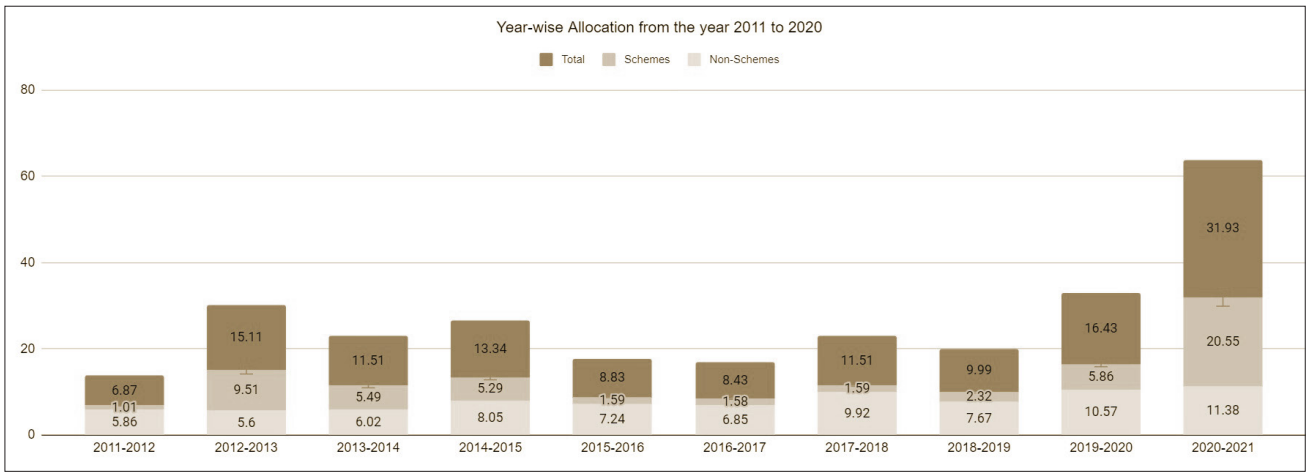
The sixth season of systematic archaeological excavation at Keeladi and its cluster (Manalur, Agaram, Kondhagai) of Sivagangai District was inaugurated by Hon'ble Chief Minister of Tamil Nadu through video conferencing on 19.02.2020 and the other archaeological excavations were also commenced from May 2020.



Tamil Nadu Archaeology Department has taken up extensive systematic archaeological explorations and excavations across the State to unravel the rich cultural heritage of Tamils and hence to suitably position Tamil Nadu in the global archaeological context. The Hon'ble Chief Minister of Tamil Nadu has ordered a massive fund allocation for various schemes to be undertaken by Department of Archaeology for the year 2020-2021 which accounts for more than two third of allocation provided in the last ten years.

Title
Ongoing Archaeological Excavations in Tamil Nadu

Publication No. : 304

Published by:
©Department of Archaeology
Government of Tamil Nadu
Chennai – 600 008

ONGOING ARCHAEOLOGICAL EXCAVATIONS IN TAMILNADU

During 2019-2020 season, Tamil Nadu State Department of Archaeology has taken up systematic archaeological excavations at four places and also two archaeological explorations as detailed below:-

Archaeological Excavations

- Keeladi cluster - Sivagangai District
- Adichanallur - Thoothukudi District
- Sivagalai - Thoothukudi District
- Kodumanal - Erode District

Archaeological Explorations

- Vellore, Krishnagiri, Tiruvannamalai, Dharmapuri and Salem Districts to identify the Neolithic sites

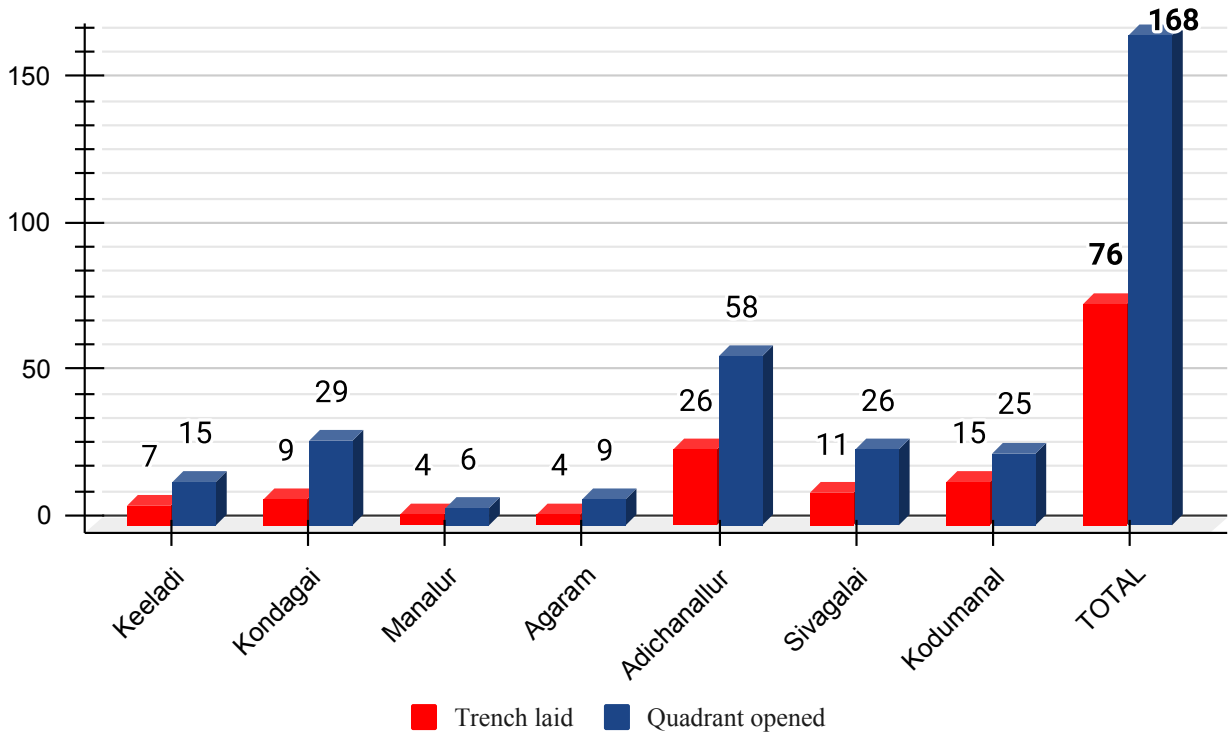
- Tirunelveli and Thoothukudi Districts to locate archaeological sites on the banks of Tamiraparani River

for which the Central Advisory Board for Archaeology (CABA), Archaeological Survey of India has issued permission to carry out the excavation works.

Keeladi Excavation Site - Aerial View

Progressive Chart of Trenches and Quadrants laid in Archaeological Sites

as on 31.07.2020



Exposing the child burial and collecting bone samples from trenches

On-site Documentation works are in progress

Inspection by the experts and excavation team

Three Dimensional measurements and Laying out trenches and sections

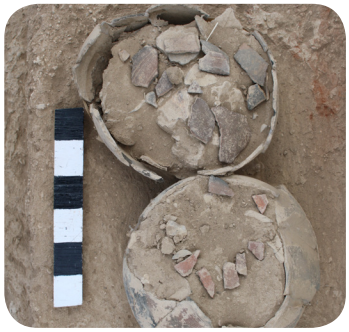


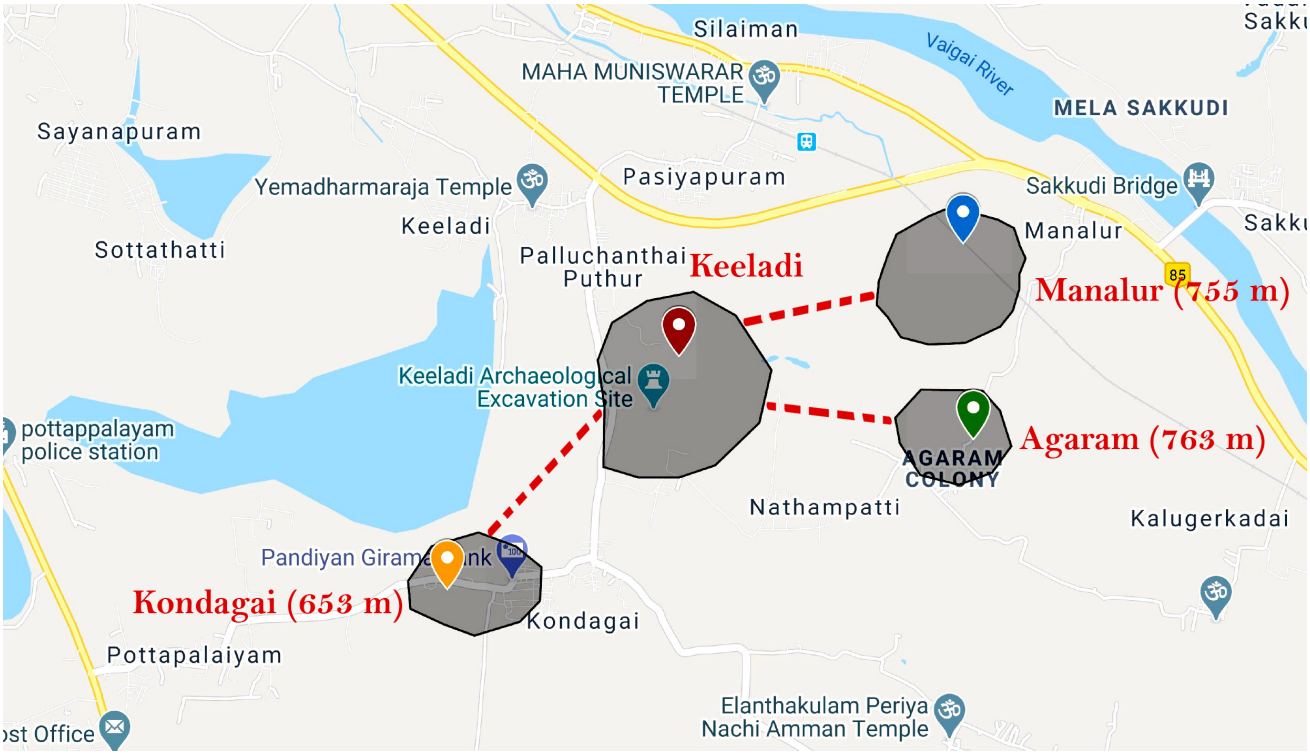
Photo documentation work at regular intervals

Brushing and cleaning the in-situ pots

Exposed Urns

Keeladi and its clusters (Kondagai | Manalur | Agaram)

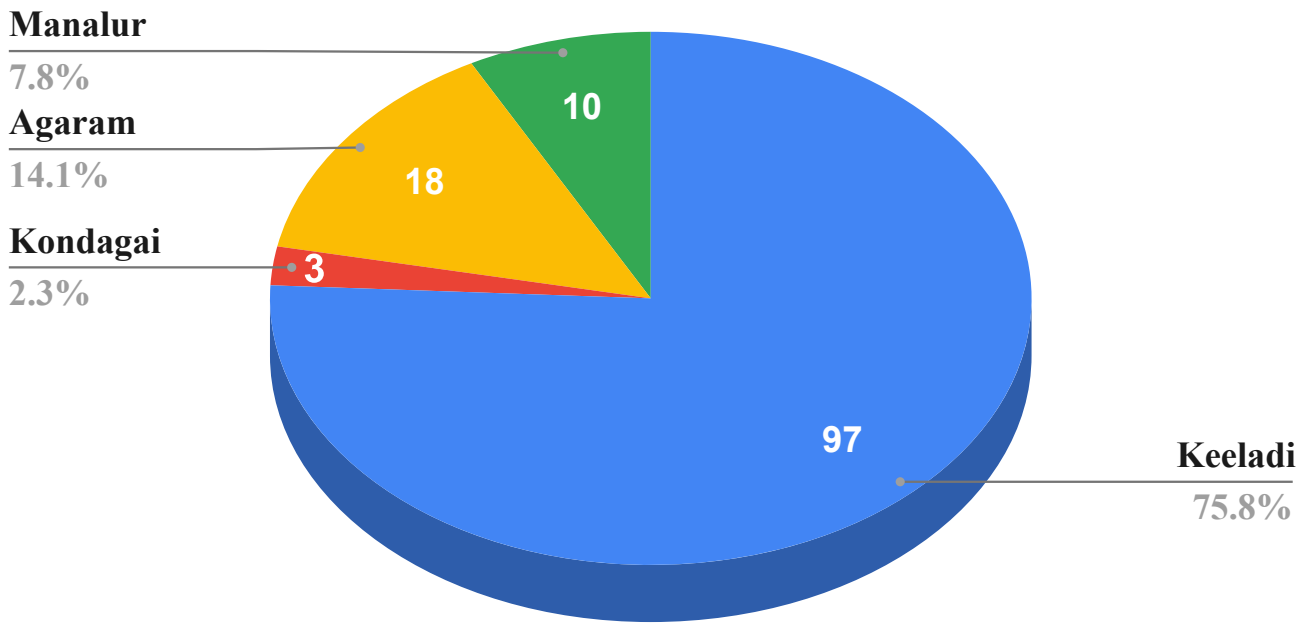
In order to study the Civilization of Vaigai River valley in a holistic manner, excavations are taken up in all those sites which include habitation, burial and industrial locations.

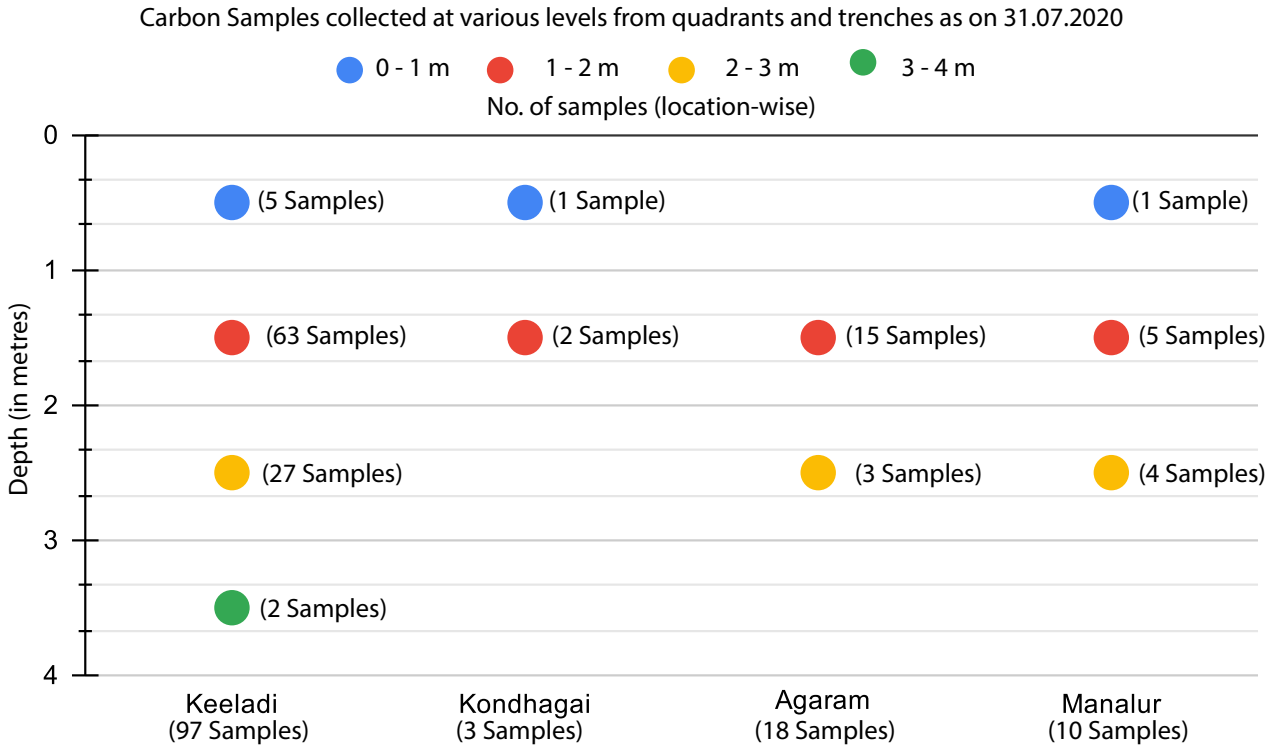


ON GOING **ARCHAEOLOGICAL EXCAVATIONS** IN TAMILNADU

Total Carbon samples collected so far in Keeladi and its clusters

SO FAR 128 SAMPLES HAVE BEEN COLLECTED





Keeladi

Key Findings so far

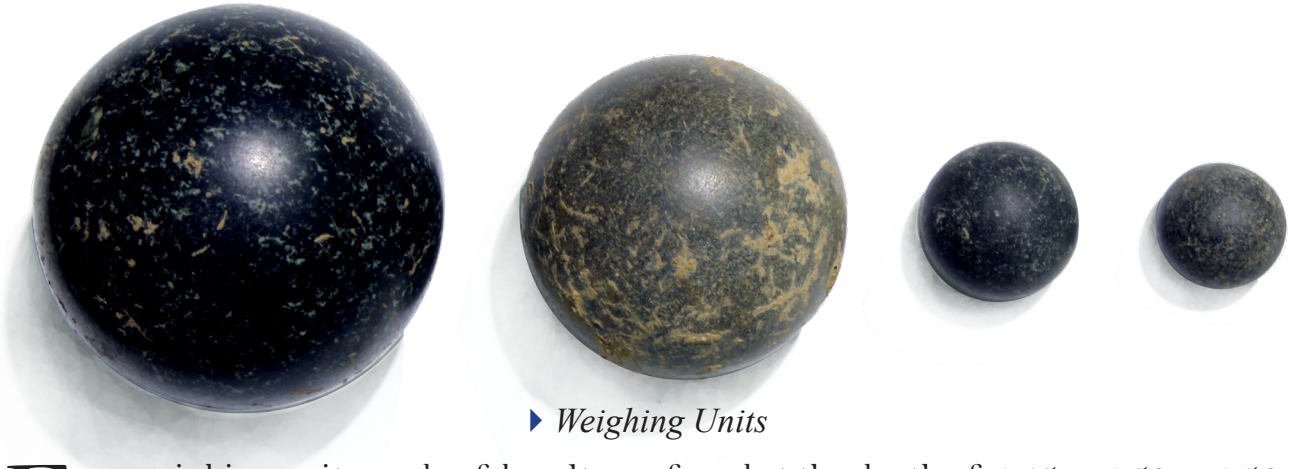
In this season of excavation, major structural activities, globular pots, furnace, cattle bones, numerous iron objects, copper objects, beads made of semi precious-stones, glass, shell and weighing units, seal, *Tamiḻi* (Tamil-Brahmi) inscribed potsherds and graffiti marks have been collected which strongly suggests that Keeladi might be an industrial-cum-habitational site. The discovery of weighing units, seal and semi-precious stone beads of other regions points to the possibility of strong trading activities of the Sangam Age society.

Tamiḻi (Tamil-Brahmi) Sherd

A fine variety of Red Slipped ware containing *Tamiḻi* (Tamil-Brahmi) letters reading Ka-y was found embedded on the soil in the quadrant YD4/2 at the depth of 1.87m. It is found in broken condition and originally might have contained more *Tamiḻi* (Tamil-Brahmi) letters.

A Fine variety of semi-precious stone beads like carnelian, agate and amethyst have been yielded in different Quadrants from Keeladi. beads of agate and carnelian which raw materials could have been brought from places in North-Western India especially from present Maharashtra and Gujarat region suggesting a very sound industrial and trading culture of the then society.

Carnelian, Agate and Amethyst beads



Weighing Units

Four weighing units made of basalt was found at the depth of 1.45m, 1.50m, 1.53m and 1.22m respectively. Three of them are spherical in shape with flat base and one is of fully spherical in shape. It respectively weighs 300gms, 150gms, 18gms and 8gms.

A pendant like a terracotta seal was found in the quadrant YD4/4 at the depth of 0.75m. It is fully hand-made, cone in shape and has two holes in each sides. It contains a tortoise in zoomorphic or in a stylistic form in the middle.

Terracotta Seal

Spinal cord of the Bovine with ribs

At the depth of 2.12m an almost complete portion of the spinal cord with ribs of a bovine having a length of 0.80m is found. A portion of pelvic ribs attached to it is kept buried and embedded.

Kondagai

Kondagai site is exclusively a burial site. So far 9 trenches in which 29 quadrants have been laid. Till date 40 urns burials, one pit burial and 16 surface burials were indentified. So far 17 human skeletons and 2 animal skeletons were unearthed in association with bowls of red-ware, red-slipped-ware and black-and-red ware.

Key Findings so far

Urn No. 1 (YA1)

urn number 01 had exposed with 10 pots Black-and-Red ware and Red-Slipped-Ware at a depth of 33cm

Urn No. 1 (O7)

The skeleton was found in a sitting position and the skull facing north.

It is a primary burial and the body of the child was laid in north-south orientation with head on the north and face facing west. The skeleton measures 77cm in height and the pelvic diameter is 13cm. the left leg was bent inward.

Skeleton No. 1 (YA3)

It is primary burial and the body of the child was laid in northeast and southwest direction with head on the north. The skeleton measures 95cm in height and the pelvic diameter is 17cm.

Skeleton No. 2 (YA3)

Agaram

Key Findings so far

The first season of excavation was initiated at Agaram. Among the artefacts, the occurence of Microlithic tools requires our attention. The blades and lunates found in association with fluted core indicate that these tools were produced at this site. Carbonized rice grains have been recovered at a depth of 1.75m. Polished stone axe, ceramics such as black-and-red ware, red slipped ware, red ware and grey slipped ware in variety of shapes and decorations / paintings, beads, terracotta figurines, terracotta objects, glass objects of various colours, decorated shell objects, metal objects of both copper and iron and a gold coin have been recovered. .

Microlithic tools (blades and scrapers)

Approximately 3cm long three stone blades made by the crested guiding ridge technique. Both the working edges are sharp. One blade had been recovered at a depth of 1.34m and remaining two blades at 3.79m respectively.

Fluted Core

A fluted core of a chert was found in the quadrant A1/2 at a depth of 2.93m. The outer surface of the core is spirally grooved.

Stone adze

A broken polished stone adze having 5cm in length was found at a depth of 1.09m.

Carbonised Paddy

Cup Marks

Carbonised paddy were collected from the southern portion of B1/2 trench at a depth of 1.75m. They were 20 in nos. The associated materials were 3 huge stones and one with 2 cup marks on it.

Obverse

Gold coin

Reverse

A Gold coin with one side containing a symbol and the other side a bent line with a dot inside and 2 smaller lines in the opposite direction with 5 more dots was recovered from a quadrant A1/2 at the depth of 1.80m.. It weighs 300mg

Celadon sherd

Rim portion of a pale green Celadon chinese ware measuring 7 cm was collected from a quadrant C2/4 at the depth of 1.04m.

Smoking Pipe

The entire smoking pipe is finely shaped with parallel lined grooves at the centre of the top globular portion with a row of concentric pecking just above it. The connecting neck portion also contains the double grooved incision all around it.

Manalur

The excavation work at Manalur was started during May 2020, so far 4 trenches were laid in which 6 quadrant were opened. As of now, antiquities like smoking pipes, beads, terracotta wheels, hop-scotches and traits of structural activity were found.

Key Findings so far

Structural Evidences

At a depth of 42cm of the quadrant A1/4 an elongated elliptical trough like vertically placed brick aligned structure with perfect shaping of 124 cm length, 93cm width and a thickness of 5 cm. The corner of the brick structure is in curved shape. It contained few vessels suggestive of furnace activity.

Unearthed Objects

Adichanallur, Thoothukudi District

Adichanallur (Adichchanallur) is located on the right bank of the Tamiraparani River, in the Thoothukudi District of Tamil Nadu. The extensive urn burial site at Adichanallur was first discovered by Dr. Jagor of Berlin Museum in 1876. Alexander Rea excavated a good number of urns during 1903 and discovered gold diadems with parallels from Mycenae (one of the major centres of Greek civilization); bronze objects notably lids with exquisite finials depicting many animal forms, iron objects besides thousands of potsherds. The excavation was resumed by the Archaeological Survey of India during the years 2003-2004 and 2004-2005. More than 160 urns within the area of 600 square meters were exposed.

This marvelous wealthy habitation site and the antiquities unearthed from Adichanallur of Thoothukudi District plays a vital role in the history of Tamil Nadu and its civilization.

The excavation work is in progress on two main localities viz. burial ground and habitation. Totally ten urn burials were exposed of which two are in better state of preservation and remaining urns were buried in the soil. 438 antiquities were collected excluding graffiti marks.

Microlithic cores and a tool

Key Findings so far

These stone tools are collected from laterite deposit stratigraphically below the exposed urn burial. Tools consist of blade, point and scraper made of chert were recovered.

Graffiti Marks and Tamiḻi (Tamil-Brahmi) inscribed potsherds

Iron Objects

These iron objects were collected as grave goods. They are highly in rusted condition

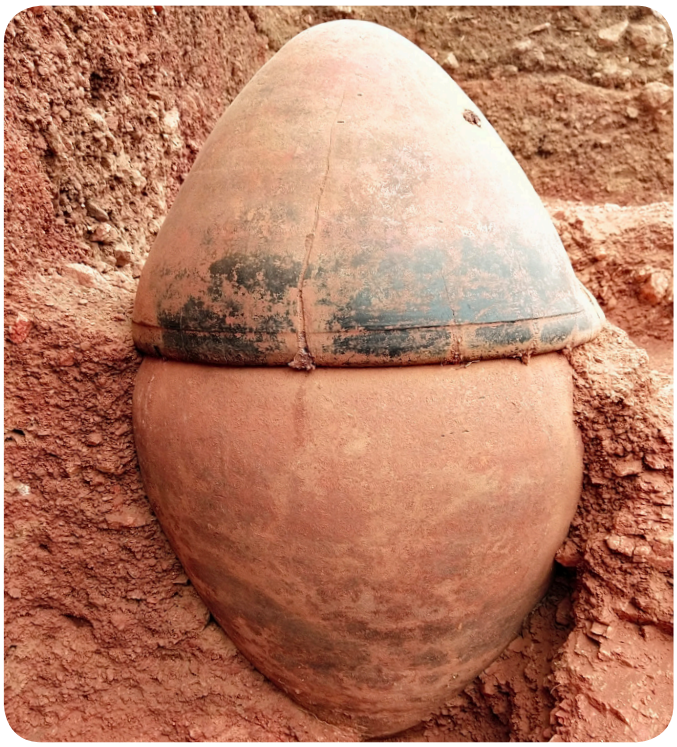
Roofing Tiles

Grooved roofing tiles with circular holes in the top

Urn 07

This is black-and-red ware urn. Top portion of the urn was crumbled. The urn contains offering pots like bowl and ring stand. Ash and bone remains were also found inside the urn.

Disc-shaped Ivory bead



Urn 08

This is a red ware urn covered with lid.

Urn 09

This urn burial found with broken lid. It has offering pots in upper level as well as bottom of the urn. Skeletal remains and black-and-red ware bowl placed inside the burial.

Sivagalai
Thoothukudi District

Sivagalai is a village in Srivaikundam Taluk of Thoothukudi District, Tamil Nadu. It is located on the left banks of the river Tamiraparani. Adichanallur lies 14 km west of Sivagalai.

The main objectives of the excavation are as follows:-

- To know the Iron Age burial culture and the cultural sequence of the site
- To locate the earliest settlement of this region

The excavation carried out in the mound called *parumbu* and *valappan pillaithiradu* met with plenty of potsherds, Mesolithic tools and other artefacts which marked the archaeological importance of this region.

The Sivagalai is a habi tation-cum-burial site and the excavation work is in progress at both the localities. There are 11 Trenches with 26 quadrants are opened in burial ground as well as in habitation mound. So far, 61 antiquities were collected. Totally 31 urn burials were exposed.

- *Burial Urn (A2)*

- *Deep bowl with the edge is painted white*

Urn 1 (A1) in-situ

Urn 1 & 2 (A1) in-situ

Key Findings so far

Coin

Stone Ball

Kodumanal
Erode District

Kodumanal in Perundurai Taluk, Erode District, Tamil Nadu is located on the northern bank of Noyyal River, a tributary to the Kaveri River. It is about 15 km west of Chennimalai and about 40 km southwest of Erode.

The significance of Kodumanal is evident from the textual references to it as a trade-cum-industrial centre in Sangam literature Padirruppattu (dated around the early part of Common Era) referred to this village as 'Kodumanam'. The site lies on an ancient trade route that connects Karur, the ancient capital of Cheras, in the east to the ancient seaport of Muziri on the west.

The main objectives of the excavation are as follows:-

- To locate the earliest settlement of the region.
- To understand the potentiality of Iron Age and Early historical culture and its transition.
- To study the evolution of Tamil - Brahmi script.

So far, 15 Trenches and 25 quadrants were opened. A large quantity of black-and-red ware and russet coated ware found. This site is associated with high industrial activities as evidenced from the large amount of furnace material exposed in the trenches. The floor levels of the houses, Tamil-Brahmi inscribed potsherds, terracotta objects and considerable quantities of animal bones were collected.

- *Tamiḻi* (Tamil-Brahmi) *Inscribed Potsherd*

Key Findings so far

Inscribed potsherd bearing *Tamiḻi* (Tamil-Brahmi) letters reading atan (ātaṉ) recovered at a depth of 146cm

Inscribed potsherd bearing *Tamiḻi* (Tamil-Brahmi) letters reading l̲ a kura (vaṉ) (l a-ku-ra-[vaṉ]) at a depth of 80 cm.

- *Construction Activity*

Channel like structure built of stone masonry is exposed at the centre of the trench, they were constructed with granite and limestone slabs. The space between two walls is 1m.

- *Furnace unit*

Furnace and burnt clay suggesting a iron smelting area was exposed at 70 cm depth.

The bunch of pots exposed close to Furnace.

Pot and Quartz Industry activity with graffiti pot

A pot with graffiti mark in-situ position exposed at 66cm depth

Bead Industry activity

The evidence of production of beads was found in B2 trench

Coin / Gold Ornament Piece

Several coins including punch-marked coins and Gold ornaments unearthed in various trenches at different levels.

Iron Arrow head with socket and bottom portion of socket arrow heads MEG – I

MEG – I Cairn Circle with cist

Iron Ring (MEG-II)

Iron Sword (MEG-II)

Carnelian Beads and Agate Beads found at MEG – II

Collaboration with other agencies

Having recognized the valuable contribution of specialized disciplines into deeper analysis of archaeological findings, the Tamil Nadu State Department of Archaeology is collaborating with the experts from the fields such as Archaeo-Botany, Molecular Biology, Population Genetics, Pre-Historic Archaeology, Environmental Archaeology and Linguistic Archaeology.

In this endeavour, the Department has taken up a major initiative in adopting various technologies like Ground Penetrating Radar [GPR] Survey, Magnetometer Survey, Unmanned Aerial Vehicle [UAV] Survey, etc., to identify the ideal spot for carrying out the systematic archaeological explorations and excavations with the help of reputed institutions like Indian Institute of Geomagnetism, Mumbai, Indian Institute of Science, Bengaluru, Department of Remote Sensing, Bharathidasan University, Institute of Remote Sensing, Anna University and Madras Institute of Technology, Chennai.

There has been a renewed interest in Archaeology and Heritage in our State and the support of the Government of Tamil Nadu is phenomenal and quite encouraging. Hence, there is a huge scope for the study of past. The State Archaeology Department is taking every effort with the guidance of eminent scholars namely Prof. K. Rajan, Department of History Pondicherry University, Prof. Shanti Pappu, Sharma Centre for Heritage Education Chennai,Dr. V. Selvakumar, Department of Maritime History and Marine Archaeology Tamil University, Thanjavur, Dr. S. Rajavelu, Adjunct Faculty, Department of History, Alagappa University, Karaikkudi in each and every steps of present archaeological excavations and explorations and also in the future projects to discover, document, describe and disseminate our cultural heritage through intensive archaeological excavation and exploration to get a right place in global history and reassure the position of the cultural history of Tamil Nadu in the global context.

Major Collaborating agencies

The antiquities unearthed from the present ongoing systematic archaeological excavations conducted at above potential sites are to be scientifically analysed using modern scientific methods through the reputed laboratories and institutions as listed who are pioneer in the archaeology related fields. In order to supplement the ongoing archaeological excavations in Tamil Nadu, Madurai Kamaraj University has taken necessary steps to establish an "ancient DNA Lab" at a cost of Rs. 3 Crore.