

KEELADI IS THE BIRTH PLACE OF TAMIL CULTURE – A HISTORICAL STUDY

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Abstract

Keeladi excavation is a sangam period settlement that is being excavated by the Archaeological survey of India and the Tamil Nadu Archaeology Department. Keeladi is a village located 12 kilometres south east of Madurai in Tamil Nadu near the town of Sivagangai district. In the middle of the coconut grooves the site Keeladi, with the cultural deposit mound extending over a vast area of more than 110 acres, is located at Tirupuvanam Taluk in Sivagangai district. In order to find the ancient artefacts and unearthed materials, several times the Archaeologists made an attempt. The first attempt was made the 1974. This excavation was first started in Pallisanthai thidal which is in the north of manalur. It is one kilometer east of the town of Keeladi. Various archaeological resides were found when blowing the land around the site. A survey was conducted for the study, which found that this ancient settlement was less than two and a half meters below the ground level. The area currently being excavated is spread over 80 acres with a 3.5 kilometre radius. The ancient towns of Kondagai and manalur are also said to be associated with this region. To explore the ancient archaeological site this gives the picture of ancient Tamil culture. To find out of the data which belong the period of ancient sangam age. To study the artefacts and archaeological remains of the study area. To explain the ancient culture is the culture of modern period.

Introduction

Keeladi is one of the most important Archaeological sites discovered in South India. Early history of south India is dominated by the Pandyas the cheras and the cholas. Recent advances in Archaeological and Literary research have helped to reconstruct the early period in details. The social and religious customs of the people have remained the same through the ages by the Archaeological Excavations and Explorations in the following methods.

Location:

Keeladi excavation is a sangam period settlement that is being excavated by the Archaeological survey of India and the Tamil Nadu Archaeology Department. Keeladi is a village located 12 kilometres south east of Madurai in Tamil Nadu near the town of Sivagangai district. In the middle of the coconut grooves the site Keeladi, with the cultural deposit mound extending over a vast area of more than 110 acres, is located at Tirupuvanam Taluk in Sivagangai district. In order to find the ancient artefacts and unearthed materials, several times the Archaeologists made an attempt. The first attempt was made the 1974. This excavation was first started in Pallisanthai thidal which is in the north of manalur. It is one kilometer east of the town of Keeladi. Various archaeological resides were found when blowing the land around the site. A survey was conducted for the study, which found that this ancient settlement was less than two and a half meters below the ground level. The area currently being excavated is spread over 80 acres with a 3.5 kilometre radius. The ancient towns of Kondagai and manalur are also said to be associated with this region.

Objectives:

- To explore the ancient archaeological site this gives the picture of ancient Tamil culture.
- To find out of the data which belong the period of ancient sangam age.
- To study the artefacts and archaeological remains of the study area.
- To explain the ancient culture is the culture of modern period.

Generally the explorations and the excavations have so far not yielded any clear proof for Neolithic habitation in the study area. Abundant evidences though are unearthed for the early sangam Age settlement along the lower valley of

Vaigai. Generally the Iron age culture is characterised on the ceramic side by a black and Red ware a very interesting variety of ceramics that is caused by a firing technique.

Then after 37 years back the second attempt was carried out in 2013 with the support of Dr.Vedachalam, Amarnath and Rajesh (the land owner). During the study 293 sites including Keeladi were identified to have archaeological residues. In continuation of exposing the hidden treasures and antique of this site, the State Department of Archaeology has been conducting excavation at this site after getting approval from the CABA. This is a large scale excavation carried out in Tamil Nadu after the Adichanallur archaeological site excavation. The first three phases of excavation at Keeladi were conducted by the Archaeological Survey of India while the fourth and fifth phases were conducted by the Tamil Nadu Archaeology Department.

Phases of Keezhadi Excavation:

First phase:

In June 2015, an Archaeological Survey of India group led by Amarnath Ramakrishnan started the first phase of the excavation in the area near the Vaigai River in Keezhadi.

Second phase:

The second phase began on 2 January 2016. Various documents, including medical jars, antique kitchen wells, and factory and government seals, were found. At the end of the second phase, more than six thousand artifacts were found. It was confirmed that these artifacts were 2,200 years old when they were tested by radiocarbon dating.

Third phase:

The third phase of the excavation was conducted under the chairmanship Sri Ramanan of the Archaeological Survey of India from January 2017. The work ended on 30 September 2017. In the third phase, 16 digging sites were selected, taking up a total area of 400 square meters, which is 80 acres of land.

Fourth phase:

The fourth phase of the excavation was conducted between 2017 and 2018, bringing out 5,820 artefacts. This phase was conducted by the Tamil Nadu Archaeology Department while the first three phases were conducted by the Archaeological Survey of India. Six carbon samples collected from the fourth phase of excavation at Keeladi were sent to Beta Analytic,

Miami, Florida, USA for Accelerator Mass Spectrometry (AMS) dating; one sample, collected at a depth of 353 cm, was dated at 580 BCE. The graffiti marks on the artefacts obtained from the excavation site are interpreted by the excavators as a link between the scripts of the Indus Valley Civilization and Tamil-Brahmi.

Fifth phase:

In June 2019, the Tamil Nadu Archaeology Department began the fifth phase of the excavation led by Dr R Sivanantham. This phase will be completed in four to five months in which 15 trenches have been planned to be dug. In the 5th stage of excavation, Sangam-era bricks and more than 700 objects were found and these have been sent for testing.

Findings:

Brick wall found in the excavation:

Almost 48 square pits have been cut and various structures and artifacts have been found, including frosts, brick walls, roof tiles, pottery, mimic accessories, skeletal tools, iron Vel, and Tamil-Brahmi letter-etched plates. This place is considered to be Pandyan dynasty's city called "Perumanalur", the pioneer of literature. The use of fired brick, the size of the building complex, an array of pots placed in such a way that it must have been used either as a lamp or for painting, and other finds suggest that the settlement is of a more civilized population than was previously suspected during the Sangam period.

Buildings:

More than 10 buildings have been found in the bottom of the settlement. This is a strong proof that this was a well-developed city. The excavation has disproved the claim that there were no buildings during the Sangam period.

Canals and sewage system:

Water supply and wastewater are considered as important landmarks of civil development. At the bottom of the settlement, there are buildings with a sewage canal facility made of ceramic tubes.

Ring wells and brick walls:

Ancient earthenware and ring wells have been found. Archaeologist Velappan said that this proves the ancient tradition of Tamils indicating that they used these wells in river shores and ponds for water. Brick buildings are considered rare in

ancient times but a large number of brick buildings have been found.

Pottery:

The Archaeologists they found different types of potteries like the rouletted, arretine-type ceramics brought by merchants demonstrate business connections with the Roman Empire. It is noteworthy that such products have been discovered. Furthermore, there are also black and red parchment fragments from the earliest history, and white-colored black, red papillae and reddish-pitted pieces. There Tamil words engraved with the potteries that mention the names of individuals like 'Aathan', 'Uthiran' and 'Thiesan'.

Pottery:

Tamil-Brahmi script and graffiti marks:

In the fourth phase of excavations at Keezhadi, 72 potsherds with Tamil-Brahmi script were discovered at the site. Some of these artifacts have inscribed graffiti marks, similar to graffiti marks which some believe to have evolved from the Indus script. According to T. Udhayachandran, the artifacts found at Keeladi excavation site may point to a link between the scripts of the Indus Valley Civilization and Tamil-Brahmi. Based on these marks, and one Keeladi findings of the fourth phase which was dated to 580 BCE, R. Sivanantham and M. Seran argue that the date of the earliest attestation of Tamil-Brahmi can be pushed back to the 6th century BCE, a few centuries older than Dhamma Lipi (Prakrit in the Brahmi Script) of Ashokan Edicts, which is stated to be dated from 268 BC to 232 BC. Likewise, the recent scientific dates obtained for Keeladi findings pushback the date of Tamil-Brahmi to another century i.e. 6th century BCE. These results clearly ascertained that they attained the literacy or learned the art of writing as early as 6th century BCE. In short the sangam era which marked the largest social and cultural developments in Tamil Nadu, could be much earlier than 300 BCE.

Literacy Standard of the Sangam Age:

Tamil-Brahmi letters as part of inscriptions are found engraved on the shoulder portions of the earthen vessels. In general, these letters were inscribed when the pot is in leather condition or were inscribed/ engraved after the pot became dry. The letters engraved in leather condition could be made only by the potters at the time making pots. In the case of Keeladi examples, they were all post-firing in nature and were engraved by the owners after purchasing the pots. The representation of various styles of writing also suggests this view. It clearly suggests that the literacy level of the contemporary society that

survived in 6th century BCE. Thus keeladi excavation findings and different dimensions of the "Language War", have again proved that Tamil is the oldest Language.

Ornaments and antiquities:

There are sponges, marble, agate beads, green, yellow and blue glass beads found here. There are also elephant tusks, copper ointment and sheets of wire. The various rare artefacts including iron edged corners, gold ornaments, stylus, terracotta stamps, diaphragm tiles, firefly toys are found. The settlement lies on the banks of the river Vaigai and it reflects the ancient culture of Tamil people. According to V.Vedachalam, who served as a domain expert for the excavation, dated the excavated remains between 5th century B.C. and 3rd century A.D. The occurrence of seven gold ornaments, copper article, beads of gems, more than 4000 beads of semiprecious stones, glass beads, shell bangles, ivory bangles and well crafted household utensils which indicate the culture richness and economic prosperity of Sangam Age.

Trace of Agrarian Society and Cattle Rearing:

There are the 70 samples of skeletal fragments collected from Keeladi had been sent to Deccan College, Post Graduate and Research Institute, Pune to analyze the faunal remains. The analysis is made under the categorize due to the nature of the specimens. In which the species such as Cow/Ox (*Bos indicus*), Buffalo (*Bubalus bubalis*), Sheep (*Ovis aries*), Goat (*Capra hircus*), Nilgai (*Boselaphus tragocamelus*), Blackbuck (*Antelope cervicapra*), Wild boar (*Sus scrofa*) and Peacock (*Pavo cristatus*) were identified. Among the species, ox, cow, buffalo and goat indicating that they were predominantly used for agriculture purposes. The availability of cut marks in some of the animals like antelope, goat and wild boar suggest that they were consumed. Thus, the faunal remains report suggests that the people mainly depended on agriculture and cattle rearing, they were their main occupation of the people of this area in ancient period.

Analysis of the Structural Remains:

The samples like bricks, lime-mortar, roof tiles and the binding materials of the ring well collected from the structural remains were sent to the Vellore Institute of Technology for scientific material analysis. It revealed that every specimen contained elements like silica, lime, ferrous, aluminum and magnesium. The detailed report also furnishes of its constitution and nature. The bricks and roof tiles contained more than eighty percentage of silica mixed with seven percentage of lime while lime plaster possessed ninety seven percentage of lime. In fact, the long

survival of these materials with considerable strength and quality is due the quality of material deployed in the construction activities.

Structural Engineering:

These two seasons of excavation conducted at Keeladi exposed includes a 13 meter long wall. The dimension of baked bricks used and the dimension of baked bricks available in other Sangam Age archaeological sites are found in the ratio of 1: 4: 6.

Structure Wall:

The well-laid floors, made of fine clay, along with roof tiles in collapsed state. It seems, wooden poles were planted over which roof was erected, the occurrence of iron nails give clues of festering the poles and rafters. The roof tiles contained finger groove impressions meant to drain water and double holes at the top to be tied with rafters. Such structural activities express the high standards of living during the Sangam Age.

Graffiti and Symbols:

Among the available scripts of India, the Indus scripts are considered to be the earliest one and were 4500 years old. One kind of script that survived between the disappearance of Indus script and the emergence of Brahmi script is called as graffiti marks by the scholars. These graffiti marks are the one evolved or transformed from Indus script and served as precursor for the emergence of Brahmi script. Therefore, these graffiti marks cannot be set aside as mere scratches. Like Indus script, this also could not be deciphered till date. These graffiti marks were found in Chalcolithic culture as well as in Megalithic culture. Earlier excavations at Adichchanallur, Korkai, Alagankulam, Kodumanal, Karur, Teriruvveli, Uraiyur, Mangulam, Perur and all other places yielded such type of graffiti inscribed potsherds were recovered.

Beyond Tamil Nadu, these marks were recovered from the sites such as Tissamaharama, Kantarodai, Manthai and Rithiyagama of Srilanka. Of the graffiti sherds collected from the sites of the Indian sub-continent, more than 75% of the symbols are traced from Tamil Nadu alone.

The symbols and graffiti are very much suggestive of the symbolic and codified expressions and communication of the megalithic and Iron Age people. In this context, the recovery of 1,001 graffiti sherds from Keeladi excavation recalls the preliminary writing expressions of the Iron Age people.

Handicrafts:

There are seventeen pottery specimens were found and sent to the Earth Science Department of Pisa University, Italy through Vellore Institute of Technology for mineral analysis. The samples were analyzed and the results confirmed that water container and cooking vessels shaped out of locally available raw materials. Interestingly, it is to be noted that two quadrants of adjacent trenches below the depth of 4 meters revealed heaps of potteries of many cart loads. The occurrence of such large quantity clearly suggests that there could have been a pottery making industry at this site.

The Spectroscopic analysis of the Black and red ware sherds of Keeladi revealed that the reason for its black colour is due to the use of carbon material and for the existence of red colour is due to use and presence of Hematite (Iron core). The potters of Keeladi were familiar with the technique and knew the art of raising the Kiln temperature to 1100°C to produce the typical Black-and-Red ware pottery. The results of the samples sent to the Pisa University, Italy reveal that the earthen vessels produced by the Keeladi people of Sangam Age were followed the same technique and content of minerals and constituents of clay right from 6th century BCE to 2nd Century BCE. The same report also states that few pottery samples of 2nd century BCE contain earth content similar to that of other region thereby suggesting that they exchanged the goods between the neighbouring regions probably through traders, craftsmen and visitors.

Weaving Industry:

This place was maybe a centre of weaving Industry because there are of 10 spindle whorls, 20 sharply pin pointed bone tip tools used for design creations, hanging stones of the yarn, terracotta spheres, copper needle and earthen vessels to hold liquid clearly attest the various stages of weaving industry from spinning, yarning, looming and weaving, later for dyeing. The archaeological findings of the Excavation wing of Archaeological Survey of India at this site confirmed of the dyeing industry. So, the occurrence of recent antiquities also attests the existence of weaving industry.

Gamesmen and pastimes:

The occurrence of gamesmen such as hop scotches and gamesmen, really reflects the pastime activities of the ancient people. Majority of the gamesman recovered from excavations are of terracotta. In this context Keeladi yielded 600 hop scotches even now the same game is prevalent Madurai and other regions as 'Pandi' or

Nondivilayattu. Dices were also recovered from the site. The occurrence of single and double holed terracotta discs represents either use of wheel of the toy cart or twist disc game pieces. Apart from these, 80 chessmen of similar shape but in different sizes were collected from the excavation.

Commerce:

Keeladi excavation yielded beads of agate and carnelian and their origins are Maharashtra and Gujarat. Agate and Carnelian Beads, the occurrence of Roman potteries like Arretine and imitated roulette sherds could have reached the site either through Alagankulam port town which had International Trade contacts during the early centuries of Common Era. In fact, such potteries were used by Roman during 2nd BCE. Therefore, the traders of Roman or the Roman traders housed in Alagankulam could have come to this region.

Terracotta Images:

The terracotta objects recovered from Keeladi excavation, 13 are of human images, 3 of animals, more than 650 represent gamesmen and 35 are of ear ornaments. Other than terracotta objects the site also yielded jewellery pieces of gold, copper, objects of iron were also recovered. But it is to be noted that this site didn't yield any objects meant for worship so far. Initially this site was estimated to be from the period between 5th century B.C and 3rd century A.D. Two samples were sent for Carbon dating from this excavation. It was confirmed in 2017, that samples were from about 2200 years ago that one of the artefacts was from 6th century B.C.

Conclusion:

Keeladi excavation had yielded 5820 antiquities with enough cultural traits in the form of structural activity (brick structures, terracotta ring wells, fallen roofing tiles with double holes and deeply finger pressed grooves to draw rain water). Antiquities like few pieces of golden ornaments, broken portions, copper objects, iron implements, terracotta gamesmen (chessman), hop scotches, ear ornaments, spindle whorls, figurines and portions besides beads of terracotta, glass, semi-precious stones (agate, carnelian, crystal, etc.). Popular ceramic types like finer variety of Black and Red ware, Black ware, Black Polished ware, Red ware, Rouletted ware, few pieces of Arretines were also found. There are also enough numbers of graffiti sherds of both pre and post firing nature. A good number of Tamil Brahmi sherds also have been unearthed.

All these finds clearly indicate the cultural richness of the ancient civilization of the Tamils of

this region having its close proximity to the temple city Madurai. Hence it becomes essential to continue to probe such cultural hidden treasures of Keeladi site in future and reveal the cultural wealth of the ancient Tamil society. Thus Keeladi is significant for many reasons. It cause given evidence of urban life and settlements in Tamil Nadu during the early Historic period.

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