



DISTRIBUTION PATTERN AND STUDY OF NEOLITHIC SITES IN ANDHRADESA

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ABSTRACT

In the cultural process of human being Neolithic culture is represented with many new inventions. Term Neolithic is for the first time coined by John Lubbock in 1865ⁱ. Term Neolithic means new stone age; this word is derived from two Greek words i.e Neo means New and Lithos means Stone. Neolithic period flourished in world in various phases at different times.

INTRODUCTION

For the first time V Gordon Childe propounded a new term Neolithic Revolution for Neolithic period since it is recorded with the emergence of agriculture practices in large scale in entire world. He mentioned that climatic and environmental changes are reason for the starting of cultivation and agricultural practices; as the world environment has changed from Pleistocene to Holocene. He used the term revolution to describe the changes took place in the social and economic sectors of human beings; with the wide spread practice of agriculture.

Before going to discuss about the Neolithic culture of Andhra it is important to know common features of Neolithic culture in various regions of the world. Though there are regional differences in Neolithic cultural characteristics but some of the common features are there in all the regions. Most of the researchers and scholars accepted that wide range of changes took place in the lives of during Neolithic period. Domestication of animals and plants, incensement in the population, settled life, village system, potter's wheel, economical and cultural interaction within the people, proper and suitable diet are some of the major innovations taken place during Neolithic phase of the world.

Many polished tools appeared in this period due to the necessary of the tools to procure the food items from plants and mostly to clear the land; tools like axes or adzes are identified in many Neolithic sites which are mostly polished in nature. Polishing of the tools was a new



invention which brought control over plants and made Neolithic people so comfortable to get their food. Specialized tools like sickle brought changes in the harvesting Methods. Sickle was made after attaching short blades of flint to wooden handle. Tools like axes were polished by rubbing the edges on stones.

In most Neolithic societies pottery and weaving were associated with agriculture.¹ Activities like pottery and weaving were involved creating or making new substances which don't available readymade in nature. The vessels carved with wood or soft stone or shaped from vegetable like gourds and used by people continued to be used. But these objects but were not useful to cook or store the food items.

Based on the above discussion it can be said that the shift from food gathering stage to more specific food collecting techniques were backed by changes in the contemporary social structure. A combined group of men and women might be settled in a place which led to the emergence of early farming practices during Neolithic period. Neolithic villages engaged many economic activities which, is absent during early stone ages.

Gordon child described that discovery of suitable plants and appropriate methods for the cultivation were carried out by women. According to Gordon child pottery-making, spinning, weaving and most of the inventions was the works of women. Latest researches shows, it is proved that the transition to agriculture has witnessed with dramatic changes in economical and social roles of the people. Working in the fields with a hoe (before the introduction of plough), pottery-making, weaving, tending to animals, collecting ripening seeds, grinding flour and cooking along with remaining other household activities of women. Thus Neolithic age has witnessed many changes in the evolution of human civilization including social and economic aspects.

Neolithic culture of Andhradesa:

Andhra Pradesh has its own version of Neolithic culture with many specific characteristics and commonalities with rest of the world. Researchers, Historians, Archaeologists had discovered and excavated many Neolithic sites in Andhradesa, even though they did not spread evenly, throughout Indian subcontinent.

On the basis of variations in pottery and material objects Neolithic culture of Andhra Pradesh has dealt in three geographical areas like Southran Coastal Andhra, Northern Coastal Andhra and Western Andhra. Nagarjunakonda, (Guntur & Nalgonda Districts) and Kesarapalli (Krishna District) and Gandluru, Gummadur, Alur, Kondapeta, Pallagiri and Peddapuram are



the significant Neolithic sites in Central Coastal Andhra. Nagarjunakonda has represented with three phased development of Neolithic culture.

Economy of the Neolithic people belongs to Western Andhra was depended on hunting, fishing, primitive agriculture and pastoralism. No direct evidences are available for the practice of agriculture in the excavated or explored sites in South Western Andhra, but presence of a large number of mullers, querns, mortars from the sites indicate that some sort of agricultural activity was in practice.

Neolithic culture and Different Phases in Andhradesa

Chronology of the Neolithic culture of Andhra can be found from the remains of excavations. The pottery suggests that the Neolithic period in the Andhra region seems to have begun sometime in the 3rd millennium BC and ends about 1000 B.C. The C-14 date obtained for this culture in the region is 2160 BC for the early Neolithic at Utnur, which forms the upper limit for its existence and this date more or less corresponds to the date 2361 B.C.² from Karnataka.

In South India, Taylor discovered the first Neolithic tool in 1842 at Lingsugur in Raichur district of Karnataka. Later Robert Bruce Foote discovered more than two hundred Neolithic sites in his south Indian explorations and he was the first scholar to trace the Neolithic culture in Andhra Pradesh at Vaddamanu village on the right bank of Krishna River in Guntur district in the year 1876. The excavations at Nagarjunakonda in Guntur district, and Palvoy in Ananthapur district gave some gleanings of the Neolithic culture in Andhra Pradesh. Archaeologists have found several sites in Kurnool, Kadapa, Praksam, Guntur, Nellore, Visakhapatnam and Srikakulam districts respectively showing a wide distribution of the early farming communities in the coastal as well as inland tracts of the stateⁱⁱ.

The Neolithic culture in Andhra Pradesh region is of significant interest in many ways as it represents largely indigenous transformation. There are number of distinguishing features in the Neolithic culture of Andhra Pradesh - including symbolic importance of cattle, and creation of ash mounds which give it a notably indigenous nature, and appear to have local origins. Andhra Neolithic societies were not isolated.

It is identified southern and Andhra Neolithic culture have no evidence for the gradual transition from the preceding Mesolithic culture. The Neolithic culture appeared suddenly because of colonization of favorable habitats by communities who moved and raised settlements in the sub-regions of southern Deccan. There is a similarity between South Indian Neolithic material culture and other parts of the subcontinent- stone artifacts like querns,

hammer stones and sling balls, blades of fine-grained stones are showing similarities in this case. Pottery is identified throughout Neolithic period.

First Phase of Neolithic culture:

The early Neolithic phase of South India started around 2500 B. C. and it is represented at Uttoor, along with sites in Karnataka such as Kodekal, Brahmagiri and Piklihal. Settlements of this phase were confined to tops of low lying granitoid hills or on leveled terraces of hills sides surrounded by vast stretches of fertile black soils.

Neolithic period of this phase witnessed with mixed economyⁱⁱⁱ and included both food gathering and food production. Hunting and fishing played an important role during this phase. Some rock bruising in Karnataka and Andhra belongs to the same period provide evidences of cattle domestication. Uttoor and Kodekal, has produced evidence of the dog, owl, fish fowl and wild animals like gazelle, spotted deer, monitor lizard. The remains of the deer and goat were identified at Uttoor.

Second phase of Neolithic culture:

Around 1800 B.C. sudden change appeared in the Neolithic culture of South India which resulted in the dispersal and diversification of the culture starting from Raichur and Bellary doab. A change in the settlement pattern is clearly identified in this period.

At Palvoy, Sanganakallu and Piklihal edge tools were recorded in detail. Sites like Hallur, T.Narsipur, Paiyampalle and Hemmige have rich collection of ground stone tools, along with unfinished tools in the strata. Based on the evidences of Hallur, T.Narsapur, Paiyampalle archaeologists concluded that trade contact with the tool manufacturing centers. Sites like Brahmagiri, Piklihal, Tekkelakota, Hallur, Sanganakallu, Hammige has the evidences of microlithic tools. Sites like T.Narsipur, Palvoy and Paiyampalle, have less evidences to chipped stone industry was very limited and it is attributed due to the paucity of raw material. Some Copper implements are identified in this phase of Neolithic sites. Palvoy provides the earliest evidence of copper in South India and the carbon₁₄ dates obtained from this site provided the date of 1965 ± 105 B.C.³. At Hallur, the earliest copper objects dates 1710 ± 105 B.C., T. Narsipur 1805 ± 110 B.C., and Tekkellakota 1780 ± 105 B.C. Average date for this could be fixed as, 1800 B.C. which would suit the occasion. Along with copper, evidences of gold ornaments were identified at T. Narsipur and Hallur.

Deccan Chalcolithic cultures could be contemporary culture of South India Neolithic which is dated back to 1400 B.C. The main features of the movement are recorded in Tekkalakota,

Hallur, Piklihal (late levels), Brahmagiri (late levels) Sanganakallu II, T.Narsipur Ib, Hemmige Ib, Paiyampalle Ib, and Iib of Palavoy. The ground stone tools and microliths exist as in the previous phase. Beads also occur without much variation either in the raw material or in shapes as that of previous phase

The economy of this period is mostly depended upon the production of food grains and domestication of animals. Evidences of hunting and fishing are also identified at some of the sites. The faunal remains of ox, sheep, goat, buffalo, and dog were found in large numbers in the excavated sites. The cultivation of ragi, and horse gram are evident in the previous phase have continued in this phase also. Besides these, Paiyampalle provided yet another evidence of the cultivation of green gram.

Ashmounds culture:

South Indian Neolithic sites including Andhra Pradesh (only of South Western Andhra) are differentiate by the presence of ash mounds, literally mounds of ash suggesting large-scale burning of material, which is supposed to be heaps of cow-dung, though still different opinions arising on this particular issue. Utnur, Kodekal and Pallavoy are example of such sites in modern Andhra Pradesh along with many other sites in bordering Karnataka. Ash mounds are large mounded features comprise of stratified deposits of vitrified, carbonized material.

Ash mound construction activities were carried out regularly and repeatedly yet with differential building rhythm and tempo throughout much of the South Indian Neolithic. They were built with the intent of expressing a specific range of meaning and engendering specific sets of actions and reactions. Many Neolithic builders of Ash mounds were living in granite hilly tracts and away from the region's most arable land, it resulted in the emphasis on pastoralism and the practice of low- risk, rain-fed agriculture present in the Neolithic culture of the region which can be called as mixed subsistence economy.

In general, the Neolithic culture of south India is characterized by the emergence of agro-pastoral economy. The changed life style consequently brought in new tool technology in the form of ground and polished tools. Permanent settlements and secure subsistence pattern brought it dynamic cultural transformation evident in pottery, art and ornamentation.

Distribution pattern of Neolithic sites:

Distribution pattern is vital to understand the nature and material culture of any culture. Neolithic sites of andhradesa have distributed almost all the districts except some of the plane lands areas; which shows the importance of raw materials for the preparation of tools and instruments. Based on the data available in this chapter some of the conclusions can be

drawn. For the convenience of researcher it distribution pattern of the Neolithic culture sites in Andhra are explained district wise. The following pages are showing the distribution pattern of Neolithic sites in Andhradesa.

Distribution pattern of the Neolithic sites in Guntur district shows and represents the cultural transformation from Neolithic culture to Early Historical period. Many sites of this district represented with Neolithic and Early historic continuity. Many Neolithic sites of this district have cultural transition from Neolithic to Early Historical period. Present district also proved that Neolithic culture people lived in hilly regions only. The demographic distribution of Neolithic sites of Guntur district suggest that raw materials are crucial during pre historic cultural phase; since the Neolithic sites of Guntur district distributed in Palnadu region which is part and partial of Deccan plateau where small hills are available abundantly. Distribution pattern of the Neolithic sites in Guntur District is as follows;

Name of the Site	Region	Nature of the site
Symaraja puram	puram	Neolithic site
Mallepadu	Tenali	Ashmound
Tangirala	Vinukonda	Neolithic tools
Ainavolu	Vinukonda	Neolithic tools
Gokanakonda	Vinukonda	Neolithic, Megalithic, EH
Jonnalagadda	Narasaraopet	Neolithic to Early Historic
Elcheru	Narasaraopet	Neolithic to Early Historic
Garapadu	Sattenapalli	Neolithic to Early Historic
Jalalapuram	Sattenapalli	Neolithic to Early Historic
Garikapadu	Sattenapalli	Neolithic to Early Historic

Neolithic sites of Krishna district have a distinct feature. In this district Neolithic sites are identified in plain areas where fertile soils are available. Mostly they are having later stage of Neolithic evidences. The cultural transition from Neolithic to Early Historic period is identified, since many multi cultural sites are available here. Most of the Neolithic sites in this district are spread in Nandigama and Bandar regions only. Distribution pattern of the Neolithic sites in Krishna district are as follows;

Name of the Site	Region	Nature of the site
Donabanda	Musilipatnam-Hyd road	Neolithic and Megaliths
Mungasala	Nandigama	Neolithic period
Akripalli	Nuziveedu	Neolithic tools and Megaliths
Atukuru	Nandigama	Neolithic period
Bobellapadu	Nandigama	Neolithic

Kodavatikallu	Nandigama	Neolithic, Early Historic
Kunikanapadu	Nandigama	Neolithic, Ear. Historic, Medieval
Sanagapadu	Nandigama	Neolithic, Ear. Historic, Medieval
Saunak	Bandar	Remains of Neolithic culture
Nidumolu	Bandar	Neolithic and early Historical
Kollikulla	Nandigama	Neolithic, Early Historical
Kondapet	Nandigama	Neolithic, Early Historical
Kunikinapadu	Nandigama	Neolithic, Early Historical
Pallagiri	Nandigama	Neolithic, Early Historical
Sanegapadu	Nandigama	Neolithic, Early Historical
Kadavakollu	Vuyyar	Neolithic, Early Historical
Gavaravaram	Jagayyapeta	Neolithic, Early Historical

Neolithic sites of Prakasam district are situated in the regions such as Addanki, Kanigiri, Darsi, Podili, Kandukuru, and Ongole. Many multi cultural sites are identified at Podili, Addanki and Darsi region. Among these multi cultural sites some of the sites showed direct transition from Middle Paleolithic to Neolithic and most of the sites shows transition from Neolithic to Early Historical period. Site Elchuru has recorded with the transition from Neolithic to Megalithic period. Neolithic sites of Prakasam District are distributed as follows;

Name of the Site	Region	Nature of the site
Kanigiri	Kanigiri	Mid.Paleolithic and Neolithic
Boggukonda(Kukutapalli)	Addanki	Neolithic, EH, IP
Elchur	Addanki	Neolithic, Megalithic
Guntupalle	Addanki	Neolithic, EM, LM
Konidena	Addanki	Neolithic, EH, IP
Medarametla	Addanki	Neolithic Site
Chollavidu	Ongole	Neolithic site
Bobbepalle	Addanki	Neolithic, EH, MT
Dronadula	Addanki	Neolithic, EH, MT
Darsi	Darsi	Neolithic, EH, Medieval
Pothakamuru	Darsi	Neolithic and EH
Singanapalem	Darsi	Neolithic and EH
Nayudupalle	Podili	PreHistoric Engravings, Neolithic,
Addanki	Podili	Neolithic and EH Pottery
Baliparu	Podili	Neolithic and EH Pottery
Chodavaram	Podili	Neolithic and EH Pottery
Pangaluru	Podili	Neolithic and EH Pottery

Polavaram	Podili	Neolithic and EH Pottery
Cheemakurthy	Podili	Neolithic site
Manginipudi	Kandukur	Neolithic and Early historical
Ramathirtam	Kandukur	Neolithic Habitation Site

Neolithic sites of Ananthapur district are distributed in Guntakal, Tadiparti, Uravakonda, Kalyandurg, Dharmavaram and Rayadurg regions. Neolithic tools, Ash mounds and habitation sites are distributed in this region. Ash mounds are identified at sites like Andepalli, Hulikal, Mallipalli, Palvoy, Mallapuram and Vantareddipalli. Neolithic sites of Anantapur District are distributed as follows; District

Name of the Site	Region	Nature of the site
Timmapuram	Guntakal	Neolithic complex
Dorigal	Guntakal	Neolithic period
Tadpatri	Guntakal	Neolithic period
Udiripikonda	Guntakal	Neolithic period
Anantapur	Guntakal	Neolithic period
Bogasamudram	Tadipatri	Neolithic period
Muchukota	Tadipatri	Neolithic period
akkammakonda	Kalyandurg`	Neolithic period
Andepalli	Kalyandurg	Neolithic ashmounds
Hulikal	Kalyandurg	Neolithic ashmounds
Idukal	Kalyandurg	Neolithic period
Kalyandurg port	Kalyandurg	Neolithic period
Kundurpi	Kalyandurg	Neolithic period
Mallipalli	Kalyandurg	Neolithic ashmounds
Pallvoy	Kalyandurg	Neolithic ashmounds
Pillalapalli	Kalyandurg	Neolithic period
Gulapalyam	Uravakonda	Neolithic period
Gadecal N. West	Uravakonda	Neolithic period
Gadecal S West	Uravakonda	Neolithic period
Donekal N East	Uravakonda	Neolithic period
Buthamahalhill	Uravakonda	Neolithic period
Budagavihill	Uravakonda	Neolithic period
Yatakal	Kalyandurg	Neolithic period
Vitlampalli	Kalyandurg	Neolithic period
Vantareddipalli	Kalyandurg	Neolithic Ashmounds
Havligi	Uravakonda	Neolithic period
Karakumukkala	Uravakonda	Neolithic period

Lattavaramhill	Uravakonda	Neolithic period
Mallappakonda	Uravakonda	Neolithic period
Mallapuram	Uravakonda	Neolithic ash mounds
Uidupanakal West	Uravakonda	Neolithic period
Uravakonda	Uravakonda	Neolithic period
Vajrakarur	Uravakonda	Neolithic period
Velpumadugu	Uravakonda	Neolithic period
Vidupankala Fort	Uravakonda	Neolithic period
Chinadandukonda	Ananthapur	Neolithic period
Peddadandukonda	Ananthapur	Neolithic period
Katamadevuduhill	Dharmavaram	Neolithic period
Rayadurg	Rayadurg	Neolithic period
Dayallan-Kuntapalle	Rayadurg	Neolithic Habitation Sites
Hampapuram	Rayadurg	Neolithic Habitation Sites
Krishnamareddipalle	Rayadurg	Neolithic Habitation Sites
Akkamma-Konda	Kalyandurg	Neolithic to Medieval Period, Megalithic burials

Neolithic sites of Kurnool district have the evidences of various peculiar characteristics of Neolithic culture. Neolithic stone tools, transition from Neolithic to Early Historic period and Ash mounds are identified in this region. Sites like Suguru, Kolimigundla, Gudikallu, Kuluru^{iv} are represented with ash mounds. Kuluru is Neolithic habitation site. Most of the sites in this district are represented with Neolithic culture only. Multicultural sites are very limited in this particular district. Distribution pattern of Neolithic sites of Kurnool district are as follows;

Name of the Site	Region	Nature of the site
Hattibellagallu	Adoni	Neolithic, megalithic
kupagallu	Adoni	Neolithic, megalithic
Budidepadu	Adoni	Neolithic tools
Penchikalapadu	Adoni	Neolithic tools
Gaddamankampalli	Adoni	Neolithic tools
Mettupalli	Adoni	Neolithic tools
Sivavaram	Adoni	Neolithic tools
Chinakothaliki	Adoni	Neolithic tools
Johrapuram	Adoni	Neolithic tools
Madhavaram	Adoni	Neolithic tools
Mantralayam	Adoni	Neolithic tools
Peddakothaliki	Adoni	Neolithic tools
Adoni	Adoni	Neolithic tools
Chetnepalli	Adoni	Neolithic tools
Hattibelagallu	Adoni	Neolithic tools

Muravakonda	Adoni	Neolithic Acheulian site.
Kulur	Yammiganur	Ash mound, Habitation site
Gudikallu	Yammiganur	Ash mound
Suguru	Yammiganur	Ash mound
Kanakaveedu	Kanakaveedu	Neolithic to Early Historic
Kolimigundla	Koilkuntla	Ash mound

Neolithic sites of Kadapa district are distributed in Proddutur, Kamalapuram, Jammalamadugu and Pulivendula regions. All of these sites are represented with Neolithic culture only. Information related to cultural transformation can't drag from this district. Neolithic sites of Kadapa district are distributed as follows;

Name of the Site	Region	Nature of the site
A.KAmbaladinne	Jammalamadugu	Neolithic period
Beditippenapadu	Jammalamadugu	Neolithic period
Chinnamudiyum	Jammalamadugu	Neolithic period
Dannawada	Jammalamadugu	Neolithic period
Gudemcheruvu	Jammalamadugu	Neolithic period
Jangalapalli	Jammalamadugu	Neolithic period
Madhavapuram	Jammalamadugu	Neolithic period
Mylavaram	Jammalamadugu	Neolithic period
Paddamudiyam	Jammalamadugu	Neolithic period
Paluru	Jammalamadugu	Neolithic period
Vaddirala	Jammalamadugu	Neolithic period
Veparla	Jammalamadugu	Neolithic period
Akkammappeta	Kamalapuram	Neolithic period
Koduru	Kamalapuram	Neolithic period
Ramireddipalle	Kamalapuram	Neolithic period
Tippaluru	Kamalapuram	Neolithic period
Nidivelogala	Muddanuru	Neolithic period
Kottapalli	Pulivendula	Neolithic period
Kotthagundavaripalle	Pulivendula	Neolithic period
Koraguntapalli	Pulivendula	Neolithic period
Inagaluru	Pulivendula	Neolithic period
Balijapalli	Pulivendula	Neolithic period
Vellala	Prodduturu	Neolithic period
Tondaladine	Prodduturu	Neolithic period
Idamadaka	Prodduturu	Neolithic period
Gadeguduru	Prodduturu	Neolithic period
Chapadu	Prodduturu	Neolithic period

Ulimella	Pulivendula	Neolithic period
Paluru	Pulivendula	Neolithic period

Neolithic sites of Srikakulam district are distributed in Tekkali, salur, Palakonda, Gunpur and Parlakimidi regions. Here most of the sites are represented with single culture sites i.e Neolithic culture. Site named pandavulamitta has the evidences of transition from Mesolithic period to Neolithic and thence to Megalithic period. Neolithic sites of Srikakulam District are distributed as follows;

Name of the Site	Region	Nature of the site
Pandavulametta	Tekkali	Mesolithic, Neolithic,
Kondabuchaimpeta ^v	Salur	Neolithic pot sherds and Pre Historic rockshelters
Dasaradhiguda	Palakonda	Mesolithic Tools and Neolithic Ground and polished tools
Ippamanuguda	Palakonda	Neolithic tools
Nayudaguda	Palakonda	Neolithic tools
Sattineguda	Gunpur	Neolithic tools
Ruphabadra	Gunpur	Neolithic tools
Siripur	Parlakimidi	Neolithic tools
Kolasingu	Parlakimidii	Neolithic tools
Ramachandrapuram	Parlakimidi	Neolithic tools
Damanukonda	Salur	Neolithic urn burial

Neolithic sites of Visakapatnam are identified in Visakapatnam region only. Much research needed thid region on Neolithic cultural evidences. Here all the sites are having the evidences of Neolithic culture only. No multi cultural site is identified in Visakapatnam district as far Archaeological Survey of India records. Neolithic sites of Visakhapatnam District are distributed as follows;

Name of the Site	Region	Nature of the site
Madhuravada	Vizag	Neolithic, Stoneage
Paradeshipalem	Vizag	Neolithic tools
Boredupalem	Vizag	Neolithic tools
Marikavalasa	Vizag	Neolithic tools
Masuelavada	Vizag	Neolithic tools
Rishikonda	Vizag	Neolithic tools
Peddatadivada	Vizag	Neolithic tools



Nellore, East Godavari and Chittoor districts don't have the evidences of Neolithic culture. Andhra Neolithic culture has witness with clear cultural transition evidences along with Ground and polished tools, habitation sites, Ash mounds; other economical activities related evidences are quite clear in Andhra region.

REFERENCES

- Allchin, F.R., 'The Neolithic Stone Industry of the Karnataka Region', *Bulletin of the School of Oriental and African Studies*, XIX, 2, 1957.
- Child, V. Gordon, *Man Makes Himself*, Penguin, London, 1983.
- Fuller, D., Nicole Boivin, and Ravi Korisettar. "Dating the Neolithic of South India: New Radiometric Evidence for key Economic, Social and Ritual Transformations." *Antiquity* Vol. 81, No. 313.
- Indian Archaeological Review, 1954-55.
- Indian Archaeological Review, 1958-59.
- Indian Archaeological Review, 1961-62.
- Indian Archaeological Review, 1963-64.
- Indian Archaeological Review, 1964-65.
- Indian Archaeological Review, 1977-78.
- Indian Archaeological Review, 1979-80.
- Indian Archaeological Review, 1980-81.
- Indian Archaeological Review, 1981-82.
- Indian Archaeological Review, 1982-83.
- Indian Archaeological Review, 1984-85.
- Indian Archaeological Review, 1985-86.
- Indian Archaeological Review, 1986-87.
- Indian Archaeological Review, 1989-90.
- Indian Archaeological Review, 1992-93.
- Indian Archaeological Review, 1996-97.
- Johansen, P. G., Landscape, Monumental Architecture and Ritual: A Reconsideration of the South Indian Ashmounds, *Journal of Anthropological Archaeology*, 2004.
- Kartikeya Sarma, 'Neolithic- Chalcolithic Cultures in Andhra Pradesh', in M L K Murthy (Ed), *Pre and Proto Historic Andhra Pradesh*, Orient Longman Publishers, Chennai, 2003.
- Lubbock, John, *Pre-historic Times: As Illustrated by Ancient Remains and the Modern Manners and Customs of Modern Savages*, Williams and Norgate, London, 1865.
- Nicole Boivin, Dorian Fuller, Ravi Korisettar and Michael Petraglia, *The Emergence and Transformation of South India's Earliest Settled Societies*, Based on the Paper presented in the International Seminar on the "First Farmers in Global Perspective", Lucknow, India, 18-20 January, 2006.



Rami Reddy, V., *The Prehistoric and Proto-historic culture of Palavoy, South India: With Special Reference to the Ashmound Problem*, Government of Andhra Pradesh, Hyderabad, 1976.

Rami Reddy, V., 'South Indian Neolithic Culture Seen in Retrospect', *East and West*, Vol. 35, No. 1/3, 1985.

Subrahmanyam, B.R. and David Raju, B., 'The Neolithic Phase in Coastal Andhra-Distribution pattern' *JAHRS*, Dr. Venkataramanayya Commemoration Volume- XXXVIII, Part-1, 1983- 84, Govt. Of A.P, Hyderabad, 1983.

Subranmanyam B, *Pre, Proto and Early Historic Cultures of Krishna Tungabhadra Valley*, Delhi, 1997.

ⁱ Lubbock, John, *Pre-historic Times: As Illustrated by Ancient Remains and the Modern Manners and Customs of Modern Savages*, Williams and Norgate, London, 1865, pp. 2-3.

ⁱⁱ Rami Reddy, V., 'South Indian Neolithic Culture Seen in Retrospect', *East and West*, Vol. 35, No. 1/3, 1985, pp. 43-65.

ⁱⁱⁱ Rami Reddy, V., *Neolithic and Post-Neolithic Cultures*, Mittal Publications, New Delhi, 1991, p. 46-51

^{iv} Indian Archaeological Review, 1992-93, p.2.

^v Indian Archaeological Review, 1983-84, p.6.