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Kaveripattinam: An Ancient Port

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Introduction

Ancient ports of Tamil Nadu played a vital role in overseas trade and diffusion of Indian culture in South-East Asia. Kaveripattinam, presently known as Poompuhar, situated about 75 km from Pondicherry, (fig. 1) was one of such flourishing ports of the pre-Sangam and Sangam periods.

The Sangam text *Silappadikāram* mentions that Poompuhar (Kaveripattinam) covered an area of 4 kavatham approximating to 30 sq. miles, and the boundaries of Poompuhar extended up to Karivendanathapuram and Kadarankondan in the west, Thirukadavur in the south, Kalikamur in the north and sea in the east. It encompassed 30 villages in which 60,000 families lived. It is then obvious that ancient Poompuhar was not confined to the present Kaveripattinam and Vanagiri but extended inland up to Manigramam, Pallavaneswaram and southward up to Tarangambadi. Wheeler considered Tranquebar as Kaveripattinam (S.R. Rao, 1991, 6).

The city of Poompuhar is said to have been swallowed by the sea, owing to the wrath of Indra whose festival was not performed by the Pandyan king. The most important port of the Chola mandala was Kaveripattinam or Puhar, which was situated at the mouth of the northern branch of the Kaveri (M. Chandra, 1977, 118). The author of the *Periplus* refers to it as Kabera and the Tamil text gives a description of the brisk overseas trade at the port (S.R. Rao, 1987, 59).

According to Pliny and the author of the *Periplus*, big ships entered the port of Puhar (Kaveripattinam) without slackening their sails and brought precious merchandise from different countries like Malaya, Ceylon. From Arabia, horses were imported by the Pandyan country through Kaveripattinam. The political and trade contacts with Malaya peninsula and Indo-China increased during Pallava times (K.V. Raman, 1988, 114).

From the 5th cent. AD we get evidence of direct sea-route between India and China. Fahien travelled from Ceylon in a merchant ship with more than 200 Indian and Ceylonese merchants. Itsing also mentions the popularity of the route. As a result of brisk trade Indian merchant colonies were established and temples were built at Canton in AD 750 (Sastri, K.A.N., 1966, 333).

Kaveripattinam was an important port during the reign of Chola kings, Rajaraja I and

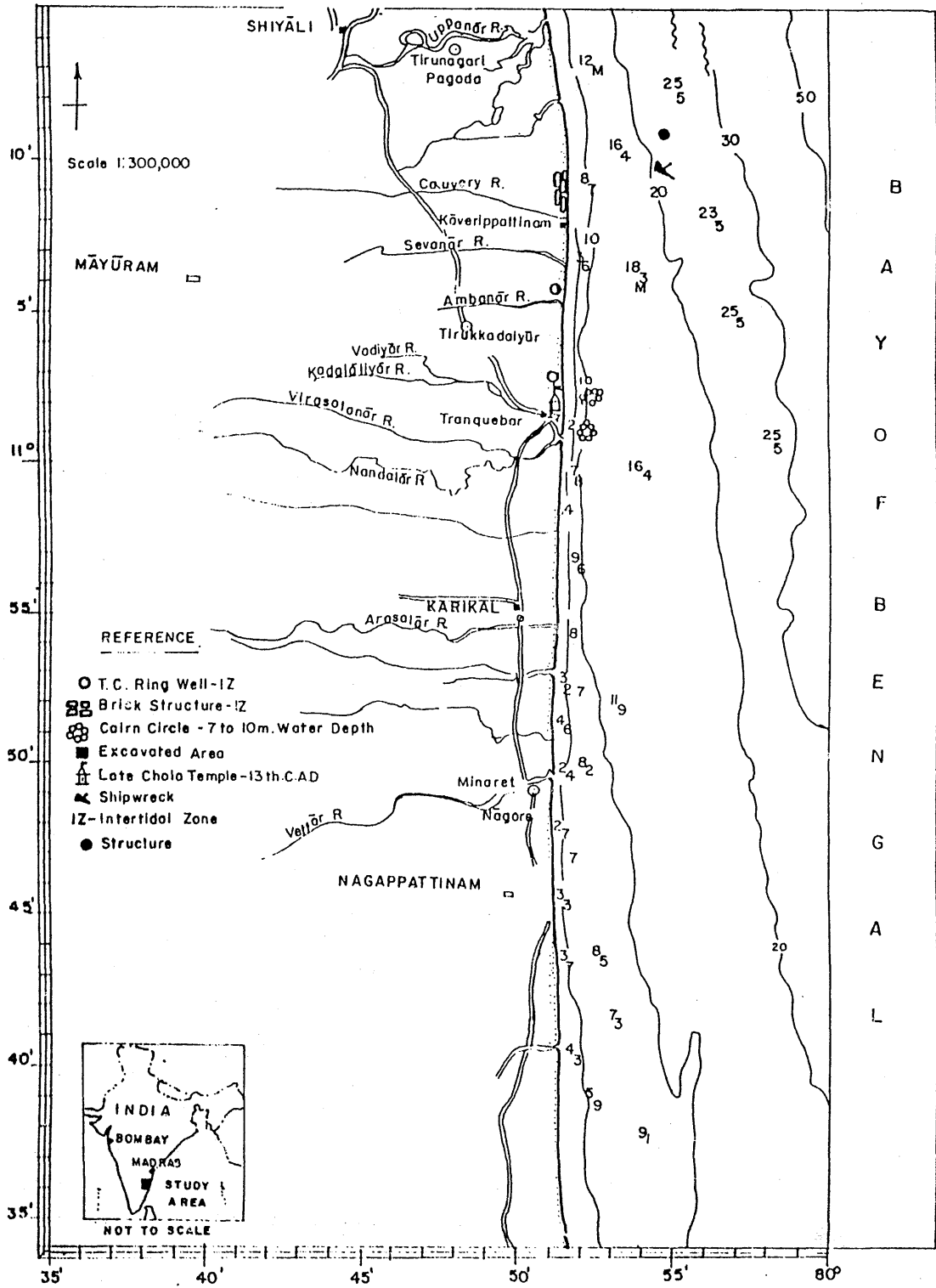


Fig. 1 Kaveripattinam, now known as Poempuhar.

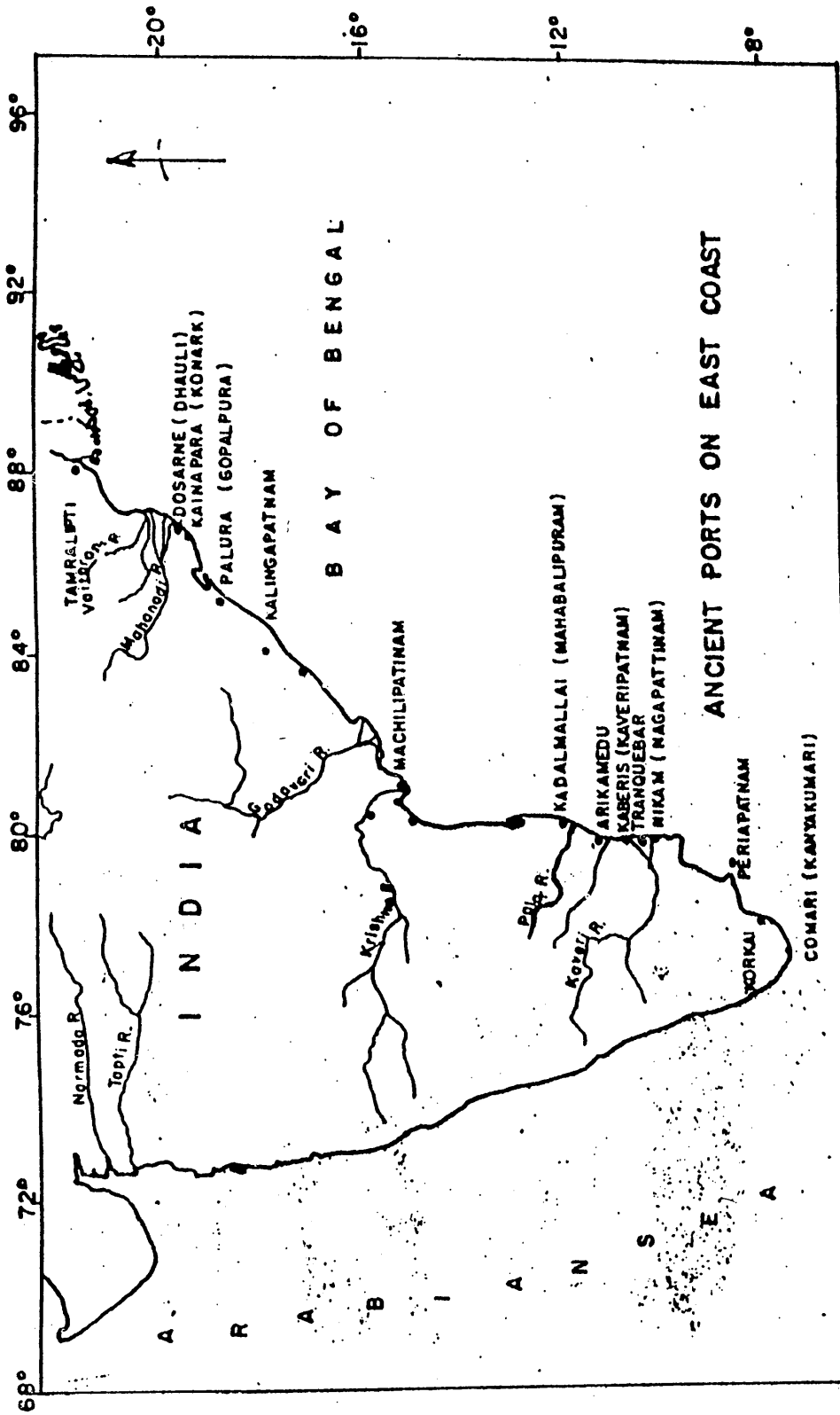


Fig. 2 Ancient ports on the East Coast.

Kulothunga. They established good relationship with China and trade between the two countries flourished. The articles exported during this period were cotton fabrics, spices, drugs, semi-precious stones, ivory, ebony, coral and perfumes.

Early Excavations at Kaveripattinam

Onshore excavation of Kaveripattinam undertaken by S.R. Rao and K.V. Raman in 1962–65 and subsequently by K.V. Soundararajan, brought to light a brick wharf (8.28 × 7.62 m) in Kilaiyur. The ¹⁴C date of the samples taken from wooden posts anciently fixed along this structure is 316 ± 103 BC which precedes the period of early Chola kings. The brick structure with a drain for water-flow and a platform supported by wooden posts for handling cargo served as a wharf built in the channel of the river Kaveri (IAR, 1962–63, 13).

Excavation undertaken near the Siva temple at Pallavanewaram brought to light a series of rooms of a vihara of 4th–5th cent. AD, where Buddhist monks used to live. An image of the Buddha was recovered from the site. Another brick building noted for stucco plaster and floral designs was laid bare. Further south a Buddha *pada* of Palnad limestone was found. These relics indicated that Kaveripattinam was a very important centre of Buddhism, noted for its stupa, chaitya, vihara and metal images of the Buddha (S.R. Rao, 1991, 7).

The semicircular brick structure exposed in the excavation at Vanagiri served as a reservoir its internal diameter being 3.5 m and the extant height 2 m. It was connected with the river Kaveri through an inlet channel and has been dated to 1st–2nd cent. AD. The mound Sampapati Amman temple excavated by K.V. Soundararajan yielded two terracotta ring-wells of the pre-late Chola period. Though the remains of ancient Kaveripattinam on land were discovered, the submergence of the port had to be proved by exploring the seabed.

The Marine Archaeology Centre (MAC) undertook onshore and offshore explorations of Tranquebar–Poompuhar coast in 1989–91 in view of the fact that Kaveripattinam (Poompuhar) had extended southward also. Terracotta ring-wells and storage jars of 3rd–4th cent. AD have been discovered by MAC in the intertidal zone.

Offshore Explorations off Tranquebar/Poompuhar

The Marine Archaeology team, under the guidance of Dr. S.R. Rao and Dr. T.C.S. Rao, Scientist-in-charge of National Institute of Oceanography, Waltair, carried out offshore survey of Tamil Nadu coast from Tranquebar in the south up to Poompuhar in the north. The main object of the survey was to explore the submerged townships of Early Historical period and shipwrecks. During the exploration, bathymetry, side scan sonar and magnetic surveys were undertaken up to 15 m water depth. Sonar survey record revealed certain “features” in 9 m water depth, opposite the Chola temple and Chinnavanagiri village.

In March, 1990 offshore explorations off Tranquebar–Poompuhar was conducted with a

view to check manually a circular object seen as an anomaly on sonograph in May, 1989. Diver archaeologists who dived between Sinnarpet and Chinnavanagiri at the depth 10–11 m found these objects were partly covered by sediment. In plan they were similar to the cairn circles of Chinglepet district. The “cairn circles” of Tranquebar have a pebble tumulus with small rolled boulders underneath, which form an outer circle (S.R. Rao, 1991, 12). The objects recovered include a large number of conch shells, a couple of granite blocks. One of the other two circles discovered on 21st March, 1990, is 15 m in diameter. The boulders are 40 to 45 cm in diameter. A few hundred metres north of the fort are some semicircular objects; the circle is buried partly under blocks and clayey sediments; two ovoid formations look like circles with a tail like passage. Photography was not possible because of poor visibility and bad weather. Geophysical survey by Vora K.H. and L.V. Subbaraju, N.I.O. scientists, had recorded in 1981 a few circular objects. A part of a circle recorded in 1990 was excavated by diver archaeologists, who found that below the circle there is a beach rock, a sample of which was collected. The analysis of the boulders from the excavated cairn circles revealed that they contained metamorphosed anorthosite gneiss of archaean origin. This variety of rock is available near Pthalur on the Kaveri river and also at Sittampudi to Suryapatti in Salem district. It occurs around Kadalur in Tiruchinapalli district.

The boulders are overgrown with shells, cemented in a beach environment and thus have formed a shelly limestone. The analysis of sediment samples indicates a high statement energy. The very fact that the Tranquebar cairn circles are in 7–8 m water depth places them earlier in date than those on land near Korkai. The megaliths of Tamil Nadu are dated between 1000 BC to 300 AD. The habitation debris in the section north of Murugan temple, above the HWL was excavated and it was found that the late medieval brick structure 1 is sealed by layer 1 and structure 2 by layer 1A. The pottery mostly red ware was found in layer 2 and layer 3, the former being whitish sand and the latter brownish (S.R. Rao, 1991, 13).

The offshore survey, off Poompuhar was undertaken by the Marine Archaeology Centre of the National Institute of Oceanography, Goa, in collaboration with the Department of Archaeology, Tamil Nadu Government in the year 1991.

The Geophysical survey carried out by Dr. T.C.S. Rao, Scientist, Regional Centre, Waltair with side scan sonar and echosounder recorded small objects in 2 rows on either side of track, at about 1 km from shore, opposite to Kaveri mouth and a channel-like section was also noticed in 6 to 7 m water depth opposite to Vanagiri temple.

The side scan sonar recorded an object 2 to 3 m high at a depth of 19 m water, about 5 km south seaward of Vanagiri. This may be the spot which was found in 1990 and marked as PMR 1. This was suspected to be a shipwreck. After examination by divers it is confirmed as a shipwreck, which was buried in sediment in two parts. Its western part is 1m above the seabed and the eastern part is 2.5 m above the seabed. A large number of lead ingots found at

the site confirms that the sunken ship carried lead ingots. A cannon near the porthole is also there. It was covered with heavy growth of barnacles and oysters. Chiselling was done to remove the barnacles. Airlifting done near the wreck revealed conical object of copper alloy projecting in U-shape, two iron pipes 3 m long and 2 iron rings.

One more important discovery is an oval shaped object found in 23 m water depth and designated as PMR 2. It was surveyed by Dr. T.C.S. Rao. The diver archaeologists manually examined and reported that it is a horseshoe-shaped object, its height being 1 to 2 m.

In shallow waters visibility was nil, but diving was done in 5 m water depth, opposite to lighthouse, but no structures were found. At the depth of 8 m, about 300 to 400 m seaward 4 dressed stones were found and one was brought on board; soil samples were also collected.

Findings

An onshore survey was carried out from Pudupet to Tranquebar, and the intertidal zones were explored. Terracotta ring-wells and jars *in situ* were discovered between Vanagiri and Tranquebar. They were datable to 1st to 5th cent. AD, if not earlier (S.R. Rao, 1991, 17). Brick structures were found in shallow waters at the depth of 5 to 7 m, and are visible at the lowest low tide.

The most important discovery was a shipwreck which carried a huge number of lead ingots dated AD 1791 and 1792 and inscribed 'BLACKETT', which must be a company name. The excavation and retrieval of all the ingots cannons and any other antiquities, may reveal the hull and design of the ship and material used for construction.

Another important finding was a horseshoe-shaped structure, in 23 m water depth.

Conclusion

From the above study it is becoming clear that the ancient Poempuhar extended from the mouth of Kaveri up to Tranquebar in the south and Pudupet in the north, the structures which are in 23 m depth, seaward off Vanagiri and in 5 to 7 m water depth, off Poempuhar are proposed to be surveyed further in the next season.

References

1. IAR, 1963-64, *Indian Archaeology : A Review*, New Delhi.
2. Chandra, M., 1977, *Trade and trade routes in ancient India*, New Delhi.
3. Rao, S.R., 1987, *Progress and Prospectus of Marine Archaeology in India*, NIO, Goa.
4. Rao, S.R., 1991, Underwater exploration of submerged towns near Tranquebar (Tarangambadi), on Tamil Nadu coast in *Proc. of Sec. Conf. on Marine Archaeology, Recent Advances in Marine Archaeology*, ed. by S.R. Rao, NIO, Goa.
5. Rao, T.C.S. and Mohan Rao, 1991, Geophysical and Magnetic Surveys for Marine Archaeological Explorations off Tranquebar-Tamil Nadu. in *Recent Advances in Marine Archaeology*, ed. by S.R. Rao, NIO, Goa.

6. Rao, T.C.S., 1991, Marine Geophysical Surveys of Archaeological Investigations, in *Journal of Marine Archaeology*, vol. 2, ed. by S.R. Rao, NIO, Goa.
7. Rao, S.R., 1991, Marine Archaeological Exploration off Tranquebar–Poompuhar region on Tamil Nadu coast, in *Journal of Marine Archaeology*, vol. 2, ed. by S.R. Rao, NIO, Goa.
8. Ramachandran, S., 1991, Ships of Tarangambadi, in *Journal of Marine Archaeology*, vol.2, ed. by S.R. Rao, NIO, Goa.
9. Rajan, K., 1988, Seafaring activities off Tamil Nadu coast, in *Proc. of 1st Indian Conf. on Marine Archaeology of Indian Ocean Countries*, ed. by S.R. Rao, NIO, Goa.
10. Raman, K.V., 1988, Port Towns of Tamil Nadu, Some Field-data and the Prospects of Marine Archaeology, in *Proc. of 1st Indian Conf. on Marine Archaeology of Indian Ocean Countries*, ed. by S.R. Rao, NIO, Goa.
11. Sarma, I.K., 1990, Ancient Andhra Ports and Religion Centres and Seafaring, in *Journal of Marine Archaeology*, vol. 1, ed. by S.R. Rao, NIO, Goa.
12. Sastri, K.A.N., 1966, *A History of South India from Prehistoric times to the fall of Vijayanagara*, Madras.
13. Schoff, W.H., 1974, *The Periplus of the Erythrean Sea*, first edition, London.
14. Vora, K.H., 1987, A note on Geophysical Exploration for Marine Archaeology off Tamil Nadu coast, *International Journal of Nautical Archaeology*, vol. 16, pp. 159–64.