandy, soot stains
113	1	RTU	3	1	66	Buff	Plain	3.9	8	Medium coarse	2		2		Sandy gritty granules
114	1	RTU	3	2	66	Reddish Yellow	Paddle, herringbone, horizontal	9.8	25	Medium coarse	38		38		Sandy, soot stains
115	1	RTU	3	2	66	Reddish Yellow	Plain	9.3	22	Medium coarse	20		9	11	Sandy
116	1	RTU	3	2	66	Reddish Brown	Paddle	6.1	7	Medium coarse	15		15		Sandy, soot stains

Reg. No	Tr	Site	Spit	Layer	Depth (cm)	Colour	Decoration	Thickness (mm)	Weight (gm)	Texture	No. of Sherds	Vessel Part			Remarks
												Neck	Body	Rim	
117	1	KOR	1	1	49	Yellowish Brown	Paddle	8.4	21	Coarse	14	1	11	2	Sandy, withered
118	1	KOR	1	1	49	Yellowish Red	Plain	7.4	27	Medium Coarse	7		7		Sandy, soot stains
119	1	KOR	1	1	49	Brown	Paddle	6.2	8	Medium Coarse	14		14		Sandy
120	1	KOR	2	1	92	Yellowish Brown	Paddle	7.2	38	Coarse	1			1	Sandy, gritty granules
121	1	KOR	2	1	92	Brown	Plain	9.3	27	Medium Coarse	3			3	Sandy
122	1	KOR	2	1	92	Yellowish Brown	Paddle	6.7	8	Medium Coarse	9		8	1	Sandy, soot stains
123	1	KOR	2	1	92	Reddish Yellow	Paddle	5.8	3	Medium Coarse	5		5		Sandy
124	1	KOR	2	1	92	Reddish Yellow	Paddle	4.1	3	Medium Coarse	8		8		Sandy, soot stains
125	1	KOR	3	1	108	Brown	Plain	25.3	96	Medium Coarse	6		6		Sandy, gritty granules

Reg. No	Tr	Site	Spit	Layer	Depth (cm)	Colour	Decoration	Thickness (mm)	Weight (gm)	Texture	No. of Sherds	Vessel Part			Remarks
												Neck	Body	Rim	
126	1	KOR	3	1	108	Reddish Yellow	Plain	6.5	22	Medium Coarse	4	2	2		Sandy
127	1	KOR	3	1	108	Reddish Brown	Plain	8.1	19	Medium Coarse	3		2	1	Sandy
128	1	KOR	4	1	123	Reddish Yellow	Paddle	4.1	12	Coarse	12		2		Sandy, withered
129	1	KOR	4	1	123	Reddish Brown	Plain	6.4	23	Medium Coarse	8		7	1	Sandy, soot stains, withered
130	1	KOR	4	1	123	Brown	Paddle	5.8	8	Medium Coarse	3		3		Sandy
131	1	KOR	5	2	168	Reddish Brown	Paddle	5.4	15	Coarse	19		19		Sandy, withered
132	1	KOR	5	2	168	Reddish Brown	Plain	3.9	7	Coarse	12	1	2	9	Sandy, soot stains, withered
133	1	KOR	6	2	180	Reddish Brown	Paddle	9.5	31	Coarse	6	2	4		Sandy, soot stains, withered

Reg. No	Tr	Site	Spit	Layer	Depth (cm)	Colour	Decoration	Thickness (mm)	Weight (gm)	Texture	No. of Sherds	Vessel Part			Remarks
												Neck	Body	Rim	
134	1	SYT	1	1	16	Red	Plain	7	4	Medium Coarse	2		2		Sandy, gritty granules
135	1	SYT	2	2	24	Reddish Yellow	Plain	5.5	11	Coarse	3		3		Sandy, gritty granules, withered
136	1	SYT	2	2	24	Brown	Paddle	6.9	6	Medium Coarse	1		1		Sandy
137	1	SYT	3	2	33	Reddish Brown	Plain	7.6	5	Coarse	2		2		Sandy, withered
138	1	SYT	4	2	44	Reddish Yellow	Paddle	4.5	10	Medium Coarse	1		1		Sandy
139	2	SYT	1	1	21	Yellowish Brown	Paddle	7.2	16	Medium Coarse	6		6		Sandy, soot stain
140	2	SYT	2	1	30	Reddish Brown	Paddle	7.3	34	Medium Coarse	22		22		Sandy
141	2	SYT	2	1	30	Reddish Yellow	Plain	7.9	14	Medium Coarse	6		2	4	Sandy
142	2	SYT	3	2	37	Brown	Paddle	4.1	6	Medium Coarse	3		3		Sandy
143	2	SYT	3	2	37	Reddish Brown	Paddle, mat impressed, horizontal	5	14	Medium Coarse	9		9		Sandy, soot stain
144	2	SYT	3	2	37	Reddish Yellow	Paddle	8.5	27	Medium Coarse	8		7	1	Sandy, soot stain
145	2	SYT	4	2	45	Red	Plain	5	8	Medium Coarse	4		4		Sandy, soot stain
146	2	SYT	4	2	45	Reddish Yellow	Plain	8.6	8	Medium Coarse	10	4	3	3	Sandy, soot stain
147	2	SYT	4	2	45	Reddish Brown	Paddle	6.2	9	Medium Coarse	2		2		Sandy
148	2	SYT	4	2	45	Grey	Plain	4	3	Medium Coarse	1		1		Sandy, withered

Reg. No	Tr	Site	Spit	Layer	Depth (cm)	Colour	Decoration	Thickness (mm)	Weight (gm)	Texture	No. of Sherds	Vessel Part			Remarks
												Neck	Body	Rim	
149	2	SYT	4	2	45	Reddish Brown	Plain	4.2	5	Medium Coarse	1		1		Sandy, gritty granules
150	2	SYT	4	2	45	Reddish Yellow	Paddle	2.9	3	Medium Coarse	4		4		Sandy, soot stain
151	2	SYT	5	2	54	Reddish Yellow	Plain	5.8	35	Medium Coarse	17		13	4	Sandy
152	2	SYT	5	2	54	Brown	Plain	5.2	13	Medium Coarse	31		31		Sandy, soot stain
153	2	SYT	5	2	54	Reddish Brown	Cord	5.7	6	Medium Coarse	4		4		Sandy
154	2	SYT	5	2	54	Reddish Yellow	Plain	4.4	14	Medium Coarse	8		6	2	Sandy
155	2	SYT	5	2	54	Reddish Brown	Paddle	2.9	3	Medium Coarse	4		4		Sandy, soot stain
156	2	SYT	6	2	65	Reddish Yellow	Paddle, mat, herringbone	8.7	7	Medium Coarse	5		5		Sandy, withered
157	2	SYT	6	2	65	Reddish Yellow	Plain	5.7	20	Medium Coarse	4	2	1	1	Sandy
158	2	SYT	6	2	65	Reddish Brown	Plain	3.9	16	Medium Coarse	19		19		Sandy, soot stain
159	2	SYT	6	2	65	Reddish Brown	Plain	5.2	14	Medium Coarse	45		45		Sandy, soot stain
160	2	SYT	6	2	65	Reddish Yellow	Cord	3.6	6	Medium Coarse	3		3		Sandy
161	2	SYT	7	2	89	Reddish Yellow	Plain	7.6	13	Medium Coarse	10		6	4	Sandy
162	2	SYT	7	2	89	Reddish Brown	Plain	7	10	Medium Coarse	6		6		Sandy