Maritime Trade and Early Urbanism in the Jaffna Peninsula of Northern Sri Lanka

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Abstract

Sri Lanka has played a key role in maritime trade on a global scale since Early Historic times to the colonial period. Archaeological evidence from harbors and ports of the Jaffna peninsula in northern Sri Lanka indicate very early trade connections with China to the east, Rome and Arabia to the west, and with India to the north. Ceramics and other artifacts associated with diverse cultures discovered from excavations and surveys in the Jaffna peninsula show that Jaffna has played a prominent role in Indian Ocean trade. Early urbanism and the emergence of trade related settlements in the Jaffna peninsula with the city of Kantharodai as a focal point had begun in the 6th century BCE. International trade and commerce of the Indian Ocean region had a direct impact on the development of urbanism in Kantharodai in the Jaffna peninsula, while the ports and trade network in the hinterland provide useful insights into the nature of economic activities and urbanism in the region. Finds from several key ports in the Jaffna peninsula and particularly the port on the island of Kayts indicate international trade. The city of Kantharodai as a focus for change, the city as the focus of power and domination, and the city as an organizing principle or creator of efficient space use are aspects explored in this paper.



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Introduction

The main objective of this paper is to discuss the association between international trade and urbanism in the Jaffna peninsula in northern Sri Lanka. This paper will also investigate the role of Kantharodai as the central city of the Jaffna peninsula regarding international trade. It is proposed that the Kantharodai city and the hinterland were strategically linked in a system of trade-related networks. The Jaffna peninsula or Northern Sri Lanka is a uniquely shaped peninsula situated in close proximity to South India, particularly to Tamil Nadu in South India. Geographically, the lagoons and coasts are often ringed with sandy tracts of scrub making this region strikingly different from the rest of Sri Lanka (Figure 1). Archaeological studies conducted at Iranaimattu in Kilinochchi have indicated that people using Middle Paleolithic technologies lived in northern Sri Lanka ca. 125,000 years ago (Deraniyagala, 1992). The evidence found from Punakarai, Manthai, and Mankulam suggests that the microlithic (Mesolithic) cultures flourished in the region later. The archaeological survey conducted at Mayakkai in Point Pedro in 2001 by the Department of Archaeology of the University of Jaffna recorded a large number of surface scatter stone tools made of chert that may be of considerable antiquity, possibly with affinities to the Lower Palaeolithic (Pushparatnam, pers. comm, 2020). The recent excavations in Kantharodai have found microlithic tools highlighting the microlithic cultures of Jaffna (Helwing et al., 2022). In 2019, Pushparathnam (pers. comm) had also discovered the same stone tools in the Mutativu area and are awaiting scientific study.

Overview of the study area

The archaeological findings of Black and Red Ware and Rouletted Ware of the Arikamedu type indicate that the first international trade contacts of Sri Lanka with South India emerged during the protohistoric Period (Coningham, 2006). It is generally accepted that the protohistoric period extends from 1000 BCE to 500 BCE (Bandaranayake, 2012). Archaeological studies indicate that the city of Kantharodai had a remarkable involvement in craft activities. Some writers consider the long-distance foreign trade, subsistence, population, and technological emergence to be major key subsystems when the city emerged (Coningham & Allchin, 1995). The origin and development of international trade activities were mainly influenced by the formation of the settlement pattern and cityscape and development of urbanism. By the sixth century BCE, there was an extensive landbased trade network within South Asia while Buddhism spread along the Silk Route (Ray, 2003). With the opening up of the sea routes, Buddhism expanded further in the Early Historic Period (Singh, 1988). The Silk Route, popularly known as the spice road, that linked the cultures of Rome and China, was known to early traders and navigators (Bopearchchi, 1997). Sri Lanka was central to religious, political, and maritime trade with its role as an advanced emporium in commerce and trade from the fifth century BCE.

With the emergence of trade, one of the ten criteria of urbanism, an urban revolution can ensue. This advent of urbanism due to trade connections is seen in the Jaffna peninsula. The use of the monsoon wind patterns, where Sri Lanka is directly accessible in the east-west flow, was beneficial in navigation in the first century BCE. By the end of the 1st Century BCE, remarkable trade ventures were launched with Rome in the West and China in the far East in addition to the expanding trade links with India (Kiribamune,

1990). Gems, pearls, and spices were the most popular items of export throughout Sri Lanka's trade and commerce history. The early chronicles such as *Mahavamsa* describe the exotic gems and pearls received by the rulers from various parts of the country. The Jaffna traders purchased gems from the south of Sri Lanka before they were exported (Thiagarajah, 2016). The documents of Plini and Ptolemy note this while also mentioning the ports of Sri Lanka. Recent studies draw our attention to the ports of the southern coast as especially convenient meeting places for traders arriving in Sri Lanka, both from the eastern and western ports of the Indian Ocean (Bopearachchi, 1999).

Northern Sri Lanka or the Jaffna peninsula was referred to as "Nagatipa" in early chronicles (Indrapala, 2005). During the Dutch period (17th-18th century CE), there was considerable trade in the north, however it was not associated with the value crops of the south. The two principal commodities were elephants and pearls. The arrival of Europeans to Sri Lanka in the 16th century CE brought significant changes to the lifestyle, education, language, and art of the people of Jaffna (Pushparatnam, 2014). The Portuguese and Dutch records refer to Jaffna as "Jafanapatam". The Tamil literary work "Yalpanavaipavamalai" has records of Jaffna up to the 17th century CE (Pushparatnam, 2014).

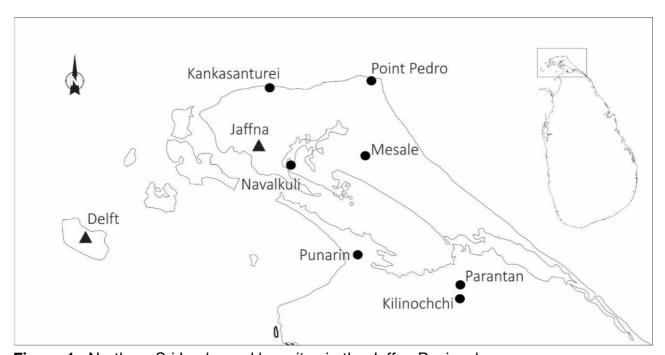


Figure 1. Northern Sri Lanka and key sites in the Jaffna Peninsula.

Cities built as symbolism

The definition of urban form has been established by archaeologists more than seventy years ago and one of the earliest definitions was formulated by Childe, who noted a firm linkage between urban cities and symbolic functions (Childe, 1979). Childe who pointed out aspects essential for an urban society where he envisaged the development of complex organizational structures. It has been suggested that socio-economic changes produce urban forms (Champakalakshmi, 1996), and that many ancient cities show a vital regularity in their architectural plan, which presents considerable symbolism of the city (Carl, 2000). In this regard, the archeological material culture revealed by the excavations in Anuradhapura, Manthai, Magama, and Kantharodai show that they are the foremost urban sites in Sri Lanka (Coningham & Young, 2015). In Mahavamsa, King Pandukabhaya (probably in the fourth century BCE) is said to have allocated a part of Anuradhapura to the "Yona"s. This term occurs frequently in Sanskrit text referring to Westerners in general as a derivative of the Greek term "Ionian" This term was also used to refer to the Romans in ancient Tamil literature. It can be assumed that here Yona is the name for Arab traders who dealt with indigenous people even before the arrival of the Aryans (Dissanayake, Subsequently, the close political association between two leaders King Devanampiyatissa in Sri Lanka and Emperor Asoka in India had enhanced the sociocultural and maritime link between the two countries during the third century BCE (Gunawardhana, 2011). The art and architecture of the city of Anuradhapura along with the material evidence such as Northern Black Polished Ware and Gray Ware found in the citadel of Anuradhapura indicate the close commercial link with Northern India (Coningham, 2006; Gunawardhana, 2011; Coningham & Gunawardhana, 2012).

According to ancient chronicles of Sri Lanka (e.g., *Mahavamsa*), Greek traders had operated in the citadel of Anuradhapura in the 5th century BCE. Greek coinage has been found in different places on the island providing corroborating archaeological evidence. Anuradhapura, the first urban city formed in ancient Sri Lanka (Figure 2), represents one of the island's most important archaeological Buddhist monastic sites. This importance centers on the site's role as the royal capital from around the second half of the first millennium BCE to CE 1029 (Bandaranayake, 2012), where its Buddhist rulers and people played a role in building a state organization-based society. The city also attracted remarkable wealth and prestige due to its important role as a depository for Buddhist relics, both within the island and within South and Southeast Asia as a whole. Most urban sites in early historic South Asia display a regularity in their planning strategy of the city (Coningham & Allchin 1995; Gunawardhana, 2009).

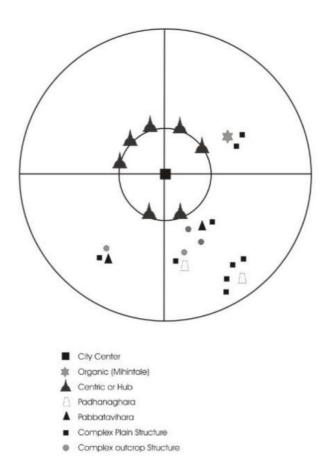


Figure 2. Centre and hinterland of Anuradhapura city

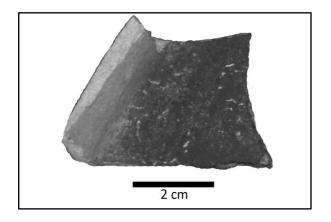
Anuradhapura has been studied at the basic level for over a hundred years, however archaeological stratigraphic investigation in the Anuradhapura Citadel commenced only through the pioneering fieldwork by Deraniyagala in 1990, Coningham in 1989, and in the peripheral zone in 2003 by Coningham, Gunawardhana and colleagues. The results of these excavations were used to develop typological sequences for artifacts for the Island and in so doing, allowed the identification of extensive trade networks. Many early archaeological studies on Sri Lanka have recognized its peripheral geographical location in relation to peninsular South Asia. Cultural innovations such as writing, and urbanization appear later in Sri Lanka than in North India. However, the hallmark of the Early Historic Period, Rouletted Ware (250-BCE- CE300), appearing in Sri Lankan contexts indicates contact and exchange with many eastern and South Indian sites (Coningham, 2006). These contacts have a strong maritime component as well, for the Rouletted Ware distribution was spread throughout the Bay of Bengal region and extended as far east as Indonesia to sites on the coasts of Java and Bali. A rock carving of a boat in relief from the Polonnaruwa area vividly presents the association of long-distance trade with monastic Buddhism. This single mast ship with high prows found carved on the rock at Duvegala in Polonnaruwa and a potsherd from Tissamaharama symbolizing a sailing ship of the first century BCE, are noteworthy examples of a maritime component in these complex societies (Gunawardhana, 1990).

Archaeological evidence from the region

Sri Lanka, after a thirty-year conflict, is now launching a post-conflict program to ensure peace building, socioeconomic and religious infrastructural development in the Jaffna peninsula. Archaeological documentation, conservation, and excavations have been conducted to understand the impacted monumental heritage of the region. The post-disaster archaeological collaborative project initiated by Durham University, UK and the Central Cultural Fund to understand the archaeological sequence of the damaged cultural landscape of the region, is focusing on the heavily affected main structure of Jaffna fort. This Fort, established by the Portuguese in 1628 and later developed by the Dutch in 1658 (Nelson, 1984) was excavated recently (Coningham & Gunawardhana, 2018; Davis, et.al., 2018).

Jaffna is located in a central position in what has been termed the Maritime Silk Route between the West and East and within wider trade links to East Africa, the Mediterranean, and the South China Sea. Ragupathy (1987) who recognized various types of ceramics in several archeological sites in the region has classified them into nine types and several subtypes, based on type and origin. These types are: (1) Early Carinated Black and Red Ware or Megalithic Black and Red Ware, (2) other Black and Red Ware, (3) Early Red Ware, (4) Rouletted Ware, (5) Thick Rim Red Ware, (6) Chinese and Islamic wares, (7) Grooved Thick Rim Ware, (8) Grooved Rim Ware, and (9) Others. They indicate that the Jaffna peninsula would have played a vital role in international trade from the Early Historic Period to the European invasion in the 16th century CE. The abundance of ceramics from the West, East and South Asian countries show that Jaffna has played a very prominent role in Indian Ocean trade associated with the ports network of the region. In 2011-2013, a rescue archaeological excavation conducted by the Department of Archaeology, Sri Lanka, and the University of Jaffna recovered Rouletted Ware and Amphora Jars at the queen's house of the Jaffna fort, dated to 300 BCE-300CE as well as Chinese ceramics and various types of earthenware belonging to 700-1300 CE (Pushparathnam, 2015).

The recent archaeological investigation at Jaffna fort (Coningham et al., 2018) has drawn our attention to understanding the role of cultural sequences of Jaffna within these international Indian Ocean trade networks from the Early Historic Period to the post-European period. Research has revealed that the Jaffna fort was built on an earlier cultural landscape, which had wider trade contacts with South Asia. For example, Black and Red ware (1000 BCE - 100 CE), Grey Ware (500 BCE - 200 CE), Rouletted Ware (200 BCE - 200 CE), and Red Polished Ware (100 BCE - 800 CE) from different sources have been encountered. The close trade contacts with the West Asian world have been confirmed by Sasanian–Islamic Wares (200 BCE-800CE). Evidence of trade with East Asia has been revealed by the presence of Yue Green or Caledon Ware (800 CE - 900 CE), Dusun Stoneware (700 CE-1100 CE) and, Ming porcelain (1300 CE-1600 CE) (Figures 3, 4 and 5). (Coningham & Gunawardhana, 2018, Davis et.al., 2018). These general dates have been provided, pending results from radiocarbon samples, that will help elaborate international connections and associated timelines.



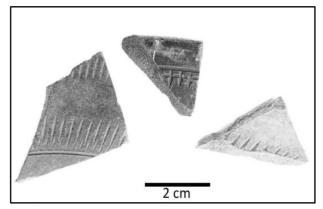


Figure 3. Black & Red Ware

Figure 4. Rouletted Ware

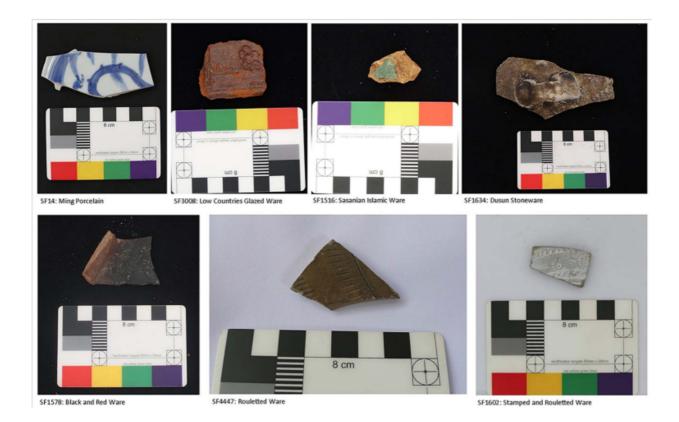


Figure 5. International ceramic types from Jaffna Fort - 2018 excavations.

The archaeological site of Allaipiddy is located on Velanai (modern Kayts) island. It appears to be closely associated with the ancient port of Catti. The first archaeological excavation of the Allaipiddy site was carried out by Carswell in 1975 where a large collection of ceramic sherds was found. He hypothesized that a cargo of Chinese ceramics was brought ashore and found to have been damaged. After the owners had sifted through these ceramics to retrieve any intact vessels, they had covered up the debris with sand. Carswell stated that these ceramics were not associated with any settlement (Carswell, 1978). Among the sherds were fine white Qingbai ware, off-white carved ware with a

ceramic glaze, fine earthenware, off-white ware with dull ceramic glaze. There were 443 vessels identified and more than thirty-five different types of Yueh ware that date to 1100 CE of the Northern Song period (Carswell, 1978). A type of ceramic similar to these findings discovered at Chenkaladi in Sri Lanka and Maldives, have also been available at an unidentified port on the south coast of China that assembled goods to be exported to the West. These archaeological finds are indicative of the demand for these particular types of Chinese ceramics and their hegemony over maritime trade in the Indian Ocean during this period (Carswell 1978, 2013).

The Shanghai Museum, the Central Cultural Fund, and the University of Kelaniya in a collaborative archaeological project in 2018-2019 focused on the distribution pattern of the ceramics and the role of the Jaffna peninsula in international trade (Gunawardhana & Chen, 2018). In this project, the Allaipiddy archaeological site was re-examined (Figure 6) with a view of exploring the hypothesis presented by Carswell. It has been suggested a shipwreck might have related to the ceramics in Allaipiddy (Kiribamune, 2013). The excavation features drew our attention to conjecture that the ceramics at Allaipiddy might have been purposely deposited due to an unexpected disaster such as a shipwreck.



Figure 6. Allaipiddy excavation 2018

The abundance of bowls, plates, ewers, storage jars and dishes of stoneware, brown-glazed ware, green-glazed ware, bluish-white ware, greyish green glazed ware, Northern celadon ware, and earthen-ware is recorded in the 2018 Allaipiddy excavation (Figures 7, 8 and 9). They were most probably manufactured in Guangdong, Fujian, and Yasho provinces in Northern China. These finds are similar to the earlier Qinabai porcelains discovered by John Carswell and were dated (1050 CE - 1127 CE) to the 11th-12th century CE of the Post-Northern Song period (Gunawardhana & Chen, 2018).



Figure 7. Various Chinese ceramics from Allaipiddy-2018

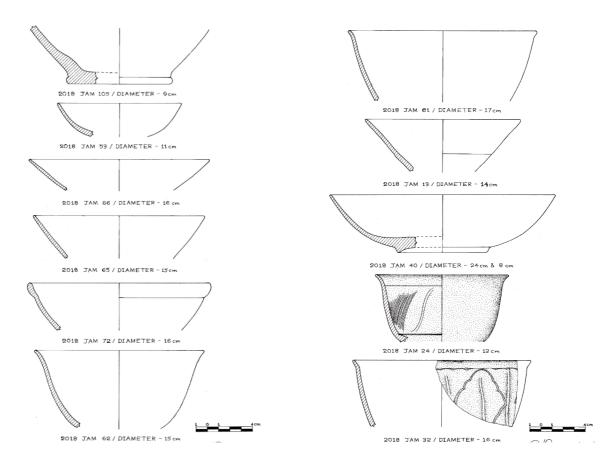


Figure 8 and Figure 9. Various Chinese ceramic types from Allaipiddy-2018 (reconstructed from fragments)

Kantharodai city centre

Conceptualized in ideal terms of trade and commerce in the region, Kantharodai might have played a vital role as the chief city center in the Jaffna peninsula. Archaeological excavations conducted at Kantharodai have confirmed that this site is one of the earliest and largest urbanized hubs and one of the largest Early Iron Age settlements (Figure 10) next to the Anuradhapura (Seneviratne, 1984). Kantharodai, as the widest and the richest early settlement with the largest number of early structural remains, is situated in the most fertile agricultural strip of the peninsula. The urbanization of Kantharodai dates to the beginning of Roman trade if not earlier than the first century BCE. The urbanization of Kantharodai would have occurred parallel to Kaveripattanam and Arikamedu in the Coromandel coast and to Anuradhapura and Mahagama (Ragupathy,1987) in Sri Lanka. South India held a trade monopoly over the Coromandel Coast toward Southeast Asia. From southeast Asia towards the far east, trade was carried out by China. Apart from Kantharodai, Anaaikoddai, Keerimalai, Vallipuram, Nagakoil and Chinkai were ancient trading cities in this region.



Figure 10. Kantharodai settlement area

The present urbanized settlement area of Kantharodai, appearing as a mound that extends for about 25 hectares, is characterized by a heavy concentration of surface artifacts. Kantharodai has been one of the first urbanized centers that has operated from the Early Historic Period (from the fifth century BCE up to at least the first century BCE) (Perera, 2013). The importance of this site was first identified by J.P Lewis in 1916 and elaborated by Paul. E. Peris (1922) in 1918, who excavated both urban and Buddhist monastic sites. Roman coins dated between the second century BCE and the third century CE, Persian coins, shards of earthenware and ceramics from Persia, Arabia, and Rome (Ragupathy,1987) recovered from Kantharodai indicate that the city and its people were engaged in maritime trade in the circum-Indian Ocean region. A pillar stone decorated with a lotus flower and inscribed in the 10th century CE implies a donation to a Buddhist monastery. This inscription and other findings from the Kantharodai site are curated at the Jaffna Archaeological Museum

Adjoining the urban site fifty-eight stupas (Figure 11) were revealed in excavations conducted by Godakumbura. Such small constructions from many parts of the Dry Zone are dated to the Iron Age and have been identified as commemorative features characteristic of the megalithic communities (Perera, 2013). The Kantharodai commemorative stupas are dated from 300 CE to 600 CE and are associated with the Buddhist traditions of the fourth phase of the cultural sequence of the site. These stupas and the urban centre indicate a very close association between religion and governance. Kantharodai provides evidence on the prevalence of early Buddhist practices in Jaffna (Perera, 2013; Ragupathy, 1987) stemming from and/or overlapping with the belief systems of megalithic people. (See Thiagrajah, 2016 for further interpretations).

In 1970 the first systematic excavation of the urban site of Kantharodai was implemented through a collaboration between the Department of archaeology in Sri Lanka, and a team of archaeologists, headed by Vimala Begley from the University of Pennsylvania. The earliest occupation of the site from the fifth century BCE to the first century BCE (Begley, 1973) was recognized). A notable find was a unique ceramic sherd of Rouletted Ware, with an Indo-Aryan Prakrit inscription reading "Dataha Pata", which implies 'bowl of Datta' dating to the second century BCE (Indrapala, 2005). The Brahmi inscription of the first century BCE refers to the word "Nakanakar", which means the city of "Nakas". Ragupathy (1987) has identified that Nakanakar may in fact be the city of Kantharodai. A chronicle of the 13th century CE mentions northern Sri Lanka as *Maninakatipa*. Godakumbura recognized that this place could be Kantharodai.



Figure 11. Commemorative stupas at Kantharodai

The collaborative project carried out in 2012 by the Department of Archaeology, Sri Lanka and the Archaeology Department of the University of Jaffna has drawn our attention to Kantharodai as a very early settlement that dates from the fifth century BCE to the first century BCE (Perera, 2013). Urban settlements of Kantharodai and other contemporaneous locations in the Jaffna peninsula (e.g., Anaikkottai, Karainagar, Velanai-Catti, and Mannittalai) have been assigned to Phase 1, dating from the fifth century BCE to the first century BCE (Perera, 2013). Recent archaeological excavations suggested that the occupation of Kantharodai dates between 400-100 BCE (Helwing et al., 2022). Evidence for self-sufficient settlement units with diverse subsistence patterns including a combination of farming, pastoralism, and lagoon fishing has been prevalent (Helwing et al., 2022; Ragupathy, 1987).

The hinterland of Kantharodai

Similar to the ancient cities of Anuradhapura and Polonnaruwa, the archaeological visibility factor of Kantharodai has been recognized (Coningham & Gunawardhana, 2013). The study of major irrigation works, settlements, craft specialization, and paddy cultivation surrounding the city of Anuradhapura suggest a link between the city and hinterland (see Figure 2). In Anuradhapura, the settlements surrounding the royal city core were either secular or religious, thus forming two separate hierarchies (Coningham & Gunawardhana, 2013). A recent study of Anuradhapura (Coningham & Gunawardhana, 2013) has identified that the hinterland has been steadily populated. Based on these results on Anuradhapura, we can assume that the process of urbanization affected both the city population of Kantharodai and those people living in the hinterland. Coningham and Young (2015) point out that the social evolutionary trend that is generally called urbanization has often the equally significant counterpart of ruralization. They use the term "Low Density Urbanism" with reference to the tropical dry zone of Sri Lanka's hinterland (2015). The settlements surrounding the city of Kanatarodai can be identified as located in the hinterland of the city. More than thirty archaeological sites are distributed in the hinterland, with sites such as Tiruvantinilai, Ticaimaluvai, Kattippulam, Kalaiyotai, Mulli, Nallur irupalai, Vethilaikarni (Figure 12), Anaikottai (Figure 13) and Kalvali identified as the sites closest to the Kantharodai city centre. A future comprehensive study of the hinterland is necessary to make detailed inferences.

The importance of Gokanna, a natural harbour-based port site in the northeastern coast of Sri Lanka that connects the Bay of Bengal and Southeast Asian trade had been recognized by the Sinhalese rulers of Polonnaruwa, particularly Vijayabahu I (1070- 1110 CE) and Parakramabahu I (1153-1186 CE). Under the Polonnaruwa rulers, an interesting new dimension of politics emerged linking Southeast Asia, with Mynamar (Ramanna), Cambodia, Java and Malaysia becoming linked with Sri Lanka. For instance, historic records indicate that new political allies were sought by King Parakramabahu I who established a close association with Cambodia (De Silva, 2005). During this time Sri Lanka emerged as the central point in sea trade between the West and the Far East. China continued to retain control of the seaborne traffic to the Far East. Chinese vessels and ships from the Far East came into the harbors of Sri Lanka conveying their cargoes of silk, while from the West arrived vessels and merchandise of the Persians and of the Kingdom of Aksum in Northern Ethiopia (Ray, 2003).



Figure 12. (L) Vethilaikarni settlement site and Figure 13. (R) Anaikottai Settlement site

Merchants from India and mariners from distant lands exchanged their goods and purchased products of Sri Lanka. According to historical sources, Sri Lanka and the Malay peninsula played an important role in Indian Ocean trade networks during the thirteenth century CE. It is noted that Chandrabhanu of Thambralinga from the Malay peninsula invaded Sri Lanka to gain an upper hand in maritime trade. This marks the only recorded evidence of a Southeast Asian invasion of Sri Lanka. According to historical sources Parakramabahu II's (1236-1270 CE) army had defeated Chandrabhanu who fled to the north of Sri Lanka. Some writers (Liyanagamage, 1968) argue that place names such as Chavkachcher (Javaka place), Chavankottei (Javaka fort), and Javaka kottei (fort) to the south of the Jaffna peninsula indicate that Chandhrabhanu was settled in Jaffna for several years with a hegemony over maritime trade (De Silva, 2005). Nevertheless, historic sources indicate that the northern part of the island was important internationally.

The ports network of the region

The ancient port site of Manthai (Mahatittha/Matota), 6 km east of Mannar was identified as one of the most important trading ports of the Island. It has played a remarkable role from 500 BCE to the middle of the thirteenth century CE, directly influencing the urban development of Kantharodai, Anuradhapura, Magama, the foremost early cities of the island. Manthai was accessed through South Indian trade links and beyond, demonstrated by the ceramic imports recovered at the site. A large number of artifacts traced to many countries found at Manthai indicate that cosmopolitanism had an impact on the urban centers through the trade (Coningham et.al., 2017). New developments in trade, in particular, the growing importance of relations with Southeast Asia wielded a noteworthy influence on commercial centers on the island.

The practice of sailing a ship from Manthai to Tamralipti, a major port city in West Bengal, had been quite popular during the fifth century CE. Clearly, with the passage of

time, ports in the southern and eastern parts of the island became actively more significant in trade with Southeast Asia (Gunawardhana, 1990). Along with the important role of Gokanna as a port, it is possible that the southern coastal ports have also been vital to trade routes during this period. The ports of the southern region were convenient meeting places for traders arriving on the island from both the eastern and western sectors of the Indian Ocean. Active maritime trade between Sri Lanka and India was present since the first millennium BCE as shown by the presence of several Indian punch-marked coins belonging to 500 BCE at Kantharodai (Thiagarajah, 2016). By the 7th century CE, the Arabs dominated the then known trade routes and had control over the international trade where Sri Lanka was a participant. By the 9th century CE, settlements of Arabs appear around the major port in Manthai, which had grown into a significant commercial center, while the adjoining urban settlement of Mannar had become a hub for international trade.

Several significant ports in the Jaffna peninsula such as Jambukolapattana, Uraturai, and Allaipiddy have shown a seascape urban formation. Jambukolapattana that can be recognized as modern Sambiliturai did not appear as a port of maritime trade. However, it operated as a port of embarkation and landing in the Early Historic Period (Siriweera, 2013). Catti, identified as ancient Uraturai and Allaipiddy, also might have operated as ports (Figures 14 and 15). It has been suggested that these two ports together might have operated as a sea entrepot for the Jaffna peninsula (Ragupathy, 1987). The Catti site is located on a convenient coastal navigational-communication line along the western coast of Sri Lanka, while contact with the Tamil Nadu ports was also feasible. Moreover, the ports of Kayts Island might have played a key role in trade especially during the Polonnaruwa period. The ports of Uraturai (Urathota) or modern day Kayts, Catti, Allaipiddy, and Jambukolapattana would have attained importance as maritime hubs when Kantharodai emerged as a city due to heightened maritime commercial activity. Later, the Kayts fort built during the colonial period may have played an important role in trade and commerce.



Figure 14. Kayts (Uraturai) Fort

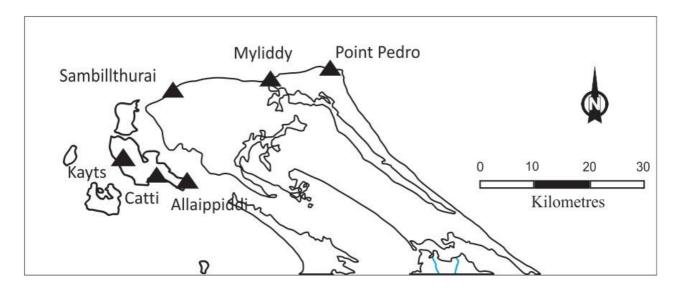


Figure 15. Ports network in Northern Sri Lanka

The aforementioned role of King Parakramabahu I (1183-86 CE) was significant where he established the island's wealth and presence by sending ships to other countries to trade gems. The port of Uraturai in Kayts, had been a popular site for South Indian traders in the 12th century CE is shown by the Nayinativu inscription. The Nainativu Tamil inscription exhibited at Sri Nagapushini Amman Kovil in Nainativu island dates to the reign of King Parakramabahu I. It draws our attention to the customs system that has been operational at the Port of Uraturai. This inscription elaborates that the foreign traders should be provided with due protection and the port should be used as a meeting place. Here, the King is possibly addressing the South Indian traders regarding the concession available to ships bringing in horses and elephants. The duty fee levied was one-fourth of tax to the treasury and three-fourths to the owners of a ship, laden with horses and elephants. This inscription further refers to the building and the assembling of the ships at Uraturai by King Parakramabahu I during his South Indian invasion (Siriweera, 2013).

Chinese porcelain discovered at Allaipiddy on the island of Kayts dated to the eleventh century confirms that Kayts was a trading center and that other commodities such as Chinese porcelain also arrived from the Far East. Notably, the Malay peninsula had become the centre of multipartite interaction with Sri Lanka, while Myanmar (ancient Ramanna) and Cambodia also gained importance in regional trade. The King of Myanmar had decided to stop selling certain types of elephants and to also increase the price of elephants in Myanmar. As the Myanmar king intended to expand their maritime trade in the region, Sri Lanka's trade in Southeast Asia was an obstruction. These decisions had resulted in a conflict between King Parakramabahu I and King Alaungsithu of Myanmar.

Conclusion

The archaeological findings from northern Sri Lanka suggest that the emergence of the urban form in Kantharodai had been shaping since the sixth century BCE when circum-Indian Ocean trade and commerce had been operational. Kantharodai illustrates urban experiences particularly in the emergence of trading patterns. Small and large ships from China in the east, and from Rome and Arabia in the west, and from Indian harbors in the northern belt reached the harbors of the Jaffna peninsula. Later, the trade patterns changed in the mid-eleventh century as trade activities diverted from the earlier centers when Sri Lankan ports were conquered by the Cholas of South India.

The port on the island of Kayts has been associated with international trade from Roman times. It might very well be one of the earliest ports in the island or in the Jaffna peninsula. Archaeological evidence from and the geographical location of the ports of Uraturai, Allaipiddy and Catti indicate that the island of Kayts would have been a convenient hub enabling navigation along the coast. These connections would have been maintained along the western coastal belt of Sri Lanka and Tamil Nadu ports. The port of Uraturai in particular, located in the northwestern part of the island of Kayts has is well positioned within ancient sea trade routes. Well known for maritime trade and commerce including conch-shells during the 11th -12th centuries CE, the Uraturai port has been cited as a strategic position in medieval inscriptions and literary records. A well-established ports network and customs system that facilitated more intensive and organized merchandise trading marked the seascape of the economic system in the region. Facilities provided for trading are one of the most important services offered at urban centers. The location of these ports in northern, northwestern, western, south, and southwestern positions with easy access to urban centers of the region suggest that maritime trade operations in the Jaffna peninsula were well established and successful throughout historic times.

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