Enviro-Ethno-Archaeology in Northeast India: Prospects and Possibilities with Bodo-Kachari Tribe

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Abstract:
Artefacts at any site reflect the region’s specific environmental conditions and ecology. Ethnographic data can also aid in understanding the inhabitants’ environmental settings that are similar to those of their ancestors. A holistic approach merging methods from archaeology, anthropology, and information about the environment may go a long way in understanding the ancient culture and society of any region. The present paper examines this idea with a case study of the prominent tribe of North-East India, i.e., Bodo-Kachari, to give a framework of research that could be done with this newly emerging perspective. The Bodo-Kachari tribe, an indigenous community primarily residing in the northeastern regions of India, boasts a rich cultural heritage and a history that dates back centuries. Archaeological investigations into the material culture and lifestyle of the Bodo tribe offer a unique opportunity to delve into the past and understand the evolution of their society, economy, and cultural practices. By suggesting the possible interactions of archaeological data with historical records and ethnographic studies, this paper seeks to provide a path to reconstruct the past lifeways of the Bodo-kachari tribe, tracing the trajectory of their cultural development and interactions with neighbouring communities. Additionally, this study aims to contribute to the broader understanding of indigenous cultures in India and their significance in the country’s cultural mosaic.

Keywords: Environment, Ethno-archaeology, North-East India, Bodo-Kachari, Tribal culture, Neolithic, Analogy, Archaeology
Introduction

Humans everywhere have changed their environment, and for better or worse, they manipulate it and modify it for their purposes. So, the facts about interactions between humans and the environment help to understand spatial variations of culture, its development, and distributions. Understanding a particular region's natural environment is paramount for studying past social behaviour as well as the present indigenous group. On the other hand, human-environment interaction describes the interactions that occur between people and their surroundings, including the ways in which they depend on, alter, and adapt to them (Shende et al., 2015). It is essential knowledge for comprehending how civilisations grow and affect the environment they live in (Dearing et al., 2006). This interaction can be seen in various ways, such as through agriculture, urbanisation, resource extraction, and pollution. Understanding these interactions helps us comprehend the complex dynamics between humans and their surroundings and how they shape both societies and the environment (Dearing, 2006; Stern, 1993).

India is a unique country with diverse geographical variations, and its different regions give an ideal situation to study how humans adapt to associated environmental settings. The northeastern part of India is situated at the nexus of the South Asian, Southeast Asian, and East Asian biogeographical realms (Hazarika, 2017). It harbours diverse biota, providing a unique opportunity for archaeologists and anthropologists to study the relationship between humans and their environment over the ages. Moreover, this region, the abode of diverse ethnic groups with diverse cultures and customs, hints at a long history of a continuous and close association between humans and nature, which is essential for the understanding of the domestication of plants and animals as well as the development of human society there.

The Northeastern part of India is inhabited by several tribal communities with distinct socio-economic and socio-cultural elements. The tenets of traditional practices of these tribes are deep-rooted in environmental ethics, supporting a close and harmonious relationship with nature (Wouters & Subba, 2013). Thus, there are a plethora of opportunities to do research using the ‘Bodo-Kachari’ tribe as a case study from an ethno-archaeological perspective in order to comprehend their ecological adaption. Not only are they the largest ethnic group residing primarily in the Northeast Indian states, but they are also the original occupants of this region and the true source of modern Northeastern culture. They have a rich traditional cultural heritage to ensure a healthy ecological balance in society. It appears that the agricultural systems early populations used there in the past and those Bod-Kachari people use now are similar (Barooah & Pathak, 2009). There is an apparent continuity between the prehistoric and the current agricultural systems as practised by them. Thus, in the absence of any significant influence from outside, the indigenous Shifting and Jhum cultivation is practised more or less in its...
pristine form without many modifications. In other words, it offers a model scenario for conducting an ethnoarchaeological investigation to identify the modern environmental adaptation mechanisms used by humans in Northeast India.

**Why Study the Bodo-Kachari Tribe**

There is a firm belief that present-day North-East India is actively engaged in its traditional cultural practices, and a rural lifestyle is still widespread and available there for study. The Bodo-Kachari society, as a riverine people, practise hunting, fishing, medicinal practices, food habits, and all other material cultural activities prevail. These can inform us as to what are the prehistoric possibilities. Thus, studies on the Bodo-Kachari tribe can contribute to our understanding of how humans have adapted to a specific habitat in northeastern India (Brahma & Daimary, 2017). A study on perishable material culture and ethnographic observation on the given indigenous population of the Bodo-Kachari tribe will play a significant role in deciphering the past human behaviour, its adaptations, and interactions with the environment to comprehend the settlement pattern of early humans in the region of North-East India (Barooah & Pathak, 2009).

Further, it must be understood that studying the Bodo-Kachari tribe from an archaeological perspective can provide valuable insights into the history, culture, and lifestyle of this indigenous group. Here are some reasons why studying this tribe can be significant:

1) **Cultural History**: The Bodo-Kachari tribe has a rich cultural history that can be traced back centuries. Studying the archaeological remains scattered there can help us understand their traditional practices, beliefs, and social structures in the past.

2) **Settlement Patterns**: Archaeological studies can reveal the settlement patterns developed in the society of the Bodo-Kachari tribe, including the types of dwellings they used and how they organised their communities.

3) **Subsistence Strategies**: By studying their tools, pottery, and other artefacts, archaeologists can learn about the Bodo-Kachari tribe’s subsistence strategies, including their hunting, fishing, and agricultural practices and the continuity of ancient occupations.

4) **Trade and Exchange**: Archaeological findings can provide insights into the trade networks of the Bodo-Kachari tribe, including the types of goods they traded and with whom through the ages.
5) **Historical Context:** Understanding the archaeological record associated with the Bodo-Kachari tribe can help historians and anthropologists place their culture and history within the broader context of the region’s history. All things considered, a close interaction with the Bodo-Kachari tribe from an archaeological standpoint can yield important insights into their history, which will aid in our comprehension of their current culture and legacy.

**The Intersection of Environment, Ethnicity and Archaeology**

The proposed type of disquisition is an attempt at applying a new and innovative multi-methodological approach, which incorporates ethnoarchaeology to answer the questions about environmental adaptation. We can name this type of research work as an ‘Enviro-Ethno-archaeological study’, which includes ethnographic, ethnohistoric, and anthropological data in the archaeological frame to trace the interactions between ecological and social processes which were produced by past environment in North-East India and have shaped the experience of being human in those environments over time (Barooah & Pathak, 2009). Perhaps the most pervasive argument is the belief that the physical environment plays the role of ‘prime mover’ in human affairs (Sargentis et al., 2022). Personality, morality, subsistence pattern, material culture, biology— all of these and more have at one time or another been subject to explanation by ‘environmental determinism’. In other words, the environment plays an essential role in explaining why some features of culture did not occur. Therefore, material and non-material culture should also be described environmentally for an archaeological study to provide a complete picture of the past (Hardesty, 1977).

Consequently, it is evident that an intriguing area of investigation that illuminates how ancient societies interacted with their natural surroundings and how these interactions impacted their ethnic identity is the confluence of environment, ethnicity, and archaeology (Jones, 2002; Curta, 2014)). One key aspect of this intersection is the study of ancient foodways, which encompass the practices and traditions related to food production, consumption, and culinary techniques. By analysing the remains of plants, animals, and cooking implements found at archaeological sites, researchers can reconstruct ancient diets and understand how environmental factors influenced food choices and cooking methods. For example, the discovery of millet grains at archaeological sites in the Indian subcontinent suggests that millet was an essential part of the ancient diet, possibly due to their resilience to drought and their suitability to the local environment.

Another aspect of this intersection is the study of how environmental changes, such as climate change or the introduction of new agricultural practices, may have influenced the migration patterns and cultural exchanges of ancient peoples (Stern, 1993). For example,
the spread of rice cultivation in South Asia is thought to have been facilitated by the migration of rice farmers from regions where rice was already cultivated, leading to the cultural and genetic mixing of different ethnic groups. In this way, the study of the intersection of environment, ethnicity, and archaeology in India offers valuable insights into the complex interplay between human societies and their natural environments, highlighting the importance of environmental factors in shaping cultural identity and social dynamics and Northeastern part of this country is the paramount place for this type of exertion (Syngai, 1999).

Reflections from Previous Works
The origin of humans in the North-Eastern part of India has nearly always been shrouded in mystery. The Northeast region of India, comprising eight states nestled amidst the lush greenery of the Eastern Himalayas, is a land steeped in history and culture. Over the years, archaeological excavations and research have unearthed a treasure trove of ancient sites and artefacts, shedding light on the region's rich and diverse past (Jamir, 2022). However, no serious research work on the ethnoarchaeological study of the prominent inhabitants of North-East India, Bodo-Kachari, has yet been made by any other scholar utilising all the available sources from archaeological, environmental, and anthropological data. It is also a fact that the Bodo-Kachari have maintained their distinctive cultural traditions, customs, beliefs, rituals, social systems, and so on. Hence, it is a requirement to correlate them with archaeological findings and provide a complete picture of the earliest human settlement there.

One of the most fascinating aspects of Northeast India's archaeology is its cultural diversity, which is reflected in the various archaeological sites found across the region. From the ancient ruins of the Ahom Kingdom in Assam to the megalithic sites of Meghalaya, each site tells a unique story of the region's past inhabitants. The first systematic attempt to study the earliest human settlement of this region was initiated by Hilton (1928) in his report entitled ‘Prehistory of Assam’. After this, Baruah did some exercises in 1939. Then Dani (1960) wrote the book ‘Prehistory and Protohistory of Eastern India’. However, his work cannot provide a complete picture of early human settlements because his study materials are based on stray finds that lack other contextual evidence. R. Dennel's works (2002 & 2009) about ‘The Early Human Settlement and the Migration of Early Man’ provided valuable information. Still, we find that some areas have not received the attention they deserve.

Meghalaya, known for its stunning natural beauty, is also home to a rich archaeological heritage. The megalithic sites found in the Khasi and Jaintia Hills are among the most intriguing archaeological finds in the region. These sites, which date back to the 1st millennium BCE, are believed to be associated with the early tribal communities of the
region and are marked by the presence of large stone monoliths, some of which are intricately carved. Another fascinating aspect of Northeast India's archaeology is its rock art sites, which provide a glimpse into the region's prehistoric past (Jamir, 2022). The rock art sites found in states like Arunachal Pradesh and Mizoram depict various motifs, including human and animal figures, geometric designs, and scenes of daily life. These rock art sites are not only of archaeological significance but also hold cultural and religious significance for the local tribes. Despite this rich tapestry of the past, the archaeology of Northeast India still holds many mysteries waiting to be uncovered (Jamir, 2012). As researchers continue to explore the region's ancient sites and artefacts, we can expect to gain a deeper understanding of the region's rich and diverse past and its significance in the broader context of Indian history and culture.

The Bodo Kachari tribe is an indigenous community primarily found in the northeastern region of India, particularly in the states of Assam, West Bengal, and Meghalaya. They have a rich cultural heritage with unique traditions, language, and social practices. While there may not be a single comprehensive writing that covers all aspects of the Bodo Kachari tribe's works, there are several scholarly works, books, and articles that shed light on various aspects of their culture and history. From the perspective of the Bodo-Kachari tribe's lifestyle, some work has been done about their socio-cultural practices, but no work has been done to make their linkage with the earliest human settlement in this region. The writings of Sidney Endle (The Kachari), B.L. Brahma Choudhury (Bodo: At a Glance), Kameswor Brahma (An Introduction to Myths and Legends of the Bodos), and Dr Harka Bahadur Chhetri Attreya (The Bodos of Assam: A socio-cultural study) are some of the early works on this native group of Northeast India and add some light on the life of these people. A recent book by Manjushree Pathak (Kherai: A Living Tradition of Bodos) tells some hidden cultural patterns of the Bodo-Kachari tribal group. This book embodies a particular characteristic, thereby throwing light on religious belief as well as a cultural and social matrix of the age-old community of Northeast India, i.e., Bodos. Even though many gaps still exist in the earlier and later works in this regard, which need to be filled in.

Currently, there is no systemic report or documentation to investigate the environmental potentialities of the earliest human settlement in North-East India. No serious attempt has been made to study the Geology, Palaeontology, and Ethnoarchaeology of North-East India together. So, one should take the initiative and aim to fill these gaps through multidisciplinary study and provide outstanding and new information about this research problem.
The conundrum in the Digging of the Past

Previous works do not present the complete picture of the earliest human colonisation in North-East India; they do not deliver the human-environment interactions that happened at that time, resulting in the beginning of human civilisation, and also no works are there to show its legacy in the present indigenous people of this region. Hence, some of the gaps in existing research are as follows:

1) Very little work has been attempted to date about the earliest human settlement and its adaptation to this region’s environment. These works are done state-wise or on an individual basis. They do not cover the whole of North-East India as a prehistoric ecological zone.

2) Ethnic groups play a vital role in the culture of North-East India. So, there is a demand to study them according to an archaeological point of view.

3) Most significantly, archaeological data affirms that the practice of shifting cultivation stands out as a distinct transition stage between nomadic hunting-gathering and sedentary agriculture. So, we have to study this transition from an ethnoarchaeological perspective, which will show a divisive step in the evolution of agriculture and modern land husbandry.

4) This work is dictated by the reality that the scanty nature of archaeological data from the region could compel anyone to gather evidence from all possible scientific lines of inquiry in order to paint a vivid picture of the development of early human societies, who must have been the ancestors of some or all of the present day indigenous ethnic groups there.

5) It is a requirement to draw analogies from modern behaviour to explain and better understand the patterns seen at archaeological sites and to interpret the material culture in terms of the life of the Bodo-Kachari people. Thus, it is a demand to study today’s culture in terms of interpreting the past.

Possibilities and Way Ahead

The Northeast region of India offers immense possibilities for archaeologists to work and can also play an essential role in uncovering unexplored pages of an ancient civilisation. A researcher working in this field must be broadly interdisciplinary and try to look at the
prehistoric past from different angles. Thus, the following is a summary of some of the goals and opportunities for study on Enviro-Ethno-Archaeology in North-East India:

1) An attempt is required to understand the settlement pattern of early humans in the particular ecology of North-East India.
2) An attempt should be made to explore the possibilities of an ethnoarchaeological approach to study the agricultural adaptation of the Bodo-Kachari tribe.
3) An attempt should be made to know whether there is any cultural link between the stone Celt found in the region and the existing aboriginal people.
4) The cultural development of this region should be studied against the backdrop of the ecology and environment of the area. So, an in-depth study of the settlement, subsistence, and technology used in the contemporary traditions (for example, shifting cultivation) and survival of Neolithic traditions is necessary to understand the link between the past and the present.
5) The research should also attempt to explore the material culture of the Bodo-Kachori society and seek to comprehend relationships between cultural behaviours and their associated residue regarding ecological perspectives.
6) An attempt should also be made to look at the behavioural aspects of the Bodo-Kachari and to record the living traditions of the people, which might have been a remnant of the past.
7) This research should include the study of the physical space or habitat of the community, i.e., Mapping in terms of water, earth, rocks, soils, minerals, vegetation, and sources of energy, along with interactions of all these elements in the socio-cultural environment of the tribal landscape.
8) Scholars established that North-East India and Southeast Asia form part of a shared ecological zone, and it appears that in North-East India, there was a fusion of two cultures during the prehistoric period. Therefore, it is necessary to make broad-based cross-cultural comparisons to grasp its influence on indigenous cultural development in the region.

**What may be the Implications of Enviro-Ethno-Archaeology**

Most of the research on the prehistoric archaeology of Northeast India shows that many such attempts are confirmed mainly to surface sites and excavated sites from the Neolithic and afterwards (Jamir, 2012). It is now time to scrutinise the information from the studies done so far on the archaeology of this region and anthropology, together with the recent interdisciplinary development in the discipline. This area will only be fully known when a complete picture of its prehistoric cultural growth emerges through sustained archaeological and interdisciplinary ethnocentric environmental studies.
The prime focus of this paper is to provide the wide-ranged idea about reconstructing prehistoric ecology in North-East India by reviewing the relationship between humans and their environment in the present day in the light of the most dominating tribe of this region, i.e., Bodo-Kachari. Moreover, this region, the abode of diverse ethnic groups with diverse cultures and customs, hints at a long history of a continuous and close association between humans and their environment, which is very important in understanding early human adaptation there (Jamir, 2022). It also provides valuable insights into plant and animal domestication patterns as ethnographic analysis of present-day domesticates with their wild counterparts would be helpful in understanding the changes in their morphological traits through human control.

To approach the problem of the earliest human-environment interaction, which is responsible for the emergence of human settlement in North-East India, the results of the Enviro-Ethno-Archaeology application may be consequential. Through this study, one can resolve the critical issue of adaptation in this part of India, as adaptation is the process of creating a beneficial relationship with the environment employing behavioural, physiological, and genetic or demographic changes.

**Conclusion**

Cultural concepts, traditional perceptions, and analysis of various aspects of the environment are of great importance in the archaeological-anthropological matrix. The present paper gives a very concrete picture of the idea of the Bodo-Kachari tribe and the different ecological conditions in which they will be studied regarding eco-centric ethnoarchaeology. This paper attempts to address the prehistoric ‘people’ responsible for formalising sites found sporadically across the entire length and breadth of North-East India. The region's dominant tribal group highlights the archaeological role of the region's natural environment in controlling the formation of culture. The part that the new arena of discipline, Enviro-Ethno-Archaeology, might play in reconstructing the past has been adequately dealt with here. Lastly, how the research planning could be possible, the problems and prospects, and the prescript of work are also discussed.

**References:**