

PREHISTORIC ARCHAELOGY

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Paper No. & Title:

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Topic No. & Title:

(15/21)

Neolithic Cultures of India:

Eastern Group, Southern Group and Northern Group.

1.Introduction

The term Neolithic has been derived from two Latin words i.e. *Neo* meaning New and *lithic* meaning stone, hence *Neolithic* period is also known as New Stone Age. This period is considered as one of the significant cultural stages when man started producing food and shifted to production economy from their previous hunting-gathering stage. Man started making specialised tools to suit this economic behaviour and also modified their social behaviour in a large extent which is reflected in the material record.

Stratigraphic evidences supported by radio carbon dates suggest that the Neolithic culture in India flourished in different areas between the midthird millennium BC and the beginning of the historical period. On the basis of distributions and cluster of sites, the development of Neolithic pattern in India may broadly be divided into three main broad groups:

- (i) Eastern Group (Vindhyan region, middle Ganga plain, Chotanagpur plateau of Bihar, West Bengal and Orissa and Northeast India)
- (ii) Southern Group (South India)
- (iii) Northern Group (Kashmir Valley)

2. Eastern Group

In the eastern group, the sites in the Middle Ganga plain and Vindhayn, Chota Nagpur plateau in Bihar, Orissa and West Bengal and Northern Indian hills are included and discussions are made on the Neolithic scenario of each of these regions separately.

Middle Ganga Plain and Vindhyan Region

Explorations conducted in the Middle Ganga plain revealed a good number of sites in the Basti, Siddharthnagar, Sant Kabirnagar, Gorakhpur, Ballia and Allahabad districts of Uttar Pradesh and Saran, Vaisali, Patna, Gaya and Rohtas districts of Bihar. The important excavated sites in Uttar Pradesh include Jhusi and Hetapatti in Allahabad, Bhunadih and Waina in Ballia, Sohgaura and Imlidih Khurd in Gorakhpur and Lahuradeva in Sant Kabirnagar, while Chirand in Saran, Chechar Kutubpur in Vaisali, Taradih in Gaya, Maner in Patna and Senuwar in Rohtas in Bihar.

Most of these excavated sites are multi-culture sites and yielded archaeological material ranging from Neolithic to early Historical periods. These sites are located near some water bodies such as rivers, rivulets, or horse-shoe lakes. Lahuradeva is a horse-shoe lake site.

3. Ceramic Industry

The study of the ceramic industry of the middle Ganga plain suggests that in the early stage of the Neolithic culture, people were using hand made pottery as it was evidenced at the sites of Chirand, Lahuradeva, Jhusi and Hetapatti. Subsequently slow wheel method emerged. The pottery assemblage includes ordinary red ware, lustrous red ware, burnished ware (red, black and grey), rusticated ware, black-and-red ware and corded ware. The clay used for manufacturing the pot is not levigated which contains grits, husks and chaff as degraissant. Pots are generally ill fired and have black core. Pottery types include bowls (pedestalled, wide mouthed, channelled, etc.) with varying profile, vases, vessels, basins, miniature jars, handis, etc. Cord-impressed pottery occurs in good amount and the cording exhibits dozen of patterns. Spouted vessels have also been obtained. Some of the pots were made in two parts separately - the lower portion and the rim portion and subsequently these were luted together. Occurrence of painted potsherds has been reported from Imlidih Khurd, Lahuradeva, Chirand and Senuwar. The post firing

paintings of Chirand and Senuwar are confined to the rim and have been executed in red ochre. At Chirand the painting motifs consist of linear designs of criss-cross lines and concentric circles. At Imlidih Khurd painting executed in white red pigment over a bright slip has been reported. Multiple brush technique has been employed. Post firing scratching by sharp instrument is another feature of decorating the pots. Often these scratching result in geometric patterns such as opposed triangles within concentric circles and floral motifs. Pots with appliqué bands have also been reported. On these appliqué are executed chain and rope patterns or incised decorations. In this connection it may be pointed out that appliqué patterns are confined to big pots like handis, etc. The early potteries are handmade and corded and rusticated wares constitute the hallmarks.

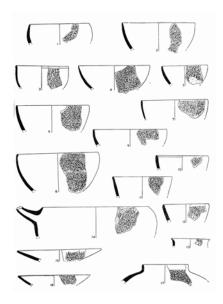


Plate 1: Cord-impressed pottery from Mehgraha



Plate 2: Cord-impressed pottery, Koldihwa



Plate 3: Cord-impressed pottery from Hetapatti

Cord-impressed pottery making tradition is one of the important aspects of the eastern Indian Neolithic culture. This pottery is handmade from coarse clay and is poorly baked and has cord designs on the external surface of vessels. These designs are believed to have been produced when the pots were beaten for enlargement by wooden paddle wrapped with cord. The cord-impressed ware, a typical ceramic industry widely distributed in the prehistoric contexts of East and Southeast Asia was first reported in the Indian context from Assam by T.C. Sharma. Later on, this ware has been reported from several sites of northern Vindhyas and Gangetic valley. Considering the wide occurrences, this ware has been considered as a unique characteristic of the ceramic traditions of Neolithic-Chalcolithic culture of Eastern India.

Other wares of this culture are black-and-red ware, black-slipped ware in which the potters apply a coating of clay to the pot and then rub it with some object to produce a smooth and shining surface, the coating is known as slip, with occasional painting in white, and slipped-plain red ware. The principal vessel shapes are bowls, basins, vases and dishes.



Plate 4: Bone and antler tools from Chirand

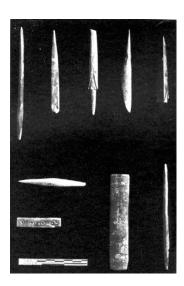


Plate 5: Bone and ivory objects of Chirand

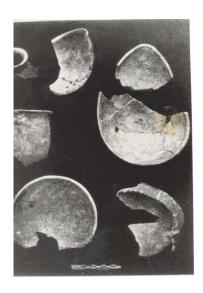


Plate 6: Pottery from Chirand

4. Stone and Bone Objects

From some of the excavated sites like Jhusi, Hetapatti, Chirand, Taradih, Senuwar, etc. stone objects including blades, bladelets, scrapers, arrowheads, serrated points, triangles, lunates, borers, flakes etc. are unearthed. The raw material for making these artifacts are chert, chalcedony, agate, jasper, quartz, etc. Rounded celts of basalt and granite have also been reported from Chirand, Senuwar and Hetapatti. Fragments of querns, mullers, balls, hammer stones, etc. fashioned on sand stone or quartzite are also found in the excavated sites.

Excavations yielded several bone objects which include celts, scrapers, chisels, hammers, needles, points, borers/awls, shaft straightners, styli and arrowhead and bone ornaments like pendants, earrings, bangles, discs, combs etc. Bone arrowheads and points have also been found at sites like Imlidih Khurd, Senuwar, Lahuradeva, Hetapatti and Jhusi. Other finds include beads of steatite, agate, faience and terracotta; pottery discs, terracotta wheels, beads, bangles, cakes, birds, serpents etc.

Some of the excavated sites like Chirand, Taradih and Senuwar have yielded celts, microlithic tools and bone tools. Jhusi and Hetapatti have yielded microliths in good number.

5. Structural Remains

Form the excavations at a number of sites; evidence of wattle and daub structures for settlement of the Neolithic people of this region has come to light. There are found traces of post-holes and hut-floors. The screen walls of huts were made of split bamboo and reed, the impressions of which have been preserved on burnt clay lumps. The site of Chirand has yielded the evidence of pit dwelling. The huts were round or oval on plan. There is no evidence of the

use of bricks, baked or unbaked from any of the sites whereas there are evidences of the other structural remains such as hearths, pits and silo probably for keeping grains.

6. Economic life

A number of Eastern groups of Neolithic sites like Koldihwa and Mahagara in the Vindhyas and several sites like Sohagaura, Khairadih, Narhan, Chirand and Senuwar in the middle Ganga plain have revealed evidence of early plant cultivation and animal domestication, microliths, bone and antler tools and terracotta objects besides ground stone tools.

Excavations conducted at Chirand, Senuwar, Imlidih Khurd, Lahuradeva and Jhusi have yielded several cereals which were cultivated by the Neolithic people of the mid Ganga Plain. In the beginning, people were cultivating rice and millets. Both wild (*Oryza rufiprogan*) and domesticated rice (*Oryza sativa*) have been identified at Lahuradeva. Along with rice, hulled and single row barley, bread wheat and dwarf wheat, *jowar* millet and pearl millet have been reported from Imlidih Khurd. This site has also reported evidence of lentil, green gram, field pea and grass pea, brassica and sesame, seeds of jujube, *amalaka* and grapes. The Neolithic people were producing both rainy crops and winter crops. Rice was the staple food of the people.

The cultivated plants in eastern Indian group include hulled and sixrowed barley (Hordeum vulgare), club wheat (T. compactum), bread wheat (T. aestivum), dwarf wheat (T. sphaerococcum), rice (Oryza sativa), pea (Pisum sativum), green gram (Vigna radiata), gram/chicken pea (Cicer arietinum), khesari (Lathyrus sativus), mustard (a form of Brassica campastris), flax/linseed (Linum usitatissium) and jackfruit (Artocarpus heterophyllus). The domesticated animals include humped cattle (Bos indicus) and sheep/goat (Ovis/Capra). The animal bones include bones of domestic buffalo, sheep, goat and pig and wild animals such as elephant, rhinoceros, stag, deer, etc. and aquatic creatures like turtle and fish and birds. Rice was the staple diet of the people which was supplemented by fish and animal meat. Besides cultivation of crops and domestication of animals, hunting and fishing also played an important role in the life of the Neolithic people of the mid Ganga plain.

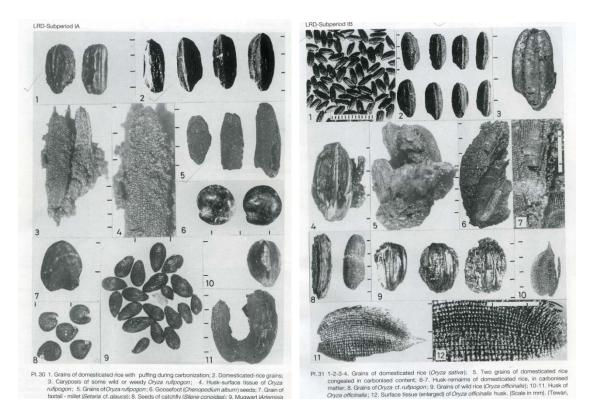


Plate 7 & 8: Botanical remains from Lahuradeva

7. Chronology

A few excavated Neolithic sites of the middle Ganga plain have furnished C14 dates such as Chirand (1760 \pm 150 B.C. and 1680 \pm 135 B.C.), Lahuradeva (5320 \pm 90 B.P. and 6290 \pm 160 B.P.), Jhusi, (8140 \pm 220 B.P., 6760 \pm 190 B.P. and 7110 \pm 170 B.P.). These dates would push back the antiquity of the Neolithic culture in mid Ganga plain around the latter half of 8th millennium B.P.

The Neolithic sites in the Vindhyan such as Koldihwa, Mahagara and Pachoh in the Belan valley in Allahabad district, Indari and Tokwa in Mirzapur district in Uttar Pradesh and Kunjhun in the mid Son valley in Sidhi district of Madhya Pradesh have yielded several C14 or thermo-luminescent dates. The dated sites are Koldihwa (4530 \pm 185 B.C., 5440 \pm 240 B.C. and 6570 \pm 210 B.C.), Mahagara (2265 B.C. and 1616 B.C., 1400 \pm 150B.C., 1330 \pm 120 B.C., 1440 \pm 100 B.C. and 1480 \pm 110 B.C.), Kunjhun (1565-1265 B.C. and 3530-3335 B.C.), Tokwa (ca. 6591 B.C., 5976 B.C. and 4797 B.C.). In the light of these dates the antiquity of Neolithic culture of Vindhyan region may be traced back to 7th millennium B.C.

8. Chota Nagpur Plateau

Since the beginning of the nineteenth century, Neolithic artefacts like pointed butt celts (axes), chisels, bar celts, shouldered celts, hammer stones and perforated discs have been recorded at a number of surface sites in the Chota Nagpur plateau in Bihar, Orissa and West Bengal. Small scale excavations carried out at a few sites in Orissa like Kuchai in Mayurbhanj district, Golbai Sasan in Khurda district, Kuanr in Keonjhar district and Sankarjang in Angul district have revealed evidences of stratified Neolithic culture in this zone. Kuchai is one of the important sites which yielded pointed-butt celts and cord-impressed pottery whereas Golbai Sasan has produced a rich bone tool industry and evidence of circular and rectangular wattle-and-daub houses, in addition to stone celts and an extended human burial, Kuanr has produced pointed-butt celts, evidence of wattle-and-daub structures and copper bangles. The site of Sankarjang unearthed several human burials in association with bar celts and copper artefacts.

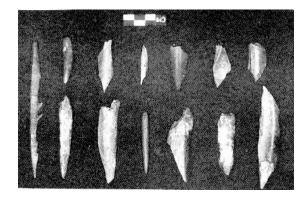


Plate 9: Bone tools from Golbai Sasan

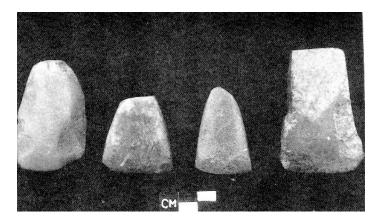


Plate 10: Stone tools from Golbai Sasan

Kuchai is one the most well known Neolithic sites in eastern India which was excavated by B.K. Thapar in early sixties of the last century. The ceramic industry of Kuchai comprises grit tempered red ware with incised and finger tip decorations along with plain orange brown ware. The ground tool comprising

rounded butt axes, adzes, chisels, mace heads, pounders and grinding stones suggest the basic structure of the Neolithic economy.

Radiocarbon dates from Golbai Sasan and Sankarjang suggest duration of 2200 to 700 B.C. for the Neolithic culture of this region.

9. Northeast India

In Northeast India, during the 1960s and 1970s, three important excavations were carried out, one in the North Cachar Hills (1961-1963) and two in the districts of Kamrup (1972-1974). These excavations authenticated the Neolithic assignments of ground stone tools and pottery. In 1963, M.C. Goswami and T.C. Sharma carried out excavations at Daojali Hading in North Cachar Hills of Assam which have given for the first time stratigraphical occurrence of ground or polished axes and also pottery. 65 Stone implements were recovered from the excavations, 60 from the road cutting and 77 from the surface. The excavated ones comprises of edged tool, grinding stones, querns, mullers, quartzite pebbles and fossil wood. The raw materials used as shale, sandstone, quartzite and fossil wood. Shale was used for making edged tools and so also fossil wood; sandstone for grinding stones whetstones, querns etc. which are locally available. Out of over 600 potsherds, 595 were of Cordimpressed variety, 19 of Stamped Dull Red variety, and 11 of Brick Red variety. The majority of the potsherds are heavily weathered, and those few that were well backed are relatively in good condition. Shapes and forms of vessels are difficult to make out, as the potsherds were in small fragments.

S.N. Rao conducted excavations at the Neolithic site called Sarutaru in Kamrup district, Assam during 1967-73. The cultural contents recovered from the excavations include nine ground stone celts and potsherds. The celts are made on slate of grey to black colour sandstone of cream to buff colour and are manufactured in two stages: chipping and grinding. The stone tools are classified into two types: (a) Shouldered celts and (b) Round-butted axes. Several potsherds were recovered in association with the stone axes which does not have complete shape. The Pottery is hand made and made of clay mixed with quartz particles. The three ceramic types on the basis of colour are: Brown, Buff and Grey. The ceramics are sometimes decorated with cordimpressions or basket-impressions in the form of either parallel or criss-cross lines with paddle which is wrapped in cord or matting. The neck or rim portion is plain without any sort of decoration. The ceramic tradition is similar to the ceramics of Daojali hading of North Cachar Hills, Assam. Marakdola, another excavated site at a distance of one kilometer from the Neolithic site of Sarutaru reveal wheel turned pottery of fine kaolin clay and a shouldered celt. Comparing both the sites of Sarutaru and Marakdola, another excavated site

with a single cultural stratum of one meter thickness from which recovered a shouldered celt and wheel turned pottery of fine kaolin clay, S.N. Rao argues for a provisional date about the beginning of Christian era for the Neolithic Sarutaru. Besides these excavated sites, there are many surface sites in different parts of Northeast India which have yielded a great amount of stone artifacts and pottery now housed at various museums and departments.

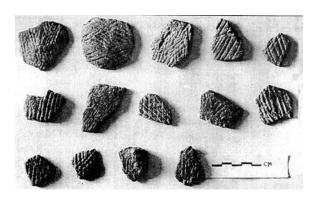


Plate 11: Cord-impressed ware of Napachik, Manipur

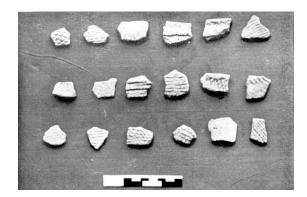


Plate 12: Cord-impressed pottery from Daojali Hading, Assam

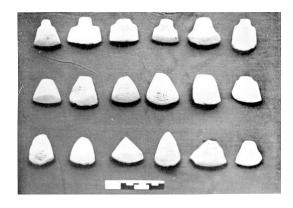


Plate 13: Stone tools from Daojali Hading, Assam

The Neolithic culture of Northeastern India is distinguished by the predominance of shouldered celts and the characteristic Cord-marked pottery. The shouldered tool type has a sporadic distribution in the adjacent states of Eastern India. Yet, as far as Neolithic period is concerned, there appears to be no doubt about the relationship between Northeastern India and the countries of Southeast Asia and East Asia.

Name of the site	Ceramic wares
Daojali Hading of Assam	Cord-marked pottery, Incised pottery, Stamped pottery, Plain Fine Red ware
Selbalgiri 2 of Meghalaya	Handmade, coarse and gritty in fabric and grey, grey-brown and dull brown in colour without Cord-impression
Chungliyimati of Nagaland	Crude, hand made, Thick Grey and Red ware occasionally with cord-marked impressions and incised designs
Sarutaru of Assam	Brown, Buff and Grey in Colour with cord-impressions or basket-impressions
Marakdola of Meghalaya	Kaolin Pottery, Cord Impressed pottery
Kamla valley of Arunachal Pradesh	Plain coarse ware, Cord-impressed Coarse Red ware, Stamped Coarse Brown / Red ware, Stamped (square grid) Buff ware Grooved Coarse / Fine Buff ware, Plain Brown ware
Taba of Arunachal Pradesh	Plain (thick and coarse) ware, Stamped (grid pattern) ware, Irregular Corded ware
Pynthorlangtein of Meghalaya	Handmade, Coarse Red ware pottery with cord impression
Phunan Hills of Manipur	Plain wares, Stamped wares, Incised wares, Cord-marked wares, wares with circular spots and Appliqué wares.
Napachik of Manipur	Plain ware, Cord-marked ware, Ring Footed ware, Tripod Legs ware, Spindle Whorl of pottery
Nongpok Keithelmandi of Manipur	Plain ware, Cord-marked ware

Table 1: Ceramic wares of some important Neolithic sites of Northeast India

From the above table, it is clear that the Cord-impressed pottery is the predominant ceramic ware of these sites. The excavated sites have yielded numerous potsherds, basically the Cord-impressed and other hand made wares. It is most likely that being the nearest area to China and the Southeast Asian countries, Northeast India was under the strong influence of these cultures during this period.

A.H. Dani has demonstrated the stone tools of various regions from Northeast India with various parts of Southeast Asia and East Asia.

Zone of Northeast India	Related Zone in East and Southeast Asia
Cachar Hills Zone	Upper Burma, communication through Manipur
Sadiya Frontier Zone	Yunan of Southeast China
Naga Hiils Zone	Burma, Malaya, Siam, Laos, Yunan and Cambodia
Khasi Hills Zone	Cachar Hills
Garo Hills zone	Cachar Hills
Brahmaputra Valley Zone	Shantung province, Hong Kong, Naga Hills, Cachar
	Hills and Garo Hills

Table 2: Neolithic tools of Northeast India and its relation with East and Southeast Asian countries

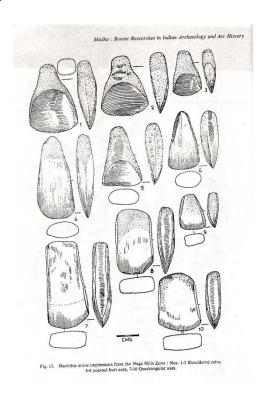


Plate 14: Neolithic tools from Naga Hills



Plate 15: Neolithic tools from Manipur



Plate 16: Neolithic tools from Garo Hills



Plate 17: Neolithic tools from Garo Hills

The present day shifting cultivation in Northeast India, often related to the Neolithic agricultural system, may be an adaptation strategy of the Neolithic people of this area. S.K. Roy did an elaborate study on the types of artifact from both prehistoric and modern day slash and burn cultivation. He studied the agricultural implements from the Neolithic sites of the Garo hills, and the tools of ethnographic contexts. According to him, the tools from the Neolithic sites and the ethnographic situation at Garo Hills reveals homogeneity in function. Looking at the tools, it can be presumed that they were used for primitive type of agriculture resembling the present day shifting cultivation prevalent among many of the populations living in hilly areas.

10. Southern Group

Comparatively, the southern Neolithic group is better understood than the other Neolithic groups of India. It is primarily a product of human adaptation to the semi-arid environment, marked by low (600–1200 mm) rainfall. It has been found in northern Karnataka and western Andhra Pradesh, although a few sites also occur in southern Karnataka, coastal Andhra Pradesh and northern Tamil Nadu. Many of these sites occur on the flat tops, slopes and foot of granitic hills but some are also found on the alluvial banks of rivers like the Godavari, Krishna, Penneru, Tungabhadra and Cauvery. Some of the important excavated sites are:

- (1) Sangnakallu in Bellary district, Karnataka
- (2) Tekkalakota in Bellary district, Karnataka
- (3) Brahmagiri in Chitradurg district, Karnataka
- (4) Maski in Raichur district, Karnataka
- (5) Piklihal in Raichur district, Karnataka
- (6) Watgal in Raichur district, in Karnataka
- (7) Hallur in Dharwad district, Karnataka
- (8) T. Narasipur in Mysore district, Karnataka
- (9) Hemmige in Mysore district, Karnataka
- (10) Nagarjunakonda in Guntur district, Andhra Pradesh

- (11) Ramapuram in Kurnool district, Andhra Pradesh
- (12) Veerapuram in Kurnool district, Andhra Pradesh
- (13) Paiyampalli in North Arcot district, Tamil Nadu

The stone tools of the Neolithic people consisted of ground stone tools like axes, adzes, wedges, chisels, microliths and stone blades. At Palavoy a rich bone tool assemblage comprising axes, blades and points has been found. In the later stages of the culture copper and bronze tools also came to be used.

The pottery was initially only handmade, of poor quality and drab grey colour, and consisted of jars, spouted vessels and bowls of various sizes, sometimes decorated with incised designs. In later stages wheel made, sturdy pottery, occasionally decorated with painted motifs, also came into use. An important new ceramic was the black-and-red ware.

The Neolithic people lived in circular or rectangular wattle-and-daub huts with floors having stone paving. Large stones were placed around the huts on the outside to protect them from winds. There is evidence of a burnt hut at the site of Sanganakallu which indicate that the huts had a thatched roof.



Ph.8. (A). Kanigiri Kondalu: Extensive Neolithic Habitations site.

Plate 18: Neolithic Site of Kanigiri Kondalu



Ph.8. (B). Paiyampalli : Pottery and ground stone tools from period IA.

Plate 19: Pottery and stone tools of Paiyampali



Plate 20: Copper and Gold artefacts from Sanganakallu - Kupgal

The study of burial practise indicates that the dead, both children and adults were buried in double or multiple clay urns beneath the floors of their houses.

Southern Neolithic people practised an agro-pastoral economy. The domesticated animals comprise cattle (Bos indicus), buffalo (Bubalus bubalis), sheep (Ovis aries), goat (Capra hircus aegagrus), pig (Sus scrofa cristatus), dog (Canis familiaris) and fowl (Gallus sp.). Cattle played a predominant role in the economy as is evident by the abundance of bone refuse. Further evidence comes from the presence of ash mounds, terracotta figurines, and portrayal in the bruising on rocks near archaeological sites. The vegetation of the Neolithic landscape is characterized by scrub woodland, savanna woodland, scattered shrubby facies and thorny thickets of different vegetation series which is ideally suited for keeping sheep/ goat herds. Communities like the Kuruvas and Gollas in Andhra Pradesh, the Kurubas in Karnataka and the Dhangars in Maharashtra even today keep large herds but it does not seem to have been an important component of the Neolithic economy. M.L.K. Murty has used ethnohistorical data and has indicated that rearing sheep/goat herds developed as an offshoot of the agro-pastoral Neolithic economy in later (Chalcolithic and historic) times.

The Neolithic people also cultivated a variety of crops on hill tops and in narrow valleys between the hills using rain fed gravity-flow irrigation as also on alluvial banks of rivers. Their main crops were millets, pulses and legumes. The cultivated crops include finger millet (*Eleusine coracana*), *kodo* millet (*Paspalum scrobiculatum*), horse gram (*Dolichos biflorus*), green gram (*Vigna radiata*), black gram (*Phaseolus mungo*) and hyacinth bean (*Dolichos lablab*). The only cereals known to have been cultivated are barley (*Hordeum vulgare*) and rice (*Oryza sativa*) but they are known only from one site each.

11. Problems of Ash mounds

A very distinctive feature of the southern groups of Neolithic culture is ash mounds, which are heaps of ash produced by the burning of cow dung. They are closely associated with habitation sites and provide tell-tale evidence of the role of cattle pastoralism in the economy. It is believed that dung from cattle pens was allowed to accumulate and periodically set ablaze, probably in a ceremonial way as is done at annual cattle festivals in south India even today. The ash in the mounds consists of several distinct layers; in some layers it is soft and loose and in others heavily vitrified, suggesting that cow dung was burnt at varying temperatures. The contents of the ash include stone and bone tools, animal bones and pottery. At Utnur and Budihal hoof impressions of cattle have been found beneath the cow dung, showing evidence of cattle penning. Besides, Budihal has also produced evidence of a butchering floor.



Plate 21: Ashmounds of Kupgal

Some of the important ash mounds sites are:

- 1. Utnur in Mahbubnagar district, Andhra Pradesh studied by F.R. Allchin
- 2. Palavoy in Ananatpur district, Andhra Pradesh studied by V. Rami Reddy
- 3. Kupgal in Bellary district, Karnataka studied by G.G. Mujumdar and S.N. Rajaguru
- 4. Kodekal, Karnataka studied by K. Paddayya
- 5. Budihal in Gulbarga district, Karnataka studied by K. Paddayya

The Neolithic culture is dated by C14 dating from the middle of the third millennium B.C. to the beginning of the first millennium B.C. Although during this long period the basic form of the culture remained uniform, there were changes in the form of improvement in ceramic technology and introduction of metal tools.

12. Northern Group

The evidence of the Neolithic culture in the Northern India comes from several sites of Kashmir valley, which was a vast lake in the Pleistocene times. The Neolithic settlers settled in the Pleistocene lake beds which are locally known as Karewas. The important sites are Burzahom, Gufkral, Kanishpur, Begagund, Hariparigom, Jayadeviudar, Olchibag etc. and nearly forty Neolithic sites have been discovered. The archaeological record at a few excavated sites like Burzahom, Gufkral and Kanishkpura has given a fairly good picture of the life ways of the first farmers in the Kashmir valley.



Plate 22: Dwelling Pit at Burzahom

The understanding of the Neolithic culture in Kashmir is based on excavations at the three sites, Burzahom, Gufkral (Gofkral) and Kanishkapura (Kanispur) while there are a number of other Neolithic settlements in Kashmir valley which are not yet excavated. Burzahom, situated in the northeast of Srinagar in the Kashmir valley was the first Neolithic site discovered in this area. It was discovered by de Terra and Peterson in 1935. Burzahom was excavated by T.N. Khazanchi for seven seasons (1960-1971), Gufkral was excavated for only two seasons (1980-1982) by A.K. Sharma and Kanishkapura for only one season (1998-99) by B.R. Mani. From the aceramic Neolithic (Period I) of Kanishkapura, a polished stone celt was found. The Neolithic population settled on the flat top of the Karewas at the initial stage and later they occupied the slopes. Four successive floor levels along with post-holes were noticed which are parts of rectangular houses which most probably had thatched roofs. Five bone points and six polished stone celts were recovered. The ceramic industry comprises both hand made as well as wheel turned pottery. Fine grey ware of medium to thick fabric, coarse grey ware, red ware, dull red ware, black wares of both plain and burnished varieties are important types. The important shapes include bowls, shallow bowls, or dishes-on-stand, jars, vases and long-necked vases. The evidence of copper objects in the form of a bangle piece, a needle, two pins, an ear or nose ring and a chisel from the late Neolithic levels at Kanishkapura suggests the Chalcolithic contacts,

probably with the Harappans, as also found in similar levels at Burzahom and Gufkral.

Khazanchi divided the site into four cultural periods: first two are of Neolithic, third to Megalithic and fourth to Early Historic period. We shall see the archaeological record of the Neolithic period only. One of the most important features of the period I is the pit dwelling which means the Neolithic settlers dug some circular/oval and rectangular/square pits in the Karewas. This was to protect themselves from the freezing winds during winter. The evidence of postholes around the mouth of the pits suggests that a roof thatched with birch and hay were constructed. Steps were cut into the walls of the pits for entry and exit, and the walls and floors were plastered with lime. The shallow pits were probably used for habitation during summer. Evidence of human occupation in the pits occurs in the form of ovens, charcoal, ash, pottery, stone tools, human burials and animal bones.

The Neolithic folk of the Kashmir valley made various artefacts of stone, bone and antler tools. The stone tools are comprised of polished axes and chisels, harvesters, pounders, polishers, querns, grinders and perforated discs etc. The harvesters are rectangular knives with two or more holes on the blunt side, probably for hafting is related to the north Chinese Neolithic sites. The bone and antler tool industry comprised harpoons, spatulae, needles, awls, spear points, arrowheads, daggers and scrapers etc. Beads of semi-precious stones, terracotta bangles and cowrie shells are also found at these sites.

The pottery from early Neolithic period of the northern group is largely handmade; however, wheel-made pottery appears in the later stages. The mat impressions at the base of some of the pot suggest that these were placed on mats for drying. The pottery shapes include jars, vases, globular pots, basins, dish-on-stand and bowls. The pots are occasionally decorated with paintings. There is an interesting globular pot with painting of a horned deity which very similar to specimens from Kot Diji and Gumla in Pakistan. There is another example that a copper hairpin from the upper levels of Gufkral which resemble a specimen from Chanhudaro in Pakistan. These similarities of artefacts suggest some kind of contact between the Kashmir Neolithic and the Harappan civilization.

Archeobotanical and Archaeozoological evidence suggests that the subsistence economy of the northern Neolithic people was based on a combination of plant cultivation, animal husbandry and hunting-gathering. Botanical evidences of several cultivated crops such as seeds of wheat (*Triticum* sp.), barley (*Hordeum vulgare*), common pea (*Pisum arvense* L.) and lentil (*Lens culinaris*) and zoological evidences domestic animals such as cattle, sheep, goat, pig, dog and fowl and wild animals such as red deer, Kashmir stag, ibex, bear, wolf, hedgehog, beaver and rodents are recovered from sites.

An important feature of the northern group of Neolithic culture of India is the burial practice. People practised both primary and secondary burial. In a primary burial, the body was placed in a crouched position and sometimes dogs were buried with the master. Semi-precious stone beads are also found in some graves and in case of secondary burials, bones were sometimes treated with red ochre. There are several graves of animals like dog, wolf and ibex.

Neolithic culture of northern group is dated to a time bracket of 2400–1500 B.C. based on several uncalibrated C14 dates from Burzahom. The new radiocarbon dates from Kanishkapura suggests the beginning of Neolithic age in Kashmir in the middle of the fourth millennium B.C. with ceramic Neolithic appearing in the late fourth millennium B.C. and not in the first half of the third millennium B.C. as popularly believed by archaeologists on the evidence of Burzahom and Gufkral. A calibrated C14 date of one charcoal sample from Kanishkapura is 3361 BC to 2937.

13. Conclusion:

In the above discussions, we have seen the archaeological record of three important groups of Neolithic culture of India. The Neolithic cultures are distributed in the Kashmir valley, the northern Vindhyas, middle Ganga valley, and eastern, northeastern and south India. The overall topography, environmental pattern of the area shapes the cultural development; hence we see different traits in the development of Neolithic culture in different regional context.