
Historical Archaeology of Iron Age and Early Historic Society of Kerala

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Abstract: Kerala had witnessed the formation of settled agro-pastoral societies during the Iron Age and early historic period (circa. 6th century BCE- 6th century CE). The material remains from the megalithic burials and from the excavated contexts at Pattanam along with evidence from Sangam literature have inferred to the formation of a complex society with knowledge and skills in agricultural production, metallurgy, masonry, pottery making, salt making, fishing, manufacturing of semi-precious stone articles etc. The occurrence of people belonging to various sects like Jainism, Buddhism, and Vedic-Puranic ideology in ancient Tamilakam also pointed towards the commencement of a stratified society with the prevalence of Varna ideology where the Brahmins and their Vedic rituals got prominence. The period also witnessed the development of internal and external trade networks which become the main base of the early historic economy and polity. The Cēra power developed as a powerful resource accumulation system in the backdrop of a multi-crop agro-pastoral and exchange or trade economy. Brahmins conducted ritual performances to elevate the political and social status of the ruling power of the Varna hierarchy.

Keywords: Iron Age, Early Historic, Megaliths, Kerala, Sangam Society, Paṭṭaṇam, Muziris

Introduction

The Iron Age and early historic period (a period between circa 500 BCE and 500 CE) is discussed as the primordial phase in the history of Kerala (Gurukkal and Raghava Varier 1999:101-233). The development in archaeological studies after 2000 CE are not incorporated in the historical studies of Kerala. Based on the existing historical studies, early Tamil *Sangam* literature, epigraphs and recent archaeological evidence, the present study attempts to revisit the early history of Kerala and tries to argue that the Iron Age and Early historic society of Kerala was well organized and developed with a sound base of agro-pastoral and exchange economy. It was a stratified society consisting of farmers, cattle herders, anglers, traders, ritual performers, ruling authorities, warriors, plunderers, bards, various specialized skilled occupational groups etc. This was a period of technological development, especially in metal working, masonry, pottery bead manufacturing, weaving, construction of memorial stone structures etc., along with techno-economic specialization and diversification.

Traces of the Iron Age and Early Historic Past

Megaliths are the foremost archaeological evidence for understanding the socio-cultural aspects of the Iron Age and early historic society of Kerala. Megaliths are huge monolithic and structural sepulchres built to commemorate the ancestors of the Iron Age and early historic societies in Peninsular India. These archaeological evidence have represented the socio-economic setting, ideology, workmanship and architectural knowledge of the Iron Age and early historic societies (Gurukkal and Raghava Varier 1999:101-15, Rajesh 2017:486-506). There are different typologies of megaliths in Kerala made of laterite, granite and in a combination of both these materials as well as in terracotta (Table 1).

Table 1: Megalithic Typologies of Kerala

Megaliths in Laterite	Megaliths in Granite	Megaliths in Laterite and Granite	Megaliths in Terracotta
<i>Kodakkallu</i> (Umbrella stone)	Cist	<i>Kodakkallu</i> - (Logan1951: 182-83)	Urn
<i>Toppikkallu</i> (cap stone)	Dolmen	Stone circle	Sarcophagus
Rock-cut Sepulchre	Stone circle	<i>Menhir</i>	-
Stone circle	<i>Menhir</i>	-	-

The material evidences unearthed hitherto from the megaliths of Kerala include various types of potteries (Black and Red Wares, Black wares, Red slipped Wares, Legged Jar, various types of lids, stands, Russet Coated Painted Wares etc.), Iron objects (trident, sword, dagger, knife, sickle, ploughshare, spear head, arrow head, hanging lamp, tripod, etc.), stone beads (etched carnelian, agate, quartz, amethyst, steatite, beryl etc.), gold ornaments and bronze objects (which are very few in number) along with bone fragments. Another set of material evidence from the early historic period of Kerala is from the Pattanam (V. Selvakumar. et.al. 2005: 57-66, Cherian ed. 2015) and Vilinjam (Ajit Kumar et.al 2013: 195- 201) excavations, which have evidently recognized the development of a well-organized material culture in connection with internal and external exchanges while also hinting at the existence of an organized urban society in the west coast of Kerala during the Iron Age and early historic period.

An additional set of data can be derived from the early Tamil literatures, popularly known as *Sangam literature*, that includes the *Tolkāppiyam*, a grammar text by *Tolkāppiyar* and three corpuses of literatures - *Eṭṭutokai*, *Pattupāṭṭu* and *Patineṇkīlkaṇakku* - that cover a period from 300 BCE to 500 CE (Champakalakshmi 1996: 175-76). The post *Sangam* works like *Cilappatikāram*, *Maṇimēkhalai*, *Kīlkaṇakku* etc. are also included in this category. *Tolkāppiyar* divided the subject matter of all poetry or human emotions into two broad categories namely *Akam* (inner) and *Puram* (outer) (Kailasapathy 1968: 4-5). It is a thematic classification; *Akam* deals with the pre-marital and marital life and *Puram* deals with the military and non- romantic themes (Sivathamby 1974:20-37). Some of the early epigraphs in Tamil Brahmi, Grantha and Vaṭṭeḷuttu (Gurukkal and Raghava Varier. 1999: 188-199, Mahadevan 2003:433-35) along with coins from Kerala

(Gupta (1965) 1988) and Tamilnadu (Mahadevan 2003:62-63) have also been used for this study. By analysing these source materials, the following part tries to trace the social formation of early Kerala.

Inhabited Landscape

As Kerala is an undulated region that gets two incessant monsoon seasons and continuous evidence for occupation, it is not easy to find archaeological proof for the habitational spaces of the early societies. The distribution of megaliths in the high lands of the Western Ghats, in the hillocks and its slopes along with the valleys of the midland and coastal areas of Kerala have shown the possible spread of the dispersed settlements of a populous society during the Iron Age and early historic period (Satyamurthy 1992, Gurukkal and Raghava Varier 1999:110, Peter 2002:144-166). In Tamilnadu, many burial cum habitation sites were excavated and many burial sites were discovered near the areas of habitation sites (Rajan 2009, Ramakrishna 2018: 30-72). However, in the case of Kerala, until now no habitation cum burial sites of the Iron Age is reported. Recently, a thin Iron Age cultural layer found in the excavation trench at Pattanam, proves the presence of an Iron Age population in the west coast of Kerala (Cherian ed. 2015a-i). This site is in the coastal zone and is not associated with burials. However, in Kerala even in the absence of habitational remains, the burial sites have indicated the possible spread of human settlements in the areas nearby the burial grounds during the Iron Age and early historic period. The available distribution pattern of the Megaliths has shown the presence of human involvement in different landscapes including the highlands, slopes, midland areas and coastal zones (Gurukkal and Raghava Varier 1999: 110). The megalithic people largely used the locally available materials including laterite, granite and terracotta for the preparation of different types of burial monuments. For instance, cists and dolmens are largely distributed in areas where granite is locally available, the rock cut sepulchers are found in the laterite plains of northern Kerala and the urn burials are found in the loose soil terrains and in coastal zones. The megalithic population must have used the locally available clay. All these evidence point towards the probability of the formation of permanent settlements surrounding burial areas. Besides these archaeological signs, *Sangam* literature also furnishes many hints towards the human involvement in the Iron Age and early historic landscape of Tamilakam.

According to *Sangam* poems, the people of Tamilakam were involved in different forms of occupation in their living landscape. *Tolkāppiyam* refers to the existence of seven types of geo-economic zones in which the intermediate five are significant (Sundramathy and Indra Manuel ed. 2010: *Porulatikaram- Akattinaiyiyal* 57, Kailasapathy 1968:5). The *Tinai* landscape classification, which was also considered as the inhabited landscape, was peculiar to early Tamil poetry (Subbarayalu 2016:125-130). The five *Tinais* represent five types of geo-economic cultural systems; *Kuṟiñji* (mountain forest tracts), *Mullai* (pastoral tracts in the hillock slopes), *Pālai* (parched zone), *Marutam* (wet land plains) and *Neital* (coastal areas). Both love and military affairs of *Akam* and *Puram* songs respectively are related to these ecological regions

(Sivathamby 1974:20-37). Unlike other *Tinai*s, *Pālai* was the dry zone that formed due to the aridness of either *Kuṟiñji* or *Mullai* tracts. K. Sivathamby, based on a reference in the *Cilappadikaram*, categorically states, “Mullai and *Kuṟiñji* are transformed into distress giving arid region (*Pālai*) by the excessive heat of Sun. *Mullai* and *Kuṟiñji* have taken the shape of *Pālai*, with the rainfall the shape could be transformed to the original *Kuṟiñji* and *Mullai*. It would, therefore, be appropriate to treat *Pālai* as seasonal change” (Sivathamby 1974:20-37).

However, the poetic allusions about the five eco-zones have shown that the people were settled in different landscapes and were involved in different types of occupations in the early historic *Tamiḻakam*. The people must have settled in the hilly tracts, slopes, valleys, arid zones and coastal areas.

Formation of Society

The Iron Age and early historic periods had witnessed the formation of an agro-pastoral economy. The people practiced multiple subsistence forms including hunting, food gathering, cattle rearing, shifting and slash and burn cultivation, along with wetland cultivation. These periods witnessed the profuse use of iron tools and weapons, which had been used for hunting and agricultural purposes.

Hunting and Food Gathering: Hunting and food gathering, the primitive mode of human subsistence, was continued in the Iron Age and early historic period as well (*Akanānūru*- 58:3, 63:17, 78:7). The discovery of iron weapons from the megalithic burials including spearheads, arrowheads, trident, swords etc. have evidently proved the existence of the hunting and subsistence strategy of the contemporary society (Babington 1823:324-30, Sewell 1882: 238-61, Aiyappan (1933) 2007:12-29, Thapar 1952: 3-16, Mehta, and K.M. George 1978, John 1974: 383-86, John 1982: 148-54. Poyil 2006: 94-95, Satyamurthy 1992: 25-31, Krishna Raj 2015). The occupants of the *Kuṟiñji* zones mainly depended on hunting and food gathering (*Akanānūru*-78) The hunters lifted cattle from their neighbouring zones (*Akanānūru*- 63:17) showing that this was also part of the subsistence of the *Kuṟiñji* population. Wild honey was also collected from the forest tracts (*Akanānūru*-94:1-2).

Cattle Wealth: The Archaeo-Zoological evidences from the Megaliths of South India have shown the details regarding domesticated animals which include, cattle, buffalo, sheep, goat, pig, horse, ass, dog etc. (Mohanty and V. Selvakumar 2002: 324-25). The poetical references in *Sangam* texts on the cattle of *Nāṭu* and *Kāṭu* has revealed the domestication of cows (*Puṟānānūru* :166). The milch cow was a commodity of wealth in the *Nāṭu* (*Akanānūru*-155:7). The *Kōvalar* or herdsmen grazed the cattle (*Akanānūru*- 14:7, 54:10, 74:15, 124:14, 214:12, 219:15, 253:12, 264:4, 293:11, 311:9, 321:7, 354:5, 399:11) and procured water for them by digging ponds in the parched *Pālai* tracts (*Akanānūru*-155:8). Incidentally many artificially made ponds with slopping steps, where megalithic burials are also found, were noticed in the pastoral tracts of the Northern Malabar area and it is argued that these ponds were made by the pastoral community

for cattle (Rajesh 2014b: 383-404). The herds of cattle were usually plundered or recovered at the occasion of predatory marches by chiefs and *Maṟavars* (*Akanānūṟu*-63:12). The *Mullai* tracts produced milk and milk products (*Puṟanānūṟu* - 33:3, 215: 3) Both men and women were involved in cattle rearing and they were usually called as *āymakal* (*Puṟanānūṟu* 215:4).

Cultivation: Agriculture became the main base of livelihood of the Iron Age and early historic society. The finding of sickles from various megalithic burials, (Satyamurthy 1992: 14, 21,23) iron ploughshares from Kuppakkolli in Waynad (Gurukkal 1999: 26) and Kuruvattūr (Krishnaraj 2015: 14-15) in Calicut along with iron hoes from Arippa in Kollam (Rajendran 1995:684) have hinted at the process of reclamation of forest tracts and the development of an advanced form of cultivation techniques. Though the megaliths are mainly distributed in the non-productive plains, most of them are found nearby areas of the cultivable plots (Rajesh 2014b: 401). There are different interpretations given for megalithic societies i.e., agrarian communities (Gururaja Rao 1972: 298-99, Ramachandran 1980: 68), nomadic pastoral societies (Leshnik 1974) and societies with mixed economies based on agro-pastoral production (Moorti1994: 44). Based on the Urn burial excavations at Mangadu in Kollam district, T. Satyamurthy argues that “the occurrence of large number of agricultural implements and the location of the monuments overlooking arable land show that the builders of these megaliths were primarily agriculturalists.” (Satyamurthy 1992:21). However, the makers of the advanced form of burial structures, especially the rock-cut sepulchres, umbrella stones and stone circles, had a strong economic base. The paddy husk remains from the megaliths represent the staple diet of the contemporary society (Chedampath 1997: 271). The different types of pottery unearthed from the megaliths, including bowls, plates, cooking pots, storage jars etc. have represented a settled agrarian society in the iron age and early historic times.

More details of the early agricultural practices in various landscapes are found in the *Sangam* texts like the shifting agriculture practiced in the hilly forest tracts (*Kuṟiñji*), the slash and burn cultivation in the pastoral plains (*Mullai*) and wet land cultivation by using cattle in wet fields (*Marutam*). Such tracts were also termed as *Vanpulam* and *Menpulam* (*Puṟanānūṟu* -42:17-18, Gurukkal and Raghava Varier 1999: 174). The *Kuṟiñji* and *Mullai* tracts were considered as *Vanpulam* and the wetland cultivated areas of *Marutam* was termed as *Menpulam* (Subrahmanian 1966:709). The slash and burn millet cultivation was practiced in the *Kuṟiñji* zone (*Akanānūṟu*-88:1-2, 288:5-6). Dry cultivation areas were also known as *Punpulam* (*Patirrupattu* - 6th Ten 8 :15. *Akanānūṟu*-394:16). The open pastoral tracts were termed as *Viyanpulam* (*Akanānūṟu*-14:7, *Puṟanānūṟu*-339:1) The cultivated areas of the *Kuṟiñji* zones were known as *Nāṭu*. The earliest cultivated lands or *nāṭu* were said to have been found in the *Kuṟiñji* zones (Gurukkal and Raghava Varier 1999:174). There is a reference about the ploughing of land within the forest tract by using oxen and applying cattle dung to prepare the land for cultivation (*Akanānūṟu*-262:1-4). As these references occur in the songs about *Kuṟiñji*, it can be assumed that the early settled agrarian population developed in the

hilly areas. The term *nāṭu* stands for such cultivated and occupied land. There is a poem by Kumattūr Kannanār which talks about the expansion of agrarian settlements in the reclaimed forest areas at the time of Imayavarampan Nedumcēral, the early Cēra ruler (*Patirrupattu* -2nd Ten 3:20-24). The reference of *Nāṭu* and *Kāṭu* (*Puṇānūru*-166:19, 187:1) imply the distinction between the occupied cultivated zones and unoccupied resource areas. It is also understood that the earliest *Nāṭu* was developed within the *Kāṭu* or in other words, *Nāṭu* formed as a result of the reclamation of forest tracts and the beginning of agriculture in such tracts. Both production and resource accumulation were part of the economy of the *nāṭu* in the *Kuṟiṇṇi* zone (*Akanānūru*-2), which was also known as *kunṟunāṭu* (*Akanānūru* -182:8) or *malaināṭu* (*Akanānūru*-272:19), meaning the agrarian settlement in the hillock. The references of *Nannāṭu* testify to the existence of prosperous agrarian settlements (*Akanānūru*-83:10, *Puṇānūru*-229:14). Paddy and millets were cultivated in the hilly forest tracts of the *Kuṟiṇṇi* and also in the pastoral *Mullai* tracts (*Akanānūru*-78:15-19).

The pastoral subsistence of the inhabitants of the *Mullai* zone was supplemented by shifting and slash and burn cultivation (Gurukkal and Raghava Varier 1999:168-170). There are references to the plough channel of yoked bullocks in the red soil (probably laterite soil) and the seeds grown in that plough channel found in the pastoral tracts of *Mullai* zone (*Akanānūru*-194:2-5). There is reference to *Koḷuvaṇikan* or the professional merchant who must have sold ploughs in the first century BCE as mentioned in the Tamil Brahmi inscription of Aḷagarmalai in Tamilnadu (Mahadevan 2003:368-384). It further indicates the demand of ploughs and also the expansion of plough-based cultivation in Tamiḷakam. *Puṇānūru* refers to the use of ploughs in the *Kuṟiṇṇi* zone as well. *Uḷavar*, the occupants of the *Kuṟiṇṇi tinai*, often used best the oxen for ploughing the field (*Puṇānūru*-289:2-4).

The wet land cultivation zones located in the valley of the *Kuṟiṇṇi* and *Mullai* tracts and in river belts are referred to as the *Marutam* or *Menpulam*. The term *Uḷavu* (*Akanānūru*-91:11, 262:2) or ploughing or *Uḷātu* or without ploughing appears in literature in connection with cultivation (*Patirrupattu* -2nd Ten 3:2, (*Akanānūru*- 140:2). There are references to the preparation of new plots of land in the swampy areas of *Neital* zone by slashing and burning the plants for dry crop millet cultivation (*Akanānūru*-140:11-13). All these references have shown that millets (*tina*) and paddy (*nellu*) were cultivated in all the zones of early Tamiḷakam. The plough-based agriculture prevailed in the hilly, pastoral and wet tracts and even in the muddy areas of coastal zones.

The literary allusions emphasized a mixed crop pattern in agriculture. Besides millets and paddy cultivation, there was the cultivation of sugarcane in the wet fields (*Akanānūru*-217:4-5, *Patirrupattu* -2nd Ten 3:13) and coconut trees (*Patirrupattu* -2nd Ten 3:7) in the garden land. The pepper vines were widely grown in the hillocks and garden land (*Akanānūru*-2:6, 112:14, 149:10, 182:14 *Puṇānūru*- 168: 2,343:3). Pepper was one of the major spices for which the *Yavanar* or the traders from Ionian Sea in the Mediterranean world, came to Muziris in the Kerala coast (*Akanānūru*-149:10). As

pepper had great demand in contemporary trade, it must have been cultivated in the hilly tracts and garden lands (*Akanānūru*-2:6, 112:14, 182:14 *Puṛānānūru*- 168:2, Krishnan 2017: 158-163). Jack fruit, banana, toddy from coconut and palm trees etc. were also part of the contemporary commodities that were traded (*Akanānūru*-2:1-9, 8:7-8,182:3). There is a direct indication about the nature of garden land or *parampu* where bamboo rice, jack fruit, tuber and honey were naturally grown (*Puṛānānūru*-109:1-7) The garden land surrounding a residence is mentioned in the Sangam literature as *Paḍappai* (*Akanānūru*-204:12, 256: 15, 326:10, *Puṛānānūru*-140, 197, 375, Subrahmanian 1966: 522). Hence, references in literature have shown that the early societies were involved both in production and resource accumulation in the garden land.

Fishing and Salt Making: Geographically, the western part of Kerala has a long coastal zone. This zone is referred to as *Neital tinai* in literature. In the early historic times, the people were actively involved in two major occupations in this zone - fishing and the making of rock salt. The coastal zone was also significant with regards to the overseas exchange in the period under discussion. The term *Vaippin* appears to denote the coastal zone near the seacoast and riverbanks (*Puṛānānūru*- 42: 18. *Paṭiṛrupattu* 2nd Ten-3:9). The major occupation of the people in the coastal zone was rock salt (*Kalluppu*) making (*Akanānūru*-140:3). This zone was occupied by *Paratavar* or fishermen who were involved in fishing in the Sea, and *Umaṇar* or salt makers cum merchants (*Akanānūru*- 140:1,5, 295:9). The fishermen were also known as *Vēṭṭuvar* (*Akanānūru*-270: 3). Salt was exchanged with paddy, which shows the exchange of produce from different *tinai* in the streets (*Akanānūru*-140:7).

Exchange Networks

The archaeological, epigraphical, numismatic and literary evidence underline the development of wide networks of internal and external exchanges in the early historic society of Kerala. The wheeled cart engraving at Edakkal cave in Wayanad (Gurukkal and Raghava Varier 1999:92) and the engraving of a cart on the pottery found at Anakkara push back the antiquity of the movement of goods in Kerala to the pre-historic, iron age and the-early historic period respectively.

The unearthed non-local potteries like Russet Coated Painted ware which is also known as Andhra ware, and semi-precious stone beads like etched and un-etched carnelian beads, amethyst, quartz, etc. (Babington, Thapar, Gurukkal and Raghava Varier, Rajesh) from the megaliths along with the bead manufacturing wastes of non-local semi-precious stones like carnelian, amethyst, quartz, beryl, chalcedony, topaz, onyx etc. from Pattanam excavations (About 1062 semi-precious stone debitage found at Pattanam during the 2007-2014 excavations. Cherian ed. 2015h: 30-31) have attested to the possible development of exchange in Kerala with the northern part of India during the Iron age and early historic period. The mentions of *muttu* or *maṇi* in the *Akanānūru* (*Akanānūru* - 5: 25, 8:15, 25:6, 13:1,14: 3-4, 66:14, 105:5, 213:14, 225:12, 236:1, 240:3, 242:3, 304:13) has represented the availability of beads in the contemporary

society. This term may have referred to gems or all precious stones in general or just sapphire and ruby or sapphire in particular (Subrahmanian 1966:629). Beryl, carnelian, amethyst etc. were available in the Kodumanal region, but all other semi-precious stones must have been brought from the north especially from areas in Maharashtra. The wide availability of beads in the megalithic burials substantiated the peoples' contact with areas outside Tamiḷakam.

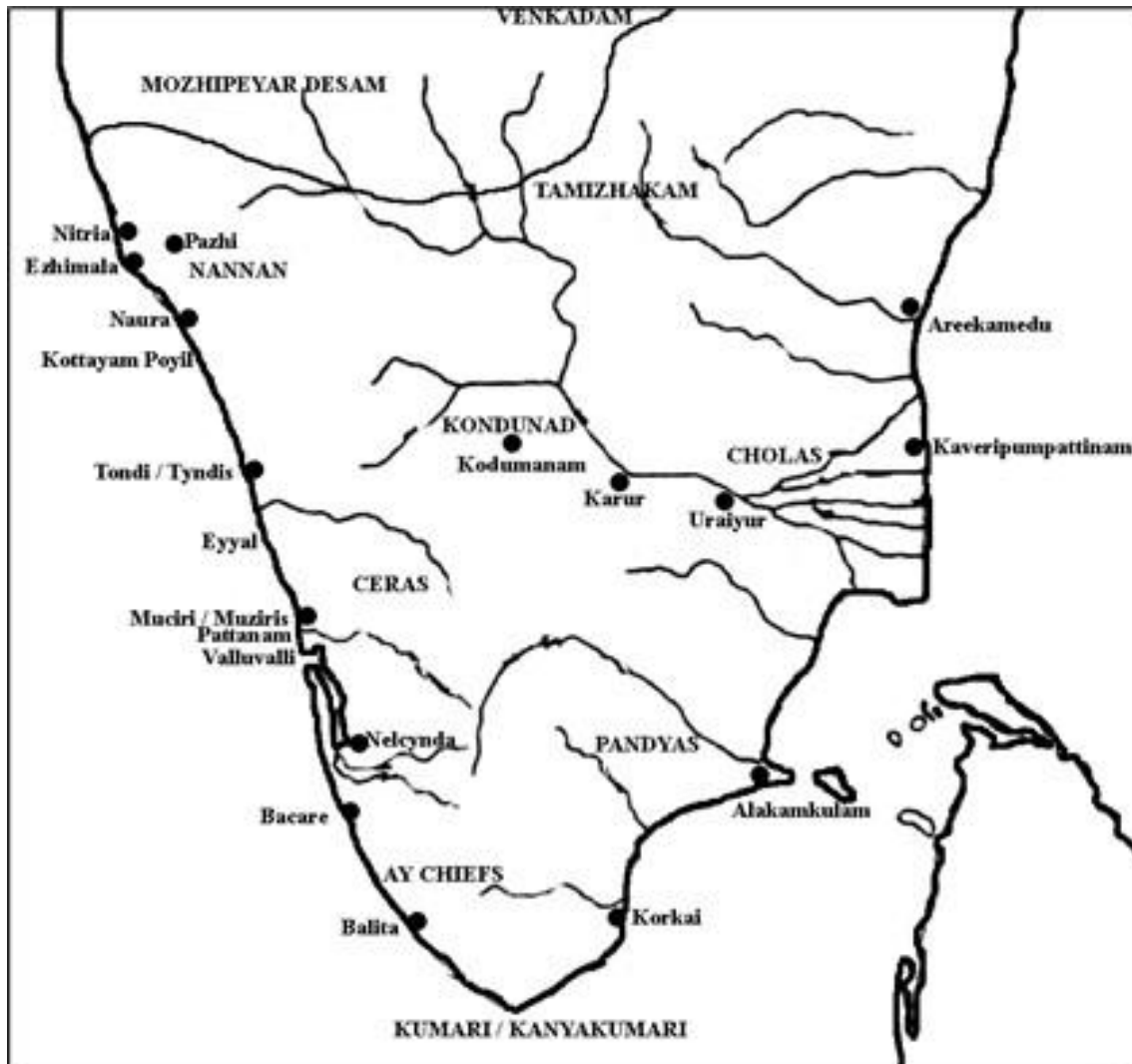


Figure 1: Port towns of the west coast of the Ancient Tamiḷakam (Not to Scale)

The references to *Moliḷpeyaṟ tē enterumār* (*Akanānūṟu* - 67-12) or the area where people spoke another language (non-Tamil) and the *Vaṭukar* (*Akanānūṟu* - 107-11, 213-8, 253-18) or the people from the northern side, have testified to the movement of people from the northern parts of Tamiḷakam mainly for the exchange of goods. The mentions of *koḷu vaṇikan* (plough merchant), *panita vaṇikan* (toddy merchant) and *aruvai vaṇikan* (textile merchant) in the early Tamil Brahmi inscription found at Aḷagarmalai in Tamilnadu (Mahadevan 2003:369-83) has also emphasized on the formation of professional merchants and specialization in exchange activities based on the

commodity that were manufactured during the early historic times. The mode of exchange was goods for goods. Paddy and salt were the standard medium in which goods for goods were exchanged (*Akanānūru*- 60:4, 140:7). The salt merchants transported the salt by using cart (*Akanānūru* -395:9-10). Bullock carts was also used for transporting the goods (*Akanānūru* -295:10). Toddy was one of the major items that was exchanged with paddy in the local trade (*Akanānūru*- 61:10) and the place of its exchange was indicated by a flag (*Akanānūru*- 196:1-2).

The discovery of early Cēra coins and the early punch marked coins have shown that the early historic societies were familiar with the monetary exchange or the purpose of coins in the contemporary economic transactions. The coins of early Cērās, with elephant on the obverse and bow and arrow on the reverse were discovered at Pattanam (Cherian ed. 2015a: 15, 50, 2015b: 14, 2015c: 14, 37, 52, 2015d:19, 29, 56, 87, 102, 127, 131, 2015e: 22, 57, 239, 2015 f: 81, 88, 100, 131, 2015g: 31, 2015h: 36) in Kerala and similar coins with symbols and Tamil Brahmi legend were discovered from Tamilnadu (Mahadevan 2003: 62-63). As the name of the Cēra ruler was imprinted on the coins, it is clear that the Cērās minted these coins. We are not sure whether it was minted for circulation or to validate the political role of Cēra power in the exchange process. The coins from the archaeological site of Pattanam were made with copper and lead. It seems to have been circulated in the coastal towns which were also known in literature as Pattanam. At the same time, we have accidental discoveries of Roman gold coin treasure hoards from Valluvally, Eyyal and Kottayam Poyil, (Gupta (1965)1988, Satyamurthi 1992a) which prove that the Romans brought these coins for the purpose of exchange. Ptolemy, the early Roman writer, complains about the drain of Roman gold due to the greed of Romans for pepper and other spices of the Malabar coast. The references to *ponkācu* (*Akanānūru*- 269: 15-17, 363:8, *Puṛānānūru*-353:2) or *maṇikkācu* (*Akanānūru*-293: 7) have also proved the familiarity of the gold coins, probably the Roman gold coins, in the contemporary society. Such coins were not circulated in the early historic society, but the references indicate that they were modified or fashioned as ornaments (*Akanānūru*- 75:19, *Puṛānānūru*-353:1-4). However, all these evidence indicate that the contemporary society was not completely ignorant about the usage of coins.

According to literatures, there were many port towns like Naurā, Tyndis (Tondi), Muziris (Muciri), Bacare, Nelcynda, etc. in the west coast of Kerala (Scoff 1912: 201-21, Kunjan Pillai 2005: 224-38) (Figure 1). Among these, Muziris or Muciri, located on the bank of Cullī (Periyar) river, is referred to as a prosperous city of the Cērās, where the *Yavānar* arrived with gold and went back with pepper (*Akanānūru*- 149:7-11). The *Yavānas* were the traders from the Ionian Sea (Mediterranean), mainly Greeks and Romans. Muciri is mentioned as the city where fish had been exchanged for paddy and the pepper heaps were stored in houses and boats and also packed in bags that were kept next to the houses (*Puṛānānūru*-343:1-3). The same poem also mentions the gold items carried by the ships which were subsequently brought to the shore in lighter boats (*kalitōṇi*) (*Puṛānānūru*-343:4-6). The *Yavānar* brought gold to the Muziris coast

(*Akanānūru* - 149:9) and they reached the city, which was under the political sway of Kuṭṭuvan, the Cēra ruler who was then adorned with this gold (*Puṛanānūru*- 343:8-10). They collected the resources or products that originated from the land and sea (*Puṛanānūru*- 343: 7) and went back to their homeland. The products from Kerala's coast must have included spices, semi-precious stone items, iron etc. Pepper was one of the most profitable items of trade between India and Rome during the time of the Roman Empire (Scoff 1912:214). The semi-precious stones from India, especially carnelian and agate products had great demand and were highly prized in the Mediterranean countries (Scoff 1912: 193). Pliny mentioned that pepper was one of the expensive cooking items used in Rome and also one of the items of offering given by the Roman Emperor Constantine to the Church under St. Silvester (Scoff1912:214). Pliny indicated that the best iron from the Cēra region was exported to Rome (Scoff1912:209). The profuse discovery of a wide variety of iron objects from megaliths also show the mastery of iron working in Kerala.

The archaeological evidence so far unearthed from the west coast of Kerala, especially at Pattanam, have firmly stated the active trade contact of Kerala's coastal regions with the Mediterranean and west Asian countries. The Roman evidence yielded at Pattanam, which could be part of ancient Muziris, include some fragments of Roman Amphora (About 9017 Amphorae shreds were found at Pattanam excavations from 2007-2014. Cherian. ed. 2015h: 40), Mediterranean and West Asian glass fragments (About 906 glass fragments including Roman pillared bowl were found at Pattanam from 2007-2014. Cherian. ed. 2015h:29), Terrasigillata (About 171 Terrasigillata were found at Pattanam excavations from 2007-2014. Cherian. ed. 2015h:40), and a Carnelian inlaid object with the image of the Greek Goddess Tyche or the Roman Goddess Fortuna (Cherian. ed. 2015h:40). The amphora jars were containers of Roman wine. There is a direct indication of the cool fragrant wine in precious jars brought by *Yavananar* (*Puṛanānūru*- 56: 18). Most recently, about 7.5-kilograms of pepper was discovered in a terracotta jar, probably made in Kerala's coast, at Berenice in Egypt (Sidebotham 2011: 226-227). Berenice, probably the home of the author of *Periplus of Erythraean Sea*, was a leading port of Egypt for eastern trade at the time of writing the *Periplus* (Scoff 1912:55).

The archaeological site of Pattanam also yielded a number of West Asian ceramics like Torpedo jars (About 398 Torpedo jar shreds were found at Pattanam excavations from 2007-2014. Cherian ed. 2015h:25), Turquoise Glazed Painted ware (TGP) (About 412 TGP were found at Pattanam excavations from 2007-2014. Cherian 2015h:25) etc. This evidence confirm the trade relations of the west coast of Kerala with the west Asian countries during the early historic period. The archaeological data unearthed from Vīlinjam, probably a part of ancient Balita, have also accentuated the evidence for trade contacts of the west coast of Kerala with the Mediterranean and West Asian countries (Ajit Kumar et.al 2013). All these findings have shown that Kerala had exchange and trade relations with the northern parts of the country as well as from places overseas especially with the Mediterranean and West Asian countries during the early historic

period. Since the indigenous and foreign coins are reported here, it can be assumed that the contemporary ruling powers must have had some mechanism to facilitate the internal and external trade.

Pottery Manufacture: The megalithic builders of the Iron Age and early historic period were well versed in the pottery manufacturing technology. Both handmade and wheel made potteries were manufactured (Ramamurti. 1992:16). The huge burial urns were handmade and poorly fired, but the big handmade storage jars were adequately fired. Such type of storage jars was unearthed from the early historic cultural layer at Pattanam (Cherian ed. 2015a: 33-48). The megalithic builders made sarcophagus or terracotta coffins and these burial types were discovered from Chevayur and Cheliya in Calicut district. The associated grave potteries are wheel made. The important pottery types yielded from the megalithic burials are Black and Red Ware, Red Slipped Ware, all Black ware, Red Slipped Legged Jars and Russet Coated Painted ware (Gururaja Rao 1972: 257). A Neolithic pinkish ware was discovered along with Megalithic assemblages from Citrari (John 1974:383-86). A channel-spouted vessel typical of the Neolithic period in the form of a dull red ware was discovered from the rock cut sepulchers at Ummichipoyil (Jayasree Nair 2008:13-29). Both these evidence point towards the survival of Neolithic potteries in the Iron Age or in the early historic phase. These megalithic ceramics represent the ritual and domestic functions of pottery that the society had at that time. It is argued that the common types of pottery found in the Megalithic burials are household utensils like bowls with flat bases and jars (Gurukkal and Raghava Vaier. 1999:137-41). The associated earthenware found in graves are all wheel turned and made of well processed clay. The other potteries so far discovered from Kerala are from the excavated coastal, urban and habitation sites at Pattanam (About 300930 body sherds, 55935 Rim sherds, 5801 Decorated Pottery, 581 Edge ground pottery, 9 Spout, 1,586 fragments of Lid, 61 pot sherds of Organic impressed, 20 Handle sherds, 103 Pottery base were found from the Pattanam excavations from 2007-2014. Cherian. ed. 2015h:21-23).

The literary references have also corroborated the archaeological evidence. *Puranānūru* poem refers to the existence of potters (*kalam cey kōvē*) who prepared huge urns (*tālī*) for burial purposes and their settlement areas were always surrounded by smoke from the kiln (*cūlai*) and formed as clouds in the sky (*Puranānūru*-228:1-4, 256:1-7). The wide distribution of urns in connection with the Iron Age and Early historic burial practices in South India proved that *tālī* (urn) was the typical burial form.

Hence, all these evidences confirm that the Iron Age and early historic people had acquired an advanced form of ceramic technology. The available megalithic assemblage includes the roughly made urns and moderately fired fine quality pots which reveal the growth of both handmade and wheel made technology. The application of the manufacturing techniques depended on the function of the pot. For burial purposes, they made rough pots, but for the storage, it was fired in a kiln. Black and Red Ware, the typical Iron Age pottery was manufactured by an inverted firing

process, and this demonstrated the highly developed form of firing techniques. The potteries had different functions. It must have been used for all household purposes including cooking, storage, serving etc. It may have also been used for burial and ritual purposes as well. These potteries were locally produced by a group of people specialized in pottery making. The well fired potteries including black and red ware, red slipped ware and black ware indicated that they were well versed in wheel techniques and prepared kilns for manufacturing.

Metallurgy and Manufacturing Skills: The megalithic builders were very much familiar with metal smelting technology, especially with iron and copper-based alloys. Gold working was also known to them. The unearthed megalithic metal assemblages show an indication towards the development of an advanced form of metal technology during the Iron Age and early historic period. The metal mainly used in majority of the objects was iron. Implements made from other metals like bronze, copper and gold are very few in number.

The megaliths have represented the formation of a technologically advanced society with various skills related to iron working, including the locating of iron deposits, iron quarrying, smelting and manufacturing different implements and objects. Many sites have yielded iron slags that show evidence for the process of iron smelting. It is argued that the iron objects discovered from Machad, Palayannur in Thrissur district and Kuppakkolli in Wayanad gave clues for the iron smelting process (Gurukkal and Raghava Varier 1992: 62). Recently, the Kinalur excavation also produced the remains of an iron Slag. The Iron Age and Early historic people have manufactured different tools according to various purposes and needs that arose in the contemporary society. The following table will show the nature of Iron objects unearthed so far from the Iron Age burials (Table 2).

Table 2: Iron Objects from the Excavated Megaliths

Objects	Megalithic Type	Site	Reference
Trident, Tripod, lamp along with 21 types of iron instruments	Cap stone- Urn	Chataparampu Feroke - 1819 Calicut dist.	Babington 1823: 3: 324-330
A bill hook of Iron, a number of small iron chisels, scraper of iron, bill hooks or weapons, and a double iron hook for suspending a lamp	A Multi-chambered Rock cut cell	Challil Kurinyoli (Patinyatumur i) Calicut dist.	Logan 1984 [1879]: 309-311
One tripod and one dagger	Rock cut cave	Feroke 1931	Aiyappan 2007 (1933): 12-29
Three iron implements	Urn burial	Porkalam 1948 Trissur	Thapar 1952:3-16
Daggers, chisels, hooks and nails	transected cist	Machad and Pazhayannur	Mehta and K.M. George 1978

Tripod, lamp and double-edged dagger	Umbrella Stone	Perambra Calicut	John 1982: 148-153
Iron ploughshare	Cist	Kuppakkolli Waynad	Varier and Y Subbarayalu
1. Four arrowheads, two lamps with hooks, two tripods, a hook, knife, sickle and rod 2. Four rods, three ring stands, two arrowheads, two lamps with hooks and a sickle	One Stone circle with three Urn pits. Two pits contained Iron objects	Cheramangad Thissur	Madras Circle of ASI 1990
Iron sword, iron dagger, tridents, knives, chisels, iron saucer lamps, iron tripod	Stone Circle with rock cut chamber	Naduvil Kannur	K.J. John 1990
Wedges, long cutting knives, sickles, tanged knife and blades.	Urns	Mangadu Kollam	Satyamurthy 1992
Dagger, sickles, hoes, rods and knives	Cists	Arippa Kollam	P Rajendran 1995: 684
Sword, chisel, wedges, tripod, tanged knife, ploughshare and tweezers	Rock cut cave	Kuruvattur 2006 Calicut district	The State Archaeology Department (Krishnaraj 2015: 14-15)
1. One dagger, chisels, hoes, leaf shaped knife, sword and an object with hilted handle on one end and carved projection on the other end, a long spear. 2. Chisel, battle-axe, dagger knife, ladle, a long spear type implement and two implements having edges on four sides	Three cist burials Two contained Iron objects	Kadanad 2008 Kottayam	Nambirajan and C Kumaran 2011:123-128
Trident, tripod, dagger, sword, Arrow heads, rods	Stone Circles, Umbrella Stone	Anakkara Palakkad dist.	Rajan Gurukkal 2008-09

The multiplicity in the object types indicate to the multiplicity of their social needs. The varieties of the objects have also hinted at the resourcefulness of the metal workers. The objects included tools for hunting and agrarian purposes like spear heads, arrowheads, tridents, daggers, sickles, hoes, plough shares etc. The objects like the iron tripod and lamp, which was found enclosed in burials as part of a death ritual, must

have been used for household purposes also. The lamps signify the growth of a permanently settled household system as well. The above table shows that the majority of the tools are associated with the subsistence pattern of the megalithic builders. The number of weapons like swords is comparatively less.

The bronze alloy technology was also developed along with the iron technology. The bronze objects including bronze-vases (John1982: 148-54, John:1990), bronze lid fragments (Rajesh 2014a: 25-26) and bronze pipe lamps (Rajesh 2014: 96) represent an advanced form of household lifestyle of the megalithic builders. As bronze is an alloy of copper and tin, the findings of it establish the sophisticated skills of the megalithic builders in alloy fabrication. Though the number of copper and gold ornaments is less, it exposes the development of a copper and gold-based technology in the contemporary society. It is suggested that the gold ornaments from Puliur, exhibit a high degree of workmanship (Gurukkal and Raghava Varier 1999:134). The population must have been skilled in Bronze making. The available evidences prove that bronze was only used for the manufacturing of ornaments, craft goods, household utensils etc. It was not used for the manufacturing of weapons or other implements.

Ironsmiths of the early historic society were known as *irumpucey kollan* (*Akanānūru*-72:4-6). The poetic depictions of fire sparks due to blowing through the pipe from the forge of a blacksmith (*Akanānūru*-96:6, 202: 5-7) has represented the iron workmanship of the contemporary society. The red-hot iron prepared by the big handed blacksmith, probably meaning the master blacksmith in his workshop, is depicted in another poem (*Puṛanānūru*- 21:7-8, 36:6). There is a reference on the making of a sharpened axe which was used for slashing trees and plants by the master blacksmith (*Puṛanānūru*- 36:6-8). Another poem mentions that the making of an arrow or arrowhead for the hero was also the duty of the blacksmith (*Puṛanānūru*- 312:3). All these references have corroborated the presence of iron axes and arrowheads unearthed from Iron Age burials (Table 2). Pliny mentioned that Cēras sent the best iron to Rome (Scoff 1912:209). This reference has underlined the superior quality of the iron available in the region of the Cēras.

The evidences of gold ornaments including pendants, rings, threads that were probably used in cloth stitching from the Pattanam excavations (About 178 gold objects including ornaments and manufacturing wastages are found at Pattanam excavations from 2007 to 2015. Cherian ed. 2015a: 17,37, 2015b: 21,22,26,28,43,74, 2015c:26,28,43,74, 2015d: 26, 39, 40,41,53, 56,58,60-62,76,88,92-94,100,102,123, 2015e: 26,34-36,38,49-51,60-61,68, 93, 100, 122, 2015f: 40-41, 44, 48, 54-55, 58, 59-60, 63, 65-66,88,90,92,95,107,131,152, 2015g: 27-28, 45,81,101,115,130,158, 2015h: 34,38, 2015i: 43) and gold ornaments from the megaliths of Naduvil (Kannur) (John1990) and Arippa (Kollam) (Rajan Gurukkal and Raghava Varier 1999:136) have shown the expertise of the Iron Age and early historic society in gold working. There are mentions about jewellery working in literatures as well. *Puṛanānūru* mentions the immaculate jeweller (*ācil kammiyan*) or gold smith who fashioned a girdle with many gold coins (*pal pon*

kācu) for the beautiful maiden (*Puṛaṇānūṛu*- 353: 1-3). The discovery of gold coins at Valluvalli, Eyyal and Kottayam Poyil (Gupta (1965) (1988), Satyamurthy 1992a) corroborated to the accessibility of Roman gold coins in the contemporary society. The early Tamil Brāhmi inscription of the 2nd century CE refers to *pon kolavan*, possibly indicating a gold smith (Mahadevan2003: 369). The discovery of gold beads (Cherian ed. 2015d: 54, 93, 2015f: 54, 88,95, 2015h: 34, 38, 258, 439) and gold foiled glass beads (Cherian ed. 2015e:22,37,45,80,92,97,98-100,111, 2015f: 40,42, 44, 54, 55, 64, 90,100, 2015g: 94, 193,194,206, 208,209,215,222,226, 249, 254; 2015i:193-194, 198) from the early historic archaeological layers at Pattanam show two types of gold working; the actual gold ornament making and the making of imitations.

Architectural Knowledge: The megalithic builders and early historic societies acquired various knowledge and skills associated with multiple forms of occupations. The archaeological and other contemporary evidence indicate that the Iron Age and Early historic societies attained proficiency and expertise in the execution of various architectural forms (Rajesh 2017:492-494). It mainly includes, burial tombs made using granite and laterite and brick structural remains like those found in the Pattanam excavations. The available evidences proved that these pre-temple building societies were skilled in masonry and developed elegant architectural plans while having systems for its orderly execution. The laterite and granite burials have exemplified the multiplicity of skills required for the preparation of various architectural plans according to the nature of materials and the requirements of the contemporary society. Though the megaliths made of granite blocks are found all over Kerala, the laterite structures, especially rock-cut chambers carved in the laterite plateaus, are confined to the northern parts of Kerala, mainly distributed in the present-day Thrissur, Palakkad, Malappuram, Kozhikode, Kannur and Kasaragod districts and only one such site is reported so far from the Wayanad district.

Rock-cut chambers are one of the major architectural forms fashioned by the megalithic builders. The different types of chambers so far discovered in Kerala include port hole chambers, pillared chambers, chambers with square or rectangular inner surfaces and pillars, multi-chambered structure, chambers surrounded by stone circle etc. The multiplicity in the architectural type has signified the expertise of the megalithic builders. These builders must have used sophisticated iron tools for carving purposes. Chisels were found in the megalithic contexts. The chisel marks are also very much visible in the inner wall of the rock-cut caves. Interestingly there are references about the iron *Uḷi* or chisels in Sangam literature as well (*Akanānūṛu*- 33-10, 55-3, 210-2, 343-7. Subrahmanian 1966:146). We are not fully aware about the criteria used for the fixation of the plan of burial monuments. The discovery of an unfinished rock cut cave to the north of the excavated rock cut cave at Citrāri in Kannur district points to the method of cave carving adopted by the megalithic builders (John 1974: 383-86). This unfinished cave must have been discarded by the megalithic builders owing to the inappropriateness of the plot for the cave, which had further signified to the cleverness of the builders to select the plot based on the quality of the laterite or other necessary

materials. However, the deciding factor for the burial type could have been based on the availability of materials, the societal grandeur and the political status of the dead person along with the economic base of the builder.

The splendid architectural plans of the megaliths proved the people's mastery of masonry and execution and it also represented the extensive evidence for the use of iron implements. Umbrella stones, popularly known as *Kodakkal*, are another type of megalithic monuments which speaks for the proficiency of the megalithic builders in laterite working. These types of megaliths are mainly confined to the northern part of Kerala, especially found distributed towards the north of the present-day Thrissur district extending up to the Kasaragod district. This type also epitomized the population's creative thinking process to protect the monument from the incessant rainy seasons (Rajesh 2017:490-91).

The early historic site of Pattanam unearthed cherished archaeological evidences to expose the engineering skills of Kerala's early societies. The discovery of a brick wharf structure, remains of walls, a room structure and a huge quantity of debris belonging to the brick structures etc (Cherian ed :2015a: 42-93, 2015b: 37-72) have indicated the advanced phase of masonry practised in the early historic period. The presence of post holes in the brick floor or wharf structure connoted the possible erection of a wooden super structure. The discovery of a roof tile, which had a holed portion for fixing the nail, along with subsequent findings of iron nails offered supporting testimony to substantiate the engineering knowledge of the early historic society.

Textile and Leather Works: The discovery of terracotta spindle whorls from the Pattanam excavations (About 70 spindle whorls were yielded from 2007 to 2014 Pattanam excavations. Cherian ed.:2015a: 40, 54, 2015b: 19, 24, 45, 55,69, 2015c:14, 26, 29, 54, 2015d: 29, 30, 33, 39, 46, 53, 54, 59, 68, 70, 86, 95, 2015e: 25, 28, 36, 61, 65, 79, 81, 100, 121,128, 2015f: 58, 59, 66-67, 90, 95, 98, 101, 111,156, 165, 2015:33, 45, 111-112, 115, 130, 139, 2015h: 36-37, 39, 96, 159, 177-178, 181, 238, 246, 260, 265, 281, 297, 241, 251) have substantiated the weaving tradition of the early historic society of the west coast of Kerala. References about the *uṭai* or dress and dress materials are found in the Sangam texts (Akanānūṟu- 7: 19, 54: 10), which shows the prevalence of a tradition that gave importance to clothing in the early historic society. The references to *Cīṟukarōṭan* appears to indicate the leather worker (Akanānūṟu- 1:5) The references to various drums made of leather like *muraṣu*, *tudi*, *para*, *muḷavu* etc that was played at various ritual occasions. have also hinted at the leather working traditions (Akanānūṟu- 23:2, 159:9, 155:14).

Settlement Forms and Social Order

The early Kerala society was not based on any caste system, instead it varied according to their inhabited landscape (*Tiṇai*) and occupation (Kunjan Pillai 2005:63). The people were familiar with various skills and techniques and interacted with the people outside of Tamiḷakam and overseas.

Settlement Areas: Though the megaliths are burial monuments, it was made by the existing population as their tribute to their ancestors. In most contexts, the megaliths are found as clusters. This shows that the megalithic society prepared a separate space for funeral practices including cremation or burial and for the preparation of these burial monuments. The abundant distribution of megaliths, especially in the midland and highland regions, has emphasised to a population increase and the spread of settlements in the areas near the burial spaces. The megaliths and megalithic assemblages represent the possible formation of settlements of the people who were involved in various occupations in the nearby areas of the megalithic monuments. There are many references to the lamp like *naḷicuṭar* (*Akanānūru*-65:11) in literature, which also shows the spread of permanent settlements rather than a temporary night camping by the population. The *kānavar* hanged the lamp in the night at the guard house in the slash and burned cultivated millet tracts of the *Kuṟiñji* zone (*Akanānūru*-88:1-6). A poem mentioned the lamp with a garland placed at the house at the time of a marriage ceremony (*Akanānūru*-86:4). All these indicate that the lamp was used in settled spaces as well as in ritual contexts. The unearthed iron lamps from various megalithic sites archaeologically validates the use of lamps in the early historic societies (Table 2).

Nāṭu, Ūr, Kuṭi, Cēri / Tuṟai, Āvaṇam, and Paṭṭinam: Nāṭu was the larger agrarian settlement comprising of Kuṭi, Cēri and Ūr (*Akanānūru*- 331:7-8). It is argued that nāṭu appears extensively in the Kuṟiñji songs (Gurukkal and Raghava Varier 1999:174). The occurrence of nāṭu in these songs indicate that the cultivated areas were developed in the forest tracts of hilly areas. The prosperous cultivated regions were termed as nalnāṭu or nannāṭu (Paṭiṟrupattu – 2nd Ten:16, 34. *Akanānūru* -83:10). Though the Nāṭu was the settled agrarian unit, the Kāṭu was the unoccupied forest tract. Both are mentioned as separate entities, but the early nāṭus were developed within the kāṭu. Kāṭu is mentioned along with kāvu and Nāṭu with tēyam or waste land (*Akanānūru*-383: 3-4).

Ūr was the grouping of Kuṭi (*Akanānūru*- 9: 10). The size of the settlement varied. The small settlements were known as Cīrūr (*Akanānūru*- 9-10, 152:2, 331:8. *Puṟanānūru*-297:4). The mention of Mūtūr (*Akanānūru*- 15-7, Paṭiṟrupattu 2nd Ten:18) indicate the existence of traditional and archaic settlements. The prosperous agrarian settlement areas were known as nallūr and the chief or settlers of the ūr were known as ūran, nallūran (*Akanānūru*- 14-21). Ūr appears as the settlement areas of the Brahmins as well. Cellūr (*Akanānūru*-220:3), the archaic Brahmin settlement of Kerala, is identified with the present Talipparamba of Kannur district (Veluthat (1978) 2013:35-41).

Kuṭi was the settlement site of the inhabitants of different eco-zones or Tinai. The small settlement areas were known as Cīrukuṭi (*Akanānūru*- 7: 22, 75:7, 103:7, 110:13, 118:4, 140:1, 192:12, 297:16, 300:14, 312: 5, 318:12). There are mentions of Cīrukuṭi in the forests (*Akanānūru*- 315: 18), Cīrukuṭi in the slopes of the hills (*Akanānūru*- 192:12), Cīrukuṭi surrounded by mountains like a fence (*Akanānūru*- 232: 6), Cīrukuṭi of the

barren mountain tracts (Akanānūru- 284:7), Cīṟukuṭi of fishermen in the seashore or tuṟai (Akanānūru-70:2, 250:11,320:5) etc. The term Cīṟukuṭiyān stands for the member of the Kuṭi (Akanānūru- 228-13). The term Kutī also occurred in the poems to denote the dwellings (palkuṭi) of the inhabitants (Akanānūru- 228-13).44:16). The chief of the Kuṭi was known as Kuṭipati (Akanānūru-77: 6). There are references to Kuṭis of Pāṇan (bards), Tuṭiyan (who play Tuṭi drum), Paṟayan (drummer at funeral) and Kaṭampan (worshipper of Murukan) (Puṟanānūru- 335:7-8).

The Cēri were the streets occupied by people involved in different occupations and it appeared in the songs related to all eco-zones of ancient Tamiḷakam (Akanānūru- 15:7, 65:4, 115:4, 347:6, 383:3, 76:2, 146:6, 216:16, 276:7, 110:2, 140-8, 220:1, 390:9).

The Cēri were crowded streets that developed in the Ūr and this space appears as the centre of gossips. (Akanānūru- 65: 4, 76, 110:2,115:4,347:6-7). The Cēri and Ūr were separate areas (Akanānūru- 220: 1, 383:2), but the first one seems to have been developed within the second. Cēri primarily appears as the streets in the traditional settlements or Ūr (Akanānūru- 15-7, 347:6-7). The itinerant merchants who announced the exchange value of salt for paddy were moved through the Cēri (Akanānūru- 140:7-8,390: 8-9). The presence of prostitutes in the streets of Marutam zone is also mentioned (Akanānūru- 146:6). Like Cēri, Āvaṇam also stands for the active space of local exchange where the people exchanged their goods for goods (Akanānūru- 227:21-22).

Tuṟai were the larger settlements on the sea shore mainly inhabited by fishermen and salt makers (Puṟanānūru- 84: 6). They mainly appeared in the Neital and Marutam zones. These settlements were actually the combining of Ūr and Kutis of the coastal zone (Puṟanānūru- 400:22). The chief of the Ūr also commanded the rights over Tuṟai, which shows that the Tuṟai was part of the Ūr (Akanānūru- 276:5). The coastal settlements in the river shores were also known as Tuṟaiyūr (Puṟanānūru- 136:25). The water ponds were termed as Nīṟtuṟai, where animals and human beings consumed water (Puṟanānūru- 94:2, 96:7). The biggest settlement units of the coastal areas were known as Peruṇtuṟai (Akanānūru- 70: 10,320:10; P.N- 42:15; P.N- 67:6). The head of the Tuṟai was known as Tuṟaivan (Akanānūru- 30:11,40: 16, 70: 4, 170: 7, 190:3, 210:6, 380:3). Paṭṭinam also appears as the coastal exchange or trading centre (Akanānūru- 227:20).

There are mentions of terms like Iṟai (Akanānūru- 9:18), Manai (Akanānūru- 21:1, 46:9, 50:11), etc. which seem to indicate the early historic dwellings. The terms like Cīṟumanai and Nanmanai (Puṟanānūru- 29:20, Akanānūru- 22:16) demonstrate the difference in size and status of the houses.

Social Groups: The early historic societies were organized on the basis of occupations and they were involved in different activities and were settled in different eco-zones. *Kuṟavar*, the inhabitants of *Kuṟiñji*, were mentioned as gatherers of honey and toddy (Akanānūru- 78: 7). They were depicted as hunters with tridents (Puṟanānūru- 236:2). The unearthed remains of iron tridents from many megaliths have corroborated this

literary allusion (Table 2). These inhabitants were involved in shifting cultivation and such cultivated lands were known as *nāṭu* (*Puṛānānūṟu*- 168:4-7), which is already discussed above. They depended on the rainy season for shifting cultivation in the hillocks. *Kuṟavar* gave offerings to *Kaṭavuḷ* or God for timely onset of rainy seasons in the hillocks and to enable them to cultivate the land during the appropriate time, which was also needed for the development of agrarian villages, the *nāṭu* (*Puṛānānūṟu*-143:1-7). *Kuṟavar* lived in small huts known as *Kurampai* (*Puṛānānūṟu*- 129:1). The house of the *Kuṟiñji* people in the garden lands were mentioned as *Mania* (*Akanānūṟu*-272:10-11). The chief of their settlements seems to have been called as *Kiḷavan* (*Puṛānānūṟu*- 129:4-5). *Kānavan* appears to be the settler on the *Kuṟiñji* tracts who was involved in slash and burn cultivation (*Akanānūṟu*-88:1-5).

Vēṭṭakkaḷvaṟ, that is *vēṭar* or hunters who sometimes became *kaḷvaṟ* or robbers were found in a *pālai* or the trans-*tinai* region that might have formed due to the decline of either *Kuṟiñji* or *Mullai*; further indicating that the people were identified mainly on the basis of their survival pattern or occupation. If a hunter transformed into a robber, he became recognized as a robber or a hunter cum robber. *Maṟavaṟ* were plunderers who often robbed cattle herds (*Akanānūṟu*-63: 12) and attacked the itinerary merchants. The cowherds and shepherds were mentioned separately in the poem. The cowherds of the *Mullai* tract were mentioned as *kōvalar* (*Akanānūṟu*-14:7, 54:10, 74: 16, 124:14, 155:8, 219:15, 253:12, 264:4, 293:11, 311: 9, 321:7, 354:5, 399:11, Subrahmanian 1966: 342) who used a stick to graze their livestock (*Akanānūṟu*- 74:15-16). The shepherd was referred to as *Itaiyan* of *туру* or goat/sheep (*Akanānūṟu*- 94:4, 274: 4, 8, 394:2). They were also mentioned as *Kuṭavar*.

The cultivators in the hillocks, garden lands and wetlands were mentioned in different terms. The *Kuṟavar* in the hillocks were involved in mixed crop cultivation. *Uḷavar* (*Puṛānānūṟu*- 65:4), as the tilling occupational groups, were found in the *Vanpulam* (*Kuṟiñji* and *Mullai* tracts) (*Puṛānānūṟu*- 42: 13,18) and *Menpulam* (*Marutam*) (*Puṛānānūṟu*- 395: 1-2). The cultivators in the *vayal* or *kaḷani*, or wet lands, were termed as *Uḷavar* (*kaḷaniyuḷavar*) (*Puṛānānūṟu*- 13:11, *Patirrupattu* – 9th Tens - 10:41). They were ploughing the land by using the best bulls (*Puṛānānūṟu*- 289: 2-3). *Uḷavar* were depicted as cultivators who were eating rice and consuming spicy fish curry and excessive toddy (*Puṛānānūṟu*- 384:8, *Akanānūṟu*-37:2-3).

The *Uḷavar* prepared a platform known as *kaḷam* for storing and thrashing the harvested paddy sheaf (*Akanānūṟu*- 30:8). Such paddy sheaf storing plots were prepared in the garden lands very close to the harvested fields (*Akanānūṟu*- 41:4-5). They were also involved in the winnowing of the thrashed paddy. The *Uḷavars* must have kept some portion of the paddy after harvesting, as seed for the upcoming seasons (*Puṛānānūṟu*-230:12-14). They settled in the nearby areas of cultivated tracts. The skilled labour forces like *Kollan* (*Puṛānānūṟu*- 21-7. 170-15. 180-12) or Iron smith, *Taccan* or carpenters (*Puṛānānūṟu*- 87:3), *Kammiyan* or gold smith (*Puṛānānūṟu*- 353-1), potters etc. were also the part of early *Tamiḷakam*.

Brahmins: The Brahmins were mentioned by many terms like *Pārppān* (*Puṛānānūṟu*- 9:1, 34:3), *Antaṇar*, *Amantaṇar*, *Munivaṟ*, *Mutalvar*, *Neṭiyōn*, *Āriyar* etc. The *Pārppān* were brahmins who did not learn Vedic texts and did not perform ritual sacrifices (*Akanānūṟu*- 24:1-2). Therefore, they were naturally unfit for performing the Vedic rituals and sacrifices and were forced to do other jobs for their livelihood (*Akanānūṟu*- 24:1-2). They appear in literature as the messengers of *Umaṇar* in the exchange routes and were sometimes killed by the *Maṟavar* or robbers, as well (*Akanānūṟu*- 337:5-20). There is a reference that gives warning to the *Maṟava* saying “none of your ancestors did anything that the Brahmins did not like” (*Akanānūṟu*- 43: 11-14). Such allusions have shown that *Pārppān* got a propitious status from the society who considered hurting Brahmins as a sin. *Puṛānānūṟu* states that “gladden impoverished Brahmins who come begging for wealth by filling their moist cupped hands with gold flowers and gold coins along with the oblations of water” (*Puṛānānūṟu*- 367:3-5, Madhava Menon 2011: 543-544). The *Pārppān* or *Piṟappālar* were desirous of liberation and in order to attain salvation restrained their senses (*Puṛānānūṟu*- 367:11-13). They were respected by the Cēra rulers (*Patirrupattu* – 7th Tens-2:1). All these literary mentions shown the expression of courtesy by the society towards the Brahmins.

Antaṇar and *Amaṇtaṇar* were the Brahmins who learned the Vedas, performed the Vedic rituals (*Puṛānānūṟu*- 1:6, 2: 22, 122: 3, 361:4-5, 397:20) and also taught the Vedas (*Patirrupattu* – 3rd Ten-4:8). The term *Antaṇar* stands for the highest birth in the contemporary society (Subrahmanian 1966:34). The poet Kapilar eulogized the precious grant of the Cēra ruler Celva Kaṭuṅko to the *Antaṇar* (*Patirrupattu* – 7th Ten-3:5-6). *Munivars* were the Brahmins who claimed to know the four Vedas and practiced rituals in the temple of the three-eyed god or Siva (*Puṛānānūṟu*- 6: 17-20). *Mutalvar* was another term to indicate the well-versed Brahmins who restrained their senses and learned the four Vedas (*Puṛānānūṟu*- 26:12-13). *Mutalvars* were said to have given blessings to the wounded kings to get to heaven by cutting their body with a sword and subsequently burying it (*Puṛānānūṟu*- 93:7-15), which probably indicates the involvement of Brahmins in the death rites as well.

Apart from the above-mentioned Brahmins, the poetic allusions have explored the antagonistic nature of *Āriyans* in ancient Tamiḻakam, who disturbed the existing socio-political systems. The *Āriyar* were probably the Vedic Brahmins from the northern parts of India (*Patirrupattu* – 2nd Ten-1: 23-24, *Akanānūṟu*- 276: 9, 398:18). They are depicted as a hostile group who did military operations against the Cōḷas but were later defeated by them (*Akanānūṟu*- 336:22). The same situation occurred with the Cēras also (*Patirrupattu* – 5th Tens- patikam 5:6). *Āriyar* appeared as the war like group who were implicated and defeated in combat (*Akanānūṟu*- 396:16). The above discussion makes us realize that some of the Brahmins did not learn the Vedas but most of the others were well versed in it and performed Vedic rituals. It seems to possibly shown the different time periods of Brahmin migration to Tamiḻakam. Some Brahmins like *Antaṇar* were in fact of indigenous origin and go back to a class of priests (Hart 1999:54-55). The *Āriyar* were the northern Brahmins who must have had martial powers as well.

Influences of Buddhism and Jainism: As the Kēraḷaputra are mentioned in the Asoka's inscription along with the Cōḷa, Pāṇḍya and Satiyaputo, (Sircar (1957) 1975:41-42, Thapar 1997: 251), the Buddhist ideas must have percolated to Tamiḷakam even before the Common Era. The presence of Vaṭukar (Puṛaṇānūru- 378-2, Akanānūru-107-11, 213-8, 253-18) as powerful warriors in the forefront of the Mōriyar in their expedition to the southern countries (Akanānūru-281:7-8), also underline the interaction between the North and the South. According to George Hart, there are many poems on the ephemeral nature of life that seem certainly to have been influenced by Buddhism and Jainism (Hart 1999:69). It is argued that the Puṛaṇānūru poem 27 "seems to reflect the Four-Fold Noble Truth of Suffering of Buddhism, though not in terms of exactly equivalent to those in the Buddhist scripture" (Madhava Menon 2011:138-40, Puṛaṇānūru- 27: 11-14). The Jain practice of fast unto death of the Cēra ruler Utiyan Cēral, which is termed as *Vaṭakkirikkal* (literally sitting towards north) mentioned in literature (Puṛaṇānūru- 65:10-11,66:8), shows the Jain influence on the ruling elite and probably in the society as well. The fragmented inscription on a rim portion of a storage jar with five Tamil Brahmi letters deciphered as "ama ṇa," from Pattanam excavation (Cherian ed. 2015e:35) is identified with Śramaṇa or Jain presence in the west coast of Kerala.

Women and Marriage Relations in the Society: Women appears in different situations in poems as spinster, cohabitant, prostitute, maid, mother etc. (Akanānūru- 6: 10-14). Women were involved in all subsistence forms in the contemporary society including hunting, resource gathering, slash and burn cultivation etc. A division of labour was practiced in the initial stage but gradually the working space of women became limited to the house. They appear in these songs as itinerant toddy merchants (Akanānūru- 157:1-2). They wore ornaments of semi-precious stones and gold coins. They were morally categorized in many sections as young girls approaching puberty (Akanānūru- 7:1-7), noble women who hold their chastity, women without chastity, prostitutes (Akanānūru- 16:7), maids (Akanānūru- 48:5, 25) etc.

Women were not seen entering into sacred places during menstruation. A poem indicates that they were scared to even touch the vessels of the sacred spaces of *Muruka* during their menstruation (Puṛaṇānūru- 299:6-7). As this reference appeared as an example or simile to mention the victory of a minor king who had an inferior cavalry over a more powerful king who had a bigger cavalry but who was forced to stand shy away from the battle field; making it clear that the women's code of conduct during their menstruation was very much familiar to the early historic society. Women in their menstrual phase are represented as inferior and a polluted figure in the society, which indicates the development of a male dominant dwelling locale and the expansion of the concept of pollution, probably in the wake of the emergence of a Brahmanical ritual culture in the society. A poem has indicated the social setting of the early historic period and has stated the limited freedom of a young girl who reached puberty has in the society. She has to be aware about her body and keep away from sacred spaces and the crowded zones (Akanānūru- 7:1-7).

The people of Tamilakam had a relatively simple conception of marriage similar to the conventional union of a man and a woman (Sastri (1955) 2006: 117). The marriage system was gradually transformed into a Brahminical tradition and the concept of morality became dominant in the society. *Tolkāppiyam* states marriage as a sacrament attended with ritual was established by the Aryans (Sastri (1955) 2006: 117). Two terms, *Kaḷavu* and *Karpu* are mentioned in the *Sangam* literature in connection with marriage and familial life of women in the society. *Tolkāppiyam* states *Kaḷavu* as pre-marital clandestine affairs and *Karpu* as the married stage of a women and it also warned the chance for generating gossips in both stages (*Tolkāppiyam Porḷadhikāram. Karpiyal-* 160). The *Kaḷavu* stands for unfair pre-marital love affairs and cohabitation of the women with her lover. *Karpu* stands for the chastity of the women (*Akanānūru-* 6:13, 9: 24, 33:2, 198:12, *Puṇānānūru-* 163:2, 249:10, 383:14). *Karpu* was the loftier virtue of a girl or woman (*Akanānūru-* 323:7). The coyness of a woman was considered as a quality and her chastity as an asset (*Akanānūru-* 9:24). *Karpu* also appears as the supreme quality and strength of the *Manaivi* or housewife (*Akanānūru-* 33: 2). The women, who firmly holds *Karpu*, was forced to stay in their household without interfering in society (*Akanānūru-* 114: 13). *Karpu* was represented as the sacred strength of a women as well (*Akanānūru-* 73:5, 184: 1, 314:15, *Puṇānānūru-* 138:3). The *Karpu* or chastity of a girl is praised as her highest value at the time of her marriage (*Akanānūru-* 86:13-14) and also considered it as her fitness for wearing jasmine flowers on the head (*Akanānūru-* 274:12-14), probably during the occasion of marriage. The young girls are very conscious in keeping their chastity as they feel free from that irritating mindfulness when they are getting married (*Akanānūru-* 136:19). The husband with a wife who hold her chastity is glorified (*Puṇānānūru-* 3:6) and sometimes it is considered as the only remaining wealth even at the time of severe starvation or famine of the hero. (*Puṇānānūru-* 122:8-9, 196:13). The gracious wives with the impeccable chastity of a Brahmin are also mentioned in the poem (*Puṇānānūru-* 166) All these show that the contemporary society was very much concerned about the morality of women and such indications point towards the formation of a male dominated patrilineal society.

The term *Kaḷavu* and *Karpu* also shows the changes that occurred in the marriage relations in *Sangam* society. The living together or the union of lovers was considered as immoral and the women who were holding their chastity without fault were glorified. Only women were subjected to both these conditions. The male members were outside the moral codes. The term *Manai* and *Maṇaivi* stands for the house and wife respectively. The development of *Manai* or wealthy houses, seems to represent the changes in the gender relations and the emerging restrictions over the movement of women (Madhavan 2015:269). It shows that the *Sangam* period witnessed the formation of a male dominant society and women were mainly forced to be involved in the household activities.

Ancestral Worship: The *Sangam* works mention different types of burial practices. *Puṇānānūru* refers to *Itukavaṇto*, *Suṭukavaṇto* (*Puṇānānūru-* 239:20), that is the body is either exposed or cremated. The post *Sangam* works like *Maṇimēkhalai* refers to *iṭuvōr*

and *suṭuvōṛ* (*Maṇimēkhalai* -VI 65-73, Rajan 2000: 11-12) meaning the people who expose the dead body to degrade and the people who expose the body to fire respectively. The same poem also refers to different types of burial structures like *toṭukulipaṭupppōṛ* i.e., those who laid the body or mortal remains in pits dug into the ground, *tāliyiḷ kavippōṛ* i.e., those who placed the body or the remains thereof inside a burial urn and inverted a lid over it and *tālvayinataippōṛ* i.e., those who were interred in a sub-terrain cist. *Maṇimēkhalai* contains this song while describing the necropolis at Puhar or Kaverippattinam. As these types of megalithic burials are widely found in Kerala, this literary reference can be taken as a hint to the burial practice of Kerala as well. The wide distribution of megaliths has shown the ceremonial homage given by the early historic society towards their ancestors. The megalithic builders believed in ancestral worship and the burials were treated as the pagoda of the spirit.

There are references on the offerings of the living people to their dead ancestors (*Puṛaṇānūṛu*- 234). The offerings of a widow to her dead husband on the platform that was prepared by rubbing cow dung is mentioned in the poem (*Puṛaṇānūṛu*- 249:10-14). There is a reference to the offering of toddy as *Pali* (*Bali*) to the *naṭukaḷ* or menhir at dawn every morning and lamps filled with ghee (*Puṛaṇānūṛu*- 329:1-4). The *Patukkai* and *naṭukaḷ*, that is the cairn circle entombing a cist and the Menhir or hero stone that is erected to commemorate the murdered warrior or *Maṛavaṛ*, was worshipped as *Kaṭavul* or God and obeisance and offerings were made (*Akaṇānūṛu*- 35:5-8). *Patukkai* is identified with cairn circle entombing a cist. (Rajan. 2000:26-27). *Naṭukaḷ* was worshipped as an ancestral god (*Puṛaṇānūṛu*- 335). It is believed that the spirit of the dead person resides in the stone (Hart 1999:25). The poet Māmūlanār refers to Utiyan Cēral's solemn offerings to his dead ancestors and the great feast held at that occasion (*Akaṇānūṛu*- 233:8-9). The contemporary society worshipped their God only using such memorial stone (*Puṛaṇānūṛu*- 335: 10-11).

Political Entities

The available archaeological evidence including megaliths and the artifacts from Pattanam signify the possible existence of some sort of a political hierarchy in the Iron Age and early historic society. It is observed that differences in the size of the megaliths and their subsequent burial goods suggesting differentiation in status and ranking, point to the nature of political power (Gurukkal and Raghava Varier 1999: 145). The huge burial monuments and valuable burial goods like semi-precious stone beads, iron weapons etc. must represent the possible existence of a powerful political system, which had a sway over the resource mobilization and redistribution. The discovery of copper and lead coins with Cēra emblems (bow and arrow and elephant) from the early historic archaeological layer at Pattanam also underline the existence of a political system which might have issued coins as well.

As the archaeological remains are almost silent about the nature of this political system, one has to look into the contemporary literatures and epigraphs. According to the available literature and Tamil Brahmi epigraphs, Tamiḷakam was ruled by three

major political powers known as *Mūvar* or *Mūvēntar* who had the royal drum or the muracu as the symbol of their commanding power (*Puṛaṇānūru*- 35:4, 110:1, 338: 8, 350:4-5, 357: 2, Hart 1999: 14-15). The Cēra, Cōḷa and Pāṇḍya were the *Mūvaṛ* or *Mūvēntar*, who were mentioned in the 3rd century BCE inscription of Maurya emperor Asoka (Sircar 1975 (1957): 41-42, Thapar 1997: 251) as the kings of South India. The early Tamil literature also mentions the Mōriyar or Maurya as the Emperor (*Puṛaṇānūru*-175:6), which proved the reciprocal familiarity between the North Indian Mauryan Empire and Tamiḷakam and also the contemporaneity of Maurya and the *Mūvēntar*. The kings of South India had their own political emblems like tiger for Cōḷa, bow and arrow for Cēra and carp fish for Pāṇḍya. Besides these three major powers, the literature refers to many minor chieftains as well who belonged to *Vēḷir* and *Kiḷār* line (Gurukkal and Raghava Varier 1999:199, Subbarayalu 2014: 53).

Patirrupattu eulogizes Perum Cēral Irumpoṛai as the Cēra ruler who had the power to control the *Vēntar*, *Vēḷir* and other minor chieftains (*Patirrupattu* – 8th Ten 5:4, 9th Ten 8:13, *Akaṇānūru*- 246:12). *Patirrupattu*, the collection of eulogizing songs, has also shown the political prominence of the Cēras in the ancient Tamiḷakam (Gurukkal and Raghava Varier 1999:205). The Cēra ruler Imayavarampan Neṭumcēral is mentioned as the lord of the prosperous *nāṭu* with sea, mountains, rivers and wetlands (*Patirrupattu* – 2nd Tens 5:16-17). These are the typical references to the topographical feature of the Cēra land and the indications to the resource base of the Cēra power. Cēras seem to have acquired political prominence in the ancient Tamiḷakam through resource mobilization from sea and land. They must have accumulated wealth from the mountains, seas and other resourceful tracts and redistributed this to their subjects (*Patirrupattu* – 6th Ten 9:15-16). They are depicted as the political power who defeated the entire political territories of Aryans in the North and extended their rule up to Kanyakumari in the South (*Patirrupattu* – 2nd Ten 1:23-24). Though such illustrations can be only considered as eulogies of the Cēra powers, it seems to show that the contemporary society was aware about the political scenario to the north and south of the Indian subcontinent. The reference to Maurya, mentioned earlier, have also shown the reciprocal political contacts of the Iron Age and early historic political powers of the North and South.

The territorial boundary of *Mūvar* is referred to as *Tamiḷtalai*, or Tamiḷakam, the region surrounded by sea (*Puṛaṇānūru*- 19:1-2, 35:1-4). *Periplus of the Erythraean Sea* written in the early Christian Era refers to the region of Tamil people as *Damirica*, probably an erroneous pronunciation of Tamiḷakam (Scoff 1912 205). Tamiḷakam was a cultural and linguistic zone in an undulated topography bounded by Cape Comorin to the South and Veṅkaṭa hills to the North (sometimes the Himalayas is also referred to as the northern boundary) and surrounded by the ocean towards the east and west (*Puṛaṇānūru*- 17: 1-4, Hart 1999:14). The Cēra, Pāṇṭiya and Cōḷa were praised separately in different poems (*Puṛaṇānūru*- 2, 5, 8, 11-, 3, 6, 9-Pāṇṭiya, 4,7, 10 -Cōḷa) and were depicted as the three major powers of Tamiḷakam. Among these, the region under the political sway of the Cērās, referred to as *Kēṭalaputa* in the Asokan inscription and

Cērobotra in the *Periplus of the Erythraean Sea* which is also translated as *Kēraḷaputra* (Scoff 1912:208) was a separate political entity, which consisted of the present-day central Kerala, and extended up to the Kongu region of the present-day Coimbatore area of Tamilnadu. *Patirrupattu*, the only Tamil text eulogizing ten Cēra rulers, also underlined the prominence of their political power. A poem of *Puṛaṇānūru*, sung by Poikayār about Cēramān Kō Kōtai Mārpen, refers to the political power of the Cēras over the undulated region by depicting him as the *Nāṭan* (the lord of the cultivated and occupied zones in the hilly areas or *Kuṛiṇṇi*), *Ūran* (lord of the wet land agrarian settlements or *Marutam*) and *Cōrpan* (lord of the coastal areas) (*Puṛaṇānūru*- 49). This can be considered as a clear depiction of the undulated landscape west of the Western Ghats of Tamiḷakam, i.e., the present-day Kerala, in the early centuries of Christian era (Madhava Menon 2011: 172). Perumcōṛru Utiyan Cēral is represented as the king who extended his political boundary of the *nāṭu* by defeating the enemies of the Cēras (*Akanānūru*- 65-5).

Karur and Muziris were the two important political hubs of the early Cēras (Subbarayalu 2014: 50). As the Cēras were described as the lord of the resource areas in the hilly forests, wetland plains and in the coastal zones, they must have possessed economic control over the contemporary resources of these terrain. The Roman trade was one reasons for the political prominence of the Cēra power in Tamiḷakam. Muziris is depicted as a flourishing port town due to the arrival of *Yavanās* with gold and as the centre of spices especially pepper (*Akanānūru*- 149:10-11). Pliny and *Periplus of the Erythraean Sea* also refer to Muziris as the port for pepper trade (Scoff 1912:205). Besides spices, the iron deposit and the semi-precious stones, especially the beryl deposit in the Cēra region (Rajan 1991: 111-12, Subbarayalu 2014:50) was also a reason behind the opulence of the Cēra economy. Karur was located near the areas of such deposit zone. Koṭumaṇam and Paṇtar are mentioned in the *Patirrupattu* as the centres of semiprecious beads and pearls respectively (*Patirrupattu* – 7th Ten 7:1-2). Koṭumaṇam is identified with the present-day Kotumaṇal in Erode district, where archaeological excavation has brought to light the evidence of a flourishing gemstone craft centre (Rajan 1991: 111-12, Subbarayalu 2014: 50). Paṇtar seems to be the medieval port Fandarina also known as Panthalayani Kollam in the present-day Kerala (Subbarayalu 2014: 50). Pliny mentions that the Cēras sent their best iron to Rome (Scoff 1912: 209). All these indicate the importance of Muziris and Karur in the history Cēra polity.

Genealogy of Cēras: The *Sangam* literature and the early historic Tamil Brahmi inscriptions from Pugalur in Tamilnadu have mentioned the political genealogy of the Cēras (Table 3). Accordingly, there were two lineages of Cēra that is the Utiyan and Irumporai lines. *Patirrupattu* refers to seven rulers of the Utiyan lineage and three rulers of Irumporai lineage (Ayyar (1961)1997: 20, Gurukkal and Raghava Varier 1999: 205-09). *Puṛaṇānūru* refers to the eight Cēra rulers of the Irumporai line. The genealogy of three generations of Irumporai line of the Cēra is recorded in the Pugalur inscription as well (Gurukkal and Raghava Varier 1999: 205-09, Mahadevan 2003:117-18, 405-21).

Table 3: List of the Rulers of Utiyan Lineage

Utiyan Lineage (Ayyar (1961) 1997: 20, Gurukkal and Raghava Varier 1999: 207-08)	Sangam Texts
Utiyan Cēral or Perumcōr̥rudiyan	<i>Patirrupattu</i> – 2 nd Ten (<i>Patikam</i> -2), <i>Akanānūru</i> - 65:5, 233:8-9. <i>Puṇānānūru</i> - 2, 65.
Imayavarampan Neṭumcēralātan Kuṭakkō Neṭuncēralātan	<i>Patirrupattu</i> – 2 nd Ten. <i>Puṇānānūru</i> - 368368.
Palyānai Cēlkelu Kuṭṭuvan	<i>Patirrupattu</i> – 3 rd Ten.
Kaḷaṅkāykaṇṇi Nārmuṭi Cēral	<i>Patirrupattu</i> – 4 th Ten.
Kaṭalpiṇakōṭṭiya Ceṅkuṭṭuvan Kaṭalōṭṭiya Vēlkelkuṭṭuvan	<i>Patirrupattu</i> – 5 th Ten. <i>Puṇānānūru</i> - 368
Āṭukōṭupāṭṭu Cēralātan	<i>Patirrupattu</i> – 6 th Ten.
Aṇṭuvan Cēral	<i>Patirrupattu</i> – 7 th Ten.

The details of the Irumpoṇai line (Table 4) appear in literature as well as in inscriptions. *Patirrupattu* mentions three rulers, *Puṇānānūru* refers to 8 rulers and *Pugalur* inscription of 2nd century CE alludes to three rulers of the *Irumpoṇai* line.

The 2nd century CE Pugalur inscription clearly records the genealogy of three generations of the Irumpoṇai line of the Cēras (Mahadevan 2003:117-18, 405-21). It records the construction and the grant of a rock shelter to a senior Jain monk, Caṅkāyapan, by the Irumpoṇai line of the Cēras rulers from Karūr. R. Paneerselvam and Iravatham Mahadevan identified the three rulers mentioned in the inscription with the rulers mentioned in the *Patirrupattu* as given in table 5 (Paneerselvam 1968:421-425, Mahadevan 2003: 117).

Table 4: List of the rulers of Irumpoṇai Lineage

Irumpoṇai Lineage	Sangam texts
Karuvūrēriya olvāl Kōperumcēral Irumpoṇai	<i>Puṇānānūru</i> -5
Kaṭunko Aḷiyātan Celvakaṭunkō Aḷiyātan	<i>Puṇānānūru</i> -8 <i>Patirrupattu</i> –7 th Ten
Yānaikkaṭ Cēymāntarancēral Irumpoṇai	<i>Puṇānānūru</i> -17, 20,22, 50, 229
Takaṭūr eṇiṇta Perumcēral Irumpoṇai	<i>Puṇānānūru</i> -50; <i>Patirrupattu</i> – 8 th Ten
Māntaran Cēral Irumpoṇai.	<i>Puṇānānūru</i> -53
Kaṇaikkāl Irumpoṇai	<i>Puṇānānūru</i> -74
Kuṭakkō Cēral Irumpoṇai	<i>Puṇānānūru</i> -210
Kuṭakkō Ilancēral Irumpoṇai	<i>Patirrupattu</i> – 9 th Ten

It is stated that there were about thirty Cēra rulers mentioned in literature (Kunjan Pillai 2005:135). However, the rulers eulogized in the *Patirrupattu* are considered as the most important rulers and they belonged to the above mentioned two genealogies. The

term Kō Ātan occurring in literature as well as in the Tamil Brahmi inscription at Edakkal in the Waynad district of Kerala (Gurukkal and Raghava Varier 1999: 193) represent a Cēra ruler. The mention of Katumiputta Cēra in the Edakkal inscription has also helped in corroborating the literary indications about the Cēra power in Kerala during the early historic period (Mahadevan 2003: 118, 431-35). There is another Cēra ruler named Kōkōtai Mārpan who is not mentioned in the *Patirrupattu* but appears in the *Puṇānūru* poems as the lord of the land and sea of the west coast of Tamiḷakam (*Puṇānūru* - 48:1-4, 49:1-6). It is argued that Cēramān Kō Kōtai Mārpen is one of the last rulers in the Cēra genealogy who ruled between 150 CE and 175 CE (Sivaraja Pillai (1932) 1984: xix). The ceremonial functions before the predatory marches under the Maravas with the auspicious blessing of the ruling power is clearly depicted in a *Puṇānūru* song (*Puṇānūru* – 289).

Table 5: List of the rulers appeared in the Pugalur Inscription and corresponding references in the *Patirrupattu*

Pugalur Inscription	<i>Patirrupattu</i>
Kō Ātan Cel Irumpoṟai	Celva-k-kaṭuṅkō Vāli-y Ātan – <i>Patirrupattu</i> – 7 th Ten
Peruṅkaṭuṅkōn	Perum-cēral Irumpuṟai- <i>Patirrupattu</i> –8 th Ten
Kaṭuṅkōṇ Ḵaṅkaṭuṅkō	Ḵan- cēral Irumpuṟai – <i>Patirrupattu</i> –9 th Ten

Features of Cēra Polity: The above discussion reveals that the Cēras were an independent political entity in ancient Tamiḷakam. *Patirrupattu*, the eulogizing genealogical account of the Cēras, shows their political involvement in the west coast of Kerala that extended up to ancient Kongunāṭu (the present Coimbatore region). They must have also passed through the Palaghat gap of the Western Ghats. According to literature there were two lineages of Cēra; Utiyan and Irumpoṟai. They had a rich resource base arising from both the land and the sea. The inland and overseas exchange networks were important to the economic stability of the Cēras. Muziris had a significant role in the overseas exchanges of the domain. It is suggested that the Cēra kings took steps to control piracy in the western sea and also vouched for their keen interest in sea trade (Subbarayalu 2014: 54).

The Cērās were influenced by the Jain, Buddhist and Brahmanical traditions. Utiyan Cēral observed the Jain practice of fast unto death called *Vaṭakkirikkal*. The Pugalur inscription mentions that Kaṭuṅkōn Ḵamkaṭuṅko of Irumporai line constructed a rock shelter for Jain monks (Mahadevan 2003:117). The land grants and gifts giving practice prevailed during the Cēra period. Celvakaṭuṅko Aḷiyātan is mentioned as the ruler who gave utmost respect to Brahmins (*Patirrupattu*- 7th Ten 3:1). He gave gifts and grants to the *Aṇṭaṇar* or the learned Vedic Brahmins who performed *Vēlvi* (Vedic Sacrifices) in favour of the ruler (*Patirrupattu* -7th Ten 4:3-6, 7th Ten 10:18). Imayavarampan Neṭumcēralātan granted land to the Brahmana (*Patirrupattu* -2nd Ten *Patikam* 2). The Cērās tried to advance their political power by defeating minor *Vēḷir* chiefs and the major powers like the Cōḷas. Nārmuṭi Cēralātan cut down the totem tree

of the *Vēḷir* chief Nannan of Eḷimalai and defeated and established his power over the region (*Patirrupattu*- 4th Ten 10:14-16). The Cēras also defeated Cōḷas in some instances.

Nature of Pre- Temple Kerala Polity: The above discussion proves that Kerala was ruled by the Cēra, one of the Mūvēntars of Tamiḷakam, along with minor *Vēḷir* chiefs like Nannan in the north and Āys in the south. The petty chiefs must have enjoyed power over different clannish occupational groups (*Kuṭis*). Most of the studies considered *Mūvēntar* as Kings and the Cēra power as a kingdom or dynasty or empire (Kunjan Pillai 2005:135-59, Sreedhara Menon (1967) 2003:73-80, Pillai (1979)2008:26-27, Hart 1999:13-20, Mahadevan 2003:117-18). Elamkulam Kunjan Pillai considered Utiyan Cēralātan as the first king of Kerala (Kunjan Pillai 2005:174-79). Rajan Gurukkal and Raghava Varier put forward a chiefdom theory regarding the Cēra polity and dismissed the possibility of kingship and monarchy in early Kerala. Accordingly, there were three levels of chiefly power based on kinship relations, *Kiḷār* (lower chiefs), *Vēḷir* (hill chiefs) and *Vēntar* (major chief) (Gurukkal and Raghava Varier 1999: 199-213) The scholars like Y. Subarayalu stated that there was a sort of state society in the early Tamiḷakam, though the evidence is too slender to make a concrete statement. According to him, “the Tamil state can be compared to some extent with the Satavahana set up” (Subbarayalu 2014:55).

Like Pāndyas and Cōḷas, the Cērās also issued coins. These coins must have been issued by the rulers to stamp their political power and not for circulation in connection with a money-based economy. However, the discovery of copper and lead coins from the Pattanam excavation seems to shown a material wise difference in the value of coins. If so, one has to argue that the early historic society was not fully ignorant about the concept of money exchange. As the Cēra political emblem is found in these coins, the Cēra rulers issued the coinage and it represented their political control over trade especially over the maritime trade.

The Cērās were also depicted as rulers who conducted predatory marches against the *Vēḷir* and other minor chiefs and against bigger *Vēntars* like the Cōḷas and Pāndyas. The Cērā rulers collected *Tiṟai* or tribute from the defeated powers. These rulers also performed various Vedic rituals and started giving land grants and other gifts to the Brahmins as a reward of their ritual performances. This shows that the practice of giving land grants to the Brahmin was started even before the development of temples. Sangam literature and the Pugalur inscriptions and coins with legends and emblems have evidently proved the patriarchic lineage of the Cēra ruling families. All these evidence have underlined the possible existence of some sort of a state system in the early historic period, which was probably influenced by the newly emerged Vedic principles of the Brahmins as well.

The Beginning of Syncretic Culture

Ancient Tamiḷakam consisted of many social groups and their settlements. As part of Tamiḷakam, Kerala had contact with many cultural zones in India and overseas mainly

through the trade routes. *Sangam* literature refers to the presence of people who spoke other languages and who probably reached Tamiḷakam because of trade. The term *Vaṭukar* and *Āriyar* also indicated the arrival of people from the northern parts of Tamiḷakam. The archaeological remains, especially the non-local semi-precious stones beads and manufacturing waste of carnelian, amethyst, chalcedony etc. from megaliths and from the Pattanam excavations respectively have shown the possible contact of the traders or craftsmen of the region with the northern parts of the country. The Buddhist and Jain influences were prominent in the society. Both these sects were noticeable in Tamiḷakam even before the arrival of Brahmins. The Brahmins tried to overcome the Buddhist influence in the society and emphasized the importance of four Vedas and six sections of Veda, probably *Vēdaṅgās* and the Vedic sacrifices (*Puṛaṇānūṟu*-166). Thus, the Brahmins gradually indoctrinated the common people into believing the Vedic scriptures and sacrifices and consciously generated a feeling that the Veda alone is true. *Puṛaṇānūṟu*-166 poem actually hinted at this Brahminization process of early Tamiḷakam. Along with the propagation of the prominence of Vedic texts and sacrifices, the Brahmins or *Āriyar* must have used martial powers as well.

The *Konkar*, probably the people from Kongunadu were mentioned in the poem (*Puṛaṇānūṟu*-130:5). The *Kōcar* who is said to have arrived from the northern parts are also mentioned (*Puṛaṇānūṟu*-169:9, 283:6, 396:7). The term *Yavanar* appear in the context of maritime exchanges, which also underlines the presence of the traders from the Ionian Sea of the Mediterranean region. The discovery of the West Asian ceramics from the early historic archaeological layers at Pattanam have proved the presence of foreigners in the west coast of Kerala. All these show the formation of a syncretic culture in Kerala during the early historic period.

Conclusion

To sum up, the Iron Age and early historic society was organized, stratified and economically sound. A multi crop production method was practiced in the hillocks, plains and wet lands. The prosperous agrarian settlements like *Nāṭu*, *Ūr* along with the populous craft manufacturing zones like *Cēri* and exchange centres like *Aṅgādi*, *Āvaṇam*, *Paṭṭinam* etc. came to be developed. It was a hierarchical and organized society comprised of various occupational groups with various skill sets and knowledge bases. The settlements were developed according to the nature of occupation or subsistence forms. The people residing in hills who were involved in a hunting and gathering subsistence pattern must have followed a nomadic life according to the availability of the resources and the agricultural population must have had a settled life in the plains. Fishing and salt making developed as regular practices in the coastal areas. The resources from the mountains, plains and coasts were widely exchanged and the goods from long distances and from overseas are said to have reached the west coast of Kerala. The coastal trading ports like Muziris had a remarkable position in the economic development of the Cēra country. There was an effective hierarchical ruling system comprised of the *Vēṇtar*, *Vēḷir* and *Kīlār* behind the existence of a stratified and organized society in early Kerala. The Cēras must have

patronized or became influenced by religious sects like Jainism, Buddhism and Brahminism. The rulers had practiced many Vedic rituals as a part of their ruling structure which also slightly indicated the emerging influence of Brahmanical rituals over the Cēra polity. The kings had started giving land grants to the Brahmins as a reward for their services. Thus the 6th century CE was a period of transition in the socio-political and cultural relations of South India in general and Kerala in particular.

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