

# Industrialization and Urban Growth: The History of Alappuzha Through Coir Industry

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## *Abstract*

Alappuzha, an old city in Travancore State (Kerala) that may have only been urbanized in the 1750s. Trade and industry are key factors in a city's expansion. Alappuzha's growth into an urban city was influenced by its road and canal network leading to its port, which was once a major global trade center. The city's transformation into an industrial and urban center was because to the tireless efforts of Raja Kesava Das, the Dewan of Travancore. This study endeavors to provide a glimpse into the recent past of Alappuzha by recalling its urbanization and trade operations in relation to the growth of the coir industry in the area. The study aims to historicize the history of Alappuzha by examining urbanization processes, road and canal network structure, creation of sea port, coir industry growth, trade guilds, and commercial streets that enabled the city to develop into a port city. This study employs the historical research method to enhance data comprehension and test critical arguments, incorporating critical analysis of sources, time series analyses, comparative methods, counterfactual analysis, and outlier evaluation. The study analyzes primary and secondary sources, including government reports, official records of Travancore state, and previous studies, to analyze the history of Alappuzha. It finds that Raja Kesava Das's policies and contributions to urbanization and industrialization were closely linked to the development of the coir industry, which strengthened the commercial networks and economy of the state. The coir industry's history forms the socio-economic history of Alappuzha.

*Keywords:* coir industry, port city, urbanization, industrialization, socio-economic history.

## 1. Introduction

Alappuzha, an old city in Travancore, Kerala, is known for its scenic beauty, rich natural resources, and resemblance (once reoffered "Venice of the East" by then-Viceroy Lord Curzon) to city of Venice. The toponym "Alappuzha" is thought to derive from the root words Alayam and Puzha according to Herman Gundert's dictionary, which defines the name Alappuzha as the home of ponds and rivers, where 'Alayam' means 'home' and 'puzha' means 'watercourse' or 'river'. Hence the name Alappuzha implies a network of waterways and backwaters in the region. The place has a long history dating back to the Puranic age. The prehistoric past of the region is unknown, and no specific inscriptions or archaeological evidence have been found which give references to Alappuzha. Even though, there are fragmentary references in some temple inscriptions, Greek-Roman-Chinese coins, and other archaeological articles received in this region point to the fact that trade relations were active here from very early times. In terms of how the coastal regions were formed, silt and sand deposition are thought to have produced the coastal taluks of Cherthala, Ambalappuzha, and Karthikappally based on geological records.

The historical records of second Chera Empire (9<sup>th</sup> to 12<sup>th</sup> century AD) also mentions the area. Later, traders brought Buddhism and Jainism to the area (Karumadi Temple and Kaviyoor Temple representing the Buddhist and Jain faiths), and Christianity first appeared in the area in the first century A.D. with the founding of the church at Kokkomangalam by St. Thomas, a disciple of Jesus Christ. Little monarchies like Kayamkulam, Purakkad, Ambalappuzha, and Karappuram arose in the sixteenth century. Purakkad gained popularity as a trading hub for local produce and foreign commerce as Christianity progressed. There was Dutch East India Company's factory near Purakkad, and it was thought that Dutch seamen had given a crucifix there. Portuguese influence was also noticeable in the administrative politics of the area. With a port, thriving trade, the coir industry, and other amenities like the first post office, telegraph office, and modern coir factory, the location really rose to importance in the eighteenth century.

The principal means of subsistence for region's the coastal population was identified to be fishing and related fisheries activities, as well as coir work, based on historical sources, including Malayalam literature. However, Kuttanad and neighbouring lowlands served as a productive agricultural region. These represent Alappuzha's progressive elements in a passive state. However, the real development boom was brought about by the coir industry's entry into the global export firm for natural fiber products and the corresponding establishment of extensive canals, inland waterways, road networks, and a modern sea port close to the city's center. The fact that no historical research has been conducted on the growth of the coir industry and the influence seaport in Alappuzha to date. Hence the article covers the story, history and reality of the coir industry, focusing on Alappuzha and its socioeconomic prospects. It also examines the current state, labor conditions, production, and exchange effects of modernization.

The study has significance from a socioeconomic and contemporary standpoint because Alappuzha is currently one of Kerala's disadvantaged districts in terms of industry and lacks basic urban facilities, with the exception of the potential for a developing, regionally tailored tourism industry. Also, from an academic and administrative perspective, the study on the historical significance of a global industry, the coir industry, and the administrator's encouragement of infrastructure development as well as the region's plans for urbanization and industrialization will have an impact on future plans and policies for the district's infrastructure and industrial development.

## 2. Literature review

Alappuzha's history is threaded through the growth of the coir industry, sea port, and the socioeconomic repercussions because it was Kerala's coir industrial hub, engages both men and women in yarn spinning, weaving, loom work, and allied industries as the main source of life earning. So, the study looked at the key existing literature addressing the coir industry's history, development, power structures, class conflicts, and economic ties to locate the socioeconomic history of Alappuzha. Also, the contributions of Travancore royalty to the development and economic growth of Alappuzha were examined in depth using related secondary sources. Two sets of studies are evaluated in the review of literature section: one focuses on the administrative reforms in Travancore in the 18<sup>th</sup> and 19<sup>th</sup> centuries, specifically on the development of industry and infrastructure, and the other examines the origins, growth, and socioeconomic significance of the coir industry in Alappuzha. This will provide the precise context for the study, highlight the research gap, and make it possible to establish the goals for the investigation.

A general overview of the early Indian states, their administrations, nobility, wars, conquests, rivalries, principal forces, European powers, and the English East India Company, emphasizing their friendships and assistance, may be found in V. Nagam Aiya's Travancore State Manual (1906). It was written by the support of Travancore ruler, provides a comprehensive overview of the history, culture, economy, and society of the former Travancore kingdom. In

Kunju's study, "King Balarama Varma of Travancore," Kunju (1977) examines the administrative structure of Travancore in the 18<sup>th</sup> and 19<sup>th</sup> centuries. The study details the administrative consolidation between 1756 and 1763, dividing the Kingdom into three divisions, and interventions for the liberation of Cochin and capture of Calicut province in 1761. It also discusses territorial disputes, tensions with the East India Company, the creation of a sea port at Alappuzha, and policies to improve cashew and coir industries.

Additional contributions to the historiography commemorating Travancore's governance came from Thomas (2005), Lawrence (2010), Prakash (2018), Wilfred (2019), Racheal (2021), Amrutha and Pushpalatha (2021). These studies look at inheritance patterns, taxation, territorial expansion, historical Travancore monarchs, and royal boundary-strengthening tactics. Along with these topics, they cover trade and industry, urbanization, education in the West, irrigation and land tenure systems, political reforms, social and economic developments, and forest policies under royal reigns. These studies point that Travancore state policies focused on infrastructural development, including roads, canals, and waterways, which burdened the royal treasury. However, these efforts were justified to strengthen administration and improve security. Raja Kesava Das, a prominent figure, focused on internal reforms, agriculture, and industries, leading to modern Chala Bazaar, Alappuzha Port, and trade centres.

Kannan (1976), Jose, A. V. (1977), V. Meera (1983), Robin Jeffrey (1984), Thomas Isaac (1985), P. M. Mathew (1985), Alice Albin (1990), Isaac et al., (1992), Padmanabhan, V. T. (2002), K. T. Rammohan (2008), Mohanasundaram (2015), and Anu and Deepu (2018), Aswathy (2018), Pratheesh (2021, 2022), Pratheesh and Gopakumaran Nair (2022), and Raseena (2022, 2023) investigated the origins and development of the coir industry, its socioeconomic role during colonial times, labor position, labor unionism, and the current state of the coir industry in Alappuzha. Each study emphasizes the fact that the traditional industry's decline is putting the distinctive history and technology of the coir industry in Alappuzha, the country's center of coir production, in danger of disappearing. From a historical perspective, however, researchers such as Pylee, Devidas, and Balakrishnan have devoted much effort to recording the origins, growth, and functioning of the coir industry. But other scholars frequently leave these things out and present the commercial and economic viewpoints rather than the historical perspective.

The examination of these studies demonstrates that, while some academic studies on the coir industry employ non-academic or literary approaches, the majority of these studies employ Marxian historiography and are primarily concerned with economic interpretations. What is truly lacking is a honest historiographic approach to the history of Alappuzha as it relates to the development of the coir industry.

### 3. Methods

The main objective of the study is to provide answers to two questions: first, whether the Travancore ruler's attempts to industrialize and urbanize Alappuzha were based on opportunities to increase the state's overseas trade network and utilize the potential of the coir industry; and second, whether the coir industry encouraged the creation of the road-canal network and other urbanization activities in Alappuzha. To solve these research questions, the study uses a historical and sociological method and analyzed primary and secondary sources related to the Alappuzha coir industry to orient its socio-economic history. Primary sources include historical policies from royal and colonial administrations. Secondary sources aim to understand the industry's history, development, modernization, and labor responses. Data is collected through field trips and interviews with coir workers, particularly veterans, using sociological approaches. The archival sources used are acquired from Kerala State Archives, Trivandrum, and Alleppey port records. From the 14<sup>th</sup> century until the 1900s, the Travancore region's industrial, political, religious, and cultural affairs are covered in these records. It was also highlighted that the

Travancore rajas had made royal proclamations about state administration and policies. Treaties with English, Dutch, and other rajas, trade and allied activity, and the creation of institutions are among the other records. The port records of the man-made port of Alleppey include specifics about imports, exports, and overseas trade activities.

The two sections that make up the analysis and discussion portion are the industrialization-related infrastructure changes and evolution of Alappuzha's urban design and the socioeconomic contributions of the coir industry through its expansion that contributed to the town's urbanization and industrialization. The first section chronicles the history of Alappuzha's urbanization, while the second portion chronicles the development of the city's coir industry.

#### 4. Analysis

*Urban growth of Alappuzha.* Although archaeological evidence points to human habitation in Alappuzha as early as the Paleolithic, and a primitive port at Purakkad near Ambalappuzha (certainly Bakare, or Barakart, the ancient harbor referenced in both foreign chronicles and archaic native inscriptions, is modern Purakkad) undoubtedly indicates the region's connections abroad, Alappuzha's modern history emphasizes the contributions of Raja Kesava Das, the ebullient Diwan of Travancore (Diwanship, 1789-1798), who turned the coastal region into a globally recognized spot by designing the sea port and allied infrastructure developments that ultimately resulted in the creation of the modern city of Alappuzha. Raman Kesavan, also known as Raja Kesava Das, was a Dewan of Travancore during the reign of Dharma Raja Karthika Thirunal Rama Varma (Racheal, 2021). His strong mathematical abilities and excellent statesmanship won him an appointment to head the state's commercial department by the Maharaja of Travancore, despite his lack of formal education (Michael Tharakan, 1984). He understood that the wealth and prosperity of the State depended on commerce and made efforts to improve the material prosperity of the State (Nagam Aiya, 1906).

Kesava Das, the commandant of the Travancore army during Tipu Sultan's aggression against Travancore (Battle of Nedumkotta, December 1789 – May 1790), and was appointed Diwan of Travancore following the success (Deepa, 2013). Raja Kesava Das then relocated the capital from Padmanabhapuram (today in Tamil Nadu's Kanyakumari district) to Thiruvananthapuram. Kesava Das' principal purpose was to enhance Travancore's economy by expanding trade, which helped maintain a standing army and prepare for the war with both Europeans and Mysore (Lawrence, 2016). The establishment of a new port at Alleppey, which was hitherto only a suburb, was his greatest success. Because of the Dewan's personal interest, Alleppey grew into a port town complete with stores, worshipping centers for different religions, schools, and a large warehouse. In order to accommodate the invited merchants from Sindh and Cutch, the town constructed a Hindu and Jain temples, court, other accommodation infrastructure and Maharaja's palace. He drew traders from Surat, Saurashtra, and Bombay as well. A timber depot was established, and Sarkar agents were posted in forests to gather produce from the hills, in an effort to turn the area into a hub of commerce. To conduct trade with other regions of India, particularly with Bombay and Calcutta, three ships were constructed at state expense.

While the ports in Kerala, which were occupied by Portuguese, Dutch or Mysore, steadily declined in importance, Alleppey rose to prominence as a major western marketplace (Kooiman, 2005). He also developed well designed interior canal network for navigation and a chain of roads leading to the port region in order to complete the success of the new port at Alappuzha (Ibrahim, 1978). The Gujarathi Street and Marathwada market were established and brought cloth merchants from Tinnevely. Because of the aforementioned activities, scholars who researched him referred to him as the "architect of modern-day Alappuzha."

Alappuzha's town planning and urbanization were managed under Raja Kesava Das's reign, along with the infrastructure development that brings in both the local and global economies (Prakash, 2018). The port, the road system, and the canal system make up the grid design for Alappuzha's urban growth, which approximates the town plan patterns that were utilized in the building of some of the first planned towns in history.

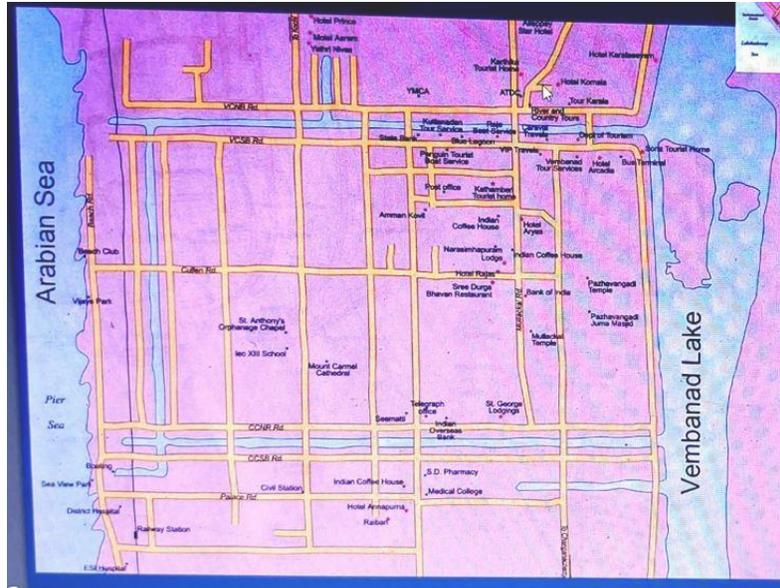


Figure 1. Urban plan of Alappuzha, grid of canals and roads

When the port of Alappuzha was ready to operate in 1762, two parallel canals were built to make it easier for commerce barges to access the town center. As a result, more trading stores were progressively added to these canal's banks. The area along the Commercial Canal, close to Vembanad Lake, known as "Chunkam" (trade, as the Malayalam language puts it), was created as a marketplace for the distribution and re-distribution of import-export commodities. Other canals, such as the Alappuzha-Changanasery Canal and the Alappuzha-Sherthala (AS Canal), were also constructed and lead to Alappuzha Port (Census of India 1911). In order to discourage foreign traders from obtaining a monopoly on the spice trade in Travancore and to encourage local traders to export their goods, these canals connect the marketplaces of Vaikom and Changanassery, from where spices are collected and conveyed to Alappuzha.

Travancore's history was significantly influenced by the port of Alappuzha. As a statesman's point of view, she protected the Dutch, Portuguese, and English East India Company from growing influence in the spice trade of Travancore by maintaining more and much overseas trade just near Cochin. Travancore maintained more than eighteen ports, four of which were major ports that were independent of foreign monopolies or direct influence: Alleppey, Quilon, Vizhinjam, and Culachal. Travancore's advantageous location on the Malabar Coast, abundant natural riches, and kind climate drew traders and migrants to its key areas. Alappuzha settlement grew both during and after port's establishment. Despite not having a natural harbor, Alleppey was developed into a significant port with easy-to-use mooring facilities that could handle vessels of all kinds.



Image 1. Distant view of Alappuzha Port (1910) – Port Archive

When the port first opened in 1762, its main exports were goods, from within and those from Kottayam and the surrounding hill regions. The first ship left Alappuzha in 1786, carrying coir yarn, mats, fiber, tea, coconut oil, rubber, pepper, copra, oil cake, ginger, and prawns. Rice, piece goods, machinery, hardware, cement, and European-made goods were among the imported commodities. The fate of the coir industry was first regulated by the independence of local trade and handicrafts, but the completion of Alappuzha port and the advent of European manufacturers and exporters in the 1850s marked a turning point in the Indian coir sector's development.

*Inception of Coir Industry.* Coir fibers, originally used for traditional purposes, have evolved into a semi-industrialized sector by the mid-18<sup>th</sup> century due to market price stability and growing demand for coir for various uses. The first coir factory in India was opened in 1859, and European businessmen constructed fresh coir and coir product manufacturing facilities in Alappuzha (Balakrishnan, 2005). The coir factory of Darragh Smail & Co. Cocoa Mat was located near the port on the north side of the Vadai Canal. Following that, several European companies erected coir plants on either side of the Commercial or Vadai canals. Throughout human history, urbanization has been most concentrated around major bodies of water, mostly to meet food and water demands. This trend has been ongoing since the industrial revolution, as big quantities of water are required for industry. However, in Alappuzha, urbanization is also associated with water bodies as a low-cost means of transporting commodities to and from port (Gopinathan Nair, 1976). As a result, large-scale amenity and utility facilities grew along the banks of canals that connect the town to the port or coir factories to the port.

Alappuzha's urbanization was triggered by the expansion of coir manufacturing facilities and allied factories, as well as former agricultural laborers migrating to Alappuzha and settling near factories because the coir industry was a promising occupational sector that provided consistent income and employment, particularly for the socially and economically disadvantaged sections of rural areas. This movement also resulted in the establishment of large businesses, restaurants, and teashops, as well as banking, recreational, educational, and religious organizations in Alappuzha. By 1900, there were approximately hundreds of exports cum manufacture coir industries just near the port of Alappuzha, or near the canals. The direct export to overseas destinations via the Alappuzha port was a significant advantage for the flourishing of the coir industry. Similarly, as Cochin port regained importance, Alappuzha port survived by exporting a huge quantity of coir products such as coir fiber, coir yarn, coir rope, mat and matting, and other related products.

In addition to European businessmen, native businessmen, including members of the royal family, were drawn to the coir industry at the beginning of the 20<sup>th</sup> century and established coir production factories in Ambalappuzha, Punnappuzha, Omanappuzha, Kanjikkuzhi, Mararikkulam, Muhamma, Thennermukkom, Kadakkarappally, Cherthala, Vayalar, and Aroor. As a result, the coir sector in Alappuzha, which was valued as a worldwide export market that provided stable employment opportunities for the locals, saw its first industrial boom (Houtart & Lemercinier, 1978). In order to facilitate the expansion of the coir industry, a network of road transportations was established aside from Vembanad Lake and parallel to NH 47 (now NH66). Some of these roads, including Aspinwall Road, Goodacre Road, Travancore Mill's Road, Alleppey Coir Road, etc., are still recognized by the name of the coir plant to which they link.

Regarding the employment delivering potential, the coir industry was promising at that time. About 50,000 men were directly engaged in European coir companies, and an additional 50,000 worked in local coir companies. Since they earn a consistent and respectable wage compared to fishermen or agricultural laborers, these individuals were recognized as coir workers and appreciated in the sociocultural context. Women's employment options are mostly dependent on coir work, with the exception of loom work, which produces coir mats and matting, but other coir sector jobs include dehusking coconuts, retting husks, defibering, and spinning coir yarns. The coir industry quickly spread throughout Alappuzha's villages, with household loom units ranging from one to three looms, small scale units with five to ten looms, and medium-sized firms with twenty to thirty looms. All of the works at coir industry rely primarily on human power for loom operations at that time, but there was a surge of modernization at the period that included wood-cum-metal frames for looms, Wimbley and London looms, and other semi-automated tools and equipment that made human labor easier.

As the industry grew, it was divided into three functional areas: de-fibering, spinning coir yarn, and coir loom/weaving (Pratheesh & Nair, 2022). The dehusking and husk retting was the initial segment. Defibering and coir yarn spinning forms the next segment. Hand-loomed coir mats and matting are created by trained craftsmen weaving coir yarn together on a traditional handloom. As technology advanced, new types were created, but machines drastically altered the manufacturing process. In Alappuzha, women account for 86% of the coir labor force, whereas men dominate the coir loom industry. Until the 1980s, coir served as the major medium of commerce and value measurement in rural Alappuzha. We may therefore affirm the theory that industrialization fosters urbanization, which comprises the establishment of businesses, the creation of jobs, labor mobility, commercialization, and the construction of related infrastructure, using the example of the coir industry and Alappuzha's urbanization (Thomas, 2005). The establishment of schools; religious institutions such as the Jain Temple, the Latin Church, the Mosques near Sakkariyah Bazar, the Brahmin Temple, the Mahavishnu and Rasjeswari temples at Mullackal; parks; talkies; shopping areas like street markets and the establishment of Vazhichery market; the increase in public transportation such as bus and boat services; were the validation proof for the above stanza.

## 5. Discussion

The discussion portion evaluates and interprets the findings from the preceding section, including their significance for the research question, its validations, and future research directions.

1. Did Raja Kesava Das's administrative changes lead to the urbanization of Alappuzha?

The academic studies of Houtart and Lemercinier (1978), Ibrahim (1978), Kooiman (2005), Kunju (1977), Lawrence (2016), Nagam (1906), P. K. Michael Tharakan (1984),

Gopinathan Nair (1976), Deepa (2013), Prakash (2018), Racheal (2021) and Thomas (2005), and the reports like the Census of India 1911, Travancore Administration Reports were used for examining the questions validity and solution. The analysis section laid out the explanations, which are summarized here.

Raja Kesava Das, a Dewan of Travancore was instrumental in turning the coastal region into a globally recognized city. He designed the sea port and infrastructure developments that led to the creation of the modern city of Alappuzha. Kesava Das's primary goal was to enhance Travancore's economy by expanding trade, which helped maintain a standing army and prepare for war with Europeans and Mysore. Alappuzha's town planning and urbanization were managed under his reign, with the development of a well-designed interior canal network for navigation and a chain of roads leading to the port region. The Gujarathi Street and Marathwada market were established, bringing cloth merchants from Tinnevely. When the port of Alappuzha was ready to operate in 1762, two parallel canals were built to make it easier for commerce barges to access the town center. Other canals, such as the Alappuzha-Changanasery Canal and the Alappuzha-Sherthala (AS Canal), were also constructed to encourage local traders to export their goods.

2. Was the rise of the coir industry over the last century truly the narrative of Alappuzha's industrialization?

Except for the burgeoning tourism industry, Alappuzha is one of Kerala's most industrially backward districts. Contemporary industries were not familiar in Alappuzha due of its industrial backwardness and people's reliance on traditional industries like agriculture and coir. The preceding section provides an examination of substantial secondary sources, highlighting the coir industry's origins in Alappuzha and its expansion into a global export industry. Coir fibers, originally used for traditional purposes, became a semi-industrialized sector in the mid-18<sup>th</sup> century. The first coir factory in India opened in 1859, and European businessmen-built facilities in Alappuzha, leading to hundreds of export coir industries by 1900. As a result, it is unquestionably shown that the coir industry is a reality of Alappuzha's industrialization.

3. Has the expansion of the coir industry aided the urbanization of Alappuzha?

The establishment of Alappuzha port, as well as the subsequent designing of road and canal networks, all contributed to Alappuzha's infrastructural transformation into an urban center. In some ways, the port has been the driving force behind the rise of the coir business in Alappuzha, and the coir industry's exports through the port have helped to keep the port as a profitable endeavor in Travancore.

And this difficult stanza cannot be resolved by simple analysis and peripheral explanations. As a result, the query promotes more in-depth research into the subject. A specialized historiography of the coir industry, as well as emerging socio-cultural narratives through the evolution of the coir sector, are other threshold areas for further research.

## 6. Conclusion

The coir industry in Alappuzha has received substantial attention, but no anthropological or sociological research has been performed to depict the interplay between urbanization, industrialization, and socioeconomic expansion in Alappuzha through an examination of the coir industry and Alappuzha port. Scholarly research focuses on economic analysis, whereas non-scholarly works emphasize socio-cultural issues.

The coir industry in Alappuzha was largely shaped by urban developments, industrialization, and transportation. It provided employment opportunities for agricultural laborers, facilitated commercialization, and led to the development of schools, religious

institutions, and public transportation. The growth of the coir industry and Alappuzha Port's potential also boosted population growth and economic opportunities.

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