
Pottery Tradition of the Hira Community in Jadupara Village, Darrang District, Assam

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Abstract: Pottery serves as a unique reflection of artisans' mental frameworks, technological practices, and economic circumstances. This study focuses on Jadupara, a hamlet in Bijulibari village, located in Assam's Darrang district, approximately 55 kilometers northeast of Guwahati. Jadupara is primarily inhabited by the Hira Potters, an indigenous, scheduled caste community in Assam for whom pottery is a vital livelihood. The Hira potters employ ancient hand-molding techniques without using wheels, preserving one of the oldest archetypal methods of pottery-making. This paper examines both the production technology and the socio-cultural importance of pottery within the Hira community. Using ethnographic methods such as surveys, observation, and interviews, this study explores the classification and usage of Hira pottery, which is divided into three primary categories—utilitarian, decorative, and ritualistic—with seven, three, and six subtypes, respectively. The presence of six ritualistic types highlights the Hiras' deep affiliation with the Damodardev sect of Neo-Vaishnavism, where Brahmanical rituals are accepted. The distinct stages of pottery production, from clay preparation to the final product, reveal technological continuities with prehistoric pottery traditions, underscoring the craft's enduring legacy. This paper also discusses the economic and utilitarian aspects of pottery production, offering insight into how this ancient craft continues to support the Hira community in modern times.

Keywords: Pottery, Archaeology, Ethnography, Hira Potters, Neo-Vaishnavism, Assam, Craftsmanship

Introduction

Pottery is one of humanity's earliest crafts and, once adopted, becomes an intrinsic part of a culture. Known as the "alphabet of archaeology" due to its durability and continuity over time, pottery serves as a reflection of a society's cultural values and traditions. In the absence of other datable artifacts like coins or inscriptions, archaeologists rely on pottery to interpret the material culture of a site (Deo and Ansari, 1977). Henri Frankfort, as cited by Pal (1978), emphasized pottery's centrality to civilization, noting that it reveals details about dietary practices, religious and social customs, technological developments, and economic conditions. Consequently, studying pottery without considering its sociological context would render it an incomplete analysis.

Extensive studies document pottery-making processes among rural and indigenous communities, providing archaeologists with valuable insights into prehistoric techniques. By examining modern clay preparation, shaping, and firing methods, ethnographers like Thomson (1958) have offered archaeologists perspectives on prehistoric pottery. Some archaeologists have even lived among traditional pottery-making communities, observing their practices to deepen their understanding of ancient ceramic technologies.

The origins of pottery, however, remain uncertain and debated among scholars. Cox (1970) suggested that humans might have created clay vessels as early as the Paleolithic period, possibly even before they mastered stone-cutting. He argued that the natural progression from making mud pies to creating clay vessels would have been intuitive. Singh (1979), on the other hand, proposed that pottery emerged independently across various regions thousands of years ago, with all early pottery made by hand until the Egyptians invented the potter's wheel around 3000 B.C. Sankalia (1962, 1974) associated pottery with the sedentary lifestyle of the post-Mesolithic period, asserting that it was not a crucial part of Indian culture until the Neolithic period when people began to settle in one place.

In the Neolithic period, pottery was primarily handmade and crafted from rough, textured clay, often painted in black, white, grey, or red. By the Harappan period, pottery production reached new heights, with both handmade and wheel-made pottery styles emerging. Post-Harappan pottery was notable for its black and red painted designs (Ghosh, 1960).

Pottery from Indian protohistoric and early historic sites showcase a range of unique types, including the notable Northern Black Polished Ware (NBP) and Painted Grey Ware (PGW), which date back to the first century A.D. Interestingly, these pottery forms are found in various regions of India but are absent in Northeast India, where distinct pottery styles seem to have developed independently. For example, Kaolin ware—known as Ambari ware—was a prevalent ceramic type in ancient Assam (Goswami 1974; Roy 1977). Additional types, such as Coarse Grey, dull red, and stamped ware, were discovered in Neolithic contexts at sites like Daojali Hading in Assam (Sharma 1967) and Parsi Parlo in Arunachal Pradesh (Ashraf 1990). A Neolithic platter from Bambooti in Assam's Kamrup district, dated to around 3000 B.P., further highlights the region's rich pottery heritage (Ashraf and Duarah, 2015).

Pottery artifacts have been reported from various locations across Northeast India, particularly in Assam (Hazarika 2017; Jamir and Hazarika 2014). Notable examples include kaolin pottery, or Ambari ware, from the Ambari site in Guwahati (Sonowal 2006; Sharma 2014). Beyond archaeological studies, a few ethnographic studies have also examined Assamese potter communities, providing insights into the technologies and social dynamics of groups like the Hiras (Bandopadhyay 1961; Bezbarua 2007; Medhi 1992; Thakuria 2017; Sarmah and Hazarika 2018).

The Hiras are one of Assam's sixteen Scheduled Caste communities and are traditionally skilled in handcrafting pottery. They use a unique type of clay known as "Hira Clay," specific to Assam, which serves as a critical raw material in the region's pottery industry. Known as the Hira Potters or Hira Community, they produce a wide array of earthen pots and utensils to meet household and communal needs.

Determining the origins of Assamese handmade pottery is challenging due to limited systematic research and documentation. However, historical evidence suggests pottery usage in Assam dates back to the 5th or 6th century A.D. (Bhattacharyya 2014). The Hira community has long been involved in pottery—a prominent and ancient cottage industry in Assam. According to Herbert (1954), pottery is one of the earliest forms of art, fundamental in its simplicity yet complex in its conceptual and cognitive demands. This study focuses on Jadupara, a hamlet in the village of Bijulibari in Assam's Darrang district, located about 55 kilometers north of Guwahati. Jadupara is home primarily to the Hira Potters. The study aims to explore the manufacturing techniques and socio-cultural significance of pottery within the Hira community of this village.

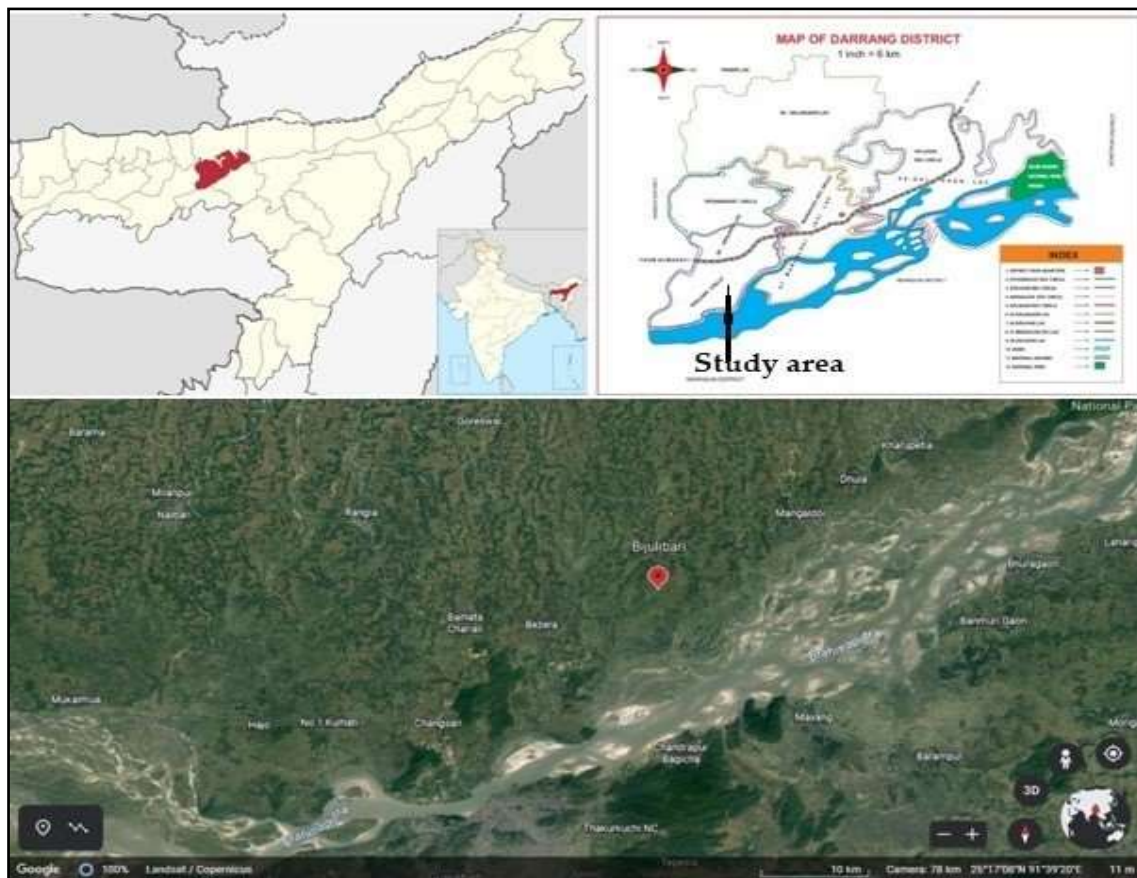


Figure 1: Locational Map of Study Area

Study Area

Darrang district, located on the northern bank of the Brahmaputra River in Assam, lies between 20° 9' N to 26° 95' N longitude and 91° 45' E to 92° 22' E latitude, and sits at an

elevation of 35 meters above sea level (Figure 1). Positioned northeast of Guwahati, the capital of Assam, Darrang is approximately 55 kilometers away. Covering a total area of 1,850.58 square kilometers, the district has a population of 908,090, according to the 2011 Census. The NH-52 highway runs east-west through the district, linking it with neighboring Kamrup and Sonitpur districts. Darrang is bordered by Udalguri to the north, the Brahmaputra River to the south, Sonitpur to the east, and Kamrup district to the west. Initially established by the British in 1833 as one of Assam's larger districts, Darrang was divided twice—first in 1985 and again in 2004—resulting in a smaller district as it exists today.

Bijulibari, a small village within the Sipajhar circle of Darrang district, has 510 households and a population of 2,272, comprising 1,156 males and 1,116 females (Census 2011). The village consists of seven hamlets, but pottery-making is practiced only in one—Jadupara—which serves as the study area for this research. Jadupara has 60 households with a population of 311, including 152 males and 159 females. It is bordered by Maroi village to the north, Bothabil to the south, the paddy fields of Mohoriapothar to the east, and Punia village and the Bangnoi River to the west. The geo-coordinates of Jadupara are approximately 26° 39' N latitude and 91° 89' E longitude.

Jadupara is predominantly inhabited by Hira potters, who practice their traditional craft year-round. The literacy rate in Jadupara stands at 67.81%, with male literacy at 70.19% and female literacy at 65.43%. In addition to pottery, residents work as daily wage laborers, weavers, small shopkeepers, and in other occupations. This study aims to explore the techniques, utility, commercial aspects, and socio-cultural significance of pottery production within the Hira community of Jadupara.

Data Collection Methods

To gather data, ethnographic methods such as surveys, observations, and interviews were applied in the field. Initially, a pilot survey of the village was conducted to gain a broad understanding of the study area. A structured survey schedule was then used for a comprehensive household survey. Non-participant observation allowed the researcher to document each stage of pottery production without direct involvement.

Both structured and unstructured interviews were conducted within the village, targeting a few key informants directly involved in pottery-making. These interviews provided valuable insights into pottery production techniques, types of pottery, market sales of finished products, and their utility within the community. Secondary data was obtained by reviewing previous studies, research papers, and published books on the subject. Additionally, photographs were taken to document each stage of the pottery-making process.

Fieldwork for this study took place between December 2021 and February 2022, a period chosen for its dry and favorable weather conditions for pottery production in Assam.

Findings

The Hira potters of Jadupara village craft their pottery entirely by hand, without the use of a potter's wheel, and this tradition is largely female-driven. The Hira potters use simple, traditional tools, including the *kodal* or spade (Figure 2a), primarily used to cut clay and create a trench where the clay is stored and aged. A bamboo tool called the *gayen* or bamboo beater (Figure 2e) is a cylindrical bamboo rod with a rounded tip, used to thresh the clay while it is being stored and prepared for pot-making.



Figure 2: Instruments used in Pot Making

A *baira*, a half-broken earthen bucket (Figure 2b), is used to hold water, and a piece of old cotton cloth called *kani* is kept to apply water during the final shaping, especially around the rim and neck of the pot. Another tool, the *pitani*, an elongated wooden beater (Figures 2c and d), is used to shape the pottery. Additionally, natural tools like the large boulder *dangarshil* (Figure 2c) and *sarushil* (Figure 2d), or river pebbles, are used to support the grip of the dabber with the left hand and are pressed inside the pot to stabilize it while the potter applies strokes to shape the outside.

Techniques and Stages of Pottery-Making

The process of pottery production relies on three essential elements. First, clay, a fine-grained, sticky silt, which when moistened becomes moldable and flexible. Second,

non-cohesive natural materials, often organic or mineral inclusions, are either naturally present or intentionally added to improve the clay's usability and reduce shrinkage. Finally, water is added to soften the clay initially, though it evaporates as the pottery is sun-dried or fired. Other materials, like pigments for decoration and fuel for firing, are also essential in ceramics production (Rice 1987).

The complete process of pottery-making involves several techniques, applied at various stages, such as gathering fine white sand and *hiramati* (clay), storing and preparing the clay, creating the base (known as *tapal*, *gol*, and *dan*), final shaping of the pots, and preparing the *bhati* or kiln for firing the dried pieces. The entire pottery-making process consists of seven main stages, each crucial in the overall technique and craft of pottery production.

Stage 1: Although pottery-making is primarily a female-dominated occupation, male members play an essential role by sourcing the raw materials. The men gather fine white sand from a nearby dried riverbed, storing it in a *gara* (trench) near the courtyard to prepare the final clay mix for pottery-making. The clay is aged in the trench for 3–4 months, maintaining its essential stickiness.



Figure 3: (A-L) Various Stages of Pottery Making

Stage 2: In groups, the men travel approximately 15 kilometers to Singimaribil to gather a specific type of sticky clay, which they collect during the dry winter months of November and December. Equipped with spades (*kodal*), baskets, and flat wooden tools (*khan*), they carefully extract the clay, which is essential for traditional hand-crafted pottery. Before gathering, they perform a ritual, offering betel leaves, betel nuts, and incense sticks as a mark of respect. The eldest member of the group inspects the clay for key qualities, such as texture, stickiness, and the clay-to-sand ratio, rather than color. After verifying its suitability, the men dig the clay and transport it back, storing it in a shaded trench near the courtyard for later use.

Stage 3: Before storing the clay in the trench, a layer of white sand is laid in the pit. The women then compress the clay using a bamboo beater (*gayen*) to ensure it is compact. This process is repeated layer by layer, alternating between clay and sand, with the top layer covered in local soil and then protected with jute bags to prevent drying. The clay is kept moist for an extended period, which is essential for preserving its quality.

Stage 4: Most natural clays contain impurities like stones, pebbles, and organic materials that need to be removed. The amount of cleaning depends on the clay's intended use: hand-built vessels can use coarser clays, while wheel-formed vessels require finer clay without large impurities (Sinopoli 1991). To improve the clay's durability, tempering agents such as crushed rock, lime, grog, ash, seed husks, or ground straw are added. The ratio of these additives, which can constitute 20 to 50 percent of the clay volume, depends on the specific clay characteristics and the desired outcome (Rye 1981). In Jadupara, women handle all clay preparation tasks. The stored soil is removed from the trench with a spade, placed into jute or plastic bags, and moistened to soften it. This softened clay is then repeatedly threshed with the *gayen* and mixed with water and fine white sand in a process known as *matikhunda* (clay threshing). The women then shape the clay into rounded lumps called *tapal*, which serve as the base for further shaping (Figure 3B).

Stage 5: The potters bring the prepared clay from the trench to the courtyard, shaping it by hand into small round balls known as *gols*. These *gols* are then gradually flattened into *dan*, plate-like forms that serve as the base structure for larger vessels. The *dan* is left in the sun initially, and then moved to the shade to dry evenly and set properly (Figure 3D).

Stage 6: Using a wooden beater (*pitani*), the potters beat the *dan* in an anti-clockwise direction to achieve the desired base shape (Figure 3E). The size of the *dan* depends on the intended size of the final pot. Next, they apply the coil-building technique to gradually shape the walls of the vessel, adding clay coils one by one (Figure 3F and G). To strengthen the bond between coils, the potters moisten the surfaces as they work (Sinopoli 1991). While beating is integral to this process, it is considered more of a refining technique rather than a primary construction method (Solheim 1954). The potters use a small rounded pebble to provide counterpressure, a method known as "Saru shil pita." This technique allows them to shape, size, and refine the vessel while

the clay is still wet or leather-hard. Using a flat stick or beater on one surface and a convex stone on the inside, they imprint a series of rounded impressions that help form the vessel's concavity, which is repeated until the desired shape is achieved (Roy 2004). The rhythmic movement and sound of beating the clay reflect the precision and skill of the craft. A wet cloth (*kani*) is used to keep both the *pitani* and boulder surface moist, ensuring smooth strokes. Mud slip, applied with the *kani*, is typically restricted to the rim and neck areas of the vessel, giving these parts a distinct finish (Roy 2004).

Stage 7: In the final stages of pottery production, the Hira potters often use scrapers, or *rukani*, to refine the vessel's surface by removing any excess clay. Traditionally, these scrapers are made from thin bamboo sticks (Medhi 1992). However, the potters of Jadupara have adapted the use of broken, concave pieces of older pots for this purpose, scraping or smoothing the leather-hard pottery as needed.

The final appearance of the pottery after firing is influenced by three main factors: the firing environment, the peak temperature achieved, and the duration of firing (Rice 1987). Before preparing the *bhatti* (kiln), the potters gather *kathkoila* (charcoal), paddy straw or dry grass, and a local aquatic alga known as *pana*. The kiln, usually round and constructed in the courtyard, is first layered with dry *pana* in a circular arrangement (Figure 3J), followed by a layer of charcoal, and then the clay vessels are arranged atop this base. The entire arrangement is covered with more *pana* and dry grass or straw, after which charcoal is lit at several points of the kiln to ignite it (Figure 3K). The kiln's structure and the amount of fuel are adjusted according to the number of pots being fired, sometimes forming a semi-arched mound for larger batches. After the clay pots have been sun-dried for 7-8 days, they undergo firing.

The characteristics of the finished ceramics are largely determined by the firing temperature. High-fired vessels (above 900°C) are more porous and have a coarser texture, while lower-fired ceramics retain a finer finish (Sinopoli 1991). When firing in an oxygen-rich environment, carbon is fully consumed, resulting in lighter-colored pottery. In contrast, an oxygen-deficient environment produces darker pots, as carbon deposits remain on the surface, creating dark patches or an overall black-brown hue. Once fired, these earthenware items are taken to market for sale (Figure 3L).

In their pottery-making practices, Hira artisans observe strict taboos and restrictions. They refrain from producing pottery for twelve days following a birth or death within the family or clan. Women observing their menstrual cycles avoid all pottery-related tasks for up to four days. Additionally, potters cease production during festivals like Holi, Dipawali, and Bihu, as well as communal gatherings such as *Raijor Sobha* and *Bhagabat Path*.

The Hira potters of Jadupara create a variety of vessels, pots, and utilitarian items to meet local needs. These items serve practical purposes such as cooking, fetching, and storing water, as well as specific uses in religious ceremonies and traditional smoking. The pottery produced in Jadupara is classified into three categories (Table 1):

Utilitarian (Figure 4, Table 2), Ritualistic (Figure 5, Table 3), and Decorative (Figure 6, Table 4). Although Hira pottery is generally not a primary choice for religious rituals, the villagers use these items for ceremonies in their communal *namghar* (temple). This likely reflects the influence of the Neo-Vaishnavist Damodardev sect, with which the Hiras of Jadupara are affiliated. The cost of each item varies based on size and season, adapting to local demand.



Figure 4: (a-g) Types of Utilitarian Pottery

Table 1: Three Categories of Potteries from the Study Area

Utilitarian Pottery	Ritualistic Pottery	Decorative Pottery
Pitcher	Lamp stand	Flower pot
Medium sized pitcher with flaring lips	Lamp	Mini saving bank
Plate	Incense stick holder	Small Flower vase
Bowl with wide mouth without neck	Dish on stand	-
Lid	Bowl on stand with handle	-
Large bowl with slightly out turned rim	Miniature vessel with stand	-
Miniature variety pitcher	-	-



Figure 5: (a-f) Types of Ritualistic Pottery



Figure 6: Types of Decorative Pottery

Table 2: Different attributes of Utilitarian pottery

Sl. No.	English Term	Local Term	Description of the Pots	Utility	Market price of items (in Rupee)		Average Number of sells/month	
					Peak Season	Lean Season	Peak Season	Lean Season
1.	Pitcher	<i>Koloh</i>	It's a medium-sized vessel with a spherical base and a compressed neck. Internally, the rim is notched. The lower body protrudes.	For storing and fetching water, sometimes used in storing other solid items like rice, pulses also.	50	40	1700	650
2.	Medium sized pitcher with flaring lips	<i>Bhetua</i>	This vessel has a curved lower body and a less extended neck, making it easier for individuals to drink directly from it.	Container for prepare curd	25	15	500	350
3.	Plate	<i>Patcharu</i>	It's a basin-shaped vessel with a round bottom and a wide mouth. The rim is grooved on the outside. The bottom part protrudes, and the upper	Cooking Assamese rice cake (<i>pitha</i>)	30	30	30	---

			body lacks a neck part. The vessel's profile is convex.					
4.	Bowl with wide mouth without neck	<i>Charia</i>	It's a pot with a broad mouth and a round bottom, no neck, and a slightly everted lip with a beaded rim. The vessel's profile is concave. it is slightly deep than the <i>pat charu</i> variety.	Cooking and washing rice , vegetables.	20	20	12	---
5.	Lid	<i>Dhakoni</i>	It is a dish shaped item which has a knob like structure at centre on the upper surface to hold.	Cover cooking food	20	20	30	---
6.	Large bowl with slightly out turned rim	<i>Harua</i>	Prepared in two size - Large and small are the most common sizes. With a straight neck and a gently flaring lip, it's a storage vessel. The has a convex-concave profile and is gently curved.	To store grains	Big size 100	Big size 80	500	50
					Small 60	Small 50		

7.	Miniature variety pitcher	<i>Ghoti</i>	It has a compact, rounded body with a slightly out turned neck and a less flared mouth, making it easier to drink water.	To keep drinking water during summer	30	20	50	20
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Table 3: Different attributes of Ritualistic pottery

Sl. No.	English term	Local term	Description of the pots	Utility	Market price of items (in rupee)		Average Number of sells/month	
					Peak Season	Lean Season	Peak Season	Lean Season
1.	Lamp stand	<i>Gosa</i>	It is an elongated body or trunk with a short flat or concave platform on which lamp can be placed. The base is truncated and concave, while the stem has a pointed beak.	To lighten up	30	30	12	12
2.	Lamp	<i>Chaki</i>	This is constructed using the pinched technique. The form is adjusted to hold oil, which can be lightened with wick or a coil of gently wrapped cotton thread. It's compact, shallow, and has a pinched	To lighten up	2	0.50	500	150

			lip.						
3.	Incense stick holder	<i>Dhoopdani</i>	This is a little stand with a covered top that is rounded. The top is perforated to facilitate the joss - sticks to pass through.	To hold a burning incense stick	5	5	20	20	
4.	Dish on stand	<i>Bota</i>	It is a dish like structure slightly everted in neck portion. Base of the dish rest on a stand.	Offer betalnut and leaf	50	50	10	10	
5.	Bowl on stand with handle	<i>Dhunaban</i>	This is a stand-alone vase with decorations. Sometimes the entire body is covered and has triangular perforations. A sharp knife is used to shape the holes and create the designs which allows the smoke to pass. Moreover simple form like bowl on stand with a handle like structure to hold are most common type.	To creat smoke	30	20	300	100	
6.	Miniature vessel	<i>Ghot</i>	This vessel looks like a <i>Ghotti</i> with moderately arched body and straight neck less flaring mouth, the base has a stand that adds stability.	To contain water and mango leaves on auspicious occasion	40	40	30	30	

Table 4: Different Attributes of Decorative Pottery

Sl. No.	English Term	Local Term	Description of Pots	Utility	Market price/item	Average Number of sell/month
1.	Flower pot	<i>Taab</i>	Mostly U shaped with wide opening mouth	Gardening	30	70
2	Mini saving pot	<i>Poisa jamua</i>	Different shapes has been found mostly resemble with vegetable's and fruit's structure.	Keep coins	20	50
3	Small Flower vase	<i>Fuldani</i>	Elongated cylindrical in shape with straight neck with less opening	Decorate flower	10	20

*In case of decorative items there is neither peak nor lean season. All the 3 items get sell almost throughout the year.

Discussion and Conclusion

The findings reveal that the potters of Jadupara employ traditional techniques like beating, coil building, and molding, using simple tools such as stones and wooden beaters to craft a variety of pots and clay items. Despite pottery-making being a female-dominated craft, there is a clear division of labor. Men are responsible for gathering suitable clay, sourcing firing materials, and distributing and selling the finished products at market, while women focus solely on clay preparation and pot-making. This division is not only practical but has allowed the community to adapt efficiently, even in the face of modern technological advancements.

The presence of ritualistic pottery types, specifically six subtypes identified within this study, reflects a deep socio-religious connection to the Damodardev sect of Neo-Vaishnavism. Although Neo-Vaishnavism is traditionally less ritualistic, the people of Jadupara still perform Brahmanical rituals, like *Bishnu Jogya* and *Satyanaran puja*, using pottery items such as the *Ghot*, *Gosa*, and earthen lamps. Roy (1992) previously observed that Hira pottery generally served utilitarian purposes, while Kumar pottery was used for rituals. However, this study shows a shift, as Jadupara's Hira potters craft their own ritualistic pottery, foregoing the need to purchase from the Kumars. Additionally, the socioeconomic gap between Hira and Kumar potters in Assam has diminished, with Hira potters increasingly creating ceremonial and auspicious pottery (Sarmah and Hazarika, 2018).

An analysis of pottery sales data presented in Tables 2, 3, and 4 highlights the relationship between utility, seasonal market demand, and pricing. For example, the most popular utilitarian pottery items, such as the *kalah* and *bhetua*, sell frequently

during Bihu and wedding seasons, while *patsaru* is exclusive to Bihu. Items like *ghoti* are more popular in winter, while others like *charia*, *dhakoni*, and *harua* maintain steady sales throughout the year. Table 3 shows that earthen lamps peak in demand during Durga Puja and Diwali, followed by *dhunaban*, which sells well in summer and during festivals. The decorative potteries in Table 4 show minimal sales fluctuations year-round, with flower pots commanding the highest price and sales volume, followed by mini saving pots. For the economic upliftment of the Hira community, especially its women, implementing functional literacy programs and community-based welfare and training initiatives would support the preservation and growth of this artisanal heritage. The village of Jadupara also holds archaeological interest. Named after a terracotta sculpture of Lord Bishnu found in the area, the village has yielded artifacts like brick structures and scattered potsherds, suggesting rich historical significance. While further documentation and systematic investigation are necessary to confirm these findings, the proximity to the Madan Kamdev archaeological site, located approximately 17 kilometers away, presents an exciting opportunity for future research.

In conclusion, ethnographic documentation of Jadupara's traditional pottery-making methods, in tandem with archaeological studies of nearby sites, offers valuable insights into the ceramic technologies of early Neolithic and historical periods in Assam and Northeast India. Comparative studies, involving scientific thin sections of present-day handmade and wheel-thrown pottery alongside Neolithic and historical potsherds, could further enrich our understanding of regional pottery-making techniques over time.

References

- Ashraf, A.A. 1990. *Prehistoric Arunachal: A Study on Prehistory and Ethnoarchaeology of Kamala Valley*. Itanagar. Directorate of Research. Government of Arunachal Pradesh.
- Ashraf, A.A. and A.G. Duarah. 2015. Bambooti: A late Neolithic Site in the foothills of Southern Assam. *Bulletin of the Department of Anthropology. Gauhati University* 15 (2013-14): 23-32.
- Bandopadhyay, B. 1961. Hira Potters of Assam. *Man in India* 41(1): 25-44.
- Bezbarua, D. K. 2007. *Problems and Prospects of Pottery Industry of Hiras in Assam*. Guwahati. Bright Offset.
- Cox, W. E. 1970. *The Book of Pottery and Porcelain*. (1). New York. Crown Publishers.
- Deo, S.B. and Z. D. Ansari. 1977. Some technical aspects of Pottery drawing. *Bulletin of Deccan College Post Graduate Research Institute* 14 (2): 124-31.
- Ghosh, A. 1965. *The Indus Civilization: Its Origin. Authors. Extent and Chronology. Indian Prehistory*. Deccan College. Poona: 113-156.
- Goswami, M. C. and S. K. Roy. 1976. An Introductory Study of the Pottery of Assam with Special Reference to Ambari Excavation. *Bulletin of the Department of Anthropology. Gauhati University* 5: 1-1.

- Hazarika, M. 2017. *Prehistory and Archaeology of Northeast India: Multi-disciplinary Investigations in an Archaeological Terra Incognita*. New Delhi. Oxford University Press.
- Herbert, H. S. 1966. *How to Make Pottery and Ceramic Sculpture*. Lane Book Company. Toronto.
- Jamir, T. and M. Hazarika. (eds). 2014. *50 Years of Daojali Hading – Emerging Perspectives in the Archaeology of Northeast India: Essays in Honour of Tarun Chandra Sharma*. New Delhi. Research India Press.
- Medhi, B. 1992. *The Potters and Pottery of Nalbari District of Assam: A Study in Ethnohistory and Ethnoarchaeology*. Unpublished PhD Dissertation. Gauhati University. Guwahati.
- Medhi, D. K. 2003. Potters and Pottery of the Assam Region. In *Earthenware of Southeast Asia*. (ed.). J. Miksic. pp. 332-336. Singapore. University Press.
- Pal, M. K. 1978. *Crafts and Craftsman in Traditional India*. New Delhi. Kanak Publications.
- Prasad, C. B. 1990. Sankardeva's Bhakti-dharama: Some salient features. *Journal of Srimanta Sankaradeva Research Institute* 1: 126-129.
- Rice, P. M. 1987. *Pottery Analysis: A sourcebook*. Chicago and London. The University of Chicago Press.
- Roy, S. K. 1977. *Study of Ceramics from Neolithic to Medieval Period of Assam*. Unpublished Ph.D. Dissertation. Gauhati University. Guwahati.
- Roy, S. K. 2004. *Ceramics of North East India: Ethnoarchaeological Perspective*. New Delhi. Himalayan Publishers.
- Rye, O. 1981. *Pottery Technology: Principles and Reconstruction*. Washington. Taraxacum.
- Sankalia, H. D. 1962. *Indian Archaeology Today*. Asian Publishing House. Bombay.
- Sankalia, H. D. 1974. *Prehistory and Protohistory of India and Pakistan*. Deccan College Post-Graduate and Research Institute. Pune.
- Sarma, H. C. 1992. *The Study of Hira Community in Assam around Barpeta*. Unpublished M. Phil Dissertation. Gauhati University. Guwahati.
- Sarmah, S. and M. Hazarika. 2018. Pottery Making Tradition among the Hira Potters of Morno. Goalpara in Assam. *Heritage: Journal of Multidisciplinary Studies in Archaeology* 6: 967-990.
- Sharma, P. 2014. 'Ambari Ware': Network and Linkage in Brahmaputra Valley from 7th century CE to 17th century CE. In *50 Years of Daojali Hading – Emerging Perspectives in the Archaeology of Northeast India: Essays in Honour of Tarun Chandra Sharma* (eds.). T. Jamir and M. Hazarika. Pp. 385-393. New Delhi. Research India Press.
- Sharma, T. C. 1967. A note on the Neolithic pottery of Assam. *Man* 2 (1): 126-128.
- Singh, G. 1979. *Pottery in India*. Vikas Publishing House Pvt. Ltd. New Delhi.
- Singh, K. S. 1993. *The Scheduled Castes. People of India. National Series (2). Anthropological Survey of India*. Oxford University Press. Calcutta: 596-600.
- Sinopoli, C. M. 1991. *Approaches to Archaeological Ceramics*. New York. Plenum Press.

- Solheim, W. G. II. 1954. Ibanag Pottery Manufacture in Isabella. Philippines. *Journal of East Asiatic Studies* 3(3): 305-308.
- Sonowal, M. 2006 (reprint). *A Brief Report on the Potteries of Ambari Excavation. In Ambari Archaeological Site: An Interim Report.* (ed). H.N. Dutta. Pp. 83-86. Guwahati. Directorate of Archaeology Assam.
- Thakuria, G. 2017. Pottery Making Tradition of Assam: A Study among the Kumar Potters. *Heritage: Journal of Multidisciplinary Studies in Archaeology* 5: 698-714.
- Thompson, R. H. 1958. *Modern Yucatecan Maya Pottery Making: Memoirs of the Society for American Archaeology* 23(4). Literary Licensing Publisher. United States.