CHAPTER 4

EXPLORATION AND EXCAVATION AT SIRUTHAVOOR

4.1 INTRODUCTION

Of the reported megalithic site approximately less than 1% of the sites have been excavated. There is evidence of uneven distribution of sites within Tamil Nadu, Kerala, Karnataka and Andhra Pradesh and little systematic survey has been carried out (Sinapoli 2002, Mohanty and Selvakumar 2002). Conducting large scale exploration and excavation of megalithic sites is needed, but understanding each megalithic site is required to understand site specific variations. Both of which require scientific excavation, exploration, analysis and interpretation. This chapter describes the exploration and excavation carried out at Siruthavoor.

4.2 EXPLORATION OF MEGALITHIC SITES AROUND SIRUTHAVOOR

Following sites namely Reddikupam (Chengalpattu Taluk) which is reported to be having dolmen, Thiruporur (Chengalpattu Taluk) as having habitation site and cairn circle with cist, Manamai (Tirukalukundram Taluk) reported to have cairn circle with urns (Tirukalukundram Taluk), Manmur (Tirukalukundram Taluk) having Paleolithic and Early-historic habitation site with Roulettet Ware, Nellikuppam (Chengalpattu Taluk) with Cairn circle with urns, Orakadam (Tirukalukundram Taluk) having Paleolithic tools and Sempakkamkottamalai (Chengalpattu Taluk) with Megalithic Dolmens (Figure 4.1.) were reported by Rajan et al (2009) north of Palar in Kancheepuram district.
Figure 4.1 Study area Siruthavoor and other megalithic sites around Siruthavoor
This study involved, analysis of satellite data, study of toposheets and field explorations in order to understand the Megalithic culture in a detailed manner. The largest megalithic sites that were identified were Siruthavoor, Thirupurur, Amur (referred to as Pandithamedu in toposheet 66 D/2) and Manamai (all within 10 km radius). Satellite data also exhibits burials near Madayathur which is a few kms northeast of Siruthavoor site. At Thirupurur dolmen, with and without circle, circles, cist and urn burials were noticed. At Manamai burial types like cairn circles, sarcophagi and dolmen were observed. Further exploration around Oragadam revealed occurrence of Paleolithic tools and at Sirikunram a couple of cairn circles in a paddy field, but these were disturbed and not easily recognizable (Figure 4.2).

![Image of Sirukunram: Cairn Circle](image)

**Figure 4.2 Site Sirukunram: Cairn Circle**

Satellite imagery as well as toposheet data led to the exploration of the village named Amur (Pandithamedu). This site was to the south of the Siruthavoor Lake, and similar burial type to those at Siruthavoor having cairn circles, cist burials with and without circle, dolmen, with and without circle and sarcophagi were observed. The burials at Amur followed a similar type as those observed from Siruthavoor site. Some of cairn circles in both the sites...
had cairn circle stones with curved or rounded tops (Figures 4.3 and 4.4). Slabs of stone rested on smaller boulders forming a dolmen forming a very low type of dolmen (Figures 4.5 and 4.6) as well as dolmen with five or more stones, a huge top slab and one side flattened with extra stones (Figures 4.7 and 4.8) were noticed.

Figure 4.3 Dolmen with curved cairn circle stones at Siruthavoor

Figure 4.4 Dolmen with curved cairn circle stones at Amur
Figure 4.5 Dolmen very low in Siruthavoor with 2 large slabs as capstone

Figure 4.6 Dolmen very low in Amur with 2 large slabs as capstone

Figure 4.7 Dolmen at Amur with anti-chamber and large flat boulder as capstone
Figure 4.8  Dolmen at Siruthavoor with anti-chamber and large flat boulder as capstone

4.3  SPATIAL PATTERN OF BURIALS AT SIRUTHAVOOR

More than 559 burials were recorded at Siruthavoor and are presented in (Figures 4.12 to 4.22, Annexure 1). Table (4.1) represents the number of burials and type of burials documented during the exploration.

Table 4.1. Individual type of burial and their number

<table>
<thead>
<tr>
<th>Type of burial</th>
<th>Number of burials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circle</td>
<td>166</td>
</tr>
<tr>
<td>Dolmen</td>
<td>123</td>
</tr>
<tr>
<td>Dolmen with circle</td>
<td>157</td>
</tr>
<tr>
<td>Cist</td>
<td>38</td>
</tr>
<tr>
<td>Cist with circle</td>
<td>57</td>
</tr>
<tr>
<td>Dolmenoid cist</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>559</td>
</tr>
</tbody>
</table>
For building these burials, two varieties of raw material were used, granitic gneiss and Charnokite the source for which is locally available (Figure 4.9).

![Figure 4.9 Granatic Gneiss and Charnokite used for megalithic burials at Siruthavoor](image)

Burials from Siruthavoor and Amur show clear signs of the techniques used in building these burials (Figures 4.10 and 4.11). The boulders and slabs, (especially the cap stone) had square holes which were arranged in a perfect line, and these holes could have been used to split the boulders. Similarly, in later period, especially during Chola period, in order to split huge boulders to build temples, the stone mason used to carve small holes with the help of small chisels aligned in a straight line and insert wooden pieces into these holes, on these wooden pieces water was poured, due to the contraction and expansion of the wooden piece cracks would develop, which was then used to break the stone (Rocks 2009). Wheeler (1948) on the other hand describes the use of heat application and iron wedges in order to extract slabs for cist building which he also reported from the excavation of one of the megaliths. A nail/chisel like object, heavy and in a good state of preservation was a part of the surface finds at Siruthavoor,
fund next to a sarcophagus alone with a few other iron implements. However due to the fact that it was located on the surface it is difficult without further metallurgical analysis to correlate this implement with the megalithic structure or their constructions.

Figure 4.10 Capstone at Amur showing signs of being shaped

Figure 4.11 Capstone from Siruthavoor with a line of holes probably for cutting or shaping of stone
Figure 4.12 Map of Siruthavoor showing all the burial types including cairn circle, dolmen, cist, dolmen with circle, cist with circle and dolmenoid cist
Figure 4.13 Over all map of Siruthavoor (close up) showing the spatial outlay of all megalithic burials at Siruthavoor
Figure 4.14 Spatial outlay cist and cist with circle type burial at Siruthavoor
Figure 4.15 Spatial outlay of dolmen and dolmen with circle type burials at Siruthavoor
Figure 4.16  Spatial outlay of cist with circle and dolmen with circle type burials at Siruthavoor
Figure 4.17 Spatial outlay of dolmen, cist and dolmenoid cist type of burials at Siruthavoor
Figure 4.18 Spatial outlay of cairn circle type burials at Siruthavoor
Figure 4.19 Spatial outlay of cist type burials at Siruthavoor
Figure 4.20 Spatial outlay cist with circle type burials at Siruthavoor
Figure 4.21 Spatial outlay of dolmen with circle type burials at Siruthavoor
Figure 4.22 Spatial outlay of dolmen type burial at Siruthavoor
4.3.1 Cairn Circle

Around 30% of the Cairn circle situated close to (on the bank of) the Siruthavoor Lake had distinctly visible cairn packing (Figure 4.1). However half of the cairn circles were exposed due to the disturbances caused by water activity with very few having partially preserved cairn packing visible on the surface. The surface of the Cairn circle to a large extent had a sandy pinkish white deposit, especially closer to the Lake. Some of the circles also had stone slabs visible inside the circle, but no clear shape was discerned to be able to distinguish them as having a cist or stone slabs. On an average around 12 stones were found in each circle, with a maximum up to 18 stones. Lateritic blocks and well rounded boulders were found largely in the eastern or northeast of the Cairn Circle (Figure 4.23), sometimes either inside or outside the circle and also part of the circle. In some areas the sand quarrying activity was carried out in such way that an island of stones with a nearly intact circle exposed in section was revealed.

![Image of Cairn Circle with Lateritic Blocks](image)

Figure 4.23 cairn circle with lateritic blocks outside circle
Figure 4.24 Cairn circle around hillock showing overlap of burials

Fewer cairn circles were found near the hillock when compared to those near the Lake, the former have a distinct cairn packing, much more visible than the ones near the Lake. Towards the northwestern side of the hill, a group of 4 circles were documented as overlapping each other and forming a pattern (Figure 4.24). Two of the circles also had a smaller circle or box like feature attached to the east of the circles.

4.3.2 Dolmen

The dolmen at Siruthavoor are of varying types, sizes and shape, namely the flush capstone which is placed close to the ground, but most of them have small slabs separating the large capstone from the ground (Figure 4.25). Another dolmen has five boulders supporting a slab on top (capstone), this dolmen has a cairn circle around it and is shaped like a pentagon rather than rectangular or square (Figure 4.26). Another type of dolmen found at Siruthavoor have long slabs placed in a north south orientation which are close to the ground, much like the flush capstone with an extra third slab on one side leaning into the dolmen and a triangular stone on the eastern side (Figure 4.27). A variation of this is a dolmen made of boulders, yet the
boulders are long and the dolmen is well above the ground level (Figure 4.28). One or two dolmen had an antechamber in front of the dolmen, clearly distinguishable from those without one (Figure 4.29). The natural outcrops are often incorporated into the construction of the dolmen with circle which is found near the hillock (Figure 4.29, Figure 4.30) as seen in the excavated burial 4 (Figure 4. ).

![Figure 4.25 Dolmen with low/flush capstone](image)

**Figure 4.25** Dolmen with low/flush capstone

![Figure 4.26 Dolmen with circle, dolmen has five stones supporting the capstone and is circular shaped](image)

**Figure 4.26** Dolmen with circle, dolmen has five stones supporting the capstone and is circular shaped

![Figure 4.27 Low dolmen with long slabs as capstone](image)

**Figure 4.27** Low dolmen with long slabs as capstone
Figure 4.28 Dolmen with long boulder shaped stones

Figure 4.29 Dolmen with outcrop, and open on two sides

One particular dolmen found to the southern end of the hillock (larger hillock) had a dolmen with a circle, the dolmen had a flattened stone placed to the north and a space left between the capstone and this stone created a type of antechamber (Figure 4.30). Towards the northwest of the same dolmen, two boulders were having a flat surface facing the dolmen, rounded at the back and forming a part of the cairn circle.
4.3.3 Dolmenoid Cist

Some of the dolmenoid cist burials have rough unhewn stones, and are thicker in breadth, sometimes having a swastika pattern (Figure 4.31 and 4.32). The height of the dolmenoid cist at Siruthavoor is not far above the ground, especially when compared to the dolmen. Some dolmenoid cist have no capstone and this may be due to anthropogenic factors, such as stone quarrying carried out by the villagers of Siruthavoor. Due to this reason as well as the unevenness of the terrain and vegetation dolmenoid cists and dolmen are difficult to differentiate from each other clearly.
Figure 4.31 Dolmenoid cist showing swastika pattern and roughly shaped stones

Figure 4.32 Dolmenoid cist with swastika pattern at Amur

4.3.4 Cist

Majority of the cists are rectangular, with the occasional square type (Figure 4.33). Some of the cists burials like the circles which are near the Lake have a sandy white deposit. Few of the cists with a circle are not easy to identify due to sediment deposit. This is due to the rise of water level during the rainy season. The height of the cists does not vary a lot but there is a perceptible difference. While the cairn packing is visible for some, others do not have any surface cairn packing and most of them have no visible cap stone. The main types of cist that were observed are the rectangular cists with
swastika pattern, the square type which does not have the swastika, and one
cist which has one side cist wall taller than the other sides (Figure 4.34). One
cist with circle observed near the water body to the northwest of the
Siruthavoor Lake, clearly showed a transcepted cist.

Figure 4.33  Cist burial situated northwest of Siruthavoor Lake with
swastika pattern clearly visible on the surface

Figure 4.34  Cist burial with one orthostat higher above ground than rest
Figure 4.35 Exposed section showing cist burial

Figure 4.36 exposed section of cist burial with sarcophagus and urn seen
Those cists which are exposed in section due to sand quarrying have either urn burial or sarcophagi and sometimes both (Figure 4.35 and 4.36). The sarcophagi have 6 to 15 legs in rows of 2 or 3, and the original shape of both urn and sarcophagi is unclear due to post depositional changes, like weight of sediments and stones on them, damage due to plant root and anthropogenic activity. An important aspect noticed during the survey was that, a reactangular pit in the area beginning from at the Siruthavoor lake running northwest parallel to the mountain reaching a small dry water body west of the hillock was affected by sand quarrying activities. However the exposed sections revealed many disturbed or damaged burials, having a slab on top or a swastika shaped cist (Figure 4.36). A large number of sarcophagi were also noticed in this area, and a number of iron implements were also noticed during the survey (Figure 4.37). The area north of the Siruthavoor Lake, and south of the hillock was also completely changed due to sand quarrying, however the destruction here was so complete and even exposed sections were very few.

![Image of iron implements](image.png)

**Figure 4.37** Iron implements found near disturbed cist burials during exploration
4.3.5 Urn Burials

The urn burials are located close to the water body, which is to the west of the cairn circles, and are exposed due to sand quarrying. They have no stone appendage on the surface, and sometimes have slabs on top of the urn but a few cms below the surface, while others have upturned lids. The size, shape and design on the urns are different to each other.

4.4 Lithosection

Five sections were litho logged, 4 of these were without any archaeological material, and one a composite stratigraphy after studying a number of exposed section with archaeological remains from Siruthavoor (Figure 4.38). All the sections showed a similar weathering profile; with some variation is thickness of sediments. Lithosection 1 was totally 1.23 m in height, the lowermost sediment seen was 20cms in thickness, was seen to be weathering of the gneiss below, with occasional angular cobbles of weathered gneiss and quartz. On top of which was a red (7.5 YR 4/6) coloured strata of 40cms thickness, made up of sediments supported by coarse granular clasts, the clasts being sub rounded to angular, mainly feldsic, with quartz and lateritic pieces. This is followed by a layer of gradational contact of 20 cms, orange (5 YR 7/8) in colour thickness overlain by matrix supported, orange (5 YR 7/6) granular sediments of 20 cms thickness, this layer is normally graded and topped with a surface layer of 23 cms which is pale orange (5 YR 8/4) sandy silt (Figure 4.39 and 4.40).
Figure 4.38 Map showing distribution of lithosection at Sairuthavoor
Figure 4.39 Graph of lithosections 1-5

Lithosection 2 was a similar weathering profile, with the only changes being in thickness of soil. Litho section 4 however, a composite stratigraphic section of archaeological stratigraphy, had a similar base of weathering bedrock material, with angular clasts of gneiss and quartz, red (7.5 YR 4/6) coloured, overlain by a layer of dusky red (7.5 R 4/4) granular clast supported layer, topped by a gradational dull reddish brown (7.5 R 5/3) layer. The archaeological remains which include large slabs of granitic gneiss used in construction of burials and pottery pieces, intrude into a grayish red layer (7.7 R 6/2), pebbly in texture, this is topped by a layer of sandy silt sediments dull orangish red in colour (10 R 6/3). The lithosections 3 and 5 have a thicker layer of bedrock around 60 cms followed by a layer of angular red (7.5 YR 4/6) coloured clasts, overlain by dusky red (7.5 R 4/4) granular sediments. The location of these lithosections shows that the elevated bedrock is seen to be interspersed between the sections with thicker soil profile (Figure 4.39 and 4.40).
Figure 4.40 Image showing lithosections 1-5 at Siruthavoor

4.5 EXCAVATION

As earlier mentioned eight burials were excavated at Sirthavoor, out of these, Burial 1, 4, 5 and 6 were intact burials, while burials 2, 3, 7 and 8 were partially disturbed/ exposed and burials 2, 7 and 8 did not have any associated stone appendage (Figure 4.41). Burial 3 was the least disturbed, a cist burial, missing half its cairn circle, and the western cist wall was only partially intact. However the cist itself it was nearly completely preserved. Since the site is being destroyed due to sand quarrying these burials (2, 3, 7 and 8) were excavated with the view of not only getting more information but also salvaging data from already disturbed burials.
Figure 4.41 Distribution of excavated burials and lithosection at Siruthavoor
4.5.1 Excavation of Burial 1 (Cairn Circle)

Burial 1, a cairn circle, located close to the Siruthavoor Lake was excavated with the aim of understanding construction patterns of burials in Siruthavoor. The surface of the cairn circle was flat, remnants of what may have been cairn packing was noticed in the form of scattered cairn stones within and around the burial. The circle measured 5.90 x 5.10 m on the inside (outer circle measuring 6.33 cms NS and 6.93 EW cms). Inside the cairn circle on the eastern side a rounded stone was located, the rounded side of this stone faced the middle of the circle, its flat side resting upon the cairn circle stone (Figure 4.42). To explore if there was any further evidence of deliberate placement of this extra inner stone in the east and any other associated material; the circle was divided into east and western quadrants and the eastern half was excavated first. Initially a balk of 0.50 m width was kept, dividing the eastern and western quadrants, which was removed after the western quadrant was excavated so as to understand the stratigraphy of both the quadrants.

![Plan of Burial 1 at Siruthavoor, situated close to the lake, having an extra stone inside the cairn circle in the east](image)

Figure 4.42 Plan of Burial 1 at Siruthavoor, situated close to the lake, having an extra stone inside the cairn circle in the east
Four 1x1m trenches were placed outside the circle and were referred to as NE Outer, NW Outer, SW Outer and SE Outer due to their position. These trenches were laid in order to check and verify if any cultural activity was going on outside the circle. While clearing the outer area of the cairn circle, 4 stones were found placed roughly in the four cardinal directions (N,S,E,W) measuring roughly around 12x10x3 cms each underlining the importance of understanding any activities carried outside the circle. Towards the south of the eastern stone inside the circle a pile of laterite pieces were noticed during the excavation. These laterite pieces were completely exposed at depth of 35 cms and on an average they measured 30x15x10cms individually and all together it measured in a cluster 70 x 65 cms. The soil around this feature was much looser, fine and ashy in colour.

Figure 4.43 Statigraphy of burial 1 eastern section
At a depth of 33cms the eastern facing section of this burial revealed a pit marking. Four layers were identified from this excavation, the lower or 3rd layer most being the natural soil (Figure 4.43), was a lateritic red coloured soil, very compact and gravelly in texture (10 R 5/8, Red), overlain by the 2nd layer, a mixed brownish sediment of clay mixed with laterite gravel (5 YR 6/3, dull orange), 25 cms in thickness, having some pebbles and this was overlain by a 30 cms deposit of finer brown sediments (5 YR 6/4, dull orange), which was more sandy and less clayey and the 1st layer on the surface. The 4th unit was a clearly demarcated pit which cut into the first 2nd and 3rd layers of the section. Its shape was outlined with angular granitic gneiss. The sediments from the pit were compact, fine in texture, and light reddish grey in colour (2.5 YR 7/1) (Figures 4.42 and 4.43).

A large slab of gneiss was located at a depth of 50cms in the northeastern quadrant of the trench measuring (25x67x70 cms). When completely exposed the sediments below the slab was seen to be having the same stratigraphic sequence as the east facing section, the complete thickness of soil below this slab being 46 cms, 32 cms of sediments same as 2nd layer and 14 cms of the 3rd layer (Figure 4.43 ). The position of the slab was such that it sloped from the northern part of the circle towards the centre of the circle.

At an average depth of 32cms the natural soil appeared in the outer areas of the eastern quadrant (the northernmost and southernmost areas), whereby an area of 1.37 m in the centre of the circle where the brownish layer continued was dug further. This area started from 1.99 m from the northern side and 1.74 m from the southern side to and 1.12 m from the eastern side forming a roughly oval shape. Towards the south east of the granitic gneiss slab was another pit formation which was 35 cms deep covering an area of 3.05X4.35 m, excavation this pit revealed angular slabs of granitic gneiss and
charnockite measuring an average of 36x10x14cms held together with a compact clayey deposit of similar texture and colour as the pit from the section (Figure 4.43). Small pottery pieces were recovered from this pit at depths of 38, 42 and 60cms, they was very weathered but recognizable as Red Ware. This pit ended at a depth of 75 cms below which the lateritic soil was encountered and left undug.

![Image of the pit with coarse Red Ware pottery]

**Figure 4.44 Southwestern quadrant with coarse Red Ware pottery**

The outer trenches (1x1 m) had two layers, a finer brown sediment (5 YR 6/, dull orange), which was more sandy and less clayey and the 1st layer on the surface of 33cms thick similar to that of the circle. Below this was a 2nd layer of looser lateritic red coloured soil with patches of, very compact and gravelly in texture (10 R 5/8 Red). The 4th layer, namely the pit as well as the intermediate layer numbered 2 in the cairn circle, was missing in the outer trenches. Some fragmentary pieces of coarse and fine Red Ware were recovered in the southwest and southeast outer trenches at a depth of 33 cms and 30 cms respectively (Figure 4.44).
Figure 4.45 Western quadrant showing sarcophagus

In the western quadrant at depth of 16 cms, a sarcophagus of 22 cms long was noticed, the sarcophagus oriented in an east west direction, around it was a roughly circular alignment of stones (Figure 4.45). Along with the sarcophagus some broken pottery pieces of fine Ware, in a very badly preserved state were noticed. Iron implements in a very fragile state were also recovered; the shape of the object was not recognizable due to its bad preservation. Some holes were noticed around to the sarcophagus, the body of the sarcophagus had tiny holes but was completely broken. After the balk was removed, it was noticed that long many sided slabs of granitic gneiss were located between the two sides of the circle, or in the centre of the circle. These slabs looked dressed, but did not form any recognizable structure or formation (Figure 4.46 ).
4.5.2 Excavation of Burial 2 (Sarcophagus)

During preliminary field survey a sarcophagus was partially exposed due to sand quarrying and erosion activity, situated to the northwest of the Siruthavoor Lake. At previous excavated sites such as Sanur and Kunnattur sarcophagi in stone lined pits have been reported (Krishnaswami and Saran 1955, 1956, 1957, Banerjee and Soundara Rajan 1959). This exposed sarcophagus had no stone appendage in its immediate proximity; however presence of disturbed cairn stone’s were noticed on the surface around the sarcophagus, but whether it formed a circle or was associated with the sarcophagus was not clear. The objective of excavating this burial, which was disturbed, was to understand if it was buried within any stone appendage or pit.
Figure 4.47 Burial 2: Exposed sarcophagus with remnants of lid

A 3x 3 m trench was laid encompassing the exposed sarcophagus, but as the burial was very disturbed both stratigraphy and pit markings were difficult to demarcate. The sarcophagus was oriented in a northwest-southeast direction and was completely exposed at 45 cms (Figure 4.47). The trench did not reveal any associated stone appendage but broken pottery pieces were recovered from the northeastern end of the sarcophagus. The soil in the first layer was mostly loose and bright brown (2.5 YR 5/8) in colour and was 45 cms thick and was redeposited from sand quarrying activity, below this is a 30 cms thick orange (2.5 YR 7/8) coloured sediment.
It was observed that there was a complete lack of stones; the trench was laid on the north-south axis at 1.50 m. the sarcophagus measured 1.65 m in length and 40 cms in breadth and was exposed at a depth 45 cms. The placement of the sarcophagus in the trench was such that it was 1.63 m from the northwestern corner and 2.25 m from the southwestern corner. At the southeastern end of the sarcophagus a possible lid was noticed in broken and fragmentary condition having designs of finger impression all around the upper part and a more elaborate design on the southern facing side of the sarcophagus. The northwestern facing side of the sarcophagus had broken pottery pieces, including Black - and - Red Ware pottery in broken condition due to which the shape was not recognizable. From within the sarcophagus, 13 etched carnelian beads and 3 paste beads (Figure 4.48) were recovered at a depth of 65 cms between the second and third leg of the sarcophagus. The sarcophagus itself was completely exposed at a depth of 95 cms. At the western side of the sarcophagus, a few Black-and-Red Ware pottery pieces (maybe bowl) were noticed and Red Ware pieces in fragmentary condition.

Figure 4.48 Iron implements and beads from excavated burials at Siruthavoor
4.5.3  Excavation of Burial 3 (Cist)

Burial 3 was a partially disturbed cist burial with half a circle around it, though one wall of the cist was half uncovered, and some pottery pieces and iron implements were visible. The cist measured 2.47 m (southern orthostat), 1.16 m (eastern orthostat, thickness being 18 cms) 1.46 m (western orthostat, thickness being 15 cms) and inside the eastern wall measured 1.10 m (Figure 4.49). On the inside of the eastern side of the cist an extra slab was present, which sealed the gap between the eastern and southern orthostat. The plan of the cist was that of a swastika, and the slabs used for the orthostat were dressed, and shaped. The sediments in this burial were uniformly red (10 R 5/8) in colour, compact and sandy silt in texture, with very little or no variation.

Figure 4.49 Burial 3: Cist type burial with fourth orthostat disturbed

Two individual arrangements of cairn packing besides on top of cist with slab covering cist, were noticed outside the eastern and southern sides of the cist (Figures 4.50 and 4.51). The stones measured an average of (large) 31 x 24 x 17cms and (small) 30 x 31 x 40 cms. These arrangements forming a
rectangular path towards the cist without any pebbles or boulders found anywhere else around the cist. At a depths of 28 and 67 cms within the stone packing of the southern side Red Ware pottery were noticed, the pottery from the 28 cms were fine while those at 67 cms were coarse.

Figure 4.50 Outside cist, cairn packing on eastern and south eastern areas

Figure 4.51 Slab on top of cist with cairn packing on top with slab in eastern side
An iron implement, appearing to be a sword partially intact and exposed in the western part of the cist at depth of 55 cms, a few other smaller iron implements were also found at this level (Figure 4.48). At a depth of 63 to 67 cms inside the cist, complete pots along with iron implements was excavated, some of the pots were in an inverted position while others were upright and sediments was found within the two layers (Figure 4.52). The pots were of varied shapes and while occasionally Black and Red Ware bowls were also noticed a majority of them were pots with rounded base, in Red Ware. The base of the sarcophagus was noticed at depth 66 cms while the legs of the sarcophagus were uncovered at the base of the cist at a depth of 90 cms. The sarcophagus measured 2.10 m x 0.60 m width however the walls of the sarcophagus were too fragmentary to recover and the height of the wall can only be approximated. Around the sarcophagus at the same depth of 90 cms more pottery was found as well as Black Ware and Red Ware stands. Two large iron implements were found at this level, in a rectangular shape, one placed below the sarcophagus and the other leaning on the eastern orthostat (Figures 4.53 and 4.54). Besides other smaller iron implements carnelian beads were also recovered from the surface of the sarcophagus (Figures 4.48 and 4.53).

Figure 4.52 Cist with pottery
Figure 4.53  Iron implements from burial 3, sword like object and 2 large iron slabs found near sarcophagus inside cist

Figure 4.54 Sarcophagus, large iron implements and Red Ware stand
Small pieces of flat stone were noticed underneath the legs of the sarcophagus in what seems to be an attempt to rectify the difference in height of the legs (Figure 4.56). The southern orthostat was made up of a huge slab, at the centre of which was a rectangular opening measuring 68 cms in width. At the middle of the base of this opening was a triangular shaped feature of 53 cms length and was not independent of the orthostat, appearing to be a port hole (Figure 4.57).

Figure 4.56 Sarcophagus of cist with stone below legs to balance the structure

Figure 4.57 sarcophagus from cist with associated grave goods
4.5.4  **Excavation of Burial 4 (Dolmen)**

Burial 4 was a dolmen type, situated next to the smaller hillock at Siruthavoor and is north of the Siruthavoor Lake. The reasons for the choice of this burial were multifold, first to understand the relationship between the outcrop present to the east of the dolmen and the dolmen. The burials here were at a depth of 10 cms to 30 cms and the sediments were reddish orange (10 R 6/8) in colour and sandy silt in texture. The reasoning behind excavation this particular dolmen was dual in nature. The exploration revealed many smaller dolmens around this hillock which may or may not be symbolic; excavating a burial around this hillock was aimed at clarifying this aspect of the site (Figure 4.58). Secondly the surface and sub surface features of the megalithic burials differ from one burial to another and excavating this dolmen was important for understanding these differences at Siruthavoor.

![Burial 4: dolmen associated with outcrop, next to smaller hillock](image)

**Figure 4.58**  Burial 4: dolmen associated with outcrop, next to smaller hillock

A circular trench was laid around the dolmen for a better understanding of it and its relationship to the outcrop present northeast of the dolmen (Figure 4.59). From the eastern quadrant around the circle Red Ware
and black (maybe stand) Ware pottery pieces were recovered at a depth of 10 cms in the northeastern side of the dolmen next to the natural outcrops was recovered. Closer to the dolmen also amongst the outcrops at a depth of 43 cms more pottery was found, in a fragmentary condition. At a depth of 10 cms within the dolmen a Black Ware plate and a small iron implement were noticed. To the west of the dolmen at a depth of 53 cms, a sarcophagus was noticed, the sarcophagus was filled with rounded stones and slabs and no other antiquity was found around.

![Figure 4.59 Burial 4 showing association with outcrop](image)

4.5.5 Excavation of Burial 5 (Dolmen with circle)

Burial 5 was a dolman type of burial with a circle around it; the dolmen consisted of five boulders as base which carried the weight of the capstone which was placed on top of these boulders. While normally dolmen type burials are believed to have a rectangular or square base, the five base stones of this dolmen formed a rough circle rather than a box. On the eastern side, was a gap between two of the boulders which formed the circular base and just outside the circumference of which were present two triangular
shaped stones. This type of dolmen was also noticed during the field survey, and due to their repeated occurrence on the site understanding these dolmen was important for the further understanding of the typological differences of burials at Siruthavoor.

![Dolmen in pentagon/circular shape with two triangular stones in the east]

**Figure 4.60** Burial 5: Dolmen in pentagon/circular shape with two triangular stones in the east

The soil within the cairn circle, outside the dolmen was orange (2.5YR 7/6), lateritised and hard mixed with weathered stones. These pebble sized stones also occurred outside the cairn circle, forming part of a cairn packing, but the stones were not very dense, evenly distributed within the sediments. The cairn packing was excavated leaving a balk of 50 cms in all four directions. The cairn packing was 40 cms thick, after which the soil texture changed and was left un-dug, in the southeastern quadrant, abutting the eastern balk was a stone packing of larger stones and compact in a rectangular pattern abutting the eastern balk. In the northeastern quadrant Red Ware pottery pieces were found both near one of the cairn circle stones
and directly outside the dolmen partly within the eastern balk. The excavation of the circle outside the dolmen also revealed that between the 5 boulders that made up the dolman stone packing made of smaller pebbles and ceiling the gaps between the boulders was revealed (Figure 4.61).

![Figure 4.61 Burial 5 with stone packing between boulders below capstone](image)

The soil within the dolmen was reddish orange (10 R 6/8) in colour, loosely packed and fine textured, without any distinct variations. Three sarcophagi were excavated from within the dolmen and labeled sarcophagus A, B and C. At a depth of 40 cms 2 iron pieces in the western area of the dolmen and the top of sarcophagus A was revealed, a circular arrangement of rounded stones was also exposed roughly placed on top of sarcophagus A (Figure 4.60). Occasional pieces of broken pottery were uncovered within the western part of dolman however the eastern part was completely devoid of any artifacts. While sieving sand from the southwestern area (around western end of sarcophagus A) a gold ring was discovered at a depth of 54 cms (Figure 4.62). It was small in circumference and thin, however the colour was a bright yellow, with no sign of any tarnishing. At the same depth of 54 cms the second sarcophagus, sarcophagus B was exposed in the northeastern area of the dolmen (Figure 4.63).
Figure 4.62 Gold ring from burial 5

Figure 4.63 Sarcophagi A, B and C within burial 5 with remains of lid on top

Two iron implements were discovered, the larger one in the northeast next to sarcophagus A and smaller one in the southwest near sarcophagus B which was partially exposed. At the same depth in the southern part of the dolmen a small translucent white quartzite pieces was recovered, apart from this and the stones used for the semi circle on top of
sarcophagus A the sediment had no large clasts. Sarcophagus C, which was smaller in length to A and B was recovered in the northeastern most corner of the dolmen. Two of the sarcophagi had designs on their body, while sarcophagus A had a rope like design through out the top of the body, B had a fingerprint design and all three had lids, though the lids were disturbed and broken and all the sarcophagi were placed in the east-west orientation. In the western part of the dolmen above sarcophagus A was found a three legged pot at a depth of 60 cms however it was broken and not recovered intact (Fig). Sarcophagus A had three rows of legs, 15 in number, while sarcophagi B and C have two rows numbering 12 and 4 respectively. At a depth of 74 cms the natural outcrop on which the sarcophagi were placed was exposed (Figure 4.64). The exposed outcrop also acted as the base of the dolmen on which the sarcophagi and other grave goods were placed.

![Image](image_url)

**Figure 4.64** Bedrocks on which sarcophagi were kept in burial 5
4.5.6 Excavation of Burial 6 (Dolmenoid Cist)

Burial 6 was a dolmenoid cist burial having no cairn circle around; the cist did not have a capstone. The orthostat of the cist were made of stones which were roughly shaped; they were neither like the boulders used in Burial 4 nor were they dressed slabs like those of Burial 3 (Figure 4.65). The burial had very compact with only one unit of sediments, orange (5 YR 6/6) in colour and gravelly in texture with some pebbles and no variation is sediments was noticed. At a depth of 35 cms pottery pieces were recovered, and some course Red Ware pottery however the pottery excavated form this burial was very dark in colour and was in a very weathered condition, making it impossible to record any shapes. At same depth as the Red Ware pottery, a possible sarcophagus was excavated on the south east side of the dolmenoid cist. This sarcophagus was placed in an east west oriented and some pottery was recovered on the northeast side, a few pieces were fragmentary Black and Red Ware pottery was also exposed. In the northern area of the quadrant at the same depth, a conglomerate of pottery pieces cemented together by sediments was exposed. Further excavation of these revealed two circular impressions which were probably remnants of a pot, the pottery pieces themselves were highly weathered and dark orange in colour, though due to their poor state of preservation the Ware and type were not identifiable.

Figure 4.65 Dolmenoid cist type burial, burial 6
4.5.7 Excavation of Burial 7 (Urn with Capstone)

![Image](image.png)

**Figure 4.68 Burial 7, urn with capstone**

Burial 7 is an urn type of burial partly exposed due to human activity. The urn on excavation was found to be intact along having a cap stone measuring 73 cms in width and 9 cms thickness and placed 8 cms above the urn (Figure 4.68). The urn was then excavated with the intention of understanding its associated finds and any visible pit markings. No stone appendage was visible on the surface in this area of the site, only due to the large scale anthropogenic activities were the urns exposed and also destroyed. No grave goods were found around Burial 7, the urn was 42 cms in width and 33 cms in height with the neck measuring 6 cms. The capstone emerged 22 cms below the surface, this soil was reddish orange (10R 6/8) in colour and hard and compact with a sandy texture. The soil around the urn was red coloured (7.5R 4/8), latertic and very compact and gravely in texture. The urn was covered by a lid, which was broken but clearly visible around the mouth of the urn, inside the urn the soil was fine textured, red in colour (7.5R 4/8)
and loosely packed. At the bottom of the urn, a Black and Red Ware bowl, inside which ash and fragmentary bone pieces were recovered, the ash and bone pieces were also found inside the urn around the bowl.

4.5.8 Excavation of Burial 8 (Urn)

Burial 8 was exposed along with many other such urns when a ditch had been dug by the Siruthavoor village authorities as drainage for a road which was being laid to the northeast of Siruthavoor Lake. Burial 8 did not have any cap stone or any other associated stone appendage (Figure 4.69). The 1st layer was 31 cms in thickness, and was dump resulting from the road laying activities below this was a lateritic soil not very compact and this layer continued below the urn, the section did not clearly show any pit marking or change in texture. The urn was 71 cms wide at the shoulder, 58 cms at the base and 1.41m height. The trench was 1.50 m in width, with the urn located 39 cms away from the northern wall of the trench.

Figure 4.69 Urn with inverted lid on top burial 8
On the southern section another disturbed urn, was exposed, however this was not further excavated. The excavation revealed a single urn with an upturned lid on top; very few fragmentary pieces of pottery were recovered from around the urn. The inside of the urn had yellowish soil; the urn was found tilting towards the southwest. The urn also had some clasts of quartzite and some very gneiss which appeared very weathered. No grave goods or bones were recovered except for a few fragmentary broken pieces of pottery form outside the urn.

The output from the survey and excavation carried out at Siruthavoor addresses a few important questions which have often been asked but so far have not been analysed in detail. It also raises many questions, the following points summarise briefly the work carried out at Siruthavoor and its results:

4.6 SUMMARY

The exploration of the sites around Siruthavoor show that other megalithic burial sites existed within close proximity clearly indicating towards a landscape in which the people did not live in isolation. On the contrary where the area occupied by other megalithic sites like Thiruporur and Mnaimai indicate a well populated region.

The burials at Siruthavoor show variations in density of types of burials into specific regions of the landscape. The different types of burial are however not completely exclusive, rather they overlap, showing us that chronology, topography as well as social factors could all affect this spatial segregation.
The previously given classification does not make allowance for all the variations of burial types, not does it help understand this peculiarities within a site of the types.

Rather than try and fit burials into pre existing classification, understanding the burials in terms of chronology and construction methods could prove more effective in collecting more information and data on the megalithic burials.

The excavation has shown that the different types of megalithic burials have been placed with topographical context; however survey reveals that this is not the only factor influencing the placement of burial. Excavation reveals that burial 4 and 5 are placed on top of the bedrock, and the outcrop east of burial 4 has integrated into the burial space. However dolmen seen in exposed sections how that they are not all placed only on the bed rock.

Excavation has also revealed that the cist burials had a richer variety of grave goods when compared to the other types of burial at Siruthavoor.